

# Cardwell Tropical Mountain Bike Trails Business Case

Cassowary Coast Regional Council

**Final**

September 2023



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# Acknowledgment of Country

Cassowary Coast Regional Council acknowledges the traditional custodians of the land and sea on which we operate, the Mamu, Djiru, Girramay, Gulgnay, Warrgamay, Jirrbal and Bandjin Peoples. We wish to acknowledge our respect for their current and emerging leaders and those in the dreaming. We thank all First Nations people for the contributions they make in building the community.

# Acknowledgment Statement

The Cardwell Tropical Mountain Bike Trails Business Case was developed with the support of the Queensland Government in association with the Cassowary Coast Regional Council, the Cardwell community and the Girramay Peoples Aboriginal Corporation.



# Executive Summary

## The Cardwell Tropical Mountain Bike Trails Project - *‘Ride where our ancestors once walked, Girramay Country’*

The Cardwell Tropical Mountain Bike Trails Project (the Trails or the Project) includes the proposed development of a new 94km, 26-trail mountain bike network in picturesque national park and World Heritage rainforest in Cardwell (see Figure 1). The Project is focused on establishing the region as a ‘Ride Destination’ and integrates and promotes the unique cultural heritage of the local Traditional Owners, the Girramay Peoples.

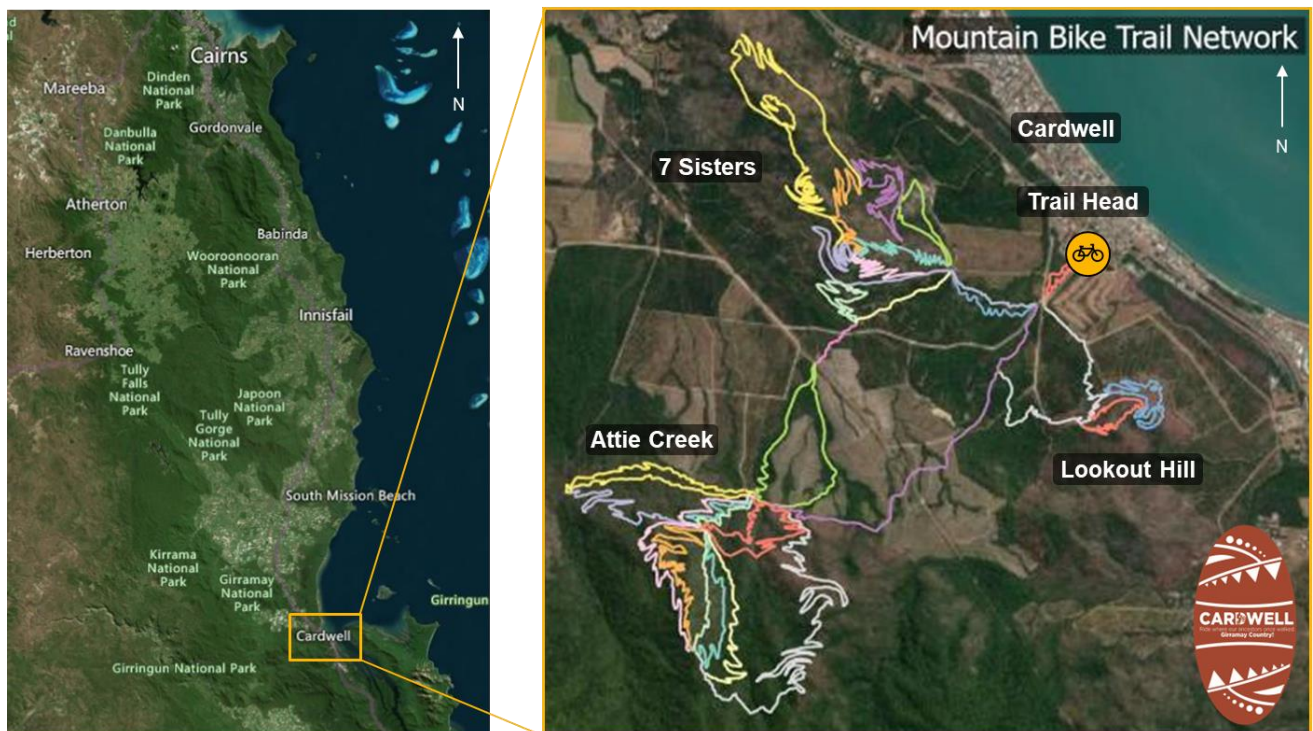


Figure 1: Cardwell Tropical Mountain Bike Trails Project

Leveraging the natural elevation of the areas surrounding Cardwell, the Trails are proposed to span across the 7 Sisters (otherwise known as Elphinstone Range), Lookout Hill and Attie Creek. Importantly, the Trail Head is proposed to be co-located with the Cardwell Pump Track, which is within 500 metres of Cardwell’s main town centre and foreshore. This is a key feature that will enable the Trails to be ‘ride in ride out’ and will reduce visitors’ use of private vehicles whilst visiting Cardwell; a competitive advantage that is expected to be an important drawcard for the Project. Complementing the Trails is Cardwell’s range of ‘off-bike’ attractions and unique offerings, including the Wet Tropics and Great Barrier Reef (GBR) World Heritage Areas (WHA), Hinchinbrook Island, Blencoe Falls, the Thorsborne Trails and the Girringun Art Centre.

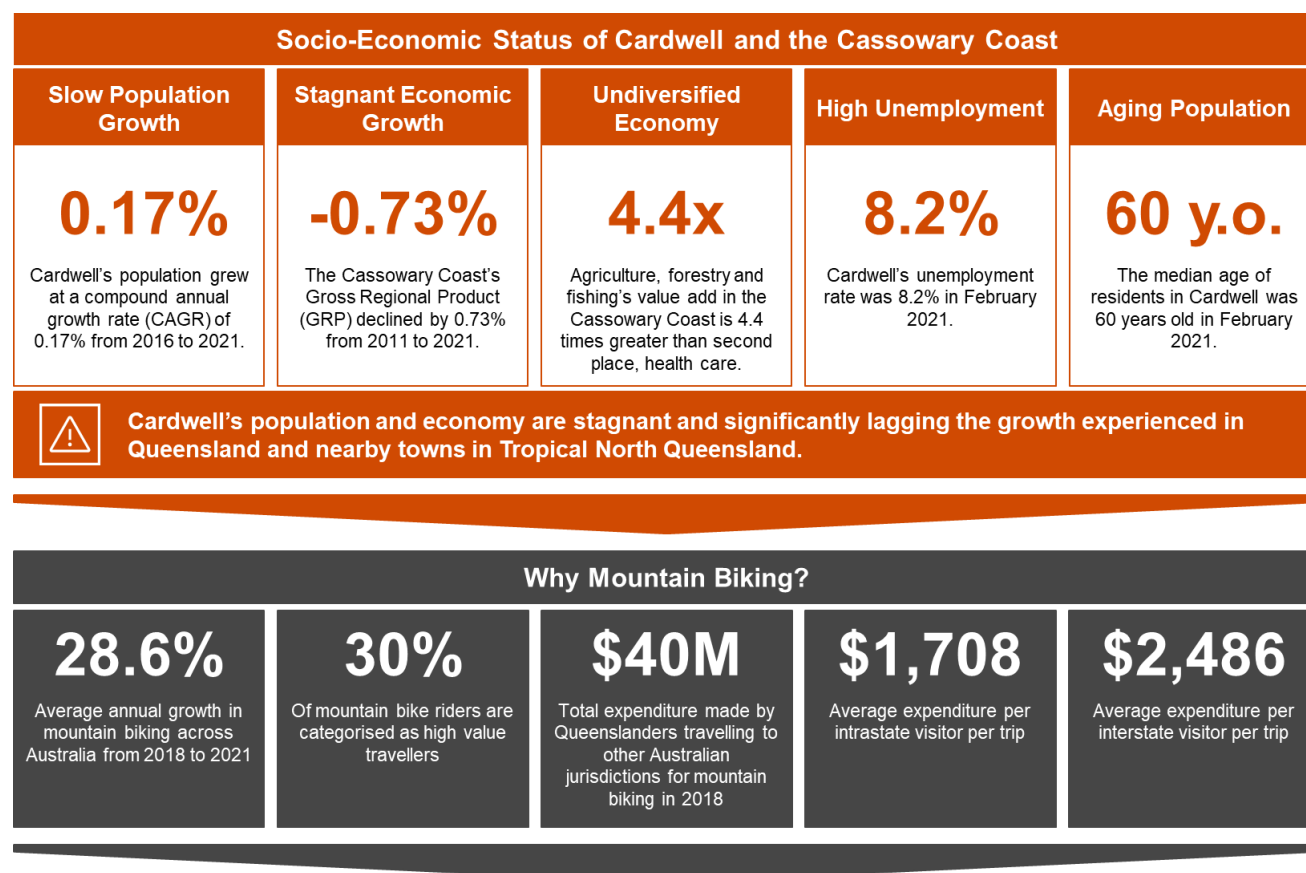
The Project was conceived by the Cardwell community and Traditional Owners in 2019. At this time, the Cassowary Coast Regional Council (CCRC or the Council) and the Queensland Government’s Department of Tourism, Innovation and Sport (DTIS) co-funded the delivery of a Feasibility Report, which affirmed the significant opportunity to establish Cardwell as a leading ‘Ride Destination’. The strong support for the Trails and the sense of enthusiasm amongst the local community and key stakeholders has continued, and this was evident throughout the preparation of this Business Case. The Project was recognised on a national scale in 2022 through the Australian Government’s *National Awards for Local Government*, with the following quote used:

***“A small community with deep pride for its culture has come together to take on one very ambitious goal – to be Australia’s next big ‘Ride Destination’.”***

Importantly, the Trails continue to receive support from the Girramay Peoples and Giringun Aboriginal Corporation (Giringun). Girramay Registered Native Title Bodies Corporate (RNTBC) has strongly advocated for the Trails since the initial concept was conceived and is supportive of the many opportunities that may be generated for the Girramay Peoples and the broader Cardwell community from the Project. Giringun is also interested in supporting the Project through the provision of Aboriginal Rangers to support the future operation and maintenance of the Trails.

## The Opportunity

The development of the Trails in Cardwell presents a significant opportunity to address Cardwell's social and economic challenges, as demonstrated in Figure 2.



Value Proposition of the Cardwell Tropical Mountain Bike Trails Project	
<b>1</b>	<b>World class trails that offer a variety of styles and difficulties for all riders</b>
<b>2</b>	<b>Meaningful involvement and recognition of the Girramay People</b>
<b>3</b>	<b>Ride in, ride out trails, within 500m of the town centre and foreshore</b>
<b>4</b>	<b>Off-bike cultural experiences and natural attractions in proximity to the Trails and Cardwell</b>
<b>5</b>	<b>Community-led project that has been recognised on the national scale</b>

Sources: AusPlay (2022). *Mountain Biking Report*; Department of Transport and Main Roads (2022). *Bike Tourism in Queensland – Supplementary Report: Mountain Biking*; idcommunity (2023). *Cassowary Coast Regional Council | Economic Profile*; Australian Bureau of Statistics (2022). *Cardwell 2021 Census All persons QuickStats*

Figure 2: The Opportunity

## The Need for the Trails

The strategic rationale driving the need for the Trails in Cardwell and the potential significant socio-economic benefits created by the Trails are summarised in Figure 3.



Figure 3: Service Need Summary

## Ownership and Operating Model

The development of a sustainable ownership and operating model is integral to the long-term viability of the proposed Trails in Cardwell. The ownership and operational models of the Trails must align with the Service Need of the Project and balance the Trails' financial sustainability with the potential economic and social benefits that are expected to be created. Importantly, the Trails' ownership and operating models must also ensure that the culture and heritage of the Girramay Peoples is recognised and promoted throughout the Trails in a meaningful manner.

As demonstrated below in Figure 4, it is recommended that the Council retains ownership of the Trails in the short term. The Council may seek to transfer the ownership risk of the Trails, through a contractual arrangement (such as a lease or licence) to a third party, or divest their ownership interest entirely to an independent entity, in the medium to long term.

It is also recommended that the Council leads the operations and maintenance of the Trails in the short term, supported by Girramay RNTBC and Giringun. This approach has been implemented by local governments in comparable, successful mountain biking trail projects, such as Blue Derby and St Helens. Further, the Council's strong and trusted relationship with Girramay RNTBC and Giringun will be important, as Giringun's Aboriginal Ranger Program is expected to be integral to the maintenance of the Trails.

The Trails are anticipated to become financially sustainable within five to seven years of operation, at which point the Council may seek to transfer the operation and maintenance responsibilities to an independent commercial operator or a Council-owned entity.

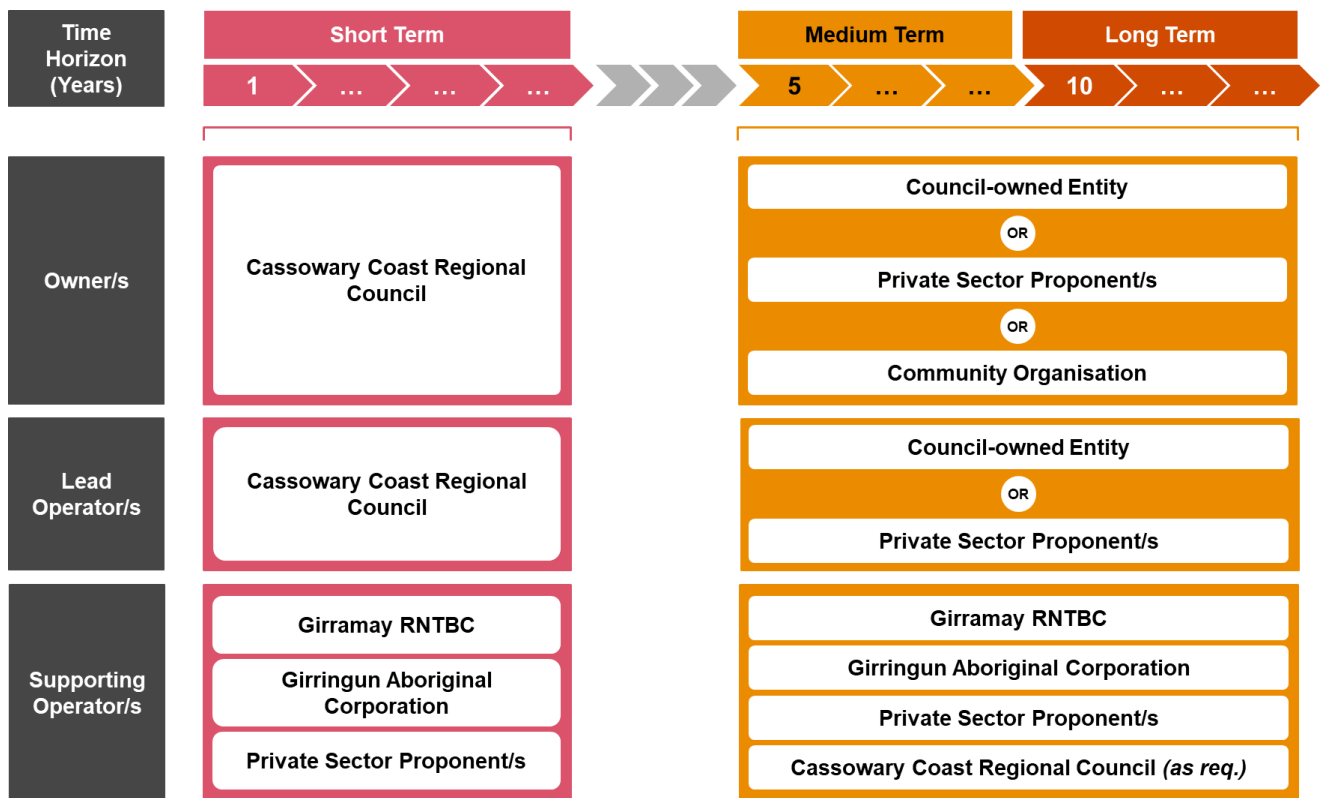


Figure 4: Recommended Ownership and Operational Model for the Trails

## Financial Analysis

A financial analysis was completed to determine the financial sustainability of the Trails and the long term financial outcomes generated by the Project, whilst also generating the significant economic benefits associated with increased visitation to Cardwell. The key revenue streams that are expected to be directly generated by the Trails, and will be used to offset the operational and maintenance costs of the Trails, are presented in Figure 5. There are also a range of indirect revenue streams that have not been quantified as part of the financial analysis, however are expected to contribute to the Trails' financial sustainability, such as merchandise and branding royalties.



Figure 5: Key Revenue Streams

The shuttle service licences fees and users levy are the most significant revenue streams for the Trails and are estimated to represent approximately 55% of total revenue generated by the Trails per annum. Importantly, contributions from the Council are anticipated to be required in the first five years of operations as visitation and visitor expenditure in the region increases. Contributions from the Council are expected to be initially required to offset the operational and maintenance costs of the trail network, and the associated workforce costs in the initial years of operations. However, the need for Council contributions is expected to ease as the Trails become increasingly financially self-sufficient.

Table 1 presents the total nominal and Present Value (PV) cashflows of the Trails under a medium demand scenario across a 30-year operational period. The medium demand scenario estimates the number of riders at the Trails in Cardwell to increase from just over 5,000 in 2026 to approximately 23,500 riders in 2055. This is a conservative estimate that is below the more aspirational projections used for other mountain bike trails in Queensland and across the country.

Table 1: Financial Analysis Summary (\$'000, Nominal and PV)

Cashflow	Nominal	PV
Revenue	\$21,108.7	\$9,043.6
Operational and Maintenance (O&M) Costs	-\$18,632.2	-\$8,129.6
<b>Net Operational Cashflows</b>	<b>\$2,476.5</b>	<b>\$914.0</b>
Capital Costs	-\$13,038.5	-\$11,565.5
<b>Net Project Value</b>	<b>-\$10,562.1</b>	<b>-\$10,651.5</b>

The Net Project Value of the Trails is approximately -\$10.6 million (nominal terms), which suggests that the Trails will not be able to generate sufficient operational surpluses to offset the initial capital cost. However, based on the current assumptions, the Trails are estimated to generate a positive net operational cashflow of \$2.5 million in nominal terms and just under \$1 million in PV terms over the analysis period. This suggests that the Trails will be able to operate on a financially sustainable basis across the analysis period, under the assumption that funding support will be available to deliver the Trails.



## Economic Analysis

An economic analysis was undertaken to assess the economic outcomes generated by the Trails in Cardwell. At the current stage of the Project evaluation process, the Trails' economic outcomes were assessed through the estimated capital and O&M costs, in addition to the monetisable benefits presented in Figure 6. The Trails will also generate significant non-monetisable and qualitative benefits for Cardwell and the community. This includes increased employment, social capital for Indigenous communities, urban revitalisation, greater national and elite sporting outcomes, and increased expenditure relating to events.

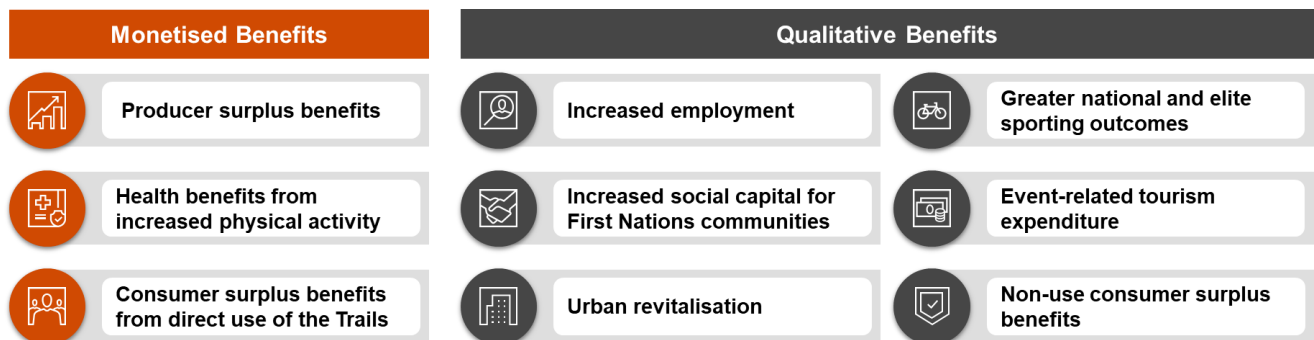


Figure 6: Economic Benefits of the Trails

Table 2 summarises the total discounted costs and benefits for the Trails, which is based on the estimation of monetisable project benefits and costs and expressed as a Net Present Value (NPV) and Benefit Cost Ratio (BCR). Different discount rates were applied in the economic and financial analyses to determine the PV results.

Table 2: Economic Analysis Outcomes (\$'000, PV)

Expenditure Item	PV
<b>Costs</b>	
Capital Costs	8,849
O&M Costs	3,756
<b>Total Costs</b>	<b>12,605</b>
<b>Benefits</b>	
Producer surplus benefit from increased tourism expenditure	20,659
Health benefits from increased physical activity	1,095
WTP benefit for recreational use	712
<b>Total Benefits</b>	<b>22,467</b>
<b>NPV</b>	<b>9,862</b>
<b>BCR</b>	<b>1.8</b>

The Trails are projected to have an economic NPV of approximately \$9.9 million and a BCR of 1.8. This indicates that the monetised economic benefits of the Trails outweigh the monetised costs, thus the Trails are expected to provide an incremental net benefit to the community. This affirms the strong economic rationale for the Trails, which are expected to provide significant economic benefits to the Cardwell community, the GIRRamay Peoples and other First Nations Peoples, as well as local businesses.



## Delivery and Implementation

Subject to the endorsement of the Business Case by the Council, the Trails will progress to the pre-construction phase, followed by the staged construction and gradual commissioning of each trail segment. An indicative program to deliver the Trails is presented in Figure 7.

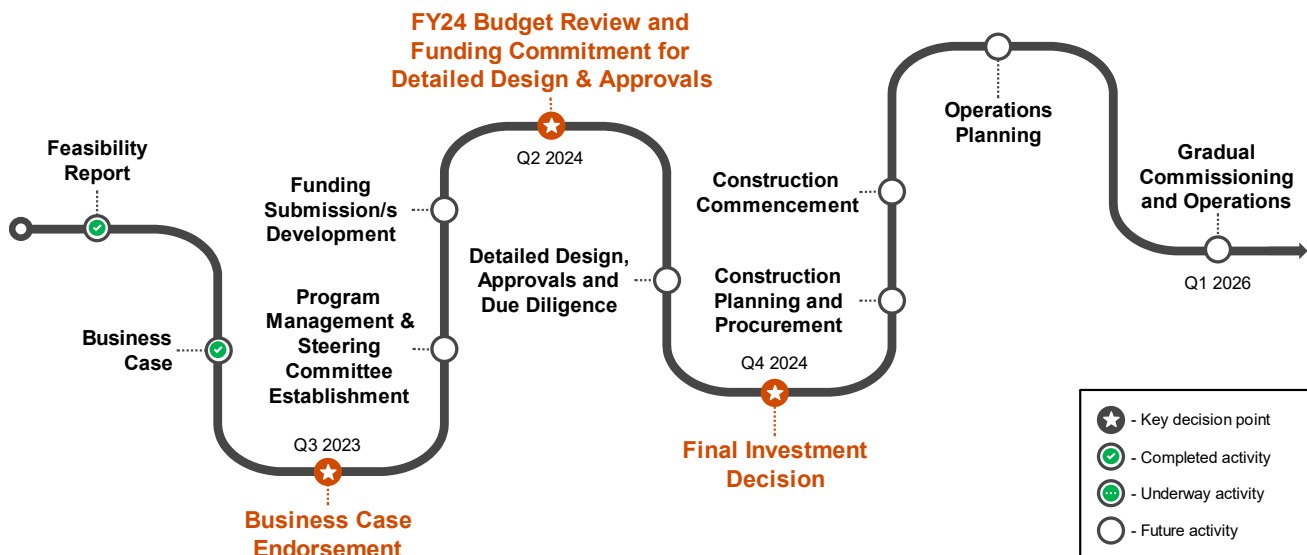


Figure 7: Delivery and Implementation

The purpose of the pre-construction phase will be to complete the required environmental and cultural assessments and related studies, refine the concept design and confirm the operational and maintenance model for the Trails, which will be ultimately required to secure approvals and funding and commence construction of the Trails. The key packages of work and activities that are anticipated to be required during the pre-construction phase are as follows:

- **Funding Submissions:** Secure funding support to progress the Trails and, where required, procure external resources to commence the key work packages.
- **Work Package 1 – Approvals and Due Diligence:** Complete detailed environmental and cultural heritage assessments and establish an agreement with key stakeholders regarding land tenure matters. These activities will be required to secure legal, regulatory, planning and other approvals for the Trails prior to construction.
- **Work Package 2 – Detailed Design and Updated Cost Estimates:** Develop a detailed design and updated capital and operational cost estimates for the Trails, incorporating key findings from the approvals and due diligence package of work where required.
- **Work Package 3 – Construction Planning and Procurement:** Develop construction documentation in preparation for the procurement of the relevant construction contractor/s.
- **Work Package 4 – Operational Planning:** Commence operational planning and employee training in preparation for the Trails' commissioning. This may include establishing financial and administrative processes, appointing key personnel, developing operating agreements and practice manuals, and establishing social media and other promotional channels.

To ensure that the outcomes of the Project are optimised through the pre-construction phase, it is imperative that a robust and structured program management function is implemented by the Council. This function will play an important role in ensuring the Trails are delivered within the desired parameters (scope, time, cost and quality) and in accordance with the Council's objectives. The dedicated program management team will play an important role in advancing the Trails and ensuring the desired outcomes and benefits of the Project are achieved.

## Conclusion

The Trails are a community-led initiative that have been jointly driven by the Cardwell community and the Girramay Peoples with support of the Council, who all equally share the ambition to establish Cardwell as a 'Ride Destination' and '**Ride where our ancestors once walked, Girramay Country**'. The Trails will also generate significant benefits for the local community, including increased employment and training opportunities for residents and First Nations Peoples, as well as enhanced health and wellbeing of participants.

The Business Case has demonstrated clear service need and strong strategic rationale for investment in the Trails. In the absence of timely and appropriate action and investment, the momentum and strong advocacy for the Trails will fade, along with the opportunity to generate the breadth of social and economic benefits in Cardwell and far north Queensland.

## Recommendations and Next Steps

Based on the analysis undertaken in the Business Case, recommendations for the Council's consideration are as follows:

- Endorse the outcomes of the Business Case and the proposed ownership and operational model of the Trails
- Establish the project management and governance structure that will be required to progress the Trails and to oversee the extensive program of work that is required to deliver the Project
- Using the Business Case, develop funding applications to seek support from the Queensland Government to progress the Trails and secure funding for the pre-construction phase
- Continue to engage with key stakeholders in relation to the following:
  - Girramay RNTBC regarding their desired role in the Trails' operations and maintenance and the potential complementary service offerings that could be provided by the Girramay People
  - Giringun regarding their proposed involvement in the operations and maintenance of the Trails
  - DTIS regarding funding programs and opportunities to support the construction of the Trails
  - Queensland Government's Department of Environment and Science (DES) and the Wet Tropics Management Authority (WTMA) regarding the approval requirements to develop the Trails
  - HQ Plantations regarding the land tenure agreements to develop, operate and maintain the Trails.
- Deliver a community briefing session to provide an update regarding the status of the Project, and update any social media platforms and websites notifying of the progress of the Project
- Engage with key regional advocacy groups (such as Far North Queensland Regional Organisation of Councils [FNQROC], Tourism Tropical North Queensland [TTNQ] and Tourism and Events Queensland [TEQ]) to participate in discussions regarding the definition of regional mountain biking strategies and promotions
- Commence work package 1, approvals and due diligence, as soon as practical.

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# Glossary

Abbreviation / Term	Definition
ABS	Australian Bureau of Statistics
Activate! Queensland	Activate! Queensland 2019 – 2029
ATAP	Australian Transport Assessment and Planning
Austrade	Australian Trade and Investment Commission
BCDF	Business Case Development Framework
BCR	Benefit Cost Ratio
BPIC	Best Practice Industry Conditions
CAGR	Compound Annual Growth Rate
CBA	Cost Benefit Analysis
CCRC or the Council	Cassowary Coast Regional Council
CMP	Construction Management Plan
CO	Construct Only
CPI	Consumer Price Index
CY	Calendar Year
DCF	Discounted Cash Flow
DITRDCA	Department of Infrastructure, Transport, Regional Development, Communications and the Arts
DTIS	Department of Tourism, Innovation and Sport
D&C	Design and Construct
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortisation
ECI	Early Contractor Involvement
EOI	Expression of Interest
EPA	Environment Protection Authority
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
ETI	Early Tenderer Involvement
EWS	Enduro World Series
E-Bikes	Electric bicycles
FID	Final Investment Decision
FNQ	Far North Queensland
FNQROC	Far North Queensland Regional Organisation of Councils

Abbreviation / Term	Definition
FTE	Full-Time Equivalent
FY	Financial Year
GBR	Great Barrier Reef
GBRMPA	Great Barrier Reef Marine Park Authority
Girramay RNTBC	Girramay People Aboriginal Corporation Registered Native Title Bodies Corporate
Girringun	Girringun Aboriginal Corporation
GRP	Gross Regional Product
HVT	High Value Traveller
IAAF	Infrastructure Australia's Assessment Framework
ILM	Investment Logic Mapping
Innovate RAP	Innovate Reconciliation Action Plan 2023-2025
IPA	Indigenous Protected Area
IRA	Impact Risk Assessment
IRSD	Index of Relative Socio-Economic Disadvantage
km	Kilometre
LGA	Local Government Area
MCA	Multi-Criteria Assessment
MNES	Matters of National Environmental Significance
MSES	Matters of State Environmental Significance
NQROC	North Queensland Regional Organisation of Councils
NPV	Net Present Value
O&M	Operating and Maintenance
PAF	Project Assessment Framework
PMP	Project Management Plan
PV	Present Value
PwC	PricewaterhouseCoopers
QPWS	Queensland Parks and Wildlife Services
QTC	Queensland Treasury Corporation
RBA	Reserve Bank of Australia
RFT	Request for Tender
SEQ	South East Queensland



Abbreviation / Term	Definition
SIB	Social Impact Baseline
SIE	Social Impact Evaluation
TCM	Travel-cost Method
TCT	Tropical Coast Tourism
TDRS	Trail Difficulty Rating System
TEQ	Tourism and Events Queensland
The Business Case	Cardwell Tropical Mountain Bike Trails Business Case (this document)
The Feasibility Report	Cardwell Tropical Mountain Bike Feasibility Report
The Trails or the Project	Cardwell Tropical Mountain Bike Trails
TNQ	Tropical North Queensland
TNQ Regional Mountain Bike Strategy	Tropical North Queensland Regional Mountain Bike Strategy 2018
Towards Tourism	Towards Tourism 2032
TRA	Tourism Research Australia
TTNQ	Tourism Tropical North Queensland
TUMRA	Traditional Use of Marine Resource Agreement
UCI	Union Cycliste Internationale
UNESCO	United Nations Educational, Scientific and Cultural Organisation
VFR	Visiting Family and Relatives
VMA Act	Vegetation Management Act 1999
Water Act	Water Act 2000
Wet Tropics Act	The Wet Tropics World Heritage Protection and Management Act 1993
WH&S	Workplace Health and Safety
WHA	World Heritage Area
WPI	Wage Price Index
WTP	Willingness to Pay
Yasi	Tropical Cyclone Yasi



# 1 Introduction

The Cassowary Coast is abundant with natural attractions, world-class landscapes and unique experiences that have the potential to generate employment opportunities and economic development in the region. The Cassowary Coast Regional Council (CCRC or the Council) is actively working to leverage these natural characteristics and reaffirm tourism as a foundational part of the broader Cassowary Coast economy. The *Cassowary Coast Region Tourism Strategy* highlights this potential and outlines the driving objectives of the Council for growing tourism in the region.

The Cardwell Tropical Mountain Bike Trails Project (the Trails or the Project) represents an important step towards establishing the broader region as a leading adventure and lifestyle destination and involves the development of a new mountain bike network in Cardwell. The Trails are a community-led initiative that have been jointly driven by the Cardwell community and the Girramay Peoples with support of the Council, who all equally share the ambition to establish Cardwell as a 'Ride Destination' and '*Ride where our ancestors once walked, Girramay Country*'. The Trails will also generate significant benefits for the local community, including increased employment and training opportunities for residents and Traditional Owners as well as enhanced health and wellbeing of participants.

Cardwell is located between two adjoining world heritage listed areas, the Wet Tropics World Heritage Area (WHA) and the Great Barrier Reef (GBR) Marine Park WHA, and is also favourably situated close to many unique natural, adventure and cultural experiences. Coupled with the breadth of existing tourism offerings in Cardwell and nearby, the Trails present a significant opportunity to generate economic development and employment growth and actively promote and protect the Indigenous heritage and cultural significance of the region.

## 1.1 Project Background

The genesis of the Trails dates back to September 2019, when the first community-led meetings were facilitated. There was strong support from residents and Traditional Owners in attendance at these meetings, which ultimately led to the Council progressing the Project and providing \$50,000 for the development of the *Cardwell Tropical Mountain Bike Feasibility Report* (the Feasibility Report). The Queensland Government's Department of Tourism, Innovation and Sport (DTIS) contributed \$50,000 of matched funding to support further investigations into the locally driven proposal, which demonstrates the broader understanding of the opportunity to reinvigorate and establish Cardwell as a leading Ride Destination.

During 2020 and 2021, the Council commissioned the development of the Feasibility Report to evaluate the potential for Cardwell to host a world class mountain bike trail network. The Feasibility Report involved a robust stakeholder engagement process with Traditional Owners, locals from Cardwell, members from the Council and Queensland Government, and a breadth of other stakeholders. Through this process and the associated analyses, the Feasibility Report identified the opportunity for Cardwell, highlighted the strong support for the Project and identified the need to develop a Business Case to progress the Project. Importantly, the Trails also received full support from Girramay People Aboriginal Corporation Registered Native Title Bodies Corporate (Girramay RNTBC) and Giringun Aboriginal Corporation (Giringun).

## 1.2 Business Case Scope and Methodology

The Council has engaged PricewaterhouseCoopers (PwC) to develop the Cardwell Tropical Mountain Bike Trails Business Case (the Business Case) to ratify the work undertaken to date, confirm the strategic need for the Trails and to identify a sustainable commercial, operational and maintenance model for the Project. The objective of the Business Case is to form the foundation of future funding applications that support the progression of the community-led initiative to detailed design.

Targeted stakeholder engagement represents a fundamental and critical component of the Business Case, as demonstrated by the strong support for the Project from local members of the community and Girramay RNTBC. A comprehensive stakeholder engagement and market sounding process has been facilitated to inform and support the development of the Business Case.

The Business Case has been developed with reference to the Queensland Government's *Business Case Development Framework* (BCDF), Queensland Treasury's *Project Assessment Framework* (PAF) and Infrastructure Australia's *Assessment Framework* (IAAF). Supplementary guidance from the *BCDF* was also referred to throughout the Business Case's development, including:

- Investment Logic Mapping (ILM) Guide
- Stakeholder Engagement Guide
- Social Impact Evaluation (SIE) Guide
- Cost Benefit Analysis (CBA) Guide.

### 1.3 Business Case Structure

The structure of the Business Case is as follows:

- **Chapter 2 – Project Background:** The purpose of this chapter is to provide an overview of the Trails' location and key features, outline the work completed to date, identify related projects and developments in the Cassowary Coast, and assess the Trails' strategic alignment with key government objectives.
- **Chapter 3 – Mountain Biking Industry Analysis:** The purpose of this chapter is to define and analyse the mountain biking industry at the state and national levels, outline the value proposition of the Trails in Cardwell and summarise the potential economic, social and environmental benefits from mountain biking.
- **Chapter 4 – Service Need:** The purpose of this chapter is to demonstrate the strategic rationale for the Trails by clearly articulating the key problems and opportunities being addressed, and subsequently establishing the service need for the Trails.
- **Chapter 5 – Proposed Trail Network:** The purpose of this chapter is to present the concept design and the associated capital cost estimate of the Trails, which were developed as part of the Feasibility Report in 2021.
- **Chapter 6 – Impacts Analysis:** The purpose of this chapter is to provide an overview of the potential environmental and social impacts and considerations that are associated with the construction and operations of the Trails.
- **Chapter 7 – Ownership and Operational Model Analysis:** The purpose of this chapter is to present the analysis that has been undertaken to identify the preferred owner and operator of the Trails, as the development of a sustainable ownership and operational model is integral to the long term sustainability of the proposed Trails in Cardwell.
- **Chapter 8 – Financial Analysis:** The purpose of this chapter is to determine the financial sustainability of the Trails and estimate the total financial impact to government from an internal financing perspective.
- **Chapter 9 – Economic Analysis:** The purpose of this chapter is to evaluate the economic viability and outcomes generated by the Trails in Cardwell.
- **Chapter 10 – Risk Analysis:** The purpose of this chapter is to provide an overview of the risk assessment undertaken during the development of the Business Case and to guide future risk management measures for the Trails.
- **Chapter 11 – Delivery and Implementation:** The purpose of this chapter is to outline the key activities that will be required to progress the Trails from the Business Case and be completed during the pre-construction phase of the Trails. This chapter also an indicative delivery program for the Trails.
- **Chapter 12 – Conclusion and Recommendations:** This chapter summarises the key findings and outcomes of the Business Case and provides recommendations for the Council's consideration, informed by the analyses undertaken throughout the Business Case.



# 2 Project Background

## 2.1 Purpose

The purpose of this chapter is to provide an overview of the Trails' key features and location, outline the work completed to date, identify related projects and developments in the Cassowary Coast, and assess the Trails' strategic alignment with key government objectives. This chapter includes:

- Project Description and Location
- Project History
- Mountain Biking Definition
- Related Projects and Planned Developments
- Strategic Alignment
- Summary.

## 2.2 Project Description and Location

The Project includes the proposed development of a new 94km, 26-trail mountain bike network in Cardwell to establish the area as a 'Ride Destination' and **'Ride where our ancestors once walked, Girramay Country'**. The Trails are located on the traditional lands of the Girramay Peoples and will actively promote and protect the Traditional Owner heritage and cultural significance of the region. The Project's 26 trails are proposed to span across three key areas in Cardwell (see Figure 8), including 7 Sisters, Lookout Hill and Attie Creek.

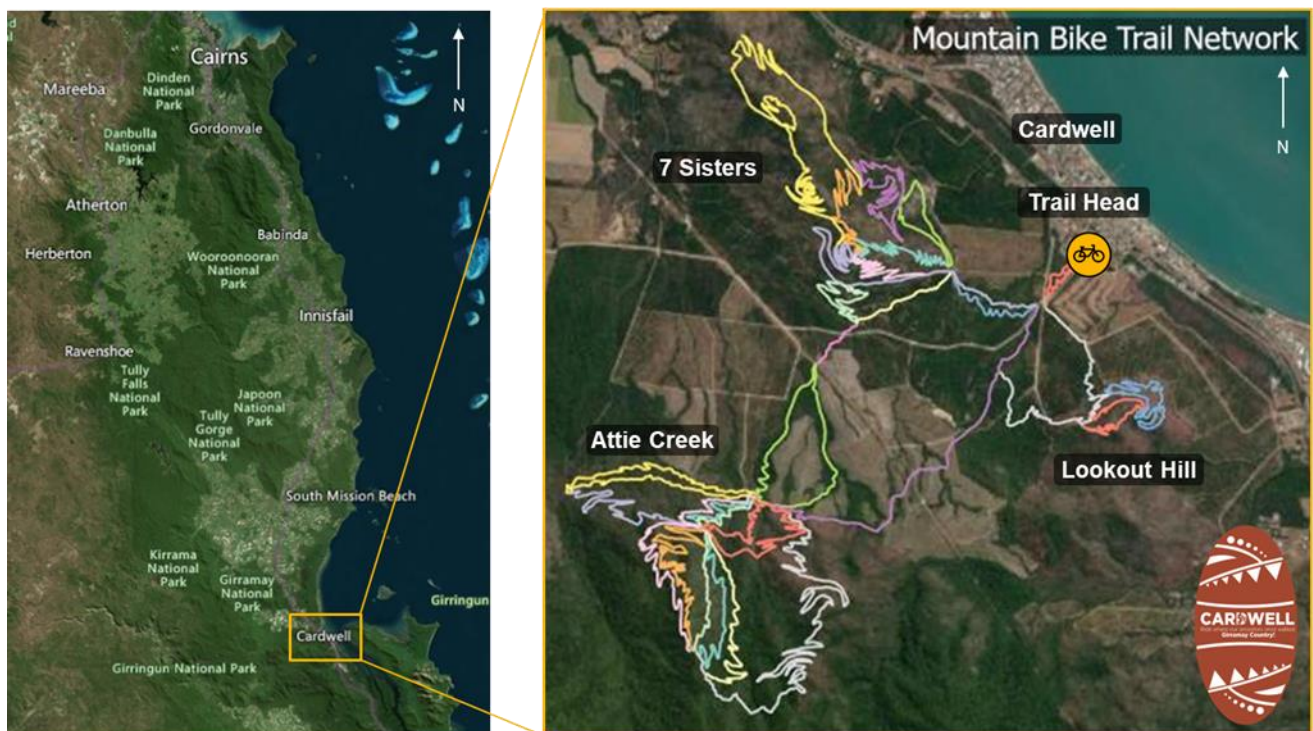


Figure 8: The Trails – Concept Design<sup>1</sup>

<sup>1</sup> World Trail (2021). *Cardwell Tropical Mountain Bike Trail Project Feasibility Report*. Provided by CCRC.

The Trails are proposed to cater for all skill levels, featuring different trail styles including adventure, wilderness, gravity and airflow. In addition to the trail network, the Project proposes to include two event zones that are capable of hosting large scale mountain biking or related events and accessible for shuttles. The Trail Head is located within 500m of Cardwell's foreshore, which is a key feature that will enable the Trails to be 'ride in ride out'; a competitive advantage for the Trails that will attract visitors to the town, as they will not require private vehicles to transport their mountain bikes and access the Trails. The Trails are intended to have a small environmental footprint and are set amongst the Cardwell State Forest, featuring many of Cardwell's natural attractions such as waterfalls, freshwater swimming holes, and lookouts.

Complementing the Trails is Cardwell's range of 'off-bike' attractions and unique offerings, including Hinchinbrook Island and the Thorsborne Trails, the GBR, Blencoe Falls, Murray Falls, Dalrymple Track and the Girringun Art Centre. The town's food, beverage and accommodation offerings are also located nearby to the town centre and the Trails, which will be pivotal to optimising visitor attraction and expenditure and limiting the use of private vehicles whilst visiting Cardwell.

### 2.2.1 Cassowary Coast and Cardwell Overview

The following sections introduce the Cassowary Coast Local Government Area (LGA) and Cardwell and highlight the significant impact of Cyclone Yasi and Port Hinchinbrook on the region's economy.

#### Cassowary Coast Overview

The Cassowary Coast LGA is located in far north Queensland (FNQ) and neighbours the Cairns, Tablelands and Hinchinbrook LGAs (see Figure 9). The region includes towns, rural and coastal communities that cover an area of approximately 4,700 kilometres (km), spanning south from Innisfail, through Tully and Mission Beach to Cardwell.



Figure 9: Cassowary Coast LGA<sup>2</sup>

<sup>2</sup> Adapted from Australian Government (2023). *National Maps*. Accessed at <https://nationalmap.gov.au/>

In the year ending 30 June 2021 (FY21), the Cassowary Coast had an estimated resident population of 29,525 people. This reflects an annual average growth rate of 0.2% per annum from the estimated resident population in 2016 of 29,687 people, which is significantly lower than Queensland's average growth rate of 1.5% per annum. The percentage of Aboriginal and Torres Strait Islander Peoples in Cassowary Coast LGA was 11.0% in FY21, which is significantly greater than Queensland's average of 4.8% and further reiterates the importance of cultural heritage in the region.<sup>3</sup>

In FY21, the Cassowary Coast economy generated a Gross Regional Product (GRP) of \$1.58 billion and supported the employment of 12,890 people within the LGA. As demonstrated in Figure 10, the region's economy is primarily driven by traditional and labour-driven sectors, including agriculture, forestry and fishing, manufacturing and health care and social assistance, with smaller contributions from the retail trade and education sectors.<sup>4</sup>

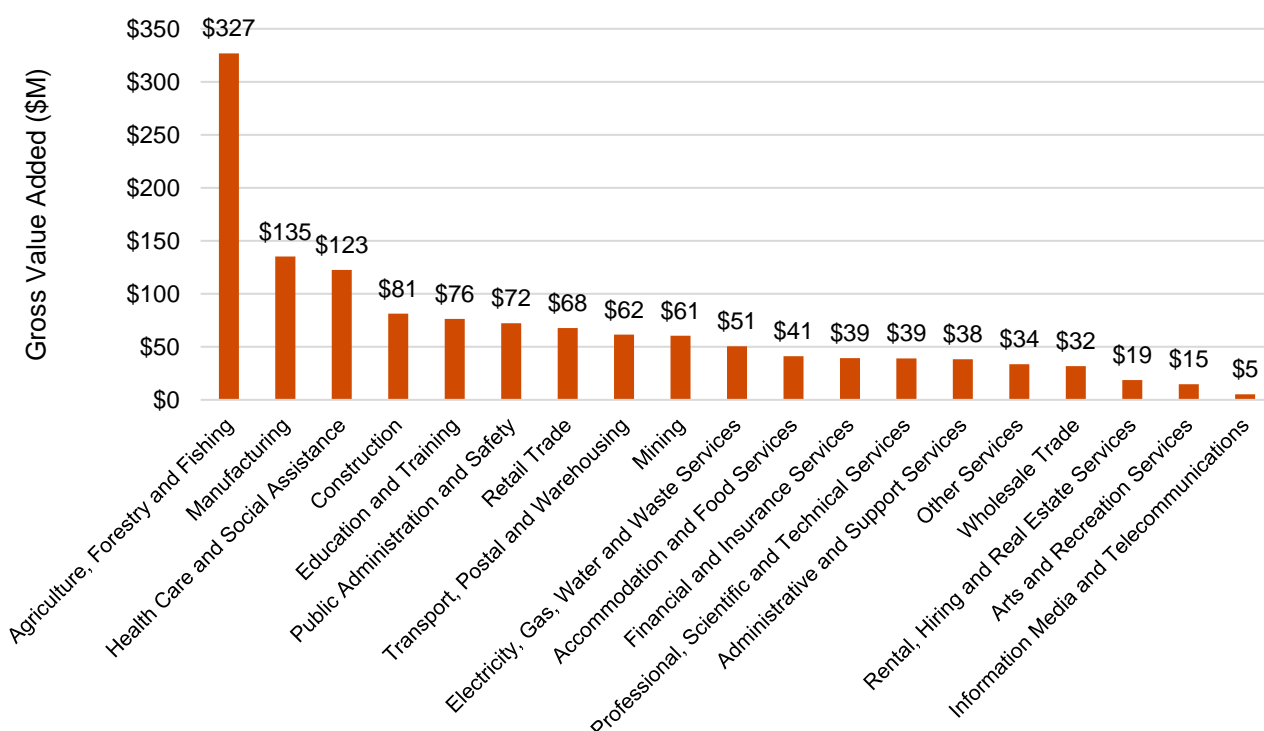


Figure 10: Gross Value Added by Sector in the Cassowary Coast LGA during FY21<sup>5</sup>

### Cardwell Overview

Cardwell is located within the southern region of the Cassowary Coast LGA and is approximately halfway between Cairns and Townsville. For this reason, Cardwell is a popular stop-off destination for visitors travelling between Cairns and Townsville. The greater Townsville and Cairns regions have a combined population of approximately 500,000 within three hours of Cardwell.

Cardwell is one of the only towns in the world where two WHAs adjoin, the Wet Tropics and the GBR, and is situated close to many unique natural, adventure and cultural experiences. This includes Hinchinbrook Island, the Thorsborne Trails, Blencoe Falls, Murray Falls, the Dalrymple Track and the Giringun Art Centre.

<sup>3</sup> Queensland Government Statistician's Office (2023). *Queensland Regional Profiles: Cassowary Coast (R) Local Government Area (LGA) (ASGS 2021)*. Accessed at <https://statistics.qgso.qld.gov.au/qld-regional-profiles>

<sup>4</sup> .idcommunity (2023). *Cassowary Coast Regional Council | Economic Profile*. Accessed at <https://economy.id.com.au/cassowary-coast>

<sup>5</sup> Ibid.

Cardwell's population and economy are stagnant and significantly lagging the growth experienced in Queensland and nearby towns in FNQ.

As of February 2021, Cardwell had an estimated population of 1,320 people. This represents an increase of just 11 people since the 2016 Census and is predominantly due to the stagnant economy, limited training and employment opportunities, and the impact of Cyclone Yasi on the town. Cardwell has a high proportion of Indigenous people, with approximately 9.6% of Cardwell's total residential population identifying as Aboriginal and/or Torres Strait Islander. The median age in Cardwell increased from 57 years in 2016 to 60 years in 2021; significantly greater than Queensland's median age, which increased from 37 years to 38 years respectively over the same decade.<sup>6</sup>

Cardwell's ageing population has significant implications for the town's socio-economic outcomes, which is illustrated in the labour force participation rates and the indicative health of the population. As of February 2021, the labour force participation rate was just 37.3% of the residential population. Further, 58% of the town's population live with long term health conditions, which is approximately 16.2% higher than Queensland's average of 41.8%.<sup>7</sup>

In addition to the ageing population, Cardwell's unemployment rate of 8.2% in February 2021 is materially greater than Queensland's unemployment rate of 5.4%. Of those employed, the primary sectors for employment include aged care residential services (10.3%), primary education (4.9%), cafes and restaurants (4.4%) and supermarket and grocery stores (4.4%).<sup>8</sup>

The proportion of unoccupied private dwellings in Cardwell is also greater than 25%, which is significantly greater than Queensland's average of 9.3%. Of those dwellings that are occupied, over 32% have a household income of less than \$650 per week.<sup>9</sup> This percentage is significantly greater than Queensland's average of 16.4% and further demonstrates the stagnant and comparatively poor socio-economic conditions in Cardwell.

These statistics demonstrate the need to revitalise and reinvigorate the Cardwell economy through catalytic infrastructure that can provide new employment opportunities and generate economic development and diversification.

### Impact of Cyclone Yasi and Port Hinchinbrook on Cardwell

The Cassowary Coast was significantly impacted by Tropical Cyclone Yasi (Yasi) in 2011, which to this day is one of the biggest known cyclones in Queensland's history. The category five system spanned 650km and recorded gusts of up to 250 to 295 km per hour when it crossed the coast at Mission Beach. The damage from Yasi was reported to have exceeded \$800m in cost, with over 50,000 cyclone-related claims and insured losses estimated at \$655m for North Queensland.<sup>10</sup>

The impact of Yasi continues to be felt in pockets of the Cassowary Coast despite occurring over a decade ago. This is particularly the case for Cardwell, which was one of the hardest hit communities in the region with over 75% of the town's buildings damaged.<sup>11</sup> Yasi also wiped out crops in nearby plantations and destroyed the Port Hinchinbrook Marina, which was a popular attraction prior to 2011 that generated significant economy activity in the town.

In 2013, just as Cardwell was recovering from Yasi, the nearby Port Hinchinbrook Residential Marina Resort was placed into the hands of a liquidator due to the Williams Corporation entering administration. The resort remained in the hands of

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<sup>6</sup> Queensland Government Statistician's Office (2023). *Queensland Regional Profiles: Cassowary Coast (R) Local Government Area (LGA) (ASGS 2021)*. Accessed at <https://statistics.qgso.qld.gov.au/qld-regional-profiles>

<sup>7</sup> Australian Bureau of Statistics (ABS) (2022). *Cardwell 2021 Census All persons QuickStats*. Accessed at <https://www.abs.gov.au/census/find-census-data/quickstats/2021/SAL30537>

<sup>8</sup> Ibid.

<sup>9</sup> Ibid.

<sup>10</sup> ABC News (2016). *Five years on, Cardwell economy yet to bounce back after shattering Cyclone Yasi*. Accessed at <https://www.abc.net.au/news/2016-02-02/cardwell-economy-yet-to-bounce-back-after-cyclone-yasi/7126934>

<sup>11</sup> Ibid.



liquidators over the next decade, placing significant constraints on local businesses and residents as they attempted to bounce back from Yasi and restore their former status as a highly popular destination for visitors. These constraints were exacerbated by the privately owned assets at Port Hinchinbrook that were not connected to existing enabling infrastructure in the region, such as sewerage, as well as the poorly maintained roads and mud-filled marina which remains inaccessible for recreational vessels. In particular, the ageing sewerage treatment plant was a major environmental issue at Port Hinchinbrook and had the potential to impact on public health and the GBR WHA.<sup>12</sup> As a result, Port Hinchinbrook's vacancy rate remained high and housing prices declined significantly. For example, a two-bedroom, two-bathroom apartment that sold for \$565,000 in 2007, was sold for less than \$170,000 in 2018.<sup>13</sup>

### *Cardwell's Strong Civic Pride in the Face of Adversity*

Despite the challenges presented from Yasi and Port Hinchinbrook, the strong civic pride of the Cardwell community and Traditional Owners has continued to grow and strengthen. This was particularly evident through the delivery of the Cardwell Pump Track that opened in July 2022, which was an initiative driven by the community (Cardwell Lions, the Cardwell Mountain Bike Trials Group, the Kirrama Range Road Support Group, Cardwell Care and Girramay RNTBC) and supported by the Council.<sup>14</sup>

The opening event of the Pump Track attracted hundreds of members from the community. The Cardwell Pump Track has also led to a significant uptake in mountain biking amongst teenagers and youth in Cardwell and broader regions in the Cassowary Coast. For example, 'Ngulgah Time Youth Group' is a locally run initiative by the Cardwell Lions Club that transports teenagers and youth from nearby areas to the Pump Track every Friday night. Coupled with the regular and daily-use of the Pump Track by youth in the community, it has proven to be a successful piece of recreational infrastructure that is highly utilised and has led to improved social outcomes in the community.

## 2.3 Project History

There has been considerable investigation and planning undertaken on the Trails in recent years. Figure 11 illustrates the work completed to date.



Figure 11: Project History

The following sections summarise each key phase of the Project's history, as well as the national award received from the Australian Government in 2022.

<sup>12</sup> CCRC (2022). *Port Hinchinbrook Sewerage Treatment Plant and Normalisation*. Accessed at <https://yoursay.cassowarycoast.qld.gov.au/port-hinchinbrook>

<sup>13</sup> ABC News (2019). *Port Hinchinbrook property prices plunge as residents beg Queensland Government for help*. Accessed at <https://www.abc.net.au/news/2018-02-25/port-hinchinbrook-prices-plunge-residents-beg-government/9477178>

<sup>14</sup> Cairns Local News (2022). *Community gathers to pump it at the Cardwell Pump Track*. Accessed at <https://www.cairnslnews.com.au/community/community-gathers-to-pump-it-at-the-cardwell-pump-track>

### Community-led Meetings

As outlined in Chapter 1, the Project was conceived in September 2019, when the first community-led meetings were facilitated. There was strong support from the Cardwell residents and Traditional Owners in attendance, which ultimately led to the Council progressing the Project and providing \$50,000 for the development of the Feasibility Report. DTIS contributed \$50,000 of matched funding to support further investigations into the locally driven proposal.

### Feasibility Report

In 2021, the Council commissioned the development of the Feasibility Report to evaluate the potential for Cardwell to host a world class mountain bike trail network and become a 'Ride Destination'. The objectives of the Feasibility Report were to:

- Develop a concept mountain bike trail network that has inputs for Traditional Owners, key stakeholders from the area as well as local and state government bodies
- Develop a concept mountain bike trail network that originates and finishes at the town of Cardwell in the Cassowary Coast
- Develop a concept trail network that can provide a range of mountain bike trail experiences for riders of different skill levels making use of the Cultural Heritage values and scenic beauty of the area including Wet Tropics Rainforest locations
- Develop a concept trail network that is balanced between cost effectiveness in terms of its construction and operation and the expected economic and social benefits that it may bring to Cardwell and the region as a whole
- Develop a concept trail network that adequately identifies key land tenure, terrain, potential environmental values impacts and Cultural Heritage assessment
- Develop estimated trail-specific construction and operating costs for a concept trail network
- Develop a concept mountain bike trail network that can be practicably staged in a manner to account for realistic funding requirements as well as ensure sufficient interest can be maintained to grow a local mountain bike economy
- Develop a mountain bike concept plan and feasibility investigation that is consistent with State and Federal tourism and environmental management policy and general funding application support requirements.

The preparation of the Feasibility Report involved a stakeholder engagement process with Traditional Owners, locals from Cardwell, members from the Council and Queensland Government, amongst a breadth of other stakeholders. Through this process, the Feasibility Report confirmed the strong support for the Project and the sense of enthusiasm amongst key stakeholders. Importantly, the Trails received full support from Girramay RNTBC and Girringun.

As part of the Feasibility Report, a conceptually designed trail network of 94km was designed to originate and finish in Cardwell (see Figure 8). The Feasibility Report also identified the potential for the Project to incorporate over 130km of trails, which is well more than the 80km of trails is generally required to become an international ride destination.

The Feasibility Report concluded that the Trails have the potential to generate significant socio-economic benefits for Cardwell and the Cassowary Coast and identified the need to develop a Business Case to progress the Project.

Subject to the outcomes of this Business Case, and prior to commencing construction activities, the Feasibility Report also documented the need to develop a funding and approval requirements framework, complete ground truthing and infield assessments and investigations, and develop a detailed design for the Trails.

### National Awards for Local Government

In 2022, the Project received an Honourable Mention in the Indigenous Recognition category of the Australian Government's Department of Infrastructure, Transport, Regional Development, Communications and the Arts' (DITRDCA)

2022 National Awards for Local Government.<sup>15</sup> The Project was nominated as the **'Ride Where Our Ancestors Once Walked - Girramay Country'** project, with the following quote used:

**"A small community with deep pride for its culture has come together to take on one very ambitious goal – to be Australia's next big 'Ride Destination'."**

The national recognition that the Trails is now receiving is driven by the involvement of the local Traditional Owners, who are fully in support of the Trails and enthusiastic to be involved and share their cultural heritage to visitors of Cardwell.

## 2.4 Mountain Biking Definition

Mountain biking is one of the fastest growing recreational and adventure tourism activities in Australia, and is broadly defined as off-road cycling on a variety of unsealed surfaces that are typically through a natural setting.<sup>16</sup> Mountain biking is a great way to experience the outdoors and connect with the landscape, with people of all ages able to participate in the activity. Mountain biking is usually highly accessible and can deliver significant environmental, social, health, cultural and economic benefits.

The *Mountain Biking in Australia: An Economic and Participation Analysis Report* completed for AusCycling in 2021 estimated the mountain biking industry to be worth approximately \$630.8 million to the Australian economy, which supported over 6,000 jobs across the nation at the time.<sup>17</sup> AusCycling also reported that cycling and riding activities contributed \$6.3 billion to the Australian economy in 2020 alone, which demonstrates the significant economic importance of the broader sector to Australia.<sup>18</sup>

A comprehensive analysis on the mountain biking market is outlined further in Chapter 3, *Mountain Biking Industry Analysis*.

## 2.5 Related Projects and Planned Developments

The Trails are expected to be influenced by, and integrated with, several relevant projects in the Cassowary Coast LGA as well as existing mountain biking developments in north and far north Queensland. The following sections provide a brief overview of each relevant project in the Cassowary Coast LGA and mountain biking development in north Queensland.

### 2.5.1 Cassowary Coast LGA

Table 3 summarises the projects and developments in the Cassowary Coast LGA that are expected to influence the Trails.

**Table 3: Related Projects and Developments**

Project	Description
<b>Cardwell Pump Track</b>	The Cardwell Pump Track is the first pump track to open in the region and is an exciting step towards establishing Cardwell as a 'Ride Destination'. The whole community came together for the Official Pump Track Opening, with riders of all levels enjoying the facility and riding the different features of the track. The project was largely driven by the community and supported by the Council. <sup>19</sup>

<sup>15</sup> DITRDCA (2022). *2022 National Awards for Local Government winners*. Accessed at <https://www.infrastructure.gov.au/territories-regions-cities/local-government/national-awards-local-government/2022-national-awards-local-government-winners>

<sup>16</sup> Mountain Bike Australia and the Queensland Government (2018). *Queensland Mountain Bike Strategy*. Accessed at [https://www.mtba.org.au/wp-content/uploads/QLD-MTB-MASTER-PLAN-Single-Pages\\_FINAL-180706\\_.pdf](https://www.mtba.org.au/wp-content/uploads/QLD-MTB-MASTER-PLAN-Single-Pages_FINAL-180706_.pdf)

<sup>17</sup> AusCycling (2021). *Mountain Biking in Australia: An Economic and Participation Analysis*. Accessed at <https://assets.auscycling.org.au/s3fs-public/2021-03/mountain-biking-in-australia-final-report-march-2021.pdf?sOhdYZLJUG1eZnmPE8yYmFQbbuOqr4m4=>

<sup>18</sup> AusCycling (2022). *Annual Report 2021*. Accessed at [https://assets.auscycling.org.au/s3fs-public/2022-04/auscycling\\_annualreport2021\\_published20220412.pdf?VersionId=0y4LuBiifOrkK.7qYKPQlant2DwBYLAq](https://assets.auscycling.org.au/s3fs-public/2022-04/auscycling_annualreport2021_published20220412.pdf?VersionId=0y4LuBiifOrkK.7qYKPQlant2DwBYLAq)

<sup>19</sup> CCRC (2022). *Cardwell Pump Track*. Accessed at <https://www.cassowarycoast.qld.gov.au/homepage/172/cardwell-pump-track>

Project	Description
<b>Port Hinchinbrook Sewerage Treatment Plant and Normalisation Project</b>	<p>The normalisation project includes transfer of ownership and control of the road, sewerage, stormwater and water assets to Council. This project will deliver the rehabilitation of roads, replacement of culverts, upgrades to the sewerage systems and the construction of a new sewerage treatment plant for the residents of Port Hinchinbrook.<sup>20</sup></p> <p>This will positively impact the Trails, as Port Hinchinbrook may play a key role in providing additional accommodation options for visitors. Further, the reinvigoration of Port Hinchinbrook may restore its status as a popular holiday destination, which may ultimately attract a blend of domestic and international visitors to Cardwell for the breadth of attractions.</p>
<b>Open Space Strategy Development – Stage 1</b>	<p>The Council is currently developing the Open Space Strategy to inform future investment and management outcomes across the Cassowary Coast parks and reserves network. This includes all land that is publicly owned and managed and is publicly accessible for community use. Open Space performs many functions across the region including conserving the natural environment, contributing to the community's health and wellbeing, providing areas for sports and recreation, creating spaces for events and supporting economic development and tourism.<sup>21</sup></p> <p>The Trails are strongly aligned with the Council's Open Space Strategy and will play an important role in enhancing the community's health and wellbeing, providing areas for sports and recreation, creating spaces for events and supporting economic development and tourism.</p>
<b>Mission Beach Town Centre Revitalisation Project</b>	<p>The Mission Beach Town Centre Revitalisation Project will create a vibrant town centre that reinvigorates Mission Beach and surrounds for the enjoyment of our community and visitors. The revitalisation will bring more tourism to the region and encourage further development from investors.<sup>22</sup> The final concept designs were adopted by the Council in 2022 and detailed design is scheduled to commence in 2023.</p> <p>The revitalisation of Mission Beach is expected to attract more visitors to the Cassowary Coast, creating an opportunity to promote the Trails and attract visitors to Cardwell. Further, Mission Beach includes a breadth of food, beverage and accommodation offerings which may be used by visitors to the Trails and the Cassowary Coast LGA.</p>

## 2.5.2 North and Far North Queensland Mountain Biking Parks and Tracks

Figure 12 presents the key mountain biking parks and tracks across north and far north Queensland. Collectively, these mountain biking tracks cater for a breadth of skills levels and offer a variety of trail styles, ranging from cross-country and gravity trails to pump tracks. The mountain biking tracks across the region are growing in reputation and awareness across Australia and internationally. This is particularly evident through *Crankworx*, which is a world-renown multi-stop series of mountain biking festivals that continues to be facilitated at the Smithfield Mountain Bike Park in Cairns. In 2022, *Crankworx Cairns* was reported to have attracted 1,200 athletes, 220 volunteers and up to 34,000 spectators.<sup>23</sup> Further, Cairns is one of only four worldwide destinations for *Crankworx*, which highlights the region's growing reputation.

<sup>20</sup> CCRC (2022). *Port Hinchinbrook Sewerage Treatment Plant and Normalisation*. Accessed at <https://www.cassowarycoast.qld.gov.au/homepage/171/port-hinchinbrook-sewerage-treatment-plant-and-normalisation>

<sup>21</sup> CCRC (2022). *Open Space Strategy Phase One - Classification and Service Levels*. Accessed at <https://yoursay.cassowarycoast.qld.gov.au/open-spaces>

<sup>22</sup> CCRC (2022). *Mission Beach Town Centre Revitalisation Project*. Accessed at <https://yoursay.cassowarycoast.qld.gov.au/mission-beach-town-centre-revitalisation-project>

<sup>23</sup> TTNQ (2022). *Crankworx to crank up Cairns' Mountain Biking Game*. Accessed at <https://www.tropicalnorthqueensland.org.au/articles/crankworx-cairns/>

In addition to these parks and tracks, there is also a significant number of informal trails across the region that have been developed in areas of natural bushland with vertical elevation.<sup>24</sup> The region's growing reputation, in conjunction with the unique, differentiated and potentially world-class offering of the Trails in Cardwell, presents an opportunity to establish north and far north Queensland as a leading mountain biking destination in the winter months and shoulder seasons. A high-level analysis of the Trails' value proposition is outlined in Chapter 3.



Figure 12: Mountain Bike Parks and Tracks in North and Far North Queensland<sup>25</sup>

In light of this, the *Tropical North Queensland (TNQ) Regional Mountain Bike Strategy 2018* (TNQ Regional Mountain Bike Strategy) recommended the development of clear, region-wide priorities to establish a coordinated network of trails and experiences across the region. This recommendation was reinforced throughout the comprehensive stakeholder engagement process undertaken as part of this Business Case, with several stakeholders confirming the broader need to collaborate and collectively promote the region as the home of winter mountain biking. In the absence of collaboration, other mountain bike parks and tracks (formal and informal) in north and far north Queensland may have a negative impact on the Project. However, with the appropriate level of investment and collaboration, there is a significant opportunity to increase visitation to all regional mountain biking parks and tracks and the breadth of other attractions, which would generate significant economic development and create new job opportunities throughout the region.

<sup>24</sup> Mountain Bike Australia and the Queensland Government (2018). *Tropical North Queensland Regional Mountain Bike Strategy*. Accessed at [https://www.mtba.org.au/wp-content/uploads/QLD-MTB-MASTER-PLAN-Single-Pages\\_FINAL-180706\\_.pdf](https://www.mtba.org.au/wp-content/uploads/QLD-MTB-MASTER-PLAN-Single-Pages_FINAL-180706_.pdf)

<sup>25</sup> Adapted from Australian Government (2023). *National Maps*. Accessed at <https://nationalmap.gov.au/>



## 2.6 Strategic Alignment

The Trails align with a number of CCRC, Queensland and Australian Government strategies, policies and reports, as listed in Figure 13. The following sections demonstrate the strategic alignment of the Trails with the key government strategies, policies and reports.

Cassowary Coast Regional Council	Queensland Government and Agencies	Australian Government and Agencies
<p><b>Key Strategies, Policies and Reports</b></p> <ul style="list-style-type: none"> <li>Innovate Reconciliation Action Plan 2023-2025</li> <li>CCRC Operational Plan 2022-23</li> <li>Cassowary Coast Region Tourism Strategy (2019).</li> </ul> <p><b>Other Relevant Strategies, Policies and Reports</b></p> <ul style="list-style-type: none"> <li>CCRC Visitor Information Services Strategy 2022-26</li> <li>CCRC Art and Culture Policy (2015)</li> <li>Cassowary Coast Regional Council Planning Scheme 2015</li> <li>Cassowary Coast Region Community Plan 2011-2021.</li> </ul>	<p><b>Queensland Government – Key Strategies, Policies and Reports</b></p> <ul style="list-style-type: none"> <li>Towards Tourism 2032</li> <li>Activate! Queensland 2019 – 2029</li> <li>Queensland Mountain Bike Strategy 2018</li> <li>Tropical North Queensland Mountain Bike Strategy (2018)</li> <li>Queensland Ecotourism Trails Plan 2016-2020 and Program</li> <li>Bike Tourism in Queensland Research Report (2022)</li> </ul> <p><b>Other Relevant Strategies, Policies and Reports</b></p> <ul style="list-style-type: none"> <li>Tropical North Queensland Mountain Biking Analysis</li> <li>Queensland Indigenous Procurement Policy (2022)</li> <li>Aboriginal and Torres Strait Island Cultural Capability Action Plan 2019-2022</li> <li>Reconciliation Action Plan 2018-2021 / Reconciliation Action Plan 2018-2022 Addendum</li> <li>Queensland Tourism and Transport Strategy (2018).</li> </ul> <p><b>Queensland Government Agencies – Key Strategies, Policies and Reports</b></p> <ul style="list-style-type: none"> <li>Tropical North Queensland Destination Tourism Plan 2021</li> <li>Tropical North Queensland Mountain Biking Market Analysis 2021</li> <li>Regional Multi-use Trails Strategy 2019</li> </ul> <p><b>Other Relevant Strategies, Policies and Reports</b></p> <ul style="list-style-type: none"> <li>Global Marketing Strategy 2023-2028</li> <li>Events Strategy 2025</li> <li>Tourism and Events Queensland Strategic Plan 2022-26</li> <li>Nature-based Tourism Strategy 2021 – 2024.</li> </ul>	<p><b>Australian Government – Key Strategies, Policies and Reports</b></p> <ul style="list-style-type: none"> <li>Thrive 2030</li> <li>Tourism Australia Corporate Plan 2021/22 – 2024/25.</li> </ul> <p><b>Other Key Strategies, Policies and Reports</b></p> <ul style="list-style-type: none"> <li>Sport 2030 - National Sport Plan</li> <li>Indigenous Advancement Strategy</li> <li>Indigenous Procurement Policy</li> <li>Empowered Communities.</li> </ul>

Figure 13: Strategic Alignment of the Trails

### 2.6.1 Local Government

#### Cassowary Coast Region Tourism Strategy

The *Cassowary Coast Region Tourism Strategy* was collaboratively developed between the Council, Tropical Coast Tourism (TCT), and tourism industry members to provide greater certainty and direction for investors, tourism operators and community alike. The strategy guides industry and local government priorities for the tourism sector's growth, support services, destination planning and marketing for the region. The strategy aims to:

- Improve integration and collaboration of public and private sectors involved in tourism
- Provide enhanced quality of local tourist information and experiences
- Guide the repositioning of the region's tourist destination brand
- Redefine the role and image of TCT
- Support the development of Indigenous tourism products that can provide business growth opportunities for existing operators and expand employment opportunities across the industry.

The Trails are strongly aligned with CCRC's tourism strategy as it will involve investing in, and leveraging, the competitive advantages and natural attractions of Cardwell to become a popular destination for ecotourism, adventure and nature-based and cultural tourism activities and experiences. Furthermore, the Project may also catalyse further investment in the region's tourism industry, which will likely drive further economic growth and generate new employment opportunities. The Trails will also provide employment and business development opportunities for local Traditional Owners, which will



support the strategy's objective to support business growth and expand employment opportunities associated with Indigenous tourism products.

### **Innovate Reconciliation Action Plan**

The *Innovate Reconciliation Action Plan 2023-2025* (Innovate RAP) focuses on the Council's drive to create a trustful, supportive and collaborative environment for all First Nations Peoples. The Innovate RAP will guide the Council's work over the next two years to ensure it is positioned to implement effective and mutually beneficial initiatives as part of the Council's ongoing commitment to reconciliation. The Innovate RAP involves strategies that are focused on developing respect and creating opportunities by acknowledging and sharing experiences for an inclusive community connected to Culture and Country on the Cassowary Coast.

The Trails will promote and protect the Girramay People's Culture and connection with Country, as well as generate new employment opportunities for local Traditional Owners. The Innovate RAP's commitments that align with the Project include:

- Establish and maintain mutually beneficial relationships with Aboriginal and Torres Strait Islander stakeholders and organisations
- Increase understanding, value and recognition of Aboriginal and Torres Strait Islander cultures, histories, knowledge and rights through cultural learning.
- Consult local Traditional Owners and/or Aboriginal and Torres Strait Islander advisors on the development and implementation of a cultural learning strategy
- Promote recognition of the Traditional Owners of the region by including an acknowledgement of lands on signage when entering towns
- Engage with Aboriginal and Torres Strait Islander staff to consult on our recruitment, retention and professional development strategy.

The development of the Business Case has involved a comprehensive stakeholder engagement process with the Girramay RNTBC and Giringun to ensure the Trails provide meaningful opportunities for Traditional Owners. Importantly, the unique cultural heritage of the Girramay Peoples will form a foundational component of the Trails' offering. This will provide new business opportunities for Traditional Owners and support the employment of local Traditional Owners and First Nations Peoples. For example, the Trails may be maintained by Rangers as part of Giringun's Aboriginal Ranger Program. Therefore, the Trails are strongly aligned with, and will support, the Innovate RAP and the Council's commitment to delivering sustainable, thoughtful and impactful RAP outcomes into the future.

### **CCRC Operational Plan 2022 – 2023**

The *Operational Plan 2022 – 2023* outlines the activities and actions to be undertaken by the Council for the 2022/23 financial year (FY), with specific focus categorised by community, economy, infrastructure, region and organisation. The operational plan also identifies the community's desires and expectations within the region and the Council's proposed activities to deliver upon these expectations.

The Trails are included in the operational plan as an economic operational initiative, aligning to the Council's economic goal:

*"A strong diverse economy which provides opportunities for business and investment with an integrated approach to long term planning where the region's assets meet community needs."*

The relevant strategic directions and priorities the Project will address include:

- Driving innovation in ecotourism experiences
- Supporting an environmentally balanced and aware community that preserves and maintains the natural environment
- Accrediting and investing in ecotourism strategies and projects.

The Council's operational plan also included advocating for the development of this Business Case, confirming their intent to support the Project.

## 2.6.2 Queensland Government

### Towards Tourism 2032

*Towards Tourism 2032* (Towards Tourism) outlines the vision and mission for Queensland's tourism sector over the next decade to 2032, which is the year of the Brisbane Olympic and Paralympic Games. Towards Tourism defines the focus and guides actions in the Queensland tourism sector to generate the most impact by building on Queensland's competitive advantages. It provides an enduring framework to direct business and government cooperation to foster Queensland tourism's long term expansion and success.

Towards Tourism intends to increase Queensland's visibility as a tourist destination on a worldwide scale by 2032. As part of this, the Queensland Government is seeking to increase the resilience of the tourism sector by reinventing products for the benefit of travellers, locals, and the environment.

The delivery of the Trails in Cardwell will support the following key focus areas outlined in Towards Tourism:

- **Supply:** By 2032, Queensland is a global leader of vibrant, authentic, accessible and transformative visitor experiences and events – reflecting our natural and cultural values, vibrant communities and regions, catering for different types of visitors and delivering on our brand promise.
- **Sustainability:** By 2032, Queensland is recognised as a global leader in sustainable tourism experiences with a clear industry pathway towards net zero emissions, and has a thriving nature-based tourism sector that balances tourism development with environmental preservation, protection, and interpretation.
- **First Nations:** By 2032, Queensland is recognised as Australia's leading destination for First Nations tourism experiences – showcasing and enriching cultural experiences for visitors and delivering economic opportunities for Traditional Owners, Indigenous communities and businesses.

As previously outlined in Section 2.6.1, the Trails will promote and protect the Girramay Peoples culture and connection with country, as well as generate new employment opportunities for local Traditional Owners and First Nations Peoples; strongly aligned with the Queensland Government's First Nations focus area. The Trails will also promote and protect the Girramay Peoples' authentic cultural heritage, which is a unique value offering that is anticipated to attract a breadth of visitors to the Trails and Cardwell more broadly. Finally, the Trails will offer sustainable tourism experiences that balance tourism development with environmental protection, which is a key focus area of Towards Tourism.

### Activate! Queensland 2019 – 2029

*Activate! Queensland 2019 – 2029* (Activate! Queensland) is the Queensland Government's 10-year strategy to promote the long term vision of enhanced movement and physical activity in Queensland. Activate! Queensland is a whole-of-government priority that was developed to facilitate collaboration between government, industry and the community to benefit all Queenslanders. The strategy is a foundational reform for investment, aligning delivery of physical activity to achieve key targets and tackling major challenges with a strong sense of purpose, focus and commitment. Whole-of-government investment will see improvements in physical activity opportunities across a diverse range of areas.

The Trails are strongly aligned with Activate! Queensland's focus areas, including:

- Empower more Queenslanders to enjoy physical activity to improve their health and wellbeing in active communities
- Inspire activity with places and spaces that invite an active lifestyle.

The Trails will facilitate collaboration in the Cardwell community by delivering infrastructure solutions that respond to community needs, improve accessibility and inspire recreational activity in the town, which align to the strategies objectives of Activate! Queensland. The Project also includes the development of trails for all skill levels and ages, establishing an activity space for regular physical activity.

### Queensland Mountain Bike Strategy 2018

The *Queensland Mountain Bike Strategy 2018* was commissioned by the Queensland Government and the then-named Mountain Bike Australia (now AusCycling) to gain an understanding of the existing and projected demand for mountain bike

trails, identify gaps, constraints and opportunities, and provide strategies to guide trail investment decisions. The strategy provides an informative overview of the demand and supply factors for mountain bike infrastructure and identifies gaps and opportunities in the market. Further, the strategy also provides guidance on the involvement, governance and sustainable development of trails, facilities and infrastructure, as well as the methodology to prioritise trail investment decisions.

The Trails are strongly aligned the Queensland Mountain Bike Strategy and will support the following key strategic areas:

- Bridging the gap in participation in the broader community
- Supporting trails, facilities and infrastructure that cater to the needs of all abilities
- Focusing on creating locations that could cater for national and international mountain bike events that will draw visitation from intrastate, interstate and overseas.

As previously outlined, the Project will include a network of trails that accommodates all skill levels and ages, which will bridge the gap in participation in Cardwell and the Cassowary Coast, more broadly. The Trails will cater to the abilities of all potential riders, particularly given the recent rise in e-bikes. Finally, the Trails will have event zones and facilities that are capable of hosting national and international mountain bike vents in Cardwell, providing a significant boost to the local economy and tourism sector.

### **Tropical North Queensland Regional Mountain Bike Strategy 2018**

The TNQ Regional Mountain Bike Strategy builds upon the grass roots evolution of mountain biking in TNQ to identify regional collaboration opportunities and goals. The purpose of the TNQ Regional Mountain Bike Strategy is to ensure the region can continue to offer a diverse range of experiences and trail levels for riders, which are required to maintain and grow the region's position as a world-class mountain biking destination. The objective of the strategy is to respond to the need for a clear, region-wide blueprint to guide agencies and public interest groups to link hubs across the entire Far North Queensland Regional Organisation of Councils (FNQROC) region.

The Trails in Cardwell were identified as a regional mountain biking centre in the TNQ Regional Mountain Bike Strategy and are strongly aligned with several recommendations documented in the strategy. This includes:

- Developing and maintaining world-class trails to facilitate world-class events
- Providing opportunities for use of trails by less experienced riders
- Creating safe and convenient drop off and pick up areas and trail head amenities.

The Trails are strongly aligned with the recommendations outlined above and will progress the strategy's recommendations by providing a world-class trail network that is capable of hosting world-class events, accommodating for all levels of riders and providing safe and accessible facilities.

### **Queensland Ecotourism Trails Plan 2016 – 2020 and Program**

The *Queensland Ecotourism Trails Plan 2016 – 2020* and Program aims to collaborate with Traditional Owners and regional communities to deliver new tourism opportunities for Queensland and generate positive social, environmental and economic outcomes. These opportunities are intended to showcase Queensland's natural assets and cultural heritage and enhance connection to country, for now and for future generations.

The development of the Project will contribute to achieving these outcomes, which include long term job and business opportunities for the Girramay Peoples, as well as a stronger appreciation and understanding of Girramay Country and culture. Additionally, the Trails will present an opportunity to develop innovative tourism offerings that can capture a greater market share of high value tourists and generate greater economic activity in the region.

### **Bike Tourism in Queensland Research Report**

The *Bike Tourism in Queensland Research Report* was commissioned by the Department of Transport and Main Roads to investigate the current and potential market for bike tourism in Queensland. The report found that bike riding is becoming of the fastest growing types of outdoor recreation and tourism nationwide. Further, the report indicated that Queensland weather enables domestic and international visitors to visit and ride at any time throughout the year, unlike other popular

riding destinations such as Tasmania. These visitors contribute significantly to the economy, using accommodation, visiting local attractions and buying goods from local shops.

The report found that successful mountain biking destinations must provide a sufficient volume of high-quality trails, scenery, supporting experiences, and a mountain bike culture. Additionally, the report suggested that great experiences are critical for driving repeat visitation and future growth, not just 'good' experiences. Importantly, the findings of the report are strongly aligned with the value proposition of the Trails in Cardwell and the breadth of complementary attractions in the region.

### **Tropical North Queensland Destination Tourism Plan 2021**

The *Tropical North Queensland Destination Tourism Plan 2021* was developed by Tourism and Events Queensland (TEQ) to provide prospective investors with an understanding of tourism in TNQ and its significant growth potential. The plan provides a thorough overview of the region's advantages, current product offerings, and visitor profiles, whilst also serving as a management and investment guide for the destination.

The plan considers visitor demand, current planning and priorities for regional attractions, as well as stakeholder participation. To meet demand and promote the growth of a sustainable tourism industry for the areas, actions were developed and defined to capitalise on possibilities, fill gaps, and prioritise product development. The Trails are strongly aligned to this plan, as they will enhance visitation to TNQ and increase the length of stay in Cardwell.

### **Tropical North Queensland Mountain Biking Market Analysis**

The *Tropical North Queensland Mountain Biking Market Analysis* (Draft Report) was prepared for Tourism Tropical North Queensland (TTNQ) to explore the potential size, value, characteristics and preferences of the mountain biking market for Cairns and TNQ, more broadly.

The analysis identified that the MTB market is a sympathetic and potentially symbiotic market for TNQ to pursue, due to the outdoor nature of the activity, the remarkable diversity and beauty in the landscape, and the particular opportunity presented for winter riding when the climate is best in TNQ and worst in southern source markets. The analysis identified that mountain bike riders are seeking consistency in branding, uniqueness and connection with place, opportunities to socialise and to consume locally produced food and beverages in a down-to-earth, connected environment. According to the analysis, they are also seeking opportunities to connect with other riders in rest areas, as well as places to enjoy a drink and a good view.

The Trails in Cardwell are strongly aligned with this, as they will represent a high quality network of trails in a pristine natural environment. The Trail Head's proximity to the town centre and foreshore will enable riders to enjoy local businesses' food and beverage offerings and each other's company, all without requiring access to private vehicles.

### **Regional Multi-Use Trails Strategy**

The *Regional Multi-Use Trails Strategy* was developed in recognition of the major opportunity for the Cassowary Coast and Tablelands regions to develop trail-based recreation and tourism, benefiting residents and expanding each region's tourism potential.

In the strategy, trails were identified as valuable community assets with the potential to be economically and environmentally sustainable. Additionally, the strategy demonstrated that trails have the ability to contribute to community wellbeing through healthy and active communities, providing a connection to cultural heritage, and by contributing economic benefits.

Importantly, the Trails in Cardwell were identified in the strategy as a major opportunity to develop a regionally significant network.

### 2.6.3 Federal Government

#### Thrive 2030

*Thrive 2030* was developed by the Australian Trade and Investment Commission (Austrade) and presents the national strategy for the long term sustainable growth of the visitor economy.

The Trails align with several key strategic areas outlined in *Thrive 2030*, including:

- Grow unique and high-quality products, including Aboriginal and Torres Strait Islander experiences
- Improve and maintain public infrastructure in national parks and WHAs
- Deliver priority local infrastructure projects to support local communities.

A number of key actions outlined in *Thrive 2030* are strongly aligned with the Trails, including 5.5 – Improve tourism infrastructure in regional areas, and 5.6 – Improve and maintain public infrastructure in national parks and WHAs through master planning and destination management planning developed alongside Traditional Owners.

*Thrive 2030* recognised Indigenous tourism as an integral part of Australia's visitor economy, as it provides a platform for Aboriginal and Torres Strait Islander Peoples to share the oldest continuous culture in the world through authentic, immersive and life-changing experiences. Indigenous tourism also provides a valuable source of economic opportunity and employment for Aboriginal and Torres Strait Islander Peoples, which is anticipated to be generated through the Trails in Cardwell.

The Trails will enhance the attractiveness of Cardwell to high value tourism markets, whilst diversifying the tourism offerings to the town. In doing so, the Trails will support the development of a more resilient tourism sector in Cardwell. Furthermore, the Trails will also drive growth in the local economy and provide employment opportunities to Girramay Peoples and residents. These employment opportunities will be provided during the construction and maintenance phases of the Trails and are strongly aligned to *Thrive 2030*'s objectives.

#### Tourism Australia Corporate Plan 2021/22 – 2024/25

The *Tourism Australia Corporate Plan 2021/22 – 2024/25* outlines Tourism Australia's strategic direction, objective and goals. The delivery of the plan has already commenced, with Tourism Australia focused on growing demand in the tourism sector and fostering a competitive and sustainable sector nationwide.

The strategic priorities of Tourism Australia that are aligned with the Trails include:

- Elevate and champion Indigenous tourism
- Drive awareness of, and capability for, sustainable travel
- Generate long term demand and growth.

The Girramay Culture will be respectfully promoted and protected through the development of the Trails, which is strongly aligned with Tourism Australia's strategic priority to elevate and champion Indigenous tourism. As part of this, the Trails will also provide employment opportunities for the local Traditional Owners, which is strongly aligned with Tourism Australia's commitment towards the Australian Government's target for people with Aboriginal or Torres Strait Islander heritage to represent 3% of Australia's workforce.

The Trails also present an opportunity to support the long term growth and rebound of Cardwell's tourism sector. This will be particularly driven by the Project's variety of trails that will cater for all skill levels, which will attract initial and return visitation of key tourism demographics and contributing to Cardwell's viability as a tourist destination in the long term.

Finally, whilst less relevant, the Trails will also enable visitors to travel across the town via bike, rather than private transport. This represents a form of sustainable travel that promotes recreational activity and support the health of visitors to Cardwell.

## **2.7 Summary**

This chapter has outlined the background of the Trails – a community-led initiative that has received support from Traditional Owners, the Council and the Queensland Government. The Trails were also recognised by the Australian Government for the level of support and involvement of the local Traditional Owners, who fully support the Trails and are enthusiastic to be involved and share their cultural heritage to visitors of Cardwell.

Despite the stagnant economy, slowing population growth and ageing population in Cardwell, there is a significant opportunity to establish Cardwell as a leading mountain biking destination in the region during the winter months and shoulder seasons. Further, the Trails demonstrate the significant opportunity to align with and achieve key objectives and priorities for all three levels of government, generating benefits to the local community and Traditional Owners, and catalysing economic development and population growth in Cardwell.



# 3 Mountain Biking Industry Analysis

## 3.1 Purpose

The purpose of this chapter is to define and analyse the mountain biking industry at the state and national levels, outline the value proposition of the Trails in Cardwell and summarise the potential economic, social and environmental benefits from mountain biking. This chapter includes:

- Mountain Biking Overview
- Mountain Biking Industry Analysis
- Value Proposition of Cardwell
- Benefits of Mountain Biking
- Summary.

Given that participation in mountain biking is varied and constantly changing with new technology and different demand drivers, the following sections analyse the mountain biking industry through the most recent and reputable information that is publicly available. Information and data pertaining to international mountain bike visitors is limited. As a result, this chapter is focused on the domestic mountain biking industry, which is expected to be critical to the Trails' operational sustainability.

## 3.2 Mountain Biking Overview

Mountain biking is one of the fastest growing recreational and adventure tourism activities in Australia, and is broadly defined as off-road cycling on a variety of unsealed surfaces that are typically through a natural setting.<sup>26</sup> Mountain biking is a great way to experience the outdoors and connect with the landscape, with people of all ages able to participate in the activity. Mountain biking is typically highly accessible and can deliver significant environmental, social, health, cultural and economic benefits. Generally, mountain bike riders ride their bikes a couple of times per week for one to two hours.

The following sections introduce the key types of mountain bike riders, as well as the types of trails that are typically located at mountain bike parks and trails relevant to this Project.

### 3.2.1 Types of Mountain Bike Riders

Mountain bikers can be categorised by 'rider' and 'visitor' groups. This section outlines five general types of mountain bike riders, which is typically determined by the preference of trail style and level of experience. Further detail on the key mountain bike visitor groups for the Trails in Cardwell is outlined in Section 3.4.

Table 4 presents five key types of mountain bike riders, according to AusCycling's *Australian Mountain Bike Trail Guidelines*.

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<sup>26</sup> Mountain Bike Australia and the Queensland Government (2018). *Queensland Mountain Bike Strategy*. Accessed at [https://www.mtba.org.au/wp-content/uploads/QLD-MTB-MASTER-PLAN-Single-Pages\\_FINAL-180706\\_.pdf](https://www.mtba.org.au/wp-content/uploads/QLD-MTB-MASTER-PLAN-Single-Pages_FINAL-180706_.pdf)

Table 4: Types of Mountain Bike Riders<sup>27</sup>

Type	Description
Leisure	Leisure riders include general cyclists of all ages and abilities and is potentially the largest market. Typically, they ride infrequently, often have limited skills and require very accessible trails. They are typically not members of clubs and are more likely to use highly accessible routes close to home or make the journey to trail facilities with amenities and services such as bike hire, cafes, and toilets.
Enthusiast	Enthusiasts are purely recreational mountain bikers with moderate skills and variable fitness, and ride weekly. They are typically aged 29-49 and represent the majority of mountain bike riders. They typically don't compete in events, and they possess limited outdoors experience. They prefer trails with good trail signage and seek technical but not too challenging trails. Enthusiast mountain bikers are the most likely to take short breaks to different areas.
Sport	Competitive mountain bikers, who ride regular routes multiple times a week and are members of mountain bike clubs, are a small but influential market. They are willing to seek less accessible trails and have high fitness levels and are technically proficient but may have limited outdoor skills. They ride a very wide variety of trails.
Independent	Skilled outdoor enthusiasts who ride once a week and are technically proficient with a good level of fitness. Generally, they are a small market. Often involved in other outdoor activities, they plan their own rides and ride a very wide variety of trail classifications. For independent riders, the adventurous aspect is more important than the technical challenge and, as such, they will seek more remote trails.
Gravity	Highly skilled technical riders who seek very challenging trails, typically ride at least once a week and are often members of clubs. They represent a small market that required purpose-built trails, which are repeatedly used in a concentrated manner. Gravity riders seek specific trails with the highest classification.

### 3.2.2 Types of Mountain Bike Trails

Mountain bike parks and trails typically consist of single-use or multi-use trails, which determine the mode/s of transportation that are permitted on the trail. A single-use mountain bike trail only permits mountain biker riders and is generally more prevalent in difficult and extreme trails that are designed for bikes to be travelling in one direction and at high speeds (see Table 6). Multi-use trails are becoming increasingly more prevalent and provide for a range of nature-based activities including walking, biking, horse riding and trail running. Multi-use trails are valuable community assets with the potential to be economically and environmentally sustainable, and to contribute to community wellbeing through healthy and active communities, providing a connection to cultural heritage, and by contributing economic benefits.<sup>28</sup>

Table 5 summarises the key trail types that are relevant to the Trails in Cardwell and are typically featured at mountain bike parks and trails. It is important to provide a variety of trail types, and difficulties, to establish an ideal and successful mountain bike destination that attracts new and repeat mountain bikers.

<sup>27</sup> AusCycling (2019). *Australian Mountain Bike Trail Guidelines*. Accessed at <https://assets.auscycling.org.au/s3fs-public/2021-03/mountain-biking-in-australia-final-report-march-2021.pdf?sOhdYZLJUG1eZnmPE8yYmFQbbuOqrfm4=>

<sup>28</sup> Otium and TORA (2019). *Regional Multi-Use Trails Strategy*. Accessed at <https://www.cassowarycoast.qld.gov.au/downloads/file/3429/regional-multi-use-trails-strategy-ccrc-trc-january-2019-final>



Table 5: Trail Style Descriptions<sup>29</sup>

Trail Style	Description
Adventure	Adventure trails are one of the world's most prolific trail types and, as such, are the most popular gateway trails for all levels of mountain bike riders. Adventure trails are traditionally referred to as cross-country and have a free-flowing style that maximise the use of the natural terrain. Adventure trails feature contour-hugging designs that allow riders to feel confident, while also providing options and features for extra challenge.
Air Flow	Air flow trails magnify pure flow and create exciting line choices, transfers and safe jumping options. Air flow trails typically feature sculptured jumps, berms and rollers. Air flow trails place an emphasis on rider safety, skill progression and fun experiences.
Downhill	Of all the trail styles, downhill trails are generally the steepest, most raw and challenging. They are the domain of long-travel, design-specific mountain bikes and Union Cycliste Internationale (UCI) sanctioned racing. With minimal benching, steep erratic features, off-camber, large transfer and high-risk options, these trails are generally shorter, more aggressive and suited to more experienced riders.
Flow	Flow trails are a descending trail style that offer a constant undulation of groomed rollers, berms, and achievable obstacles. Flow trails create a sensation of speed and rhythm, require minimal decision-making and enable riders to feel in control and have fun.
Gravity	Gravity trails incorporate a mix of flow, air flow and downhill styles that leverage natural terrain in an exciting and challenging descent. Gravity trails typically provide multiple line choices and a variety of features and may include occasional short uphill sections.
Wilderness	Wilderness trails are in remote settings and take advantage of diverse landscapes to provide riders a unique, immersive and memorable experience. They are generally narrow, longer-distance trails with a focus on ensuring the trail provides an opportunity for riders to challenge themselves over an endurance distance, while finishing with a good experience that attracts repeat use of the trails.

### 3.2.3 Types of Mountain Bike Trail Difficulties






Table 6 outlines the seven levels of difficulty for mountain bike trails, based upon Mountain Bike Australia's *Trail Difficulty Rating System* (TDRS). The TDRS enables visitors to understand the nature of the trail before beginning their ride and allows them to plan their ride for enjoyment, appropriate level of challenge and safety. Trails are classified based on the physical attributes presented and the technical challenge of the trail, not the exertion and fitness that may be required by the user. The difficulty of each trail is generally communicated to visitors through trail signage and on brochures and maps.

Table 6: Trail Difficulty Rating System<sup>30</sup>

Symbol	Classification	Description
	<b>Very Easy</b>	<ul style="list-style-type: none"> <li>Wide trail with a gentle gradient smooth surface and no obstacles</li> <li>Suitable for beginner cyclists with basic bike skills, and most bikes</li> </ul>
	<b>Easy</b>	<ul style="list-style-type: none"> <li>Wide trail with a gentle gradient smooth surface</li> <li>Some obstacles such as roots, logs and rocks</li> <li>Suitable for beginner cyclists with basic mountain bike skills, and off-road bikes</li> </ul>

<sup>29</sup> World Trail (2021). *Cardwell Tropical Mountain Bike Trail Project Feasibility Report*. Provided by CCRC.

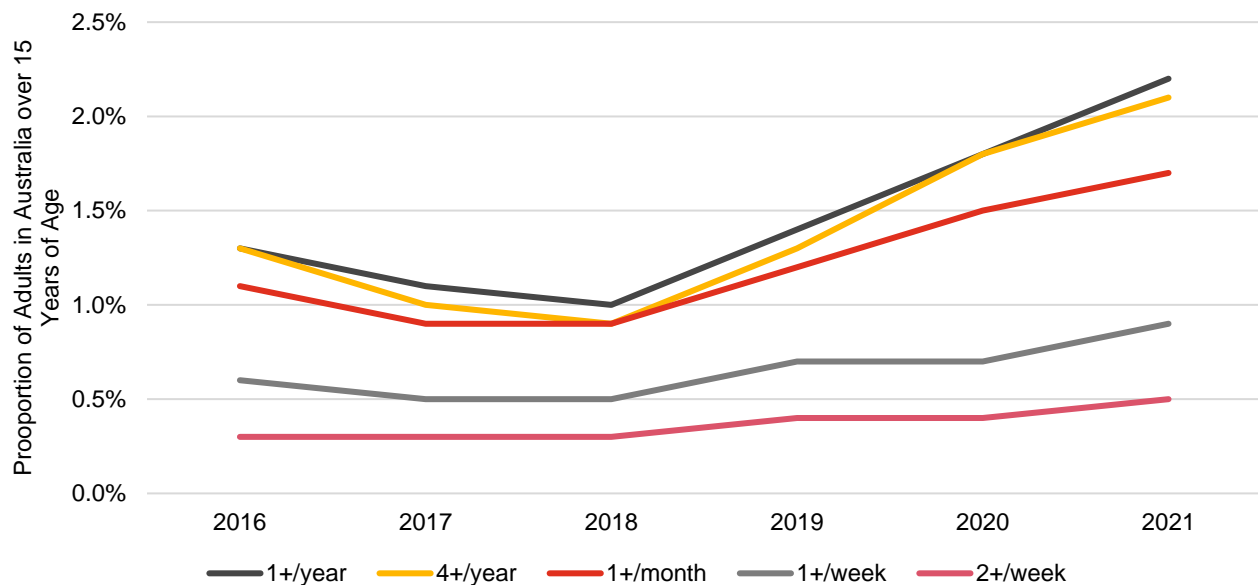
<sup>30</sup> Mountain Bike Australia (2019). *Trail Difficulty Rating Systems*. Accessed at <https://www.mtba.org.au/wp-content/uploads/Trail-Difficulty-Rating-System-Australian-MTB-Management-Guidelines-Web-V2.pdf>

Symbol	Classification	Description
	<b>Easy with Intermediate Sections</b>	<ul style="list-style-type: none"> <li>• Likely to be single track with a moderate gradient, variable surface and some obstacles</li> <li>• Some obstacles such as roots, logs and rocks</li> <li>• Suitable for mountain bikers with mountain bikes</li> </ul>
	<b>Intermediate</b>	<ul style="list-style-type: none"> <li>• Single trail with moderate gradients, variable surface and obstacles</li> <li>• May include steep sections</li> <li>• Suitable for skilled mountain bikers with mountain bikes</li> </ul>
	<b>Intermediate with Difficult Sections</b>	<ul style="list-style-type: none"> <li>• Suitable for competent mountain bikers, used to physically demanding routes</li> <li>• Expect large and unavoidable obstacles and features</li> <li>• Challenging and variable with some steep climbs or descents and loose surfaces</li> </ul>
	<b>Difficult</b>	<ul style="list-style-type: none"> <li>• Suitable for experienced mountain bikers, used to physically demanding routes</li> <li>• Navigation and personal survival skills are highly desirable</li> <li>• Expect large, dangerous and unavoidable obstacles and features</li> <li>• Challenging and variable with long steep climbs or descents and loose surfaces</li> <li>• Some sections will be easier to walk</li> </ul>
	<b>Extreme</b>	<ul style="list-style-type: none"> <li>• Suitable for highly experienced mountain bikers, used to physically demanding routes</li> <li>• Navigation and personal survival skills are highly desirable</li> <li>• Severe constructed trails and/ or natural features, all sections are challenging</li> <li>• Includes extreme levels of exposure and / or risk</li> <li>• Expect large and unavoidable obstacles and features</li> <li>• Some sections will be easier to walk</li> </ul>

### 3.3 Mountain Biking Industry Analysis

#### 3.3.1 Australia

Participation in mountain biking has grown significantly across Australia in recent years. As highlighted in Figure 14, participation in mountain biking has surged across all categories since 2018; particularly in 2020 during the COVID-19 Pandemic, which saw a dramatic increase in participation levels. Collectively, the number of people who participated in mountain biking increased from approximately 737,000 in 2018 to 1.6 million in 2021 at a compound annual growth rate (CAGR) of 28.6% per annum. Whilst participation in mountain biking is unlikely to continue this trajectory, this demonstrates the significant growth that has occurred in mountain biking across Australia in recent years.

Figure 14: Participation in Mountain Biking in Australia<sup>31</sup>

The following sections outline the key demographics, household income and travel tendencies of mountain bike riders in Australia.

## Demographics

Mountain bike riders are predominately male, who represent approximately 82% of all participants in Australia.<sup>32</sup> Males also represent the majority of mountain bike travellers, accounting for 83% and 59% of intrastate and interstate visitors who travel for mountain biking respectively.<sup>33</sup> However, females are increasingly participating in mountain biking. This is anticipated to be buoyed from strong participation levels amongst girls aged less than 15 years old, who represent 29% of participants below the age of 15 years old compared to females representing just 18% of participants aged 15 years or older.<sup>34</sup> Whilst this may be partially a result of children riding as part of a family group, the strong participation in mountain biking by girls aged less than 15 years old suggests there will be continued growth in the participation levels of females in mountain biking.

As demonstrated in Figure 15, males aged 25 to 44 years old represent approximately 60% of participants in mountain biking. Participation by females also peaks from the age 25 to 44 years old, although this age group cumulatively represents 14% of participants in mountain biking. Collectively, males and females aged 25 to 44 years old represents close to 75% of the market.

<sup>31</sup> AusPlay (2022). *Mountain Biking Report*. Accessed at <https://app.powerbi.com/view?r=eyJrJoiYzA4NzNINzUtNzMxMi00ZTk0LWJkZmMtNDQxNTYxMGY0ZDc5IiwidCI6IjhhkMmUwZjRjLTU1ZjltNGNiMS04ZWU3LWRhNWRkM2ZmMzYwMCJ9>

32 Ibid.

<sup>33</sup> Department of Transport and Main Roads (2022). *Bike Tourism in Queensland – Supplementary Report: Mountain Biking*. Accessed at <https://www.tmr.qld.gov.au/Travel-and-transport/Cycling/bike-tourism>

<sup>34</sup> AusPlay (2022). *Mountain Biking Report*. Accessed at <https://app.powerbi.com/view?r=eyJrIjoieZA4NzNiNzUtNzMxMi00ZTk0LWJkNzMtNDQxNTYxMGY0ZDc5IiwidCI6IjhhkMmUwZjRjLTU1ZjltNGNiMS04ZWU3LWRhNWRkM2ZmMzYwMCJ9>

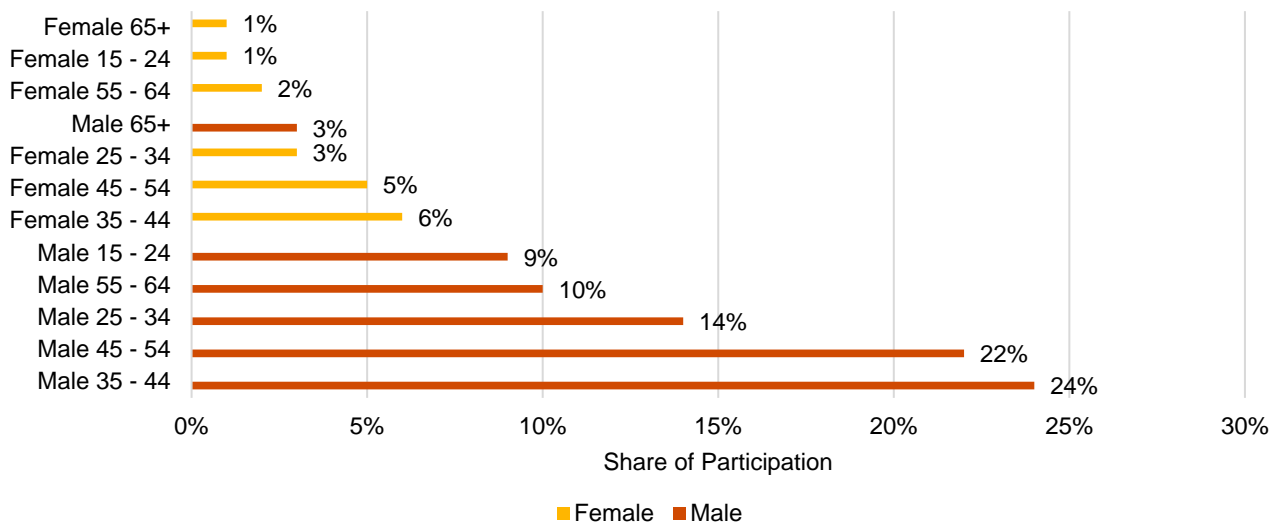


Figure 15: Share of Participation in Mountain Biking in Australia by Age and Gender<sup>35</sup>

### Growing Popularity of E-bikes

Electric bicycles (or e-bikes) are becoming more popular and will enable all mountain bikers to ride for longer in terms of age, distances and durations. According to the Australian Bicycle Association, the sale of e-bikes has increased by more than 50% over the last few years in Australia.<sup>36</sup> In Queensland, the sale of e-bikes was reported to have increased by 20% per annum in recent years.<sup>37</sup>

The growth in e-bike sales and ownership has been driven by the increased environmental awareness amongst consumers, greater convenience and accessibility of e-bikes for riders who may be unable to ride for long distances or otherwise participate in mountain biking or cycling, and increasing affordability. Along with this, there is an increasing acceptance of e-bikes by 'hard-core' riders, which is critical to ensuring those who use e-bikes are not dissuaded from riding.

Importantly, the growth in e-bikes introduces new opportunities and target demographics in mountain biking. This includes 'baby boomers', which includes people born between 1946 to 1964, as well as families with younger children who may typically be unable to mountain bike for long distances.

### Household Income of Mountain Bike Riders

As demonstrated in Figure 16, approximately 44% of mountain bike travellers are from high income households, defined as those that earn approximately \$130,000 per annum or more.<sup>38 39</sup>

<sup>35</sup> AusPlay (2022). *Mountain Biking Report*. Accessed at <https://app.powerbi.com/view?r=eyJrJoiYzA4NzNINzUtNzMxMi00ZTkLWjkzNzMtNDQzNTYxMGY0ZDc5liwidCI6IjhhkMmUwZjRjLTU1ZjltNGNiMS04ZWU3LWRhNWRkM2ZmMzYwMCJ9>

<sup>36</sup> JOBO (2023). *The Electric Bike Market in Australia is Booming*. Accessed at <https://www.jobobikes.com/news/the-electric-bike-market-in-australia-is-boomi-65289127.html>

<sup>37</sup> ABC News (2021). *E-scooter sales boom in Queensland but confusion over rules, council uptake continues*. Accessed at <https://www.abc.net.au/news/2021-05-25/e-scooter-sales-boom-but-confusion-over-rules-continues/100161896>

<sup>38</sup> Department of Transport and Main Roads (2022). *Bike Tourism in Queensland – Supplementary Report: Mountain Biking*. Accessed at <https://www.tmr.qld.gov.au/Travel-and-transport/Cycling/bike-tourism>

<sup>39</sup> Australian Taxation Office (n.d.). *Low- and middle-income earner tax offsets*. Accessed at <https://www.ato.gov.au/Individuals/Income-and-deductions/Offsets-and-rebates/Low-and-middle-income-earner-tax-offsets/>



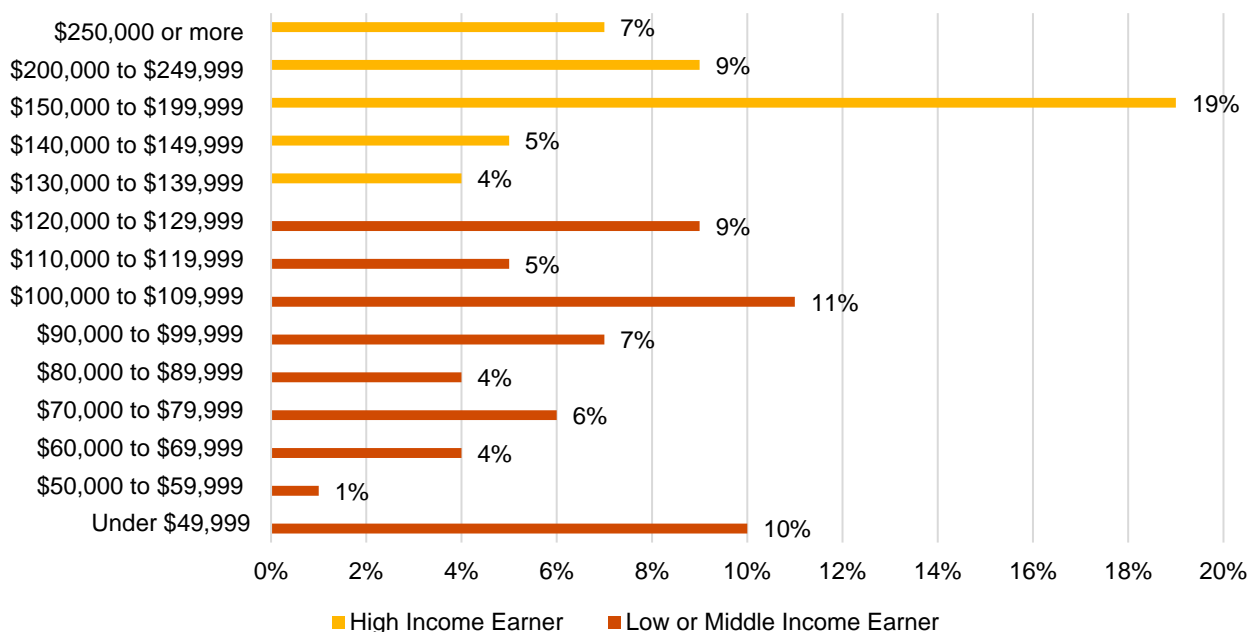


Figure 16: Household Income of Mountain Bike Riders<sup>40</sup>

Further, the *Bike Tourism Opportunities in Queensland Report* completed by the Department of Transport and Main Roads estimated that 30% of mountain bike riders are categorised as high value travellers (HVT) who engage in domestic leisure (holiday or visiting friends and relatives) travel, spend more than average on leisure trips, and are interested in the type of leisure experiences Queensland has to offer.<sup>41</sup>

Despite the strong representation of high income households, low and middle income households still account for approximately 66% of all mountain bikers. This suggests that there is still a relatively low barrier of entry to participate in mountain biking. This is important to catalysing growth in mountain biking participation rates in Cardwell, as the median income for a household in the town is \$846 a week, or approximately \$44,000 per annum.<sup>42</sup> Growth in mountain biking participation in Cardwell will also be supported by the strong uptake in mountain biking that has been occurred since the commissioning of the Cardwell Pump Track, as well as the little to no travel required to access the Trails and convenient location of the Trail Head.

## Expenditure

Mountain bikers are typically high yield visitors and are willing to travel domestically and internationally to experience new trails and participate in events.<sup>43</sup> As presented in Table 7, mountain bike riders spend an average of approximately \$27 per ride. This expenditure is likely to occur within proximity of mountain bike parks and trails, and before or after a ride. As such, this may represent the average expenditure of a local resident when visiting a mountain bike park and trail network.

<sup>40</sup> Department of Transport and Main Roads (2022). *Bike Tourism in Queensland – Supplementary Report: Mountain Biking*. Accessed at <https://www.tmr.qld.gov.au/Travel-and-transport/Cycling/bike-tourism>

<sup>41</sup> Department of Transport and Main Roads (2022). *Bike Tourism in Queensland – Supplementary Report: Mountain Biking*. Accessed at <https://www.tmr.qld.gov.au/Travel-and-transport/Cycling/bike-tourism>

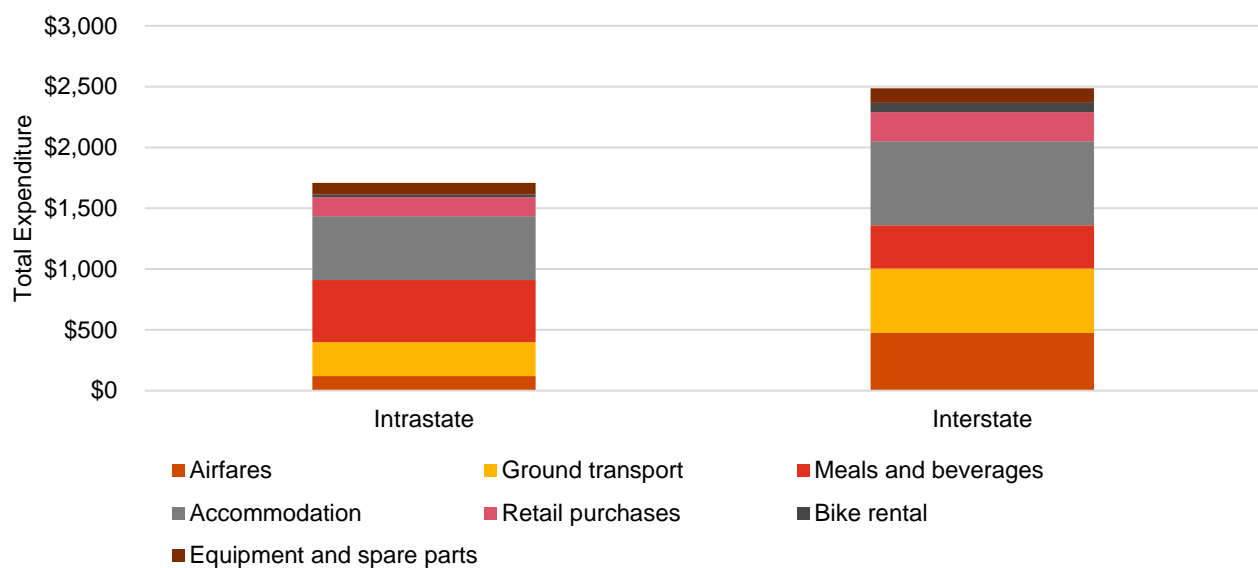
<sup>42</sup> ABS (2021). *Cardwell 2021 Census All persons QuickStats*. Accessed at <https://www.abs.gov.au/census/find-census-data/quickstats/2021/SAL30537>

<sup>43</sup> Department of Transport and Main Roads (2022). *Bike Tourism in Queensland – Supplementary Report: Mountain Biking*. Accessed at <https://www.tmr.qld.gov.au/Travel-and-transport/Cycling/bike-tourism>

Table 7: Average Expenditure Per Ride<sup>44 45</sup>

Expenditure Item	Total Expenditure
Transport to and from trails	\$12.4
Meals and beverages	\$6.3
Purchases from supermarkets or other retail shops	\$7.4
Bike rental hire	\$1.1
<b>Total average expenditure per ride</b>	<b>\$27.1</b>

Figure 17 presents the average intrastate and interstate expenditure per mountain biking trip or holiday, based on 2021 data.

Figure 17: Average Expenditure by Intrastate and Interstate Mountain Biking Visitors<sup>46</sup>

This demonstrates that, on average, intrastate and interstate visitors spend approximately \$1,708 and \$2,486 per mountain biking trip. The primary expenditure items include accommodation, meals and beverages, as well as airfares and ground transport for interstate trips. Intrastate visitors, however, would be expected to visit the trail network more regularly than interstate visitors.

### Trips and travel

Figure 18 presents the number of days spent mountain biking by intrastate and interstate visitors and Figure 19 presents the number of nights spent by intrastate and interstate mountain bikers.

<sup>44</sup> AusCycling (2021). *Mountain Biking in Australia: An Economic and Participation Analysis*. Accessed at <https://assets.auscycling.org.au/s3fs-public/2021-03/mountain-biking-in-australia-final-report-march-2021.pdf?sOhdYZLJUG1eZnmPE8yYmFQbbuOqr4m4=>

<sup>45</sup> Totals may not sum due to rounding.

<sup>46</sup> AusCycling (2021). *Mountain Biking in Australia: An Economic and Participation Analysis*. Accessed at <https://assets.auscycling.org.au/s3fs-public/2021-03/mountain-biking-in-australia-final-report-march-2021.pdf?sOhdYZLJUG1eZnmPE8yYmFQbbuOqr4m4=>

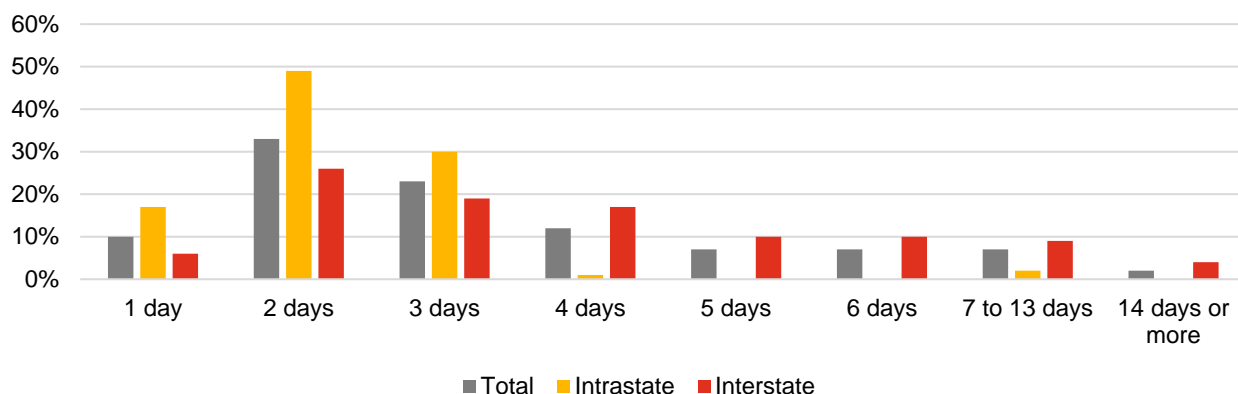


Figure 18: Number of Days Spent Mountain Biking by Intrastate and Interstate Visitors<sup>47</sup>

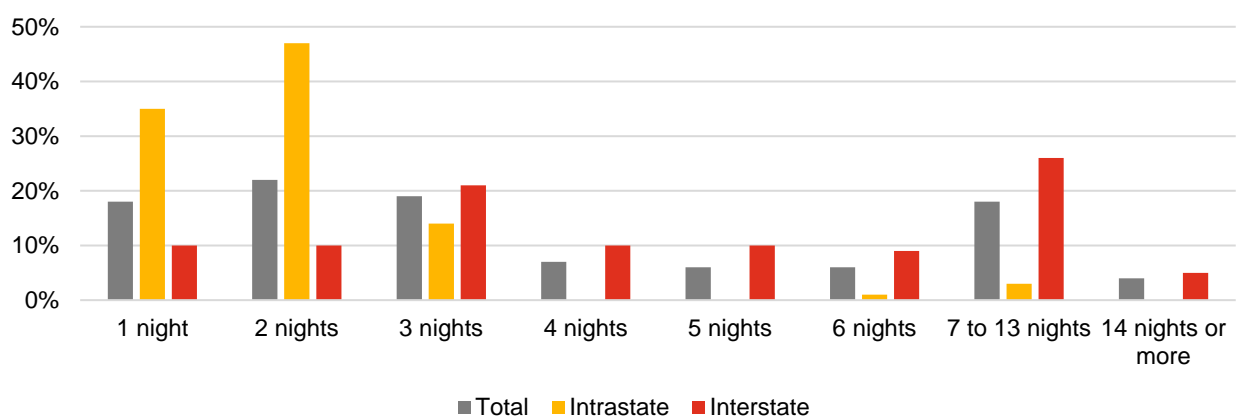


Figure 19: Number of Nights Spent by Intrastate and Interstate Mountain Bikers on Trips<sup>48</sup>

This demonstrates that the majority of intrastate visitors will mountain bike for two to three days (80%) and stay one to two nights per trip (82%). This is supported by the fact that mountain biking was the key reason for choosing to visit a destination in almost all intrastate trips.

However, there is a far greater range in the number of days spent mountain biking and the number of nights per trip for interstate visitors. For example, it is estimated that approximately 20% will travel for three nights per trip and 26% will travel for seven to 13 nights.<sup>49</sup> This indicates that there are two broad types of interstate visitors; those who travel for a one to three nights to only visit one mountain bike trail; and those who travel interstate for one to two weeks to visit a mountain bike trail (or multiple) and other attractions in the region. Interstate visitors who stay for seven to 13 nights are likely to visit a number of locations on their trip, which generates greater economic benefits for the respective destination.

The dominant transport mode of choice for intrastate and interstate mountain bike travellers is car or personal vehicles, estimated at 82% and 65% respectively. The majority of intrastate travellers drive to their destination due to the shorter travel distance and the ease of travelling with mountain bikes via car or personal vehicles, compared to flying. However, a

<sup>47</sup> Department of Transport and Main Roads (2022). *Bike Tourism in Queensland – Supplementary Report: Mountain Biking*. Accessed at <https://www.tmr.qld.gov.au/Travel-and-transport/Cycling/bike-tourism>

<sup>48</sup> Ibid.

<sup>49</sup> Ibid.

greater proportion of interstate visitors fly (29%) to the mountain biking destination relative to intrastate visitors (3%).<sup>50</sup> This is largely driven by travel distance for interstate visitors, as well as the length of interstate trips.

### Successful Destinations

An ideal and successful destination must include the following:

- Volume of high quality trails (80km+) that offer a variety of trail styles and difficulties
- Scenery and culture
- Accommodation, retail, food and beverage
- Differentiated riding experiences (i.e. cannot mimic another destination)
- Other experiences (more than just mountain bike riding).<sup>51</sup>

To generate repeat visitation, it is also important that visiting mountain bike riders are 'very satisfied' (9/10) with their trip, rather than just 'satisfied'. Once travel is introduced, each mountain biking destination is competing against other top-tier destinations such as Derby or St Helens in Tasmania. A strong brand and reputation was identified to be critical in the establishment of a successful mountain biking destination in Australia. Mountain bikers rely more on word of mouth, social media and events, rather than traditional promotion channels and research avenues.<sup>52</sup> The importance of reputation further emphasises the need for great, not just good, mountain biking experiences. Therefore, successful mountain bike trails require a strong reputation and high quality product that attracts new and repeat visitors.

#### 3.3.2 Queensland

Beyond existing mountain biking experiences, Queensland is widely considered to have unrealised potential for mountain biking and bike tourism more broadly.

As demonstrated in Figure 20, there were approximately 71,000 overnight intrastate trips for mountain biking in Queensland during the year ending November 2018, which generated approximately \$28 million in the Queensland economy. In comparison, the 14,000 domestic overnight trips to Queensland from interstate visitors generated approximately \$21 million for the economy. This demonstrates the significant benefit and opportunities associated with the attraction of interstate visitors, as the average spend per trip for intrastate visitors was just under \$400 in comparison to approximately \$1,500 for interstate visitors.

Furthermore, the 26,000 domestic overnight trips made by Queensland residents to other states resulted in approximately \$40 million of expenditure in other economies. This equates to 81.6% of the total spend from intrastate and interstate visitors in Queensland for mountain biking and represents a significant lost opportunity for the Queensland economy.

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<sup>50</sup> Department of Transport and Main Roads (2022). *Bike Tourism in Queensland – Supplementary Report: Mountain Biking*. Accessed at <https://www.tmr.qld.gov.au/Travel-and-transport/Cycling/bike-tourism>

<sup>51</sup> Ibid.

<sup>52</sup> Ibid.



Figure 20: Domestic Mountain Bike Trips – Overnight Trips and Expenditure <sup>53</sup>

With an already latent demand for bike tourism experiences and strong support among destinations to focus on the market, there is significant unrealised potential for mountain biking tourism in Queensland.

However, during the year ending November 2018, only 25% of people who had a holiday riding experience in Queensland were very satisfied and very likely to recommend the experience. For the most part, the satisfaction and likelihood of visitors to recommend Queensland bike tourism experiences was adjudged to be lower than it is elsewhere in Australia. To maintain performance and drive future growth, there is a need to improve the visitor experience for Queensland's bike tourism experiences and reduce the leakage of expenditure to other status in Australia.<sup>54</sup> With high quality trails and a quality experience, TNQ can play a critical role in increasing visitation and expenditure in Queensland's mountain bike tourism sector, with further information outlined in the subsequent section.

### North and Far North Queensland

North and far north Queensland is a highly prospective region in Queensland in terms of potential scale and quality of mountain biking experiences. As previously outlined in Section 2.5, the existing mountain bike parks and tracks in north and far north Queensland (see Figure 12) cater for a breadth of skill levels, offer a variety of trail styles and are growing in reputation and awareness across Australia and internationally. Further, in 2022, the region hosted 11 different cycling and riding events that were estimated to have generated more than \$20 million for the local economy.<sup>55</sup> *Crankworx Cairns* was one of these events and was reported to have attracted 1,200 athletes, 220 volunteers and up to 34,000 spectators.<sup>56</sup>

North and far north Queensland also offers a range of complementary attractions, such as the GBR, and is connected to major population bases through domestic and international airports and national highways. As such, north and far north Queensland are strongly placed to become a leading winter destination for mountain biking and, in doing so, enhance Queensland's reputation for mountain biking experiences.

<sup>53</sup> Department of Transport and Main Roads (2022). *Bike Tourism in Queensland: Research Report*. Accessed at <https://www.tmr.qld.gov.au/Travel-and-transport/Cycling/bike-tourism>

<sup>54</sup> Ibid.

<sup>55</sup> ABC (2022). *Mountain bike tourism booming in Cairns, far north, with events generating \$20m this year*. Accessed at <https://www.abc.net.au/news/2022-10-06/mountain-bike-tourism-cairns-far-north-queensland/101503388>

<sup>56</sup> Tropical North Queensland (2022). *Crankworx to crank up Cairns' Mountain Biking Game*. Accessed at <https://www.tropicalnorthqueensland.org.au/articles/crankworx-cairns/>

### 3.4 Value Proposition of Cardwell

To determine the value proposition of the Trails in Cardwell, a high-level analysis has been anecdotally undertaken on comparable trail networks in north and far north Queensland, as well as the key mountain bike visitor markets. A summary of the comparable trail networks in north and far north Queensland is outlined in the following section.

#### 3.4.1 Comparable Trail Networks in North and Far North Queensland

At present, there are only three mountain bike trail networks of comparable scope and scale that are situated in proximity to the proposed Trails in Cardwell – Atherton, Smithfield (Cairns) and Townsville. Based on general industry standards, these trails would typically be considered as local trail networks that service the local mountain bike riding enthusiasts (see Table 4). It is important to service this market, given the repeat visitation that is generated through enthusiasts, as well as other markets.

The population centres of Greater Brisbane (2.5 million people) and the Gold Coast (641,000 people) have an established market of mountain bike riders. Many enthusiasts from these population centres are regular users of local trails in the nearby areas, however, are reported to regularly travel as far as Tasmania to use high quality and world class trails. The size of this market, coupled with Cardwell's accessibility via the Cairns or Townsville Airport, presents an opportunity to attract enthusiasts to the Trails, as an alternative to Tasmania. The volume of daily flights into Cairns from Brisbane and other capital cities is a significant advantage for Cardwell over Mackay and other interstate destinations.

Importantly, the Cairns-Townsville population catchment, and population centres in Greater Brisbane and the Gold Coast, are expected to provide a sufficiently sized market of mountain biker riders that are willing to travel for world class trails. As such, this market is anticipated to be large enough to support the Trails in Cardwell as well as the variety of other trails in Queensland which may eventually become world class. Cardwell's natural features and unique experiences, which are outlined in Chapter 4, are also a competitive advantage that will amplify the attractiveness of the town over other areas. Importantly, the strong intrastate market will reduce the Trails' reliance on interstate visitors from Sydney or Melbourne.

#### 3.4.2 Key Mountain Bike Visitors

In addition to the strong contingent of mountain biking residents and youth in Cardwell and the Cassowary Coast LGA, the distinct types of mountain bike visitors to the Trails are likely to include:

- 1 Local and south east Queensland (SEQ) mountain bike enthusiasts
- 2 Families
- 3 Casual non-mountain bike visitors
- 4 Interstate mountain bike enthusiasts.

This high-level analysis of mountain bike visitors has been undertaken under the assumption that the Trails are high quality and well maintained.

##### Local and South East Queensland (Intrastate) Mountain Bike Enthusiasts

Local and SEQ mountain bike enthusiasts broadly encapsulate enthusiast riders who regularly mountain bike (i.e. one or more times a week) and are based in the Cairns-Townsville population catchment or SEQ. These riders would be expected to visit Cardwell purely for mountain biking. As it is typically seen as a sport by enthusiasts, they will likely be seeking difficult and high quality trails.

Enthusiasts based in the Cairns-Townsville population catchment are expected to visit the Trails more frequently, relative to SEQ enthusiasts. Consequently, enthusiasts based in the Cairns-Townsville population catchment may utilise camping options that are more affordable, relative to traditional accommodation offerings. Whilst these riders may be a lower yielding on a per trip basis, the frequency of visitation throughout the year will ultimately generate significant activity in the local economy.

SEQ enthusiasts would be expected to visit the Trails less frequently, yet spend greater amounts per trip. As such, SEQ enthusiasts are likely to seek higher quality hospitality and visitor accommodation offerings. The attraction of these



enthusiasts will be important to attracting private sector-led complementary offerings in Cardwell, such as accommodation and retail offerings.

### **Families**

Families are a rapidly growing mountain biking visitor segment that often peak in demand during school holiday periods. Mountain biking is typically viewed by families as an adventure-based recreational activity that caters for all ages, genders and experience levels. Families are likely to seek a range of trail styles of easy to intermediate difficulty, as well as 'off-bike' experiences in proximity to their accommodation locations. Importantly, this is strongly aligned with the proposed Trails in Cardwell as well as the broader tourism offerings in TNQ more broadly. Most families that visit the Trails in the initial years of operations would be expected to be from intrastate locations. However, with the development of a strong reputation, interstate families will become more prevalent visitors to the Trails in Cardwell and the broader region.

### **Casual Non-Mountain Bike Visitor**

Casual non-mountain bike visitors are broadly defined as visitors who participate in mountain biking at a trail network, yet are relatively inexperienced. These visitors would be likely to participate in mountain biking whilst on a broader trip, in comparison to enthusiasts who travel to primarily mountain bike. The attraction of these visitors requires a strong reputation, as well as sufficient accommodation and hospitality offerings. Once a strong reputation is established in Cardwell, which often takes several years or decades to develop, these visitors will become increasingly more common in Cardwell.

### **Interstate Mountain Bike Enthusiast**

Interstate mountain bike enthusiasts broadly encapsulate enthusiast riders from other states and territories in Australia. This includes the large population centres of Melbourne and Sydney, which are two key source markets of visitors to Blue Derby in Tasmania.

As previously outlined in Section 3.3, interstate visitors generally stay for longer and supplement visitation demand when local enthusiasts are working or have other commitments. Further, in peak holiday periods, interstate mountain bike enthusiasts may also travel with family members, extending their trip to visit other tourist attractions in the region.

Despite the importance of the intrastate market for the Trails in Cardwell, the interstate mountain bike enthusiast market is a long term opportunity to generate strong growth in visitation due to the appealing tropical climate during winter and shoulder seasons. This, coupled with the range of other attractions in TNQ, would be important to attracting this target market to the Trails in Cardwell.

## **3.5 Benefits of Mountain Biking**

Mountain biking can deliver a range of economic, social, health and environmental benefits to riders, participants and the broader community. The following sections outline the high-level qualitative and quantitative benefits from mountain biking. Further information on the anticipated benefits from the Trails in Cardwell is outlined in Chapters 6 and 9.

### **3.5.1 Qualitative Benefits**

Figure 21 summarises the economic, social, community, health and environmental benefits that are generated through mountain bike trails and participation. Economic benefits often lead to enhanced social and community outcomes and thus have been summarised in this section.




Economic Benefits 	Social, Community and Health Benefits 	Environmental Benefits 
Increase visitation and greater length of stay in regional communities	Increase participation in outdoor and recreational activities	Increase access to natural areas for recreation, whilst protecting environmental values
Increase expenditure in regional communities and at local businesses	Reduce the risk of physical and mental health problems	Increase community ownership and connection with natural areas
Diversify economy in towns experiencing decline in traditional industries and population	Increase engagement and cohesion in the community	Promote sustainable visitation to WHAs
Decrease costs associated with adverse health impacts	Respectfully promote Traditional Owners' cultural heritage	Passive surveillance may reduce antisocial behaviour and illegal dumping
Provide employment opportunities for members of the community and Traditional Owners	Catalyse population growth through enhanced liveability and amenity	

Figure 21: Qualitative Indicative Benefits of Mountain Biking

### 3.5.2 Quantitative Benefits

The quantitative economic and social benefits generated from mountain biking at the national level are outlined in the following sections. A selection of these benefits can be appropriately quantified in accordance with key government guidelines and frameworks; Chapter 9 outlines the economic analysis that has been undertaken on the Trails in Cardwell.

#### Economic Benefits

The *Mountain Biking in Australia: An Economic and Participation Analysis Report* completed for AusCycling in 2021 estimated the mountain biking industry to be worth approximately \$630.8 million to the Australian economy, which supported over 6,000 jobs across the nation at the time.<sup>57</sup> AusCycling also reported that cycling and riding activities contributed \$6.3 billion to the Australian economy in 2020 alone, which demonstrates the significant economic importance of the broader sector to Australia.<sup>58</sup>

The attraction of visitors to mountain bike parks and tracks also generates considerable economic activity. As previously outlined in Section 3.3.1, the average expenditure per intrastate and interstate visitor was estimated at \$1,708 and \$2,485.8 per mountain biking trip. Further, the estimated average expenditure of \$27.10 per ride would largely be spent by riders in proximity to the respective mountain bike parks and tracks, and before or after a ride.

The Blue Derby Mountain Bike Trails (Blue Derby) in north-east Tasmania demonstrate the significant economic benefits that are possible through high-quality mountain bike trails in regional areas. Blue Derby was attracting more than 30,000 visitors in 2018, who typically spent four to five nights in Derby then another five nights elsewhere in Tasmania. The return on investment from Blue Derby has been estimated at \$30 million per year in the local economy, which has been generated through an initial investment of just \$3.1 million in 2015.

Further detail on Blue Derby's positive economic and social impact is outlined in Section 4.3.5. Chapter 9, Economic Analysis, includes a comprehensive economic analysis of the proposed Trails in Cardwell.

<sup>57</sup> AusCycling (2021). *Mountain Biking in Australia: An Economic and Participation Analysis*. Accessed at <https://assets.auscycling.org.au/s3fs-public/2021-03/mountain-biking-in-australia-final-report-march-2021.pdf?sOhdYzLJUG1eZnmPE8yYmFQbbuOqrfm4=>

<sup>58</sup> AusCycling (2022). *Annual Report 2021*. Accessed at [https://assets.auscycling.org.au/s3fs-public/2022-04/auscycling\\_annualreport2021\\_published20220412.pdf?VersionId=0y4LuBiifOrkK.7qYKPQlant2DwBYLAq](https://assets.auscycling.org.au/s3fs-public/2022-04/auscycling_annualreport2021_published20220412.pdf?VersionId=0y4LuBiifOrkK.7qYKPQlant2DwBYLAq)

## Social and Community Benefits

In addition to the qualitative social and community benefits outlined in Figure 21, a range of quantifiable social benefits from mountain biking were reported in the *Mountain Biking in Australia: An Economic and Participation Analysis Report* (see Table 8).

Table 8: Quantitative Social Benefits of Mountain Biking<sup>59</sup>

Social Benefit	Description	Estimated annual benefit per mountain bike rider
Health benefit	Personal and health system benefits from active and healthier individuals.	\$1.6 per km cycled
Productivity benefit	Enhanced workplace productivity through reduced presenteeism and absenteeism.	\$767 per person
Human capital uplift	Positive association between recreation and educational outcomes.	\$252 per person
Consumer surplus	Satisfaction derived from participation in recreational activities.	\$2,624 per person
Criminal and social justice benefit	Decreased crime rates from greater engagement in recreation and sport.	\$79 per person
Civic and volunteering benefit	Value placed on volunteering and enjoying recreational and sporting activities.	\$3,214 per volunteer

## 3.6 Summary

This chapter has defined and analysed the mountain biking industry at the state and national level, outlined Cardwell's value proposition based on informal and formal sources, and identified the qualitative and quantitative benefits of mountain biking.

This chapter demonstrated that the number of mountain bike riders in Australia has significantly increased in recent years, growing from approximately 737,000 in 2018 to 1.6 million in 2021 at a CAGR of 28.6%. Males aged 25 to 44 years old represent just over half of all participants in mountain biking, however females and other age groups are becoming increasingly more represented. Mountain bike visitors generate significant economic benefits from travelling and staying in popular destinations; On average, intrastate and interstate visitors spend approximately \$1,708 and \$2,486 per trip in Australia.

To attract visitation and expenditure from mountain bikers, a destination must provide a sufficient volume and variety of trail styles and difficulties, whilst also offering other off-bike experiences. Importantly, Cardwell achieves many of these requirements and has a competitive advantage over nearby mountain bike tracks and parks in north and far north Queensland. This presents a significant opportunity to realise the positive economic, social, health and environmental benefits generated from participation in mountain bike riding.

<sup>59</sup> AusCycling (2021). *Mountain Biking in Australia: An Economic and Participation Analysis*. Accessed at <https://assets.auscycling.org.au/s3fs-public/2021-03/mountain-biking-in-australia-final-report-march-2021.pdf?sOhdYZLJUG1eZnmPE8yYmFQbbuOqrfm4=>

# 4 Service Need

## 4.1 Purpose

The purpose of this chapter is to demonstrate the strategic rationale for the Trails by clearly articulating the key problems and opportunities being addressed, and subsequently establishing the service need for the Trails. A clearly defined service need is essential to determine the best and most appropriate option/s available to address the identified needs and deliver the expected benefits to ultimately justify an investment decision. This chapter includes:

- Approach
- Service Need
- Expected Benefits
- Strategic Responses
- Potential Solution Options
- Summary.

## 4.2 Approach

This chapter and the associated ILM process have been developed with reference to the Queensland Government's *BCDF* and *ILM Guide*, Queensland Treasury's *PAF* and the *IA Assessment Framework*. The identification of the service need plays a pivotal role in the lifecycle of infrastructure projects and forms a key component of demonstrating the overarching need for the Project.

ILM workshops are typically held early in the development of projects to ensure the views of key stakeholders are captured in a collaborative setting, and project drivers, benefits and potential options are collectively defined. The process also engenders early buy-in from stakeholders, and ensures any key risks are raised early in the process. The section below discusses the ILM process in detail.

### 4.2.1 Investment Logic Mapping

An ILM provides a methodical and transparent way of achieving mutual confirmation of the critical drivers for a project amongst key stakeholders, and seeks to confirm the following:

- The problems and opportunities that the Project would respond to
- The expected benefits that may arise from addressing the problems or realising the opportunities
- The strategic responses required to deliver the benefits sought
- The initiatives or solution options which may be progressed in response to the identified problems and opportunities.

On 14 February 2023, an ILM Workshop was facilitated in Cardwell. It was attended by local stakeholders, Traditional Owner representatives and members of Council's project team. Collectively and individually, the ILM Workshop attendees represented a range of local stakeholders with a strong understanding of the Trails, and the Cardwell community more broadly. The organisations and representatives that attended the ILM Workshop included:

- |                                  |                                   |
|----------------------------------|-----------------------------------|
| • Cardwell Chamber of Commerce   | • Cassowary Coast Multisport Club |
| • Cardwell Futures Forum         | • Cassowary Coast Tourism         |
| • Cardwell Lions Club            | • Girramay RNTBC                  |
| • Cardwell Mountain Biking Group | • Girringun.                      |

Key stakeholders that were unable to attend the ILM Workshop were engaged separately in the weeks after the workshop. Figure 22 presents the ILM that was developed in collaboration with these stakeholders.

## Cardwell Tropical Mountain Bike Trails Project ILM

Problem / Opportunity	Benefits	Strategic Responses	Solution Options
<p><b>O1:</b> There is an opportunity to leverage Cardwell's natural features and nearby attractions to establish the region as a leading adventure and lifestyle destination with diverse experiences.</p>	<p>Diversify the local economy and increase economic resilience</p> <p>Provide more business, partnership and employment opportunities for the local Traditional Owners</p> <p>Protect and respect the culture, language and traditions of the local Traditional Owners</p>	<p>Do nothing</p> <p>Policy or legislative changes to support private sector investment in tourism and recreational infrastructure</p> <p>Establish a prioritisation framework for tourism investment opportunities</p>	<p>Do nothing</p> <p>Establish and promote the 'adventure, nature-based and cultural heritage highway' in North Queensland to attract visitors to the region for mountain biking and recreational activities</p>
<p><b>O2:</b> Greater respect for, and recognition of, the unique culture of the local Traditional Owners will establish cultural heritage as a key element and competitive advantage of the Trails and, in turn, provide greater employment and business opportunities for the local Traditional Owners.</p>	<p>Increase spending with local businesses in the region through "off bike" expenditures</p> <p>Generate new employment and training opportunities for new and existing residents</p> <p>Diversify tourism offerings and complement existing attractions in Cardwell and across the Cassowary Coast</p>	<p>Partner with Cairns, Townsville and other local governments in North Queensland on the 'adventure, nature-based and cultural heritage highway'</p> <p>Strategic and town master planning to accommodate visitors and new residents to Cardwell and the Cassowary Coast region</p>	<p>Invest in and revitalise the existing trail network in Cardwell Ranges and on Girramay Country</p> <p>Provide new and enhanced business and employment opportunities for the local community and Traditional Owners to support the conservation and maintenance of protected areas</p>
<p><b>O3:</b> The Cardwell community's strong civic pride and commitment presents an opportunity to deliver greater community-led infrastructure that is capable of enhancing community cohesion and wellbeing.</p>	<p>Host new major events, and support the existing, large-scale mountain biking and adventure sporting events</p> <p>Enhance the physical and mental health and wellbeing of residents in the community</p> <p>Increase participation in mountain biking and related sports and recreational activities and provide pathways for elite talent development in the sport</p> <p>Align with the CCRC's <i>Cassowary Coast Region Tourism Strategy and Reconciliation Action Plan</i></p>	<p>Advocate for Queensland Government investment in core infrastructure to attract complementary private sector investment</p> <p>Advocate for Queensland Government investment in enabling infrastructure to enhance the liveability and amenity of Cardwell and Port Hinchinbrook</p>	<p>Introduce mountain bike passes for residents and visitors to the existing trail network to offset the operational costs to maintain protected areas and national parks</p> <p>Construct and deliver supporting infrastructure and facilities to activate the new pump track in Cardwell</p>
<p><b>P1:</b> Investment is required to sustain and expand the capacity and coverage of the existing National Park maintenance programs, which are critical in providing access to and sustainably maintaining protected areas and national parks.</p>	<p>Enhance the amenity, liveability and attractiveness of Cardwell</p> <p>Catalyse urban renewal and infrastructure development in Cardwell</p> <p>Increase the attractiveness for private sector investment in the region</p>	<p>Support the formation of partnerships between the public sector, private sector and Traditional Owners to create new tourism products and offerings</p>	
<p><b>P2:</b> To secure the long-term prosperity of Cardwell, there is a need to grow and diversify the region's economy, increase economic resilience and generate new employment and training opportunities.</p>	<p>Protect and preserve culturally and environmentally significant areas</p> <p>Increase the attraction and retention of skilled people (e.g. doctors, nurses, aged care workers) in the region</p> <p>Increase the retention of youth in Cardwell through new employment opportunities</p> <p>Increased visitation to Cardwell and the Cassowary Coast region by domestic and international tourists</p>	<p>Undertake a promotional program to inform councils, businesses and the Queensland Government of the catalytic benefits generated from mountain biking and related recreational activities</p> <p>Assess alternative commercial models and best practice methods to increase revenue from the existing visitation to, and use of the mountain bike trails in Cardwell Ranges and on Girramay Country</p>	<p>Stage the construction and delivery of the Cardwell Tropical Mountain Bike Trails project</p> <p>Wholly construct and deliver the Cardwell Tropical Mountain Bike Trails project</p>
<p><b>P3:</b> The lifestyle and amenity in Cardwell must be enhanced to attract and retain skilled people and new investment in the region.</p>	<p>Establish a world-class training facility for Australian and International mountain biking athletes in preparation for the 2032 Olympic and Paralympic Games</p>		

Figure 22: ILM



## 4.3 Service Need

The key problems and opportunities identified in the ILM are discussed in detail in the following sections.

### 4.3.1 Opportunity 1: Establish Cardwell as a leading adventure destination with diverse experiences

**There is an opportunity to leverage Cardwell's natural features and nearby attractions to establish the region as a leading adventure and lifestyle destination with diverse experiences.**

Cardwell is located between two adjoining WHAs, being the Wet Tropics WHA and the GBR Marine Park WHA, and is favourably situated in proximity to many unique natural, adventure and cultural 'off-bike' experiences that attract visitors to the region, a sample of which are Hinchinbrook Island, Murray Falls, the Dalrymple Gap walking track and the Girringun Art Centre. A world class mountain biking project would build on and complement these attractions and would offer further incentives for a diverse range of tourists to visit the region and immerse themselves in the offerings that the region presents. Mountain bikers are interested in nature-based and 'off-bike' experiences that complement the quality of the trails and riding experience. Due to the sought-after autumn, winter and springs climate of FNQ, the Project also presents a significant opportunity to establish the region as a leading destination for mountain bike riding when the climate of southern Australia is not suited to mountain bike riding.

The key driving factors associated with this opportunity are summarised below and discussed in the following sections:

- Natural attractions and experiences in Cardwell and the Cassowary Coast
- Growing reputation for hosting regionally and nationally significant events
- Rebounding tourism in Queensland and Australia
- Emerging trends and opportunities in tourism.

#### Natural attractions and cultural experiences in Cardwell and the Cassowary Coast

Cardwell and the Cassowary Coast has a breadth of natural attractions and 'off-bike' experiences that will complement the proposed trail network. Figure 23 illustrates the proximity of these to Cardwell and Figure 24 describes each experience.

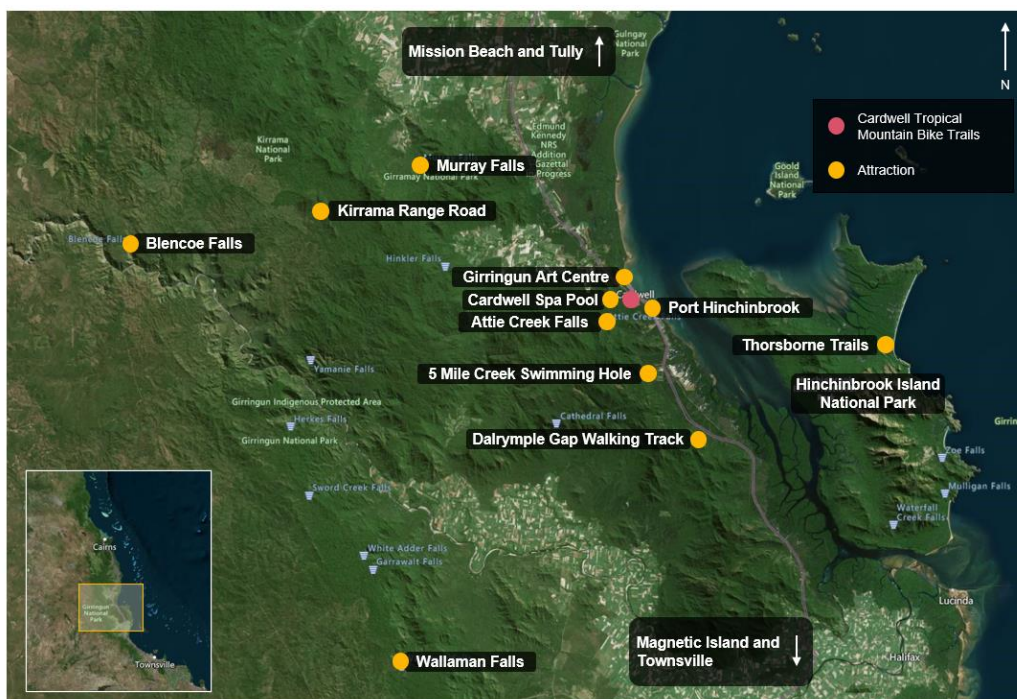


Figure 23: Snapshot of Key Natural Attractions in and nearby Cardwell and the Cassowary Coast



### Blencoe Falls

Blencoe Falls is one of the most stunning waterfalls in Australia. It plunges 90m to the pool below, before cascading a further 230m to the bottom of Blencoe Gorge. Blencoe Falls is a popular destination for camping and recreational walking.



### Kirrama Range Road

The Kirrama Range Road is a popular road and begins near Kennedy in the Girringun National Park. The road winds its way through World Heritage rainforest and eucalypt woodland, passing waterfalls and offering breathtaking views from the top of the range.



### Murray Falls

Murray Falls, within Girramay National Park, is one of north Queensland's prettiest waterfalls, with large volumes of water racing over naturally sculpted granite boulders. The clear waters of the Murray River cascade over boulders into rock pools in this picturesque spot, within the Wet Tropics WHA.



### Girringun Art Centre

Established in 2008, the Girringun Art Centre is home to multi-award winning artists and craftsmen. These artists bring to life the unique cultural story and expression of the distinctive Aboriginal rainforest art traditions and culture of the Girringun region, to share with the world.



### Attie Creek Falls

Attie Creek Falls is a seasonal waterfall located in the Cardwell Forest Drive in Girringun National Park. The falls are situated near the Cardwell Spa Pools and the thin falls flow into a calm pool, which makes it perfect for swimming.



### Cardwell Spa Pool

Cardwell Spa Pool is a naturally-fed, seasonal creek that became a popular attraction in 2016 through social media. It offers naturally turquoise water unlike anything else in the region or Tropical North Queensland.



### Hinchinbrook Island

Hinchinbrook Island is world-heritage listed and includes a variety of attractions increasing recreational walking, fishing, kayaking and camping.



### Thorsborne Trails

The Thorsborne Trail is a 32-kilometre walking trail along the eastern side of Hinchinbrook Island National Park, which takes four days to complete.



### Port Hinchinbrook

Port Hinchinbrook is a popular destination for fishing and is the gateway to the Hinchinbrook Island.



### 5 Mile Swimming Hole

5 Mile Swimming Hole is a popular, clear water swimming sport for locals and visitors to Cardwell.



### Dalrymple Gap Walking Track

Dalrymple Gap walking track follows the road built in the 1860s by the early settlers roughly following the route taken by Aboriginal people across the Cardwell Range. The track is within the Wet Tropics WHA and takes walkers across multiple creek crossings, through the cool rainforest and open eucalypt forest.



### Wallaman Falls

The highest, permanent, single-drop waterfall in Australia, Wallaman Falls is part of the Wet Tropics WHA and is home to some of the oldest rainforests on earth.

Figure 24: Description of Key Natural Attractions in Cardwell and the Cassowary Coast



Collectively, these attractions form a unique value proposition for the region to attract visitors. This value proposition is strongly aligned with the broader trends in the visitor economy (discussed further in subsequent sections in this report). Many of these attractions will also be featured throughout the Trails, such as riding through the Wet Tropics WHA and embracing the picturesque views to Hinchinbrook Island and Attie Creek.

These attractions are also aligned with and complement the existing reputation of FNQ as a leading holiday destination that provides unique tropical experiences that are set in World Heritage landscapes.<sup>60</sup> The broader tropical north region is built on the three key pillars of tropical vibes, unique nature and ancient culture, and is made up of six 'hero' experiences:

- **GBR:** The story of the reef is one of understanding and conservation – one of the most important stories of our time.
- **Rainforests:** The story of the rainforest is one of hikes, waterfall chasing, wonder and adventure – set amongst a living story that is 80-million years older than the Amazon.
- **Indigenous Culture:** The story of Indigenous culture is one of a deep connection to the land and its people.
- **Tropical Lifestyle and Culture:** The story of tropical lifestyle is one of relaxed local culture, authentic people, a choice of holiday pace and warm hospitality experiences.
- **Unique Adventures:** The story of unique adventure is one of road-tripping, exploring, crocodile touring, mountain-biking and bucket-listing.
- **Outback Adventures:** The story of the Outback is one of red dirt, wild fishing adventures and true outback style.<sup>61</sup>

Alignment with these pillars and the broader reputation of TNQ will enable the joint-promotion of Cardwell to key visitor markets. In the long term, this will be critical to attracting casual mountain bike riders to the Trails. Importantly, the region's natural attractions and experiences are highly distinctive and differentiated from other areas in TNQ. The Girramay Peoples cultural and heritage is intertwined with many of the distinctive experiences in Cardwell, such as the Girringun Art Centre, and this plays an important role in establishing the region as a leading adventure and lifestyle destination with diverse experiences, particularly around cultural heritage.

### Growing reputation for hosting regionally and nationally significant events

Cardwell and the Cassowary Coast LGA have a growing reputation for hosting regionally and nationally significant events that attract intrastate, interstate and international audiences. These events include, but are not limited to:

- **Red Bull Defiance:** A world class adventure race that is hosted over the course of two days each year and stretches across 150km of the Cassowary Coast LGA. The Red Bull Defiance attracts hundreds of Australia's best endurance athletes to participate.<sup>62</sup> Red Bull partner with the Council and CCT to facilitate this event. During the consultation process undertaken as part of the Business Case, Red Bull representatives confirmed their appetite to potentially incorporate the Trails into the event or program of events in future years.
- **Ona Mission Multisport Adventure Race:** An adventure race that features the most sensational locations of Mission Beach and Dunk Island, starring palm-tree-lined beaches, world-heritage rainforests, as well as the GBR.<sup>63</sup> The Ona Mission Multisport Adventure Race has been hosted by the Cassowary Coast Multisport Club on an annual basis since 2008, and continues to attract hundreds of participants.

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<sup>60</sup> TTNQ (2022). *Tropical North Queensland Destination Tourism Plan*. Accessed at [https://teq.queensland.com/content/dam/teq/corporate/corporate-searchable-assets/industry/strategies/destination-strategies/2021\\_TNQ\\_Destination\\_Tourism\\_Plan.pdf](https://teq.queensland.com/content/dam/teq/corporate/corporate-searchable-assets/industry/strategies/destination-strategies/2021_TNQ_Destination_Tourism_Plan.pdf)

<sup>61</sup> Ibid.

<sup>62</sup> CCRC (2022). *Red Bull Defiance 2022*. Accessed at <https://www.cassowarycoast.qld.gov.au/news/article/755/22-august-2022-red-bull-defiance-2022>

<sup>63</sup> Cassowary Coast Multisport Club (2023). *Ona Mission – Mission Beach and Dunk Island*. Accessed at <https://ccmclub.org.au/events/onamission/>

- **Cardwell UFO Festival:** Australia's only UFO Festival that attracts thousands of visitors to Cardwell each year. The Cardwell UFO Festival extends across a weekend and activates the foreshore with family activities and forums.<sup>64</sup>
- **Cardwell Barra Bonanza:** The Cardwell Barra Bonanza is a two-day sports fishing competition held annually at the end of October to coincide with the close of the Barra season. 2023 will be the 15<sup>th</sup> year of the competition, attracting a blend of residents and visitors to Cardwell.<sup>65</sup>
- **Kurrimine Beach Fishing Classic:** An annual fishing competition hosted in Kurrimine, which is a small town of approximately 400 people that is located to the north of Mission Beach. The Kurrimine Beach Fishing Classic attracts thousands of participants each year and is celebrating its 11<sup>th</sup> year in 2023.<sup>66</sup>
- **Feast of the Senses:** North Queensland's premier tropical food experience and the Cassowary Coast's major festival centred around the town of Innisfail. The festival showcases the region's variety of rare and exotic fruits and range of produce including meat, seafoods, herbs, spices and wine. The event celebrated its 20<sup>th</sup> anniversary in 2023 and continues to grow in popularity.<sup>67</sup>
- **Tropical Art Deco Festival:** This festival celebrates the Art deco heritage of Innisfail, with a variety of events including an historical town walk of Art Deco architecture, entertainment featuring music of the era and social events where patrons may dress in the fashions of the era.<sup>68</sup>

Further, Tully hosted the World Rafting Championships in 2019. Over 1,000 of the world's best rafters from 54 countries travelled to the Cassowary Coast for the event. There are also a range of world class adventure tourism events that are hosted in the broader FNQ region, such as the Cairns Ironman Festival and Crankworx Cairns.

This creates an incredibly strong calendar of events in the region that attract a significant number of visitors, promote the Cassowary Coast and showcase the region's unique natural features and attractions. Coupled with Red Bull's appetite to potentially incorporate the Trails into a broader program of events in the future, this presents a significant opportunity to support the region's growing reputation for hosting world-class events and offering diverse experiences.

## Rebounding Tourism in Queensland and Australia

### *Australia*

The Australian Tourism Sector was significantly impacted and disrupted in 2020 and 2021 by the COVID-19 pandemic, which brought domestic and international travel to an unprecedented standstill. International tourism fell sharply in early 2020 and only slowly recovered once restrictions were lifted in the first half of 2021. By contrast, domestic tourism rebounded almost immediately following the progressive easing of local travel restrictions throughout 2020 and 2021. The rebound of domestic tourism was particularly driven by travel to regional areas such as FNQ, with regional travel accounting for 63% of domestic tourism expenditure in 2021, increasing from 44% in 2019.<sup>69</sup>

As presented in Figure 25, Tourism Research Australia (TRA) is expecting the strong growth trajectory of the domestic visitor economy to continue through to 2027 and beyond. Domestic visitor nights are projected to reach approximately 420 million in 2023, surpassing pre-pandemic levels. This trajectory in domestic visitation and expenditure is projected to

<sup>64</sup> TEQ (2023). *Cardwell UFO Festival*. Accessed at <https://www.queensland.com/au/en/things-to-do/events/p-576232dc17a313107324e015-cardwell-ufo-festival>

<sup>65</sup> Cardwell Sportfishing Club (2022). *Cardwell Barra Bonanza*. Accessed at <https://www.cardwellsportfishingclub.com/barra-bonanza.php>

<sup>66</sup> Kurrimine Beach Fishing Club (n.d.). *Kurrimine Beach Fishing Club*. Accessed at <https://kurriminebeachfishingclub.com.au/>

<sup>67</sup> Feast of the Senses (2023). *Feast of the Senses*. Accessed at <https://www.feastofthesenses.com.au/>

<sup>68</sup> TEQ (2023). *Tropical Art Deco Festival Innisfail*. Accessed at <https://www.queensland.com/au/en/things-to-do/events/p-60bc8320b8874d293b54e38a-tropical-art-deco-festival-innisfail>

<sup>69</sup> TRA (2022). *State of the Industry 2021*. Accessed at <https://www.tra.gov.au/economic-analysis/state-of-the-industry/state-of-the-industry>

continue to 2027 and reach 465.8 million visitor nights and \$179 billion in domestic tourism expenditure.<sup>70</sup> The recovery of international tourism is expected to take longer than the domestic market and be uneven across markets. According to TRA, international visitor arrivals are forecast to reach 9.5 million in 2025 and 11 million in 2027. The India and New Zealand markets are expected to be the fastest recovering markets, while leisure travel is forecast to return more quickly than education or business.<sup>71</sup>

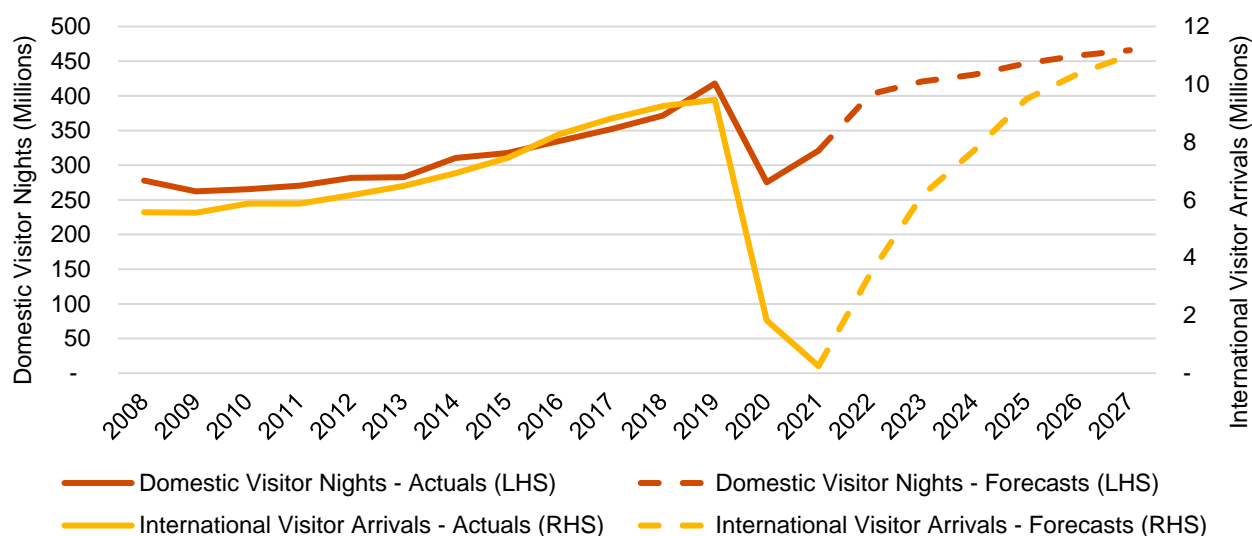


Figure 25: Domestic and International Visitation in Australia<sup>72</sup>

The domestic-led recovery of Australia's tourism sector represents a key growth opportunity for the Trails in Cardwell. As previously outlined in Chapter 3, the majority of visitors for mountain biking in Queensland are domestic travellers, with intrastate visitors accounting for approximately 64% of domestic overnight trips undertaken for mountain biking in Queensland.

Notwithstanding, interstate visitors remain important to the state's mountain biking industry, with the average spend per trip of approximately \$1,500, compared to \$400 for intrastate visitors. Furthermore, the 26,000 domestic overnight trips made by Queensland residents to participate in mountain biking activities in other states resulted in approximately \$40 million of expenditure being directed to those state and territory economies.

To this end, attracting a portion of these interstate trips made by Queenslanders to Cardwell, in conjunction with attracting more domestic visitors, would significantly contribute to the development of the sport in the region, and would support the growth of the Trails.

The growth in international tourism also presents a long term opportunity for the Trails, as international visitors may visit the network in Cardwell on leisure trips. The projected growth in New Zealand arrivals is particularly important, as mountain biking is a popular activity in the nation with an estimated 200,000 adults in New Zealand riding mountain bikes every year.<sup>73</sup>

<sup>70</sup> TRA (2022). *State of the Industry 2021*. Accessed at <https://www.tra.gov.au/economic-analysis/state-of-the-industry/state-of-the-industry>

<sup>71</sup> TRA (2022). *Tourism Forecasts for Australia 2022 to 2027*. Accessed at <https://www.tra.gov.au/economic-analysis/tourism-forecasts-australia/tourism-forecasts-for-australia-2022-2027>

<sup>72</sup> Ibid.

<sup>73</sup> NZ Herald (n.d.). *Bikes likely to use tracks in national parks*. Accessed at <https://www.nzherald.co.nz/nz/bikes-likely-to-use-tracks-in-national-parks/RFQCIIIF6CCVXSHB44BNGNBHGU/>

Figure 26 presents the historical and projected domestic visitor nights in Queensland by purpose of travel, which includes holiday, business, visiting family and relatives (VFR) and other.

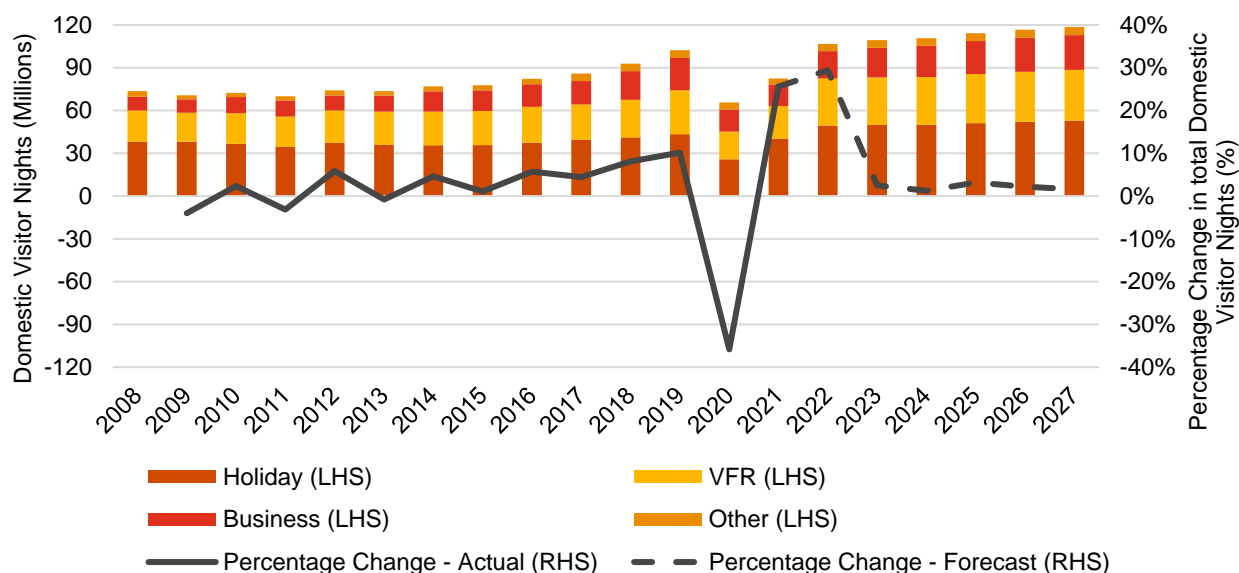


Figure 26: Domestic Visitor Nights in Queensland by Purpose of Travel<sup>75</sup>

As evidenced above, the holiday market has historically accounted for close to half of all domestic visitor nights in Queensland. This is projected to continue through to 2027 and increase from approximately 49 million visitor nights in 2022 to 53 million visitor nights in 2027 at an annual growth rate of 1.4%.<sup>76</sup>

Visitation for the purpose of recreational mountain biking would ordinarily be incorporated as holiday travel, thus continued growth in the holiday market in Queensland is expected to support further growth in those travelling specifically to partake in adventure travel, such as mountain biking. Establishing the Trails presents an opportunity to attract new and return domestic travellers to Cardwell to utilise the trail infrastructure and to partake in the variety of 'off-bike' experiences in the region.

The significant opportunity associated with the holiday market is also complemented by domestic HVTs, who spend more than the average visitor on leisure trips and are aligned to Queensland's competitive offering.<sup>77</sup> HVTs represent 35% of interstate leisure trips, yet account for 63% of overnight visitor expenditure, which highlights their disproportionate share of spending. In the intrastate market, HVTs represent 36% of intrastate leisure trips and 71% of overnight visitor expenditure. Furthermore, as previously outlined in Chapter 3, 30% of mountain bike riders are HVTs. This presents further rationale for the need to attract such tourists to Cardwell, to maximise the participation in 'on-bike' and 'off-bike' experiences and attractions, and importantly growing the overnight expenditure in the region.

<sup>74</sup> TRA recommended that international visitation and expenditure data not be presented at the regional level until International Visitor Surveys are fully reintroduced. Consequently, this section has specifically focused on the domestic tourism market.

<sup>75</sup> Ibid.

<sup>76</sup> TRA (2022). *Tourism Forecasts for Australia 2022 to 2027*. Accessed at <https://www.tra.gov.au/economic-analysis/tourism-forecasts-australia/tourism-forecasts-for-australia-2022-2027>

<sup>77</sup> TTNQ (2021). *Tropical North Queensland Destination Tourism Plan*. Accessed at <https://tourism.tropicalnorthqueensland.org.au/wp-content/uploads/2019/12/Destination-Tourism-Plan-2020-v8-Pages.pdf>

## Emerging Trends and Opportunities in Tourism

The visitor economy is rapidly shifting and evolving, which presents an opportunity for the Trails to capitalise on the emerging trends and opportunities. The key trends that are anticipated to drive increased visitation to the Trails and Cardwell's unique offerings are as follows:

- **Rise of Millennials:** People born after 1980 will represent approximately 45% of visitors by 2025. Coupled with Generation Z and later generations, travel will be dominated by these traveller groups who are looking for cultural experiences with low-cost, environmentally sustainable travel. Approximately 60% of surveyed Millennial travellers ranked authentic culture as important to them, and Millennials are more likely than older travellers to seek out cultural and historical landmarks.<sup>78</sup>
- **Ageing Populations:** By 2025, one in eight international trips will be undertaken by retirees aged 60 or above. The size of this market will almost double in the coming decade, as the global ageing population grows by 40% to 1.4 billion by 2030, with an increasing propensity to spend their retirement on travel. The older traveller is looking for comfortable accommodation, easy transitions through the 'first and last mile' of transport, and attractions with information readily and personally available.<sup>79</sup> As previously outlined in Chapter 3, the growth in e-bikes will be critical to attracting retirees to Cardwell, as they enable all mountain bikers to ride for longer in terms of age, distances and durations. The use of e-bikes will also enable ageing riders to access more challenging trails in the network and, coupled with the proximity of the Trail Head to the foreshore, will limit the need for private transportation to and from the Trails.
- **Experiential Tourism:** People are adjusting their travel spend towards experiences over purchased products, with experiential tourism being one of the fastest growing of all travel categories prior to the pandemic. For all segments, there is a growing desire to experience nature in all its forms, and to engage more and learn from authentic cultural and First Nation experiences.
- **Sustainable Practices:** The proportion of holiday and business travellers who prioritise sustainable practices is rising noticeably. In a 2019 survey conducted by McKinsey and Company, approximately 60% of Millennials and Gen Z travellers from the USA, the UK and Australia agreed that it was important to prioritise sustainable practices when travelling. Australia was also recognised by the Consumer Demand Project as the destination most associated with sustainable tourism experiences.

In summary, visitor demand for **eco-friendly and sustainable destinations** is growing due to the increasing focus on the impact of travel on climate change and the environment. Younger travellers (Millennials and Gen Z) are also seeking **authentic experiences** that are delivered onsite by local experts, whilst the growing cohort of older travellers and multi-generational families is also driving greater focus on **quality experiences** and a **safe environment** for visitors.<sup>80</sup>

These trends are strongly aligned with the on-bike experience at the Trails, as well as the off-bike attractions in and nearby to Cardwell. The proximity of the Trails to the town centre will also limit the use of visitors' private vehicles whilst they visit Cardwell, which is strongly aligned with the growth in visitors' prioritisation of sustainable practices whilst travelling. This therefore presents an opportunity to leverage these key trends in the visitor economy to establish the Trails as a leading destination for visitors seeking a high-quality, eco-friendly and authentic experience with diverse attractions.

## Summary

- Cardwell and the Cassowary Coast LGA offer a diverse range of unique natural, adventure and cultural experiences that attract visitors to the region, including Hinchinbrook Island, Murray Falls, the Dalrymple Track and the Girringun Art Centre.
- Mountain biking has the potential to leverage these existing attractions and tourism offerings to enhance the value proposition of Cardwell, increasing the number of visitors to the town who are seeking new and unique experiences.

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<sup>78</sup> Austrade (2021). *Opportunities for the Visitor Economy*. Accessed at <https://www.austrade.gov.au/news/publications/opportunities-for-the-visitor-economy-report>

<sup>79</sup> Ibid.

<sup>80</sup> Austrade (2023). *Thrive 2030*. Accessed at <https://www.austrade.gov.au/news/publications/thrive-2030-strategy>

- The region is home to many world class events, such as the Red Bull Defiance, that continue to showcase and promote Cardwell and the Cassowary Coast LGA. The Trails will offer further opportunities to attract these events to Cardwell and the Cassowary Coast.
- The rebound of the tourism sector presents a significant opportunity for Cardwell to attract a greater number of visitors who are seeking unique and differentiated experiences. This is particularly applicable to intrastate visitors, who represent the majority of visitors to TNQ. The attraction of interstate and international visitors will remain important to the Trails and the region more broadly, due to the comparatively greater overnight spend and longer trip durations.
- Promotion of the Trails must be cognisant of the emerging trends in travel, with different markets that are typically distinguished by age introducing new opportunities to catalyse growth and visitation to Cardwell and the Cassowary Coast.

**Service Need: A significant opportunity exists to leverage the region's reputation as a leading adventure and lifestyle destination, to drive further tourism growth through domestic and international travellers and the evolving visitor demand for unique, sustainable and differentiated experiences.**

#### 4.3.2 Opportunity 2: Recognise and promote the Girramay Peoples' culture and heritage

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**Greater respect for, and recognition of, the unique culture of the local Traditional Owners will establish cultural heritage as a key element and competitive advantage of the Trails and, in turn, provide greater employment and business opportunities for the local Traditional Owners.**

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The Girramay Peoples have strongly advocated for the Trails since the initial concept was conceived in September 2019, and are supportive of the many opportunities that may be generated for First Nations Peoples and the broader Cardwell community. Giringun are also advocates of the Trails and are interested in supporting the operation and maintenance of the trail network in the future. The establishment of the Trails is expected to create new training, employment and business opportunities for the local Aboriginal and Torres Strait Islander peoples, who represent close to 10% of Cardwell's population.<sup>81</sup> The Trails will also recognise, protect and promote the Girramay People's traditional lands and cultural heritage.

The driving factors associated with this opportunity are summarised below and discussed in the following sections.

- Recognition and promotion of the culture and heritage of the Girramay People
- New business, employment and training opportunities for the Girramay People
- Expansion of the Giringun's Aboriginal Ranger Program.

##### **Recognition and Promotion of the Culture and Heritage of the Girramay People**

The Trails are located on the traditional lands of the Girramay People. For the Girramay People, this country was not only the home from which they gathered food and materials, it also sustained, and continues to sustain, their spirituality. To this day, the Girramay Peoples embrace and promote their deep connection to country.<sup>82</sup>

The heritage of the Girramay Peoples is meaningfully showcased throughout Cardwell. This is demonstrated at the Cardwell foreshore, where three Bagu sculptures are located to greet visitors to Cardwell (see Figure 27). As demonstrated in Figure 28, visitors to the Cassowary Coast region and Cardwell are also welcomed through a suite of locally designed entry statements that were designed by local artists and showcase the region's rich cultural heritage and natural environment. The Giringun Art Centre also showcases the work of local multi-award winning artists and craftsmen. The stories and environments of the Girramay People's culture are transformed into visual images and designs daily by weavers, painters, potters, textile artists and makers of traditional objects. These artists bring to life the unique cultural story

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<sup>81</sup> ABS (2021). *Cardwell 2021 Census All persons QuickStats*. Accessed at <https://www.abs.gov.au/census/find-census-data/quickstats/2021/SAL30537>

<sup>82</sup> DES (n.d.). *Girramay National Park*. Accessed at <https://parks.des.qld.gov.au/parks/girramay/about/culture>



and expression of the distinctive Aboriginal rainforest art traditions and culture of the Girringun region, to share with the world.

Combined, these visual representations illustrate the intrinsic link between the local Indigenous people of the region and the communities of the Cassowary Coast. It is from this platform, and through integrating the heritage of the Girramay Peoples within the Trails project, that the further promotion and awareness of their culture and connection to country may be achieved.



Figure 27: Bagu Artwork on Cardwell Foreshore<sup>83</sup>



Figure 28: Regional and Town Entry Statements

#### *Strong Relationship between the Girramay Peoples and Cardwell Community*

There is an incredibly strong understanding and mutual respect shared between the Girramay People, the Cardwell community and the Council. An example of where this has been exhibited was through the inception of this Project, arising

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<sup>83</sup> TEQ (n.d.). *Cardwell Foreshore*. Accessed at <https://www.queensland.com/au/en/things-to-do/attractions/p-5d95547368b7e7bb4cd5444e-cardwell-foreshore>



through community-led meetings in 2019, which were attended by Girramay RNTBC representatives and community members. It was through these meetings that the mutual commitment to the Project concept was established, and this has progressed through to today.

This strong relationship has continued from the outset of the Project and was evident during the comprehensive stakeholder engagement process undertaken throughout the development of the Business Case. Engagement with Aunty Marcia Jerry, a Girramay Elder, confirmed the enthusiasm and support for the Trails by the Girramay People.

The strong understanding and mutual respect shared between the Girramay People, the Cardwell community and the Council was also demonstrated through the Cardwell Pump Track. Marcia Jerry, Girramay Elder, said at the Cardwell Pump Track Opening event:

***“I am very proud to be here today for this event. The Pump Track has been endorsed by the people, and our ancestors walked here, so our kids are gonna [sic] ride where my ancestors walked.”<sup>84</sup>***

### **New Business, Employment and Training Opportunities for the Girramay People**

Girramay RNTBC has indicated their interest to be involved in the future operation and/or maintenance of the Trails and to actively participate in the development of new service offerings that may be required to support the Trails project. In turn, the Girramay Peoples are eager to pursue new business, employment and training opportunities that will enable them to support and grow their community, offer incentives for their community members to remain in the region and to actively contribute to a more vibrant and resilient Cardwell community.

Through the stakeholder consultation process, the potential opportunities that were identified for involvement of the Girramay Peoples in the Trails included:

- Operation of a mountain bike shuttle service and/or providing mountain bike hire and repair services to users of the network
- Providing cultural experiences through tours and related events
- Supporting the construction, operation, maintenance and/or management of the Trails through new contracting or service enterprises
- Creating artwork features throughout the network of mountain bike trails and operating retail outlets in Cardwell
- Operating hospitality outlets to support the requirements of increased tourist numbers to the region
- Establishing and operating accommodation facilities to support the increased demand from visitors.

The strong support for the Project from the Girramay People, and the significant potential socio-economic benefits that may arise for them, was recognised by the Australian Government in 2022, with the Project receiving an Honourable Mention in the Indigenous Recognition category of the Australian Government’s 2022 National Awards for Local Government (see Section 2.3).

### ***Closing the Gap***

The business, employment and training opportunities that will be created for the Girramay Peoples and other First Nations Peoples through the Trails is also strongly aligned with the Queensland and Australian Governments’ commitment to ‘Closing the Gap’. The National Agreement on Closing the Gap (the National Agreement) has 19 national socio-economic targets across areas that have an impact on life outcomes for First Nations People. The targets that will be directly supported by the involvement of Girramay Peoples and Girringun in the Trails include:

- Target 7: Youth are engaged in employment or education; the Trails are expected to increase the proportion of Aboriginal and Torres Strait Islander youth who are in employment, education or training.

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<sup>84</sup> CCRC (2022). *Cardwell Pump Track Opening Ceremony*. Accessed at <https://www.youtube.com/watch?v=OzFNdqFqB5g>

- Target 8: Strong economic participation and development of people and their communities; the Trails are expected to increase the proportion of Aboriginal and Torres Strait Islander people aged 25-64 who are employed.
- Target 15: People maintain a distinctive cultural, spiritual, physical and economic relationship with their land and waters; the Trails will recognise and promote the culture and heritage of the Girramay People, ensuring their distinctive connection with country remains.
- Target 16: Cultures and languages are strong, supported and flourishing; the Trails will enable the Girramay Peoples to share their culture with visitors to Cardwell, which will ensure the culture and language continues to flourish into the future.

Whilst initial investment will be required to establish the Trails, the socio-economic benefits derived from the new business, training and employment opportunities will be significantly greater and are expected to be sustained over the long term. As such, this represents a significant opportunity to support the generation of long term, positive impacts on First Nations Peoples in Cardwell and the broader Cassowary Coast region.

### Girringun's Aboriginal Ranger Program

Girringun represent the interests of nine Traditional Owner groups, including Bandjin, Djiru, Girramay, Gugu Badhun, Gulngay, Jirrbal, Nywaigi, Warrgamay and Warrungnu. These are the current generations of people who have continuously occupied the broader region for up to 80,000 years.<sup>85</sup>

Girringun's operations are critically important to empowering local communities and supporting culturally and environmentally sustainable economic development activities in the economically-disadvantaged north Queensland region.<sup>86</sup> As part of this, Girringun facilitates several programs that protect country and provide meaningful employment and training opportunities for First Nations Peoples. The five core programs are as follows:

- **Girringun Art Centre and Keeping Place:** Established in 2008, the Girringun Art Centre is home to multi award-winning artists and craftsmen. Objects from this country are significantly different from those of much of the rest of Australia. Weaving is done by both men and women, and the diversity of resources between land and sea have resulted in a vast array of implements being crafted for use.
- **Biodiversity and Nursery Program:** Involves restoration of habitats and corridors of endangered species such as Tree Kangaroo, Mahogany Gliders and Cassowary; control of pest weeds, revegetation of areas damaged by natural disasters such as cyclones and the collection and propagation of local endemic plants, trees and grasses for use in revegetation work.
- **Girringun Indigenous Protected Areas (IPA):** A voluntary agreement between Traditional Owners and the Australian Government and is part of the National Reserve System. The Girringun IPA is comprised of mixed tenures and encompasses many layers of legislative and management responsibilities. Projects developed, through the Girringun IPA partnership engagement model, aim to address social, cultural and environmental issues and challenges regionally and nationally. The Girringun IPA provides an opportunity to enhance Traditional Owner and Indigenous engagement and involvement in regional natural and cultural resource planning and management.
- **Girringun Aboriginal Rangers:** A dynamic team of Indigenous men and women working and managing many of the cultural sites, land and sea country throughout the Girringun IPA. Rangers are highly trained and skilled in all aspects of land and sea management. This program includes the provision of training and upskilling opportunities to youth rangers.
- **Traditional Use of Marine Resource Agreement (TUMRA):** TUMRA is a commitment to the management of the traditional hunting of protected species in the greater Hinchinbrook Island area. This agreement was subsequently accredited by the GBR Marine Park Authority (GBRMPA) and the Environment Protection Authority (EPA).<sup>87</sup>

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<sup>85</sup> Girringun Aboriginal Corporation (n.d.). *Girringun, Land, Sea, Culture & Arts Campaign*. Accessed at <https://www.girringun.com/wabujananyuproject>

<sup>86</sup> Ibid.

<sup>87</sup> Girringun Aboriginal Corporation (n.d.). *Our Programs*. Accessed at <https://www.girringun.com/ourprograms>

With the support and approval of the Girramay People, Girringun confirmed their interest to potentially expand the Rangers Program to support the operation and maintenance of the Trails. This presents a significant opportunity to provide meaningful, long term employment and training opportunities for not only the Girramay Peoples but also other First Nations Peoples in the region.

### Summary

- The Girramay Peoples have strongly advocated for the Trails since the initial concept was conceived in September 2019, and are supportive of the many opportunities that may be generated for their people and the broader Cardwell community. Of particular importance, the Girramay Peoples view the Trails as an opportunity to further promote, protect and raise awareness of their culture and their connection to the lands and waters in the region surrounding the Trails.
- Girringun are also advocates of the Trails and are interested in supporting the operation and maintenance of the trail network in the future. The Trails present a significant opportunity to expand Girringun's Aboriginal Rangers Program and to provide meaningful, long term employment and training opportunities for First Nations People.
- The establishment of the Trails is expected to create new training, employment and business opportunities for the Girramay Peoples in relation to operation and maintenance of the Trails, and through the demand for supporting services, such as accommodation, tours, retail and hospitality.
- The involvement of Girramay and Girringun will directly support the National Agreement on Closing the Gap. This will be achieved through the provision of new First Nations training and employment opportunities as well as the protection and promotion of the Girramay People's cultural heritage and connection with the land and waters of the region.

**Service Need: The Trails will generate meaningful and long-term socio-economic benefits for the Girramay People, Girringun and other First Nations Peoples in the Cassowary Coast.**

### 4.3.3 Opportunity 3: Enhance Community Cohesion and Wellbeing

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**The Cardwell community's strong civic pride and commitment presents an opportunity to deliver greater community-led infrastructure that may enhance community cohesion and wellbeing.**

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Despite several seemingly insurmountable challenges experienced by the Cardwell community in recent times, the community's civic pride has remained, if not strengthened. This civic pride has been evidenced through the community's commitment to developing the Cardwell Pump Track and the progress made to date on the Trails. These projects were both community-led initiatives that continue to be strongly advocated for and supported by the community. The Trails project presents an opportunity to construct and deliver community-led recreational infrastructure that is strongly aligned with the desires of the community and able to support enhanced wellbeing across all ages, genders and demographics.

The key driving factors associated with this opportunity are summarised below and discussed in further detail in the following sections. These include:

- A community-led initiative that is supported widely by diverse stakeholder groups
- Mental and physical health benefits of recreational activities, supported by appropriate sporting infrastructure, will enhance the overall wellbeing of the community
- Clear alignment with the core objectives of the Cardwell and broader Cassowary Coast communities.

### Community-Led Initiative

The proposed Trails are a community-led initiative that were initially conceived through a meeting of a diverse range of stakeholder groups in the local community, as previously outlined in Section 2.3. There was strong support from Cardwell residents and Traditional Owners, which ultimately led to the Council progressing the Project and providing financial assistance for the development of the Feasibility Report. The Queensland Government's DTIS contributed matched funding to support further investigations into the locally driven proposal.

Throughout the preparation of the Feasibility Report and this Business Case, the support for the Project and the sense of enthusiasm amongst key stakeholders has been widely evident. Importantly, the Trails continue to receive support from the

Girramay Peoples and Giringun. The Trails were commonly identified by key stakeholders as the type of project that is needed in Cardwell to catalyse action on other commonly identified issues, such as the challenges with the sewerage network and management of Port Hinchinbrook.

The community's civic pride and commitment was recognised on the national scale in 2022 through the Australian Government's *National Awards for Local Government*, with the following quote used:

***"A small community with deep pride for its culture has come together to take on one very ambitious goal – to be Australia's next big 'Ride Destination'."***

The Cardwell Pump Track is also one of many examples that demonstrate the community's civic pride, as it was also a community-led initiative that was supported by the Council and viewed as the first step towards establishing the proposed Trails. The Pump Track's opening event brought together hundreds of community members and showcased the community's support for new recreational infrastructure. Through the 'Ngulgah Time Youth Group', community members also donated bikes for youth and children to use on the Pump Track.<sup>88</sup> As previously outlined in Section 4.3.2, Marcia Jerry, Girramay Elder, attended the event and was proud of the Pump Track providing an opportunity for youth in the area to ride where her ancestors once walked. This ties back to the overarching offering of the Trails: ***'Ride where our ancestors once walked, Girramay Country'***.

The Pump Track was recognised as a facility for riders, young and old, enabling them to practice and perfect their mountain biking skills in anticipation for the opening of the Trails. As a highly used recreational and community asset, this demonstrates the eagerness and anticipation amongst the community for the Trails. Furthermore, the Trails will provide several areas and hubs for social gatherings, which will further strengthen the collective pride and cohesion of the Cardwell community.

### Health Benefits of Recreational Infrastructure and Activities

Recreational and sporting infrastructure is a key enabler for community members to be active. In turn, such infrastructure and can facilitate the many positive social and health benefits to individuals within the community.

Mountain biking trails are a form of recreational infrastructure that will enable 'active recreation', which is defined as activities engaged in for the purpose of health, wellbeing or enjoyment with the primary activity requiring physical exertion, and the primary focus on human activity.<sup>89</sup>

Mountain biking can also deliver environmental, social and economic benefits to individuals and communities according to the *Queensland Mountain Bike Strategy (2018)*. A snapshot of these benefits is presented in Figure 21. In addition to these qualitative benefits, a range of quantified social benefits from mountain biking were reported in the *Mountain Biking in Australia: An Economic and Participation Analysis Report* (see Table 8).

The Trails are a prime example of the type of recreational and sporting infrastructure that has the potential to deliver significant social and health benefits to the community. Importantly, the Trails are expected to:

- Enable enhanced levels of physical activity and thereby support the overall health and wellness of the community
- Provide a space for the community to connect and in turn contribute to greater community cohesion
- Generate new employment and training opportunities that enable community members to be more socially connected and involved in the delivery of meaningful work and outcomes

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<sup>88</sup> CCRC (2022). *Cardwell Pump Track Opening Ceremony*. Accessed at <https://www.youtube.com/watch?v=OzFNdqFqB5g>

<sup>89</sup> Department of Sport and Recreation Victoria (2020). *Sport and Active Recreation Infrastructure*. Accessed at [https://sport.vic.gov.au/\\_\\_data/assets/pdf\\_file/0030/155685/Value-of-Community-Sport-Infrastructure-FINAL-REPORT.pdf](https://sport.vic.gov.au/__data/assets/pdf_file/0030/155685/Value-of-Community-Sport-Infrastructure-FINAL-REPORT.pdf)

- Enhance the amenity and overall liveability of the town thereby improving the perception of the community for community members and visitors.<sup>90</sup>

These benefits summarised in Figure 29 and further expanded in Chapter 9, *Economic Analysis*.

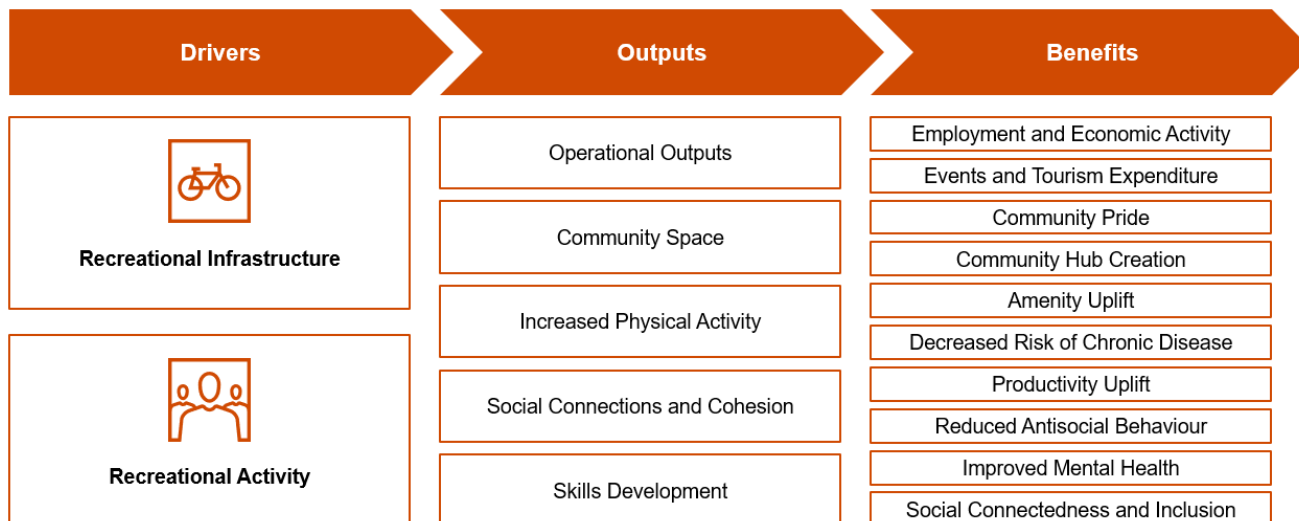


Figure 29: Benefits of Recreational Infrastructure and Activities<sup>91</sup>

### Cardwell and Cassowary Coast Community's Objectives

The *Community Scorecard* commissioned by the Council in 2022 captured responses from over 1,800 residents in the LGA. The scorecard provided a platform for residents to express their opinion and to allow the Council to evaluate and adjust its service offerings and programs to address community priorities.

The scorecard emphasised the community's desire for recreational infrastructure, specifically requesting:

- A greater range of free and low cost sporting and recreational activities for youth
- Improved connectivity with a more extensive, better quality network of footpaths, trails and cycleways.<sup>92</sup>

Furthermore, the stakeholder consultation process that was undertaken as part of this Business Case confirmed the strong desire of the community to see the Trails constructed and commissioned.

### Summary

- The Trails are a community-led initiative that has received strong support from residents and Traditional Owners since its conception in 2019. The community's unwavering pride and commitment to the Trails project was recognised on a national level by the Australian Government. Furthermore, the Cardwell Pump Track, which is viewed by many as the first stage to the broader trail network in Cardwell, has been a successful project that has heavy use as a recreational, community asset that continues to bring together the community and enhance cohesion and wellbeing.
- The potential benefits of recreational infrastructure and activities, including mountain biking, are significant and can enhance outcomes from a social and physical and mental health perspective.

<sup>90</sup> Australian Sports Commission (2018). *Investigating the value of community sport facilities to Australia*. Accessed at [https://www.sportaus.gov.au/\\_\\_data/assets/pdf\\_file/0005/974948/KPMG\\_Value\\_of\\_Community\\_Sport\\_Infrastructure\\_final.pdf](https://www.sportaus.gov.au/__data/assets/pdf_file/0005/974948/KPMG_Value_of_Community_Sport_Infrastructure_final.pdf)

<sup>91</sup> Australian Sports Commission (2018). *Investigating the value of community sport facilities to Australia*. Accessed at [https://www.sportaus.gov.au/\\_\\_data/assets/pdf\\_file/0005/974948/KPMG\\_Value\\_of\\_Community\\_Sport\\_Infrastructure\\_final.pdf](https://www.sportaus.gov.au/__data/assets/pdf_file/0005/974948/KPMG_Value_of_Community_Sport_Infrastructure_final.pdf)

<sup>92</sup> Markyt (2022). *Community Scorecard*. Accessed at <https://yoursay.cassowarycoast.qld.gov.au/community-scorecard>

- The delivery of the Trails is clearly aligned with the core objectives of the community, Traditional Owners and Council to ensure a resilient and long term sustainable community.

**Service Need: There is an opportunity to invest in more recreational infrastructure, such as the Trails, to catalyse enhanced social and health outcomes for the community and to contribute to greater cohesion amongst community members.**

#### 4.3.4 Problem 1: Sustain and Expand the Existing National Park Maintenance Programs

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**Investment is required to sustain and expand the capacity and coverage of the existing National Park maintenance programs in and around Cardwell, which are critical in providing access to and sustainably maintaining protected areas and national parks.**

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National parks and protected areas play an essential role in preserving endangered wildlife and flora and maintaining the health of ecosystems. However, despite setting a target of increasing protected areas to 17% of the state's land mass in 2015, Queensland has the lowest proportion of land area currently protected by National Parks across all Australian states and territories at just 8.2%.<sup>93</sup> <sup>94</sup> Coupled with the fact that half of state's native wildlife species are unique to Queensland,<sup>95</sup> there is a clear need to expand the environmental preservation and protection services provided by Queensland Parks and Wildlife Services (QPWS). However, insufficient resources are a significant risk and limitation to expanding protected areas in Queensland and ensuring the long term protection of the Girringun National Park and Girringun IPA.

The key issues that demonstrate the criticality of this problem are discussed in the following sections and these include:

- Limited capacity of existing national park and protected area maintenance and management programs
- Existing capabilities of Girringun's Aboriginal Ranger Program
- Importance of tourism for protected areas.

##### Limited Capacity of Existing National Park Maintenance and Management Programs

The value of national parks extends well beyond the conservation of nature and includes a number of environmental, economic, cultural, social and health benefits. In 2018, a report completed by the University of Queensland (UQ) estimated that expenditure generated by visitors to Queensland's national parks was up to \$2.64 billion, which contributed \$1.98 billion to Gross State Product and helped support 17,241 jobs in total.<sup>96</sup>

DES and QPWS are responsible for maintaining and protecting national parks and protected areas. More specifically, QPWS is responsible for protecting and conserving the natural, cultural, productive and social values within its parks and forests, in accordance with the *Nature Conservation Act 1992* and *Forestry Act 1959*.<sup>97</sup> QPWS manages over 12.5 million hectares of land, and seeks to ensure parks are protected, enjoyed and valued by all Queenslanders and our visitors now and into the future.<sup>98</sup>

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<sup>93</sup> Queensland Conversation Council (n.d.). *Double Queensland's Protected Areas*. Accessed at [https://www.queenslandconversation.org.au/national\\_parks\\_for\\_life#:~:text=Queensland%20is%20behind%20the%20rest,generations%20and%20protect%20cultural%20values](https://www.queenslandconversation.org.au/national_parks_for_life#:~:text=Queensland%20is%20behind%20the%20rest,generations%20and%20protect%20cultural%20values).

<sup>94</sup> DES (2020). *Queensland's Protected Area Strategy 2020 – 2030*. Accessed at [https://parks.des.qld.gov.au/\\_\\_data/assets/pdf\\_file/0016/212524/qld-protected-area-strategy-2020-30.pdf](https://parks.des.qld.gov.au/__data/assets/pdf_file/0016/212524/qld-protected-area-strategy-2020-30.pdf)

<sup>95</sup> Ibid.

<sup>96</sup> DES (n.d.). *About ecotourism on parks*. Accessed at <https://parks.des.qld.gov.au/management/ecotourism/about-ecotourism-on-parks>

<sup>97</sup> Queensland Government (n.d.). *Management and maintenance*. Accessed at <https://www.qld.gov.au/environment/parks/management#:~:text=In%20accordance%20with%20the%20Nature,within%20its%20parks%20and%20forests>.

<sup>98</sup> QPWS (2014). *A Master Plan for Queensland's parks and forests*. Accessed at [https://parks.des.qld.gov.au/\\_\\_data/assets/pdf\\_file/0034/167965/master-plan-qld-parks-forests-to-2015.pdf](https://parks.des.qld.gov.au/__data/assets/pdf_file/0034/167965/master-plan-qld-parks-forests-to-2015.pdf)

Specifically, under this arrangement DES is responsible for the following:

- Protecting and managing parks, forests and the GBR for current and future generations
- Enhancing Queensland's ecosystems
- Conserving and protecting Queensland's biodiversity and threatened species
- Protecting significant heritage places
- Implementing improved waste management and resource recovery
- Developing and delivering programs supporting climate action
- Avoiding, minimising or mitigating impacts to the environment.<sup>99</sup>

Despite the significant economic contribution and broader importance of national parks, the limited commercialisation of experiences has resulted in constrained resources and limited maintenance budgets for DES and QPWS. Further, it is typically free to enter Queensland's national parks and protected areas, with little to no reciprocal revenue generated due to the limited commercialisation of activities within the majority of national parks.

### Existing Capabilities of Girringun's Aboriginal Ranger Program

Collectively, DES and QPWS are seeking to partner further with First Nations Peoples to deliver the best care for country through traditional knowledge and expertise, and introducing new co-stewardship arrangements.<sup>100</sup> The Aboriginal Ranger Program is one such example of where this partnership has enabled greater outcomes in the delivery of environmental care and management. Girringun have an established Aboriginal Ranger Program and work closely with DES and QPWS to oversee much of the environmental management of the Girringun IPA and National Park.

Girringun expressed their enthusiasm to be involvement in the construction, operation and maintenance of the Trails. However, like QPWS, further funding support will be required to expand Girringun's existing programs. As previously outlined in Section 4.3.2, the Girringun Aboriginal Rangers are a dynamic team of Indigenous men and women working and managing many of the cultural sites, land and sea country throughout the 1.2 million hectares of the Girringun IPA. Girringun work closely with several partners in the region, including the Council, QPWS, DES and the GBRMPA, and provide training opportunities for First Nations Peoples and youth.

With the appropriate level of investment and support, Girringun will be able to train and employ more First Nations Peoples to protect the Girringun IPA and maintain the Trails. This is strongly aligned with the organisational priorities for DES and QPWS, as well as the *Queensland's Protected Area Strategy 2020-2030* objectives, including:

- **Objective 4.2:** Co-design and co-deliver ecotourism through collaborative models of partnership with First Nations Peoples to offer unique cultural tourism experiences.
- **Objective 4.3:** Promote First Nations business and employment opportunities in the conservation economy through protected areas.
- **Objective 4.4:** Strengthen support for First Nations Peoples as landholders and recognise traditional land management practices and protection of cultural values on private protected areas.
- **Objective 4.5:** Further expand the formal role of First Nations Peoples in the management of protected areas by training and qualifying Traditional Owners as authorised officers under the *Nature Conservation Act 1992*.

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<sup>99</sup> DES (n.d.). *Department overview*. Accessed at <https://www.des.qld.gov.au/our-department/about/overview#:~:text=Responsibility%3A,Queensland's%20biodiversity%20and%20threatened%20species>

<sup>100</sup> DES (2020). *Queensland's Protected Area Strategy 2020 – 2030*. Accessed at [https://parks.des.qld.gov.au/\\_\\_data/assets/pdf\\_file/0016/212524/qld-protected-area-strategy-2020-30.pdf](https://parks.des.qld.gov.au/__data/assets/pdf_file/0016/212524/qld-protected-area-strategy-2020-30.pdf)



- **Objective 4.6:** Further expand the Queensland Indigenous Land and Sea Ranger Program.<sup>101</sup>

A team of four full-time equivalent (FTE) rangers is anticipated to be required to ensure access to, maintain and protect the Trails. This will provide new employment and training opportunities for First Nations Peoples, whilst mitigating the significant risks associated with QPWS resource constraints.

### Importance of Tourism for Conservation of National Parks and Protected Areas

The International Union for the Conservation of Nature explicitly recognises the importance of enhancing access to protected areas as the most suitable way to protect and preserve these areas. Far from being a negative, it is considered essential to showcase nature, by implementing properly managed activities that support education and provide revenue.<sup>102</sup>

This is consistent with the wording of the *Nature Conservation Act 1992* in Queensland, which includes the requirement to “present the area’s cultural and natural resources and their values” as part of the management principles for national parks (section 17(1) (2)). Similarly, Part 2 Article 4 of the United Nations Educational, Scientific and Cultural Organisation (UNESCO) World Heritage Convention recognises the need to ‘present’ cultural and natural heritage and transmit it to future generations:

*“Each State Party to this Convention recognises that the duty of ensuring the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage referred to in Articles 1 and 2 and situated on its territory, belongs primarily to that State. It will do all it can to this end, to the utmost of its own resources and, where appropriate, with any international assistance and co-operation, in particular, financial, artistic, scientific and technical, which it may be able to obtain.”*

Tourism in national parks and protected areas may provide the necessary funds to sustainably protect and preserve the national park and WHAs through which the Trails pass, thus offsetting the associated maintenance costs. A report to the Secretariat of the Convention on Biological Diversity and International Union for Conservation of Nature noted:

*“The Convention on Biological Diversity in 2012 concluded that the tourism sector is the largest, global, market-based contributor to financing protected area systems in many countries, through entrance and other user fees, partnerships and concessions. However, many Parties ... underutilise tourism as a means to contribute towards the financial sustainability of protected areas.”*<sup>103</sup>

In addition to the importance of presenting natural assets, ‘opening up’ national parks through well-structured and robustly implemented eco-tourism projects (as explicitly allowed for in the Queensland legislation) has the potential to improve environmental outcomes. For example, an appropriately constructed, operated and maintained mountain biking trail will minimise erosion and the spread of invasive flora and fauna. It also can play an important role in educating the public about the importance of preservation and protection of the environment, supported through the traditional land management practices of Girramay and First Nations Peoples.

### Summary

- DES and QPWS are responsible for maintaining and protecting national parks and protected areas. However, these agencies are funded largely from state programs which experience budget constraints. These constraints, coupled with the growing occurrence of adverse weather events, presents a significant risk to the continued management and maintenance of the Cardwell State Forest and traditional lands of the Girramay People. The Trails presents an

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<sup>101</sup> DES (2020). *Queensland’s Protected Area Strategy 2020 – 2030*. Accessed at [https://parks.des.qld.gov.au/\\_\\_data/assets/pdf\\_file/0016/212524/qld-protected-area-strategy-2020-30.pdf](https://parks.des.qld.gov.au/__data/assets/pdf_file/0016/212524/qld-protected-area-strategy-2020-30.pdf)

<sup>102</sup> Dovers, S., Feary, S., Martin, A., McMillan, L., Morgan, D. and Tollefson, M. (2015). Engagement and participation in protected area management: who, why, how and when?, in G. L. Worboys, M. Lockwood, A. Kothari, S. Feary and I. Pulsford (eds) *Protected Area Governance and Management*, pp. 413–440, ANU Press, Canberra. Accessed at: <http://press-files.anu.edu.au/downloads/press/p312491/pdf/CHAPTER14.pdf>

<sup>103</sup> Spenceley, A., Snyman, S. & Eagles, P. (2017). *Guidelines for tourism partnerships and concessions for protected areas: Generating sustainable revenues for conservation and development. Report to the Secretariat of the Convention on Biological Diversity and IUCN*. Accessed at <https://www.cbd.int/tourism/doc/tourism-partnerships-protected-areas-web.pdf>

opportunity to generate revenue from those accessing the National Park and, in doing so, offset the operational and maintenance costs.

- Giringun's existing Aboriginal Ranger Program's capabilities are strongly aligned with the operations and maintenance of the Trails. Further, Giringun work closely with several partners in the region, including the Council, QPWS, DES and the GBRMPA, and provide training opportunities for First Nations Peoples and youth. To support the Trails Giringun's Aboriginal Ranger Program would require further funding support to train and employ more First Nations Peoples.
- Providing greater access to national parks, through well-structured eco-tourism projects such as the Trails and as explicitly allowed for in Queensland's legislation, has the potential to improve environmental outcomes by providing additional revenue through environmentally sustainable tourism experiences and offerings.

**Service Need: To ensure the long term maintenance and preservation of the National Park and Giringun IPA, the existing ranger programs through QPWS and Giringun require funding support through greater commercialisation of environmentally sustainable experiences.**

#### **4.3.5 Problem 2: Secure the long term prosperity of Cardwell**

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**To secure the long term prosperity of Cardwell, there is a need to grow and diversify the region's economy, increase economic resilience and generate new employment and training opportunities.**

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The Cardwell economy has remained relatively stagnant for the best part of the last two decades, fuelled primarily by the traditional labour intensive industries of agriculture, forestry and fishing. This has resulted in Cardwell residents experiencing greater socio-economic disadvantage as well as being impacted by the 'brain drain' of youth who often leave the town in the search of employment opportunities elsewhere. In the absence of economic development and diversification, the resilience and prosperity of Cardwell will continue to decline.

The key issues that demonstrate the criticality of this problem are discussed in the following sections and include:

- A stagnant and undiversified economy with limited employment opportunities for up and coming generations
- Low educational attainment and high socio-economic disadvantage in Cardwell
- Opportunities to leverage the benefits of tourism and increased visitation to Cardwell as evidenced by the Blue Derby Mountain Bike Trails case study.

#### **Stagnant and undiversified economy with limited employment opportunities**

The Cardwell and Cassowary Coast economy is challenged and has lagged behind the Queensland economy for the past 20 years. In the FY ending 30 June 2021 (FY21), the Cassowary Coast LGA's GRP was estimated at \$1.6 billion, which is equal to the region's GRP in 2001. Over the same two decades, Queensland's GRP increased from \$202.2 billion to \$374.1 billion, which represents a net increase of \$171.9 billion.<sup>104</sup> As previously outlined in Section 2.2, this is predominantly due to the region's reliance on traditional and labour-driven sectors, including agriculture, forestry and fishing, manufacturing and health care, with a smaller contributions from the retail trade and education sectors. Tourism also plays a key role in the Cassowary Coast economy, with the economic impacts distributed across a variety of sectors.

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<sup>104</sup> .idcommunity (2023). *Cassowary Coast Regional Council | Economic Profile*. Accessed at <https://economy.id.com.au/cassowary-coast>

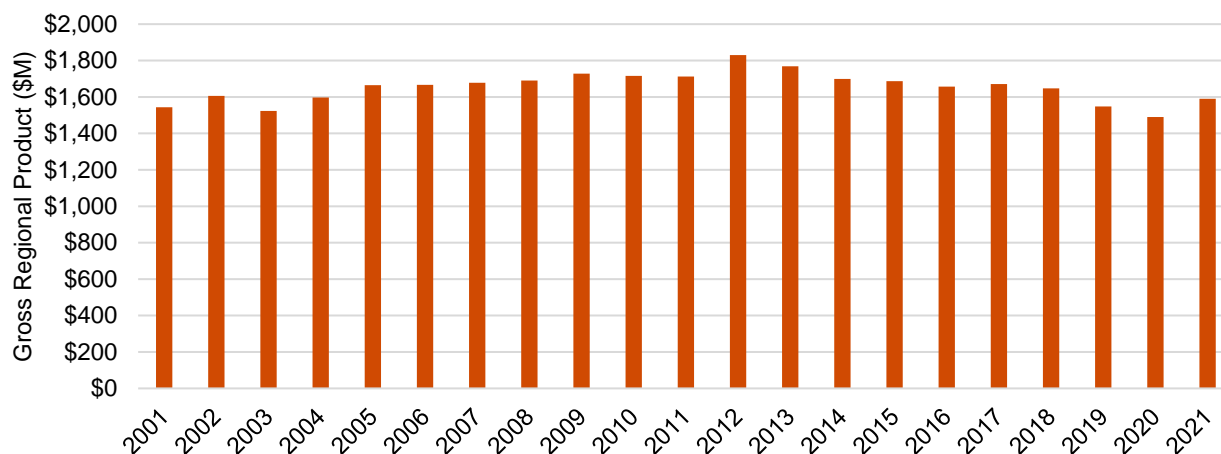


Figure 30: GRP in Cassowary Coast LGA<sup>105</sup>

The Cassowary Coast's stagnant economy has partially contributed to a net decline in employment within the LGA since FY16. As presented in Figure 31, the number of FTEs in the Cassowary Coast declined by 178 FTEs from FY16 to FY21. This was predominantly due to declining employment in three of the top six sectors for employment in the LGA, including the agriculture, forestry and fishing, manufacturing and retail trade sectors.<sup>106</sup>

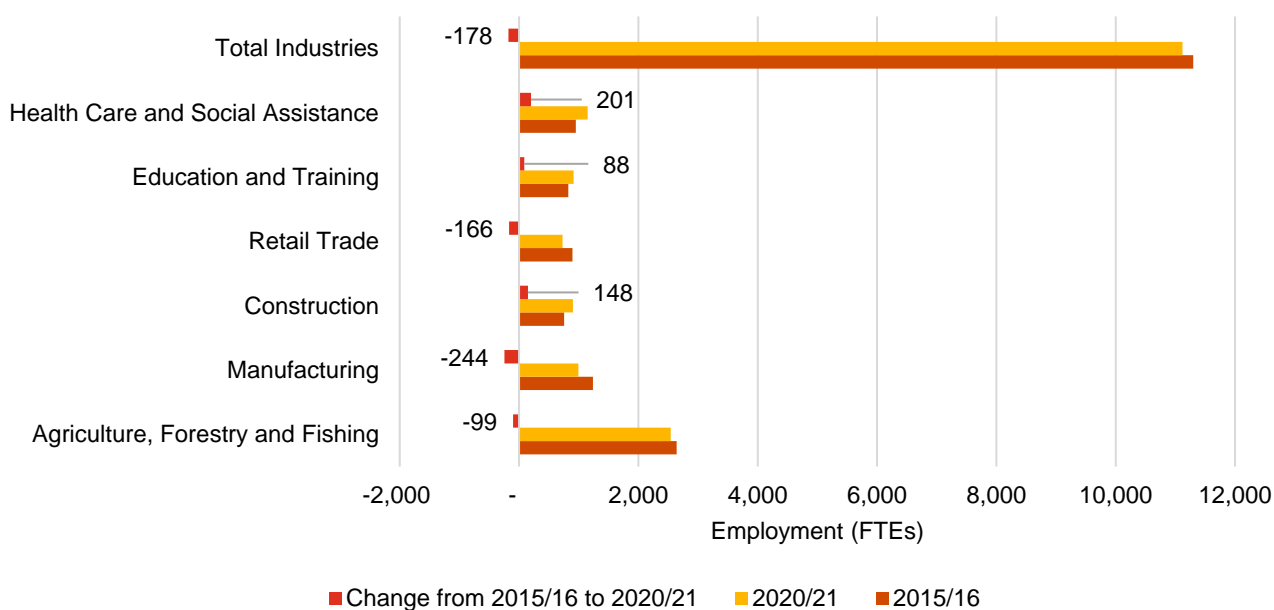


Figure 31: Employment in Cassowary Coast LGA<sup>107</sup>

<sup>105</sup> .idcommunity (2023). *Cassowary Coast Regional Council | Economic Profile*. Accessed at <https://economy.id.com.au/cassowary-coast>

<sup>106</sup> Ibid.

<sup>107</sup> Ibid.

## Cardwell

The level of longitudinal economic and employment data relating to the Cardwell township is limited, however the town's economy is anticipated to be broadly aligned to the Cassowary Coast's economy. The primary sectors for employment in Cardwell are consistent to the Cassowary Coast LGA and include aged care residential services (10.7%), primary education (4.6%), cafes and restaurants (4.4%) and supermarket and grocery stores (4.4%).<sup>108</sup>

As previously outlined in Section 2.2, Cardwell's unemployment rate of 8.2% in February 2021 is materially greater than Queensland's unemployment rate of 5.4%. To compound this issue, the labour force in Cardwell declined from 486 people in 2016 to 441 people in 2021.<sup>109 110</sup> Given the high unemployment rate and declining labour force, the likelihood of greater long term socio-economic disadvantages for residents in the community is increased.

The limited employment opportunities and economic development has resulted in a comparatively high vacancy rate of 25.4%, which is over 16% greater than Queensland's average of 9.3%. This, coupled with the declining labour force and high unemployment rate, demonstrates the need to revitalise and reinvigorate the Cardwell economy through catalytic infrastructure that can provide new, diverse employment opportunities and generate economic development.

### Educational attainment and socio-economic disadvantage in Cardwell

Educational attainment in Cardwell is significantly lower than Queensland and Australian averages. Just 8.6% of people aged 15 years and over have a bachelor's degree level and above, compared to 21.9% in Queensland. Further, 30.4% of people aged 15 years and over have not completed year 10, compared to 18.6% in Queensland. This has direct consequences for the labour force and economy as, according to the Australian Government's *National Skills Commission*, a lower level of educational attainment is associated with lower labour force participation rates and higher unemployment rates (see Figure 32).<sup>111</sup>

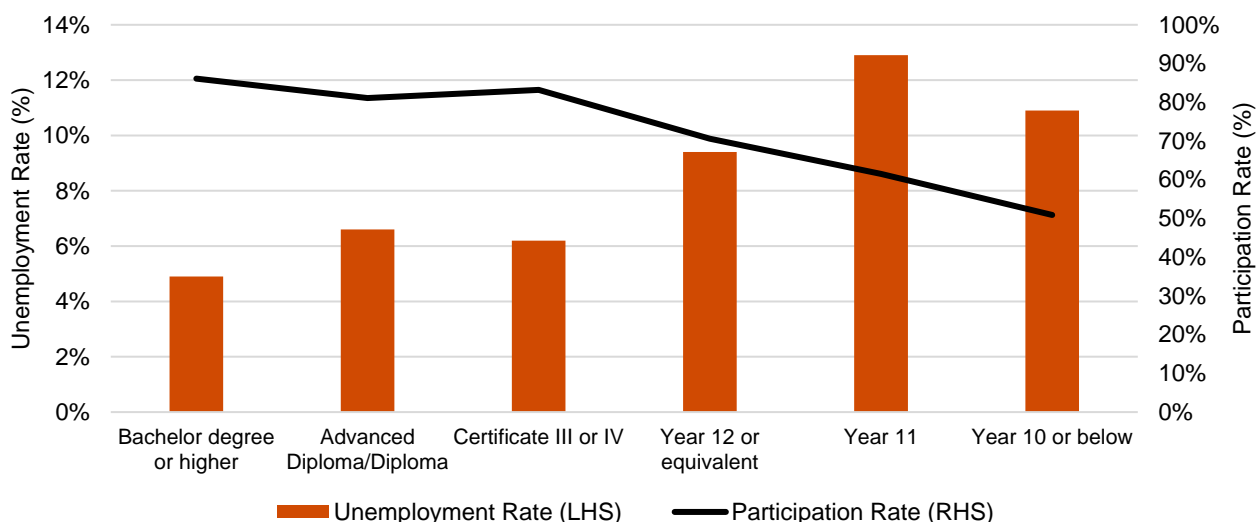


Figure 32: Impact of Educational Attainment on Unemployment and Participation Rates<sup>112</sup>

<sup>108</sup> ABS (2021). *Cardwell 2021 Census All persons QuickStats*. Accessed at <https://www.abs.gov.au/census/find-census-data/quickstats/2021/SAL30537>

<sup>109</sup> Ibid.

<sup>110</sup> ABS (2016). *Cardwell 2016 Census All persons QuickStats*. Accessed at <https://www.abs.gov.au/census/find-census-data/quickstats/2016/SSC30541>

<sup>111</sup> National Skills Commission (2021). *Australian Jobs 2021*. Accessed at <https://www.nationalskillscommission.gov.au/reports/australian-jobs-2021/jobs-and-training/education-and-employment>

<sup>112</sup> Ibid.

The lower educational attainment, coupled with the traditional, labour-driven employment sectors, has led to significantly lower household incomes across Cardwell, relative to Queensland and Australian averages. The median weekly household income in Cardwell of \$846 is also close to half of the Queensland median (\$1,675) and the Australian median (\$1,746).<sup>113</sup> Further, 32.9% of households in Cardwell earn less than \$650 in total weekly income. This is approximately double the Queensland average (16.4%) and Australian average (16.5%). Further, just 6% of households in Cardwell earn more than \$3,000 per week, compared to 21.9% in Queensland and 24.3% in Australia. This indicates that there is a greater proportion of low income households, and lower proportion of high income households, in Cardwell.<sup>114</sup>

Lower income households are typically correlated to greater socio-economic disadvantage, which can be measured through the Index of Relative Socio-Economic Disadvantage (IRSD). The Cassowary Coast's IRSD of 931 falls in the 16<sup>th</sup> percentile in Australia, which indicates that just 16% of LGAs in Australia exhibit greater social disadvantage than the Cassowary Coast. The Cassowary Coast's IRSD is anticipated to be broadly reflective of the socio-economic environment of Cardwell. This, in conjunction with the stagnant economy and decreasing labour force, demonstrates the need to support an uplift in household income through the provision of new training and employment opportunities for youth and residents in Cardwell.

### **Benefits of Tourism and Increased Visitation to Cardwell**

Tourism has the potential to positively impact current socio-economic status of Cardwell. As previously outlined in Section 4.3.1, the tourism sector generates significant economic activity in TNQ and Queensland more broadly. The positive impact of tourism is often amplified in regional areas, as tourism creates jobs and opportunities that may not otherwise exist, raise the profile of the area and improve amenity for the local community. The right investment in a tourist attraction has the potential to transform a regional destination such as Cardwell.

In the year ending September 2022, the average length of stay in TNQ was 5.6 nights and the estimated expenditure per night was \$297.<sup>115</sup> Using these benchmarks from TEQ, the potential attraction of 10,000 domestic visitors to Cardwell through an attraction such as the Trails, for just two nights, has the potential to generate close to \$6 million in just one year. This expenditure would generate significant economic activity in the town and create new training and employment opportunities for residents. The new training and employment opportunities would directly assist in diversification of the economy and grow total household income in Cardwell. Furthermore, the Trails may also attract complementary private sector investment for ancillary services and offerings in the town, such as accommodation or food and beverage offerings, which would ultimately generate further employment and training opportunities in the town.

### **Case Study: Blue Derby Mountain Bike Trails, Tasmania**

Blue Derby in north-east Tasmania is a positive case study for the success of mountain bike tourism in achieving economic benefits for local communities. The Derby economy was historically driven by the traditional sectors of mining and forestry. However, the decline in these two industries and closure of the open-cut tin mine negatively impacted the economy and employment opportunities in the town. The first 20km of trails were commissioned in 2015 and were a joint initiative between Dorset Council and Break O'Day Council. When the trails opened in early 2015, Derby reportedly had a population of 160 people.

The Dorset Council secured a \$2.5 million funding grant to construct the \$3.1 million Stage 1 of Blue Derby, which featured 80km of mountain bike trails suitable for all skill levels. Set amongst the temperate rainforests and the Blue Tier sub-alpine plateau, Blue Derby offers a range of experiences and was voted by professional mountain bikers as the best in the Enduro World Series (EWS) competition in 2017. Blue Derby has continued to expand following the initial delivery of 80km of trails and now offers approximately 125km of mountain bike trails.

In 2018, Blue Derby was attracting more than 30,000 visitors, who typically spent four to five nights in Derby then another five nights elsewhere in Tasmania. The return on investment from Blue Derby has been estimated at \$30 million per year in

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<sup>113</sup> ABS (2021). *Cardwell 2021 Census All persons QuickStats*. Accessed at <https://www.abs.gov.au/census/find-census-data/quickstats/2021/SAL30537>

<sup>114</sup> Ibid.

<sup>115</sup> TEQ (2023). *Tropical North Queensland Regional Snapshot*. Accessed at [https://teq.queensland.com/content/dam/teq/corporate/corporate-searchable-assets/industry/research/regional-snapshots/092022-ye-sep-2022/YE\\_Sep\\_2022\\_TNQ\\_Regional\\_Snapshot.pdf](https://teq.queensland.com/content/dam/teq/corporate/corporate-searchable-assets/industry/research/regional-snapshots/092022-ye-sep-2022/YE_Sep_2022_TNQ_Regional_Snapshot.pdf)

the local economy. The township of Derby has largely embraced the opportunities provided by mountain biking, with the development of new food and beverage outlets, accommodation and bike stores in the years following its commissioning.<sup>116</sup> For example, the number of hotel beds has increased from six at the time of opening to over 400. Further, two cafes opened within the first three months of Blue Derby opening and a bike hire shop and shuttle service rapidly followed. This suggests that private sector investment will rapidly flow to regional locations in response to strong visitation for world-class trails and the subsequent growth in demand for complementary offerings that are typically delivered by the private sector. As such, this indicates that the complementary private-sector offerings will gradually enter Cardwell as the number of visitors and mountain bike riders increases.

To date, the contributions from Dorset Council have been relatively limited as most of the investment in Blue Derby and upgraded enabling infrastructure has been funded through various regional Australia grant programs. All three levels of government have also realised a return on their investment in Blue Derby since 2015. This has come in a variety of forms, such as uplifted land values, increased land taxes and stamp duty, as well as increased capital gains tax and income tax.

Blue Derby has also led to the development of several mountain bike trails across Tasmania and Australia more broadly, which demonstrates the significant economic benefits that can be generated through clustering of distinctive and differentiated mountain bike trails in a region; Similar to Cardwell and the north and far north Queensland mountain bike parks and tracks outlined in Section 2.5.2.

### Summary

- Cardwell's traditional and labour-driven industries have constrained the town's economic growth in recent years. The labour force in Cardwell decreased from 2016 to 2021 by 45 people and the unemployment rate was 8.2% in February 2021, greater than Queensland's unemployment rate of 5.4% at the same point in time. This is predominantly due to the reliance of Cardwell on traditional industries that have stagnated, if not declined, in recent years, including agriculture, forestry and fishing, manufacturing and retail trade.
- Educational attainment and household incomes in Cardwell are significantly lower than Queensland and Australia, on average. This has resulted in greater socio-economic disadvantage in the region which will remain in the absence of economic diversification and development, and the creation of new employment opportunities.
- Tourism, particularly mountain biking, can play an important role in addressing the socio-economic challenges of Cardwell. The positive impact of tourism is often amplified in regional areas, as tourism creates jobs and opportunities that may not otherwise exist, raise the profile of the area and improve amenity for the local community. The right investment in a tourist attraction has the potential to transform a regional destination such as Cardwell.
- From an initial capital investment of just \$3.1 million, Blue Derby attracts over 30,000 visitors per annum who typically spend four to five nights in the town, followed by another five nights elsewhere in Tasmania. The contributions from Dorset Council have been relatively limited, as the majority of investment in Blue Derby and upgraded enabling infrastructure has been funded through various regional Australia grant programs, and all three levels of government have also realised a return on their investment since its opening in 2015. Blue Derby demonstrates the catalytic impact a world-class mountain biking trail can have on a stagnant regional town in Australia.

**Service Need: The undiversified and stagnant economy and lack of employment and training opportunities will continue to inhibit Cardwell in the absence of economic development and diversification.**

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<sup>116</sup> Mountain Bike Australia and the Queensland Government (2018). *Queensland Mountain Bike Strategy*. Accessed at [https://www.mtba.org.au/wp-content/uploads/QLD-MTB-MASTER-PLAN-Single-Pages\\_FINAL-180706\\_.pdf](https://www.mtba.org.au/wp-content/uploads/QLD-MTB-MASTER-PLAN-Single-Pages_FINAL-180706_.pdf)

#### 4.3.6 Problem 3: Attract and retain skilled people and investment

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##### **The lifestyle and amenity in Cardwell must be enhanced to attract and retain skilled people in the region.**

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Outside of Australia's metropolitan areas, planning for and managing regional populations is a major challenge. As a result, many regions struggle to provide meaningful employment options for residents and many others experience continual shortages of professionals and skilled workers. The attraction and retention of skilled workers is a key element to the long term sustainability and resilience of many regional towns and cities in Australia.

Cardwell is similar in this regard, as the town has struggled to attract and retain skilled workers for many years. This has predominately driven the limited employment opportunities and socio-economic disadvantage of many residents, coupled with the limited amenity that the town has on offer. That has resulted in considerable labour shortages in critical sectors, such as healthcare and aged care, and presents a significant risk to long term prosperity of Cardwell.

The key issues that demonstrate the criticality of this problem are discussed in the following sections and include:

- Low amenity of Cardwell that has impacted the perceived liveability of the town
- Challenges to attract and retain skilled workers and residents in regional areas.

##### **Low amenity and liveability in Cardwell**

Amenity refers to the features or facilities that are present within a region or place that contribute to its character and attractiveness. Liveability on the other hand is a subjective term that considers the attractiveness of a region or place for people to visit and ultimately live. Liveability is influenced by a wide range of factors that change over time and evolve with cultural and socio-economic status. For example, while access to good early childhood or primary education presents as an amenity that may make a place liveable for a young family, schooling will not necessarily feature in the liveability assessments of retirees.

The key measures of liveability typically include the characteristics of the amenity of the region including consideration of the built and natural environments; access to employment, goods and services, and open space; and resilience to natural hazards and the effects of climate change.<sup>117</sup> However, the concepts used to assess liveability in larger cities and metropolitan areas, such as the quality of international infrastructure links and the level of national security threat in a community, are often less applicable to regional areas. As such, regional liveability can't be viewed through the same lens as liveability in cities.<sup>118</sup>

Based upon research conducted by *Regional Australia Institute*, the six key indicators of liveability that are most common to people and relevant in regional areas include:

- Health services
- Education services
- Cost of living
- Natural, physical and cultural attributes
- Connections to community, friends and place

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<sup>117</sup> Queensland Government (2017). *Liveable Communities*. Accessed at <https://dilgpprd.blob.core.windows.net/general/spp-guidance-liveable-communities-july-2017.pdf>

<sup>118</sup> Regional Australia Institute (2019). *Understanding Regional Liveability Discussion Paper*. Accessed at [https://www.regionalaustralia.org.au/common/Uploaded%20files/Files/RAI\\_SIP2019-1-2-1\\_UnderstandingRegionalLiveabilityDiscussionPaper.pdf](https://www.regionalaustralia.org.au/common/Uploaded%20files/Files/RAI_SIP2019-1-2-1_UnderstandingRegionalLiveabilityDiscussionPaper.pdf)



- Lifestyle and opportunity.<sup>119</sup>

In the context of these six indicators, the perceived liveability of Cardwell is poor and a primary driving factor in the difficulty to attract and retain skilled people. However, 'natural, physical and cultural attributes' and 'lifestyle and opportunity' are both relatively strong in Cardwell.

This was demonstrated through the *Community Scorecard*, as Cardwell and the Cassowary Coast were scored below the 'Industry Average' in the following areas:

- Community safety and crime prevention
- Access to health and community services
- Managing responsible growth and development
- Access to housing that meets your needs
- Access to public transport
- Access to education and training opportunities.<sup>120</sup>

Further, Cardwell's sewerage management, local roads and marine facilities were also identified by residents as major inhibitors to the town's liveability and amenity. The current septic sewerage system does not extend to each residential household in the town, which detracts new businesses or residents from moving to the town. As previously outlined in Section 2.2, dredging is also required to unlock the mud-filled marina which remains inaccessible for recreational vessels. When considered with the poor socio-economic status and limited economic development in Cardwell, as outlined in Section 4.3.5, the amenity and liveability of the town is perceived to be poor by prospective residents.

### Challenges in attraction and retention of skilled workers

In recent times, Cardwell and the Cassowary Coast have struggled to attract and retain residents and skilled workers. As previously outlined in Section 2.2, the Cassowary Coast had an estimated resident population of 29,525 people in 2021. This reflects an annual average growth rate of 0.2% per annum from the estimated population in 2016 of 29,687 people, which is significantly lower than Queensland's average of 1.5% per annum.<sup>121</sup> Furthermore, as of February 2021, Cardwell had an estimated population of 1,320 people. This represents an increase of just 11 people since the 2016 Census and is a clear illustration of the town's difficulty in attracting people.

According to the *Regional Australia Institute*, the decision to move to or stay in a regional community is nuanced and often undertaken through the following two-staged process:

- 1 **Stage 1 – Decision to move to regional location:** To pursue employment and career opportunities in a regional area, a specific standard of infrastructure services must be already present, including access to water, good roads, and digital connectivity.
- 2 **Stage 2 – Decision on which regional location they'd like to live:** People decide where they want to live and which regional town or city, they will call home. This is a much more personal and nuanced decision that is undertaken through an individual, subjective 'liveability assessment'.<sup>122</sup>

This is where the attraction and retention of skilled people in Cardwell has evolved into a significant challenge. The stagnant economy, socio-economic disadvantages and limited enabling infrastructure (i.e. sewerage) are significant inhibitors to the

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<sup>119</sup> Ibid.

<sup>120</sup> Markyt (2022). *Community Scorecard*. Accessed at <https://yoursay.cassowarycoast.qld.gov.au/community-scorecard>

<sup>121</sup> Queensland Government Statistician's Office (2023). *Queensland Regional Profiles: Cassowary Coast (R) Local Government Area (LGA) (ASGS 2021)*. Accessed at <https://statistics.qgso.qld.gov.au/qld-regional-profiles>

<sup>122</sup> Regional Australia Institute (2019). *Understanding Regional Liveability Discussion Paper*. Accessed at [https://www.regionalaustralia.org.au/common/Uploaded%20files/Files/RAI\\_SIP2019-1-2-1\\_UnderstandingRegionalLiveabilityDiscussionPaper.pdf](https://www.regionalaustralia.org.au/common/Uploaded%20files/Files/RAI_SIP2019-1-2-1_UnderstandingRegionalLiveabilityDiscussionPaper.pdf)

attraction and retention of skilled workers. Further, Cardwell and the Cassowary Coast LGA are also inherently in competition with other nearby towns and regions, such as Cairns or Townsville, to attract prospective residents and skilled people, with both regions considered to offer significantly more in terms of employment, amenity and opportunity.

The lack of skilled people in Cardwell and the Cassowary Coast is particularly evident in the health sector. For example, Cardwell has very few medical practitioners and Mission Beach does not have a single general practitioner. Further decline in the amenity and liveability of Cardwell will continue to inhibit the attraction and retention of skilled people to the town, which will ultimately inhibit the liveability for existing residents.

### Summary

- Attracting and retaining skilled people and residential populations is a key concern for towns and cities across regional Australia. Cardwell is similar in this regard, as the perceived liveability by external people and prospective residents is poor. This is predominantly driven by the greater socio-economic disadvantages in the town, poor amenity in terms of limited sewerage management system and a mud-filled marina that remains inaccessible for recreational vessels.
- Cardwell's population only grew by 11 people from 2016 and 2021, with many of the existing residents having lived in the town over the long term. Cardwell's stagnant economy may detract potential skilled people from moving to the town. Further, Cardwell and the Cassowary Coast LGA are also inherently in competition with other nearby towns and regions, such as Cairns or Townsville, to attract prospective residents and skilled people.

**Service Need: The amenity of Cardwell must be improved to enhance the perceived liveability of the town and to attract and retain skilled people in the region.**

#### 4.3.7 Summary

This section has demonstrated the strategic rationale and need for the Trails and articulates the potential impact if action or investment is delayed or insufficient. A summary of the key service need statements that underpin the strategic rationale for intervention are as follows:

- A significant opportunity exists to leverage the region's reputation as a leading adventure and lifestyle destination, to drive further tourism growth through domestic and international travellers and the evolving visitor demand for unique, sustainable and differentiated experiences
- The Trails will generate meaningful and long term socio-economic benefits for the Girramay Peoples, Giringun and other First Nations Peoples in the Cassowary Coast
- There is an opportunity to invest in more recreational infrastructure, such as the Trails, to catalyse enhanced social and health outcomes for the community and to contribute to greater cohesion amongst community members
- To ensure the long term maintenance and preservation of the National Park and Giringun IPA, the existing ranger programs through QPWS and Giringun would benefit from increased funding support through greater commercialisation of environmentally sustainable experiences
- The undiversified and stagnant economy and lack of employment and training opportunities will continue to inhibit Cardwell in the absence of economic development and diversification
- The amenity of Cardwell must be improved to enhance the perceived liveability of the town and to attract and retain skilled people in the region.

## 4.4 Expected Benefits

By addressing the problems and optimising the potential opportunities identified in Section 4.3, the development of the Trails is expected to generate a range of benefits in Cardwell and the Cassowary Coast more broadly. This section documents the targeted benefits that could be realised in responding to the Project's service need. The benefits have been identified in collaboration with key stakeholders and articulated in the ILM presented in Figure 22. This information broadly aligns with Queensland Government's *BCDF* and supporting *Benefits Management Guide*.

The key benefits that are expected to be generated by the Trails are categorised in Table 9.

Table 9: Expected Benefits from the Trails

Category	Expected Benefits
Economic	<ul style="list-style-type: none"> <li>• <b>Benefit 1:</b> Diversify the local economy and increase economic resilience</li> <li>• <b>Benefit 2:</b> Provide more business, partnership and employment opportunities for the local Traditional Owners (and First Nations People)</li> <li>• <b>Benefit 3:</b> Increase spending with local businesses in the region through 'off-bike' expenditures</li> <li>• <b>Benefit 4:</b> Generate new employment and training opportunities for new and existing residents</li> <li>• <b>Benefit 5:</b> Catalyse urban renewal and infrastructure development in Cardwell</li> <li>• <b>Benefit 6:</b> Increase the attractiveness for private sector investment in the region</li> <li>• <b>Benefit 7:</b> Increase the attraction and retention of skilled people in the region</li> </ul>
Environmental	<ul style="list-style-type: none"> <li>• <b>Benefit 8:</b> Protect and preserve culturally and environmentally significant areas</li> </ul>
Social and Health	<ul style="list-style-type: none"> <li>• <b>Benefit 9:</b> Protect and respect the culture, language and traditions of the local Traditional Owners (and First Nations Peoples)</li> <li>• <b>Benefit 10:</b> Enhance the physical and mental health and wellbeing of residents in the community</li> <li>• <b>Benefit 11:</b> Enhance the amenity, liveability and attractiveness of Cardwell</li> </ul>
Strategic	<ul style="list-style-type: none"> <li>• <b>Benefit 12:</b> Align with the CCRC's <i>Cassowary Coast Region Tourism Strategy and Reconciliation Action Plan</i></li> </ul>
Tourism, Events and Recreation	<ul style="list-style-type: none"> <li>• <b>Benefit 13:</b> Diversify tourism offerings and complement existing attractions in Cardwell and across the Cassowary Coast</li> <li>• <b>Benefit 14:</b> Host new major events, and support the existing, large-scale mountain biking and adventure sporting events</li> <li>• <b>Benefit 15:</b> Increase participation in mountain biking and related sports and recreational activities and provide pathways for elite talent development in the sport</li> <li>• <b>Benefit 16:</b> Increase visitation to Cardwell and the Cassowary Coast region by domestic and international tourists</li> <li>• <b>Benefit 17:</b> Establish a world-class training facility for Australian and international mountain biking athletes in preparation for the 2032 Olympic and Paralympic Games</li> </ul>

The expected benefits outlined above form a crucial input and starting point for several key components of the Business Case, including the impacts analysis (see Chapter 6) and economic analysis (see Chapter 9). Each benefit will be assessed for its significance, relevance, and ability to be qualified or quantified for more detailed analysis in the following chapters.

## 4.5 Strategic Responses

Strategic responses are high level interventions that could assist in addressing the problems and opportunities identified, the realisation of the benefits, and avoiding the implications of not proceeding. The strategic responses discussed in this section were identified in collaboration with key stakeholders during the ILM workshop and reflect key stakeholder perspectives.

In accordance with the Queensland Government's *BCDF*, the strategic responses aim to change behaviours or assist with activating strategies to influence causes or effects of the problem and opportunity statements. Most notably, the purpose of this section is to determine a strategic response that will optimise potential economic benefits and, where possible, leverage potential commercial opportunities to support the Project's financial viability. Table 10 outlines the strategic responses identified for the Project.

Table 10: Strategic Responses

Strategic Response	Description
Implement policy or legislative changes to support private sector investment in tourism infrastructure	<p>The Council, Queensland Government and/or Australian Government could consider, plan and implement policy reforms or legislative changes that incentivise and attract private sector investment to Cardwell and the proposed Trails.</p> <p>For example, statutory charge holidays or rebates that could be provided to potential private sector proponents that may be interested in providing a complementary service offering in Cardwell, which would attract private sector investment to the region and support economic development to take place.</p>
Establish a prioritisation framework for tourism investment opportunities	<p>The Council could establish a framework in conjunction with the Queensland Government and/or Australian Government to manage the delivery of a program of works that facilitates private sector investment in priority tourism opportunities. The framework could also include opportunities for training and local employment schemes in the tourism industry.</p>
Partner with Cairns, Townsville and other local governments in north Queensland on the 'adventure, nature-based and cultural heritage highway'	<p>The Council could partner with the Cairns, Townsville and nearby local governments in north and far north Queensland to establish a packaged 'adventure, nature-based and cultural heritage' tourism offering. This would involve the transportation of visitors from Cairns to Townsville (or vice versa), stopping off at specific destinations and popular attractions such as the Trails. This would generate increased visitation across the region.</p>
Undertake strategic and town master planning to accommodate visitors and new residents to Cardwell and the Cassowary Coast region	<p>The Council could revisit strategic and town master planning to establish a clear urban development strategy for Cardwell and surrounding areas. This would support the town and broader region to attract and retain skilled people in the region.</p>
Advocate for Queensland Government investment in core infrastructure to attract complementary private sector investment	<p>The Council could advocate for Queensland Government investment in core infrastructure to encourage the private sector to capitalise and leverage the Queensland Government's initial investment. This strategy de-risks the Project for the private sector and demonstrates the Queensland Government's commitment to supporting private sector investment in mountain biking experiences. Further, minimising hurdles and facilitating an approvals and regulatory pathway will further encourage the private sector to innovate and provide sustainable tourism offerings.</p>
Advocate for Queensland Government investment in enabling infrastructure to enhance the liveability and amenity of Cardwell and Port Hinchinbrook	<p>The Council could advocate for Queensland Government investment in enabling infrastructure in Cardwell to enhance the amenity and liveability of the region, such as the mud-filled channel in the Port which requires dredging. This issue was commonly identified as a core problem in the town by key stakeholders engaged throughout the development of the Business Case.</p> <p>This may attract new residents and businesses to Cardwell, create new employment opportunities and generate economic activity in the region. Ultimately, this may also encourage greater investment in the Cardwell and Port Hinchinbrook and attract potential private sector proponents.</p>

Strategic Response	Description
Support the formation of partnerships between the public sector, private sector and Traditional Owners to create new tourism products and offerings	<p>The Council could support the formation of partnerships with the private sector, the Queensland Government and Traditional Owners to deliver positive outcomes for the environment and community and to ensure the appropriate rules and regulations are established.</p> <p>There are several policies and programs at the state and regional level that reflect the importance of tourism to Queensland and encourage cooperation between all parties to achieve the desired outcomes. Working together to reach a common goal of delivering the Trails and increasing tourism offerings will promote economic growth in regional areas and empower the Traditional Owners.</p>
Undertake a promotional program to inform councils, businesses and the Queensland Government of the catalytic benefits generated from mountain biking and related recreational activities	<p>A promotional program could be facilitated to inform other local governments, businesses and the Queensland Government of the potential positive benefits that are generated from mountain biking and increased recreational participation. This may ultimately generate increased interest in the Trails and the development of a broader strategy for mountain biking developments in north and far north Queensland, which would ensure the development of complementary mountain biking offerings.</p>
Assess alternative commercial models and best practice methods to increase revenue from the existing visitation to, and use of the mountain bike trails in Cardwell Ranges and on Girramay Country	<p>The Council could conduct a detailed assessment and engagement process to investigate and identify alternative methods to generate revenue from the existing informal trail network in Cardwell.</p> <p>This could include using donation boxes at key points throughout the Trails or providing a shuttle service on resurfaced roads.</p>

Based on these strategic responses, a list of options has been developed which provides a range of means to overcome the identified problems and realise opportunities.

## 4.6 Potential Solution Options

A range of potential solution options have been generated with the aim to address the Project's service need, considering the potential positive or negative impacts on stakeholders, targeted benefits that could be achieved and implications of not proceeding. These options align with, and have evolved from, the identified strategic responses. Consequently, these options are focused on optimising potential economic benefits and, where possible, leveraging potential commercial opportunities to support the Trails' commercial viability.

### 4.6.1 Option 1 – Do Nothing

Do nothing involves continuing business as usual and not investing in the Trails, or any new tourism infrastructure or initiatives in Cardwell. Given the significant problems and opportunities identified in Section 4.3, this is not a viable option as it fails to realise the significant potential of the Trails in Cardwell and will not deliver the associated benefits to residents, the Girramay Peoples or other local stakeholders.

Without appropriate investment or action, Cardwell will continue to struggle from a socio-economic perspective. Further, the cost to maintain the National Park and protected areas will continue to rise into the future and, without more diverse revenue streams, there will likely be increased biodiversity risks from resource constraints and limitations experienced by QPWS and Giringun.

### 4.6.2 Option 2 – Establish an Adventure, Nature-based and Cultural Heritage Highway Partnership

This option refers to the Council establishing a partnership with the Cairns Regional Council, Townsville City Council, FNQROC, the North Queensland Regional Organisation of Councils (NQROC) and/or nearby local governments connected by the Bruce Highway in north and far north Queensland. Through the partnership, the Council could seek to establish a packaged 'adventure, nature-based and cultural heritage' tourism offering, which may involve the transportation of visitors between population destinations and attractions such as the Trails. Under this partnership, the Council could also seek to

collaborate with other local governments to develop a regional mountain biking strategy (already underway and led by FNQROC) or conduct a marketing campaign that promotes mountain biking and recreational activities, with tourism advocacy agencies such as TTNQ and TEQ.

Whilst there are some economic benefits that could be generated through this partnership, they are unlikely to achieve the scale of change required to realise the benefits outlined in Section 4.4. As such, this option should be considered alongside an infrastructure solution to optimise the value gained from any potential capital investment.

#### **4.6.3 Option 3 – Investment in Existing Cardwell Trail Network**

The Council, with support from the Queensland and/or Australian Governments, could invest in and revitalise the existing trail network in the Cardwell Ranges and on the traditional lands of the Girramay Peoples. This option, whilst likely to generate a range of benefits associated with the mountain biking experience in Cardwell, would not achieve the scale of change required to realise the benefits outlined in Section 4.4.

This option would not include the delivery of new ancillary infrastructure, such as the Trail Head, or any additional trails. By maintaining the length, difficulty styles of the trails, less visitors are expected to visit and stay in Cardwell overnight. This would reduce the potential economic benefits generated by overnight visitor expenditure and fail to generate the requisite employment and training opportunities in the town. Further, initial capital investment in the existing network is unlikely to generate revenues to offset the operational and maintenance costs, without ancillary infrastructure or a longer, more diverse trail network that can cater for all skill levels. As such, this option is not expected to realise the benefits outlined in Section 4.4.

#### **4.6.4 Option 4 – Provide Local Business and Employment Support to Maintain Protected Areas**

This option includes the provision of new and enhanced employment and business opportunities for residents and Traditional Owners to support the management and maintenance of national parks and protected areas. This could include the provision of funding support to Girringun for the purpose of training and employing more youth and local First Nations Peoples through the Aboriginal Ranger Program. This would support enhanced maintenance of the existing trail network in the Cardwell Ranges and on the traditional lands of the Girramay People.

This option will generate considerable socio-economic benefits for Traditional Owners and local First Nations Peoples, in addition to a number of environmental benefits. However, this option alone is unlikely to realise the suite of benefits outlined in Section 4.4. As such, this option should be considered alongside an infrastructure solution to optimise the positive economic benefits gained from business and employment support.

#### **4.6.5 Option 5 – Implement Mountain Bike Trail Passes on Existing Cardwell Trail Network**

This option includes the implementation of a 'user pays' mountain bike trail pass commercial model, whereby riders are required to pay to use the existing trail network. The revenue generated from this commercial model would be used to offset the operational costs to maintain the national park and protected areas.

The implementation of a 'user pays' model is not expected to be appropriate or suited to the broader context in north and far north Queensland, as all other mountain biking trails in the region are free to use (excluding ancillary offerings). Further, mountain bike trails across Australia and New Zealand do not typically implement a 'user pays' model, but rather generate revenue through alternative streams such as shuttle services. As such, the implementation of a 'user pays' model will disincentivise use of the existing trail network in Cardwell.

Subject to the level of demand for the proposed 96km network of Trails, day passes may eventually represent a suitable revenue generation model once the Trails have established a strong reputation and are attracting casual visitors. However, this is not anticipated to occur within the first 10 years of operations.

#### **4.6.6 Option 6 – Investment in Supporting Infrastructure and Facilities at the Pump Track**

The Council, with support from the Queensland and/or Australian Governments, could construct and deliver supporting infrastructure and facilities to activate the Pump Track in Cardwell. As previously outlined in Section 2.2, the Pump Track has led to a significant uptake in mountain biking amongst teenagers and youth in Cardwell and broader regions in the Cassowary Coast. Coupled with the regular and daily-use of the Pump Track by youth in the community, it has proven to be



a successful piece of recreational infrastructure that is highly utilised and has led to improved social outcomes in the community. Further, the Pump Track was ultimately the first stage in the development of the proposed Trails in Cardwell.

The supporting infrastructure and facilities would likely include public toilets, lighting and other general facilities. The supporting infrastructure and facilities would also be anticipated to require ongoing maintenance, which the Council will ultimately be responsible for. However, given that the Pump Track does not directly generate any revenue, nor have any monetisable commercial streams, these additional operational costs would not be offset through additional revenue streams.

Consequently, the provision of supporting infrastructure and facilities at the Pump Track alone is unlikely to realise the benefits outlined in Section 4.4. As such, this option could be considered alongside the delivery of the Trails and Trail Head to optimise the positive economic benefits generated in Cardwell.

#### **4.6.7 Option 7 – Staged Construction and Delivery of the Project**

This option involves the staged construction and delivery of the Trails to optimise affordability and de-risk the Project for the Council, Queensland Government and/or Australian Government. Whilst the precise timing and composition of each stage is subject to further technical analysis in the detailed design phase, a staged approach would enable the Trails to incremental grow with demand and complementary services in Cardwell.

However, the staged construction approach presents a risk to developing a world-class trail network that attracts visitors to stay in Cardwell for multiple nights, as world-class trails are typically greater than 85km in length. A shorter trail network can be completed in one day and will not increase the length of stay from visitors, which represents a significant lost opportunity to generate economic activity in the town. Therefore, in the instance that construction of the proposed 96km network is paused or stopped, the benefits outlined in Section 4.4 will not be optimally realised.

#### **4.6.8 Option 8 – Wholly Construct and Deliver the Project**

This option involves the whole construction and delivery of the Trails by the Council, Queensland Government and/or Australian Government. Under this option, the delivery of the Trails may be packaged, whereby the three segments of the Trails are delivered and commissioned sequentially. The packaged approach would enable the Council to open the 7 Sisters segment of the Trails whilst the Attie Creek and/or Lookout Hill segments are under delivery. This is particularly pertinent to the Attie Creek segment of the Trails which enter the Wet Tropics WHA, as the Wet Tropics Management Authority (WTMA) will be required to provide the necessary approvals prior to construction of this segment. This option is most likely to realise the benefits outlined in Section 4.4, as it will deliver a world-class trail network that exceeds the minimum threshold of trail volume.

#### **4.6.9 Recommended Options**

In consultation with key stakeholders and members of the Council's project team, the preferred options that best address the service need and realise the targeted benefits were confirmed to be **Option 7** and **8**. These options include the construction of the Trails through alternative delivery models, which will be assessed in further detail throughout the Business Case.

### **4.7 Summary**

This chapter has demonstrated that there is strong strategic merit and rationale that underpins the Trails in Cardwell. The ILM process confirmed the need to progress an option that addresses the problems and realises the opportunities and benefits in Cardwell. It is apparent that, while some of the options address the problems and opportunities to different extents, the development of the Trails, a 96km trail network with varying ride styles and difficulties, is the most appropriate option to achieve the desired objectives and expected benefits of the Project.

# 5 Proposed Trail Network

## 5.1 Purpose

The purpose of this chapter is to present the concept design and the associated capital cost estimate of the Trails, which were developed as part of the Feasibility Report in 2021. This chapter includes:

- Trail Network Overview
- Concept Design
- Cost Estimates
- Summary.

The concept design and capital cost estimate have not been re-litigated as part of the Business Case and will be subject to further refinements during subsequent project phases.

## 5.2 Trail Network Overview

The Project involves the development of a proposed 94km, 26-trail mountain bike network in Cardwell that features a blend of trail styles at varying levels of difficulty. The concept design that was developed in the 2021 Feasibility Report is presented in Figure 33. The concept design may be subject to further refinements during detailed design.



Figure 33: Trails Concept Design<sup>123</sup>

<sup>123</sup> Adapted from World Trail (2021). *Cardwell Tropical Mountain Bike Trail Project Feasibility Report*. Provided by CCRC.

As outlined in Chapter 2, the Trails are located on the Girramay People's traditional lands and will actively promote and protect the cultural heritage and significance of the region. Girramay RNTBC and Giringun are enthusiastic to be involved in the Trails and potential complementary offerings in Cardwell, with further information outlined in Chapter 7.

The Trails are proposed to span across, and leverage the natural elevation at, 7 Sisters, Lookout Hill and Attie Creek. Importantly, the Trail Head is proposed to be located at Tully Street with the Cardwell Pump Track. This is approximately 500 metres from the foreshore and town centre, proximate to several accommodation options in the town, and provides room for future expansion should it be needed.

According to Cardwell Rangers from QPWS that are highly familiar with the Cardwell State Forest, high standard and best practice construction practices will be required to ensure the Trails are well-designed to cope with wet weather. This will be particularly important in minimising ongoing maintenance costs and supporting the longevity and regular use of the Trails. Further, small portions of the trail network and accompanying infrastructure interacts with the commercial plantation area overseen by HQ Plantations. As such, there will be a need to continue to engage with HQ Plantations following the completion of the Business Case to establish an agreement regarding land tenure and responsibilities.

The following sections provide further detail on the concept design of the Trails, as well as other key infrastructure that will be required in Cardwell to support the long term viability of the Trails. All designs presented in the following sections may be subject to change during detailed design, including the trail difficulty, length and style.

## 5.3 Concept Design

### 5.3.1 7 Sisters Segment

The 7 Sisters segment of the Trails' concept design is presented in Figure 34. This segment of the Trails is approximately 37.4km in length and will consist of 12 trails of varying styles that are well-suited to the geography of 7 Sisters, including adventure, wilderness, and gravity-style trails. The 7 Sisters segment includes beginner and intermediate trails, with comparatively easier access relative to other segments of the Trails, as well as the elevation of approximately 130 metres. Further, this segment will also feature views to Rockingham Bay and Hinchinbrook Island, which will be a major attraction for visitors.



Figure 34: 7 Sisters Segment of the Trails' Concept Design<sup>124</sup>

<sup>124</sup> World Trail (2021). *Cardwell Tropical Mountain Bike Trail Project Feasibility Report*. Provided by CCRC.



The 7 Sisters segment will require the re-activation of a road to the Fire Watch Tower to provide shuttle access to the summit, enabling riders to optimise their time and enjoyment at the Trails. The re-activation of this access road was supported by key stakeholders during the development of the Feasibility Report, with the implications and responsibility of road maintenance to be further investigated in subsequent project phases.

The soil types in the 7 Sisters segment may be slightly affected by rainfall. As such, the trail grade and construction techniques will need to consider drainage and water management. This will be required to be further investigated during detailed design.

### 5.3.2 Lookout Hill Segment

Figure 35 presents the Lookout Hill segment of the Trails, which will feature three adventure-style trails that extend for approximately 9.5km in cumulative length and feature 120 metres of elevation. This segment of the Trails is proximate to the proposed location of the Trail Head at Tully Street. The Lookout Hill segment will include beginner and intermediate trail difficulties due to its proximity to town and comparatively easier access, relative to the Attie Creek segment (see Section 5.3.3). The Lookout Hill segment will connect riders to the existing lookout facility, with a second lookout proposed to be installed at the eastern end of the hill to allow riders to take in views toward Hinchinbrook Island.



Figure 35: Lookout Hill Segment of the Trails' Concept Design<sup>125</sup>

### 5.3.3 Attie Creek Segment

Figure 36 presents the Attie Creek segment of the Trails, which will include 12 trails that feature a variety of adventure, wilderness and gravity styles. This segment will be designed to cater for intermediate and advanced riders due to the

<sup>125</sup> World Trail (2021). *Cardwell Tropical Mountain Bike Trail Project Feasibility Report*. Provided by CCRC.

connection paths and distance from the town. Further, the Attie Creek segment includes a distinctive gradient where riders can ascend to elevations of 640 metres and descend to a maximum of 450 metres.

The Attie Creek segment will feature a number of locations that provide views to Rockingham Bay and the northern end Hinchinbrook Island from elevations as high as 640m above sea level. The segment will also connect with the Attie Creek Dead Horse Creek, which are expected to be popular attractions for visitors to the Trails.

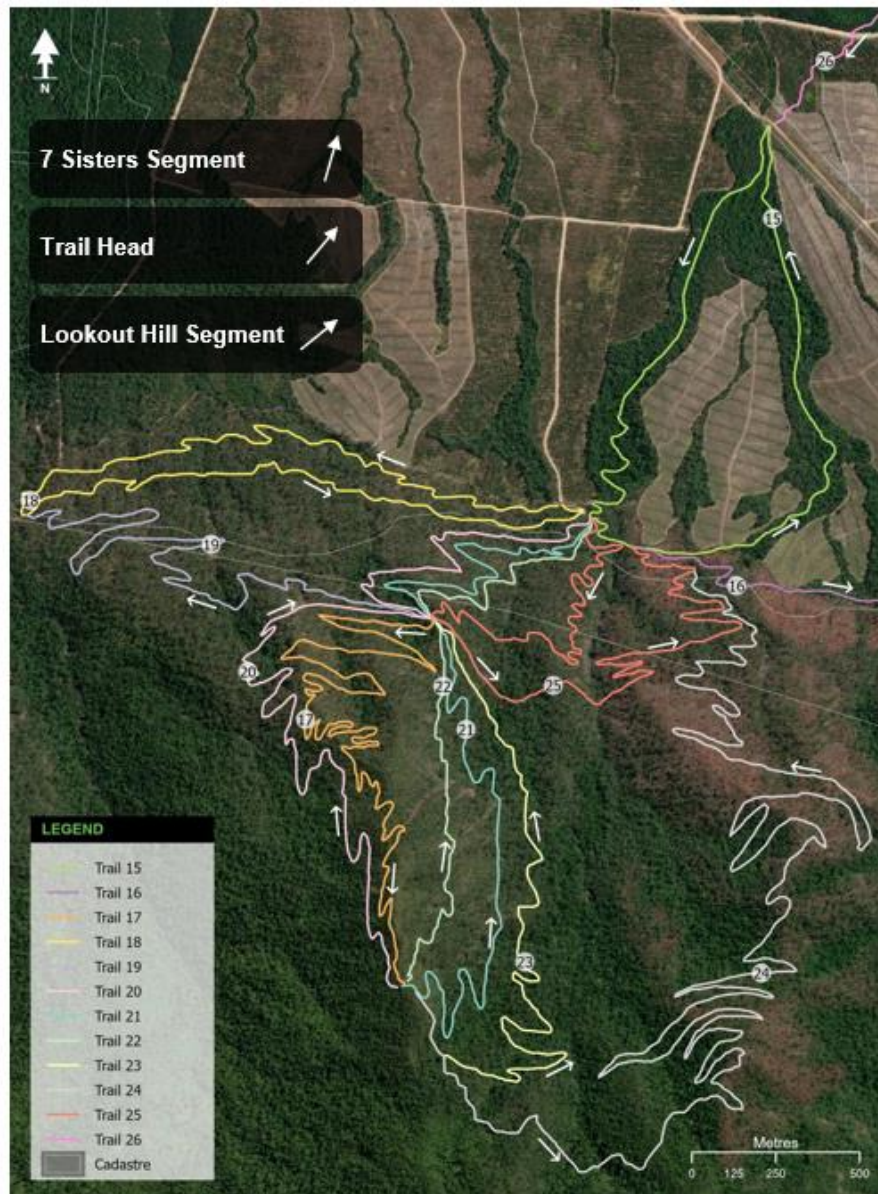


Figure 36: Attie Creek Segment of the Trails' Concept Design<sup>126</sup>

The existing vehicle track that extends along the ridgeline above Dead Horse Creek carpark will need to be re-activated to provide shuttle access to the Attie Creek segment's descending trails. The track is currently overgrown and will require new drainage and surfacing prior to any future use. Additionally, the track may also be able to be used by organisations such as QPWS and the Girringun Rangers for land management and maintenance purposes.

<sup>126</sup> World Trail (2021). *Cardwell Tropical Mountain Bike Trail Project Feasibility Report*. Provided by CCRC.



A small portion of the Attie Creek segment and the existing vehicle track is located within the Wet Tropics WHA and, as such, there are several key considerations and stringent conditions of use. The original alignment must be used, and only disturbed areas are permitted to be cleared, with no new clearing to be undertaken. The track must also remain within the existing envelope and gates must be installed at key entry points to manage access.

An ecological and cultural heritage assessment will be required, and the necessary approvals must be provided by WTMA, to construct and deliver the current alignment of the Attie Creek segment and re-activate the track. These considerations are not anticipated to be insurmountable, however further analysis will be required in the detailed design phase of the Project.

The Attie Creek segment of the Trails also includes an event and car parking zone for the purpose of hosting major events and races, with further information provided in the following section.

### 5.3.4 Trail Head

Figure 37 presents the proposed site of the Trail Head at Tully Street, which is approximately 500 metres away from the foreshore in Cardwell. The key driving factors which led to the identification of this site in the Feasibility Report include, but are not limited to:

- Proximity to the foreshore and town centre in Cardwell
- Future expansion opportunities, as the Trails grow in popularity
- Proximity to the proposed entry point and network of trails
- Co-located with the Pump Track, which is a population attraction for youth
- Nearby to existing change rooms, toilets and shower facilities
- Community hall may be able to be used to host or support events.

Further, the partial closure of Tully Street to vehicular traffic has been proposed to create a 'rider only' zone and common entry point to access Trail 1 in the 7 Sisters segment of the Trails. The creation of the 'rider only' zone, coupled with the Trail Head's proximity to the foreshore, will be an integral component and attraction of the Trails to visitors.

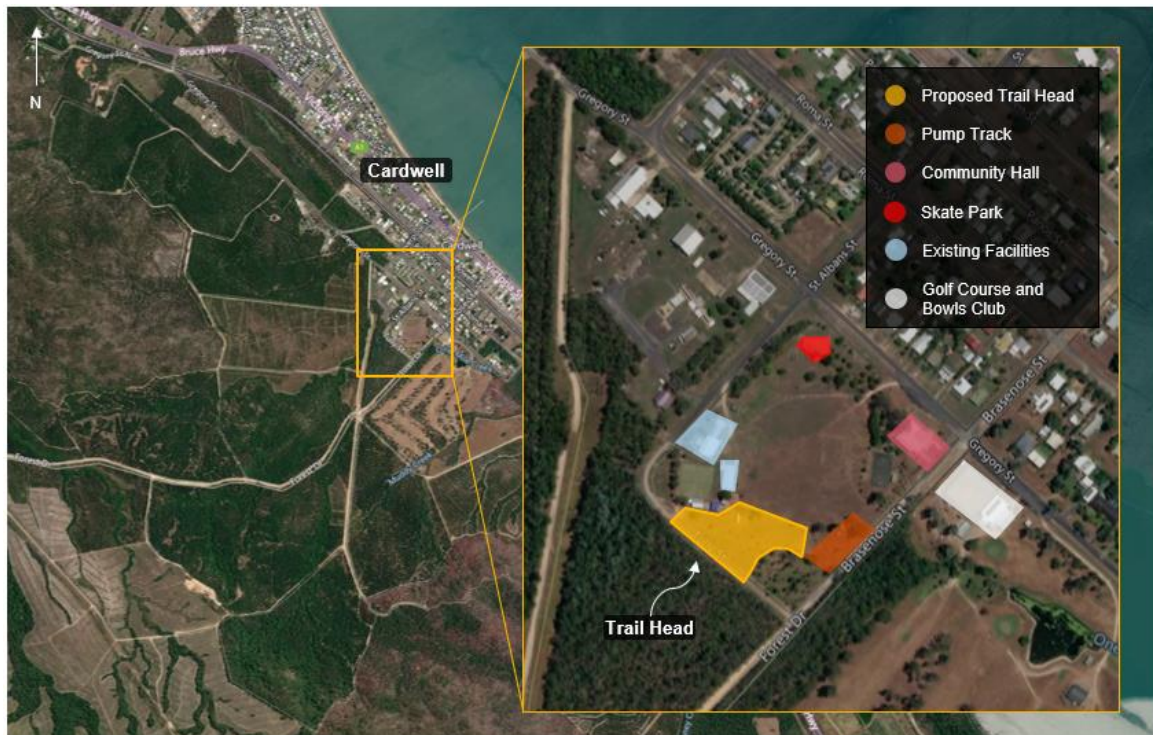


Figure 37: Proposed Site of the Trail Head



Secondary trail head locations have also been proposed in the 7 Sisters and Attie Creek segments of the Trails. The secondary trail head locations are proposed to be smaller-scale version of the Trail Head at Tully Street.

### 5.3.5 Event Zones and Shuttle Access Areas

The concept design has provisioned for a number of event zones and shuttle access areas. Across all zones and areas, signage will be important to support wayfinding for riders on the Trail

## 7 Sisters Segment

The 7 Sisters segment of the Trails will include a shuttle pick up and drop off zone. The shuttle pick up and drop off zone coincides with the start and finish of Trail 3, and the finish of Trails 7 and 9. Whilst the concept design has proposed for the area to be purely used for shuttle turnaround, it could also be used as an event hub or staging area. This area is not proposed to include designated parking to discourage the use of non-shuttle vehicles.

The Feasibility Report identified the potential consolidation of this proposed area with the main Trail Head at Tully Street, with further work required during detailed design to determine the implications of riders returning to the Trail Head. The Feasibility Report also identified the need to re-active the existing road connected to the Fire Watch Tower summit. This is expected to require the reinstatement of drainage, whoa-boys (low profile, trafficable earth banks that intercept runoff flowing down roads and tracks, carrying it safely to a stable), entry points, re-surfacing and a roundabout at the summit. As part of this, a cultural heritage and detailed ecological assessment will be required in the detailed design phase.

## Lookout Hill

The Lookout Hill segment of the Trails are not proposed to include a secondary trail head, event zone or shuttle access.

## Attie Creek

As mentioned in Section 5.3, the Attie Creek segment of the Trails is the furthest from the Trail Head. Therefore, the Attie Creek segment will require additional and complementary facilities to ensure it is accessible via shuttle, able to host high-level race events and attract sufficient levels of use and visitation. These facilities are presented in Table 11 and have been categorised as essential or recommended.

Table 11: Attie Creek Facility Requirements

Category	Facility
Essential	<ul style="list-style-type: none"> <li>Shuttle turnaround</li> <li>Trail information and maps</li> <li>Shelter and seating</li> <li>Increased parking capacity</li> <li>Events zone with room for start/finish area, event staging and management</li> </ul>
Recommended	<ul style="list-style-type: none"> <li>Space for food vans during peak times</li> <li>Ablution block</li> <li>Potable water access</li> </ul>

As previously outlined, the re-activation of the access track located at Dead Horse Creek will be required to provide shuttle access to Attie Creek, in accordance with the environmental and cultural heritage requirements and necessary approvals.

## 5.4 Cost Estimates

This section presents the capital cost estimates to design, construct and deliver the Trails. The following sections present the capital cost of each segment, including additional potential costs for consideration. The operational and maintenance costs for the Trails are subject to the preferred operational and maintenance model, which is analysed further in Chapter 7.

The cost estimates presented in this section were developed as part of the 2021 Feasibility Report and have been escalated in the financial and economic analyses. The cost estimates presented in this section do not include the potential

equipment requirements to operate and maintain the Trails, and will be required to be revisited and updated in subsequent project phases.

### Assumptions

The key assumptions made in the development of the cost estimates in the Feasibility Report are as follows:

- Costs are indicative and developed based on previous projects completed by the consultant who delivered the Feasibility Report
- Costs for each trail are derived using a benchmarked cost per metre rate, informed by the concept design and preliminary site visits – the constructability of the soil, manipulation of rock and trail style (air flow, flow, adventure) may result in changes to the benchmarked cost per metre
- Some line items do not have a precisely defined scope and quotes have not been obtained
- Line items may not encompass the final construction scope
- A contingency of 20% has been allowed for.

Ground truthing is proposed to be undertaken during the detailed design phase to enable the development of more accurate construction costs. Totals presented in this chapter may not sum as costs have been rounded for presentation purposes only.

#### 5.4.1 7 Sisters Segment

As presented in Table 12, the estimated cost to design and construct the 7 Sisters segment of the Trails is approximately \$2.8 million (Real \$ 2021, including contingency).

Table 12: 7 Sisters Segment – Capital Cost Estimate<sup>127</sup>

Cost Item	Cost (Real \$ 2021, inc. Contingency)
Trail Design	\$37,406
Trail Design Contingency (10%)	\$3,741
Trail Construction (inc. Contingency)	\$1,788,396
Total Construction Management Plans	\$25,000
Surface Treatments (10%)	\$178,840
Vegetation Clearing	\$374,069
Signage and Branding (5%)	\$89,420
Project Management (5%)	\$89,420
Mobilisation/Demobilisation (5%)	\$89,420
Accommodation/Incidentals (5%)	\$89,420
<b>Total Cost</b>	<b>\$2,765,137</b>

<sup>127</sup> World Trail (2021). *Cardwell Tropical Mountain Bike Trail Project Feasibility Report*. Provided by CCRC.

#### 5.4.2 Lookout Hill Segment

As presented in Table 13, the estimated cost to design and construct the Lookout Hill segment of the Trails is approximately \$660,306 (Real \$ 2021, including contingency).

Table 13: Lookout Hill Segment – Capital Cost Estimate<sup>128</sup>

Cost Item	Cost (Real \$ 2021, inc. Contingency)
Trail Design	\$9,487
Trail Design Contingency (10%)	\$949
Trail Construction (inc. Contingency)	\$426,922
Construction Management Plans	N/A <sup>129</sup>
Surface Treatments (10%)	\$42,692
Vegetation Clearing	\$94,872
Signage and Branding (5%)	\$21,346
Project Management (5%)	\$21,346
Mobilisation/Demobilisation (5%)	\$21,346
Accommodation/Incidentals (5%)	\$21,346
<b>Total Cost</b>	<b>\$660,306</b>

#### 5.4.3 Attie Creek Segment

As presented in Table 14, the estimated cost to design and construct the Attie Creek segment of the Trails is approximately \$3.8 million (Real \$ 2021, including contingency). Attie Creek is the most expensive segment of the Trails, as it is situated the furthest from the Trail Head and includes a distinctive gradient where riders can ascend to elevations of 640 metres and descend to a maximum of 450 metres.

Table 14: Attie Creek Segment – Capital Cost Estimate<sup>130</sup>

Cost Item	Cost (Real \$ 2021, inc. Contingency)
Trail Design	\$47,133
Trail Design Contingency (10%)	\$4,713
Trail Construction (inc. Contingency)	\$2,429,307
Construction Management Plans	N/A <sup>131</sup>
Surface Treatments (10%)	\$242,931

<sup>128</sup> World Trail (2021). *Cardwell Tropical Mountain Bike Trail Project Feasibility Report*. Provided by CCRC.

<sup>129</sup> Included in the 7 Sisters Cost Estimate.

<sup>130</sup> World Trail (2021). *Cardwell Tropical Mountain Bike Trail Project Feasibility Report*. Provided by CCRC.

<sup>131</sup> Included in the 7 Sisters Cost Estimate.

Cost Item	Cost (Real \$ 2021, inc. Contingency)
Vegetation Clearing	\$589,173
Signage and Branding (5%)	\$121,465
Project Management (5%)	\$121,465
Mobilisation/Demobilisation (5%)	\$121,465
Accommodation/Incidentals (5%)	\$121,465
<b>Total Cost</b>	<b>\$3,799,117</b>

#### 5.4.4 Additional Project Costs

Table 14 summarises the additional project costs that are anticipated to be required to complement the design, construction and delivery of the Trails. This cost estimate does not include the cost to conduct an engagement process with Traditional Owners, which will be required to ensure the potential benefits and flow-on opportunities of the Trails to the Girramay Peoples are realised.

The projected capital cost to design and construct the complementary components of the Trails is approximately \$3.2 million (Real \$ 2021, including 20% contingency). This does not include the equipment that will be required to operate and maintain the Trails, which is outlined further in Chapter 7.

Table 15: Additional Project Capital Cost Estimates<sup>132</sup>

Cost Item	Cost (Real \$ 2021, inc. Contingency)
<b>7 Sisters Segment</b>	
7 Sisters Shuttle Pick Up/Turn Around Area and Shuttle Road Re-activation Civil Works	\$180,000
7 Sisters Shuttle Pick Up/Turn Around Area and Shuttle Road Signage	\$18,000
<b>Attie Creek Segment</b>	
Attie Creek Event Zone and Shuttle Pick Up/Drop Off Civil Works	\$240,000
Attie Creek Event Zone and Shuttle Pick Up/Drop Off Facilities	\$180,000
Attie Creek Shuttle Road Re-Activation Civil Works	\$300,000
Attie Creek Event Zone and Shuttle Pick Up/Drop Off	\$18,000
Suspension Bridge (or similar) for Attie Creek Crossing	\$180,000
<b>Trail Head</b>	
Main Trail Head Civil and Facilities Upgrades	\$300,000
Main Trail Head Signage and Entry Arch	\$120,000
<b>Other Key Activities</b>	

<sup>132</sup> World Trail (2021). *Cardwell Tropical Mountain Bike Trail Project Feasibility Report*. Provided by CCRC.

Cost Item	Cost (Real \$ 2021, inc. Contingency)
Ecology Assessments and Approvals	\$444,000
Community Consultation	\$120,000
HQ Plantations Engagement and Planning	\$180,000
Marketing and Branding	\$120,000
Management Plan Creation (Operational State)	\$120,000
Design and Construction of Engineering Solutions	\$300,000
Project Management (15%)	\$423,000
<b>Total Cost</b>	<b>\$3,243,000</b>

#### 5.4.5 Total Capital Costs

Table 16 summarises the projected total cost to design, construct and deliver the Trails. The total projected capital cost to design and construct the Trails is approximately \$10.5 million (Real \$ 2021, including 20% contingency).

Table 16: Total Project Capital Costs<sup>133</sup>

Cost Item	Cost (Real \$ 2021, inc. Contingency)
<b>Trail Design (Ground Truthing)</b>	
7 Sisters	\$41,147
Lookout Hill	\$10,436
Attie Creek	\$51,846
<b>Trail Construction</b>	
7 Sisters	\$2,723,985
Lookout Hill	\$649,870
Attie Creek	\$3,747,271
Additional Project Costs	\$3,243,000
<b>Total Cost</b>	<b>\$10,467,555</b>

## 5.5 Summary

This chapter has presented the proposed concept design and estimated cost to design, construct and deliver the Trails. As summarised throughout the chapter, the Trails consist of three key segments including 7 Sisters, Lookout Hill and Attie Creek. The Trails' concept design includes a range of styles and difficulties to cater for a range of visitors and riders. Importantly, the proposed site of the Trail Head at Tully Street is co-located with the popular Pump Track. This site is also located within 500m of the Cardwell foreshore, is near to existing accommodation options in the town, and provides room for future expansion should it be needed.

<sup>133</sup> World Trail (2021). *Cardwell Tropical Mountain Bike Trail Project Feasibility Report*. Provided by CCRC.

The total projected cost to design, construct and deliver the trails is \$10.5 million (Real \$ 2021, including contingency). Attie Creek is the most expensive segment of the Trails, as it is situated the furthest from the Trail Head and includes a significant gradient ascending to elevations of 640 metres and descending to a maximum of 450 metres. The cost estimates for the Project were developed in 2021 as part of the Feasibility Report and will be further investigated and refined during subsequent project phases. The potential opportunity to stage the delivery of the Trails is analysed further in Chapter 11, *Delivery and Implementation*.



# 6 Impacts Analysis

## 6.1 Purpose

The purpose of this chapter is to provide an overview of the potential environmental and social impacts and considerations that are associated with the construction and operations of the Trails. The analysis considers the work undertaken in the Feasibility Report and assesses the anticipated social impacts of the Trails, which were identified through stakeholder consultations and targeted desktop research. This chapter includes:

- Environmental Impact Analysis
- Social Impact Analysis
- Summary.

## 6.2 Environmental Impact Analysis

The environmental impact analysis presents the anticipated environmental impacts and considerations associated with the construction and operation of the Trails. Further investigation of these impacts will be required as part of the detailed design phase of the Project to validate the preliminary findings identified in a desktop ecological assessment that was completed as part of the Feasibility Report (the ecological assessment).

### 6.2.1 Approach

The environmental impact analysis was undertaken by consolidating the outcomes of the ecological assessment and additional information obtained through stakeholder consultations with WTMA, QPWS and HQ Plantations.

The ecological assessment considered the potential impact to the area's known ecological values based on the concept design for the Trails (as presented in Chapter 5). The assessment also identified potential legislative considerations that may impact the approval of the Trails, and identified several potential mitigation and enhancement strategies that may be adopted to reduce the number of environmental approvals and/or permits required to progress the Project.

To complement the ecological assessment, WTMA, QPWS and HQ Plantations were engaged during the development of the Business Case to provide further guidance in relation to the environmental approvals and considerations required for the Project.

Importantly, neither the ecological assessment nor the consultation process identified any 'fatal flaws' for the Project, and all stakeholders confirmed their ongoing support the Trails. The following section summarises the key findings of the ecological assessment and subsequent consultations, and the key steps that will be required to progress the Project.

### 6.2.2 Ecological Assessment

The Trails' concept design traverses the Cardwell State Forest and Girringun National Park. The Trails are situated in the Wet Tropics bioregion of Queensland. This region experiences extreme climatic conditions comprising of monsoonal summers and dry winters, and comprises of a broad landscape of natural features and environmental processes that influence the functions of entire ecosystems. Due to the location of the Trails, and the highly sensitive ecosystems and environment that surround them, a complex and extensive legislative framework will apply, and will require consideration in the assessing the required approvals and permits needed to progress the Project.

The key ecological values and potential ecological impact of the Project, as outlined in the ecological assessment, are summarised in the below categories.

#### World Heritage Properties and Listed National Heritage Properties

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) identified two WHAs that were classified as Matters of National Environmental Significance (MNES), being the GBR and Wet Tropics.

The GBR WHA starts at the coastline and extends seaward past the GBR outer shelf. The Project area is not located within this WHA and is not anticipated to cause significant impacts to it. Consequently, it has been deemed unlikely to cause constraints to the Project. However, the Wet Tropics WHA was mapped in the western portion of the study area and underlies a portion of the Attie Creek segment (see Figure 38). The implications of this are discussed further in the following sections.

### **Wetlands and Watercourses**

Riverine wetlands are protected under the state-legislated *Vegetation Management Act 1999* (VMA Act). Protection of these areas is important to address the loss and degradation of wetland systems, as this may result in declining water quality (particularly to the GBR) and loss of biodiversity. The VMA requirements are only triggered on specified land tenures, with both national parks and state forest areas as noted exclusions. Based on the latest concept design for the Trails, all designated wetland areas are avoided and therefore the requirements under the VMA Act should not be triggered in this instance.

Watercourses are protected by Queensland's *Water Act 2000 (QLD)* (the Water Act) and are considered Matters of State Environmental Significance (MSES). The Water Act is applicable regardless of the land tenure and is triggered when any disturbance to a mapped watercourse is proposed, including clearing any vegetation, placing fill or structures within the bed of the watercourse, or extracting fill from the watercourse. Based on the current concept design, only Trail 12 in the Lookout Hill segment crosses a mapped watercourse. However, the design intent is for the Trails to use of the existing road to pass over the watercourse. Riders will be required to cross the watercourse using existing roads or disturbed areas to ensure alternate actions aren't required under the Water Act.

### **Protected Flora**

Protected flora is managed by Queensland and Australian Government legislation, which has the potential to impose constraints on the design and delivery of the Trails. The below sections outline the outcomes of the preliminary investigations that were completed as part of the desktop ecological assessment. The potential presence of any protected or threatened flora species can only be accurately determined through infield ecological surveys, which were not completed in the original assessment. As such, the information provided should only be relied on as indicative of the likelihood of the presence of protected flora in the Project area. Infield assessments will be required as part of the detailed design phase to determine potential mitigation and approval requirements.

#### *Vegetation Management Act 1999*

Native vegetation is regulated under the VMA Act in Queensland. Regulated vegetation maps identified that most of the Project area contains Remnant Vegetation (Category B), Non-Remnant (Category X) and Watercourse Regrowth (Category R). These areas largely contained vegetation that is classified as 'least concern' or 'of concern'. The 'of concern' areas pose the greatest ecological constraints due to stricter vegetation clearing regulations. Regional ecosystems mapped as 'of concern' and 'endangered' have increased levels of protection when it comes to vegetation clearing and are more likely to require biodiversity offsets in the instance that they are cleared. Similarly to wetland areas (discussed above), the VMA Act only applies to land tenures located outside of national parks and state forest areas.

Trail 1 in the 7 Sisters segment is the only trail that will require approvals under the VMA Act if vegetation is to be cleared, as it is located on a land tenure that is not controlled as national park or state forest. Trail 1 is vital to the Project, as it is the only dedicated mountain bike linkage between the trail network and the Trail Head. Given its importance, the Feasibility Report included preliminary mitigation options for this trail and identified the requirement for further investigation in relation to potential mitigants and the requisite approvals process.

#### *Environmental Protection and Biodiversity Conservation Act 1999*

Whilst the VMA Act is not applicable to much of the Project area, threatened ecological communities are protected by the Australian Government's EPBC Act. Within a survey area of five kilometres from the Project area, 12 threatened ecological communities of vegetation were identified and determined to be 'recorded', 'unlikely', 'likely to occur' and 'possible to occur'. Any 'threatened' species identified in the Project area has the potential to impose significant constraints on the Project in terms of design changes and restricted access to certain areas. As noted previously, detailed infield surveys will be required to validate the nature of protected flora in the Project area.

## Protected Fauna

Protected Fauna is managed under Queensland and Australian Government legislation and, if identified as “threatened”, has the potential to impact the Project’s progression or the trail design. The ecological assessment identified 24 threatened fauna species that were classified as ‘recorded’, ‘likely’, ‘potentially’ or ‘possible’ to occur within the Project area.

Further to this, the assessment also identified 18 migratory species (all birds) within five kilometres of the Project area. Additionally, a search of the EPBC protected matters identified 45 migratory species within five kilometres of the Project area. Migratory species of fauna are protected under Queensland and Australian Government legislation.

As part of this desktop assessment, it was confirmed that the Project area contains key habitat areas for the endangered Southern Cassowary and the Mahogany Glider. These two species are protected by Queensland’s *Nature Conservation Act 1992* and the EPBC Act, and are categorised as MNES and MSES.

Infield assessments will be required in the detailed design phase to confirm the presence of the Southern Cassowary, Mahogany Glider and other threatened or migratory species outlined within this section. As part of this, engagement with key environmental and ecological stakeholder groups should continue to be undertaken, including WTMA, QPWS and the Mahogany Glider Recovery Team.

## Wet Tropics Area

As presented in Figure 38, a portion of the Attie Creek trail segment overlaps the Wet Tropics WHA. Consequently, the trail network within the WHA will be subject to the *Wet Tropics World Heritage Protection and Management Act 1993* (the Wet Tropics Act) and *Wet Tropics Management Plan 1998*. The Wet Tropics Act is in place to manage activities that may affect World Heritage Values. As the Wet Tropics WHA is also considered a MNES, the requirements of the EPBC Act will also need to be considered as part of future investigations.

Despite the potential challenges and constraints in terms of environmental approvals, the trail network that extends within the Wet Tropics WHA is essential to the overarching value proposition of the Project. This is predominantly due to the disused road at Dead Horse Creek that has been identified as a potential shuttle access road, in conjunction with the eastern face of the ridgeline being highly conducive for world class gravity trails.

As previously outlined in Chapter 4, successful and world class mountain bike destinations are supported by shuttle services that provide riders with an ease of access to gravity trails. The potential removal of the shuttle access road (that traverses the WHA) will significantly inhibit accessibility to the gravity trails that are proposed, which will be of significant detriment to the value proposition of the Project.

As previously outlined, regular engagement with WTMA and QPWS has been undertaken since inception of the Project and to date, no fatal flaws have been identified that would prohibit the Trails from progressing. Importantly, it is noted that the Trails are strongly aligned with WTMA’s *Wet Tropics Sustainable Tourism Plan 2021-2031*, which outlines WTMA’s goal to support Traditional Owners to achieve their aspirations for tourism on Country.



Figure 38: Wet Tropics WHA<sup>134</sup>

### Summary

The ecological assessment identified several important environmental considerations that will require further investigation in subsequent phases of the Project. Importantly, however, the desktop assessment did not identify any fatal flaws with the concept design of the Trails. To validate the preliminary ecological findings from the desktop assessment, and to determine

<sup>134</sup> Trend Ecology (2021). *Cardwell Tropical Mountain Bike Trail Project Feasibility Report: Appendix 6 – Preliminary Ecological Constraints Analysis*. Provided by CCRC.

the true ecological impact of the Project, detailed infield assessments will be required. These assessments will assist in validating the preliminary assessment findings and will enable the development of appropriate approaches for referrals, permits and other reporting and management plans.

Ongoing engagement with key environmental stakeholders, including WTMA, QPWS and the Mahogany Glider Recovery Team, is also recommended to ensure that prevailing or identified constraints may be managed in a collaborative and timely manner.

### 6.2.3 Key Next Steps and Activities

The key next steps and activities that will be required to be completed as part of the subsequent phases, include:

- Infield assessments of the Project area across two key periods (wet and dry seasons) – initially in December, with a follow up in May and June
- Targeted flora and fauna species surveys
- Development of species management plans for those identified within the Project area
- MNES and MSES reporting
- EPBC referral and habitat offset requirements (for impacted areas)
- Approval and permit applications in accordance with designated legislation and management plans
- Construction monitoring and reporting, in accordance with permits, approvals and legislation requirements.

The timing of the proposed infield assessments will be important, considering the peak flowering periods for flora and peak activity periods for fauna. Further details and considerations regarding the factors impacting the timing of surveys has been outlined in the ecological assessment in the Feasibility Report. Continued engagement with WTMA, QPWS and other key stakeholders will be required to further understand the requirements for these assessments and other recommended investigations to support permit applications and approvals.

## 6.3 Social Impact Analysis

The purpose of the Social Impact Analysis is to identify key social impacts from the development, operation and maintenance of the Trails, and to determine any proposed impact mitigants or enhancements.

### 6.3.1 Approach

The Social Impact Analysis was completed considering the guidance provided by the Queensland Government's *BCDF* and *SIE Guide*. The approach has been summarised in Figure 39.

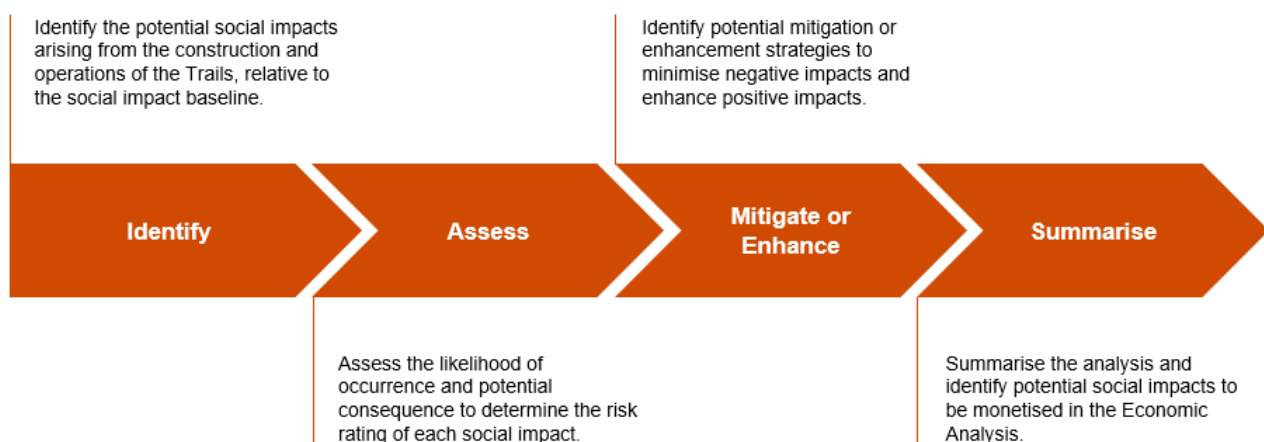


Figure 39: Social Impact Analysis Approach



## Identify Social Impacts

A high-level desktop review was undertaken to determine the Social Impact Baseline (SIB), which reflects the current socio-economic status of Cardwell, in the absence of the development and operation of the Trails. The SIB was also informed by the comprehensive stakeholder engagement process that was undertaken throughout the development of the Business Case.

Once the SIB was established, the potential social impacts from the Trails were identified through a desktop review and targeted research, which also revealed the key drivers and indicators behind each impact. With reference to the Queensland Government's *BCDF*, the SIE decision tree was used to identify whether each of these impacts could be monetised, quantified or qualitatively described.

## Assess Social Impacts

An Impact Risk Assessment (IRA) was undertaken to determine the materiality of the identified social impacts. The likelihood and severity of each identified social impact was determined in accordance with Table 17 and Table 18 respectively.

Table 17: Social Impact Consequence Criteria<sup>135</sup>

Consequence	Description
Insignificant	<ul style="list-style-type: none"> <li>Small-scale impacts</li> <li>These impacts provide limited value or costs to society</li> <li>These impacts may require future consideration if there is change to the Trails' design</li> </ul>
Minor	<ul style="list-style-type: none"> <li>Short term and mostly local impacts</li> <li>Positive impacts provide some value to society</li> <li>Negative impacts can be easily adapted to by society</li> </ul>
Moderate	<ul style="list-style-type: none"> <li>Medium term impacts</li> <li>Positive impacts can be enhanced to provide substantial value to society</li> <li>Society has the capacity to adapt and cope with the negative impacts</li> </ul>
Major	<ul style="list-style-type: none"> <li>Long term and potentially far-reaching impacts</li> <li>Positive impacts will provide substantial value to society</li> <li>Society has limited capacity to adapt and cope with the negative impacts</li> </ul>
Significant	<ul style="list-style-type: none"> <li>Long term, high-magnitude and far-reaching impacts</li> <li>Positive impacts will provide enormous value both locally and regionally</li> <li>Society has no capacity to cope with significant negative impacts</li> </ul>

Table 18: Social Impact Likelihood Criteria<sup>136</sup>

Likelihood	Description
Rare	<ul style="list-style-type: none"> <li>&lt;5% probability</li> <li>The impact may occur only in exceptional circumstance</li> </ul>
Unlikely	<ul style="list-style-type: none"> <li>5% to 35% probability</li> <li>The event could occur at some time but is improbable</li> </ul>

<sup>135</sup> Queensland Government (2021). *Business Case Development Framework: Social Impact Evaluation Guide*. Accessed at [https://www.statedevelopment.qld.gov.au/\\_\\_data/assets/pdf\\_file/0014/55031/further-guidance-05-social-impact-evaluation-guide.pdf](https://www.statedevelopment.qld.gov.au/__data/assets/pdf_file/0014/55031/further-guidance-05-social-impact-evaluation-guide.pdf)

<sup>136</sup> Ibid.



Likelihood	Description
Possible	<ul style="list-style-type: none"> <li>35% to 65%</li> <li>The event might occur at some time</li> </ul>
Likely	<ul style="list-style-type: none"> <li>65% to 95%</li> <li>The event is likely to occur</li> </ul>
Almost Certain	<ul style="list-style-type: none"> <li>95% to 100%</li> <li>The event is expected to occur</li> </ul>

The materiality of each identified social impact was then determined through an IRA matrix (see Table 19), based on the likelihood and severity of each identified impact. While some social impacts may require mitigation considerations, other social impacts have positive impacts and may need further enhancement to improve the socio-economic outcomes from the Trails.

Table 19: IRA Matrix<sup>137</sup>

		Consequence				
		Insignificant	Minor	Moderate	Major	Significant
Likelihood	Almost Certain					
	Likely				High	
	Possible			Medium		
	Unlikely		Low			
	Rare					

### Mitigate or Enhance Social Impacts

Alternative solutions, mitigation and management measures were developed to ensure that the proposed development of the Trails (including design, construction and operation) minimises the potential negative impacts and enhances the positive impacts on the community living in the immediate and regional areas around the Trails.

### Summarise Social Impact Analysis

The identified social impacts were summarised in the Business Case and a review was undertaken to determine which of the identified social impacts could be appropriately quantified in the economic analysis (see Chapter 9).

#### 6.3.2 Social Impact Baseline

The SIB describes the current socio-economic status of Cardwell and the broader Cassowary Coast LGA. Table 20 establishes the SIB, which has been developed with respect to the problems and opportunities described in Chapter 4.

<sup>137</sup> Queensland Government (2021). *Business Case Development Framework: Social Impact Evaluation Guide*. Accessed at [https://www.statedevelopment.qld.gov.au/\\_\\_data/assets/pdf\\_file/0014/55031/further-guidance-05-social-impact-evaluation-guide.pdf](https://www.statedevelopment.qld.gov.au/__data/assets/pdf_file/0014/55031/further-guidance-05-social-impact-evaluation-guide.pdf)

Table 20: SIB Summary

Problems and Opportunities	Key Drivers
There is an opportunity to leverage Cardwell's natural features and nearby attractions to establish the region as a leading adventure and lifestyle destination with diverse experiences.	<ul style="list-style-type: none"> <li>High-quality nature-based and adventure-based tourism offerings in Cardwell that are yet to be leveraged in the attraction of visitors to the town</li> <li>Growing mountain biking participation rates and adventure tourism market</li> <li>Potential attraction of HVTs to Cardwell</li> </ul>
Greater respect for, and recognition of, the unique culture of the local Traditional Owners will establish cultural heritage as a key element and competitive advantage of the Trails and, in turn, provide greater employment and business opportunities for the local Traditional Owners.	<ul style="list-style-type: none"> <li>Strong support and enthusiasm for the Trails from Girramay RNTBC</li> <li>Girringun's interest to support the operation and maintenance of the Trails</li> <li>Unique cultural heritage of the Girramay Peoples and meaningful representation throughout Cardwell</li> </ul>
The Cardwell community's strong civic pride and commitment presents an opportunity to deliver greater community-led infrastructure that can enhance community cohesion and wellbeing.	<ul style="list-style-type: none"> <li>Community-led initiative that was conceived in 2019</li> <li>Strong advocacy and support for the Trails</li> <li>Community commitment to growing a sustainable and resilient economy in Cardwell</li> </ul>
Investment is required to sustain and expand the capacity and coverage of the existing national park maintenance programs, which are critical in providing access to and sustainably maintaining protected areas and national parks.	<ul style="list-style-type: none"> <li>Expanded budget required to support the QPWS and Girringun's Aboriginal Rangers Program</li> <li>Greater biodiversity and environmental risks from limited management</li> <li>Increase patronage to national parks will facilitate greater financial contribution to upgrade facilities</li> </ul>
To secure the long term prosperity of Cardwell, there is a need to grow and diversify the region's economy, increase economic resilience and generate new employment and training opportunities.	<ul style="list-style-type: none"> <li>Desire and need to diversify the existing economy in Cardwell</li> <li>Requirement for more employment opportunities for existing youth and residents to remain in the community and to attract new residents</li> <li>Enhanced post school training and development opportunities to improve skills within the community</li> </ul>
The lifestyle and amenity in Cardwell must be enhanced to attract and retain skilled people in the region.	<ul style="list-style-type: none"> <li>Enhancements to enabling infrastructure and general amenity in Cardwell will result in improved liveability and attractiveness for visitors and new residents</li> </ul>

The Trails are expected to address each problem and opportunity identified in the ILM by focusing on the key drivers. In particular, the Trails will generate the following benefits:

- Enhanced domestic and international tourism visitation and expenditure in the local Cardwell community
- Increased training and employment opportunities for local Traditional Owners, First Nations Peoples and members of the community
- Enhanced liveability and amenity in Cardwell through investment in enabling and community infrastructure
- Continued involvement of the Girramay Peoples in the Trails and integration with the Cardwell community
- Diversified economy and new tourism offerings that will complement the existing fishing industry in Cardwell.

### 6.3.3 Social Impact Assessment

The positive and negative social impacts identified for the proposed Trails, and the concept design are described in Table 21. The red boxes are classified as high risk or highly beneficial social impacts, orange are moderate risk or moderately beneficial social impacts and yellow are minimal risk or minimally beneficial social impacts.

Table 21: Social Impact Assessment

No.	Social Impact	Description	Likelihood	Consequence	Rating	Mitigation and Enhancements
<b>Positive Social Impacts</b>						
P1	Increased Tourist Visitation and Expenditure	The Trails will increase the number of visitors to Cardwell and the Cassowary Coast LGA and, in doing so, increase tourism expenditure in the region through on-bike and off-bike expenditure.	Almost Certain	Major	High	<ul style="list-style-type: none"> <li>Promotion of the Trails as a winter mountain biking destination</li> <li>Promotion of investment in supporting services and offerings by private sector operators and Traditional Owner groups</li> </ul>
P2	Meaningful Traditional Owner Involvement and Recognition	Girramay RNTBC has been a strong advocate for the Project since the initial concept was conceived. Girramay are interested to exploit opportunities that may arise for future commercial involvement for the Girramay Peoples through the Trails. Giringun are also supportive of the Trails and are anticipated to play an integral role in the operation and maintenance of the network through the Ranger Program.	Almost Certain	Major	High	<ul style="list-style-type: none"> <li>Seek Queensland and/or Australian Government support for Girramay RNTBC or Giringun to develop opportunities arising from the Project</li> <li>Agreement with future proponents to include Traditional Owner involvement and to offer employment and training opportunities</li> <li>Continued engagement with the Girramay Peoples and Giringun</li> </ul>
P3	Increased Cultural Awareness and Learning	The Trails will protect and will meaningfully recognise the culture and heritage of the Girramay Peoples. This will provide an opportunity for the Traditional Owners to share their history and stories of the surrounding land and water as well as their culture, practices and sentiment in the area, thereby increasing social and cultural awareness.	Likely	Moderate	High	<ul style="list-style-type: none"> <li>Continued engagement with the Girramay Peoples</li> <li>Complete cultural heritage assessments to confirm key areas that are permitted for visitors to access</li> <li>Actively engage Girramay in the detailed design process to ensure the Trails appropriately reflect the culture and heritage of the Girramay Peoples.</li> </ul>

## Impacts Analysis

No.	Social Impact	Description	Likelihood	Consequence	Rating	Mitigation and Enhancements
P4	New Training and Employment Opportunities in Operations	The Trails will attract more visitors to Cardwell, which will present an opportunity for local businesses to generate more income through accommodation, food and beverage, tours and other offerings in the town. In addition, the Trails will also provide new training and employment opportunities through the operation and maintenance of the network.	Likely	Major	High	<ul style="list-style-type: none"> <li>• Active promotion of future business and service offerings needed to support the Trails.</li> <li>• Council to facilitate workshops with businesses to educate owners and operators on the growth opportunities and the steps to sustainably grow their staff and resourcing</li> <li>• Development of school based training programs aligned to new employment requirements in Cardwell</li> <li>• Continued engagement with Giringun, QPWS and funding bodies to expand Ranger programs and training programs</li> </ul>
P5	Enhanced Community Pride	The delivery of the Trails will enhance the strong civic pride of the Cardwell community, as it has been a community-led initiative that has received strong support from residents and Traditional Owners.	Likely	Moderate	High	<ul style="list-style-type: none"> <li>• Continued engagement with residents and Traditional Owners to maintain strong advocacy for the Trails</li> <li>• Regular communication and promotion of the Trails and development of digital media platforms to engage with the community.</li> </ul>
P6	Showcase Wet Tropics WHA and Increased Wildlife and Conservation Knowledge	The Trails will showcase the Wet Tropics WHA and create several opportunities for visitors to increase their knowledge and understanding around wildlife and conservation in Wet Tropics WHA. Further, the Trails may also support an expansion to the Giringun Rangers Program, which will support enhanced wildlife and conservation knowledge through a greater number of rangers in Cardwell and the Cassowary Coast LGA.	Likely	Moderate	High	<ul style="list-style-type: none"> <li>• Continued engagement with WTMA and QPWS, who will be key approval authorities for the Trails</li> <li>• Comprehensive training programs for people engaged in the Trails to ensure that have strong knowledge of the Trails and surrounding areas</li> <li>• Develop visitor guides and promote the Trails and the knowledge of flora and fauna in the area</li> </ul>

No.	Social Impact	Description	Likelihood	Consequence	Rating	Mitigation and Enhancements
P7	Increased Social Interactions and Connectivity	The Trails will include various event spaces and hubs that will support greater social and community interaction between the users of the network and surrounding infrastructure and amenities. This will enhance connectivity within the community and will enhance the overall attractiveness for visitors to stay.	Possible	Minor	Medium	<ul style="list-style-type: none"> <li>• Development of signage and advertising to raise awareness of the Trails and the community organisations that support it</li> <li>• Promote community events at the Trails through existing community groups and the Council</li> <li>• Development of greater participation in mountain biking within the community through kids biking programs, learn to ride, community days and other similar events.</li> </ul>
P8	Amenity and Liveability Uplift	The Trails will enhance the amenity of the Cardwell community, thereby having a positive impact on the overall liveability of the region. This in turn is expected to enhance interest of people to visit, stay and live in the community. With this expansion of population, further investment in critical enabling infrastructure (e.g. sewerage) to support the growth of the community is expected to follow.	Possible	Moderate	Medium	<ul style="list-style-type: none"> <li>• Promotion of the opportunities and attractions of Cardwell, and the proposition for people to live, work and stay in the community.</li> <li>• Seek funding to enhance the enabling and public infrastructure in Cardwell</li> </ul>
P9	Enhanced Physical and Mental Health and Wellbeing	The Trails will promote and support greater involvement in sporting and recreational activities in Cardwell, which is strongly linked to improved physical and mental health and wellbeing of participants. The long term impacts of this participation may result in improved health, education, employment and community cohesion outcomes.	Possible	Moderate	Medium	<ul style="list-style-type: none"> <li>• Promote use of the Trails amongst the local community and youth</li> <li>• Support the development of community sporting groups, such as the Cardwell Mountain Biking group, to facilitate and coordinate activities for new and experienced participants</li> </ul>
P10	Employment Opportunities during Construction	The construction of the Trail will provide an opportunity for Traditional Owners, residents and locals from neighbouring towns to attain employment during the construction phase, creating industry growth and upskilling people.	Likely	Minor	Medium	<ul style="list-style-type: none"> <li>• Include local and First Nations employment requirements during the construction process</li> </ul>
<b>Neutral Social Impacts</b>						

## Impacts Analysis

No.	Social Impact	Description	Likelihood	Consequence	Rating	Mitigation and Enhancements
A1	Private Property Rentals	As visitor numbers increase, residents may be able to rent their private properties and houses to visitors for the Trails, creating increased economic benefit for the town and LGA. The expansion of accommodation in the town, however, may result in an oversupply in accommodation during low seasons.	Possible	Minor	Medium	<ul style="list-style-type: none"> <li>Town planning considerations to support growth of accommodation options</li> <li>Investment in enabling infrastructure to support increased housing development across Cardwell</li> </ul>
A2	Gentrification	In the long term, the Trails may catalyse significant uplift in property values. Whilst this will generate capital return for existing residents, this may ultimately price-out residents or prevent future workers from moving to the town.	Unlikely	Minor	Low	<ul style="list-style-type: none"> <li>Town planning considerations to manage expansion of dwellings and accommodation options.</li> </ul>
<b>Negative Social Impacts</b>						
N1	Culturally and/or Environmentally Significant Sites	The Trails may create an opportunity for visitors to access culturally sensitive and/or restricted sites off the trail network. This may result in potential impacts to the cultural heritage or environmental values of the area.	Possible	Major	High	<ul style="list-style-type: none"> <li>Conduct environmental and cultural heritage studies during the detailed design phase and, if applicable, adjust the alignment of the Trails to avoid significant sites</li> <li>Mitigate through active and passive discouragement</li> <li>Do not promote areas that should be avoided or establish signage warning of restricted areas</li> </ul>
N2	Impact on HQ Plantations	The Trails will traverse the commercial pine plantation land that is held under long term leasehold by HQ Plantations. Due to the business operating throughout the year, there may be partial closures to the network during harvesting to mitigate potential impacts on the operations of HQ Plantations. Liability risks exist for interactions between trails users and the HQ Plantation operations.	Likely	Moderate	High	<ul style="list-style-type: none"> <li>Trails operator will be required to manage closures of Trails and ensure riders do not access closed areas</li> <li>Close segments of the Trails, rather than the whole network, to support HQ Plantations to harvest whilst still accommodating riders</li> </ul>
N3	Re-activation of Roads	Several existing access roads will need to be re-activated to enable shuttle access to key areas of the Trails. This access may result in potential environmental impacts to the area. Existing roads used by Rangers and shuttle service will also require greater maintenance, through the increased usage.	Likely	Minor	Medium	<ul style="list-style-type: none"> <li>Conduct a detailed investigation of the potential impacts from activating existing access roads</li> <li>If required, limited the number of shuttle runs per day to mitigate the potential impact and manage maintenance requirements</li> </ul>

No.	Social Impact	Description	Likelihood	Consequence	Rating	Mitigation and Enhancements
N4	Accommodation in Cardwell	In the medium to long term, there may insufficient accommodation in Cardwell to cater for visitors – without the attraction of private investment or greater public investment in accommodation options.	Possible	Moderate	Medium	<ul style="list-style-type: none"> <li>Promote the Trails and Cardwell as an investment opportunity for new accommodation providers</li> <li>Minimise “red tape” for potential investors</li> <li>Seek funding to enhance the enabling and public infrastructure in Cardwell to increase the attractiveness for future investment</li> </ul>
N5	Perceived Prioritisation of the Trails over Port Hinchinbrook	The Port Hinchinbrook development has a long legacy of inadequate funding to support the maintenance and upgrade of facilities. Community members are eager for the Port Hinchinbrook development to be resolved and certain residents have indicated a desire to not deflect attention from this need.	Possible	Minor	Medium	<ul style="list-style-type: none"> <li>Continued engagement with the community and communication regarding need for diversified approach to growing the community</li> <li>Confirm that Port Hinchinbrook and the Trails are separate projects and not competing for funding or attention</li> </ul>
N6	Environmental Impact	Any development or infrastructure implementation will inevitably create a level of environmental impact. These environmental impacts will be mitigated through the environmental approvals process and adhering to sustainable best practice guidelines. Further, mountain bike trails are typically low impact, and the Trails may ultimately support an expanded rangers' program, which will enhance environmental protection in the area.	Unlikely	Minor	Low	<ul style="list-style-type: none"> <li>The Trails will abide by best practice guidelines to develop a network that is low impact to the environment and able to withstand weather impacts year-round</li> <li>Employ a team of trained rangers to ensure the environmental impact of the Trails is managed</li> <li>Ensure the alignment of the Trails is appropriate</li> </ul>
N7	Disruption from Construction	Construction of the Trails may disrupt users of the existing informal trail network in the Cardwell area and may impact residents in the town.	Possible	Insignificant	Low	<ul style="list-style-type: none"> <li>The Trails will abide by best practice guidelines</li> <li>Provide regular communication updates to local riders to advise of network closures during construction</li> </ul>



Of the identified social impacts presented in Table 21, P1 and P9 are the only social impacts that have been quantified and monetised in the economic analysis. The remaining social impacts are quantitative impacts that are unable to be monetised or qualitative impacts. Further detail is outlined in Chapter 9, *Economic Analysis*.

#### 6.3.4 Summary

Table 22 summarises the impact rating of all identified social impacts resulting from the Trails.

Table 22: IRA Scatter Diagram

		Consequence				
		Insignificant	Minor	Moderate	Major	Significant
Likelihood	Almost Certain				P1, P2	
	Likely		P10, N3	P3, P5, P6, N2	P4	
	Possible	N7	P7, A1, N5	P8, P9, N4	N1	
	Unlikely		A2, N6			
	Rare					

This demonstrates that the Trails will generate six 'high' positive impacts and only two 'high' negative impacts, which may ultimately be downgraded in severity following detailed design and the undertaking of infield environmental and cultural heritage studies.

In summary, the Social Impact Assessment has highlighted the many positive social impacts that will be created through the Trails, which are expected to significantly outweigh the negative impacts in the medium to long term. The Trails will provide significant and positive benefits to the Girramay People, Giringun and First Nations Peoples in the area, as well as residents in Cardwell and potential visitors. These positive impacts should be considered in future phases of the Trails, through a range of enhancement strategies to ensure the benefits of the Trails are optimised.

## 6.4 Summary

This chapter has summarised the potential environmental impacts of the Trails and identified the social impacts that may be created through the development and operation of the Trails.

The Environmental Impact Analysis consolidated the work previously undertaken in the Feasibility Report and was complemented by engagement with WTMA, QPWS and HQ Plantations during the development of the Business Case. The desktop ecological assessment undertaken as part of the Feasibility Report identified several key environmental considerations for further investigation in the future detailed design activities. Importantly, this process did not result in the identification of any 'fatal flaws' that would prohibit the Trails from proceeding from the Business Case to detailed design.

During the detailed design phase, infield assessments will be required to be completed to determine the true ecological impact of the Trails and to provide clarity regarding permits, approvals and other risk mitigations that may need to be implemented. Engagement with WTMA, QPWS and other key environmental and community stakeholders will also be required as part of the next phase.

The Social Impact Analysis identified a range of social impacts that may result from the development, operation and maintenance of the Trails, and developed the proposed mitigant or enhancement strategies and actions. The Trails are expected to create a significant number of positive social impacts that will outweigh the potential negative social impacts. As a result, the Trails are expected to enhance the socio-economic status of Cardwell and provide positive benefits for residents, Traditional Owners and visitors to the town.

# 7 Ownership and Operational Model Analysis

## 7.1 Purpose

The development of a sustainable ownership and operational model is integral to the long term sustainability of the proposed Trails in Cardwell. The purpose of this chapter is to present the analysis that has been undertaken to identify the preferred owner and operator of the Trails. This chapter includes:

- Approach to the Ownership and Operational Model Analysis
- Scope and Objectives
- Situational Analysis
- Ownership Model Analysis
- Operational and Maintenance Model Analysis
- Revenue Generation
- Summary.

## 7.2 Approach to the Ownership and Operational Model Analysis

A structured process was undertaken to identify the preferred ownership and operational and maintenance models for the Trails. The approach that was undertaken is summarised in Figure 40, with further detail on each of the key steps outlined in the following sections. As part of the analysis, a workshop was facilitated with members from the Council's Project team.

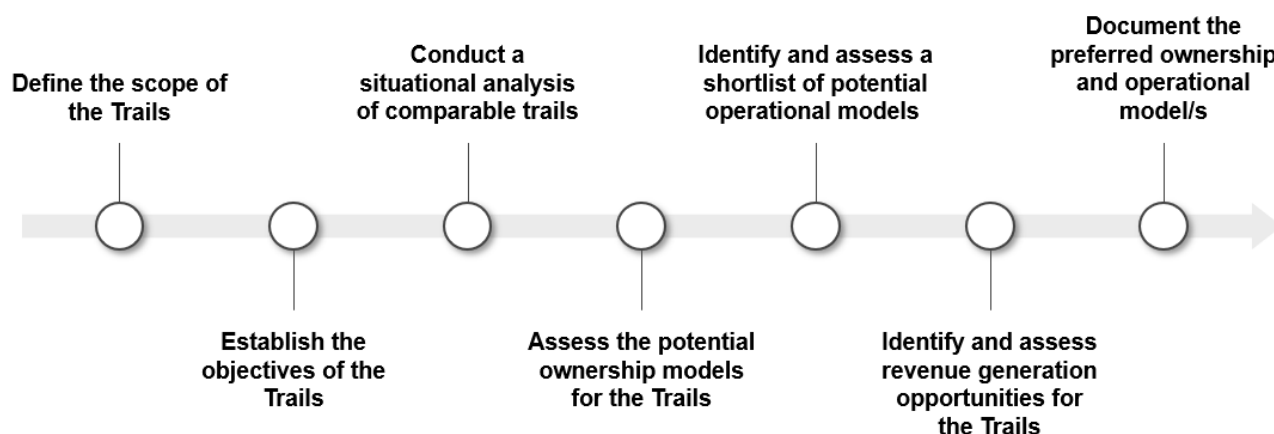


Figure 40: Approach to the Ownership and Operational Model Analysis

- 1 Define the Scope:** The scope of the Trails was clearly defined for the purpose of the analysis. This included identifying and establishing the core service offerings of the Trails. Complementary service offerings that are not within the direct scope of the Trails, yet will be required in the medium to long term, were also documented.
- 2 Establish Objectives:** The objectives for the Trails were defined and validated with members of the Council's project team. This ensured that the potential ownership and operational models considered for the Trails were aligned with the objectives of the Project itself.
- 3 Conduct a Situational Analysis:** A situational analysis was undertaken to identify the ownership, operational and maintenance models that have been implemented for comparable trail networks in Australia and New Zealand.

- 4 Assess Potential Ownership Models:** The preferred owner of the Trails was identified through a structured assessment that considered the objectives for the Trails, as well as the advantages, disadvantages and capabilities of the shortlisted potential owners.
- 5 Identify and Assess Shortlisted Operational Models:** The potential operating models that may be adopted for the Trails were identified and qualitatively analysed to determine the preferred models over the short, medium and long term.
- 6 Identify Revenue Generation Opportunities:** The potential revenue generation opportunities for the Trails, needed to offset the costs of operating and maintaining the Trails, were identified and qualitatively considered. The quantitative analysis of the revenue generation opportunities is outlined in Chapter 8.
- 7 Document Preferred Ownership and Operational Model:** The preferred ownership and operating models for the Trails, over the short, medium and long term, were documented, along with high-level roles and responsibilities for future owner/s and operator/s.

## 7.3 Scope and Objectives

The scope and objectives of the Trails were defined in conjunction with members of the Council's project team, and in consideration of the Trails' concept design presented in Chapter 5, and the outcomes of the Feasibility Report that was developed in 2021. Outcomes from the ILM process that was completed in the early stage of the Business Case were also leveraged to complete this exercise.

### 7.3.1 Scope of the Trails

The scope of the Trails has been established by categorising service offerings into 'core' and 'complementary'. As demonstrated in Figure 41, core service offerings are those that directly pertain to, and are fundamental to the operation and maintenance of the Trails. This includes maintaining the trails, managing the trail network, and ensuring transport and event access is appropriate. These services are fundamental to the Trails and, as such, would be provided by a future operator of the Trails. The core service offerings will also be required from the commencement of the operational period of the Trails.

Complementary service offerings are those which may be offered in addition to the core service offerings. Whilst not explicitly required to operate and maintain a mountain bike trail network, the complementary service offerings will enhance the visitor experience and are expected to optimise the commercial outcomes of the Trails. The complementary service offerings may be delivered by a range of service providers other than the core operator, including but not limited to the Girramay RNTBC, Girringun, local businesses and/or private sector proponents. As noted in earlier chapters of the Business Case, Girramay RNTBC and Girringun have indicated their strong interest in providing some of the core and/or complementary service offerings required for the Trails.

	<div> <div></div> - Core Service Offering <div></div> - Complementary Offerings </div>			
Offering	 <b>Trails Maintenance</b> <ul style="list-style-type: none"> <li>Trail network maintenance</li> <li>Signage</li> <li>Supporting infrastructure maintenance</li> </ul>	 <b>Operations and General Management</b> <ul style="list-style-type: none"> <li>Trail head operations</li> <li>Trail use and management</li> <li>Trail closure</li> <li>Stakeholder engagement</li> <li>Riders' health and safety</li> <li>Employee hiring and training</li> </ul>	 <b>Marketing and Business Development</b> <ul style="list-style-type: none"> <li>Marketing and advertising</li> <li>Commercial sponsorships</li> <li>Local business partnerships</li> </ul>	 <b>Transport Access</b> <ul style="list-style-type: none"> <li>Transport and event access for riders, emergency vehicles and event crews</li> </ul>
	 <b>Bike Hire and Repairs</b> <ul style="list-style-type: none"> <li>Mountain bike hire</li> <li>Mountain bike parts and repairs</li> </ul>	 <b>Tours and Cultural Offerings</b> <ul style="list-style-type: none"> <li>Organised tours of the Trails</li> <li>Cultural experiences</li> <li>Package offerings</li> </ul>	 <b>Food, Beverage and/or Accommodation</b> <ul style="list-style-type: none"> <li>Food and beverage offerings</li> <li>Accommodation offerings</li> </ul>	 <b>Transportation</b> <ul style="list-style-type: none"> <li>Transportation from Airport or location nearby</li> </ul>

Figure 41: Overview of Core and Complementary Service Offerings at the Trails

The four core servicing offerings that will be the responsibility of the future Trails' operator/s and are integral to the selected operational and maintenance model are described in Table 23.

Table 23: Core Service Offerings at the Trails

Service Offering	Description
<b>Trails Maintenance</b>	<ul style="list-style-type: none"> <li>Responsibility for professionally maintaining the trail network and supporting infrastructure (e.g. Trail Head) to a high quality, as this is a primary driving factor in attracting mountain bikers to visit and stay in Cardwell. This will include scheduled and unscheduled maintenance (as may be the case before and after severe weather events).</li> <li>Responsibility for ensuring that signage is clear, visible and well-kept, ensuring that mountain bike riders can navigate the trail network with ease.<sup>138</sup> As part of this, signage must be replaced when damaged or when deemed no longer suitable.</li> </ul>

<sup>138</sup> The Feasibility Report recommended the development of a Signage and Way Finding Plan during the Detailed Design process to determine exact signage requirements for the Trails, as well as the styles, colours, art work and branding associated with signage.

Service Offering	Description
<b>Operations and General Management</b>	<ul style="list-style-type: none"> <li>• Management of the use of the Trails as well as the Trail Head, ensuring that riders are satisfied with their experience.</li> <li>• Responsibility for coordinating potential closures of certain segments from time to time. Closures may arise due to poor weather conditions and/or when HQ Plantations are undertaking harvesting or other operational activities. Further, the operator/s will be responsible for closing the trail network, or certain segments, when fire management activities are underway by QPWS or the Girringun Rangers.</li> <li>• Responsibility for engaging and communicating with stakeholders as and when required. For example, the operator/s should be regularly engaging with HQ Plantations and QPWS to minimise any potential impacts of the Trails or mountain bikers on harvesting or fire management activities.</li> <li>• Whilst riders will be ultimately responsible for their own safety, the operator/s will be responsible for ensuring that the trail network is safe for mountain bike riders. For example, this may include removing any debris from the Trails.</li> <li>• Key point of contact for any emergency related activities related to the Trails, such as medical emergencies.</li> <li>• Responsibility for human resources management for staff to support the operation and maintenance of the Trails.</li> </ul>
<b>Marketing and Business Development</b>	<ul style="list-style-type: none"> <li>• Responsibility for marketing and advertising the Trails to potential visitors. As previously outlined in Chapter 3, mountain bikers rely more on word of mouth, social media and events, rather than traditional promotion channels and research avenues.<sup>139</sup> Further, given the growing reputation of north and far north Queensland in mountain biking, this may be able to be undertaken with the support of tourism advocacy bodies such as CCT or TTNQ.</li> <li>• Responsibility for seeking commercial sponsorships and partnerships with local businesses in Cardwell and the Cassowary Coast, generating revenue to offset the operational and maintenance costs. Further detail on the revenue generation opportunities is outlined in Section 7.7.</li> </ul>
<b>Transport Access</b>	<ul style="list-style-type: none"> <li>• Provision and maintenance of transport access to the Trails (e.g. shuttle access roads for the shuttle services or emergency vehicles when an injury occurs that requires medical attention).</li> <li>• Provision of access to the trail network and supporting infrastructure for events, as this will generate further exposure for the Trails and attraction visitors that may not otherwise visit Cardwell.</li> </ul>

### 7.3.2 Objectives for the Trails

As demonstrated in Figure 42, there are six key objectives for the operational and maintenance model of the Trails. The operational and maintenance model for the Trails should be designed to ensure these objectives can be achieved through day-to-day operations. Several of these objectives are broadly aligned with the problems and opportunities identified in the ILM (see Figure 22) and were developed in collaboration with members of the Council's project team.

<sup>139</sup> Department of Transport and Main Roads (2022). *Bike Tourism in Queensland – Supplementary Report: Mountain Biking*. Accessed at <https://www.tmr.qld.gov.au/Travel-and-transport/Cycling/bike-tourism>



Figure 42: Objectives for the Operational and Maintenance Model of the Trails

'World Class Trails' is one of the most critical objectives for the Project and will impact the achievement of the remaining five key objectives. A world class trail network, that is well maintained, is critical to attract tourists and mountain bikers to visit and stay in the region. The Trails must also be distinctively differentiated from other trail networks in north and far north Queensland, insofar as they must have a clear appeal or characteristics that will specifically attract riders to travel to visit them.

The Trails must also be able to operate in a financially and environmentally sustainable manner, seeking to ensure that the revenue generated through the Trails' core service offerings offsets the operational and maintenance costs. The potential environmental impacts of the Trails must also be able to be managed in accordance with state and national legislative requirements.

The operational and maintenance model must also ensure that the culture and heritage of the Girramay Peoples is recognised and promoted throughout the Trails in a meaningful manner. As outlined in Chapter 4, Girramay RNTBC has indicated their interest to be involved in the future operation and/or maintenance of the Trails and to actively participate in the development of new service offerings that may be required to support the Trails. In turn, the Girramay Peoples are eager to pursue new business, employment and training opportunities that will enable them to support and grow their community, offer incentives for their community members to remain in the region and to actively contribute to a more vibrant and resilient Cardwell community.

Importantly, the Trails must attract new and repeat visitors to stay longer and spend more in Cardwell, as this is critical to generating economic development and diversifying the local economy and employment base. Further, the attraction of visitors to Cardwell will play a key role in developing a strong brand and reputation for mountain biking, which will reinvigorate Cardwell's economy and create new employment opportunities in the tourism sector. As such, the Trails' operational and maintenance model must ensure that the visitor experience is high quality and able to attract new and repeat visitors to Cardwell.

## 7.4 Situational Analysis

A situational analysis was undertaken on comparable mountain bike trails and parks in Australia and New Zealand to identify the ownership, operational and maintenance models of each, as well as the key revenue streams used to offset the operational and maintenance costs. Figure 43 presents the location of these comparable mountain bike trail networks.



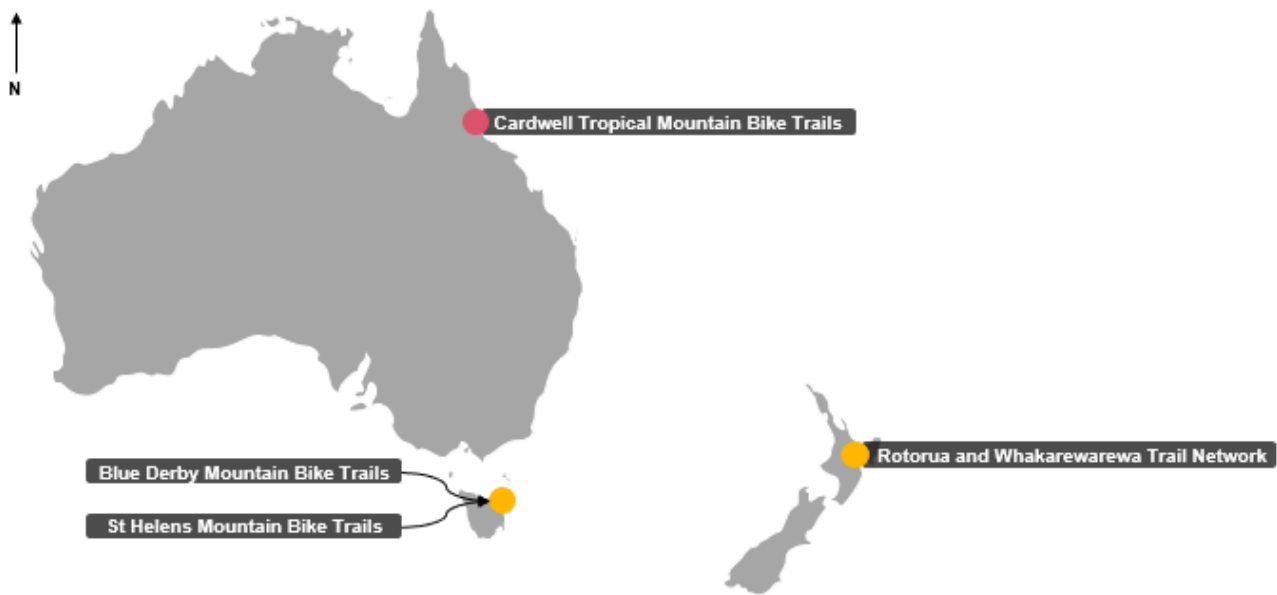


Figure 43: Comparable Mountain Bike Trails and Parks

#### 7.4.1 Blue Derby

As previously outlined in Chapter 4, the development of Blue Derby was a joint initiative between the Dorset Council and the Break O'Day Council, with the Federal Government providing \$2.5 million of funding to support the construction of Stage 1. The Dorset Council owns and operates the trail network, leasing the trail areas from the Tasmanian Government and a commercial plantation operator. The operations and maintenance of the trail network is completed through a dedicated team of rangers and trainees that are employed by the Dorset Council. Since its opening in 2015, the operations team has grown to five FTEs, some of whom were initially provided school-based apprenticeships or traineeships. Dorset Council is also responsible for the brand and social media of Blue Derby.

Shuttle services at Blue Derby are provided by a range of private sector operators and non-council owned organisations, some of whom are 'endorsed' by Blue Derby. Dorset Council also implements a sponsorship model with commercial partners, which partially offsets the costs to operate and maintain the trail network.

The complementary offerings in Derby, such as accommodation, food and beverage, are largely provided by private sector proponents that were organically attracted to the town and the various commercial opportunities borne from increased visitation. Within the first three months of Blue Derby opening, two cafes opened, and a bike hire shop and shuttle services quickly followed. The hotels in Derby and nearby towns also experienced a significant uplift in visitors, with several new accommodation offerings opening in the town since the opening of Blue Derby. Further detail on the success of Blue Derby is outlined in Chapter 4.

#### 7.4.2 St Helens Mountain Bike Trails

The St Helens Mountain Bike Trails are a network of mountain bike trails located in north-east Tasmania, approximately one hour east of Blue Derby. The St Helens Mountain Bike Trails include two primary mountain bike trails:

- St Helens stacked loops feature 66km of trail made up of 10 loops of varying length and difficulty, five descents, and a town link, which is a shared use trail for pedestrians and riders

- Bay of Fires Trail is a 42km adventure trail that starts at Poimena on the Blue Tier and finishes at Swimcart Beach.<sup>140</sup>

Break O'Day Council secured grant funding from the Tasmanian and Federal Governments to construct the two primary mountain bike trails. Break O'Day Council owns and manages the trails, with a dedicated team of FTEs conducting day-to-day maintenance activities. Similarly to Blue Derby, the majority of complementary offerings are provided by private sector proponents and non-council owned organisations. For example, Break O'Day Council undertook a market tender process in July 2021 to procure a proponent to operate the Flagstaff Trailhead.<sup>141</sup>

Break O'Day Council also employs an 'ambassador program', which is essentially a commercial sponsorship program that provides financial contribution to support the maintenance and development of the trails.

#### 7.4.3 Rotorua and Whakarewarewa Trail Network

The Rotorua and Whakarewarewa Trail Network features 220km of bike trails and is located to the southern outskirts of Rotorua, New Zealand. The ownership and operational model for the Rotorua and Whakarewarewa Trail Network is unique. The Rotorua Trails Trust, a non-profit organisation, manages and oversees the development and maintenance of the trails. The Trust is made up of representatives from the Rotorua District Council, local mountain biking clubs, and other stakeholders, and works closely with landowners and key stakeholders.

The Trust consists of staff, 'adoptees' and volunteers. Staff are hired to operate, maintain and manage the trail network, adoptees are people who have adopted specific trails and are committed to maintaining them, and volunteers are residents and visitors who attend working bees and undertaken occasional trail maintenance work.<sup>142</sup> Ultimately, the Trust is responsible for the upkeep and development of the trail network. As such, the Trust assists with the coordination of volunteers and volunteer working bees, as well as the various off-road bike clubs. To offset the costs associated with these activities, the Trust seeks funding, sponsorships, donations and contractual support.

Complementary offerings to the Rotorua and Whakarewarewa Trail Network are largely provided by private sector proponents. A 'Qualmark' grading system is used for operators and accommodation providers, which is New Zealand Tourism's official quality assurance organisation.

### 7.5 Ownership Model Analysis

Ownership of the proposed Trails is expected to take one of three forms, including government, the private sector or local stakeholder/s (see Figure 44). As previously outlined in Section 7.4, local and state government ownership is commonly implemented at comparable mountain bike trails and parks in Australia and internationally.

There are various considerations and impacts associated with each potential owner of the Trails. For example, a private sector owner of the Trails could require a higher return on the investment and is likely to implement a different operational and maintenance model, in comparison to a government owner. Further, the ownership model is expected to evolve over time as visitation and revenue generation improves and the Trails become financially sustainable. The potential ownership structures that have been considered are presented in Figure 44.

<sup>140</sup> St Helens Mountain Bike Trails (2019). *Industry Toolkit 2019*. Accessed at <https://www.bodc.tas.gov.au/wp-content/uploads/2018/07/St-Helens-MTB-BODC-Tool-Kit-2019-WEB.pdf>

<sup>141</sup> St Helens Mountain Bike Trails (2019). *Expression of Interest – New Commercial Opportunities Flagstaff Trailhead*. Accessed at <https://www.bodc.tas.gov.au/wp-content/uploads/2018/06/EOI-New-Commercial-Operations-Flagstaff-July-2021-FINAL.pdf>

<sup>142</sup> Rotorua Trails Trust (n.d.). *About the Trust*. Accessed at <https://www.rotoruatrailstrust.co.nz/about-us>

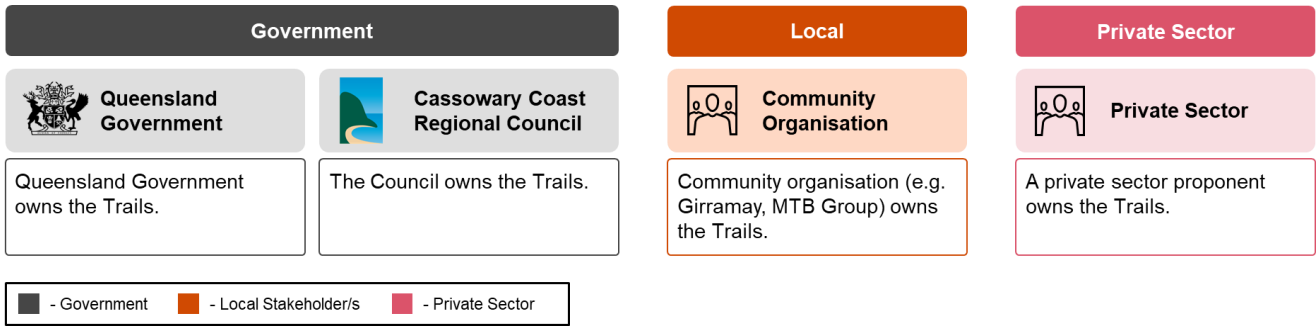


Figure 44: Potential Owners of the Trails

Each potential ownership model was qualitatively assessed to identify the key advantages and disadvantages, given the core objectives and requirements of the Trails. This assessment informed the suitability of each model for the early ownership of the Trails.

The qualitative assessment was then followed by a multi-criteria assessment (MCA) to further refine the options and to identify the preferred ownership model for the Trails. The outcomes of this two-staged approach has been outlined in further detail in Section 7.5.5.

7.5.1 Suitability of Ownership Models

Table 24 summarises the key advantages and disadvantages that are associated with each potential ownership model for the Trails in the early years of the Project. This assessment was designed to inform the suitability of the ownership model of the Trails, considering the core objectives and requirements in the initial years of operations.

Table 24: Advantages and Disadvantages of Potential Owners

Owner	Advantages	Disadvantages	Suitability	Rationale
<b>Queensland Government<sup>143</sup></b>	<ul style="list-style-type: none"> <li>• De-risks the Trails for potential operators</li> <li>• May provide streamlined access to funding</li> <li>• Strong understanding and streamlined process to obtain environmental approvals and land tenure agreements</li> <li>• Experienced in the delivery and ownership of community assets</li> <li>• Greater financial capacity to own the Trails</li> <li>• Queensland Government has an established and transparent governance structure</li> </ul>	<ul style="list-style-type: none"> <li>• Exposes the Queensland Government to ownership risk</li> <li>• Queensland Government may not share the same strong understanding of the Trails or the stakeholder's objectives, owing to not being situated in Cardwell</li> <li>• May be misaligned with the Queensland Government's priorities across the state</li> <li>• May result in longer approval and commitment timeframes</li> <li>• May not result in the level of local economic and social impact as with other models</li> </ul>	Yes	The Queensland Government may be a suitable owner of the Trails given their experience in the ownership of comparable community assets, and considering their financial capacity to own such an asset. However, the Queensland Government may not share the same understanding of stakeholder objectives compared to other potential owners and is expected to have other competing priorities and projects considerations.

<sup>143</sup> The advantages and disadvantages from Queensland Government ownership may slightly vary between departments, however, is not anticipated to significantly change.

Owner	Advantages	Disadvantages	Suitability	Rationale
<b>CCRC</b>	<ul style="list-style-type: none"> <li>De-risks the Trails for potential operators</li> <li>Strong understanding of the community and stakeholder's objectives</li> <li>Committed to the Trails, having progressed it from the Feasibility Report</li> <li>Established relationship and trust with the Girramay People, and commitment to showcasing and protecting cultural heritage</li> <li>Optimises the community and economic benefits from the Trails</li> <li>Provides some access to funding</li> <li>Commitment to local employment and training</li> <li>Strongly aligned with the Council's strategic priorities</li> <li>Council has an established and transparent governance structure</li> <li>Some financial capacity to own the Trails</li> </ul>	<ul style="list-style-type: none"> <li>Exposes the Council to ownership risk</li> <li>May introduce competing project and funding priorities</li> <li>Not viewed as Council's core business</li> <li>Significant capital commitment for the Council</li> </ul>	Yes	<p>The Council may be a suitable owner of the Trails given their key role in the Project since its conception in 2019. Further, the Council has a strong and trusted relationship with the Girramay Peoples and other stakeholders, and has a clear understanding and support for the objectives and priorities for the Project.</p> <p>Notwithstanding the inherent ownership risks of the Project for Council, it is expected that Council will be well positioned to deliver the sought after economic and social benefits identified.</p>
<b>Community Organisation</b>	<ul style="list-style-type: none"> <li>Strong understanding of the community and established relationship and trust with the Girramay People</li> <li>Strong understanding of the community and key stakeholder's objectives</li> <li>Expected to optimise the community benefits arising from the Trails</li> <li>Commitment to local employment and training</li> </ul>	<ul style="list-style-type: none"> <li>Challenges to secure initial capital funding</li> <li>Limited access to ongoing funding streams</li> <li>Volunteer organisations experience challenges with long term retention of key personnel and experience</li> <li>Requires time to mature as an organisation and to develop skills and capabilities</li> <li>Introduces greater liability and approvals risk for regulatory and stakeholder organisations</li> <li>Lower financial capacity to own the Trails</li> <li>Membership-based and difficulty in establishing a skills-based board</li> </ul>	No	<p>A community organisation is unlikely to be a feasible owner of the Trails in the short term due to the lower financial capacity and comparatively limited access to initial and ongoing capital funding support. Community organisations generally experience challenges in membership retention and have limited financial capacity, and may not have the necessary skills or experience to own the Trails. However, community organisations will be a key stakeholder to the Trails' and may organise events for riders to participate in.</p>

Owner	Advantages	Disadvantages	Suitability	Rationale
<b>Private Sector Proponent</b>	<ul style="list-style-type: none"> <li>• Likely to have the necessary skills and experience to own the Trails</li> <li>• Expected to optimise the commercial returns of the Trails and to facilitate growth in supporting services</li> <li>• May provide access to complementary services, attractions and offerings from the outset of the Trails operations</li> </ul>	<ul style="list-style-type: none"> <li>• Uncertain demand of the greenfield project may dissuade potential private sector operators or investors</li> <li>• Commercially focused and will prioritise commercial returns over economic benefits for Cardwell and the Cassowary Coast</li> <li>• May not provide local training and employment opportunities</li> <li>• May not achieve all the objectives for the Trails</li> </ul>	No	A private sector proponent is not expected to be a suitable owner of the Trails. While a private sector operator has a higher likelihood of developing a commercially sustainable project, the purely commercial focus is unlikely to align with the objectives of the Trails and may not result in the targeted social and economic benefits to the surrounding community.



Based upon this qualitative assessment, the Queensland Government or the Council were identified as the most suitable potential ownership models for the Trails in the early years of the Project. This was primarily due to the following key factors associated with a Government owned model:

- Established governance and operating structures
- Greater access to initial, and ongoing, capital funding
- Established relationships and processes to address land tenure and approval requirements
- Commitment to achieving social and economic outcomes
- Experience owning and delivering comparable projects.

This is aligned with the approach implemented for Blue Derby and the St Helens Mountain Bike Trails, and has been proposed by the Mackay Regional Council for the Pioneer Valley Mountain Bike Trails project.

### 7.5.2 Multi-criteria Assessment

Following completion of the initial qualitative assessment, an MCA was undertaken to validate the preliminary findings and to identify a preferred ownership model for the Trails. The MCA used the six key objectives outlined in Figure 42 as equally-weighted criteria, and the scoring scale presented in Figure 45.



Figure 45: MCA Scoring Scale

Table 25 presents the outcomes from the MCA. This assessment was confirmed in a workshop with members of the Council's project team.

Table 25: Ownership Model MCA

Objective	Queensland Government	CCRC	Community Organisation	Private Sector
World Class Trails	3	3	3	4
Sustainability	3	3	2	4
Economic Growth and Diversification	4	4	3	2
Employment and Training Opportunities	3	4	3	2
Cultural Heritage	3	4	4	2
Visitation	2	3	2	4
<b>Total Score</b>	<b>18</b>	<b>21</b>	<b>17</b>	<b>18</b>
<b>Rank</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>2</b>

The MCA ranked a Council owned model as a preferred ownership model for the Trails. This is largely driven by the Council's:

- Clear understanding of the objectives of the Trails and its ability to deliver the social outcomes desired

- Ability to generate economic development and diversification through the Trails
- Strong and trusted relationship with the Girramay Peoples and the Cardwell community
- Demonstrated commitment to local employment and training.

The Council also has access to potential capital and ongoing funding support and has a comparatively greater financial capacity to support the initial years of operation, as visitation and expenditure in Cardwell increases. Council's ownership also partially de-risks the Project for potential operator/s and future investors. Council also has an existing relationship with HQ Plantations, which will be important in supporting the establishment of an agreement regarding trail usage and interaction with HQ Plantation's commercial plantations.

The private sector and Queensland Government ownership models were ranked equal second. A private sector owner is likely to have the experience and skills necessary to establish world class trails that can attract visitors and operate on a financially sustainable basis. However, a private sector owner would be expected to prioritise the commercial return of the Trails over the potential economic benefits and local employment opportunities for the region, which does not align with the core objectives for the Trails. The Queensland Government would prioritise economic growth and diversification in Cardwell over the commercial returns of the Trails. However, the Queensland Government would be anticipated to have other projects and priorities that may ultimately reduce the level of resources and time committed to the Trails in Cardwell. Further, the Queensland Government is unlikely to have the same level of understanding of the local community requirements and objectives as the Council, and therefore may not be as effective in delivering the desired value to the community.

A community organisation was ranked fourth, as such organisations are unlikely to have the necessary financial capacity or experience to own the Trails in the short to medium term. Whilst a community organisation will be committed to local employment and training, they are unlikely to have the necessary skills and capabilities to own, operate and maintain high quality, world class trails.

### 7.5.3 Ownership Risk Retention

In completing the Ownership Model Analysis, and through consultations with the Council, it was identified that the Trails do not align with the Council's 'core business'. Specifically, concerns were raised that ownership of the Trails may result in the Council retaining the ongoing obligation to ensure the Trails' long term viability and meet ongoing capital requirements to support growth of the Trails (collectively referred to as 'ownership risk'). These activities may detract from the Council's time and resource commitments in other key areas and reduce the allocation of future capital to other key infrastructure or community projects. As such, the long term ownership of the Trails may not be best placed with the Council.

To address these potential concerns, the following considerations have been identified in relation to the Council's retention of the ownership risks associated with the Trails:

- **Separate Ownership and Operating Models** – A clear segregation between the ownership model and operational and maintenance model is expected to be required in the medium to long term, to the extent that the key responsibilities of each are held by different organisations and stakeholders. Ultimately, this would enable the owner to delegate the key operational activities to an appointed operator. However, the owner may have to underwrite or subsidise the appointed operator in ramp up period of the agreement and the ultimate responsibility for the Trails will remain with the owner. The several mechanisms that may be implemented to achieve this are outlined in further detail in Section 7.5.4.
- **Evolution of Ownership** – Once the Trails are operating on a financially sustainable basis, there may be an opportunity for the Council to transfer the ownership risks of the Trails wholly or partially to another party that has the capacity and appetite. There are several mechanisms that could be implemented to achieve this. However, it is most likely to occur by granting of a lease or licence over the Trails' infrastructure and assets, or through a potential divestment of the Trails to a commercial operator or community organisation. This concept has been explored further in the following section.

### 7.5.4 Evolution of Ownership

The risks (and rewards) associated with ownership of the Trails may be transferred from the Council in the medium to long term once the Trails are established and operating on financially sustainable basis. The timing and form of this transfer

should be considered with the operational and maintenance model that is implemented for the Trails. The two primary options that may be considered to transfer ownership of the Trails are as follows:

- Contractual Arrangement (e.g. lease or licence of the Trails)
- Divestment of the Trails.

### Contractual Arrangement

A contractual arrangement (for example, lease or licence of the Trails) may be implemented by the Council to transfer the ownership risk of the Trails to a third party. The extent of risk transfer from the Council to a third party would be determined through negotiations. However, it is expected that, at a minimum, the responsibility for operating the Trails would be transferred to the third party. Under this contractual arrangement, the Council would be able to retain legal right to the Trails' underlying assets and would have the ability to terminate the arrangement to the extent that the contractual conditions are not met. Subject to the financial performance of the Trails and the contracting party, the Council may be required to underwrite or subsidise the operator in the ramp up period of the agreement, or seek to extract a financial return (e.g. lease or licence fee) under the arrangement in the instance of strong financial performance. This return, however, would be subject to negotiation and would need to be determined with respect to the long term financial sustainability of the Trails.

An option that may be considered by Council to implement this type of arrangement, is through a **Council-owned (independently operated) entity** (the Entity). Under this structure, the Entity would be wholly owned by the Council, but would be governed by an independent Board of Directors. Specific consideration for the requirements of the *Local Government Act 2009* and other applicable legislation would be required. However, it is expected that the Board would be comprised of a blend of key stakeholder and Council representatives, in addition to representatives that bring strong commercial capabilities and understanding. The Entity would be established with the primary purpose of retaining the ownership risks of the Project, which would be achieved through a lease or licence of the Project assets from the Council to the Entity. The structure of this potential contractual arrangement has been displayed in Figure 46.

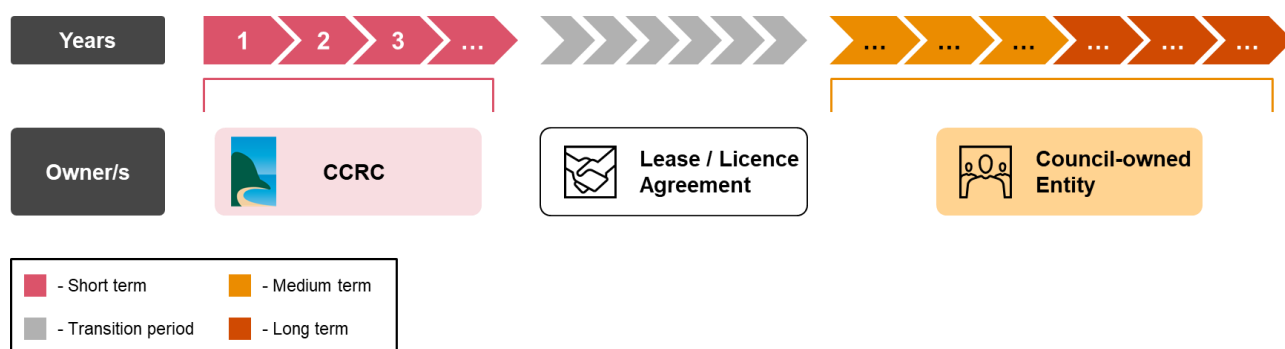


Figure 46: Evolution of Ownership

The Entity is expected to be able to dedicate greater time and resources towards the Trails, ensuring that the roles and responsibilities of the owner are fulfilled. This will include overseeing one or multiple operator/s, interfacing with key stakeholders and managing risks, liabilities and approvals requirements associated with the Trails. Further, the Entity would be responsible for implementing the commercial model, ensuring that the financial sustainability of the Trails is balanced with the potential economic and social benefits that are expected to be created.

While a Council-owned entity model is expected to be the preferred entity under this arrangement, the Council may also undertake a market tender process, or similar investigations, to identify other organisations that are suitable to hold the licence or lease. Organisations that may be suitable for this role include commercial tourism operators and/or community organisations. Importantly, these alternative organisations must be able to deliver the objectives for the Trails.

### Divestment of the Trails

The Council may seek to divest their ownership of the Trails as an alternative to contractually transferring the ownership risk associated with the Project. This divestment would be subject to the specific conditions associated with approvals and land

tenure provisions, and under relevant legislation. In the instance that these conditions are satisfied, the Council may approach the market to seek a potential buyer (or a long term lessee) who is willing to pay an appropriate market rate for the Trails.

As with the contractual arrangements, the terms of the transaction, and the value applied to the Trails’ assets would be subject to negotiation. Under this approach, the Council would permanently transfer all ownership risk to the transacting party, and would have no further involvement in the Trails, other than through the standard regulatory and planning capacity. Consequently, the Council would no longer control or have influence over the Trails. As such, the Council would rely on the new owner to ensure that the Trails’ objectives are delivered into the future, which there is no guarantee of.

7.5.5 Summary

Based on the ownership model analysis presented in this section, the Council has been identified as the preferred owner of the Trails in the short term. Notwithstanding this, concerns were expressed with retaining the inherent ownership risks of the Trails in the long term, as it may be perceived to detract time and resources from the Council’s ‘core business’ and responsibilities. The separation of the ownership model from the operational and ownership model will partially mitigate this risk. Further, the Council may also be able to issue a lease or licence of the Trails, or divest their ownership, to an independent entity in the future.

The ownership model analysis’ outcomes are summarised in Figure 47.

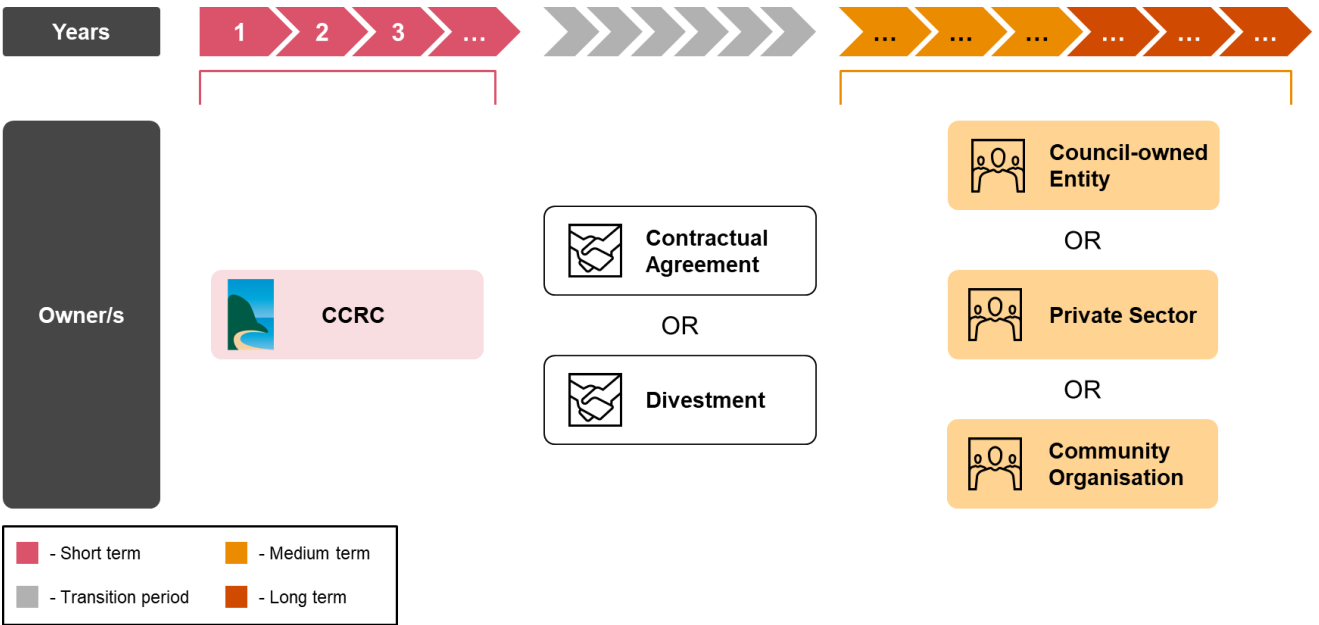


Figure 47: Summary of Ownership Model Analysis

7.6 Operational and Maintenance Model Analysis

This section presents the operational and maintenance model analysis that has been undertaken to determine the preferred operator/s of the Trails, which has been assessed separately to the ownership model due to the different roles and responsibilities associated with each.

7.6.1 Potential Operators

The five potential operator/s of the Trails that were identified, and informed by stakeholder consultations and the situational analysis, are presented in Figure 48. Due to the different capabilities that may be required to provide the core services outlined in Section 7.3, the Trails may also be operated by a combination of these operators.

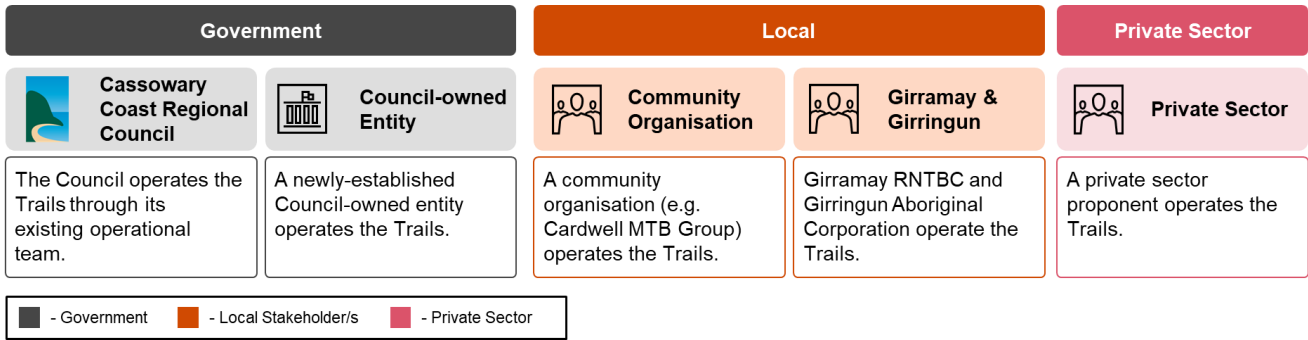


Figure 48: Potential Operators of the Trails

In alignment with the ownership model analysis presented in Section 7.5, the qualitative advantages and disadvantages of the Trails’ potential operators were identified and assessed over a short, medium and long term perspective to determine their relative suitability.

7.6.2 Suitability Assessment

Table 26 summarises the advantages and disadvantages of the potential operator/s of the Trails over the short, medium and long term. Similar to the ownership model, the operational and maintenance model may evolve over time as the Trails become more financially sustainable and as visitation increases, with further detail outlined in Section 7.6.3.

Table 26: Advantages and Disadvantages of Potential Operators

Owner	Advantages	Disadvantages	Suitability as Lead Operator			Rationale
			Short Term	Medium Term	Long Term	
CCRC	<ul style="list-style-type: none"> <li>No ramp up time required for the Council to commence operations due to existing internal capabilities</li> <li>Established training and employment opportunities</li> <li>Comparatively lower cost option due to retention of risk and existing resources</li> <li>Council retains ultimate control and can protect asset value</li> <li>Aligned with the approach implemented at comparable projects (for short to medium term operations)</li> <li>Potential to leverage local tourism organisation's capabilities through existing Council channels</li> </ul>	<ul style="list-style-type: none"> <li>May conflict with the Council's medium and long term operational priorities</li> <li>Perceived to not be the core business of local government</li> <li>Unlikely to be as efficient as private sector</li> <li>Potential amalgamation of the ownership and operational functions may introduce difficulties in the separation or transfer of either role in the future</li> </ul>	Yes	No	No	<p>The Council may be suitable to operate and maintain the Trails in the short term, particularly as the Project is established and gains interest and visitation. In the initial years of operations, visitation may not be high enough for the Trails to operate on a financially sustainable basis. Therefore, to ensure the Project objectives have the greatest chance of being achieved, the Council is the most suitable to lead and oversee the initial years of operations.</p>



Owner	Advantages	Disadvantages	Suitability as Lead Operator			Rationale
			Short Term	Medium Term	Long Term	
<b>Council-owned Entity</b>	<ul style="list-style-type: none"> <li>Potential access to existing resources of CCRC on a lease or hire arrangement</li> <li>Potential access to existing support services, such as tourism promotional services through CCRC</li> <li>Independent skills-based board with community representation providing a strong coverage of key stakeholder groups</li> <li>Agile and separate decision making from CCRC</li> <li>CCRC still retains some oversight and involvement in the delivery of the operations through Board representation</li> </ul>	<ul style="list-style-type: none"> <li>Ramp up time will be required</li> <li>Will require industry and technical specialists to fill Board roles and provide technical support to the Project (at a cost)</li> <li>May not have sufficient skills required to initially operate Trails</li> <li>Vested interests from local businesses may be prioritised over long term vision</li> <li>Depending on the Ownership Model adopted for the Project, clear segregation of the Ownership and Operational roles would need to be clearly defined, to ensure these are managed appropriately</li> </ul>	No	Yes	Yes	A Council-owned entity may be suitable to operate and maintain the Trails in the medium and long term. A council-owned entity will require time to establish itself and is unlikely to be mature enough to operate the Trails from commencement. However, once the Trails are established and further information on market demand is known, a council-owned entity is expected to be a suitable operator. Further, the entity is expected to operate with greater efficiency and may dedicate greater time and resources to the operation of the Trails.
<b>Community Organisation</b>	<ul style="list-style-type: none"> <li>Expected to optimise social and economic impact over commercial outcomes</li> <li>Expected to provide greater training and employment opportunities for local staff</li> <li>High likelihood of achieving many of the key objectives of the Trails</li> <li>Strong understanding of the community's desires</li> <li>Provides an opportunity for CCRC to influence operations</li> </ul>	<ul style="list-style-type: none"> <li>Expected to face challenges in terms of financial sustainability and ensuring the longer term viability of the Project</li> <li>Retention of skilled personnel</li> <li>Ramp up time required</li> <li>Unlikely to have sufficient skills and capacity required to operate the Trails</li> <li>Vested interests from local businesses may be prioritised over long term vision</li> </ul>	No	No	No	A community organisation is not expected to be suitable as an operator of the Trails. While a community organisation is likely to prioritise the delivery of social and economic benefits to the local community, its ability to attract and retain the key skills and capabilities required for operating and maintaining the Trails and for achieving financial sustainability is low. Furthermore, as most community based organisations are volunteer based, ensuring adequate time is committed to the Project will be an ongoing challenge.

Owner	Advantages	Disadvantages	Suitability as Lead Operator			Rationale
			Short Term	Medium Term	Long Term	
<b>Girramay RNTBC</b>	<ul style="list-style-type: none"> <li>Ensures protection and recognition of cultural heritage</li> <li>Provides training and employment opportunities</li> <li>Focus on economic and social impact over commercial outcomes</li> <li>High likelihood of achieving many of the key objectives of the Trails</li> <li>Leverages the cultural offerings to clearly differentiate the Trails</li> <li>Provides synergy opportunities with complementary offerings</li> </ul>	<ul style="list-style-type: none"> <li>Only expressed an interest in operating components of the Trails' core or complementary service offerings, rather than the full Project</li> <li>Unlikely to have sufficient capacity or experience to solely operate the Trails</li> <li>Unlikely to be as efficient as private sector</li> </ul>	No	No	No	Girramay RNTBC is unlikely to be suitable to fill the role of Trail operator and this was expressed in consultations. Girramay has expressed an interest to be involved in components of the Trails, however, will require time to upskill personnel to do so. Importantly, Girramay's involvement will provide significant socio-economic benefits and will clearly differentiate the Trails from other networks in north and far north Queensland.
<b>Girringun</b>	<ul style="list-style-type: none"> <li>Similar to Girramay RNTBC</li> <li>Expands upon existing capabilities within Ranger Program</li> </ul>	<ul style="list-style-type: none"> <li>Only expressed an interest in operating components of the Trails' core or complementary service offerings, rather than the full Project</li> <li>Unlikely to have sufficient capacity or experience to solely operate the Trails</li> <li>Unlikely to be as efficient as private sector</li> </ul>	No	No	No	While Girringun has expressed an interest in supporting the operations and maintenance, they have also indicated that they would not be interested in being the sole/lead operator for the Trails. Girringun has identified that their existing Aboriginal Rangers Program may be expanded to support the maintenance functions. In the immediacy, funding support may be required to expand the program. However, in the medium to long term, the Trails may be able to generate sufficient revenue to offset these costs in partial or whole.

Owner	Advantages	Disadvantages	Suitability as Lead Operator			Rationale
			Short Term	Medium Term	Long Term	
<b>Private Sector Proponent</b>	<ul style="list-style-type: none"> <li>• Leverages private sector operational efficiencies</li> <li>• Reduces risk exposure to CCRC</li> <li>• Could generate competitive tension in a procurement process</li> <li>• Strong market knowledge and experience</li> <li>• Incentivised through commercial return</li> <li>• Provides synergy opportunities with complementary offerings (e.g. private accommodation, F&amp;B)</li> </ul>	<ul style="list-style-type: none"> <li>• May not have a strong understanding of or appreciation for the community's objectives</li> <li>• Commercial outcomes expected to be optimised over economic or social impact</li> <li>• May require a fixed commercial return due to the inherent risk of the Trails</li> <li>• Not expected to be commercially viable from outset</li> </ul>	No	Yes	Yes	<p>Whilst likely to offer the necessary skills and capabilities to operate the Project, a private sector operator is unlikely to present as a viable option in the short term. This is primarily due to the Project not being expected to be financially viable until the medium to long term. Given the project is greenfield and demand is relatively uncertain, a private sector operator may require a fixed or ongoing payment to support the operations and maintenance of the Trails initially.</p> <p>Once the Trails are fully established and demand and visitation increases, it is expected that an opportunity may present to engage a private sector operator at that time, and to develop a commercially attractive arrangement for the owner as well as the operator.</p>

### 7.6.3 Proposed Operational and Maintenance Model

Based on this analysis, and from consultations with key stakeholders, the proposed operational and maintenance model over the different project horizons is presented in Figure 49 and is discussed in further detail below.

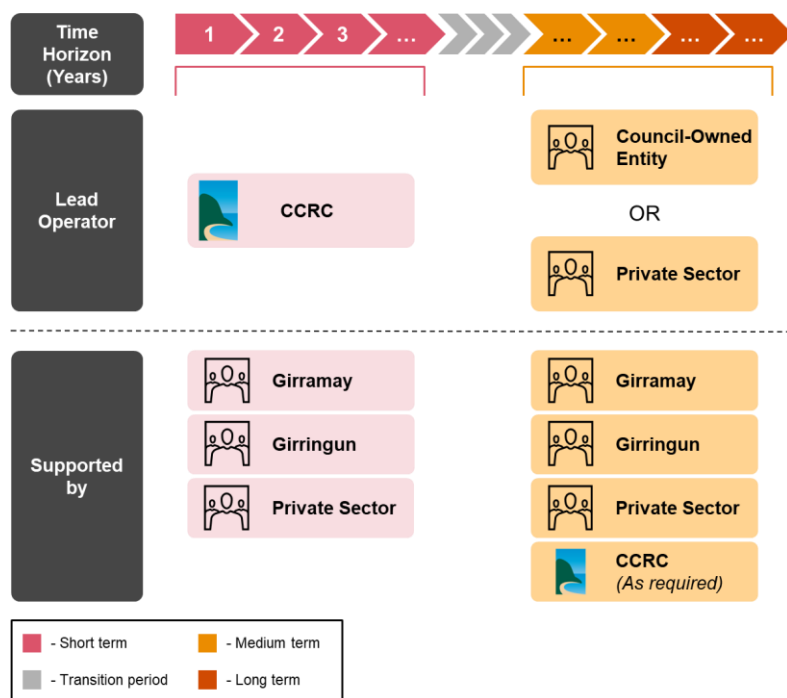


Figure 49: Proposed Operational and Maintenance Model

#### Short Term

In the short term, the Council is expected to be the most suitable operator of the Trails, with the support of Girramay RNTBC and Giringun's Aboriginal Rangers Program. The short term role of the Council in the operation and maintenance of the Trails is critical to achieve the targeted objectives of the Trails.

Compared to other potential operators, the Council has the requisite financial capacity and access to potential funding sources to cover or partly cover the operational and maintenance costs (if required) in the short term. As previously outlined in Chapter 3, time is required to build a strong reputation and brand, and to attract the revenue opportunities that come along with this. These revenue opportunities, which are outlined further in Section 7.7, are anticipated to take five years to develop and wholly offset the operational and maintenance costs.

Outsourcing the entire operations and maintenance of the Trails to a private sector operator from the commencement of operations is anticipated to be comparatively more expensive for the Council and does not guarantee the achievement of the Trails' key objectives. This is borne by the uncertain level of demand for the Trails in the initial years of operations, which exposes private sector proponents to greater risk and, as a result, necessitates a higher payment (return) to operate and maintain the Trails. As such, an insourced model that leverages the existing capabilities of Giringun's Aboriginal Ranger Program is expected to be more affordable for the Council and generate greater local employment opportunities. Further, private sector lead operators will prioritise commercial returns over the potential socio-economic benefits generated by the Trails, which does not align with the service need of the Project outlined in Chapter 4 or the objectives presented in Figure 42. However, the Council may elect to procure a private sector shuttle service operator for the Trails, subject to Girramay RNTBC's preferred involvement in the operations and maintenance of the Trails.

A Council-led operational and maintenance model is also aligned to the approach implemented at Blue Derby, as the Dorset Council was, and continues to be responsible for the operations and maintenance of the trail network. It took approximately three years from the opening of the first tranche of trails at Blue Derby in early 2015 to establish a strong brand and reputation, whereby revenue opportunities began to materialise and rapidly increase. By 2022, Blue Derby

reportedly had a fully self-funded operating budget of approximately \$400,000. The Dorset Council's role in the initial years of operations was integral to achieving this financial self-sufficiency, as they took it from conception through construction and delivery, and into operations. Whilst they were required to fund a portion of the operational and maintenance costs in the initial few years, it quickly grew to a point whereby the revenue opportunities outweighed the operational and maintenance costs. The socio-economic benefits generated from this were and continue to be significant. Over five FTEs are employed at the Trails and the economic activity generated from the Trails is estimated to be approximately \$30 million per annum.

### Medium Term

Once the Trails become financially self-sufficient in the **medium term** (~five years), it is recommended that the Council transfers the 'lead operator' role to an independent entity. This may be achieved through a market tender process, to appoint an appropriately skilled private sector proponent. Alternatively, the Council may seek to transfer the role to the Council-owned entity (discussed in Section 7.5.4). This decision will be dictated by the skills and capabilities of the Council-owned entity, as well as the potential level of market interest in operating and maintaining the Trails.

A competitive procurement process may be used to select the potential operators (private sector or community organisations). Under this approach, it is critical that the requirements and specifications contractually require any operator to professionally maintain the Trails to a world class standard and support the operations of Girramay RNTBC and Giringun, amongst a variety of other important considerations such as economic contributions and local employment opportunities. Importantly, this approach may provide the Council with a variety of options that should be considered further as the Trails mature, and as further information is collected on visitation to the Trails.

Giringun will remain a key stakeholder in the operations and maintenance of the Trails irrespective of whom the appointed lead operator is, as some or all the maintenance activities could be provided through the existing Aboriginal Ranger Program. This could be achieved through additional funding from the Queensland or Australian Government, or through a portion of the revenue generated by the Trails.

At this point in time, Girramay RNTBC is also expected to be prepared and well-placed to support the operation of the Trails through the provision of the complementary offerings (discussed in Chapter 4). The complementary offerings that have been identified for the potential involvement of Girramay RNTBC and the Girramay Peoples includes:

- Operation of a mountain bike shuttle service and/or providing mountain bike hire and repair services to users of the network
- Providing cultural experiences through tours and related events
- Creating artwork features throughout the network of mountain bike trails and operating retail outlets in Cardwell
- Operating hospitality outlets to support the requirements of increased tourist numbers to the region
- Establishing and operating accommodation facilities to support the increased demand from visitors.

Continued engagement with Girramay RNTBC should be undertaken following the Business Case to ensure that their desired involvement in the Trails' operations is achieved. This could be implemented through 'exclusive' complementary service offerings, whereby Girramay RNTBC and/or Giringun are the only permitted or endorsed service providers of a particular offering. This decision should be considered with respect to the capacity and capabilities of Girramay RNTBC and Giringun.

### Long Term

The operational and maintenance model for the Trails is expected to remain largely unchanged from the medium term to the **long term** (10 years plus). At this point in time, the Trails are anticipated to be financially sustainable and self-supported, with the revenue generated from the Trails sufficient to offset the operation and maintenance costs.

### Indicative Roles and Responsibilities

Table 27 contextualises the operational and maintenance model analysis by outlining the indicative roles and responsibilities of key stakeholders. It is noted that some of these roles and responsibilities may vary in practice and will be dependent on the nature of any contractual arrangements agreed between the different parties.

Table 27: Indicative Roles and Responsibilities in the Long term Operational and Maintenance Model

Stakeholder	Role	Responsibilities
<b>Council</b>	<ul style="list-style-type: none"> <li>Ultimate owner of the Project assets</li> </ul>	<ul style="list-style-type: none"> <li>Retains legal ownership of the Trails</li> <li>Contract owner for Operations and Maintenance Contract</li> </ul>
<b>Council-owned entity or private sector operator</b>	<ul style="list-style-type: none"> <li>Contracted Operator and Maintainer</li> <li>Lead Operator of the Trails</li> </ul>	<ul style="list-style-type: none"> <li>Overseeing the maintenance of the Trails to an agreed-upon standard</li> <li>Overseeing general operations of the Trails and Trail Head</li> <li>Implementing the commercial model and responsible for promotion and development of the Trails</li> <li>Interfacing with stakeholders</li> </ul>
<b>Girramay RNTBC</b>	<ul style="list-style-type: none"> <li>Provider of complementary service offerings</li> </ul>	<ul style="list-style-type: none"> <li>Operating a shuttle service</li> <li>Operating ancillary businesses (bike hire and repairs, accommodation etc.)</li> <li>Providing cultural heritage tours and experiences</li> </ul>
<b>Girringun</b>	<ul style="list-style-type: none"> <li>Trail maintenance support through the Aboriginal Rangers Program</li> </ul>	<ul style="list-style-type: none"> <li>Maintaining the trail network to an agreed-upon standard</li> <li>Providing training and employment opportunities to Rangers and youth in Cardwell</li> </ul>
<b>Private Sector Proponents</b>	<ul style="list-style-type: none"> <li>Provider of complementary service offerings</li> </ul>	<ul style="list-style-type: none"> <li>Operating a shuttle service</li> <li>Operating ancillary businesses and complementary offerings (e.g. accommodation)</li> </ul>

#### 7.6.4 Operational and Maintenance Workforce and Equipment Requirements

Operations and maintenance requirements are different across all mountain bike trails and network, due to the varying soil types, usage requirements and weather patterns. As such, the requirements of the Trails in Cardwell will be gradually learnt and adapted over time. The following sections outline the indicative workforce and resource requirements that are expected to be required for the Trails.

##### Workforce

The size of the trail maintenance crew will be predicated on the volume of usage and the durability of the soil types. In the **short term**, two or three professionally trained FTEs will be required. In the **medium and long term**, a trail maintenance crew of approximately five FTEs is expected to be required.

These FTEs would be required to be permanently based at the Trails. Ideally, this will be achieved through an expansion of Girringun's Aboriginal Rangers Program. However, if Girringun is unable to commit two or three rangers at the Trails on a full-time basis, the Aboriginal Ranger Program may be able to support the Trails' FTE workforce on a part time or casual basis. Continued engagement will be required with Girringun to confirm the desire to base rangers at the Trails permanently.

Additionally, the Council should explore opportunities to supplement the FTE workforce at the Trails with school or tertiary-based apprenticeships and traineeships. These two programs would provide a pathway into employment for youth in Cardwell and the Cassowary Coast. Further, a traineeship or apprenticeship program may enable the Council to leverage existing employment subsidies through the Queensland or Australian Governments, and it will also mitigate the potential risk of key FTEs leaving without transferring knowledge of the Trails. This will support the long term continuity of the Trails' workforce and lower the operational and maintenance costs. A similar program has been successfully implemented at Blue Derby, whereby traineeships have been provided to local youth and residents. This has led to the permanent employment of many former trainees at Blue Derby.

## Equipment

To maintain a high-quality and world class trail network, a modest investment in equipment will be required at the outset of operations. This includes, but is not limited to:

- 500kg power carrier (motorised wheelbarrow)
- Motorbike/s and work vehicle/s
- Small tools such as specialist rakes, sledgehammers, hand saws, slings
- Chainsaws.

An initial outlay of approximately \$160,000 (FY23, Real) is anticipated to be required to purchase this equipment. From therein, small investments will be required each year and periodically to maintain and replace this equipment. These equipment requirements will need to be confirmed in subsequent phases of the Project. Additional equipment may also be required in future years, as the workforce increases and as usage of the Trails grows. Ultimately, this would be dictated by the lead operator at the time.

## 7.7 Revenue Generation

The key direct revenue streams that are expected to contribute to a financially sustainable operational and maintenance model are presented in Figure 50, followed by further detail on each.

There are also a variety of other indirect revenue streams that will be created for local businesses through visitors' 'off-bike' expenditure. This includes expenditure on cultural tours and experiences that could be provided by Girramay RNTBC and First Nations People, food and beverage offerings at local businesses, parking and camping, as well as transportation to and from the Cairns and/or Townsville airports. Further, the Trails could also generate revenue through government grant programs that are designed to support the delivery of community or recreational infrastructure.



Figure 50: Key Revenue Generation Opportunities

**Shuttle service licence fees** may be charged to shuttle service operators that are provided exclusive access to the shuttle roads throughout the Trails. This revenue stream can be used to fund the operational and maintenance costs of the trail network, as well as the additional road maintenance costs arising from increased use of shuttle roads that are currently maintained by QPWS.

This revenue stream would be determined by the number of visitors to the Trails and could be generated by either:

- Providing exclusive access to the road network; or
- Providing overnight shuttle bus parking zones.



Ideally, the shuttle roads will be secured through gates at key points to ensure that access is only provided to approved shuttle service operators. There are a range of benefits from controlling access to the shuttle roads, including reduced risk of collision between private vehicles and riders, and reduced maintenance costs of the road from controlled use. Importantly, this will support the provision of a mountain bike rider-only zone that ensures the safety of riders, whilst also effectively monetising the shuttle road operations.

The proposed shuttle access roads at the Trails in Cardwell are not anticipated to be public roads and thus the Council is expected to be able to charge shuttle service operators for exclusive access to the two access roads. However, if the Council is legislatively unable to charge a licence fee through the provision of exclusive access to the shuttle roads, the Council could provide an overnight shuttle bus-only parking zone for operators. This is aligned with the approach that is implemented at Blue Derby, as Dorset Council was not legislatively permitted to monetise the provision of exclusive road access for shuttle service providers as they are public roads. This should be investigated further in subsequent phases of the Project.

**Shuttle service users' levy** may be charged as a pass-through fee to users who purchase shuttle service passes, and is expected to be one of the most important revenue streams for the Trails. To ensure the implementation of the levy and the pricing parity of shuttle services, the Council should only permit a limited number of shuttle service operators to operate at the Trails. This is anticipated to be one shuttle service operator initially, before ramping up in alignment with demand and the number of visitors to the Trails. The Council should seek to establish an agreement with these operators that specifies a maximum price charged to riders to reduce the risk of shuttle services becoming monopolised through a lack of market competition. A portion of the shuttle pass fee will then be 'passed through' to the Council, effectively acting as a day pass for visitors.

A differentiated pricing model is expected to be required for the Shuttle Service Users' Levy to ensure that local riders (i.e. home address in the Cassowary Coast LGA) are provided cheaper shuttle service passes. This pricing model will be ultimately determined by the private sector operator. However, the Council should seek to implement this through contractual mechanisms or alike.

**Event fees** should be charged to event hosts or clubs that facilitate mountain biking or recreational events at the Trails and require exclusive use of the network for a designated amount of time. Similar to the Shuttle Service User Levy, the Trail operator may seek to include a levy amount within the overarching registration price of each event.

**Commercial sponsorships** are a common revenue stream implemented across the majority of mountain biking trails and parks, whereby businesses pay to be associated with the Trails. As part of this, businesses become a 'bronze', 'silver' or 'gold sponsor of the Trails and, in return, receive promotional marketing on the Trails' social media and website, as well as the trail network itself. The value of commercial sponsorships would be expected to gradually increase over time, as the brand and reputation of the Trails grows and strengthens.

**Council contributions** are expected to be required in the first five years of operations, whilst visitation and expenditure gradually increases. Contributions from the Council would be used to offset the operational and maintenance costs of the trail network, and the associated workforce costs. As the Trails become increasingly financially self-sufficient, the need for Council contributions is expected to ease and dissipate.

**Government subsidies** may be provided by the Queensland and/or Australian Governments to support the employment of rangers through Girringun's Aboriginal Rangers Program, as well as trainees that are provided part-time employment at the Trails. Importantly, this will generate significant direct and indirect socio-economic benefits whilst enhancing the financial sustainability of the Trails' operations and maintenance.

The operator may also seek to implement a **booking platform** that is a central platform for visitors to book accommodation, shuttle service passes and/or complementary offerings, which will generate a commission fee for each booking made. This platform may be implemented from the commencement of the Trails, rather than retrospectively, to capture the first mover advantage. The revenue generated from bookings will be initially small, however will gradually grow as visitation and expenditure increases. Further, a centralised booking platform for all major offerings at the Trails and in Cardwell will be convenient for visitors and will assist those seeking to visit.

**Donations** may also be provided by riders of the Trails. This revenue stream will be optional and can be generated through 'tap to donate' points at key locations throughout the Trails.

Many of these revenue streams were successfully implemented at Blue Derby and St Helens, which were arguably in a worse position than Cardwell at the commencement of operations. The projected revenue generated from most of these revenue streams is outlined further in Chapter 8, *Financial Analysis*.

## 7.8 Summary

This chapter has analysed and identified the preferred ownership and operational and maintenance models at the Trails across the short, medium and long term horizons. This analysis was informed by the stakeholder engagement process and the situational analysis that was undertaken on comparable mountain biking projects. Figure 51 summarises the outcomes of the ownership and operational model analysis.

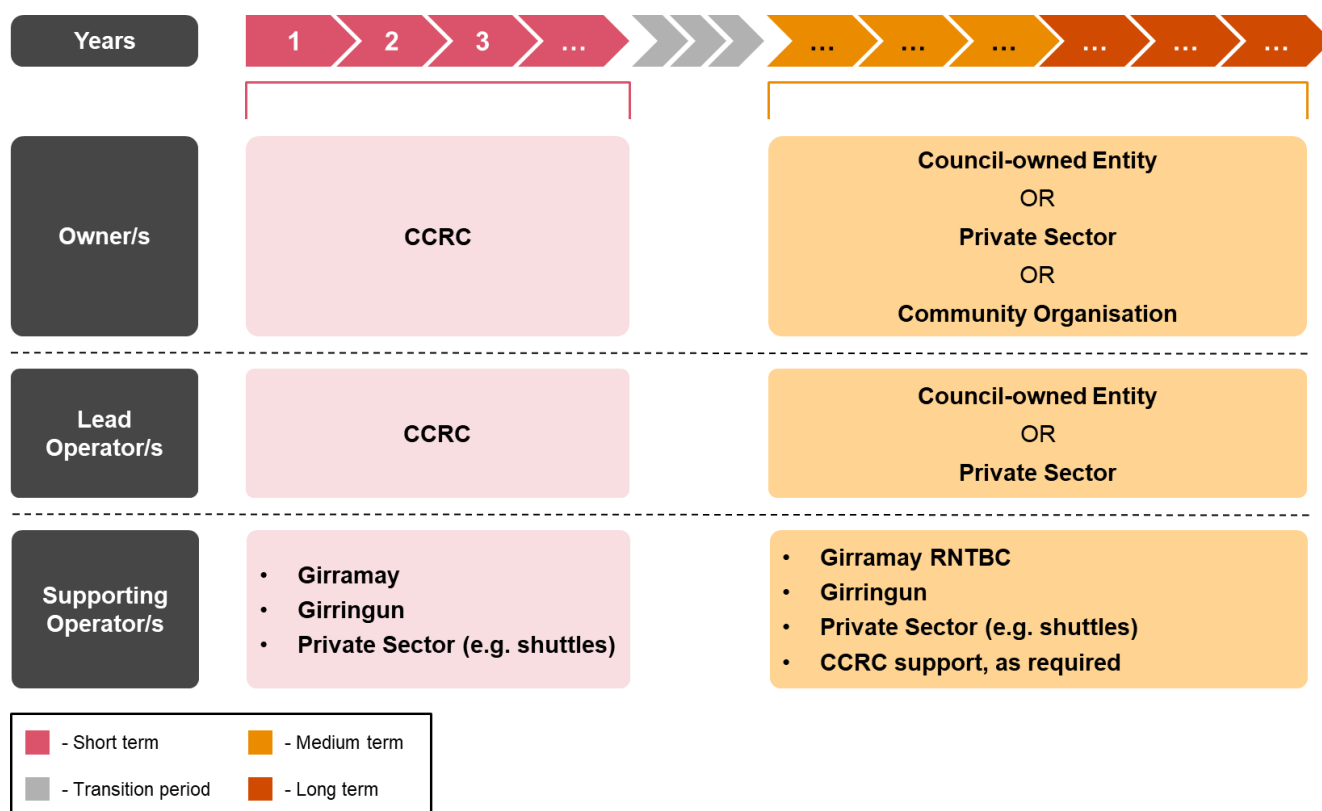


Figure 51: Recommended Ownership and Operational and Maintenance Model over the Short, Medium and Long Term

In the short term, the Council is recommended to retain ownership of the Trails. Due to the Council's concerns with retention of the "ownership risks" associated with the Trails in the medium to long term, the Council may seek to transfer this risk through a contractual arrangement (such as a lease or licence) to a third party. Under such an arrangement, the Council would still retain a legal right to the Trails' infrastructure and would have the right to revoke the lease or licence in the instance of non-performance. Alternatively, the Council may seek to divest their ownership entirely to an independent entity in the future. Where the Council seeks to divest its ownership in the Trails' infrastructure, it also passes on any future control that it may have over the management of the Trails, and importantly the delivery of the potential socio-economic benefits for the community.

In the short term, it is also recommended that the Council leads the operations and maintenance of the Trails. This is necessary as the Council is expected to be best placed to establish the core operations and maintenance model and to meet the costs of these processes whilst revenue and visitation increases. This model is aligned with the approach implemented by local governments in comparable mountain biking trails and networks, such as Blue Derby and St Helens. Giringun's Aboriginal Ranger Program is expected to be integral to the maintenance of the Trails from the commencement of operations. However, further negotiation with Giringun and the respective program funding bodies will be required to confirm funding and the commitment of resources to the Trails. Additionally, the Council may elect to procure a private sector shuttle service operator. In the medium to long term, the Council may seek to transfer the operations and maintenance responsibilities to an independent entity. The procurement of an appropriately skilled private sector proponent

could be undertaken through a market tender process, or the Council may seek to transfer the role to the Council-owned entity.

# 8 Financial Analysis

## 8.1 Purpose

The purpose of this chapter is to determine the financial sustainability of the Trails and estimate the total financial impact to government from an internal financing perspective. This chapter includes:

- Approach
- Demand
- Financial Analysis
- Affordability Considerations
- Summary.

## 8.2 Approach

The financial analysis has been undertaken with reference to the Queensland Government's *BCDF*, Queensland Treasury's *PAF* and the *IAAF*.<sup>144</sup> The analysis has also referred to guidance from other Australian jurisdictions to ensure the analysis represents a best practice approach. The financial analysis provides an assessment of the total financial impact of the Trails on government and focuses on the financial costs from an internal financing perspective (i.e. the net financial impact if it were to be funded and delivered by government, including cashflow implications).

Figure 52 summarises the financial analysis approach.

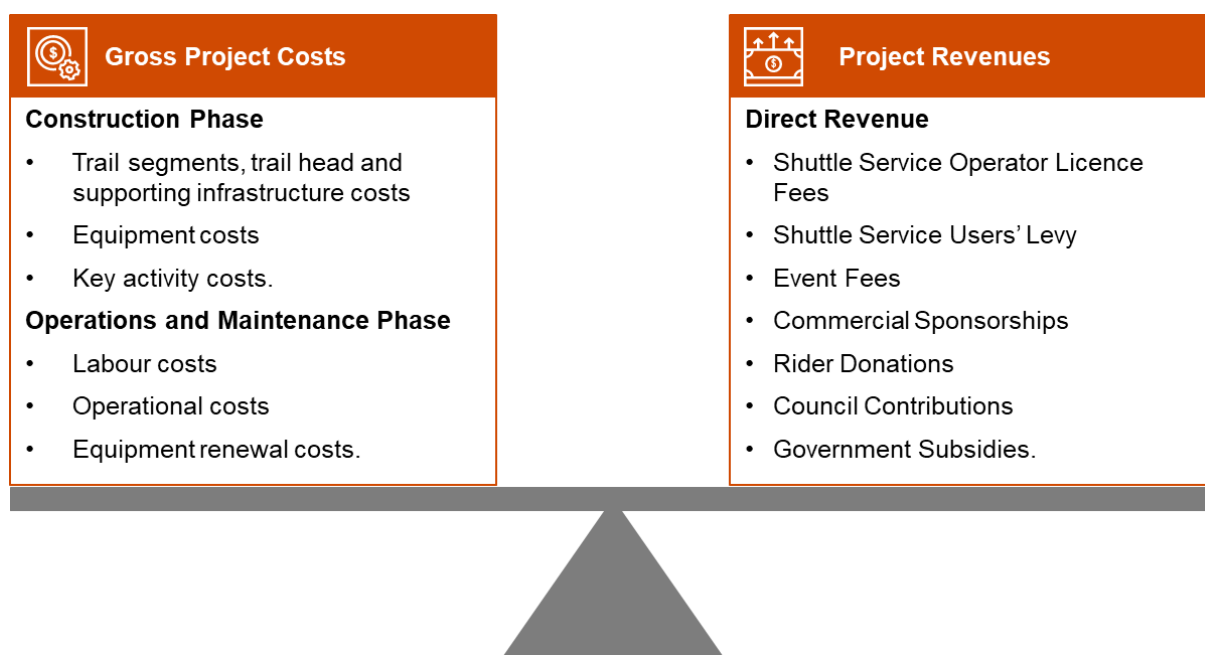


Figure 52: Financial Analysis Approach

<sup>144</sup> IA (2021). *Assessment Framework*. Accessed at <https://www.infrastructureaustralia.gov.au/publications/assessment-framework>

The cashflows modelled in the financial analysis are comprised of capital costs, operating and maintenance costs and revenues associated with the Trails. These cashflows are presented in real, nominal and present value (PV) terms, which are defined as follows:

- Real terms: represents the cost of the Project in today's dollars (Calendar Year [CY] starting 1 January 2023)
- Nominal terms: includes the effect of expected inflation on each forecast cashflow
- PV: represents the PV of a stream of costs or revenue over time, discounted at the appropriate rate.

The cashflows modelled in the financial analysis comprise:

- Capital costs
- Operating and maintenance (O&M) costs
- Revenue.

In undertaking this financial analysis, PwC has made certain assumptions and point-in-time estimates, and has relied on inputs from the Feasibility Report. Therefore, there may be material differences between the estimates and the actual values.

### 8.2.1 Inputs and Data Sources

Key inputs used for the financial analysis, and their sources, are detailed in Table 28.

Table 28: Inputs and Key Sources for the Financial Analysis

Input Assumption	Description	Source
Capital costs	Costs required to plan, design and construct the Trails, based on the concept trail network design and capital cost estimates presented in Chapter 5.	Feasibility Report, escalated to FY23 Dollars.
O&M costs	Costs required to operate and maintain the Trails (inc. equipment replacement costs).	Feasibility Report, escalated to FY23 Dollars.
Revenue	Revenue derived from visitation to the Trails and the proposed revenue streams.	PwC assumptions, informed by stakeholder engagement, desktop research and informal sources.
Demand	Projected number of visitors to the Trails.	PwC assumptions, informed by stakeholder engagement, desktop research and informal sources.

### 8.2.2 Financial Assumptions

Table 29 details the key assumptions and input sources that have been incorporated into the financial analysis. The general approach to these assumptions was confirmed with key project stakeholders.

Table 29: Financial Analysis Assumptions and Data Sources

Input	Assumption	Source
Analysis Start Date	01/01/2023	PwC assumption.
Price Year (Base Year)	FY23	PwC assumption.

Input	Assumption	Source
Period of analysis – delivery	<ul style="list-style-type: none"> <li>Trail design and related activities: 01/01/2024 to 31/12/2024</li> <li>7 Sisters segment: 01/01/2025 to 31/12/2025</li> <li>Lookout Hill segment: 01/01/2026 to 31/06/2026</li> <li>Attie Creek segment: 01/07/2026 to 30/06/2027</li> <li>Other infrastructure: 01/01/2025 to 31/12/2025.</li> </ul>	PwC assumption, informed by the Feasibility Report. This is subject to further analysis in detailed design.
Period of analysis – operations	30 years from the end of the 7 Sisters segment construction – 01/01/2026 to 31/12/2055.	PwC assumption, informed by the Feasibility Report. <sup>145</sup>
Capital costs	Based upon estimates developed in the Feasibility Report.	Feasibility Report.
O&M costs	Based upon the Feasibility Report, stakeholder engagement and targeted industry research.	PwC assumption, informed by the Feasibility Report, stakeholder engagement and targeted industry research. This is subject to further analysis in detailed design
Revenue and demand	Determined by the direct revenue opportunities and the estimated number of riders at the Trails, which is outlined further in Section 8.3.	PwC, informed by the Feasibility Report, stakeholder engagement and targeted industry research.
Escalation	<p>Reserve Bank of Australia (RBA) Australian CPI and Wage Price Index (WPI) actuals and forecasts from FY21 to FY24, then 2.5% per annum in accordance with the midpoint of the RBA's CPI target.<sup>146</sup></p> <p>Estimates for years preceding FY23 were used to escalate FY21 cost estimates from the Feasibility Report.</p>	RBA.
Discount rate	The discount rate represented the 20-day moving average of Queensland Treasury Corporation's (QTC) 10-year bond rate. <sup>147</sup>	QTC.
Residual value	To remain conservative, residual value has not been included in this financial analysis. The Project is expected to continue operations after the 30-year operations period.	PwC assumption.
Periodicity	Annual.	PwC assumption.
Basis of cashflows	Nominal.	PwC assumption.
Rounding	All values have been rounded to one decimal place in this chapter. Rounding has only been applied in the financial model for visitor numbers.	PwC assumption.

<sup>145</sup> Based on the IAAF's recommendations for long term infrastructure.

<sup>146</sup> RBA (2023). *Forecast Table – November 2022*. Accessed at <https://www.rba.gov.au/publications/smp/2022/nov/forecasts.html>

<sup>147</sup> QTC supports a 10-year trailing average to determine the allowed cost of debt, as per the *Queensland Competition Authority 1010 rate of return review*. Accessed at <https://www.qca.org.au/wp-content/uploads/2020/11/sub-no-9-qtc-jan-2021.pdf>

### 8.2.3 Financial Model

A financial model was developed to capture the construction and operating period cost and revenue assumptions and the net present cashflows to the end of the analysis period. This approach reflects a typical cashflow analysis methodology for the assessment of infrastructure developments. The cashflows have been calculated on an Earnings Before Interest, Tax, Depreciation and Amortisation (EBITDA) basis.

## 8.3 Demand

The Trails are expected to attract a greater number of mountain bike riders and visitors to Cardwell. The demand profile therefore reflects the number of mountain bike riders that are anticipated to visit and ride the Trails in Cardwell. The demand profile was developed using the key findings from the Mountain Biking Industry Analysis in Chapter 3, and was informed by the Feasibility Report and comparable mountain bike trails in Queensland. The demand profile represents a conservative estimate of potential visitation to the Trails for the purpose of this Business Case, and may be higher in practice.

The following sections provide a high-level overview of the approach that was undertaken to develop the demand profile and estimate the projected number of mountain bike riders who visit the Trails during the analysis period. The demand profile has been used in the financial analysis outlined in Section 8.4 and the economic analysis presented in Chapter 9.

### 8.3.1 Approach to Demand Analysis

The demand profile was developed through a top-down approach, whereby the total number of mountain bike riders at the Trails was estimated and extrapolated across the analysis period under a low, medium and high scenario. Figure 53 presents the approach that was implemented to conduct the demand analysis, followed by a high-level overview on each key step. As such, the underlying complexities and nuances to the demand profile have been summarised for the purpose of this Business Case. The Mountain Biking Industry Analysis presented in Chapter 3 was used to inform this demand analysis.

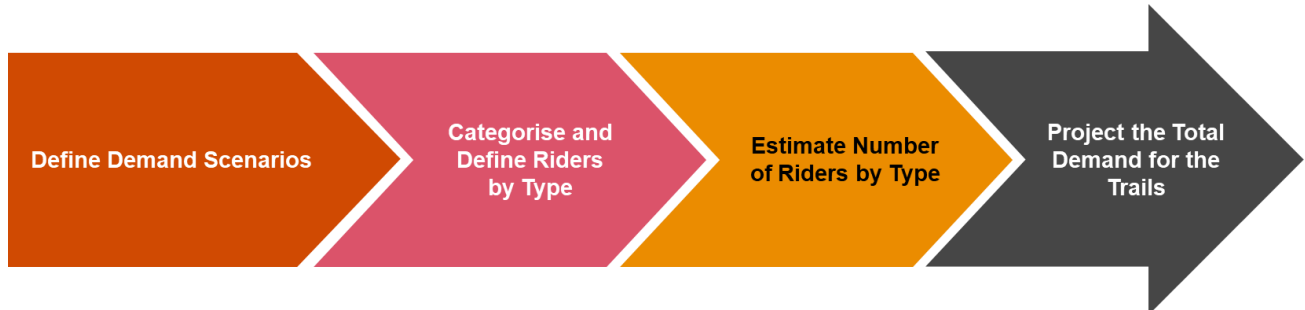


Figure 53: Approach to Demand Analysis

### 8.3.2 Define Demand Scenarios

The demand analysis includes three key scenarios, which are defined as follows:

- **Low Demand Scenario:** Pessimistic projection of the number of mountain biker riders that will visit the Trails on an annual basis. The low demand scenario is significantly lower than more aspirational projections used for other mountain bike trails in Queensland and across the country.
- **Medium Demand Scenario:** Conservative projection of the number of mountain biker riders that will visit the Trails on an annual basis. The medium demand scenario is lower than more aspirational projections used for other mountain bike trails in Queensland and across the country, and has been adopted as the 'core' demand scenario.
- **High Demand Scenario:** Optimistic projection of the number of mountain biker riders that will visit the Trails on an annual basis. The high demand scenario is aligned with the more aspirational projections used for other mountain bike trails in Queensland and across the country.



### 8.3.3 Categorise and Define Rider Types

The four key types of riders that were used as part of the demand profile are described in Table 30. Additional visitors may also travel with mountain bike riders that visit the Trails. However, to ensure the demand profile reflects a conservative estimate of riders at the Trails, these visitors have not been directly included in the demand analysis.

Table 30: Rider Types

Rider Type	Description
Local Rider	Mountain biker riders that live in the Cassowary Coast LGA.
Intrastate Rider	Mountain bike riders that live outside the Cassowary Coast LGA and in Queensland.
Interstate Rider	Mountain bike riders that live outside Queensland and in Australia.
International Rider	Mountain bike riders that live internationally.

### 8.3.4 Estimate Number of Riders by Type

The approach undertaken to estimate the number of local riders and intrastate, interstate and international riders is outlined in the following sections.

The estimated number of riders has been assumed to ramp-up with the commissioning of each trail segment, which equates to 50%, 75% and 100% in operational years one, two and three respectively. Further, the impact of the wet season was also accounted for by reducing demand by 20% for a period equivalent to four months per annum.

#### Local Riders

To estimate the number of riders who live in the Cassowary Coast LGA and will use the Trails, the region's residential population was extrapolated across the analysis period using a CAGR of 0.3% p.a., based upon the population's growth rate from 2016 to 2021.<sup>148</sup> A fixed proportion (5%) of the Cassowary Coast LGA's residential population was then assumed to ride on the Trails each year. This conservative assumption will need to be re-tested in subsequent phases of the Project, as the Trails may induce greater demand from the Cassowary Coast LGA's residential population.

Figure 54 presents the projected number of local riders at the Trails under the medium demand scenario across the analysis period. This demonstrates that the number of local riders is estimated to increase from 691 riders in 2026 to 1,505 riders in 2055. This is a conservative estimate that is anticipated to be driven by organic growth in mountain biking participation that is currently experienced nation-wide, which is outlined in Chapter 3, as well as induced growth in participation from the delivery of the Trails itself and complementary mountain biking projects in the region, such as the Cardwell Pump Track.

<sup>148</sup> ABS (2022). *Cassowary Coast – 2021 Census All persons QuickStats*. Accessed at <https://abs.gov.au/census/find-census-data/quickstats/2021/LGA32260>

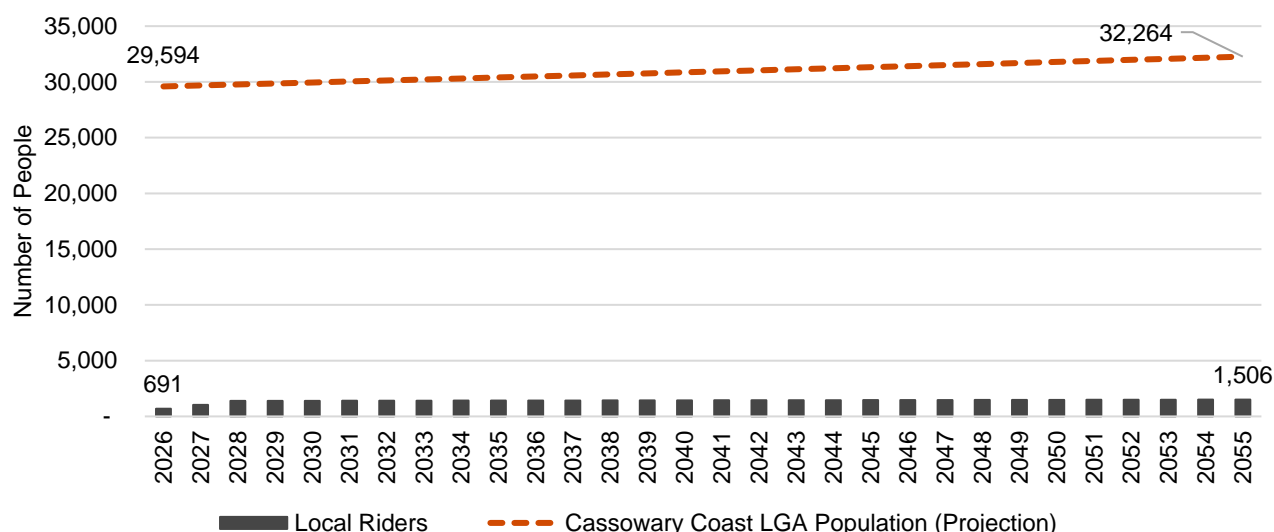


Figure 54: Estimated Local Riders at the Trails

### Intrastate, Interstate and International Riders

The number of intrastate, interstate and international riders that visit the Trails was determined through a top-down approach, whereby the total number of intrastate, interstate and international riders once all three trail segments are constructed and operational was estimated. This was estimated to be 7,500, 10,000 and 12,500 riders under the low, medium and high demand scenario respectively. These estimates were developed using historical information on mountain biking trips in Queensland, visitation to TNQ, as well as the key findings from the industry analysis outlined in Chapter 3. The intrastate riders do not include local riders to the Trails, which is calculated differently above.

According to the *Bike Tourism in Queensland Report*, intrastate and interstate visitors represented approximately 83.2% and 16.5% of domestic mountain biking trips in Queensland respectively in the year ending November 2018.<sup>149</sup> Further, according to *TEQ*, international visitors represented approximately 3.2% of overnight visitors to TNQ in the year ending September 2022.<sup>150</sup>

Using this information, the following breakdown was applied to the overarching total number of intrastate, interstate and international riders:

- Intrastate visitors: 80.4%
- Interstate visitors: 16.5%
- International visitors: 3.2%.

Once all three trail segments are commissioned and operational, the total number of intrastate, interstate and international riders has been projected to grow by 5% p.a., which aligns with the Feasibility Report's projections for visitation growth.

Figure 55 presents the estimated number of intrastate, interstate and international riders at the Trails across the analysis period. As demonstrated below, the total number of intrastate, interstate and international riders is projected to increase

<sup>149</sup> Department of Transport and Main Roads (2022). *Bike Tourism in Queensland – Supplementary Report: Mountain Biking*. Accessed at <https://www.tmr.qld.gov.au/Travel-and-transport/Cycling/bike-tourism>

<sup>150</sup> TEQ (2023). *Tropical North Queensland Regional Snapshot Year Ending September 2022*. Accessed at [https://teq.queensland.com/content/dam/teq/corporate/corporate-searchable-assets/industry/research/regional-snapshots/092022-ye-sep-2022/YE\\_Sep\\_2022\\_TNQ\\_Regional\\_Snapshot.pdf](https://teq.queensland.com/content/dam/teq/corporate/corporate-searchable-assets/industry/research/regional-snapshots/092022-ye-sep-2022/YE_Sep_2022_TNQ_Regional_Snapshot.pdf)

from 4,666 in 2026 to 17,975 in 2055. Intrastate riders are anticipated to represent the majority of visitors to the Trails, driven by the Cairns-Townsville population catchment as well as visitors from SEQ (see Chapter 3).

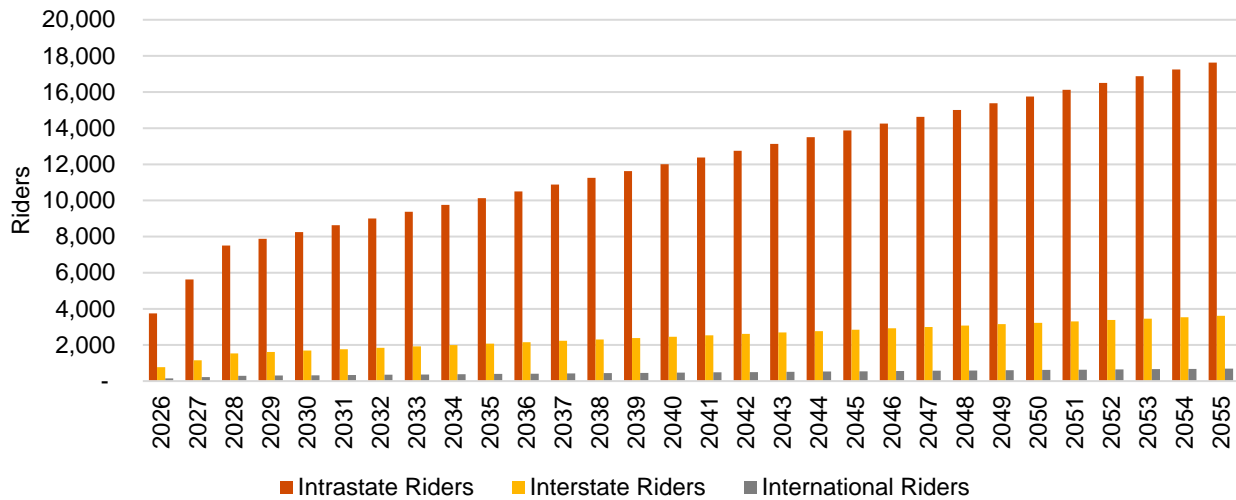


Figure 55: Estimated Intrastate, Interstate and International Riders at the Trails

### 8.3.5 Total Demand

Figure 56 presents the total estimated demand from riders for the Trails across the analysis period under the medium scenario. The economic analysis outlined in Chapter 9 has applied an adjustment factor to the estimated number of riders at the Trails to account for those riders who would have otherwise travelled to an alternative destination in Queensland in the absence of the Trails in Cardwell.

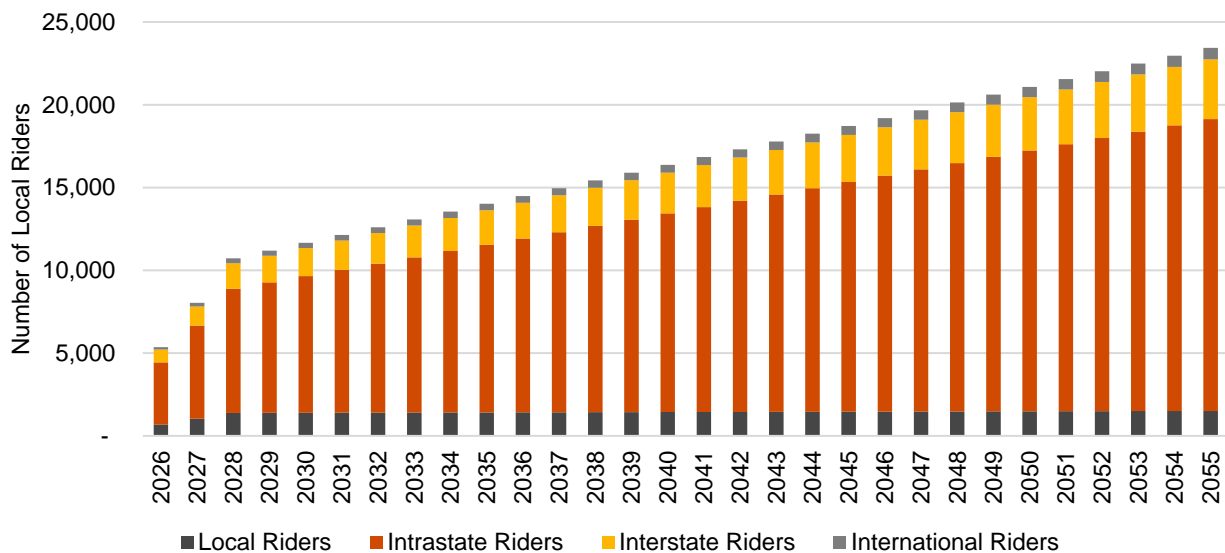


Figure 56: Total Estimated Demand for the Trails

Figure 57 presents the total estimated demand from riders for the Trails under the low, medium and high scenario. The low scenario represents a pessimistic estimate of the number of riders at the Trails and is significantly lower than previous projections from the Feasibility Report. The medium demand scenario has adopted a conservative approach and represents the base scenario of the number of riders at the Trails. The high scenario is an optimistic projection that is broadly aligned with previous estimates developed in the Feasibility Report, which projected close to 30,000 visitors per annum at the Trails.

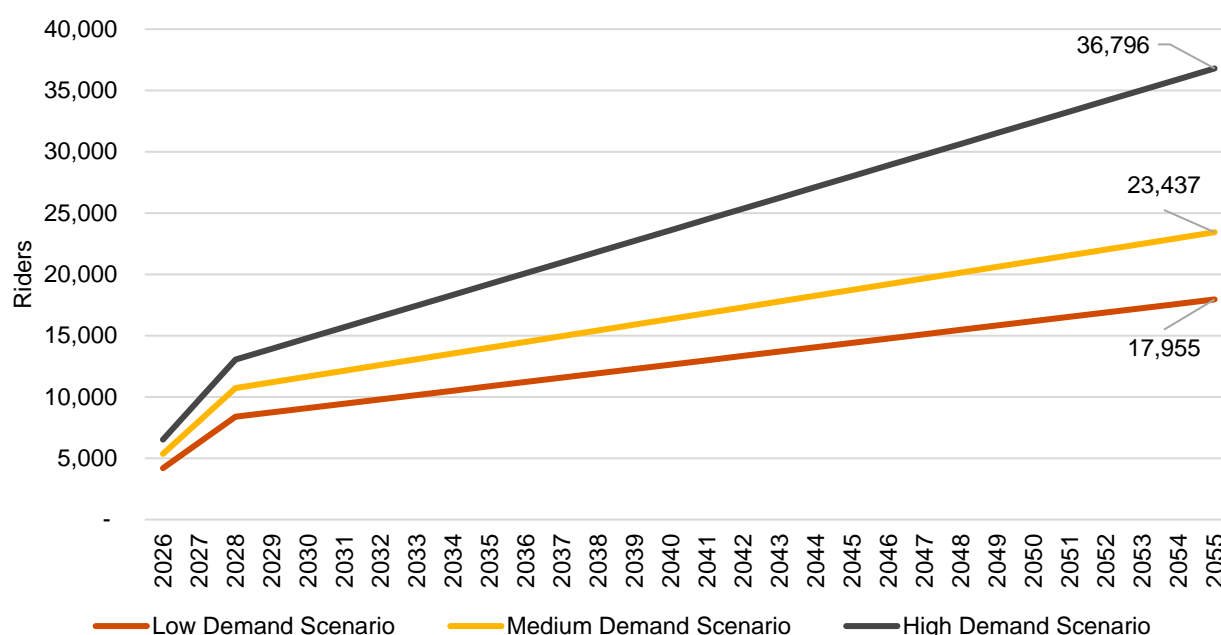


Figure 57: Estimated Number of Riders at the Trails under the Low, Medium and High Demand Scenarios

The demand profile is predicated on the assumption that the Trails will be professionally maintained to a world-class standard, as this is the key driving factor in attracting mountain bikers to Cardwell. Given the relative uncertainty on the level of demand for the Trails, this demand profile should be re-evaluated and updated in future phases of the Project.

## 8.4 Financial Analysis Summary

Table 31 presents the total nominal and PV cashflows of the Trails under the medium demand scenario. This demonstrates that the Net Project Value of the Trails is approximately -\$10.6 million (PV terms), which suggests that the Trails will not be able to generate sufficient operational surpluses to offset the initial capital cost. However, based on the current assumptions, the Trails are estimated to generate a positive net operational cashflow of \$2.5 million in nominal terms and just under \$1 million in PV terms over the analysis period. This suggests that the Trails will be able to operate on a financially self-sufficient basis across the analysis period.

Table 31: Financial Analysis Summary (\$'000, Nominal and PV)

Cashflow	Nominal	PV
Revenue	\$21,108.7	\$9,043.6
O&M Costs	-\$18,632.2	-\$8,129.6
<b>Net Operational Cashflows</b>	<b>\$2,476.5</b>	<b>\$914.0</b>
Capital Costs	-\$13,038.5	-\$11,565.5
<b>Net Project Value</b>	<b>-\$10,562.1</b>	<b>-\$10,651.5</b>

## 8.5 Affordability Considerations

Using the key findings from the financial analysis, this section presents all relevant information to allow decision makers to assess the net funding requirement and affordability of the Trails by considering the magnitude and timing of relevant capital and O&M costs, under the medium demand scenario.

The approach to analysing the affordability of the Trails is focused on the following two primary questions:

- How will the delivery of the Trails be funded?
- What funding options are available?

The Affordability Analysis considers the capital and O&M cashflows over the analysis period. The cashflows are expressed in nominal terms to demonstrate the budgetary impact at the time the cost or revenue occurs.

### 8.5.1 Delivery Funding Requirement

The total capital funding requirement to deliver the Trails is estimated at approximately \$13.1 million in nominal terms. The majority of this capital funding requirement is expected to occur in 2025 and 2026, which represents the projected year-on-year budgetary impacts for the Trails.

The delivery of the Trails is proposed to be phased, whereby the 7 Sisters segment is constructed first and immediately followed by the construction of the Lookout Hill and Attie Creek segments respectively. A phased delivery approach will provide cost efficiencies and, importantly, ensure the Trails exceed the 80km threshold of trails within two years of operations commencing, which is generally regarded as the minimum threshold of trails to attract riders. The revenue cashflows generated by the Trails will commence with the operation of the 7 Sisters segment in 2026. Consequently, the delivery of the Trails will rely on funding and/or financing contributions, which is investigated further in Section 8.5.3.

### 8.5.2 Operational Funding Requirement

The Trails are estimated to generate a positive net operational cashflow of approximately \$2.6 million in nominal terms across the analysis period. However, as previously outlined in Section 8.4, the Council is assumed to provide a total of \$580,000 (nominal) over the first five years of operations to support the Trails' operations and maintenance activities. This estimate is indicative and may be less in practice, should the Trails generate greater revenue than assumed in this analysis. This funding support is critical to the long term financial sustainability of the Trails, as it will ensure that the Trails can be professionally maintained at a world class standard whilst visitation to the Trails ramps-up.

### 8.5.3 Potential Funding Strategies

There are a variety of potential funding opportunities for the design, construction, operation and/or maintenance of the Trails including:

- Operational revenue cashflows
- Council funding
- Queensland and/or Australian Government funding
- Private sector funding and financing.

There are a range of unquantifiable benefits that should also be considered alongside these potential funding strategies. Further detail regarding these benefits is provided in Chapter 9, *Economic Analysis*.

### Operational Revenue Cashflows

The Trails will generate revenue through approximately seven different sources, with several other potential revenue opportunities available. The net operational cashflows are projected to enable the Trails to be operated and maintained on a financially viable and sustainable basis. However, whilst the operational cashflows will generate a positive net cashflow of approximately \$2.5 million in nominal terms over the analysis period, they will be insufficient to fund the detailed design and construction of the Trails under the current assumptions, driving the need for other funding sources to design and construct the Trails.

### Cassowary Coast Regional Council Funding

As previously outlined in Chapter 7, the Council is anticipated to own and operate the Trails in the short to medium term (first five years of operations). As part of this, the Council has been assumed to contribute up to \$100,000, in real terms, per annum over the first five years of operations to support the operation and maintenance of the Trails. Further, the Council is expected to provide some level of funding support for the detailed design and construction of the Trails. The quantum of

funding will ultimately be determined based on other capital funding and support that may be obtained through Queensland and Australian Government funding programs.

### Queensland and/or Australian Government Funding

The Queensland and/or Australian Governments are expected to provide a level of funding to support in the detailed design and construction of the Trails. Funding requests to the Australian and Queensland Government are expected to be supported and justified by the quantifiable and non-quantifiable socio-economic benefits catalysed by the Trails. Funding support from the Queensland and/or Australian Governments will require a strong social and economic rationale, which is outlined further in Chapter 9.

During the consultation process undertaken during the development of the Business Case, the Queensland Government noted that any funding for the construction of the Trails would be subject to the successful completion of detailed design and due diligence activities. The Queensland Government indicated that they may be willing to provide some level of support for the detailed design and due diligence process, with further detail outlined in Chapter 11.

### Private Sector Funding and Financing

The financial analysis demonstrated that, under the current assumptions, the Trails may be able to generate small positive net cashflows during the early years of operations. However, the projected operational cashflows do not offset the capital cost to design and construct the Trails and thus do not provide a commercial level of return. This suggests that the Project would not be viable for private sector proponents. Consequently, private sector proponents are not expected to be willing to partially or wholly fund the design and construction of the Trails under the current assumptions. However, as previously outlined in Chapter 7, private sector proponents are anticipated to be involved in the operations and maintenance of the Trails in the medium and long term. Additionally, there may be an opportunity for the Council to divest of its ownership in the Trails to a private sector operator in the long term.

### Suggested Funding Strategy

Based on the above analysis, the suggested potential funding strategy for the Trails is as follows:

- **Capital – Detailed Design and Due Diligence Phase:** The Council and Queensland Government to establish an agreement to co-fund the detailed design and deliver phase.
- **Capital – Construction:** The Council and Queensland and/or Australian Governments to establish an agreement to co-fund the construction of the full Trails project, noting that the works will be delivered in stages over several years.
- **Capital – Capital Upgrades and Renewals:** Once the trail network and infrastructure has been delivered, any future capital upgrades or renewals (e.g. equipment replacements) are expected to be funded through operational cashflows.
- **Operational and Maintenance Requirements – Short to Medium Term:** The Council is expected to provide up to \$100,000 per annum (in real terms) for the first five years of operations. This funding will be balanced against the operational cashflows generated by the Trails during that time. In kind or resource contributions may also be provided by the Queensland Government and/or Girringun.
- **Operational and Maintenance Requirements – Medium to Long Term:** Subject to the ownership and operational model implemented at the Trails, it is expected that these will be funded by the operational cashflows generated by the Trails.

The proposed funding strategy will require further consideration and refinement as part of the detailed design and due diligence phase of the Project. Whilst unlikely to generate sufficient cashflows to repay the capital costs associated with design and construction, the Trails are forecast to operate on a financially sustainable basis across the 30-year operational period. The Trail's affordability and funding strategy should be considered alongside the monetisable and non-monetisable economic benefits that are anticipated to be generated by the Trails, which are detailed further in Chapter 9.

## 8.6 Summary

This chapter presented the financial analysis that has been undertaken to determine the Trails' financial sustainability and identify the potential funding strategies to support the delivery, operations and maintenance of the Trails. The total capital cost to design, construct and deliver the Trails and accompanying infrastructure is estimated at approximately \$13.1 million

in nominal terms, using the raw cost estimates developed in the Feasibility Report. The O&M costs are estimated to total approximately \$18.6 million in nominal terms across the operational period of 30 years, which equates to approximately \$620,000 per annum in nominal terms.

The Trails are estimated to generate revenue from seven key sources, culminating in a total of \$21.1 million in revenue generated during the operational period. This is greater than the O&M costs of the Trails by a surplus of \$2.5 million and suggests that the Trails will be able to be operated and maintained on a financially sustainable basis. However, the Trails will require some level of funding and/or financing contributions for the detailed design and construction phases, as the Trails' positive net operational cashflows is not projected to cover the total upfront capital cost of the Project.

To fund the upfront capital costs of the Trails, the Council is recommended to seek a co-funding arrangement with the Queensland and/or Australian Governments. Upon delivery of the Trails, the Council will be required to support the ongoing operations and maintenance of the Trails through an annual contribution of \$100,000 (real terms) for the first five years. At the completion of this period, and under the assumption that visitation levels have achieved the current projections, it is expected that the future operational and capital requirements will be met by the operational cashflows generated by the Trails.



# 9 Economic Analysis

## 9.1 Purpose

The purpose of this chapter is to evaluate the economic viability and outcomes generated by the Trails in Cardwell. This chapter includes:

- Approach and Methodology
- Assumptions and Parameters
- Scenario Definition
- Benefits
- Economic Analysis Results
- Summary.

## 9.2 Approach and Methodology

### 9.2.1 General Approach

The Economic Analysis has been undertaken using a CBA framework that is designed to evaluate the economic benefits and costs accruing to members of the community as a result of the Trails. The economic appraisal assesses the incremental net benefit to the community from the Project, relative to the Base Case. The CBA framework applies a discounted cash flow (DCF) technique and is guided by the following frameworks:

- Queensland Government's *BCDF*
- Queensland Treasury's *PAF*
- Australian Transport Assessment and Planning (ATAP) – PV4 Active Travel guidance.

The steps undertaken to prepare the economic analysis include:

- 1 **Outline the economic appraisal framework:** Develop the overarching methodology to determine key modelling assumptions.
- 2 **Determine the Base Case and Project case:** Define the Base Case and Project case scenarios.
- 3 **Estimate costs:** Estimate the costs associated with the delivery (construction) and operations.
- 4 **Design the benefits estimation framework:** Determine the robust methodologies to monetise the Project's benefits.
- 5 **Quantify benefits:** Develop monetised and qualitative estimates of the benefits which are likely to be realised from the Trails.
- 6 **Results and sensitivity:** Determine the Benefit Cost Ratio (BCR) and Net Present Value (NPV) for the Trails through the DCF technique and undertake sensitivity testing on key assumptions.

### 9.2.2 Economic Analysis Measures

The Economic Analysis converts future costs and benefits to the PV using a DCF approach. These discounted costs and benefits are then used to produce measures of economic performance and calculate the net benefit to society, including:

- **NPV** represents the difference between the PV of total incremental benefits and the PV of the total incremental costs. A positive NPV indicates that the (discounted) incremental benefits exceed the incremental costs over the appraisal period. This allows the Trails to be compared against the Base Case to articulate the incremental benefits to society.
- **BCR** represents a ratio of the PV of total incremental benefits to the PV of total incremental costs. A BCR greater than one indicates that quantified benefits exceed costs. However, projects with BCR's less than one may still be considered

to have net economic benefits if some of the benefits cannot be fully monetised within the economic appraisal framework.

These economic measures are part of a broader project evaluation process and should be considered in conjunction with non-monetisable costs and benefits, the results of the financial analysis and the potential economic impact on the region. Revenues exceeding costs is not a sole reason to proceed with a project. It is also essential to consider community and social costs, as a project that causes significant harm to the community may not have a direct financial cost, but could still be damaging. If the BCR is below one, the project may still be suitable for government investment provided there are other project benefits which were not able to be monetised and included in the BCR (e.g. social benefits). The CBA uses both market and non-market monetisable costs and benefits to ensure impacts to the referent group are captured. Non-monetisable costs and benefits are qualitatively discussed and detailed, but are not quantified.

### 9.2.3 Relationship to Financial Analysis

The financial analysis (Chapter 8) assesses the financial sustainability of the Trails from the viewpoint of the owner, which is assumed to be government at this stage of the analysis. It considers only those cashflows which directly impact the owner of the Trails. The economic analysis provides an economy-wide view of the Trails' viability and considers a range of impacts which do not accrue to the owner of the Trails. The economic and financial analyses examine different measures of project viability, and neither should be considered in isolation.

## 9.3 Assumptions and Parameters

The analysis requires general assumptions which have been developed in line with relevant guidelines and the level of scoping of the Project. These assumptions are outlined in Table 32, and form the basis of the Economic Analysis. Certain assumptions have been sensitivity tested where appropriate to understand the impact of the assumption on the analysis' results.

Table 32: Economic Analysis Inputs and Assumptions

Item	Assumption(s)	Source(s) and comments
Real discount rate	7% (central case), with sensitivity tests at 4% and 10%.	Consistent with economic appraisal best practice guidelines and the <i>IAAF</i> .
Analysis start date	1 January 2023.	PwC assumption.
Base price year	1 January 2023 (FY23) – the base price year is selected to align with the cost estimates for the Project. All values are expressed in FY23 dollars, with parameters designated in prices prior to the base price year inflated to FY23 dollars using appropriate indices.	PwC assumption.
Period of analysis – delivery phase	<p>The construction schedule for each portion of the Trails is outlined below:</p> <ul style="list-style-type: none"> <li>Trail design and key activities: 01/01/2024 to 31/12/2024</li> <li>7 Sisters segment: 01/01/2025 to 31/12/2025</li> <li>Lookout Hill segment: 01/01/2026 to 31/06/2026</li> <li>Attie Creek segment: 01/07/2026 to 30/06/2027</li> <li>Other infrastructure: 01/01/2025 to 31/12/2025.</li> </ul>	PwC assumption, informed by the Feasibility Report.

Item	Assumption(s)	Source(s) and comments
Period of analysis – operations phase	<p>30 years from the end of the 7 Sisters segment construction (01/01/2026 to 31/12/2055).</p> <p>Operational ramp-up period:</p> <ul style="list-style-type: none"> <li>• First year of operations – 50% of full capacity</li> <li>• Second year of operations – 75% of full capacity</li> <li>• Third year of operations – 100% (full capacity reached).</li> </ul>	The operational period aligns with the cost estimate and financial analysis. An operational ramp-up period is applied to reflect the staging of construction. These assumptions are consistent with the financial analysis.
Periodicity	Annual (calendar year).	PwC assumption.
Growth of visitation	5% annual growth once full capacity of the Trails is reached.	Feasibility Report.

In undertaking this Economic Analysis, certain estimates and assumptions were made and PwC also relied on information, inputs and assumptions provided by multiple sources. This analysis is limited by the accuracy and availability of the data received from these sources. There will inevitably be differences between these estimates and actual values, which may be material. PwC does not warrant or guarantee any data underpinning the information contained within this chapter.

## 9.4 Scenario Definition

The economic appraisal requires a comparison of the costs and benefits of implementing the Trails (i.e. the 'Project Case') to the case where the Trails are not implemented (i.e. the 'Base Case'). The following section describes the Project case and Base Case scenario used in the economic appraisal.

### 9.4.1 Base Case

The definition of the Base Case is important for the economic appraisal as it documents the baseline against which the economic costs and benefits of the Project are assessed. The increment between the Base Case and the Project Case represents the net impact of the Trails on the Queensland community.

The Base Case assumed for the Economic Analysis for this Project represents a 'do minimum' scenario as would be expected to occur in the absence of the Project. Chapter 4 outlines the service need for the Project, confirming that providing a unique mountain biking experience in Cardwell will increase tourism expenditure and stimulate economic growth in the region. In the absence of the Trails, there are limited other strategic responses identified for the region. Further, if the Project does not progress, there is no planned alternative project that will be developed. The absence of action will also result in the strong momentum and support for the Trails that currently exists to gradually fade.

The 'do minimum' scenario for the Base Case therefore represents a business as usual approach, with no investment in mountain biking trail infrastructure or similar recreational sporting infrastructure in Cardwell or the surrounding regions. This definition of the Base Case aligns with the IAAF.

### 9.4.2 Project Case

The Project Case is the development of the 94km, 26-trail mountain bike network, presented in Figure 58. Further detail on the scope of the Trails is outlined in Chapter 5.

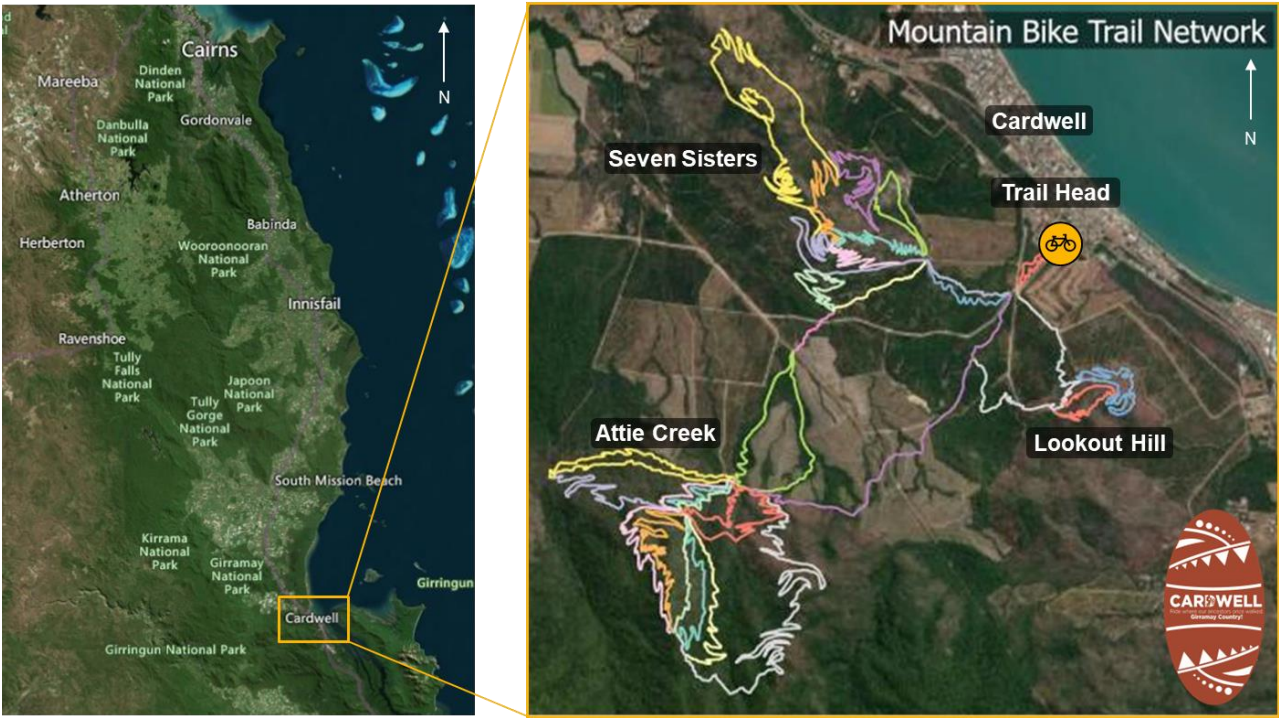


Figure 58: The Trails – Concept Design<sup>151</sup>

## 9.5 Benefits

The Trails will generate increased tourism expenditure in Queensland which, in turn, will promote economic growth and enhanced prosperity in Cardwell and the broader TNQ region. Beyond tourism expenditure, additional health and consumer surplus benefits for users of the Trails have been quantified and monetised in this economic analysis. The Trails will also generate a number of socio-economic economic benefits that are not able to be monetised in the Economic Analysis, at this stage of the projection evaluation process. Figure 59 provides an overview of the economic benefits framework.



Figure 59: Benefits Framework

<sup>151</sup> World Trail (2021). *Cardwell Tropical Mountain Bike Trail Project Feasibility Report*. Provided by CCRC.

## 9.6 Economic Analysis Results

The results of the Economic Analysis for the Trails are detailed in Table 33, with the economic outcomes summarised in terms of the NPV and BCR. All economic costs and benefits reported are incremental to the Base Case. As such, the Trail's benefits are estimated to be \$22.5 million (real, discounted at 7%) and Project costs are estimated to be \$12.6 million (real, discounted at 7%). The producer surplus benefits represent the largest economic benefit stream, followed by consumer surplus benefits and then health benefits.

Based on the Economic Analysis, the NPV for the Project is \$9.9 million with a BCR of 1.8, indicating that the monetised benefits of the Trails outweigh the monetised costs from an economics perspective.

Table 33: Summary of CBA results (\$'000, PV)

Costs and benefits	PV
<b>Economic costs</b>	
Capital costs	8,849
Operating costs	3,756
<b>Total costs</b>	<b>12,605</b>
<b>Economic benefits</b>	
Producer surplus benefit from increased tourism expenditure	20,659
Health benefits from increased physical activity	1,095
Willingness To Pay (WTP) benefit for recreational use	712
<b>Total benefits</b>	<b>22,467</b>
<b>NPV</b>	<b>9,862</b>
<b>BCR</b>	<b>1.8</b>

The Economic Analysis demonstrates that the Trails are expected to provide an incremental net benefit to the community, relative to the Base Case. As only monetisable costs and benefits have been included in the appraisal, the results should be considered as part of a broader evaluation process including the non-quantified costs and benefits, and their impact on the community.

## 9.7 Summary

The economic analysis has demonstrated the proposed development of the Trails at Cardwell is projected to generate significant benefits for local businesses, the community and the broader economy. Project benefits have been monetised with a PV of \$22.5 million and economic costs of \$12.6 million (discounted at 7%).

The Trails therefore deliver an NPV of \$9.9 million and a BCR of 1.8. Given the NPV is positive and the BCR is greater than one, this indicates a strong economic rationale for the Project. There are a number of qualitative benefits that are expected to increase the BCR for the Project if they are able to be robustly monetised. This includes increased employment, social capital for Indigenous communities, urban revitalisation, greater national and elite sporting outcomes, and increased expenditure relating to events.

# 10 Risk Analysis

## 10.1 Purpose

The purpose of this chapter is to provide an overview of the risk assessment undertaken during the development of the Business Case and to guide future risk management measures for the Trails. This chapter includes:

- Approach
- Risk Management Context
- Risk Management Approach
- Risk Assessment
- Summary.

## 10.2 Approach

Risk assessment and management has been embedded in the development of the Business Case through formal and informal processes. The formal approach to risk management included establishing a risk management process that complies with *ISO31000:2018, Risk management - Guidelines*. The risk management process was completed in accordance with CCRC's *Enterprise Risk Management Framework and Guidelines*,<sup>152</sup> and with reference to the Queensland Government's *BCDF*, Queensland Treasury's *PAF* and the *IAAF*. Figure 60 presents the risk assessment and management process in accordance with *ISO31000:2018*.

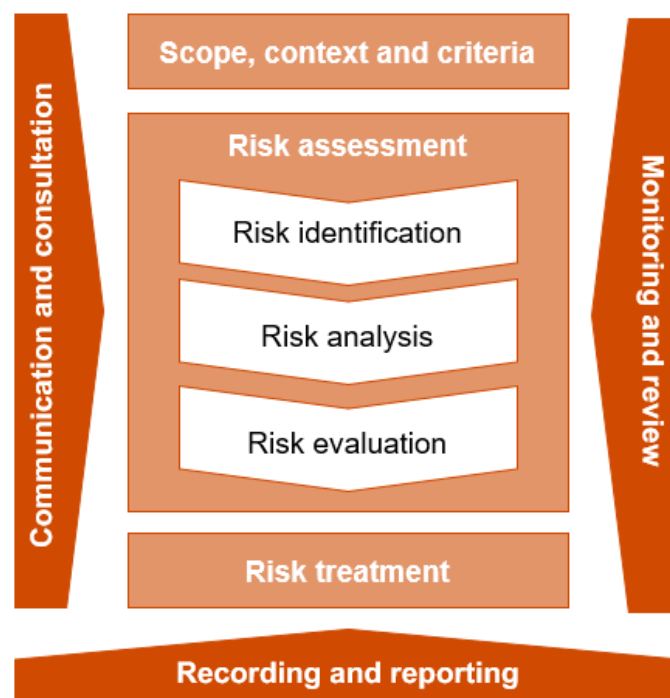


Figure 60: Risk Assessment and Management Process<sup>153</sup>

<sup>152</sup> CCRC (2021). *Enterprise Risk Management Framework and Guidelines*. Accessed at <https://www.cassowarycoast.qld.gov.au/downloads/file/1406/enterprise-risk-management-framework-and-guidelines>

<sup>153</sup> ISO (2018). *ISO 31000:2018 Risk management — Guidelines*. Accessed at <https://www.iso.org/standard/65694.html>

The formal risk management process that was completed as part of the Business Case included the following activities:

- Desktop research by the Project team
- Internal preliminary risk identification and analysis
- Risk workshop with members of the Council's project team on 4 April 2023.

This process was followed by regular reviews by the Project team. Process and project risks were also determined subsequently and incorporated into further planning activities.

The informal risk management process was incorporated into all project management activities undertaken by the Project team. A core function of the project management process for the Business Case included continual and active management of risks as the Project progressed.

### 10.3 Risk Management Context

In accordance with *ISO31000:2018*, risk has been defined as, "the effect of uncertainty on objectives". The Project's service need and targeted benefits discussed in Chapter 4 were used as the foundation for identifying risks, establishing risk ratings and developing mitigation and enhancement strategies.

Risk is inherent in every project, thus creating the potential for a range of possible outcomes to materialise over time should they remain unmitigated and unmanaged. The identification and quantification of these inherent risks provides greater transparency and raises awareness for the Council, the Project team and future funding and development partners.

#### 10.3.1 Risk types

There are three primary categories of risk that are managed through the development of the Business Case. These include:

- Strategic risks
- Process risks
- Project risks.

##### Strategic risks

Strategic risks are those risks that affect the owner organisation at a corporate level. In the case of the Council, the management of strategic risks could require that action is taken at a Councillor level or by the executive leadership team. These risks can not only impact the progression or delivery of the Project but can also have considerable reputation and public perception implications.

##### Process risks

Process risks are risks that affect the progression of the Project through the current and future phases. This set of risks has a degree of overlap with strategic risks and are normally recorded and managed in a common risk register to improve transparency for the leadership teams within the Council, and within the Project. Process risks do not necessarily have a direct impact on the cost to deliver the Project, however, they may have significant time, reputation and management implications, particularly during the Business Case, detailed design and procurement phases.

The primary purpose of identifying process risks is to design specific treatment and mitigation strategies to reduce the likelihood or consequence of risk occurrence. Process risks are temporal and change throughout the Project's development and are therefore continually reviewed and updated. The key project lifecycle phases for the purposes of risk assessment and management are:

- Planning
- Design
- Construction
- Operations.



### Project risks

Project risks are risks that affect the outcomes of the Project and have a range of potential impacts to time, cost, quality, health and safety, reputation, and environmental outcomes. The understanding of the Project will change as it proceeds, and the assessment of project risks will be regularly reviewed and updated to reflect the status of the Project. The focus of project risk management will also change as the Project develops, to reflect the roles that different parties play at different stages.

#### 10.3.2 Categorisation of Risks

Each risk can be allocated to various sub-categories depending on their causes, impact, and treatments. These categories are outlined in Table 34.

Table 34: Categorisation of Risks

Risk Category	Description
Business Case Development	Risks associated with the development and delivery of the Business Case.
Construction	Risks that may occur during the construction phase of the Trails.
Design / Technical	Risks that may impact, or be derived from, the design or technical elements of the Trails in the Business Case and subsequent phases of the Project.
Environmental	Risks related to the Trail's impact on the environment.
Feasibility	Risks that may influence the commercial sustainability and feasibility of the Trails.
Funding	Risks that impact the likelihood of securing funding for the Trails.
Governance	Risks related to the governance arrangements of the Trails.
Land / Property	Risks related to the resumption of land and tenure of the proposed trail network, and subsequent impacts.
Market / Demand	Risks related to the level of market demand for the Trails.
Political	Risks related to the various political influences on the Trails.
Procurement	Risks that are related to or likely to arise in the procurement phase of the Trails.
Project Need	Risks that may influence the Project's service need.
Schedule	Risks related to the delivery of the Trails within an appropriate timeframe aligned with the needs and requirements of key stakeholders.
Stakeholders / Consultation	Risks related to the engagement and management of key stakeholders throughout the Project.

### 10.4 Risk Management Approach

The Project's risks were identified in the early stages of the Business Case's development and have been successfully managed through ongoing risk assessment and reporting. There are several components of the risk register, including:

- Detailed risk description, causes, impacts and preliminary controls and mitigation strategies
- An initial risk rating, based on a likelihood and consequence rating
- Treatment and mitigation strategies if the initial risk rating is deemed not acceptable
- A residual risk rating, subject to the effectiveness of the treatment and mitigation strategy.

The risk assessment process for the Project is composed of five key stages as displayed in Figure 61.

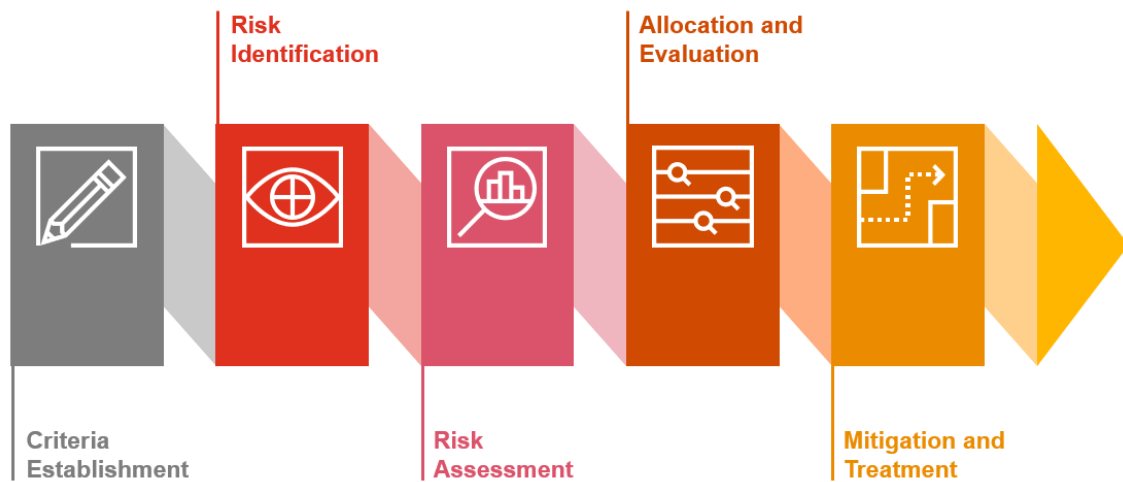


Figure 61: Risk Assessment Process

#### 10.4.1 Criteria Establishment

Defining effective risk assessment criterion is critical to ensure accurate risk ratings, treatment plans and allocation of resources. The process involves defining the terms for both likelihood and consequence and their subsequent interaction to produce an overall risk rating. Criteria were established in the context and scope of the Trails, factoring in the risk appetite of the Council.

##### Risk likelihood

The risk likelihood criteria measure the probability that a risk will be realised during the Project's delivery or operations phases. Table 35 details the risk likelihood ratings applied throughout the risk assessment process.

Table 35: Risk Likelihood Criterion<sup>154</sup>

Likelihood Rating	Description	Indicative Frequency Values	Probability
<b>Rare</b>	The event may occur only in exceptional circumstances	Once every 50 to 100 years	<5%
<b>Unlikely</b>	The event could occur at some time but is not considered likely to occur	Between 10 and 50 years	>5%
<b>Possible</b>	The event might occur at some time	Between three and 10 years	>35%
<b>Likely</b>	The event will probably occur in most circumstances	Will probably occur on one occasion in the coming year.	>65%
<b>Almost Certain</b>	The event is expected to occur in most circumstances	Greater than one or more per annum	>95%

<sup>154</sup> CCRC (2021). *Enterprise Risk Management Framework and Guidelines*. Accessed at <https://www.cassowarycoast.qld.gov.au/downloads/file/1406/enterprise-risk-management-framework-and-guidelines>

### Risk consequence

The risk consequence criteria measure the severity of the outcome, should the risk be realised during the Project's delivery or operations phase. Table 36 outlines the risk consequences used throughout the risk assessment process.

Table 36: Risk Consequence Criterion Rating<sup>155</sup>

Consequence	Project Cost	Project Time	Project Scope	Project Quality
Catastrophic	>50% change in Project cost	>100% change in Project time	Project deliverables are effectively useless	Project deliverables are effectively useless
Major	35-50% change in Project cost	65-100% change in Project time	Project deliverables are unacceptable to Project Sponsor	Quality reduction unacceptable to Project Sponsor
Moderate	20-35% change in Project cost	35-65% change in Project time	Major areas of scope affected	Quality reduction will require Project Sponsor approval
Minor	5-20% change in Project cost	15-35% change in Project time	Minor areas of Project scope affected	Only very demanding applications would be affected by quality change
Insignificant	<5% change in Project cost	<15% change in Project time	Project scope change barely noticeable	Quality degradation barely noticeable

### Risk rating

The risk rating is a measure of risk materiality and is a product of the likelihood and the consequence identified in the quantitative analysis. As displayed in Table 37, the rating can be either 'Low', 'Medium', 'High', or 'Extreme'. The resulting score, along with the existing controls, will inform the treatment and mitigation options for each risk.

Table 37: Risk Rating Matrix

		Consequence				
		Insignificant	Minor	Moderate	Major	Catastrophic
Likelihood	Almost Certain					Extreme
	Likely				High	
	Possible			Medium		
	Unlikely	Low				
	Rare					

#### 10.4.2 Risk identification

Risk identification includes identifying potential events that may prevent, degrade, delay or enhance the Project's outcomes. Risks relate to either the design, delivery and/or the ongoing operations and maintenance of the Trails. Risks to the Council (and other key stakeholders) and the Trails have been identified through the development of the Business Case. The Project team was responsible for identifying the risks of the Project across the various stages, categories and levels. All

<sup>155</sup> CCRC (2021). *Enterprise Risk Management Framework and Guidelines*. Accessed at <https://www.cassowarycoast.qld.gov.au/downloads/file/1406/enterprise-risk-management-framework-and-guidelines>

risks identified by the Project team were documented in the risk register, subject to review and refinement as the Project progressed.

#### 10.4.3 Risk assessment

The risk assessment stage refers to the qualitative analysis undertaken for each risk documented in the risk register. The qualitative assessment involves developing a description of the risk and understanding its causes, consequences and controls. The risk criteria (see Section 10.4.1) were established prior to the risk analysis process to ensure effective risk ratings, treatment plans and allocation of resources. This entails defining the likelihood and consequence terms, and the subsequent overall risk level. The Project context, scope, and risk appetite of the Council were taken into consideration when defining the criteria. Table 38 provides an example of the initial risk assessment process.

Table 38: Initial Risk Assessment Example

Description	Causes/ Sources	Impacts	Existing Controls	Consequence	Likelihood	Risk Rating
A serious injury or fatal incident occurs during construction.	<ul style="list-style-type: none"> <li>Health and safety processes not adhered to</li> <li>Health and safety processes are not adequate.</li> </ul>	<ul style="list-style-type: none"> <li>Construction stopped to undertake investigation leading to delays and increased costs</li> <li>Project receives media attention.</li> </ul>	<ul style="list-style-type: none"> <li>Consideration of construction requirements in transaction process</li> <li>Compliant Workplace Health and Safety (WH&amp;S) Plans provided and monitored.</li> </ul>	Catastrophic	Unlikely	High

#### 10.4.4 Risk evaluation and allocation

The risk evaluation uses the outcomes of the risk analysis to identify the need for treatment and the best placed party to manage the risk. Stakeholders and risk owners are identified prior to initiating the risk assessment process. Following the identification of risk treatments, each risk is allocated to a party responsible for risk ownership. These parties have been identified as the best placed party to manage this risk based on the category of the risk and the direct causes and effects.

#### 10.4.5 Risk treatment and mitigation

Prior to establishing the need for a risk treatment, the current risk rating must be accepted or rejected. A risk treatment is applied where a current risk level is rejected, with one of the following actions selected:

- Retain: Where the risk cannot be avoided, reduced or transferred. In such cases, usually the likelihood and consequence are low. These risks should be monitored and determined how losses, if they occur, will be funded.
- Transfer: Involves shifting all or part of the responsibility of another party who is best able to control it.
- Avoid: Decide not to proceed with the policy, program or activity or choose an alternative means of action.
- Control: By either reducing the likelihood of occurrence or the consequences.<sup>156</sup>

These recommendations are provided by the Project team based on the existing controls, and the potential for further risk reduction. Treatment strategies are identified and implemented on a cost and benefit basis. The relevant Project team members are responsible for developing, confirming and implementing the treatment plans throughout the life cycle of the

<sup>156</sup> CCRC (2021). *Enterprise Risk Management Framework and Guidelines*. Accessed at <https://www.cassowarycoast.qld.gov.au/downloads/file/1406/enterprise-risk-management-framework-and-guidelines>

Project. Following the application of risk treatment strategies, a residual risk rating is provided based on the updated consequence and likelihood. Table 39 provides an example of the risk treatment and mitigation process.

Table 39: Risk Treatment and Mitigation Example

Description	Treatment Option	Treatment	Residual rating		
			Consequence	Likelihood	Risk Rating
A serious injury or fatal incident occurs during construction.	Change the likelihood and/or consequence.	<ul style="list-style-type: none"> <li>Develop and actively manage robust WHS processes and controls</li> <li>Implement a zero tolerance policy for non-compliance.</li> </ul>	Major	Unlikely	High

## 10.5 Risk Assessment

The risk assessment has highlighted several key risks for the Trails at this stage of development, as documented in Table 40.

Table 40: Risk Assessment

No.	Description	Causes and/or Sources	Likelihood	Consequence	Initial Risk Rating	Residual Treatments	Residual Likelihood	Residual Consequence	Residual Risk Rating
1	Risk of being unable to establish a financially-viable commercial model for the Trails	<ul style="list-style-type: none"> <li>Estimated operational and maintenance costs are higher than anticipated</li> <li>Projected demand is lower than anticipated</li> <li>Revenue generation opportunities are limited</li> <li>Poor trail quality impacting the brand and reputation of the Trails</li> </ul>	Possible	Major	High	<ul style="list-style-type: none"> <li>Phase/stage the construction of the Trails</li> <li>Secure Queensland and/or Australian Government funding support to expand the Girringun Aboriginal Rangers Program</li> <li>Value engineer additional project components (i.e. Trail Head) to optimise affordability and reduce ongoing operational costs</li> </ul>	Unlikely	Major	High
2	Risk of failing to receive funding commitments from the Queensland and/or Australian Governments to deliver the Trails	<ul style="list-style-type: none"> <li>Project's service need or economic benefits are not sufficiently demonstrated</li> <li>Misaligned priorities of the Queensland and/or Australian Governments</li> <li>Changes in Queensland and/or Australian Governments' requirements to receive funding</li> </ul>	Possible	Catastrophic	Extreme	<ul style="list-style-type: none"> <li>Develop Business Case to articulate the service need and potential economic benefits of the Trails</li> <li>Actively engage with government agencies and key decision makers</li> </ul>	Unlikely	Catastrophic	High
3	Risk of failing to receive the necessary environmental approvals to construct and/or operate the Trails (e.g. EPBC, WHA approvals)	<ul style="list-style-type: none"> <li>Potentially significant environmental impacts on the Trails on Protected Flora or Fauna (e.g. Mahogany Glider, Southern Cassowary etc.)</li> <li>Alignment of the trail network impacts the area's environmental value</li> <li>Unidentified environmentally significant sites</li> <li>Changes in environmental legislation</li> </ul>	Possible	Catastrophic	Extreme	<ul style="list-style-type: none"> <li>Conduct infield assessments during subsequent phases</li> <li>Re-align the trail network to mitigate impacts, where possible</li> <li>Conduct early engagement with WTMA, QPWS and DES</li> </ul>	Unlikely	Catastrophic	High

No.	Description	Causes and/or Sources	Likelihood	Consequence	Initial Risk Rating	Residual Treatments	Residual Likelihood	Residual Consequence	Residual Risk Rating
4	Lack of political support from elected members that ultimately delays or prohibits the progress of the Trails	<ul style="list-style-type: none"> <li>Limited engagement with elected members</li> <li>Public pressure on elected members</li> <li>Misaligned priorities</li> </ul>	Possible	Major	High	<ul style="list-style-type: none"> <li>Engage local elected members at key checkpoints in the Business Case</li> <li>Provide updates to elected members during development of the Business Case</li> </ul>	Unlikely	Major	High
5	Risk of not generating sufficient support from the community	<ul style="list-style-type: none"> <li>Limited timeframes restrict level of stakeholder engagement</li> <li>Stakeholder views are anomalies and do not align with Project objectives</li> </ul>	Unlikely	Moderate	Medium	<ul style="list-style-type: none"> <li>Conduct comprehensive stakeholder engagement process during the development of the Business Case</li> <li>Affirm that the Trails are not competing with other priorities of local stakeholders (i.e. dredging at Port Hinchinbrook)</li> </ul>	Unlikely	Minor	Medium
6	Risk of not developing sufficient complementary offerings in Cardwell to attract visitors (accommodation etc.)	<ul style="list-style-type: none"> <li>Projected demand is lower than anticipated</li> <li>Enabling infrastructure in Cardwell limits complementary offerings</li> <li>Unviable complementary offerings</li> </ul>	Possible	Moderate	Medium	<ul style="list-style-type: none"> <li>Separately seek Queensland and/or Australian Government funding to enable potential investors to expand current offerings and provide complementary offerings</li> <li>Council to independently promote the opportunities available in Cardwell, and surrounds, to support the Trails</li> </ul>	Unlikely	Moderate	Medium
7	Risk not developing a sufficiently differentiated offering to other trail networks in north and far north Queensland	<ul style="list-style-type: none"> <li>Failure to conduct effective marketing campaigns to differentiate trails</li> <li>Limited promotion of core objectives and differentiators of the Trails</li> <li>Lack of effective integration within and advocacy of broader region mountain biking strategies.</li> </ul>	Possible	Moderate	Medium	<ul style="list-style-type: none"> <li>Engagement with tourism advocacy bodies and other trail operators</li> <li>Continued involvement of Girramay Peoples in the development of the Project</li> <li>Undertake detailed design process to optimise the distinctiveness of the Trail's design</li> </ul>	Unlikely	Moderate	Medium



## Risk Analysis

No.	Description	Causes and/or Sources	Likelihood	Consequence	Initial Risk Rating	Residual Treatments	Residual Likelihood	Residual Consequence	Residual Risk Rating
8	Risk of not attracting enough skilled private sector operators to Cardwell to provide ancillary offerings	<ul style="list-style-type: none"> <li>Projected demand for the Trails is lower than anticipated</li> <li>Enabling infrastructure in Cardwell limits ancillary offerings and private sector investment</li> <li>Limited awareness of Trails and Cardwell</li> </ul>	Unlikely	Major	Medium	<ul style="list-style-type: none"> <li>Engagement with tourism advocacy bodies and private sector proponents to test appetite</li> <li>Council to reassess planning objectives for Cardwell and to provide transparency of investment opportunities</li> </ul>	Unlikely	Moderate	Medium
9	Risk of insufficient engagement or reduced involvement of the Traditional Owners and First Nations Peoples in the progression of the Trails	<ul style="list-style-type: none"> <li>Incorrectly coordinated and managed engagement process</li> <li>Resource constraints at Council</li> <li>Traditional Owner disputes with related communities and groups</li> </ul>	Unlikely	Major	Medium	<ul style="list-style-type: none"> <li>Ongoing and proactive engagement with Girramay RNTBC and Gerringun to support the development of new commercial opportunities and creation of new employment and training opportunities</li> </ul>	Unlikely	Moderate	Medium

## 10.6 Summary

This chapter has presented the risk assessment process that has been undertaken to identify and determine the level of risk associated with constructing, operating and maintaining the Trails in Cardwell. As demonstrated throughout the chapter, there are a variety of medium, high and extreme risks, including but not limited to:

- Risk 1 – Risk of being unable to establish a financially viable commercial model for the Trails
- Risk 2 – Risk of failing to receive funding commitments from the Queensland and/or Australian Governments to deliver the Trails
- Risk 3 – Risk of failing to receive the necessary environmental approvals to construct and/or operate the Trails
- Risk 4 – Lack of political support from elected members that ultimately delays or prohibits the progress of the Trails
- Risk 5 – Risk of not generating sufficient support from the community
- Risk 6 – Risk of not developing sufficient complementary offerings in Cardwell to attract visitors
- Risk 7 – Risk not developing a sufficiently differentiated offering to other trail networks in north and far north Queensland
- Risk 8 – Risk of not attracting enough skilled private sector operators to Cardwell to provide ancillary offerings
- Risk 9 – Risk of insufficient engagement or reduced involvement of the Traditional Owners and First Nations Peoples in the progression of the Trails.

However, with the implementation of appropriate risk treatment and mitigants, and continuation of proactive risk management, these key risks to the Trails are anticipated to be able to be mitigated to an acceptable level.

# 11 Delivery and Implementation

## 11.1 Purpose

The purpose of this chapter is to outline the key activities that will be required to progress the Trails from the Business Case and during the pre-construction phase of the Trails. This chapter also includes an indicative delivery program for the Trails. This chapter includes:

- Delivery Overview
- Delivery and Implementation Phase Work Packages
- Consultants and Contractors
- Delivery Program and Schedule
- Summary.

## 11.2 Delivery Overview

Subject to the endorsement of the Business Case by the Council, the Trails will progress to the pre-construction phase. The purpose of this phase will be to complete the required environmental and related studies, refine the concept design and confirm the operational and maintenance model for the Trails, which will be ultimately required to secure approvals and funding and commence construction of the Trails. The key packages of work and activities will be required during the pre-construction phase are outlined in Section 11.3.

The pre-construction phase, and how it relates to the broader project lifecycle, is illustrated in Figure 62.



Figure 62: Project Lifecycle Overview

### 11.2.1 Program Management Approach

As outlined in Chapter 7, the Council is expected to own and operate the Trails in the short to medium term. As part of this, the Council is expected to be responsible for progressing the Trails through the pre-construction phase, construction and into commissioning and operations. To successfully progress the Trails, a robust and structured program management approach and team must be established by the Council at the commencement of the pre-construction phase.

This function will play an important role in ensuring the Trails are delivered within the desired parameters (scope, time, cost and quality) and in accordance with the Council's objectives. It is critical that a dedicated and continuous focus is applied to the Project to ensure that key activities can be completed and support for the Project is maintained through to construction and beyond. The program management team be responsible for coordinating the packages of work and guiding the pre-construction phase. The team will also provide support in ongoing stakeholder engagement, funding identification and the procurement of technical advisors.

An indicative program management structure for the pre-construction phase is presented in Figure 63.

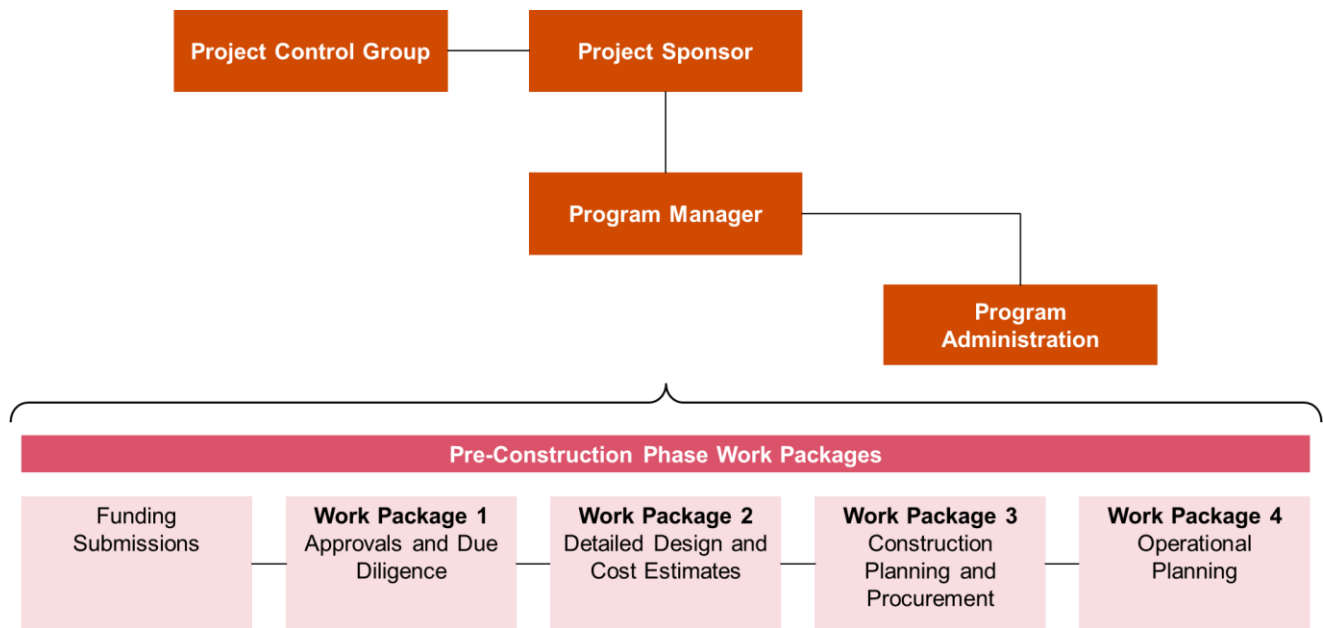


Figure 63: Indicative Project Management Approach

The program management team should have a clear charter. The Program Manager (equivalent of 0.5 FTEs) should be assigned with appropriate delegations and authorities, within agreed parameters, to ensure the function is agile and effective. Additionally, a budget provision should be allocated to the Project for internal resources and to fund external experts and advisors to support in the delivery of the various work packages.

The Program Manager will be responsible for ensuring the various work packages are delivered within the agreed scope, time, cost and quality parameters, and that the Project Control Group and Project Sponsor are provided with sufficient transparency regarding the status of the Project. Critically, the Program Manager will be required to ensure that the Project aligns with the core objectives set, and as outlined in this Business Case. The Program Manager should also provide regular briefings to key stakeholders, community and industry groups to maintain the Trails' momentum. Further, as the opportunities arise, the Program Manager, in conjunction with other Council resources, will be required to identify, prepare and submit funding applications for the Project.

### 11.3 Delivery and Implementation Phase Work Packages

The key work packages that will be required as part of the pre-construction phase includes:

- Funding submissions
- Work Package 1 – Approvals and due diligence
- Work Package 2 – Detailed design and updated cost estimates
- Work Package 3 – Construction planning and procurement
- Work Package 4 – Operational planning.

The key activities within each work package have been informed by the analyses presented in this Business Case, the Feasibility Report as well as through engagement with the Queensland Government and other stakeholders. The following sections provide an overview of each work package and the associated key activities.

#### 11.3.1 Funding Submissions

To facilitate the delivery of the various detailed design and approval activities, funding will be required to support the appointment of external resources and to engage the necessary studies and investigations. The appointed Program Manager and supporting team will be required to prepare budget submissions for the Council and/or funding applications for

the Queensland and Australian Governments, seeking financial support to advance the Project through the pre-construction phase.

The Program Manager will also need to engage with the Queensland Government to confirm the level of resource commitment and support that may be provided through DTIS and DES. Engagement should also continue to occur with Girramay RNTBC to understand the level of resource commitment that may be provided in relation to the cultural heritage assessments.

### 11.3.2 Work Package 1 – Approvals and Due Diligence

The purpose of Work Package 1 is to conduct detailed assessments and investigations in relation to the potential environmental and cultural heritage impacts for the Trails. The outcomes of this will inform and support the development of the detailed design and updated cost estimates under Work Package 2.

This package of work includes those activities that are necessary to obtain the relevant approvals and land tenure agreements to enable the future construction and operations of the Trails. These approvals and land tenure agreements will be critical to securing capital funding to support the construction of the Trails. Importantly, this package of work includes engagement with the key regulatory authorities, government departments and agencies, and land holders.

Prior to commencing Work Package 1, a detailed scope and schedule should be developed that outlines all the key activities that are necessary to be completed as part of the work package. The detailed scope and schedule will also identify the external support that the Council will require to progress the work package and the associated budget and funding that is required. The Queensland Government (DTIS and DES) has indicated that some level of resourcing support may be available to assist the Council in this process. However, the level of support is subject to further engagement with the Queensland Government and is expected to require an equivalent contribution from the Council.

A selection of the key activities that are anticipated to be completed in this work package include:

- Legal and regulatory, planning and environmental approvals plan and prepare to obtain the necessary approval submissions and supporting documentation
- Detailed ecological assessment, including:
  - Infield assessments of the Project area across two key periods (wet and dry seasons) – initially in December, with a follow up in May and June
  - Targeted flora and fauna species surveys
  - Development of species management plans for those identified within the Project area
  - MNES and MSES reporting
  - EPBC referral and habitat offset requirements (for impacted areas)
- Detailed cultural heritage assessment with Girramay RNTBC and, if applicable, Girringun
- Geotechnical investigations and site surveys to confirm soil types, land contours and topography, natural features and hazards and other elements that may impact the detailed design process
- Engagements with WTMA, DES, QPWS and HQ Plantations to inform the key land tenure agreements (i.e. secure land tenure over a 20m corridor) and approval requirements necessary to construct and operate the Trails
- Completion of any additional environmental, ecological or other surveys or investigations that may be required following engagement with the relevant regulatory authorities and stakeholders. For example, traffic survey for existing access roads and waterway surveys
- Commence the process with the relevant Queensland and Australian Government departments and agencies regarding with legal and regulatory, planning and environmental requirements
- Commence the process within the Council in relation to any planning approvals for construction of the Trail head or supporting infrastructure.

As the Attie Creek segment of the Trails overlaps with the Wet Tropics WHA, early and regular engagement should be undertaken with WTMA to determine the best course of action to progress the Trails. This may ultimately involve re-aligning the trail network, or commencing the approvals process as soon as practical for the Attie Creek segment and constructing the 7 Sisters and Lookout Hill segments in the meantime.

Work Package 1 will require technical and skilled resources. As such, it is anticipated that the Council and the Program Manager's capacity and capability will need to be supplemented with external experts and advisors. Regular and open engagement and communication with the relevant government departments, agencies and regulatory authorities will be crucial to ensuring an efficient and effective process is undertaken to delivering the required approvals.

### **11.3.3 Work Package 2 – Detailed Design and Updated Cost Estimates**

The Work Package 2 is to develop a detailed design for the Trails and to update the cost estimates that were initially developed in the Feasibility Report, and used in the Business Case. The detailed design is a critical precursor to the construction of the Trails. Where practical, the detailed design should be completed in parallel to Work Package 1, incorporating key findings from the environmental and/or cultural heritage assessments.

The key activities that are anticipated to be required in this Work Package are as follows:

- Develop a detailed design of the trail network, with updated alignments (if applicable) based on the detailed environmental and cultural heritage assessments and approvals plan
- Develop updated capital and O&M cost estimates that adhere to the Queensland Government's requirements, which is expected to be in accordance with 'Best Practice Industry Conditions' (BPIC)
- Develop a preliminary Project Management Plan (PMP) and Construction Management Plan (CMP) that provides guidance regarding the approach to constructing and commissioning the Trails, whilst also minimising any potential environmental or cultural heritage related impacts.

Due to the specialised nature of designing mountain bike trails in environmentally and culturally sensitive locations, it is recommended that the Council appoints a suitably qualified organisation to support in the completion of this work package.

### **11.3.4 Work Package 3 – Construction Planning and Procurement**

Prior to, or in conjunction with the commencement of Work Package 3, the Council is expected to make a Final Investment Decision (FID) in relation to the Trails. At this point, the Council is anticipated to have a sufficient level of information to inform the FID and the required capital and operational commitments (in conjunction with other sourced funding).

Following completion of all approvals and the finalisation of the Project design finalisation, Work Package 3 involves the development of construction documentation required to commence procurement for the Project. This will also include confirmation of the preferred delivery model for appointment of contractors to facilitate the construction process. Further detail on the common procurement options and construction delivery models that may be adopted for the Trails is provided in Section 11.4.

The key activities that are anticipated to be required in this work package are as follows:

- Review and select a preferred construction delivery model for the Trails and seek the Council's endorsement to commence the procurement process, which may be completed following a targeted engagement process with select operators to assess the appetite of the market for alternate models
- Confirm the Project scope, budget and scheduling documentation to reflect the chosen delivery model and any additional guidance from the Council
- Finalise the PMP and CMP to reflect outcomes of the FID, subsequent approvals and to reflect the requirements associated with the chosen delivery model
- Subject to the adopted procurement approach, prepare Expression of Interest (EOI) and/or Request for Tender (RFT) documentation that will be used for a market tender process to procure the preferred contractor/s for the Trails' construction
- Develop key commercial and legal documentation that will be required to appoint the preferred contractor/s

- Undertake the required market processes to shortlist and select the preferred delivery contractor/s for the Project and finalise all legal and commercial agreements to secure the arrangement
- Update the PMP, CMP and risk registers, as required
- Provide communications to the key stakeholders notifying of the completion of the milestone and updating them regarding revised Project timeframes and delivery approaches.

Subject to the level of capacity and capability within the Council, an independent Project Delivery Manager and/or technical consultant/s may be appointed to support the Program Manager in the construction phase of the Trails. These resources may be appointed through existing Council panel arrangements or through market tender processes.

### 11.3.5 Work Package 4 – Operational Planning

In parallel to Work Package 3, the Council will be required to commence operational planning for the Trails. This will include (but is not limited to) establishment of core financial and administrative processes, appointment of key personnel, development of operating agreements and the establishment of social media and other promotional channels.

The key activities that are anticipated to be required in this Work Package are as follows:

- Establishment of the Trail's operational governance structure. This structure may be a continuation of the structure outlined in Section 11.2, or an alternate structure that is aligned with the existing Council structures. As a minimum, a key accountable officer should be appointed and responsible for managing the operations of the Trails.
- Reconfirmation of the proposed ownership and operation and maintenance model for the Trails, and the necessary governance structures established.
- Establishment of the base administration and financial processes to manage the day-to-day operations. It is anticipated that many of these processes will be integrated within the Council's existing processes.
- Establishment of the key personnel and resourcing requirements. This will include recruitment, training and onboarding personnel. To the extent that Girringun's Aboriginal Ranger Program will support and supplement the resources appointed by the Council, the accountable officer will be required to facilitate the operational agreements and operating protocols required to facilitate this arrangement.
- Engagement with Girramay RNTBC to develop an approach for their involvement in the operational phase of the Trails and to instil the Girramay People's culture and heritage (e.g. artwork, artefacts, storytelling murals) throughout the Trails.
- Development of an operations and maintenance plan, which clearly documents standard trail maintenance practices and protocols for traffic management, park management (e.g. during adverse weather events) and emergencies. This will also need to outline WH&S and environmental management requirements that are necessitated by the Council and regulatory authorities.
- Procurement of key equipment and establishment of work areas and storage facilities for operational requirements and equipment storage.
- Targeted market engagement with key shuttle service operators who may be suitable for the Project. This will be critical to generating shuttle service revenue from the commencement of operations at the Trails, which is anticipated to be a key revenue stream (see Chapter 8) that the commercial model for the Trails is established early and revenue generation commences promptly once the initial infrastructure is constructed and commissioned.
- Creation of a website and social media pages for the Trails, and preparation of a branding, promotion and marketing plan. Preliminary promotional and marketing campaigns may also be required (prior to finalisation of construction) to communicate the proposed opening dates and to build interest in the Trails.
- Development of trail signage, wayfinding and trail head plans for installation across the trail network.
- Broad engagement with key stakeholder groups and services providers to communicate updates regarding the Trails. This process may also require targeted capacity and capability building workshops or sessions that are facilitated by the Council or other market operators, to ensure that the delivery of services is optimised.
- Ongoing and regular engagement with key regulatory authorities, government departments and agencies, funding bodies and other stakeholders to provide updates regarding the status and progress of the Trails.



## 11.4 Consultants and Contractors

### 11.4.1 Consultants and Technical Advisors

Consultants and technical advisors are expected to be required throughout the pre-construction phase and subsequent phases of the Trails. These resources will supplement the existing capacity and capabilities within the Council. As a minimum, the following technical expertise is expected to be required:

- Environmental – to undertake the ecological investigations, flora and fauna surveys and approval documentation.
- Design and engineering – for completion of the detailed design and relevant landscape or engineering investigations.
- Quantity survey – to provide input into the updated cost estimates.
- Legal – to facilitate the land tenure, cultural heritage and other approvals related agreements.
- Cultural heritage – to support in completion of cultural heritage assessments in conjunction with the Girramay People.
- Geotechnical – to undertake any required geotechnical surveys.
- Commercial – to facilitate the development of the commercial model and update financial forecasts and modelling.
- Project Management – to the extent required to support in the delivery of the construction phase.
- Lead Program Advisor – to develop and implement a comprehensive and robust approach to progressing the Trails through the pre-construction phase and beyond.

Girramay RNTBC has indicated their support in completing the detailed cultural heritage assessments. Further, the Queensland Government has expressed an appetite to provide resourcing assistance and support during the pre-construction phase. The costs associated with these consultants will be required to be included within the budget allowed for the pre-construction phase.

A market tender process will be required to procure consultants and technical advisors with the relevant skills and expertise that are required to support the Council in delivering the Trails. It is important to prioritise skills and capabilities, relevant experience and local knowledge of the area, Project and surroundings when evaluating tender responses from potential consultants and technical advisors. While price is an important consideration, it is recommended that a heavy weighting is not assigned to price. This is particularly important for the Trails, as visitation will rely on a high quality, world class trail network.

### 11.4.2 Construction Planning and Procurement

A key activity in Work Package 3 (construction planning and procurement) is to determine the most appropriate delivery model for the construction of the Trails and supporting infrastructure. Delivery models that are typically used in the construction of comparable infrastructure projects are summarised in Table 41. The Council is expected to be the lead contracting authority and may be supported in this function by the Queensland Government, in particular DTIS.

Table 41: Potential Delivery Models

Model	Description
Construct Only (CO)	<p>A CO contract is best suited in lower risk, small-to-medium sized projects. It involves the delivery authority (CCRC or Queensland Government) tendering for a construction contractor and maintaining responsibility (or outsourcing separately) for the detailed design, planning and project management. The delivery authority may engage a design consultant separate to the contract for construction and, as a result, will inevitably retain design risk. The construction contractor will have little or no input into the constructability of the design.</p> <p>The CO option offers a simple and well defined contract thereby increasing tenderer competition, decreasing price and ensuring a quality outcome. The Government will retain full control of the project including stakeholder interfaces and timing.</p>

Model	Description
Construct Only – Early Tenderer Involvement (ETI)	<p>ETI is a subset of the CO model and is a procurement methodology that can be applied to a standard construction contract. ETI involves selecting two or three competing contractors to participate in value engineering and refinement of the detailed design. Through this process, the design is amended and refined prior to the tender documentation for a construction contract being finalised and executed.</p>
Design and Construct (D&C)	<p>A D&amp;C contract is best suited where project scope is well defined, but private sector expertise has the potential to add value in the design and construction phases. In a D&amp;C contract arrangement, the delivery authority prepares a design brief outlining the key functional and service requirements, then seeks tenders from the market to complete the detailed design consistent with the design brief and to construct the works. This type of contract has the following features:</p> <ul style="list-style-type: none"> <li>• The owner retains the risk of project scope, scope change, unknown/undiscoverable site conditions and whole-of-life asset ownership</li> <li>• The contractor assumes the risk of compliance of design and construction works with the brief, completion within timeframe and cost overruns (subject to claims for variations)</li> <li>• Payments are at set milestones and are based on lump sums.</li> </ul> <p>By bundling the responsibilities for design and construction with a single entity, risks associated with the interface between design and construction can be transferred to one party and greater collaboration between the two functions can be achieved.</p>
Early Contractor Involvement (ECI)	<p>The ECI model is best suited in a project where there are perceived scoping and output benefits of early involvement of the contractor. It is a collaborative approach to contracting where contractor(s) are engaged in the early stages of the project process to develop a tender for the construction phase of a project. It is generally used in complex projects with challenging technical requirements and delivery timeframes.</p> <p>The ECI delivery model includes a tender phase that is followed by a two-step interactive process to negotiate D&amp;C contract. During the tender phase an EOI is typically developed and industry response to non-price criteria is sought from a list of potential candidates. A short listing process then occurs through a series of interviews and workshops. In stage one, a preferred contractor is selected and works with the delivery authority to develop the project design, assess the risks within the project and develop a risk adjusted tender price. If the delivery authority accepts the tender price, the contractor moves into stage two to complete the D&amp;C works.</p> <p>The objectives of the ECI project delivery model are:</p> <ul style="list-style-type: none"> <li>• To provide an efficient, competitive environment that enables proponents to develop an optimised value for money stage two offer</li> <li>• To encourage innovation in the development of each stage (including in the design, programming and management of the delivery of the works)</li> <li>• To reduce time of delivery, introduce more cost effective ways to meet the project objectives and maximise value for money</li> <li>• To facilitate interaction with each proponent throughout the tender and the stage one phase, and to communicate further information regarding the requirements for the Trails</li> <li>• To enhance interaction with the contractor throughout stage two to limit tensions between the delivery authority and contractor and to resolve issues on a mutually satisfactory basis.</li> </ul>

Based on the proposed delivery approach for the Trails, the recommended delivery model for the construction of the Trails is expected to be CO. The construction process to deliver the Trails is expected to be relatively straightforward. Further, with the preliminary Delivery and Implementation work packages completed in advance of the tendering stage, there should be relatively few uncertainties regarding the construction of the Trails. As previously outlined in Section 11.4.1, it is important to prioritise skills and capabilities, relevant experience and local presence of the potential construction contractors. Importantly, DTIS will be able to apply key learnings from comparable mountain bike trail projects in the procurement of a construction contractor for the Trails.

## 11.5 Delivery Program and Schedule

### 11.5.1 Delivery Program

A high-level delivery program and schedule (**as of May 2023**) is outlined in Table 42. This delivery program and schedule reflects an optimistic approach that assumes no delays occur. Given the potential timing variability, the specific timing of each phase and activity is indicative. Further, the phasing of certain work packages may vary and may not progress sequentially.

The critical path and activities to deliver the Trails have not yet been identified, as some processes and their timing are subject to further detailed analysis and confirmation. Risks associated with the delivery of the Trails, such as delayed infield assessments due to adverse and poor weather events during the wet season, should be continually assessed and actively managed by the Program Manager.

Table 42: Delivery Program Overview

Work Package / Activity	Overview and Core Activities	Timeframe for Completion	Indicative Commencement Date
Business Case Completion and Endorsement	<ul style="list-style-type: none"> <li>Complete the Business Case and demonstrate the rationale for the Trails</li> <li>Receive endorsement of the Business Case from the Council, and decision to proceed</li> </ul>	1 month	Q3 2023
Program Management - Establishment	<ul style="list-style-type: none"> <li>Establish the program governance structure, detailed scopes of work to be undertaken and overarching program management documentation</li> </ul>	Ongoing	Q3 2023
Funding Submissions	<ul style="list-style-type: none"> <li>If applicable, the Council to develop funding applications using the Business Case's analyses and key findings for pre-construction phase activities</li> <li>Submit the Business Case and/or funding application to the Queensland Government seeking funding support</li> <li>Continue engagement with key stakeholders and the Giramay People</li> <li>Confirm the Queensland Government's committed resources to the pre-construction phase of the Project</li> </ul>	6 months	Q3 2023

Work Package / Activity	Overview and Core Activities	Timeframe for Completion	Indicative Commencement Date
Work Package 1 – Approvals and Due Diligence	<ul style="list-style-type: none"> <li>Complete a market tender process to appoint key technical advisors to support in the delivery of Work Package 1</li> <li>Undertake detailed ecological and cultural heritage assessments</li> <li>Develop the legal and regulatory, planning and environmental approvals plan</li> <li>Prepare and commence process with relevant Queensland and Federal Government agencies regarding with legal and regulatory, planning and environmental requirements</li> <li>Commence planning approvals for trail head infrastructure</li> <li>Obtain the necessary legal and regulatory, planning and environmental approvals (Attie Creek approvals may lag due to the requirement to receive approval from WTMA)</li> <li>Confirm the alignment of the Trails with FNQROC's updated mountain biking strategy</li> <li>Continue engagement with key stakeholders and the Girramay People</li> </ul>	12 to 24 months	Q1 2024
Work Package 2 - Detailed Design and Costings	<ul style="list-style-type: none"> <li>Develop detailed design of the trail network and, if applicable, update the Trails' alignment to reflect outcomes of Work Package 1</li> <li>Develop updated cost estimates in accordance with the Queensland Government's requirements, which may be BPIC</li> <li>Prepare a preliminary Project Management Plan and Construction Management Plan for the consideration by the Council</li> </ul>	6 months	Q2 2024
Milestone - FID	<ul style="list-style-type: none"> <li>Confirm the funding and financing sources to deliver the Trails</li> <li>Confirm the decision to proceed with the Trails with the Queensland Government</li> <li>Confirm availability of Government subsidies for Girringun's Aboriginal Ranger Program expansion to support the Trails operations and maintenance</li> </ul>	1 month	Q4 2024
Work Package 3 - Construction Planning and Procurement	<ul style="list-style-type: none"> <li>Development of final For Construction drawings and design</li> <li>Revise the Project scope, budget and scheduling documentation to reflect the chosen delivery model approach and any additional guidance from the Council regarding project parameters</li> <li>Development of contract documentation and finalisation of the PMP and CMP</li> <li>Execute procurement strategy to procure contractor/s for the construction of the Trails under the chosen delivery model</li> </ul>	6 months	Q4 2024

Work Package / Activity	Overview and Core Activities	Timeframe for Completion	Indicative Commencement Date
Construction	<ul style="list-style-type: none"> <li>Upon appointment of the head contractor, commence work to construct the Trails and accompanying trail head infrastructure</li> <li>Phased delivery of the 7 Sisters (12 months), Lookout Hill (6 months) and Attie Creek segments (12 months)</li> </ul>	36 months	Q1 2025
Work Package 4 - Operations Planning	<ul style="list-style-type: none"> <li>Establish base governance and management structures to support the operation of the Trails</li> <li>Reconfirm the proposed ownership and operational and maintenance model for the Trails</li> <li>Establish base administration, financial and management processes</li> <li>Commence recruitment and training process of the Trails' FTEs</li> <li>Early engagement with potential shuttle operators and preparation for procurement of these services.</li> <li>Support Girramay RNTBC to establish complementary offerings and Gerringun to expand the Aboriginal Rangers Program</li> <li>Procure equipment for the Trails' operations and maintenance and establish work sites and storage areas</li> <li>Develop website and associated social media channels and prepare materials for promotion and marketing</li> <li>Finalise operations and maintenance plan</li> <li>Develop signage, wayfinding and Trail Head plans</li> <li>Engagement with key stakeholder groups and potential service providers to ensure readiness for the Trails commencement.</li> </ul>	6 months	Q2 2025
Milestone - Commissioning & Operations	<ul style="list-style-type: none"> <li>Commence operations and gradually commission the trail segments</li> <li>Engage the shuttle operator/s and other key service providers</li> </ul>	NA	Q1 2026

### 11.5.2 Delivery Schedule

The delivery program outlined in Section 11.5.1 has been presented in Table 43, which provides a visual representation of the various work packages and milestones (*As of May 2023*). The delivery schedule also identifies a proposed phasing of these activities. However, the exact timing and phasing of the activities may vary, depending on outcomes of the preceding work packages. As such, the information provided is indicative only.

Table 43: Indicative Program Delivery Timeline

Work Package/ Activity/ Milestone	2023				2024				2025				2026				2027			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Business Case Endorsement</b>																				
<b>Stakeholder Engagement</b>																				
<b>Program Management</b>																				
<i>Establishment and Planning</i>																				
<i>Ongoing Program Management</i>																				
<b>Funding Submissions &amp; Commitments</b>																				
<b>WP1 – Approvals and Due Diligence</b>																				
<i>Technical Advisor Appointment</i>																				
<i>Detailed Site Investigations</i>																				
<i>Approvals and Planning</i>																				
<i>Targeted Stakeholder Engagement</i>																				
<b>WP2 – Detailed Design and Updated Cost Estimates</b>																				
<i>Detailed Design</i>																				
<i>Cost Estimate Updates</i>																				
<i>Preliminary Construction Planning</i>																				
<b>FID</b>																				
<b>WP3 – Construction Planning</b>																				
<i>Construction Documentation</i>																				
<i>Construction Planning</i>																				
<i>Contractor Procurement</i>																				
<b>Construction</b>																				
<i>7 Sisters Segment</i>																				
<i>Lookout Hill Segment</i>																				
<i>Attie Creek Segment</i>																				
<b>WP4 – Operations Planning</b>																				
<i>Governance Structure</i>																				
<i>Management Processes</i>																				

Delivery and Implementation

Work Package/ Activity/ Milestone	2023				2024				2025				2026				2027			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Market Engagement																				
Equipment Procurement																				
Media and Marketing																				
Industry and Community Engagement																				
Commissioning & Operations																				



### 11.5.3 Delivery Cost Estimate

Using the indicative delivery and implementation plan, the estimated cost to construct and deliver the Trails in nominal terms is summarised in Table 44. In alignment with the Financial Analysis approach outlined in Chapter 8, these cost estimates have been calculated by escalating the raw cost estimates developed in the Feasibility Report and incorporating the indicative equipment costs. No allowances were made in the Feasibility Report's cost estimates for Traditional Owner engagement, noting that it was often completed in-kind through by resource commitments of 'clients' (i.e. the Council). These cost estimates are indicative and should be re-evaluated in subsequent phases of the Project.

Table 44: Indicative Cost to Deliver the Trails (\$ Nominal)

Cost Item	Estimate (\$ Nominal)	Notes
<b>Delivery and Implementation</b>		
Work Package 1: Approvals & Due Diligence	\$660,385.1	Includes 'Ecology Assessments and Approvals' based on an estimate provided by Trend Ecology in the Feasibility Report. This also includes the 'community consultation' cost provision that was included in the Feasibility Report.
Work Package 2: Detailed Design & updated cost estimates	\$472,373.2	Includes the Design and Design Contingency of each Trail Segment, and the Design and Construction of Engineering Solutions (unable to segregate cost estimate provided in the Feasibility Report).
Work Package 3: Construction Planning and Procurement	\$30,223.7	Includes development of the Construction Management Plan.
Work Package 4: Operational Planning	\$502,510.3	Includes HQ Plantations Engagement and Planning, Marketing and Branding, and Management Plan Creation (Operational State).
Project Management	\$524,276.9	Project Management for 'Additional Project Proposal Costs' as calculated in the Feasibility Report's cost estimates.
<b>Delivery and Implementation Cost</b>	<b>\$2,189,769.1</b>	
<b>Construction</b>		
Seven Sisters Construction Cost	\$3,502,308.9	
Lookout Hill Construction Cost	\$805,301.6	
Attie Creek Construction Cost	\$5,853,343.0	
Trail Head Construction Cost	\$507,758.8	
Equipment	\$180,068.4	
<b>Construction Cost</b>	<b>\$10,848,780.6</b>	
<b>Total Indicative Cost</b>	<b>\$13,038,549.8</b>	

## 11.6 Summary

Subject to the endorsement of the Business Case by the Council, the Trails will progress to the pre-construction phase. The purpose of this phase will be to undertake the various studies and investigations required to obtain the approvals for the Trails, refine the concept design and confirm and establish the operating and maintenance model. The pre-construction phase is expected to culminate in a FID for the Trails, with this being underpinned by sufficient capital funding to advance to a construction-ready state.

## **Program Management Approach**

Success of the pre-construction phase of the Trails is predicated on the establishment of a robust and structured program management approach that is underpinned by an experienced team and supporting governance structure that enables efficient and informed decision making.

## **Work Packages**

The key packages of work and activities that are anticipated to be required during the pre-construction phase are as follows:

- Funding submissions and commitments
- Work Package 1 – Approvals and due diligence
- Work Package 2 – Detailed design and updated cost estimates
- Work Package 3 – Construction planning and procurement
- Work Package 4 – Operational planning.

## **Consultants and Contractors**

Consultants and technical advisors are expected to be required throughout the pre-construction phase. These resources will supplement the existing capacity and capabilities within the Council, and importantly will ensure that the technical risk areas are sufficiently managed. Technical advisors across geotechnical, ecological, quantity survey, trail design, landscape architect, commercial and legal are expected to be required. A market tender process is recommended to procure the relevant skills and expertise, with the requisite capabilities and experience to deliver a robust outcome across the key activities within this phase.

The recommended delivery model for the construction of the Trails is expected to be 'Construct Only'. The construction process to deliver the Trails is expected to be relatively straightforward, as sufficient design and investigation work will have been completed by the Council in earlier stages.

## **Delivery Program and Schedule**

An indicative outline of the key work packages and activities for the pre-construction phase of the Trails was developed. With the pre-construction phase commencing in Q3 2023, the core activities (including operational planning) are expected to be completed within a 36-month period. This timeframe also aligns with the expected completion of the construction of the Project infrastructure. The construction and commissioning of the Trails is anticipated to be phased sequentially by each segment. However, due to the inherent uncertainties related to the environmental and planning approvals, these timeframes may change as further information becomes available in relation to the ecology and geotechnical aspects of the Project area.

# 12 Conclusion and Recommendations

## 12.1 Conclusion

The Trails represent an important step towards establishing the Cassowary Coast region as a leading adventure and lifestyle destination and involve the development of a new 94km, 26-trail mountain bike network in Cardwell. The Trails are a community-led initiative that has been jointly driven by the Cardwell community and the Girramay Peoples with support of the Council, who all equally share the ambition to establish Cardwell as a 'Ride Destination' and '*Ride where our ancestors once walked, Girramay Country*'. The Trails will also generate significant benefits for the economy and the Cardwell community, including increased employment and training opportunities for residents and First Nations Peoples, as well as enhanced health and wellbeing of participants.

As demonstrated in Figure 64, the development of the Trails is underpinned by a clear service need and strategic rationale.


Opportunities	<b>Leading adventure destination with diverse experiences</b>  <p>There is an opportunity to leverage Cardwell's natural features and nearby attractions to establish the region as a leading adventure and lifestyle destination with diverse experiences.</p>	<b>Recognise the Girramay Peoples' cultural heritage</b>  <p>Greater respect for, and recognition of, the unique culture of the local Traditional Owners will establish cultural heritage as a key element and competitive advantage of the Trails and, in turn, provide greater employment and business opportunities for the local Traditional Owners.</p>	<b>Enhance community cohesion and wellbeing</b>  <p>The Cardwell community's strong civic pride and commitment presents an opportunity to deliver greater community-led infrastructure that may enhance community cohesion and wellbeing.</p>
	<b>Sustain national park maintenance and protection programs</b>  <p>Investment is required to sustain and expand the capacity and coverage of the existing National Park maintenance programs in and around Cardwell, which are critical in providing access to and sustainably maintaining protected areas and national parks.</p>	<b>Secure the long term prosperity of Cardwell</b>  <p>To secure the long term prosperity of Cardwell, there is a need to grow and diversify the region's economy, increase economic resilience and generate new employment and training opportunities.</p>	<b>Attract and retain skilled people and investment</b>  <p>The lifestyle and amenity in Cardwell must be enhanced to attract and retain skilled people in the region.</p>

Figure 64: Summary of the Trail's Service Need

The Trails in Cardwell also offer a strong value proposition that will ultimately be integral to its long term success. This includes:

- World class trails that offer a variety of styles and difficulties for all riders
- Meaningful involvement and recognition of the Girramay Peoples
- Ride in, ride out trails, within 500m of the town centre and foreshore, which limits the use of visitors' private vehicles whilst in Cardwell
- Off-bike cultural experiences and natural attractions in proximity to the Trails and Cardwell
- Community-led project that has been recognised on the national scale.

The development of the Trails, a 96km trail network with varying ride styles and difficulties, is expected to generate a range of benefits in Cardwell and the Cassowary Coast more broadly.

The development of a sustainable ownership and operating model is integral to the long-term viability of the Trails in Cardwell. The ownership and operational models of the Trails must align with the service need of the Project and balance the Trails' financial sustainability with the potential economic and social benefits that are expected to be created. Importantly, the Trails' ownership and operating models must also ensure that the culture and heritage of the Girramay Peoples is recognised and promoted throughout the Trails in a meaningful manner. The Council is recommended to retain ownership of the Trails in the short term. The Council may seek to transfer the ownership risk of the Trails, through a contractual arrangement (such as a lease or licence) to a third party, or divest their ownership interest entirely to an independent entity, in the medium to long term.

The Council is also recommended to lead the operation and maintenance of the Trails in the short term, supported by Girramay RNTBC (subject to their desired role and level of involvement) and Giringun. This approach has been implemented by local governments in comparable, successful mountain biking trail projects, such as Blue Derby and St Helens. Further, the Council's strong and trusted relationship with Girramay People and Giringun will be important, as Giringun's Aboriginal Ranger Program is expected to be integral to the maintenance of the Trails. The Trails are anticipated to become financially sustainable within five to seven years of operation, at which point the Council may seek to transfer the operation and maintenance responsibilities to an independent commercial operator or a Council-owned entity.

A financial analysis was subsequently undertaken to determine the financial sustainability of the Trails and estimate the long term financial outcomes of the Project. Table 45 presents the total nominal and PV cashflows of the Trails under the medium demand scenario. This demonstrates that the Net Project Value of the Trails is approximately -\$10.5 million (nominal terms), which suggests that the Trails will not be able to generate sufficient operational surpluses to offset the initial capital cost. However, based on the current assumptions, the Trails are estimated to generate a positive net operational cashflow of \$2.5 million in nominal terms and just under \$1 million in PV terms over the analysis period. This suggests that the Trails will be able to operate on a financially self-sufficient basis across the analysis period.

**Table 45: Financial Analysis Summary (\$'000, Nominal and PV)**

Cashflow	Nominal	PV
Revenue	\$21,108.7	\$9,043.6
O&M Costs	-\$18,632.2	-\$8,129.6
<b>Net Operational Cashflows</b>	<b>\$2,476.5</b>	<b>\$914.0</b>
Capital Costs	-\$13,038.5	-\$11,565.5
<b>Net Project Value</b>	<b>-\$10,562.1</b>	<b>-\$10,651.5</b>

An economic analysis was undertaken to assess the economic outcomes generated by the Trails in Cardwell. Table 46 summarises the total discounted costs and benefits for the Trails, which is based on the estimation of monetisable project benefits and costs and expressed as an NPV and BCR.

**Table 46: Economic Analysis Outcomes (\$'000, PV)**

Expenditure Item	PV
<b>Costs</b>	
Capital Costs	8,849
O&M Costs	3,756
<b>Total Costs</b>	<b>12,605</b>
<b>Benefits</b>	
Producer surplus benefit from increased tourism expenditure	20,659

Expenditure Item	PV
Health benefits from increased physical activity	1,095
WTP benefit for recreational use	712
<b>Total Benefits</b>	<b>22,467</b>
<b>NPV</b>	<b>9,862</b>
<b>BCR</b>	<b>1.8</b>

The Trail benefits are estimated to be \$22.5 million (real, discounted at 7%) and Project costs are estimated to be \$12.6 million (real, discounted at 7%). The producer surplus benefits represent the largest economic benefit stream, followed by consumer surplus benefits and then health benefits. Based on the economic analysis, the NPV for the Project is \$9.9 million with a BCR of 1.8, indicating that the monetised benefits of the Trails outweigh the monetised costs from an economics perspective. The Trails will also generate significant non-monetisable and qualitative benefits for Cardwell and the community. This includes increased employment, social capital for First Nations communities, urban revitalisation, greater national and elite sporting outcomes, and increased expenditure relating to events.

The Project is therefore considered to be financially sustainable and economically viable. Subject to the endorsement of these analyses and the Business Case by the Council, it is recommended to progress to the pre-construction phase for further investigation. An indicative program to deliver the Trails is presented in Figure 65.

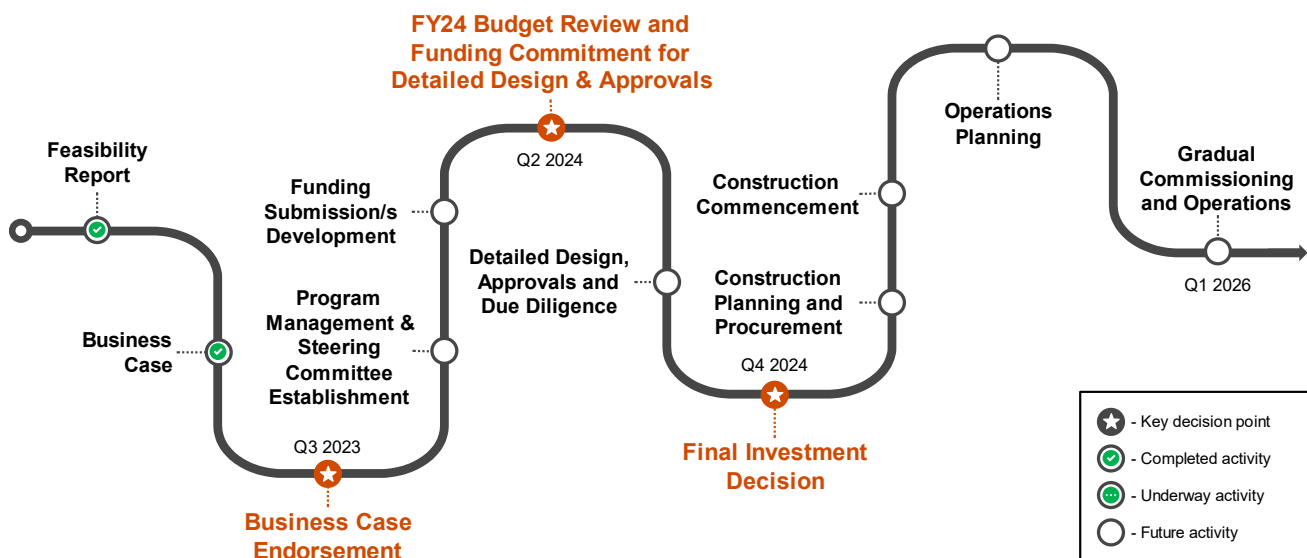


Figure 65: Delivery and Implementation Approach

The purpose of the pre-construction phase will be to complete the required environmental and cultural assessments and related studies, refine the concept design and confirm the operational and maintenance model for the Trails, which will be ultimately required to secure approvals and funding and commence construction of the Trails. The key packages of work and activities that are anticipated to be required during this phase are as follows:

- **Funding Submissions:** Secure funding support to progress the Trails and, where required, procure external resources to commence the key work packages.
- **Work Package 1 – Approvals and Due Diligence:** Complete detailed environmental and cultural heritage assessments and establish an agreement with key stakeholders regarding land tenure matters. These activities will be required to secure legal, regulatory, planning and other approvals for the Trails prior to construction.

- **Work Package 2 – Detailed Design and Updated Cost Estimates:** Develop a detailed design and updated capital and operational cost estimates for the Trails, incorporating key findings from the approvals and due diligence package of work where required.
- **Work Package 3 – Construction Planning and Procurement:** Develop construction documentation in preparation for the procurement of the relevant construction contractor/s.
- **Work Package 4 – Operational Planning:** Commence operational planning and employee training in preparation for the Trails' commissioning. This may include establishing financial and administrative processes, appointing key personnel, developing operating agreements and practice manuals, and establishing social media and other promotional channels.

To ensure that the outcomes of the Project are optimised through the pre-construction phase, it is imperative that a robust and structured program management function is implemented by the Council, potentially supported by a Lead Program Advisor. This function will play an important role in ensuring the Trails are delivered within the desired parameters (scope, time, cost and quality) and in accordance with the Council's objectives.

## 12.2 Recommendations

Based on the analysis undertaken in the Business Case, recommendations for the Council's consideration are as follows:

- Endorse the outcomes of the Business Case and the proposed ownership and operational model of the Trails
- Establish the project management and governance structure that will be required to progress the Trails and to oversee the extensive program of work that is required to deliver the Project
- Using the Business Case, develop funding applications to seek support from the Queensland Government to progress the Trails and funding for the pre-construction phase
- Continue to engage with key stakeholders in relation to the following:
  - Girramay RNTBC regarding their desired role in the Trails' operations and maintenance and the potential complementary service offerings that could be provided by the Girramay People
  - Giringun regarding their proposed involvement in the operations and maintenance of the Trails
  - DTIS regarding funding programs and opportunities to support the construction of the Trails
  - DES and WTMA regarding the approval requirements to develop the Trails
  - HQ Plantations regarding the land tenure agreements to develop, operate and maintain the Trails.
- Deliver a community briefing session to provide an update regarding the status of the Project, and update any social media platforms and websites notifying of the progress of the Project
- Engage with key regional advocacy groups (such as FNQROC, TTNQ and TEQ) to participate in discussions regarding the definition of regional mountain biking strategies and promotions

Commence work package 1, approvals and due diligence, as soon as practical.





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