Nannup Mountain Bike Park

Economic Impact Assessment

Report prepared for

Shire of Nannup

July 2020

LUCID ECONOMICS

lucid

/'lu:sid/

adjective

1. expressed clearly; easy to understand

2. bright or luminous

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Executive Summary

Introduction

Lucid Economics Pty Ltd (Lucid Economics) has been engaged by the Shire of Nannup to identify the future economic benefits associated with the planned Nannup Mountain Bike Park.

Existing Context

Nannup's economy was just over $90 million in 2018-19. Economic growth in the region has averaged 1.2% per annum over the past decade, significantly below the Western Australian average of 3.2%.

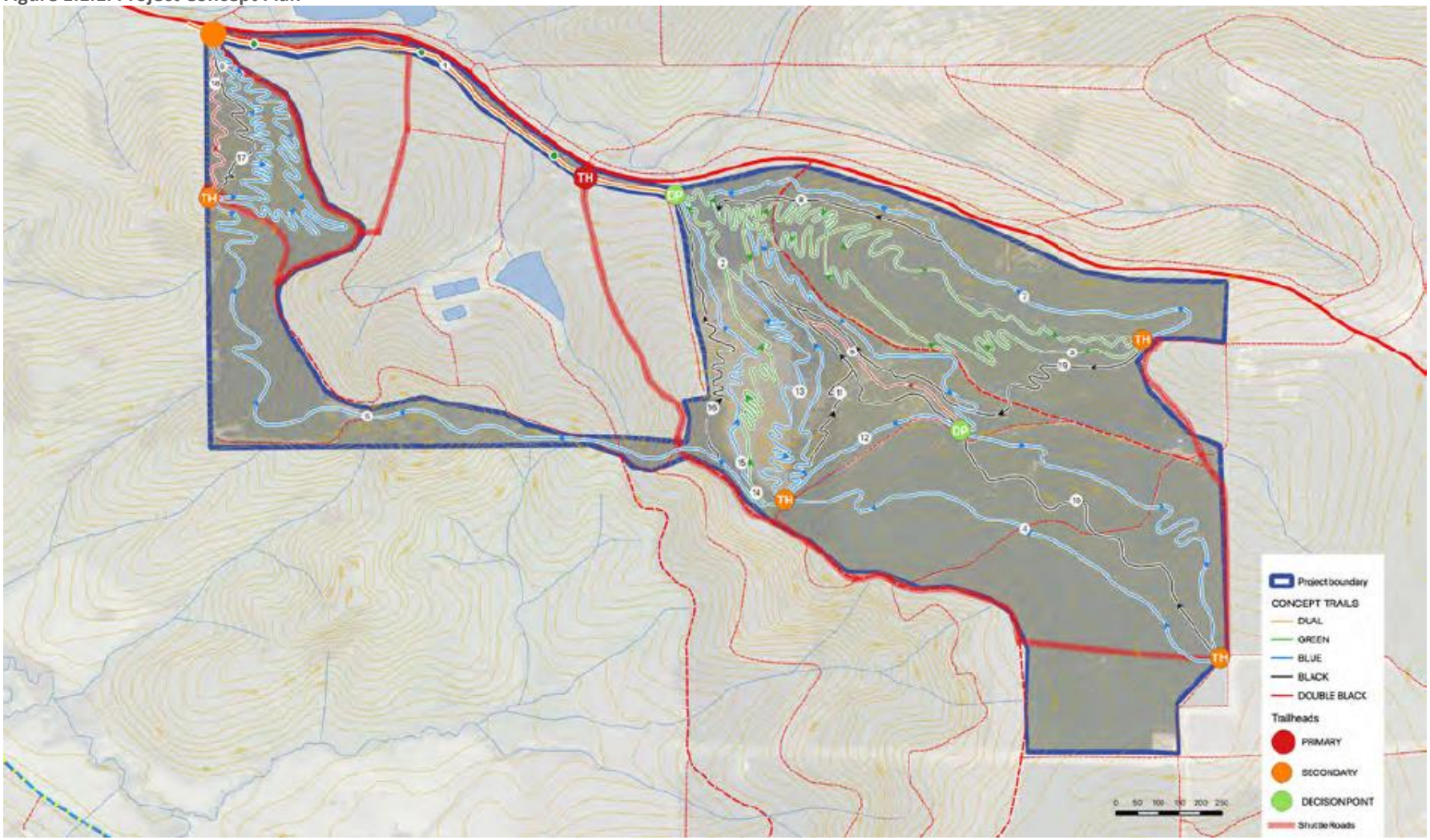
Further, economic growth in Nannup has been considerably more volatile than the State average, likely owing to the region's heavy reliance on the agriculture and manufacturing industries.

Nannup Mountain Bike Park

The Nannup Mountain Bike Park is situated on 177ha of land just 2km east of the Town of Nannup. The park includes 30km of trails consisting of various stacked loops, providing riders the option to shorten or lengthen their rides, depending on their preference. There is also a wide range of trails including those for beginners through to more experienced riders to take on difficult or even extreme trails. Furthermore, the park is only 2km east of the town, allowing riders to base themselves in town and avail themselves of the local wash down facility as well as the local accommodation, restaurants and cafes.

Figure E.1.1 provides an overview of the proposed Nannup Mountain Bike Park.

Figure E.1.1. Project Concept Plan



Source: Shire of Nannup (2019).

Economic Impact Assessment

Once the Nannup Mountain Bike Park is operational, it is expected to generate 11,600 new visitors to the town, an increase of 14% of current visitation estimates. These visitors are expected to inject $3.8 million into the local economy in the first year of operations. This level of increased expenditure is estimated to contribute (directly and indirectly) $2.5 million to the local economy, in GRP terms. It will also directly and indirectly support 23 full-time equivalent (FTE) positions in the area.

Table E.1 Economic Impact, Nannup Mountain Bike Park

	Gross Regional Product ($M)	Employment (No.)
Direct	$1.2	16
Indirect	$1.2	7
Total	**$2.5**	**23**

Source: Lucid Economics

Additionally, mountain biking tourism has grown strongly (10.5% per annum in Western Australia) over the past decade. If this trend were to continue, visitation to Nannup is expected to grow, which would also increase the economic benefits from the Nannup Mountain Bike Park (Table E.2).

Table E.2 Economic Impact, Nannup Mountain Bike Park (Year 5 of Operations)

	Gross Regional Product ($M)	Employment (No.)
Direct	$1.9	24
Indirect	$1.8	10
Total	**$3.7**	**34**

Source: Lucid Economics

Additional Benefits

Beyond the quantified economic benefits highlighted above, the project will help to deliver a number of additional qualitative benefits, including:

- Supporting the region's economic recovery post-COVID 19
- Diversifying the local economy
- Providing employment opportunities for low-skilled workers

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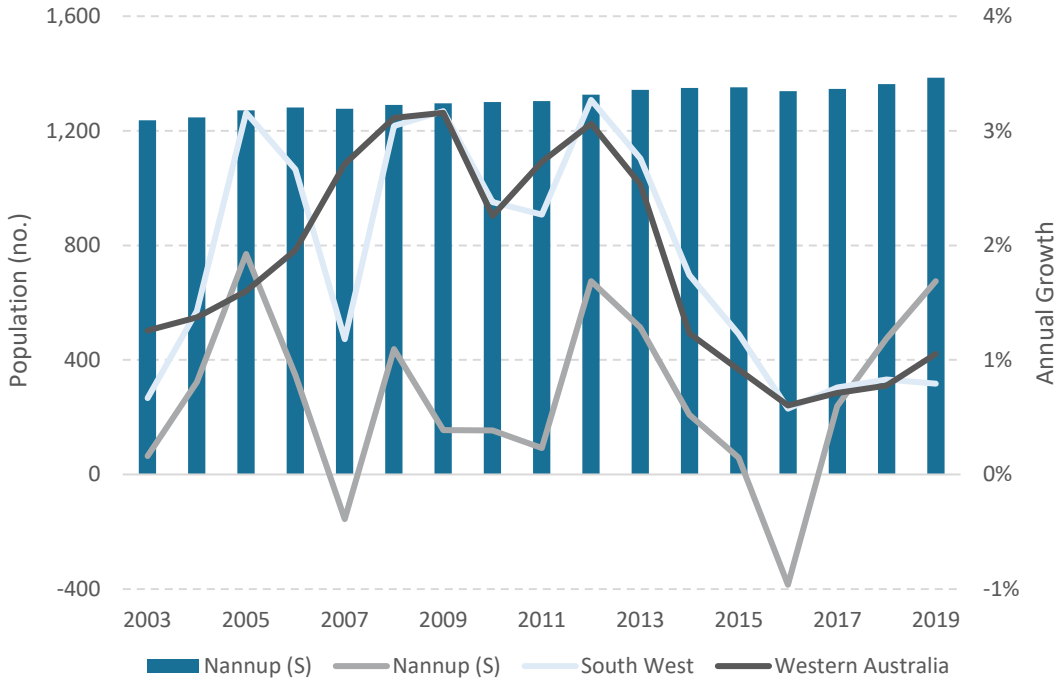
1. Introduction

Lucid Economics Pty Ltd (Lucid Economics) has been engaged by the Shire of Nannup to identify the future economic benefits associated with the planned Nannup Mountain Bike Park.

The Shire of Nannup is a small local government area (LGA) located in the South West Region of Western Australia. The LGA is located approximately 60km south-east of Bunbury and 270km south of Perth.

The LGA's resident population was just under 1,400 persons in 2019 (ABS, 2020), with population growth having generally been weaker than the South West and Western Australian averages over the past decade. The region is particularly reliant on agriculture and manufacturing for economic activity.

Figure 1.1. Historical Population



Source: ABS (2020).

Mountain biking is a fast growing recreational and tourism activity in Western Australia. Nannup is already a popular mountain biking destination within the South West Region, and therefore well positioned to capitalise on the activity's growing popularity.

The Nannup Mountain Bike Park is seeking to capitalise on this established reputation by building one of the best mountain bike parks in Western Australia and Australia. Doing so would attract additional day-trip and overnight tourists to the region, providing an increase in local economic activity as well as diversifying the local economy.

2. Existing Context

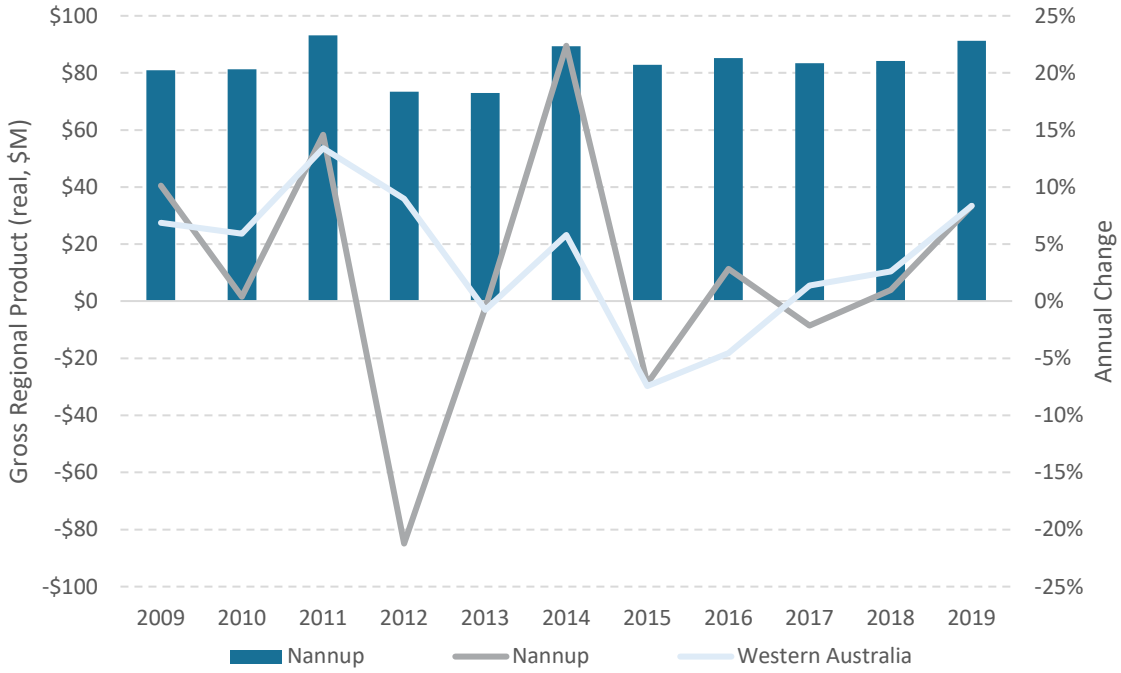
Nannup's economy was just over $90 million in 2018-19. Economic growth in the region has averaged 1.2% per annum over the past decade, significantly below the Western Australian average of 3.2%.

Further, economic growth in Nannup has been considerably more volatile than the State average, likely owing to the region's heavy reliance on the agriculture and manufacturing industries. These two industries accounted for more than 40% of total industry value-add (IVA) in 2018-19.

Given the region's heavy reliance on these two industries to generate economic activity, it is important for Nannup to look for opportunities to diversify the local economy.

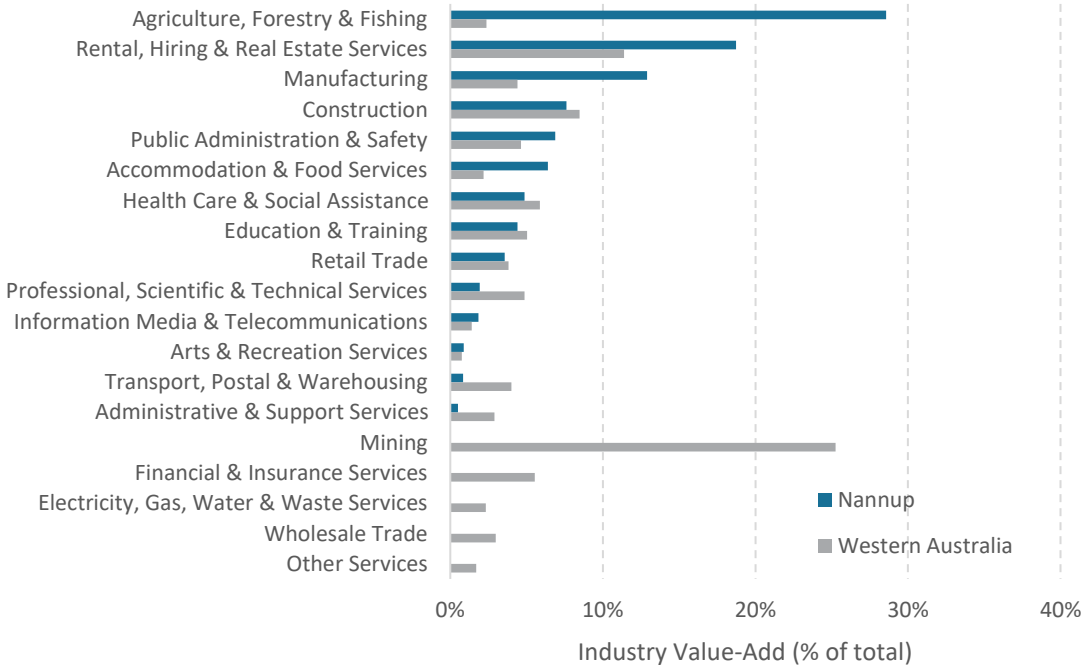
Currently, Nannup receives an estimated 85,200 visitors per year.

Figure 2.1. Gross Regional Product



Source: REMPLAN (2020).

Figure 2.2. Industry Value-Add, 2018-19



Note: The 'rental, hiring and real estate services' industry includes 'ownership of dwellings'.
Source: REMPLAN (2020).

3. Nannup Mountain Bike Park

The South West Region of Western Australia is synonymous with picturesque and diverse natural landscapes and is renowned for its range of outdoor activities, which includes mountain biking.

Mountain biking tourism continues to grow in the South West region. The South West Mountain Bike Master Plan (2020) states that '*there has been a 38% increase in cycle tourism related trips in Australia's South West over the past 5 years*' and that '*the popularity and demand for mountain biking in the South West currently far exceeds the capacity of the limited dedicated facilities*'.

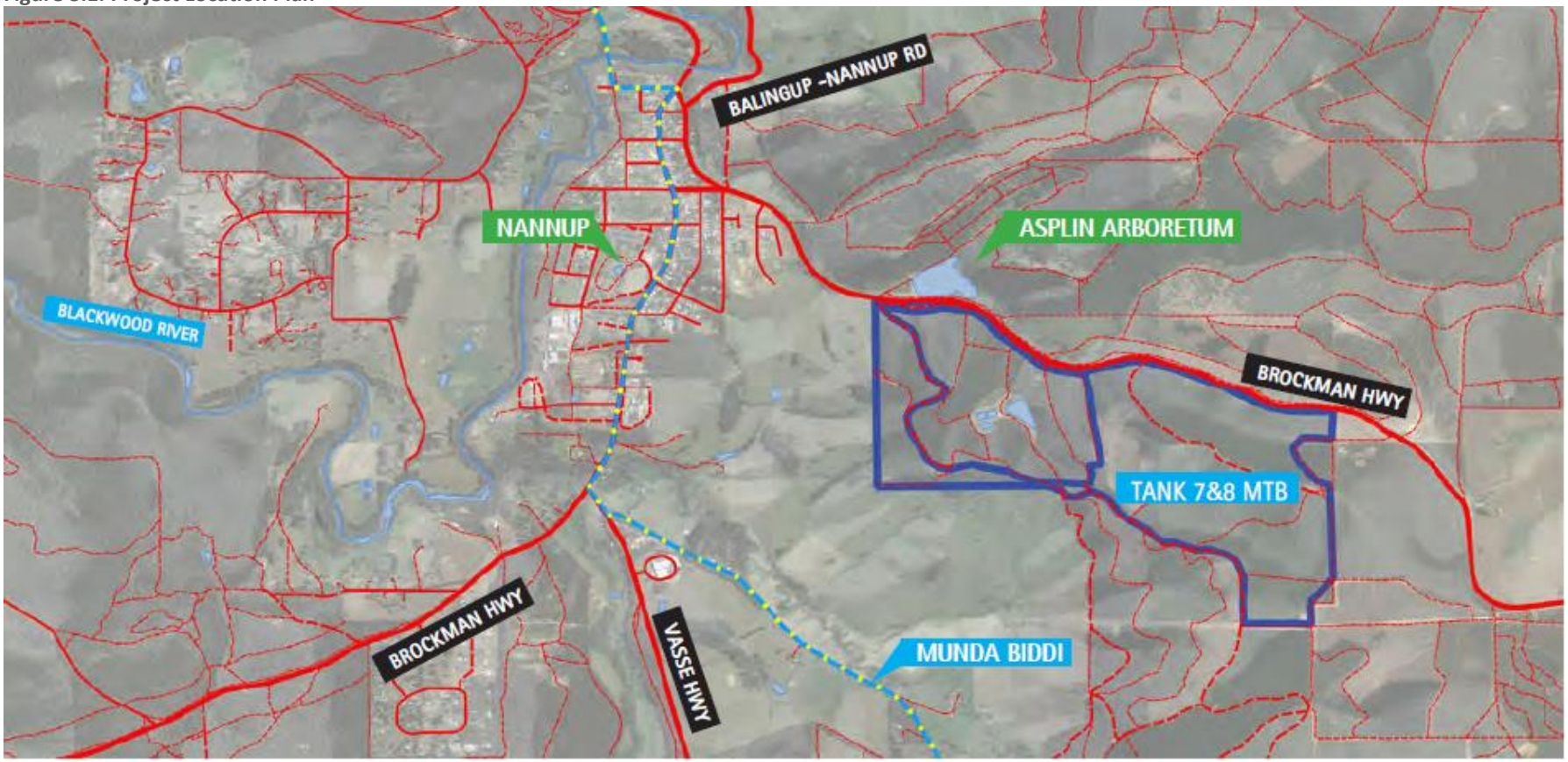
The South West Mountain Bike Master Plan identified Nannup as having the potential to become a significant mountain biking destination, with the Master Plan recommending the development of the Tank 7 & 8 site in Nannup as a dedicated mountain biking park.

The proposed Tank 7 & 8 project area is approximately 177ha and located just 2km east of the townsite of Nannup (with access via Brockman Highway). The proximity to the Nannup townsite makes the Mountain Bike Park very accessible from the town and means the development of the Park will support substantial flow-on economic benefits to the region, including increased tourism expenditure in local accommodation and food services businesses. The proposed Mountain Bike Park will leverage existing facilities in the Town of Nannup, including a wash down facility as well as accommodation, restaurants and cafes.

A total of 30km of trail is proposed within the project area, which is set within a timber reserve – allowing for a more intensive level of development. A variety of trail styles are proposed with difficulties ranging from beginner to extreme. The trail will be a '*stacked loop*' design, which allows riders to have the ability to shorten or lengthen their rides depending on the trails they choose.

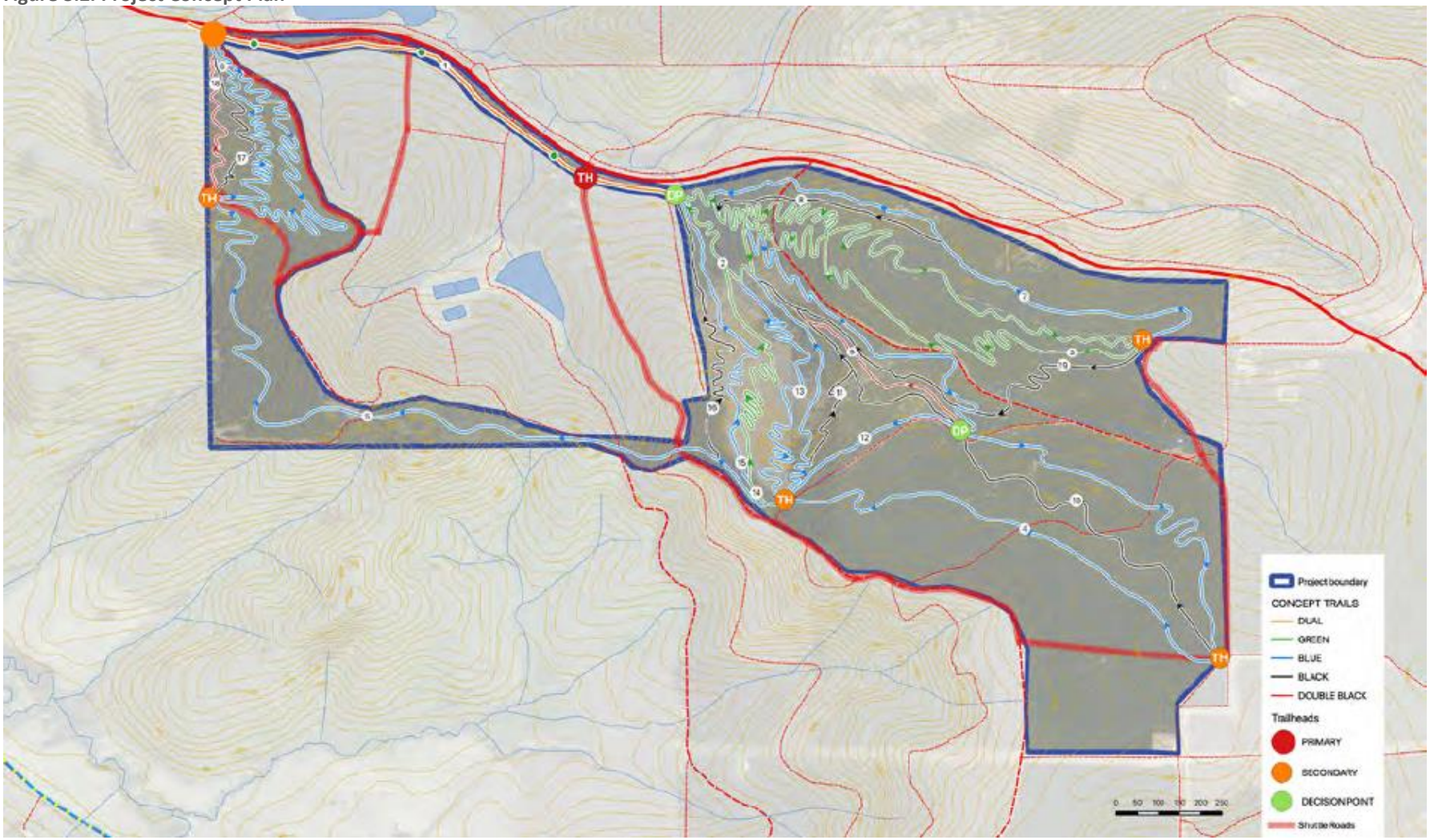
Figure 3.1 and Figure 3.2 provide an overview of the proposed Nannup Mountain Bike Park.

Figure 3.1. Project Location Plan



Source: Shire of Nannup (2019).

Figure 3.2. Project Concept Plan



Source: Shire of Nannup (2019).

4. Economic Impact Assessment

4.1 Modelling Approach

The assessment leverages the Regional Tourism Satellite Accounts developed by Tourism Research Australia (TRA, 2019) and considers the net increased economic activity created by the development of the Nannup Mountain Bike Park.

Economic impact analysis identifies a series of economic metrics. For this assessment, the following metrics have been identified:

- **Gross Regional Product**: value of the total economic output minus the costs of goods and services used as inputs, plus net taxes. Gross Regional Product (GRP) and Gross State Product (GSP) are the preferred measure of the economy as they focus on the net contribution from the local economy. This value is the local or state-level equivalent of Gross Domestic Product (GDP).
- **Employment**: employment positions generated, expressed on a full-time equivalent (FTE) basis.

These metrics are measured in terms of the direct as well as the indirect (flow-on) impacts. Indirect (flow-on) impacts are measured in two ways:

- **Type I**: Production effect or supply chain impacts linking to the direct impact.
- **Type II**: Consumption induced effect, which measures expenditure paid by employees related to the project in the broader economy.

IO modelling has various limitations, as highlighted in **Appendix A**.

In order to measure the economic impact of the development, the increase in locally retained expenditure generated from increased visitor numbers to the region has been estimated and used as the main driver of the assessment.

The geographic boundary for this assessment is the Shire of Nannup.

4.2 Assumptions

The development of the Nannup Mountain Bike Park into one of the premier mountain biking venues in Western Australia is expected to attract a significant increase in visitation to the region. Table 4.1 shows assumptions used as a basis for estimating the increase in visitor expenditure to the region once the Park becomes operational. Two mountain biking trail design companies (i.e. Common Ground Trails and Three Chillies Design) have been used to develop the detailed design of the Nannup Mountain Bike Park. These designers were consulted regarding the capacity of the mountain bike park to attract users. Both agreed that the park would likely attract 8,000 to 15,000 riders initially, noting that over time visitation to the park would increase. Based on this input, it has been assumed that 12,000 annual riders will visit the Nannup Mountain Bike Park in the first year.

Based on the results of a rider survey conducted by the Shire of Nannup to inform the Nannup Mountain Bike Masterplan, 3% of annual riders have been identified as local residents. Residents have been excluded from the assessment as they would likely spend money in the town regardless of the Park. The rider survey was also used to identify day-trip and overnight visitation and information from Tourism Research Australia (TRA, 2020) was used to identify intrastate and interstate visitors as well as expenditure per visitor estimates.

This future level of visitors associated with the Nannup Mountain Bike Park aligns well to various case studies from other established mountain biking destinations including Blue Derby (Tasmania), Thredbo (NSW) and Queenstown (NZ) that receive between 23,000 and 50,000 visitors annually.

These assumptions indicate an estimated additional annual visitor expenditure of around $3.8 million generated by the Nannup Mountain Bike Park in the first year.

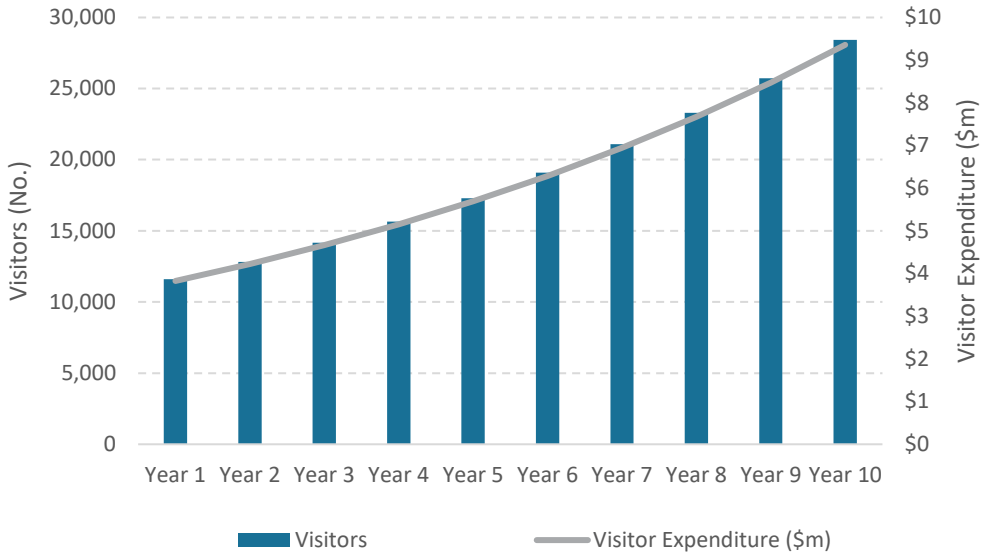
Table 4.1 Nannup Mountain Bike Park Assumptions

	Assumption	Source
Mountain Bike Riders		
Mountain Bike (Riders)	12,000	Common Ground (2020a); Three Chillies (2020)
Local Residents (%)	3%	Shire Survey of Riders
Day Trip Visitors (%)	66%	Shire Survey of Riders
Intrastate Visitors (%)	24%	Shire Survey of Riders; TRA (2020)
Interstate Visitors (%)	6%	Shire Survey of Riders; TRA (2020)
Visitors		
Day Trip Visitors (No.)	7,974	Calculation
Intrastate Visitors (No.)	2,889	Calculation
Interstate Visitors (No.)	746	Calculation
Total Visitors	11,609	Calculation
Expenditure per Visitor ($)		
Day Trip Visitor ($)	$69	TRA (2020)
Intrastate Visitor ($)	$915	TRA (2020)
Interstate Visitor ($)	$845	TRA (2020)
Total Visitor Expenditure ($)	**$3,822,914**	**Calculation**

Source: Lucid Economics

It is also worth noting the future growth potential the Nannup Mountain Bike Park offers the region. Data from Tourism Research Australia (2020) shows cycling tourism has grown at an average rate of 10.5% per annum in Western Australia over the past decade. If this type of growth were to continue over the next decade, after a decade of operations, the Nannup Mountain Bike Park would attract 28,500 visitors and generate $9.4 million of visitor expenditure (Figure 4.1).

Figure 4.1. Nannup Mountain Bike Park, Visitors and Visitor Expenditure



Source: Lucid Economics

4.3 Results

The results of the economic impact assessment are highlighted below.

Once the Nannup Mountain Bike Park is operational, the increased expenditure induced by the additional visitors to the region is estimated to contribute (directly and indirectly) $2.5 million to the local economy, in GRP terms. It will also directly and indirectly support 23 full-time equivalent (FTE) positions in the area. Growth in visitation based on the Nannup Mountain Bike Park would represent a single year increase of 14%. The increase in GRP of $2.5 million would represent an economic increase of just over 4%.

Table 4.2 Economic Impact, Nannup Mountain Bike Park

	Gross Regional Product ($M)	Employment (No.)
Direct	$1.2	16
Indirect	$1.2	7
Total	**$2.5**	**23**

Source: Lucid Economics

Additionally, based on the projected future growth of visitation to the Nannup Mountain Bike Park, its economic impact will increase to $3.7 million in GRP and 34 FTE jobs.

Table 4.3 Economic Impact, Nannup Mountain Bike Park (Year 5 of Operations)

	Gross Regional Product ($M)	Employment (No.)
Direct	$1.9	24
Indirect	$1.8	10
Total	**$3.7**	**34**

Source: Lucid Economics

4.4 Other Economic Benefits

Beyond the quantified economic benefits highlighted above, the project will help to deliver a number of additional qualitative benefits, including:

- **Supporting the region's economic recovery past-COVID-19:** Tourism visitation to the region is likely to have been severely impacted by social distancing measures implemented by the Western Australian and Federal Governments as a result of the COVID-19 pandemic. By augmenting and diversifying the local tourism product available within the region, the mountain bike park will help support the recovery in the local tourism sector and the broader economy.

  Further, job opportunities within the accommodation and food services industry have been some of the most impacted as a result of the response to the pandemic. Therefore, the job opportunities within this sector resulting from the increased visitor expenditure in the region will help support the transition in the local labour market as the local economy begins the recovery process.

- **Diversifying the local economy**: The Nannup economy is heavily reliant on the local 'agriculture, forestry and fishing' and manufacturing industries, which are both volatile and highly susceptible to external shocks. Growth in the tourism industry will help to diversify the local economy, partially absorbing any future shock to the agriculture and manufacturing industries.

- **Employment opportunities for low-skilled workers**: The majority of the employment opportunities generated by the increased visitor spend in the region are likely to come within the accommodation and food services industry. This industry provides job opportunities for young, less skilled workers, who are often just entering the job market. Providing further job opportunities for these workers, who are often the most vulnerable when economic conditions deteriorate, will strengthen the local economy and help to retain younger persons in the area.

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Appendix A: Input-Output Modelling Limitations

Input-output (IO) modelling is a common technique for economic impact assessment and has been used for a range of purposes, including to inform strategic or government policy decision making.

However, IO modelling has certain limitations and weaknesses, including:

- **Lack of supply-side constraints**: IO multipliers assume that extra output can be produced in one area of activity without taking away resources from other activities. Actual impacts would be dependent on the availability of appropriate labour and capital and other productive inputs.
- **Fixed prices**: IO systems assume fixed prices, so that the effects of relative price changes play no role in the allocation of scarce resources between activities. Essentially, prices are fixed and do not change relative to changes in supply and demand. Actual impacts would be affected by relative price changes due to constraints on the availability of labour, capital and other inputs and policy changes as well as changes in demand.
- **Fixed ratios for intermediate inputs to production and outputs from production**: IO modelling uses fixed input structures for each industry so that changes in production technology and the use of inputs in production play no role in impact assessment. Actual impacts could be affected by changes in production technologies including in the use of domestic and imported inputs and the mix of outputs including in the supply of products to household, investment and export demands.
- **No allowance for household purchasers' marginal responses to change**: IO modelling assumes that consumption is fixed to initial budget shares, so that real budget shares remain unchanged with changes in household income and relative prices. In practice, the level and composition of household purchases would be affected by income and relative price changes.
- **Absence of budget constraints**: IO modelling assumes that consumption is unconstrained so that changes in household or government consumption occur without reducing demand elsewhere. In practice, the level of consumption expenditure by households and government would be budget constrained.

Despite its flaws, IO modelling has proven an effective tool in understanding the economic benefits of a specific project, strategy or policy.

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