

GRAMPIANS RDV REGION CYCLING AND TRAILS INFRASTRUCTURE BUSINESS AND MASTER PLAN

FINAL REPORT

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CONTENTS

EXECUTIVE SUMMARY	1	5. ROAD CYCLING ASSESSMENT	40
1. INTRODUCTION	9	5.1. INTRODUCTION	40
1.1. BACKGROUND	9	5.2. KEY FINDINGS	40
1.2. PURPOSE	9	5.3. EXISTING SUPPLY OF ROAD CYCLING	40
1.3. OBJECTIVES	10	5.4. BALLARAT-HEPBURN CLUSTER	42
1.4. METHODOLOGY	11	5.5. HALLS GAP - STAWELL - ARARAT CLUSTER	43
1.5. CYCLE TYPOLOGY DEFINITIONS	12	5.6. HORSHAM - NATIMUK CLUSTER	43
PART A. BACKGROUND	14	5.7. NHILL CLUSTER	43
2. STRATEGIC CONTEXT	15	5.8. MATCHING DEMAND WITH SUPPLY	45
2.1. INTRODUCTION	15	5.9. ROAD CYCLING PROJECTS	46
2.2. KEY FINDINGS	15	6. RECREATIONAL AND MIXED-USE CYCLING TRAILS ASSESSMENT	49
2.3. POLICY AND STRATEGY CONTEXT	16	6.1. INTRODUCTION	49
2.4. THE REGION	16	6.2. KEY FINDINGS	49
3. CYCLE AND TRAIL DEMAND DRIVERS	19	6.3. SUPPLY OVERVIEW	49
3.1. INTRODUCTION	19	6.4. RECREATIONAL CYCLE TRAIL PROJECTS	53
3.2. KEY FINDINGS	19	7. CYCLING EVENTS	59
3.4. LOCAL CYCLING DEMAND	26	7.1. INTRODUCTION	59
3.6. SUMMARY OF DEMAND INDICATORS	28	7.2. KEY FINDINGS	59
4. MOUNTAIN BIKING ASSESSMENT	29	7.3. SUPPLY	59
4.1. INTRODUCTION	29	7.4. KEY EVENT OPPORTUNITIES	62
4.2. KEY FINDINGS	29	8. COMPETITOR ASSESSMENT	64
4.3. EXISTING SUPPLY	29	8.1. KEY FINDINGS	64
4.4. MOUNTAIN BIKE NETWORK REVIEWS	33	8.2. MOUNTAIN BIKING IN VICTORIA	64
4.5 OPPORTUNITIES	36	6.2. MOONTAIN DIRRING IN VIOLOTIA	04

1	8.3. ROAD CYCLING	64	11.2. PERFORMANCE MEASURES	75
:	8.4. RECREATIONAL RIDING	64	11.3. PRIORITY PROJECTS	75
:	8.5. OVERALL CYCLING CREDENTIALS	64	12. NEW AND ENHANCED TOWNSHIP FOCUSED CYCLE INFRASTRUCTURE	79
PAF	T B. MASTER PLAN	66	12.1. OBJECTIVE	79
9. S	TRATEGIC CONSIDERATIONS	67	12.2. PERFORMANCE MEASURES	79
	9.1. LARGE AND GROWING MARKET	67	12.3. PRIORITY PROJECTS	79
	9.2. NEED TO LEVERAGE FROM KEY DESTINATIONS	67	13. FORMALISE EXISTING CYCLE TRACKS AND TRAILS	84
	9.3. LIMITED MOUNTAIN BIKING ACTIVITY	67	13.1. VISION	84
9	9.4. ROAD CYCLING - A STRENGTH OF THE GRAMPIANS RDV REGION	67	13.2. PERFORMANCE MEASURES	84
9	9.5. LIMITED RECREATIONAL CYCLING TRAILS	68	13.3. PRIORITY PROJECTS	84
9	9.6. MARKETING OF CYCLING	68	14. DELIVER CYCLE TOURISM EVENTS	87
9	9.7. NEED FOR BIKE HUBS	68	14.1. VISION	87
9	9.8. MOUNTAIN BIKE PARK LAND TENURE AND MANAGEMENT	69	14.2. PERFORMANCE MEASURES	87
9	9.9. FORMER GOLDFIELD FORESTS AND RESERVES	71	14.3. PRIORITY PROJECTS	87
9	9.10. WIMMERA MALLEE AS HOME OF FAT BIKES	71	15. DELIVERY: CYCLE TOURISM MANAGEMENT, MARKETING AND SERVICI	NG90
9	9.11. TIERED APPROACH TO INVESTMENT	71	15.1. OBJECTIVE	90
	9.12. DRY WEATHER IN WIMMERA SOUTHERN MALLEE	71	15.2. PERFORMANCE MEASURES	90
9	9.13. SERVICE TO THE CYCLING MARKET	71	15.3. PRIORITY PROJECTS	90
10.	MASTER PLAN FRAMEWORK	72	15.4. CYCLE TOURISM STRUCTURE AND ROLES	91
	10.1. VISION	72	15.5. TRAIL IMPLEMENTATION	91
	10.2. TARGETS	72	PART C. BUSINESS CASES	95
	10.3. MASTER PLAN THEMES AND OBJECTIVES	72	16. OVERVIEW OF BUSINESS CASE	96
	10.4. DELIVERY	73	16.1. INTRODUCTION	96
	10.5. PROJECT PRIORITISATION	74	16.2. KEY FINDINGS	96
11.	NEW AND ENHANCED ICONIC CYCLING EXPERIENCES	75	17. GOLDFIELDS TRACK	98
	11.1. OBJECTIVE	75	17.1. INTRODUCTION	98

	17.2. LOCATION	98	20.2. DEMAND
	17.3. INVESTMENT LOGIC MAPPING	100	20.3. ECONOMIC BENEFIT
	17.4. CONCEPT	103	20.4. SENSITIVITY ANALYSIS
	17.5. COSTS	105	
	17.6. DEMAND	106	
	17.7. SOCIAL AND ECONOMIC BENEFIT	106	
	17.8. IMPLEMENTATION PLAN AND PROCUREMENT FOR GOLDFIELDS		
	TRACK MASTER PLAN	111	
18	. WIMMERA RIVER DISCOVERY TRAIL	113	
	18.1. INTRODUCTION	113	
	18.2. LOCATION	113	
	18.3. INVESTMENT LOGIC MAPPING	115	
	18.4. CONCEPT	118	
	18.5. DEMAND	121	
	18.6. SOCIAL AND ECONOMIC BENEFIT	122	
19	. ARARAT TRAILS MOUNTAIN BIKE PARK	125	
	19.1. INTRODUCTION	125	
	19.2. LOCATION	125	
	19.3. INVESTMENT LOGIC MAPPING	126	
	19.4. CONCEPT	128	
	19.5. COSTS	133	
	19.6. DEMAND	133	
	19.7. ECONOMIC BENEFIT	134	
	19.8. IMPLEMENTATION PLAN	136	
20	. SUMMARY ECONOMIC ANALYSIS OF PRIORITY INVESTMENT PROJECT	S	
		137	
	20.1. INTRODUCTION	137	

-IGURES		TABLE 9 MATCHING ROAD CYCLING SUPPLY WITH MARKET DEMAND -	
FIGURE 1 GRAMPIANS RDV REGION - SUB REGIONS	18	GRAMPIANS REGION CLUSTERS	45
FIGURE 2 DAYTRIP VISITATION BY LGA	21	TABLE 10 SUPPLY OF RECREATION CYCLING TRAILS	50
FIGURE 3 OVERNIGHT VISITATION BY LGA	22	TABLE 11 CYCLING EVENTS - GRAMPIANS RDV REGION	60
FIGURE 6 TOTAL VISITORS - ALL SCENARIOS CONSOLIDATED, GRAMPIAN	IS	TABLE 12 SUMMARY OF CYCLING STRENGTHS AND WEAKNESSES	65
RDV REGION		TABLE 13 PROJECT PRIORITISATION FRAMEWORK	74
FIGURE 7 CYCLING VISITORS - ALL SCENARIOS CONSOLIDATED	25	TABLE 14 NEW AND ENHANCED ICONIC CYCLING EXPERIENCES	76
FIGURE 8 SUPPLY OF MOUNTAIN BIKE PARKS	32	TABLE 15 NEW AND ENHANCED TOWNSHIP FOCUSED CYCLE	
FIGURE 9 ROAD CYCLING HEAT MAP	41	INFRASTRUCTURE PROJECTS	80
FIGURE 10 TRAIL MANAGEMENT AND MAINTENANCE RESPONSIBILITIES	70	TABLE 16 FORMALISATION OF EXISTING TRAILS	85
FIGURE 11 DELIVERY STRATEGY	73	TABLE 17 CYCLING TOURISM EVENTS PROJECTS	88
FIGURE 12 LOCATION	99	TABLE 19 CYCLE TOURISM MANAGEMENT, MARKETING AND SERVICING	
FIGURE 13 INVESTMENT LOGIC MAP	102	PROJECTS	93
FIGURE 14 CONCEPT DESIGN FOR THE GOLDFIELDS TRACK: PHASE 1 MA	STER	TABLE 20 BUSINESS CASE MODELLING OVERVIEW	97
PLAN INVESTMENT	104	TABLE 21 PROJECT COMPONENTS AND FUNDING REQUIREMENTS	105
FIGURE 15 LOCATION		TABLE 22 GOLDFIELDS TRACK VISITATION ESTIMATES (PHASE 1)	106
FIGURE 16 INVESTMENT LOGIC MAP	117	TABLE 23 GOLDFIELDS TRACK COST-BENEFIT ASSESSMENT (PHASE 1)	107
FIGURE 17 STAGE 1: DIMBOOLA TO LAKE HINDMARSH	119	TABLE 24 GOLDFIELDS TRACK COST-BENEFIT ASSESSMENT (PHASE 2)	108
FIGURE 18 LOCATION OF ARARAT TRAILS	125	TABLE 25 GOLDFIELDS TRACK COST-BENEFIT ASSESSMENT (PHASE 3)	108
FIGURE 19 INVESTMENT LOGIC MAP	127	TABLE 26 SHORT TERM CONSTRUCTION IMPACTS (PHASE 1)	109
FIGURE 20 EXISTING TRAIL NETWORK	129	TABLE 27 ONGOING EXPENDITURE IMPACTS (PHASE 1)	109
FIGURE 21 POTENTIAL TRAILHEAD SITES	130	TABLE 28 ONGOING EXPENDITURE IMPACTS (PHASE 2)	109
FIGURE 22 TRAIL NETWORK LAYOUT	131	TABLE 29 SHORT TERM CONSTRUCTION IMPACTS (PHASE 3)	110
FIGURE 23 TRAIL DIFFICULTY RATINGS	132	TABLE 30 PROJECT BUDGET FORECAST OF STAGE 1 OF THE WIMMERA RI	IVER
FABLES		DISCOVERY TRAIL	120
TABLE 1 BUSINESS CASE MODELLING OVERVIEW	8	TABLE 31 WIMMERA RIVER DISCOVERY TRAIL VISITATION ESTIMATES	121
TABLE 2 MAIN MOUNTAIN BIKE TYPOLOGIES	12	TABLE 32 WIMMERA RIVER DISCOVERY TRAIL COST-BENEFIT ASSESSME	NT
TABLE 3 TOTAL AVERAGE VISITORS, GRAMPIANS REGION, 2012-2016	20		122
FABLE 4 CYCLING CLUBS	26	TABLE 33 SHORT TERM CONSTRUCTION IMPACTS	123
TABLE 7 SUPPLY OF MOUNTAIN BIKING – GRAMPIANS RDV REGION	31	TABLE 34 ONGOING EXPENDITURE IMPACTS	123
TABLE 8 ROAD CYCLING AUDIT	44	TABLE 35 PROJECT COMPONENTS AND BUDGET	133
		TABLE 36 ARARAT TRAILS VISITATION ESTIMATES	134

TABLE 37 ARARAT TRAILS COST-BENEFIT ASSESSMENT	134
TABLE 38 SHORT TERM CONSTRUCTION IMPACTS	135
TABLE 39 ONGOING EXPENDITURE IMPACTS	135
TABLE 40 TOTAL VISITATION ESTIMATES	137
TABLE 41 AGGREGATED COST-BENEFIT ASSESSMENT	137
TABLE 42 SHORT TERM CONSTRUCTION IMPACTS	138
TABLE 43 ONGOING EXPENDITURE IMPACTS	138
TABLE 44 TOTAL VISITATION ESTIMATES - 50% REDUCTION	138
TABLE 45 AGGREGATED COST-BENEFIT ASSESSMENT - 50% REDUC	TION IN
VISITATION	139
TABLE 46 ONGOING EXPENDITURE IMPACTS - 50% REDUCTION IN V	ISITATION
	139





























The Grampians Region Cycling & Trails Infrastructure Business & Masterplan Project has been a collaboration between Regional Development Victoria – Grampians Region, Transport for Victoria, Sport & Recreation Victoria, Parks Victoria, Wimmera Development Association and the eleven Local Government Areas of the Grampians RDV Region.

GLOSSARY OF TERMS

MOUNTAIN BIKING TERMS

Single track - a narrow mountain biking trail that is approximately the width of the bike, specifically designed for mountain biking.

Fire trail – A wide off-road trail that is wide enough to accommodate a vehicle, however is often used for linking single track mountain bike trails.

Mountain bike park – A well-developed network of mountain bike trails that primarily include well-formed single track specially for mountain bikes.

EPIC ride – An iconic and world-class backcountry ride experience as categorised and recognised by the International Mountain Bicycling Association.

Gravity trail – A single track mountain bike trail that is mainly downhill, allowing a cyclist to descend with minimal pedalling.

Berms - An embankment on a trail which assists with cornering.

Primary and Secondary Tourism Nodes – This refers to primary and secondary tourism destinations. Primary nodes include Ballarat, Daylesford, Grampians National Park and Horsham.

ROAD CYCLING TERMS

Hors category climb - A hors catégorie ("above category") rating is given to exceptionally tough climbs. This could either be a Category 1 whose summit is also the finish of the stage, or one that is more than 10km long with an average grade of at least 7.5 per cent, or up to 25km miles long at 6 per cent or steeper.

Category 1 climb - Once the highest category, can be anything from 8km at 8 per cent to 20km at 5 per cent.

Category 2 climb - Can be as short as 5km at 8 per cent, or as long as 15km at 4 per cent.

Category 3 climb - Can be as short as one mile with a very steep grade, perhaps 10 per cent; or as long as six miles with a grade less than 5 per cent.

Category 4 climb - The easiest is a Category 4, which is typically less than 2km long and about 5 per cent grade, or up to 5km at a 2-3 per cent grade.

Gran Fondo - A Gran Fondo is a type of long-distance road bicycle ride originating in Italy in 1970, and roughly translates into English as "Big Ride". Italian Gran Fondos are officially defined and certified by the Italian Cycling Federation as a bicycle event at least 120 kilometres and are individually chip-timed (start to finish) races with prizes for the fastest riders in each category.

EXECUTIVE SUMMARY

PROJECT BACKGROUND

The Grampians RDV Region Cycling and Trails Infrastructure Business and Master Plan has an overarching objective to **'establish the Grampians RDV region as a premier tourism destination for cycling and trail related experiences'**. The project needs to consider investment required to achieve this and the need to encourage visitor dispersal across the region to create broader tourism and economic benefits.

Urban Enterprise took the lead of this project in February 2018, building on work previously undertaken. A substantial amount of consultation and research was undertaken in the region during 2017 by Ethos Urban, which provides background for this report.

The project provides focus on the following cycling disciplines:

- Mountain biking defined as using a mountain bike on predominantly singletrack trails:
- Road cycling Riding 'race bikes' predominantly for recreational purposes on roads;
- Recreational trail cycling Riding various bike types for recreational purposes on -off road paths and trails, catering for a broad market.

The report includes three key sections:

- Project background which includes trail audits, demand assessment and identification of gaps and opportunities;
- Master plan strategy which identifies a strategic framework for cycling growth and investment and specific projects and actions for implementation;
- Business cases for three priority projects.

STRATEGIC CONTEXT AND GEOGRAPHY

There is strong strategic policy support for investment in trails and cycling infrastructure for purposes of economic growth through attraction, dispersal and growing yield from visitors and the health benefits for residential populations. Active Victoria Strategy highlights the growth in informal recreational activity and the need to support this.

Victoria's 2020 Tourism Strategy clearly states the need to encourage investment in regional Victoria in tourism infrastructure and product in order to grow tourism.

The Grampians RDV region is a diverse region within Victoria. The region includes two geographical sub regions, including:

- Wimmera Southern Mallee (WSM) [RDV Partnership Area], which includes the following Local Government Areas (LGA's):
 - Hindmarsh:
 - Horsham;
 - Northern;
 - West Wimmera; and
 - Yarriambiack
- Central Highlands [RDV Partnership Area], which includes the following LGA's:
 - Ararat;
 - Ballarat:
 - Golden Plains;
 - Hepburn;
 - Moorabool; and
 - Pyrenees.

The Grampians RDV Region intersects the following tourism regions:

- Grampians Tourism [Regional Tourism Board] comprising Ararat, Northern Grampians, Southern Grampians, Horsham;
- Visit Ballarat [Regional Tourism] one of two tourism organisations for Victorian Goldfields Tourism Executive:
- Daylesford and Macedon Ranges Tourism [Regional Tourism Board] comprising Macedon Ranges, Moorabool and Hepburn;
- Tourism Greater Geelong and the Bellarine [Regional Tourism Board] comprising Greater Geelong, Queenscliff and Golden Plains; and
- Wimmera Mallee Tourism [Regional Tourism Organisation] comprising West Wimmera, Yarriambiack, Hindmarsh and Buloke.

The geography of the Grampians RDV Region is diverse and hence reflects varied cycling strengths as well as opportunities for development. The Central Highlands is dominated by goldfields country and includes extensive former goldfields reserves that provide opportunity for mountain biking, whilst an equally extensive sealed road network makes it a popular location for road cycling, with mixed terrain including hilly rides and flatter loops.

The Grampians RDV Region is highly scenic and includes mixed terrain of quiet country roads suitable for road cycling and mountain climbs extending into the Grampians National Park. The Grampians RDV Region also has bushland reserves that can be explored for mountain biking.

Sandy soils in a large part of the WSM Region are not suited to typical mountain biking, however provide opportunity for fat biking as a unique cycle activity. In addition, road cycling on flat and undulating roads within the Wimmera Mallee Tourism Region presents an opportunity for visiting road cyclists.

DEMAND FOR CYCLE TOURISM

The Grampians RDV region attracts around 5.2 million visitors annually. At a sub-regional level Central Highlands attracts most of these visitors with 4.1 million visitors per annum, whilst the Wimmera Southern Mallee attracts just over 1 million visitors per annum. (Source: Tourism Research Australia).

Visitation to the region is a driver for further investment in tracks and trails, providing for cycling as an activity for existing visitor markets.

Within the Grampians RDV region there is a pronounced concentration of visitor activity in Ballarat, Hepburn, Horsham and the Northern Grampians. Other secondary nodes include Ararat City and Moorabool Shire for daytrip visitation.

The tourism nodes that have the highest level of visitation also support the greatest level of complementary tourism product and infrastructure required to support potential cycle visitors. This includes the provision of accommodation, food, beverage and retail. Key visitor destinations include Ballarat, Daylesford, Grampians National Park and Horsham.

Horsham and Ballarat have a high level of business and visiting friends and relatives visitors, whilst Grampians National Park and Daylesford are considered holiday leisure destinations. The plan needs to consider the delivery of cycle infrastructure that can support the key tourism nodes, whilst also seeking ways to disperse visitors throughout the region from these nodes into parts of the Wimmera, Moorabool and Golden Plains, Pyrenees and Northern Grampians.

Visitors who undertake cycling activity are concentrated to the Central Highlands, possibly reflecting the impact of cycle events tourism in this area and the strong road cycling culture in the Central Highlands.

There is limited recorded cycling activity in the Wimmera Southern Mallee with only 16,000 visitors nominating cycle as an activity undertaken per annum. (Source: Tourism Research Australia).

To grow cycle tourism in both the WSM and Central Highlands, further investment in cycling infrastructure is needed. Market research shows that the delivery of quality single track mountain biking trails and short high quality recreational trails is needed

to attract visitors. In addition, formalisation and promotion of road cycling in the region would support the attraction of cycle specific visitors.

The markets most likely to visit specifically for cycling include high involvement mountain bikers and high involvement road cyclists. Recreational cycling is unlikely to be a primary motivator for visit, however is an important complementary activity when visitors are in the region, allowing for increase of stay, improved experience and greater visitor yield.

Growth in visitors to the Grampians RDV region will continue with a projected 1 million additional visitors to the region by 2025, as are the number of cycle visitors likely to increase. Visitor growth projections highlight the need for continuous investment in tracks and trails to provide for growing visitor markets and delivery of tourism infrastructure such as visitor accommodation.

MOUNTAIN BIKING ASSESSMENT

Mountain biking in the Grampians RDV region is very limited in terms of quality single track mountain bike trails and parks. There is currently only one formalised mountain bike park with good quality trail signage and trail head facilities, that being Black Hill Reserve in Ballarat.

Other than parts of the Goldfields Track, the remainder of mountain biking in the region is largely unformalised and difficult to locate and navigate. There is a substantial amount of investment required to develop mountain biking in the Grampians RDV region as a key 'tourism product'.

The region however is moving in the right direction with funding being made available to develop Creswick as a substantial mountain bike destination with over 100 kilometres of single track proposed. Ararat Hills is also undergoing master planning for a major mountain bike destination.

The Goldfields Track presents a unique multi day mountain biking tour, however this needs further trail development, signage and marketing to fulfil its potential as an iconic product which can attract interstate and international markets.

Grampians National Park is a major nature-based destination in Victoria, however there is limited mountain biking development opportunity for formalised 'single track' due to environmental policy and the Management Plan for the park. There is however opportunity to investigate public land reserves for further mountain bike development in proximity to Grampians National Park.

Whilst there is a need to invest substantial funding to develop major mountain bike destinations, there is potential to formalise existing trails that are not formalised such as Buninyong and Woowookarung Regional Park. The establishment of secondary mountain bike parks can provide additional activity for tourism destinations.

Smaller formalisation projects are achievable over a short time period and can quickly lead to growing visitation in the short term.

Given the low level of development for mountain biking in the region there are gaps across all mountain biking typologies including cross country, epic trail rides and downhill/ gravity parks. All of these typologies should be explored in the Grampians RDV region.

ROAD CYCLING

Road Cycling in the Grampians RDV region is focused towards four identified clusters, these include:

- Ballarat/Hepburn Cluster;
- Halls Gap Stawell Ararat Cluster;
- Horsham Natimuk Cluster;
- Nhill Cluster.

The attributes of each of these clusters varies, however across the region the type of road cycling that is available is suited to all road cycling market segments including cyclists that prefer flat and fast loops and those that prefer hill climbs.

The Ballarat/Hepburn cluster of road cycling shows some of the highest road cycling activity in Victoria. This is likely to be linked to the high population base in the region, the strong road cycling culture in Ballarat and the variable terrain suitable for all levels of cyclists. The gap in the Ballarat cluster is the lack of category 1 or 2 road cycling climbs.

The Halls Gap-Stawell -Ararat Cluster also provides for a mix of road cycling preferences including largely flat loops and importantly around Grampians National Park, some of the toughest road cycling climbs in Victoria. Mt William is the only *Hors* Category climb outside of the Victorian Alps in Victoria.

The highly scenic area around the Grampians National Park presents a strong opportunity to grow road cycling as a key visitor activity and with further promotion and some safety improvements, could become one of the leading areas for road cycling in Australia.

The WSM Region includes two key nodes of road cycling activity, centred around Natimuk and Nhill. Whilst there are no mountains, the there are areas within the Wimmera Mallee that have an undulating landscape and would be suited to a variety of road cycling participants and enthusiasts.

Given the diversity of the region there are not many gaps in road cycling product, with large flat loops available and a 'hors' category climb in the Grampians RDV region.

The key short-term opportunity for development of road cycling is promotion and marketing of current safe loops.

Gravel cycling also presents opportunity throughout the broader Grampians RDV region with a large amount of scenic unsealed roads and fire trails ideal for this growing market.

RECREATIONAL CYCLE TRAILS

Recreational cycling trails in the Grampians RDV region that are formalised and promoted for tourism use are limited. Ballarat to Skipton Rail Trail is the only extensive recreational trail that is well formalised and marketed for general recreational cycling use.

There are many other recreational cycling trails in the Grampians RDV region that present opportunity for further investment and expansion to be suitable for tourism use such as the Domino Rail Trail to be transformed into the Daylesford to Hanging Rock Rail Trail.

There are three categories of recreational trails that have been identified in the Region, these include:

- Iconic trails that have high scenic amenity and strong complementary tourism product;
- Trails that link townships, allowing for connectivity for visitors and residents and provision of clear destinations;
- Small township trails that provide activity for visitors and residents.

One of the advantages for the Grampians RDV region in the provision of trail networks is the extensive amount of public land reserves because of former mining activity which provide public land linkages between townships. Where these public land areas provide high amenity and further tourism product, they may support development for investment in cycle tourism.

Creek and river valleys also provide opportunity to create recreational cycle linkages across the region.

Market research confirms that most cyclists prefer no more than 30-kilometre trails with clear destination points. Flatter trails are preferred.

Overall recreational trails are of low supply in the region, particularly those that can form the basis of a tourism experience. There are several projects identified in this Master Plan that will go a long way to meeting this opportunity.

EVENTS

The Grampians RDV region has a limited calendar of cycling events, with the only signature event being the National Road Championships held in Ballarat.

There are very few mountain bike events, which reflects the lack of formalised mountain biking in the region and very few events held within the Wimmera Southern Mallee.

Events that could be explored that address the gaps in the region and complement the strengths are identified below. These would be unique to the region and would position the Grampians RDV region better within cycling markets:

- Grampians Road Cycling Granfondo Event A major participation event held during the off peak (cooler months);
- Grampians Gravel Grind Event A large participation gravel event taking in some of the backgrounds around Grampians National Park;
- National Road Championship Participation Event A participation event which allows recreational riders to cycle with the 'heroes of Australian road cycling;
- Goldfields Mountain Bike Multi Day Event taking in Buninyong, Woowookarung Regional Park, Creswick and Harcourt as major hubs;
- Ararat 12 Hour Mtn Bike Race Held in Ararat Hills and encouraging overnight stay;
- Mt William KOM A prize money race which will attract Australia's elite climbers;
- Wimmera Cycling Granfondo A 200km Wimmera loop;
- Creswick mountain bike festival.

STRATEGIC CONSIDERATIONS

The master plan must consider the following strategic considerations:

- Large and growing market Projections show that there will be continued
 organic growth in visitation and cyclists to the region. Cycling infrastructure
 should be planned to meet growing demand by visitors and to attract the large
 domestic cycling market in Australia.
- Need to leverage from key destinations Major investment in cycling should consider linkage to key destinations. Key destinations based on visitation estimates in the region include Ballarat, Daylesford, Grampians National Park and Horsham.
- Limited mountain biking activity When benchmarked with other regions
 there is very limited formalised mountain biking in the Grampians Region It is
 critical that future investment is planned and has some linkage to townships
 which can provide supporting infrastructure. In addition, minor investment to
 formalise some trails such as Buninyong will provide a readymade mountain
 bike park for visitors.

- Road cycling is already a strength—Road cycling is a strength in the region based on the level of activity currently undertaken. Formalisation of road cycling loops through maps, information, signage and digital marketing in key clusters will provide a strong short-term solution for growing road cycling activity.
- Limited recreational cycling trails There are very few quality recreational cycling trails in the region. Investment in recreational trails that lead from key township destinations and link to secondary destinations will encourage visitor dispersal. These trails will provide a complementary experience for visitors to the region and where possible link with wineries, food and beverage experiences.
- Marketing of cycling Marketing of current opportunities should be a first step to increasing cycle visitation and activity. In combination with investment in cycling infrastructure delivery of coordinated visitor information on cycling and marketing of cycling opportunities is needed.
- Need for bike hubs. The Grampians Region does not have a critical mass of cycling activity currently to warrant investment in cycle hubs. Road cyclists are generally self-sufficient already. Bike hubs should be a longer-term focus, following investment in mountain biking and recreational trails. In the future bike hubs may be considered in the following destinations:
 - Ballarat Railway Station;
 - Ararat Railway Station/VIC;
 - Halls Gap;
 - Creswick;
 - Horsham.

These locations with continued investment in cycle infrastructure may at some point require bike hub investment. Ballarat is the only location which may be able to support a bike hub in the short term.

 Mountain bike park land tenure and management - Maintaining mountain bike parks will be critical for supporting any future investment. Maintaining mountain bike trails requires direction from park managers and volunteer

- support. It is also critical that there is a strong local catchment of cyclists to ride the trails regularly to ensure they do not become overgrown.
- Former goldfields forests and reserves For the Central Highlands area and
 extending into the Pyrenees, Northern Grampians and Ararat, the goldfields
 forests and reserves provide the key public land assets that can be explored for
 off road cycling and mountain biking. This should be explored as part of the
 uniqueness of the experience and brand proposition for cycling in the region.
- Wimmera home of the Fat Bike There is opportunity for the Wimmera to become home to Fat Biking in Victoria. This will require purpose designed tracks throughout the region.
- Tiered approach to investment For recreational trails and mountain bike
 trails there needs to be a tiered approach to investment. This will allow for
 smaller in town trails, through to designated major investments that become
 key drivers for visitation.
- Service to the cycling market. One of the current gaps in the region is bike
 friendly businesses and services that support the cycling sector. This includes
 cycle friendly accommodation, cycle tours and shuttle buses, food, beverage
 and equipment hire.

MASTER PLAN VISION

By 2028 the Grampians RDV region will be recognised as a premier destination for cycling. The region will host compelling cycle related experiences for road cyclists, mountain bikers and recreational bike path cyclists.

Investment in cycle tourism trail infrastructure, supporting tourism product and improved visitor information and marketing will lead to substantial growth in cycle visitors to the region.

It is envisaged that the profile of the cycling offer will increase substantially with much improved information specific to cycling in each of the region's destination and a cohesive approach to cycling development and marketing.

TARGETS

By 2024:

- Attract an additional 50,000 cycle visitors per annum across the Grampians RDV Region. (Effectively doubling cycle visitors);
- Deliver five priority or tier 1 cycling projects;
- Attract \$10 million investment in businesses servicing the cycle tourism sector.

MASTER PLAN THEMES AND OBJECTIVES

1.NEW AND ENHANCED ICONIC CYCLING EXPERIENCES

• Establish new iconic trails in the Grampians RDV region that will be a motivator for cycle tourism visitation to the region in strategic locations.

2.NEW AND ENHANCED TOWNSHIP FOCUSED CYCLE INFRASTRUCTURE THAT COMPLEMENTS PRIMARY AND SECONDARY DESTINATIONS

 Deliver improvements to cycle tourism infrastructure in the Grampians RDV region at primary and secondary tourism nodes to encourage cycling to increase length of stay and spend of visitor markets.

3.FORMALISATION OF EXISTING TRAILS TO MAKE THEM VISITOR READY

Formalise existing trails to provide destinations that are visitor ready.

4.DELIVER A PROGRAM OF CYCLING EVENTS

 Deliver a calendar of cycle tourism events that support the cycle strengths of the Grampians Region.

5.CYCLE TOURISM MANAGEMENT, MARKETING AND SERVICING

 Raise the awareness of cycling opportunities and provide a cohesive visitor experience for cycle visitors.

PRIORITY PROJECT BUSINESS CASES AND TIER ONE PROJECTS

Business cases have been prepared for the following cycle tourism projects:

- Ararat Trails;
- Goldfields Track:

- Wimmera River Discovery Trail:
 - Stage 1: Dimboola to Lake Hindmarsh; and
 - Stage 2: Horsham to Dimboola.

In addition to the priority projects above, tier one projects that have been identified for the region which are likely to have a significant impact on cycle tourism include:

- Daylesford to Hanging Rock Rail Trail;
- Creswick Trails;
- Bald Hill Gravity Park;
- Buninyong Nationals Road Circuit Improvement;
- Grampians Granfondo Loop East Loop;
- Grampians Trail;
- Pyrenees Wine Cycle Trail.

The projects were identified as they meet the following assessment criteria:

- Project planning concept and feasibility is mostly complete;
- Project has Local Government support;
- Project has scale which will provide an iconic cycling asset for the region;
- Project will drive visitation by delivering an asset to identified target cycling markets;
- Project will meet a gap identified in cycling infrastructure in the region;
- Project connects with a primary visitor destination;
- Project is identified for delivery within a four-year timeframe.
- Project has access to a large local cycling population catchment.

BUSINESS CASE

Urban Enterprise has undertaken economic modelling of potential impacts from the three priority business case projects:

The table on the following page provides a summary of these economic impacts and benefit cost ratio from proposed investments.

The modelling included a net present value cash flow of capital, ongoing and improvement costs over the course of five years following the proposed investments.

Benefits consider the direct spend impacts in the region generated from visitors attracted to the region and who use the trail, which generates ongoing/secondary benefits.

Economic impact modelling has also been undertaken to show 'output' generated from the trail projects including direct and indirect impacts and total jobs generated from visitor spend.

The three trail projects identified as priority projects for funding include Ararat Trails, Goldfields Track and Wimmera River Discovery Trail. If realised, they will generate the following collective benefits if delivered to their full potential:

- More than 388,000 cycle visitors for the Grampians (over the first five years of operation);
- \$87.5 million per annum in output;
- 333 jobs per annum (direct and indirect);
- A net present value of over \$37 million; and
- A benefit cost ratio of 3.5.

An overview of each individual project is outlined in Table 1, while the detailed contributions are included in the Business Case section (Section 16 onwards).

TABLE 1 BUSINESS CASE MODELLING OVERVIEW¹

	COST	VISITATION (YEARS 1-5)	ECONOMIC IMPACT (OUTPUT)	JOBS (DIRECT & INDIRECT)	BCR
Goldfields Track ²					
Phase 1: Implementing Current Master Plan	\$977k		\$20.1m	94	10.8
Phase 2: Industry Support, Upskilling & Development	\$761k		\$2.3m	7	8.23
Phase 3: Master Plan and Delivery of International Icon	\$10m (est.)		\$30.9m	86	2.24
Total	\$11.7m	166,276	\$53.3m	187	
Wimmera River Discovery Trail ⁵	'		'	'	
Stage 1: Wimmera River Discovery Trail [Dimboola to Lake Hindmarsh]	\$1m	106,530	\$14.6m	66	9.0
Ararat Trails					
Stage 1: Implementation of Core Network	\$654k				
Stage 2: Implementation of Future Development Trail 8 and development of Primary Trailhead	\$827k				
Stage 3: Implementation of Future Development Trail 9, 10 and One Tree Hill Walking Track	\$673k				
Stage 4: Linkages to Ararat and rehabilitation of unnecessary/duplicate trails	\$588				
Total	\$2.7m	115,748	\$19.5m	80	5.4
3 Project Total	\$15.5m	388,554	\$87.5m	333	3.5

Urban Enterprise 2018. Note: Visitation between years 1-5 represents total visitors, not unique visitors (e.g. one person can visit multiple times).

¹ Includes direct and indirect effects.

² Demonstrating the financial and economic impact of each project phase was requested by RDV. For all other projects, only the total project impact was required.

³ Refers to BCR from implementing and funding phases one and two.

⁴ Refers to BCR from implementing and funding all three phases.

⁵ Stage 2 (Horsham to Dimboola) not included in the business case modelling as costs are indicative only and subject to further investigation

1. INTRODUCTION

1.1. BACKGROUND

The Grampians RDV Region Cycling and Trails Infrastructure, Business and Master Plan project is administered by Wimmera Development Association and funded by Regional Development Victoria Transport for Victoria, and the eleven Local Governments that comprise the Grampians RDV region in partnership with Sport and Recreation Victoria and Parks Victoria. This Master Plan considers the full breadth of cycling formats, as well as the range of potential visitors to the Grampians RDV region to establish the region as a premier tourism destination for cycling and trail related experiences.

This is a highly significant project aimed at increasing visitation and visitor yield to the region, with the commensurate economic, employment and social benefits to residents and businesses.

Ensuring that the benefits of tourism are spread across the study area is an integral part of this project. Consistent with regional Australia, regional Victoria faces low visitor dispersal, particularly from international markets, and low awareness of regional experiences. Encouraging cycle tourism in the study area provides a unique opportunity to address these issues. It provides an opportunity to enhance existing, and develop new, products and experiences that improve and expand the cycling experience within the region; therefore, dispersing visitors further and raising awareness of destinations.

This Master Plan has been prepared by Urban Enterprise drawing on initial background research and comprehensive engagement and consultation completed by Ethos Urban.

1.2. PURPOSE

The primary aim of the project is to establish the Grampians RDV region as a premier tourism destination for cycling and trail related experiences, increasing visitor numbers, expenditure, dispersal and length of stay.

The purpose of this Master Plan is to identify methods, through the development of cycling as an activity, to increase economic growth in the Region. This involves identifying and defining the cycling target markets, the product or cycling trails that will attract these segments, and the actions required to achieve this. The Master Plan also identifies three immediate projects with individual business cases that demonstrate the cost and benefits of each.

The Brief for the Grampians RDV region Cycling & Trails Infrastructure, Business and Master Plan requires a coherent and clearly outlined strategy for the infrastructure spend for the next ten years.

1.3. OBJECTIVES

The objectives of the Master Plan outlined in the Brief are:

- Establish the Grampians RDV region as a premier tourism destination for cycling and trail related experiences.
- Research and identify the range of cycling and trails related projects existing, proposed, recommended or nominated by local Councils, tourism organisations and other stakeholders.
- Assess the geography, topography and tourism assets of the region to identify the full opportunity spectrum.
- Identify the cycling market segments and the best opportunities to attract the relevant target market commensurate with the product.
- Develop a 10-year Master Plan for cycling and trails in the Grampians RDV region, that:
 - Identifies opportunities including potential for town trails and other trail
 related tourism products that will attract more visitors to the region, and
 build upon the region's strengths in nature based, heritage and wine-based
 tourism;
 - Identifies opportunities to attract both national and world class cycling and trail events to the region;
 - Capitalises on the transport and infrastructure in the region;
 - Identifies the projects that could be undertaken or commenced within the 10-year period;
 - Identifies and prioritises a range of cycling related projects, including improvements to existing trails, new trails and events in the region; and
- Identify and prioritise the key trail projects across the region;
- Prepare costed business cases for 3 identified projects suitable for funding submissions;
- Engage with user groups, other key stakeholders and the broader community through a variety of means to identify opportunities, constraints and priorities for the region;

- Involve key stakeholders in development of the Master Plan;
- Develop recommendations for a consistent approach to marketing and promotions of the Grampians RDV region cycling and trails product;
- Identify management structures to deliver the recommendations of the project and for ongoing management and maintenance.

1.4. METHODOLOGY

BACKGROUND REPORT

The Background Report (Stage 1) was used to inform consultation with Councils, user groups, tourist organisations and other stakeholders as well as the broader community, undertaken prior to development of the Draft Master Plan. The Background Report was published in order to commence discussions about the opportunities and options for achieving the aim of the project.

ENGAGEMENT AND CONSULTATION

As part of Stage 2, an online map-based survey was widely disseminated via email to a wide spectrum of potential stakeholders provided by the Project Steering Group and Stakeholder Reference Group and sourced from other research. The survey comprised an interactive map for noting existing and potential trails, and a survey to provide further details and comments. The results of this input are included in this Report.

Workshops with identified stakeholders were held in three locations throughout the region: Ballarat, Horsham and Ararat. In each location three workshops were held, one for each of the three stakeholder groups identified: Councils and government authorities, tourism operators, progress associations and economic development officers, trail users and cycle groups and other interested groups and individuals, some of whom provided input through the survey. These workshops were generally well attended and provided valuable input to identifying opportunities, discussing issues and clarifying needs.

DISCUSSION PAPER

A Discussion Paper was prepared to provide a strategic context for the Master Plan. This stage has included an audit of mountain biking, road cycling and recreational cycling supply, identify opportunities and key projects. An assessment of cycling events and competitor assessment has also been carried out.

DRAFT MASTER PLAN

Urban Enterprise has prepared a draft Master Plan which incorporated comments to the discussion paper. The draft Master Plan was presented to the Project Control Group. The report was made available to the Project Steering Committee for final input to the project before finalisation.

FINAL MASTER PLAN

Urban Enterprise has prepared a final Master Plan drawing on comments and feedback from the Project Control Group and broader Project Steering Committee.

The final Master Plan has included business cases for the three priority projects identified.

1.5. CYCLE TYPOLOGY DEFINITIONS

It is important to clearly articulate cycling definitions to provide focus to this Cycle Tourism Master Plan. Below is an outline of cycling typologies that this Master Plan deals with. These typologies are important as they represent the key drivers for visitation.

1.5.1. KEY CYCLE TYPOLOGIES

MOUNTAIN BIKING

Mountain bikes are off road bicycles that have evolved substantially since the 1970s. They were developed for use on single-track and fire trails and generally rough terrain unsuited to road bicycles. "a bicycle with a sturdy frame, broad deep-treaded tyres, and multiple gears, originally designed for riding on mountainous terrain".

Whilst a mountain bike is suitable for riding on any unpaved or paved surface, in the context of this study the focus is on 'single track' mountain biking. The reason for this is that practically any State Forest in Victoria with fire trails is suitable for mountain biking. However, the sport has evolved to the point where 'mountain bikers' as a group specifically search out single track mountain bike trails and parks.

It is important to differentiate single track mountain bike trails and single-track mountain bike parks from general fire trails as these are the trails and type of mountain biking that that will drive visitation to the region.

The audit of mountain biking in the Grampians Region focuses on single track trails and single-track mountain bike parks.

There are subsets within mountain biking that are identified below. These are specific for various terrain.

TABLE 2 MAIN MOUNTAIN BIKE TYPOLOGIES

Cross Country - This is a type of off road riding favours long climbs and descents. XC riding and racing requires a high level of endurance fitness and bike handling skills.



Trail riding - This type of mountain biking is a more aggressive type of XC riding. It generally means riding more technical single tracks both up and down.



All Mountain – Similar to trail riding, however more travel required for technical downhills.



Enduro - Modern enduro bikes are basically downhill bikes with an ability to climb back uphill once the descent is finished.



Downhill – This is a bike designed specifically for downhill riding on very technical terrain. It is very durable and has a substantial amount of suspension.



Fat Bike – A new mountain bike style suited to sand and snow. The key element is oversized wheels.



ROAD CYCLING

It is true that any bike can be ridden on the road, however the definition for road cycling in this report is refined to riding on road with a 'road bike' "a bicycle for use on paved roads as opposed to rough terrain or racing tracks, especially one designed for competitive cycling". Road cycling as a recreation and sport dates to the 1860s.



There has been substantial change in road bike technology over the past 30 years, with very specific road bikes now developed for climbing, time trialling, criteriums and grand touring.

RECREATIONAL CYCLING

In the context of this project recreational cycling refers to cycling on off road bike paths or multi use trails. Examples include paved or unpaved river trails, rail trails or specific off-road bike paths. There is no definition of the type of bike that can be used for recreational cycling, however it is generally of a more 'relaxed' nature than mountain biking or road cycling. That means trails would generally be flatter and more accessible to a wider part of the population.

1.5.2. NICHE CYCLE TYPOLOGIES

GRAVEL BIKES

Gravel bikes are an emerging trend in the road cycling community. These bikes allow cyclists to access more terrain and are suitable for both on road and off-road use.

Gravel bikes do not differ greatly from road bikes other than being a more relaxed geometry, more durable and allow for wider tyres suitable for variable road conditions.

Gravel bikes are an important consideration for this project given the opportunity to create new and interesting links throughout the region, particularly where roads have not been sealed.

CYCLO CROSS

Cyclo cross was born out of Belgium and the Netherlands for winter training of road cyclists. It has emerged as a sport of its own and specific bikes have been developed which are very stiff and durable, suited to muddy and rough conditions whilst still maintaining 'drop bars'.

This will not be a key focus for the Grampians region and remains a very niche recreation. Cyclo cross events however may be considered for the region.

BMX

BMX 'bicycle motocross' is as the name suggests is a form of freestyle cycling on small specialised bikes for jumps and circuit racing. The sport requires a BMX track and is highly specialised.

BMX competitions can be an important driver of visitation. There are very few competition level tracks in Victoria.

BIKE PACKING/CYCLE TOURING

Bike packing usually involves multi day cycling touring. The region may be suited for this activity; however, it remains a very niche area of cycling and unlikely to drive high levels of visitation or yield to the region.



2. STRATEGIC CONTEXT

2.1. INTRODUCTION

The Strategic Context section provides an assessment of strategic policy and regional geography in relation to the Master Plan.

2.2. KEY FINDINGS

There is strong strategic policy support for investment in trails and cycling infrastructure for purposes of economic growth through attraction, dispersal and growing yield from visitors and the health benefits for residential populations. Active Victoria Strategy highlights the growth in informal recreational activity and the need to support this.

Victoria's 2020 Tourism Strategy clearly states the need to encourage investment in regional Victoria in tourism infrastructure and product in order to grow tourism.

The Grampians RDV region is a diverse region within Victoria. The region includes two geographical sub regions, including:

- Wimmera Southern Mallee (WSM) [RDV Partnership Area], which includes the following Local Government Areas (LGA's):
 - Hindmarsh;
 - O Horsham;
 - Northern;
 - West Wimmera; and
 - Yarriambiack.
- Central Highlands [RDV Partnership Area], which includes the following LGA's:
 - Ararat;
 - o Ballarat:
 - Golden Plains;
 - Hepburn;

- Moorabool; and
- Pyrenees.

The Grampians RDV Region intersects the following tourism regions:

- Grampians Tourism [Regional Tourism Board] comprising Ararat, Northern Grampians, Southern Grampians, Horsham;
- Visit Ballarat [Regional Tourism] one of two tourism organisations for Victorian Goldfields Tourism Executive;
- Daylesford and Macedon Ranges Tourism [Regional Tourism Board] comprising Macedon Ranges, Moorabool and Hepburn;
- Tourism Greater Geelong and the Bellarine [Regional Tourism Board] comprising Greater Geelong, Queenscliff and Golden Plains; and
- Wimmera Mallee Tourism [Regional Tourism Organisation] comprising West Wimmera, Yarriambiack, Hindmarsh and Buloke.

The geography of the Grampians RDV Region is diverse and hence reflects varied cycling strengths as well as opportunities for development. The Central Highlands is dominated by goldfields country and includes extensive former goldfields reserves that provide opportunity for mountain biking, whilst an equally extensive sealed road network makes it a popular location for road cycling, with mixed terrain including hilly rides and flatter loops.

The Grampians RDV Region is highly scenic and includes mixed terrain of quiet country roads suitable for road cycling and mountain climbs extending into the Grampians National Park. The Grampians RDV Region also has bushland reserves that can be explored for mountain biking.

Sandy soils in a large part of the WSM Region are not suited to typical mountain biking, however provide opportunity for fat biking as a unique cycle activity. In addition, road cycling on flat and undulating roads within the Wimmera Mallee Tourism Region presents an opportunity for visiting road cyclists.

2.3. POLICY AND STRATEGY CONTEXT

There is a wide body of background information, strategy and research from which the Master Plan can draw and within which it will reference. There are several Victorian State strategies that provide support and context for the growth of cycling and trails as one component of a growing economy, a healthy community, an attractive tourist destination and a vibrant regional lifestyle. Regional Tourism Board and Local Government strategies also address these issues to varying degrees.

In general, the following strategies form the core Victorian State Government strategic context:

- Victoria's 2020 Tourism Strategy;
- Victoria's Cycling Strategy Cycling into the Future 2013 -2023;
- Victoria's Trails Strategy 2014 2024; and
- Victorian Visitor Economy Strategy 2016.

Collectively these strategies provide support for the growth of cycling both as a tourist, recreation and commuter activity. The Grampians RDV region is recognised as a significant tourist destination, with both cycling and bushwalking being significant contributors. The documents also provide guidance for the types of trails and relevant market segments that will provide the greatest potential return to the economy of the regions.

There are several regional studies of relevance including:

- Central Highlands Growth Plan: Outlining the need to improve cycling linkages in regional communities.
- Wimmera Southern Mallee Strategic Plan: Identifying the significance of mountain biking within the nature-based tourism offer of the region.
- The Ballarat Cycling Action Plan 2017: Outlining the ways in which Ballarat can created a better cycling environment including improved cycling network connectivity, linkages to tourist sites and access to useful information.
- Daylesford Macedon Ranges Destination Management Plan: Containing specific investment initiatives and identified infrastructure requirements for visitor

- experiences and products including cycling as one of four key opportunities across the region.
- Grampians Way Ring Road Scoping Study 2012: Presenting a proposal for a road-based touring route that circles the Grampians National Park, with the potential to cater to road cyclists.
- Grampians Tourism Destination Management Plan 2014. A regional plan highlighting investment needs across the Grampians Tourism region.
- Crossing Borders Tracks and Trails. A major regional plan for investment in cycle trails and routes.

These provide region specific strategies and support for growth of tourism as a key economic driver, the cycling offer and related opportunities for the region. The Grampians RDV Region Councils all have a range of strategies, studies and reports that provide information regarding the economic and health drivers, tourist attractions, existing trails and cycle routes, proposed trails and park plans that are a vital resource for this project. The existing volume and range of documents demonstrate strong rationale and support for the development of a Master Plan for cycling and trails in the Grampians RDV region. In addition, market research undertaken for other regional strategies has provided information regarding state and national markets that can be utilised for this Master Plan.

2.4. THE REGION

REGIONAL PARTNERSHIP AREAS

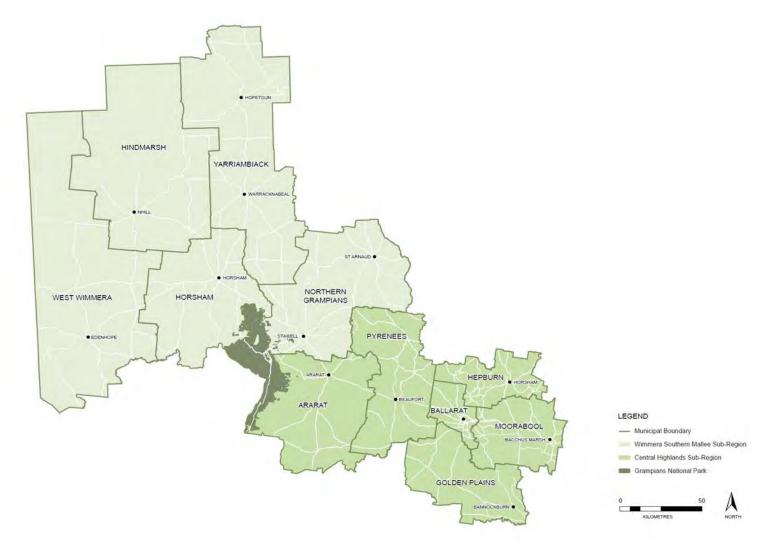
The Grampians RDV region is a diverse region within Victoria (see Figure 1). It includes the State Government 'regional partnership' areas of: **Central Highlands** which is predominantly the former goldfields areas surrounding Ballarat, and the **Wimmera Southern Mallee** that forms the western part of the region and includes the Grampians and Wimmera Mallee areas.

TOURISM GEOGRAPHY

Official tourism geographies include:

- **Grampians Tourism** [Regional Tourism Board] comprising Ararat, Northern Grampians, Southern Grampians, Horsham LGA's;
- **Goldfields Tourism** [Victorian Goldfields Tourism Executive] Includes, Ballarat, Pyrenees, Bendigo, Central Goldfields, Loddon, Mount Alexander LGA's;
- **Daylesford and Macedon Ranges Tourism** [Regional Tourism Board] Including Macedon Ranges, Hepburn and Moorabool;
- Wimmera Mallee Tourism [Regional Tourism Organisation] comprising West Wimmera, Yarriambiack, Hindmarsh and Buloke LGA's; and
- Tourism Greater Geelong and the Bellarine [Regional Tourism Board] comprising Greater Geelong, Queenscliff and Golden Plains.

FIGURE 1 GRAMPIANS RDV REGION - SUB REGIONS



Source: Ethos Urban

3. CYCLE AND TRAIL DEMAND DRIVERS

3.1. INTRODUCTION

This section of the report provides an assessment of cycle and trial demand drivers, including consideration of the following:

- Current level of visitation to the region, sub regions and LGA's;
- Level of cycling within current visitation;
- Projected future visitation;
- Projected cycling visitation scenarios;
- Local cycling trail demand and use;
- Market potential across cycling typologies.

3.2. KEY FINDINGS

The Grampians RDV region attracts around 5.2 million visitors annually. At a subregional level Central Highlands attracts most of these visitors with 4.1 million visitors per annum, whilst the Wimmera Southern Mallee attracts just over 1 million visitors per annum. (Source: Tourism Research Australia).

Visitation to the region is a driver for further investment in tracks and trails, providing for cycling as an activity for existing visitor markets.

Within the Grampians RDV region there is a pronounced concentration of visitor activity in the primary visitor nodes of Ballarat, Hepburn, Horsham and the Northern Grampians. Other secondary nodes include Ararat City and Moorabool Shire for daytrip visitation.

The tourism nodes that have the highest level of visitation also support the greatest level of complementary tourism product and infrastructure required to support potential cycle visitors. This includes the provision of accommodation, food,

beverage and retail. Key visitor destinations include Ballarat, Daylesford, Grampians National Park and Horsham.

Horsham and Ballarat have a high level of business and visiting friends and relatives visitors, whilst Grampians National Park and Daylesford are considered holiday leisure destinations. The plan needs to consider the delivery of cycle infrastructure that can support the key tourism nodes, whilst also seeking ways to disperse visitors throughout the region from these nodes into parts of the Wimmera, Moorabool and Golden Plains, Pyrenees and Northern Grampians.

Visitors who undertake cycling activity are concentrated to the Central Highlands, possibly reflecting the impact of cycle events tourism in this area and the strong road cycling culture in the Central Highlands.

There is limited recorded cycling activity in the Wimmera Southern Mallee with only 16,000 visitors nominating cycle as an activity undertaken per annum. (Source: Tourism Research Australia).

To grow cycle tourism in both the Wimmera Southern Mallee and Central Highlands, further investment in cycling infrastructure is needed. Market research shows that the delivery of quality single track mountain biking trails and short high quality recreational trails is needed to attract visitors. In addition, formalisation and promotion of road cycling in the region would support the attraction of cycle specific visitors.

The markets most likely to visit specifically for cycling include high involvement mountain bikers and high involvement road cyclists. Recreational cycling is unlikely to be a primary motivator for visit, however is an important complementary activity when visitors are in the region, allowing for increase of stay, improved experience and greater visitor yield.

Growth in visitors to the Grampians RDV region will continue with a projected 1 million additional visitors to the region by 2025, as are the number of cycle visitors likely to increase. Visitor growth projections highlight the need for continuous investment in tracks and trails to provide for growing visitor markets and delivery of tourism infrastructure such as visitor accommodation.

3.3. VISITATION SUMMARY

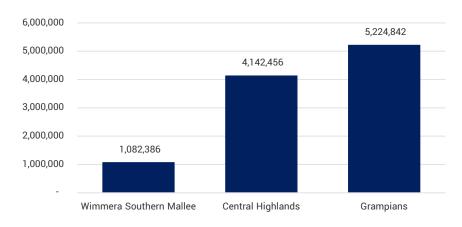
3.3.1. TOTAL VISITATION - GRAMPIANS RDV REGION

Table 2 provides a summary of visitation, based on 5-year averages between 2007-2011 and 2012-2017. Averages have been used to provide greater result reliability, however caution is recommended when examining daytrip data, particularly for the cycling market (due to small sample size).

Figure 2 shows the total average annual visitation for domestic overnight visitors, international visitors and daytrip visitors.

The data shows a much high level of visitation to Central Highlands sub region which includes Ballarat, Hepburn and Moorabool compared to the Wimmera Southern Mallee. Some of this is due to the higher level of business travel and visiting friends and relatives travel to Ballarat, however overall it highlights that visitation to the Wimmera Southern Mallee is low and dispersed.

TABLE 3 TOTAL AVERAGE VISITORS, GRAMPIANS REGION, 2012-2016



Source: Tourism Research Australia, NVS, 2016

3.3.2. VISITATION TO LGAS

OVERNIGHT VISITATION

Figure 2 provides a summary of localised visitation to LGAs across the Grampians Region. This highlights that overnight visitation is clustered to Ballarat and Hepburn to the south and Horsham, Northern Grampians and Ararat aligned with Grampians National Park and the strength of Horsham as a regional City.

Cycling product delivered in the Grampians and Ballarat/Daylesford clusters will generate largest demand from existing visitor markets.

In addition, there is opportunity to disperse existing visitors markets from key visitation nodes through cycling investment in locations such as LGAs that surround Horsham and Halls Gap (Ararat and Yarriambiack) and LGAs, which surround Ballarat and Hepburn (Pyrenees, Golden Plains and Moorabool).

DAYTRIP VISITATION

Figure 3 indicates that daytrip visitation is highest for Ballarat, followed by Moorabool and Hepburn. The proximity to Melbourne strengthens the daytrip market to these LGAs.

Horsham and North Grampians also have moderate levels of daytrip visitors.

Whilst the overall aim would be to encourage overnight visitation, the delivery of cycling infrastructure in strong daytrip markets may have the following effect:

- Encourage visitors to stay longer due to a wide variety of experiences; and
- Encourage greater levels of visitation which exposes the region to new potential markets.

FIGURE 2 DAYTRIP VISITATION BY LGA

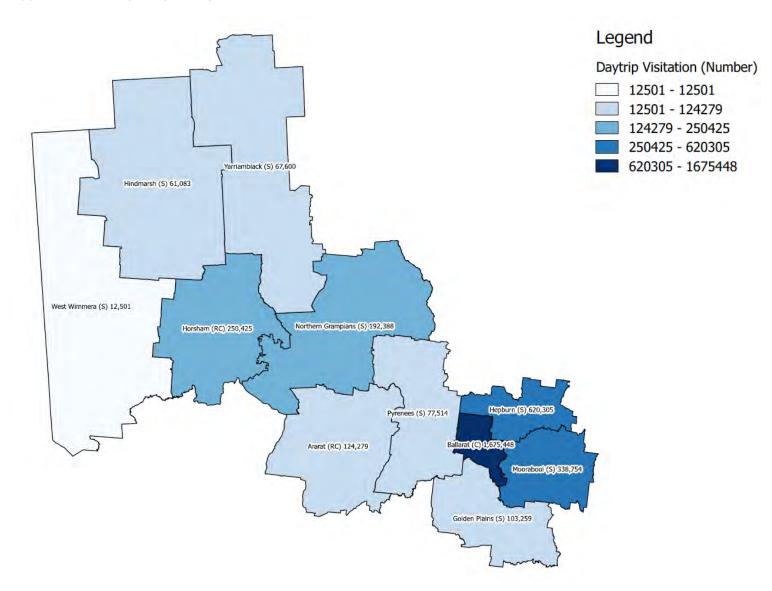
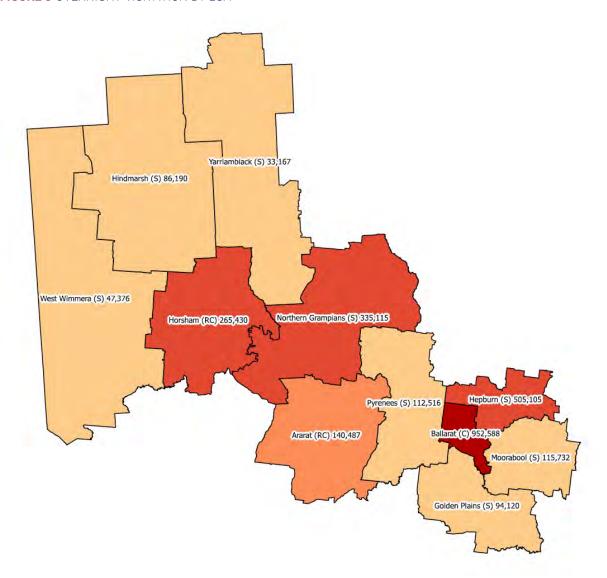


FIGURE 3 OVERNIGHT VISITATION BY LGA



Legena

Overnight Visitation (Number)

12501 - 12501

12501 - 124279

124279 - 250425

250425 - 620305

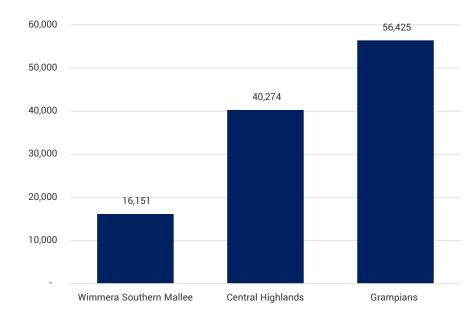
620305 - 1675448

3.3.3. CYCLING VISITORS

Between 2012-2016 the Grampians RDV region attracted approximately 56,000 cycling visitors annually (Figure 4), with the Central Highlands comprising 71% of these visitors.

Over the same period, the Grampians RDV region attracted approximately 543,000 bushwalkers annually, with the Central Highlands representing 56% of total bushwalking participants in the Grampians RDV region. The number of bushwalkers is approximately 10 times higher than the number of cyclists in the Grampians RDV region, presumably driven by the established infrastructure in place to support bushwalkers, as compared to limited cyclist facilities.

FIGURE 4 AVERAGE CYCLING VISITORS, GRAMPIANS REGION, 2012-2016

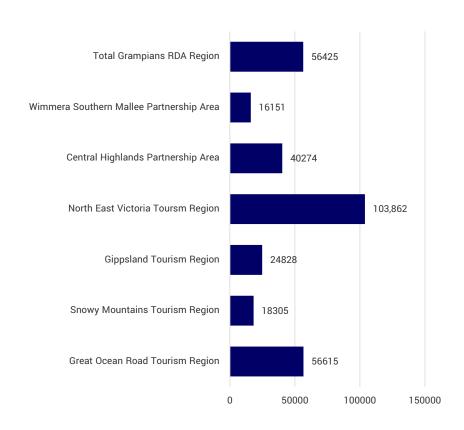


Source: Tourism Research Australia, NVS ,2012-2016 YE Dec

REGIONAL BENCHMARKING

North East Victoria has the most cyclists of any Victorian region, followed by the Grampians RDV region and the Great Ocean Road Region (Figure 5). Popularity of the North East region for cycling participants is driven by the available cycling product in the region.

FIGURE 5 BENCHMARK OF CYCLING VISITORS AGAINST OTHER REGIONS



Source: Tourism Research Australia, NVS/IVS



3.3.4. PROJECTED VISITATION

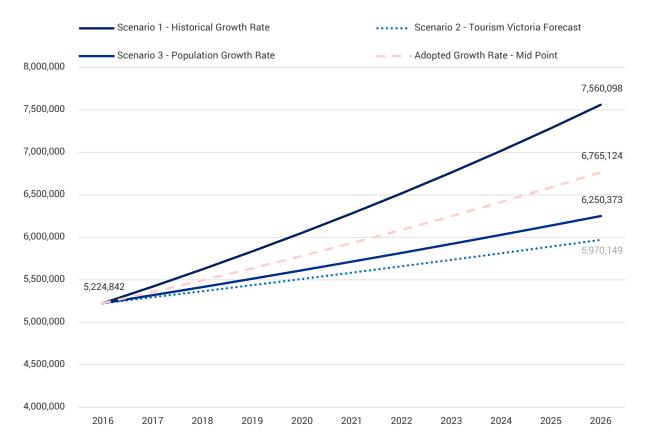
The following provides an overview of projected visitation to the Grampians RDV region for total visitors, and for cycling visitors specifically. Three scenarios are analysed:

- Historical growth scenario;
- Visit Victoria forecast scenario; and
- Population growth scenario.

TOTAL VISITORS

Figure 6 provides an estimate of all visitors to the Grampians RDV region. Notably the historical growth scenario provides a much greater visitation projection than using population growth or the Visit Victoria projections, due to strong visitation growth to the Grampians RDV region over the past 10 years. In particular, domestic overnight visitors (who comprise the largest share of visitors to the region) have grown at an average annual growth rate of 4.25% over this period. Using the historical growth rate scenario, visitation is projected to increase from 5.2 million in 2016 to 7.6 million in 2026. This is an exceptionally high rate of growth and it is recommended that the adopted growth rate be midway between the Visit Victoria projections and historical growth rate in order to not overstate growth. At the adopted growth rate, this will equal approximately an extra 1.5 million visitors per annum visiting the region.

FIGURE 6 TOTAL VISITORS - ALL SCENARIOS CONSOLIDATED, GRAMPIANS RDV REGION



Source: Urban Enterprise, 2018

CYCLING VISITORS

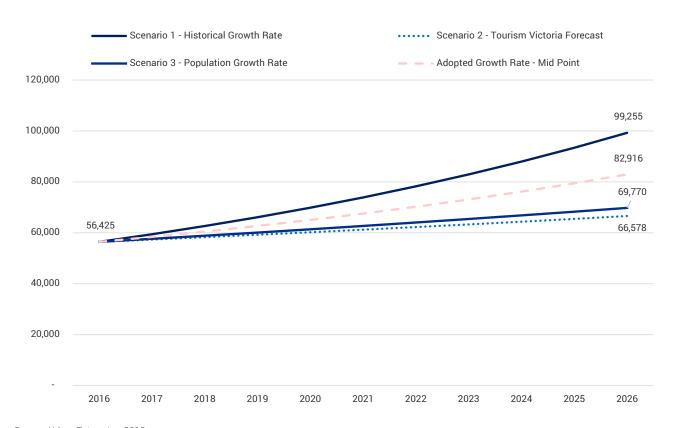
Figure 7 provides an estimate of cycling visitors to the Grampians RDV region consolidating all visitation projection scenarios.

The projected historical growth rate for cycling visitors demonstrates the growing strength of this activity in the region, projecting cycling visitation to increase from just over 56,000 in 2016 to just over 99,000 in 2026.

Similarly, with projections for overall visitation, it is recommended that the adopted growth rate be estimated mid-way between the Visit Victoria projections and historical growth rate to not overstate growth. At the adopted growth rate, this will equal approximately an additional 26,500 cycling visitors per annum visiting the region.

The significant projected growth in total visitation leaves substantial scope to increase the proportion of cycling visitors, which under the current projected growth rate is equal to only 1.2% of total visitation in 2026.

FIGURE 7 CYCLING VISITORS - ALL SCENARIOS CONSOLIDATED



Source: Urban Enterprise, 2018

3.4. LOCAL CYCLING DEMAND

3.4.1. CLUBS

Urban Enterprise conducted a desktop audit of cycling clubs located in the Grampians RDV region to determine location, and type of cycling they were aligned with. A total of 12 clubs were identified, with half of these located in Ballarat. Road cycling was the most popular typology, in line with product availability in the region.

There is also a Ballarat Bicycle Users Group based in Ballarat, which promotes and campaigns for increasing cycling participation across all disciplines.

The presence of cycling clubs is an indicator of local demand for road cycling loops and mountain biking trails. These clubs are often responsible for running cycling events and in the case of mountain biking providing trail maintenance.

TABLE 4 CYCLING CLUBS

CLUB NAME	TOWN	LGA	CYCLING TYPE
Ararat & District Cycling Club	Ararat	Ararat	Road
Ballarat Club Mud	Ballarat	Ballarat	МТВ
Ballarat Scenic Cyclists	Ballarat	Ballarat	Road; MTB
Ballarat Sebastopol BMX Club	Ballarat	Ballarat	BMX
Ballarat Sebastopol Cycling Club	Ballarat	Ballarat	Road
Ballarat Triathlon Club	Ballarat	Ballarat	Road (Triathlon)
Daylesford Cycling Club	Daylesford	Hepburn	Road
Eureka Veterans Cycling Club	Ballarat	Ballarat	Road
Grampians Vets Cycling Club	Stawell	Northern Grampians	Road
Horsham Cycling Club	Horsham	Horsham	Road
Team Outpatients Cycle Club	Hopetoun	Yarriambiack	Road
Ararat Dirt Riders mtb club	Ararat	Ararat	МТВ
VAGO	Creswick	Hepburn	Road & MTB
Edenhope Murray to Moyne team (Informal)	Edenhope	West Wimmera	Road

3.5. CYCLING PARTICIPATION

Table 4 provides an outline of the number of persons in the key markets of NSW, Victoria, South Australia and Queensland who have ridden a bike in the past 12 months by type of riding in the key domestic markets. 2.2 million people have undertaken road cycling, 1.2 million have undertaken mountain biking and 750,000 have ridden on a rail trail.

A further 17% of the key market population have ridden a bike on a bike path in the past 12 months (3.3 million).

Table 5 shows that there is a large amount of cross over between cycling types, including:

- 46% of mountain bikers have also undertaken road cycling;
- 25% of road cyclists have also ridden a mountain bike;
- 49% of rail trail riders have ridden a road bike.

The crossover between cycling typologies is important highlights the need for establishing a variety of cycling trail typologies to support cycling enthusiasts.

TABLE 5 NUMBER OF PERSONS WHO HAVE RIDDEN A BIKE IN THE PAST 12 MONTHS [QLD, VIC, SA, NSW]

TYPE OF CYCLING	PROPORTION OF POPULATION	TOTAL NUMBER OF CYCLISTS IN KEY DOMESTIC MARKETS (VIC, NSW, QLD, SA)
Road Cycling	11.4%	2.2 Million
Mountain Biking	6.2%	1.2 Million
Rail Trail Cycling	3.9%	750,000
Bike Path Cycling	17%	3.3 Million

Source: BDA Marketing Planning

TABLE 6 CROSSOVER OF CYCLING TYPES (%)

	MOUNTAIN BIKING	ROAD CYCLING	RAIL TRAIL RIDING
Mountain Biking		25	45
Road Cycling	46		49
Rail Trail Riding	28	17	
Bike Path Cycling	54	59	62

Source BDA Marketing Planning

3.5.1. MOUNTAIN BIKE MARKET

There are an estimated 1.2 million residents across the key domestic markets in Australia that have ridden a mountain bike in the past 12 months.

Segments include:

- Low Involvement 24% of participants, 6% of kilometres ridden;
- Endurance Riders 27% of participants, 37% of kilometres ridden;
- Technical Riders 17% of participants, 15% of kilometres ridden;
- High Involvement All-rounders 33% of participants, 42% of kilometres ridden.

3.5.2. ROAD CYCLING MARKET SEGMENTS

There are an estimated 1.9 million residents across the key domestic markets in Australia that have ridden a road bike in the past 12 months.

Segments include:

- Low Involvement Flat Riders 37% of participants, 10% of kilometres ridden;
- Fitness Flat Riders 18% of participants, 15% of kilometres ridden;
- Flat Riding Enthusiasts 14% of participants, 26% of kilometres ridden;
- Low Intensity Climbers 14% of participants, 8% of kilometres ridden;
- Higher Intensity Climbers 19% of participants, 42% of kilometres ridden.

3.5.3. RECREATION CYCLING MARKET

The recreational cycling market, with people cycling for passive leisure, mainly on tracks and trails is the largest market of the three. 3.3 million people have ridden on a bike path each year.

This market has the potential to undertake cycling whilst in the region, however for most it will not be the key motivator of visit.

This market includes:

- Family groups including adults and children;
- Adult couples;
- Friendship groups;
- Riding groups such as BUGs (Bicycle User Groups.

3.5.4. MALE VERSUS FEMALE

Market research into cyclists in Victoria's North East highlights that there is a substantially higher number of male road cyclists and mountain bikers than female. Future growth in cycling should consider ways to grow female participation in cycling, however the key market segments right now are heavily skewed to males.

3.6. SUMMARY OF DEMAND INDICATORS

The following provides a summary of demand indicators for cycle tourism in the Grampians RDV region:

- Clear majority of visitors are drawn to Ballarat, Daylesford, Horsham, Halls Gap and the surrounding areas - larger trail investment should consider how to leverage from these destinations;
- Cycle visitation is relatively low, considering the size of the region, with most cycle visitors visiting the Central Highlands;
- Visitation projections show using the mid point scenario an additional 1.5 million visitors to the region between 2016-2026;
- An additional 45,000 cycle visitors are projected to visit between 2016-2018.
 Further investment in cycle tracks and trails will see visitation increase greater than this:
- There is a large domestic cycling market, with over 3.3 million people riding bike paths, 2.2 million undertaking road cycling and 1.1 million undertaking mountain biking within the past 12 months;
- High involvement riders both mountain biking and road cycling are those that are most likely to visit specifically for cycling purpose;
- Mountain biking in the Grampians RDV Region was not a consideration by the current mountain bike market due to the low level of trail infrastructure in the region.
- The Grampians RDV Region and Goldfields Tourism Region (including Ballarat, Bendigo, etc.) rated well amongst road cycling markets, reinforcing the audit work undertaken.

4. MOUNTAIN BIKING ASSESSMENT

4.1. INTRODUCTION

This section provides an audit of current mountain biking activity across the Grampians RDV region and identifies opportunities for development based on the gaps in product and potential to leverage and strengthen tourism townships with the provision of mountain biking infrastructure.

4.2. KEY FINDINGS

Mountain biking in the Grampians RDV region is very limited in terms of quality single track mountain bike trails and parks. There is currently only one formalised mountain bike park with good quality trail signage and trail head facilities, that being Black Hill Reserve Mountain Bike Park in Ballarat.

Other than parts of the Goldfields Track, the remainder of mountain biking in the region is largely unformalised and difficult to locate and navigate. There is a substantial amount of investment required to develop mountain biking in the Grampians RDV region as a key 'tourism product'.

The region however is moving in the right direction with funding being made available to develop Creswick as a substantial mountain bike destination with over 100 kilometres of single track proposed. Ararat Hills is also undergoing master planning for a major mountain bike destination.

The Goldfields Track presents a unique multi day mountain biking tour, however this needs further trail development, signage and marketing to fulfil its potential as an iconic product which can attract interstate and international markets.

Grampians National Park is a major nature-based destination in Victoria, however there is limited mountain biking development opportunity for formalised 'single track' due to environmental policy and Management Plan for the National Park. There is however opportunity to investigate public land reserves for further mountain bike development in proximity to Grampians National Park.

Whilst there is a need to invest substantial funding to develop major mountain bike destinations, there is potential to formalise existing trails that are not formalised such as Buninyong and Woowookarung Regional Park. The establishment of secondary mountain bike parks can provide additional activity for tourism destinations.

Smaller formalisation projects are achievable over a short time period and can quickly lead to growing visitation in the short term.

Given the low level of development for mountain biking in the region there are gaps across all mountain biking typologies including cross country, epic trail rides and downhill/ gravity parks. All of these typologies should be explored in the Grampians RDV region.

4.3. EXISTING SUPPLY

The supply assessment for mountain biking focuses on mountain bike trail networks that include regularly utilised single track. In some cases, the mountain bike trail networks utilise walking tracks that have evolved for mountain biking and trails cut by local mountain bike riders.

There are several large public land reserves in the region including State and National Parks that show some level of cycling using Strava heat mapping, however most of the cycling activity is of low usage and primarily on fire access trails and 4WD tracks.

The focus for this audit is on the existing single-track mountain bike networks, with consideration of public land reserves that may be improved and developed for single track mountain bike trails in the future.

Table 6 provides an outline of mountain bike networks in the Grampians RDV region that have well utilised single track. There is around 200 kms of single track in the region.

The supply audit shows that Black Hill Reserve Mountain Bike Park in Ballarat is the only formalised mountain bike network that has a trail head facility, wellmarked trails and a well-developed consistent quality trail network. All the other mountain bike trail networks have limited information, inconsistent quality networks, no signage and no trail head facilities. There is opportunity to implement formalisation of existing mountain bike parks as a first step to grow mountain bike tourism in the Grampians Region.

The Goldfields Track has signage; however, the quality of trail is inconsistent.

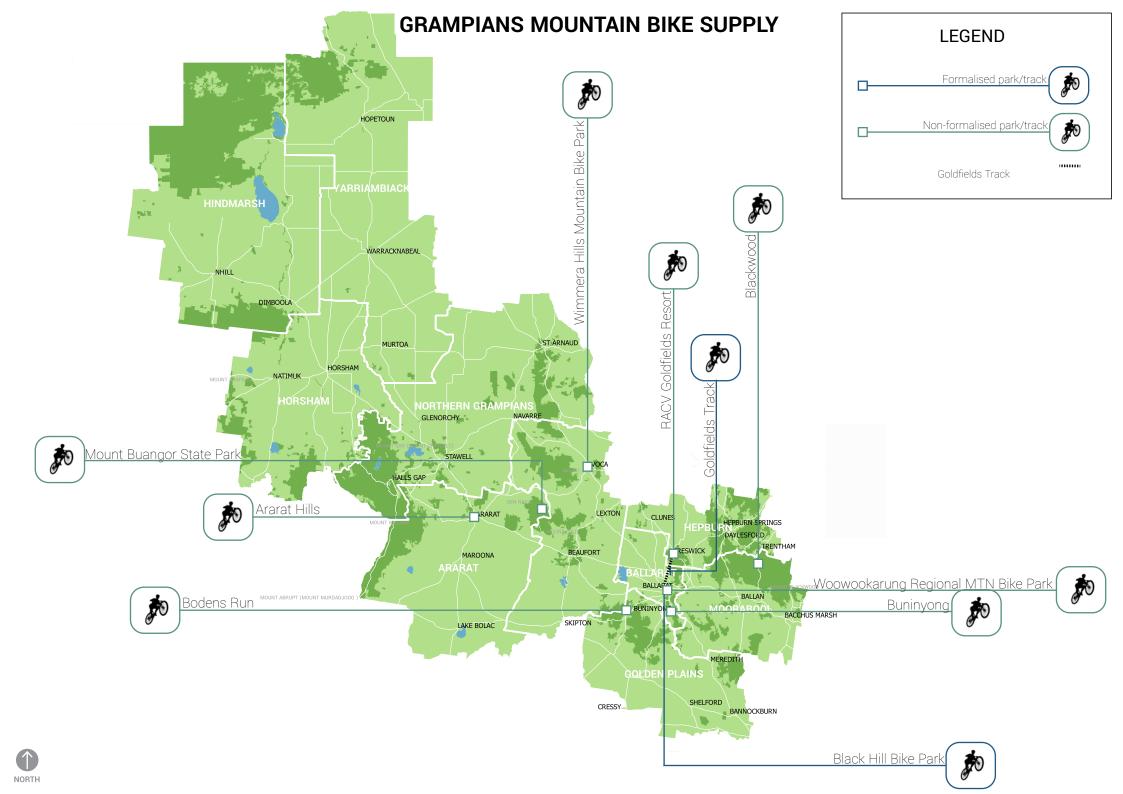
TABLE 7 SUPPLY OF MOUNTAIN BIKING - GRAMPIANS RDV REGION

NETWORK/ PARK NAME	LOCATION/NEAREST TOWN	CROSS COUNTRY	GRAVITY TRAILS (INTERMEDIATE)	DOWNHILL (ADVANCED)	KMS OF SINGLE TRACK	LEVEL OF FORMALISATION
RACV GOLDFIELDS RESORT MOUNTAIN BIKE TRAILS	CRESWICK	•			6.9	***
BLACK HILL RESERVE MOUNTAIN BIKE PARK	BALLARAT		•	•	10	***
BUNINYONG	BUNINYONG	•			22	*
WIMMERA HILLS MOUNTAIN BIKE TRACK	AVOCA	•			13	*
ARARAT TRAILS MOUNTAIN BIKE	ARARAT	•	•		20	*
WOOWOOKARUNG REGIONAL MTN BIKE PARK	BALLARAT	•			15	**
MOUNT BUANGOR STATE PARK	ARARAT AVOCA BEAUFORT	•			20+	*
BODENS RUN	SMYTHESDALE	•	•		45	*
BLACKWOOD RANGES TRACK	BLACKWOOD	•			6	*
GOLDFIELDS TRACK	BALLARAT/ CRESWICK	•			100+	**
TOTAL					197	

^{★★} Formalised quality single track and signed

^{★★} Some formalised single track with some signage

[★] Some single track, however not formalised and no signage



4.4. MOUNTAIN BIKE NETWORK REVIEWS

BLACK HILL RESERVE MTN BIKE PARK [CITY OF BALLARAT MANAGED

Black Hill Reserve Mountain Bike Park has been long utilised by Ballarat mountain bikers and overtime has organically grown into a formalised mountain bike park. Black Hill Reserve includes some cross-country trails but is mostly regarded as a downhill mountain bike park. Whilst the vertical drop on the downhill trails is limited the difficulty level is high and provides a variety of downhill trails to test rider ability.

The infrastructure that has been delivered at Black Hill Reserve is of high quality with well signed trails, good trail head and sealed formalised car parking. There is also a training ground for beginner mountain bikers.

Black Hill is limited in its geographic size and has limited opportunity to expand.



WOOWOOKARUNG REGIONAL PARK PARKS **VICTORIA MANAGED**]

Woowookarung Regional Park includes around 20 kilometres of single track. Some of it is well formalised including a criterium loop developed by local mountain bikers. Further work is required to complete the trail network and establish a trail head and improved signage.

The trail network is suitable for beginner and low intermediate skill level and good fitness. It is largely an open and flowy single track and does not include a high level of technical enhancements.

Master Plans are underway for Woowookarung Regional Park and improvement to the mountain bike network is proposed.



BUNINYONG [DELWP MANAGED]

Buninyong is a reserve managed by DELWP near Buninyong township. The reserve has a 22 km single track circuit, well prepared by enthusiastic and creative locals. The circuit is a mix of old school mountain biking and formalised improvements such as berms and jumps.

The trail is suitable for cross country riding and is one of the best informal mountain bike circuits in Victoria.

There is no formal signage, trail head or mapping of the mountain bike trails at Buninyong.

If the trail was formalised it has great potential for attracting higher visitation.



BLACKWOOD [DELWP MANAGED]

There are some informal trails near Blackwood township. The bushland is very lush, and the township has potential to establish itself as a short break tourism village, less than one hour from Melbourne.

The existing trail network is mostly on walking track; however, motor bikes have also cut single track through Wombat State Forest.

The existing trail network needs a further audit and master plan. Formalisation of a mountain bike network will complement the tourism development of the township.



SMYTHESDALE/BODENS RUN [PARKS VICTORIA MANAGED]

Smythesdale has a substantial amount of state forest and plantations near the township. The township is small however has several heritage buildings as well as the Ballarat to Skipton Rail Trail.

A former water race 'Bowden's Run' was developed as a walking track and more recently has attracted mountain bikers.

The small network is only a 4.5-kilometre loop, however there is opportunity to expand the network to link to the town and include further single track to replace the fire trail.



CRESWICK TRAILS [PARKS VICTORIA/DELWP MANAGED]

Creswick has long been used as a mountain bike destination, however the majority of single track in Creswick is not formalised and difficult to navigate.

The Goldfields Track will link into this park. This is an important link to Creswick from Ballarat.

Over 100kms of formalised mountain bike network has been funded and construction is due to commence in 2018. This will create one of the largest mountain bike parks in Victoria.

ARARAT TRAILS [PARKS VICTORIA]

Ararat Hills has an established network of trails that have been developed by local riders. The trails include single track linked in some sections by fire trail. The trail network is mainly cross-country trail riding however the vertical that can be achieved in the Ararat Hills provides opportunity for flow trail and downhill trail options in the future.

Some downhill mountain biking has occurred within the park historically.

There is no trail head, signage or clear mapping of the trails and unless the rider has knowledge of the network, navigation is currently very difficult.

There are plans underway to expand the mountain bike park which will lead to an extensive and welldesigned trail network.

Ararat Hills is near Ararat town centre which has many supporting services and public transport options.

PYRENEES STATE FOREST [DEWLP MANAGED]

There is a network of informal MTB trails in Pyrenees Hills State Forest to the west of Avoca.

The Pyrenees Hills connect to Mt Avoca Winery which acts a staging point for mountain bike races.

Bill Hill Events have operated a cross country mountain bike marathon that includes up to a 90-kilometre circuit

Mountain biking in the Pyrenees Hills includes use of both fire trails and walking track.

Mountain biking is not promoted in the forest; however, the rocky terrain and large vertical drop would make it highly suitable as a mountain bike destination.

Its proximity to tourism product including wineries and Avoca township would complement mountain biking.

Further enhancement of the mountain bike trail network should be considered



WIMMERA HILL WINERY MTN BIKE TRACKS [PRIVATELY OWNED]

Wimmera Hills Winery have developed a short network of trails within their property. The trails are mostly of beginner standard.

The trail network is not extensive enough to be a 'mountain bike destination', however visitors to the region may try their hand at mountain biking if bike hire were provided or if they had their own bikes with them.

MOUNT BUANGOR /MT COLE STATE PARK [PARKS VICTORIA AND DELWP MANAGED]

This large and rugged range located in proximity to Beaufort has some informal mountain biking activity. This is restricted to fire trails and some walking trails.

The park which includes granitic outcrops and a large amount of vertical would be suitable for development of mountain biking.

There are already tourism businesses that operate within and near the State Park that would benefit from development of mountain bike trails.

The park however is quite remote and has limited services adjoining it.

Further assessment and feasibility is required to explore the extent of the opportunity, whether it be formalisation of some existing walking trails and or fire trails into single track mountain bike trails or development of a more extensive network.

4.5. OPPORTUNITIES

4.5.1. MOUNTAIN BIKE DESTINATIONS

ARARAT TRAILS MOUNTAIN BIKE PARK

Ararat Trails Mountain Bike Park is undergoing a Master Plan to establish it as one of Victoria's premier mountain bike destinations.

The mountain bike park will include a mix of gravity flow trails and cross trails.

Ararat (and, therefore, Ararat Hill) is accessible by train from Melbourne through Ballarat.

CRESWICK TRAILS

Creswick Trails development has been funded and is proposed to have over 100 kilometres of trail developed to create one of the largest single-track mountain bike networks in Victoria

Creswick (and, therefore, Creswick Trails) is accessible by train from Melbourne through Ballarat.

BALD HILL GRAVITY PARK, BACCHUS MARSH

Bald Hill, near Bacchus Marsh is Council owned land that includes a lease for a plantation and former quarried land. Bald Hill has quite a substantial amount of vertical and the area is highly disturbed and has little current environmental value.

One of the major gaps for Victoria is accessible high quality downhill, flow trail and slopestyle courses. This is a key growing mountain bike segment and is poorly serviced. There is history of mountain biking around Bacchus Marsh with downhill races having been held there in the 1980s. The vision for Bald Hill is to establish Melbourne's premier downhill and flow park, suitable for a range of levels. Some cross-country trail may also be included to support the network.

Bald Hill is well suited to this discipline of mountain biking as it requires substantial earthworks and given the need for Bald Hill to be completely rehabilitated provides a unique opportunity.

Bald Hill would be unique for a mountain bike park in close proximity to Melbourne as it is accessible by train.



CASE STUDY: DERBY TASMANIA

Derby, in Northern Tasmania has developed into a mountain bike mecca over a very short period. The project originally identified in the Dorset Council Tourism Strategy in 2011 has attracted over \$3.5 million in Government and stakeholder funding. The park has 80 kilometres of world class trail. The quality of the trail system designed by World Trail and the high amenity country side has created a must ride destination for mountain bikers.

Investment in the township has followed with new tour operators, food and beverage businesses and accommodation businesses attracted to the town.



Source: www.ridebluederby.com.au

GOLDFIELDS TRACK MULTI DAY MOUNTAIN BIKE ADVENTURE

Goldfields Track has potential to become a premier multi day mountain bike trail in Australia. Many sections are already well developed with single track, however to establish a premium experience further development of the Goldfields Track including improvement to single track is required.

The Goldfields Track will link several existing mountain bike parks including Creswick, Black Hill Reserve, Woowookarung Regional Park and the newly establish Harcourt park.

There is opportunity to better utilise Ballarat and Bendigo Railway Stations as bookends to the experience allowing visitors to travel by train to undertake the journey.

PYRENEES STATE FORREST DESTINATION MTN CROSS COUNTRY MOUNTAIN BIKE PARK

There is opportunity to create a destination mountain bike park in the Pyrenees State Forrest. This may utilise existing underutilised walking track and motor bike single track as well as developing new trails.

This would need to be undertaken in conjunction with the land manager.

MOUNT BUANGOR /MT COLE STATE PARK MTN BIKE DEVELOPMENT

Mount Buangor / Mt Cole has some informal mountain biking that currently takes place. The bushland is one of the lushest in the region and would provide high amenity terrain for mountain biking. The park has potential to extend its attraction to visitors through formalising of mountain bike trails.

A feasibility study is required to assess the opportunity.

4.5.2. MOUNTAIN BIKE TRAILS THAT COMPLEMENT TOURISM TOWNSHIPS

HALLS GAP MOUNTAIN BIKING

There is no formalised mountain biking in or around Halls Gap which is one of Victoria's key nature-based destinations.

There are a range of mountain bike options which may be explored within proximity to Halls Gap:

Single track loops may be explored in and around Halls Gap which service the visitor market in that location. Examples of loops are provided in this section; however, these would need to be explored in greater. Mountain bike trails options to be explored include:

- Halls Gap to Lake Fyans
- Devil's Garden Loop
- HGX Loop
- Lake Bellfield Loop
- Mt Difficult Fireline Loop
- Pomonal and Return Loop
- Redgum Loop

Halls Gap to Lake Fyans



Devils Garden Loop



HGX Loop



Lake Bellfield Loop



Mt Difficult Fireline Loop



Pomonal and Return Loop



Redgum Loop



BLACKWOOD CROSS COUNTRY LOOP

There is opportunity to complete and formalise a 15-kilometre cross country loop in Blackwood within Wombat State Forrest. This would complement the establishment of Blackwood as an accessible nature-based destination near Melbourne.

SMYTHESDALE CROSS COUNTRY LOOP

'Bodens Run' was initially developed as a walking track, however it is used for mountain biking. The establishment of a cross country mountain bike loop that links Smythesdale township with Bodens loop and return will provide a network of around 20 kilometres. This can also link to the Ballarat to Skipton Rail Trail.

ST ARNAUD MOUNTAIN MTN BIKE LOOP

St Arnaud is surrounded by an extensive regional park. The park is suitable to cater for a mountain bike network. This will provide recreation for visitors and the local community alike.

DERGHOLM/ BAILEY ROCKS MOUNTAIN BIKE TRAIL

Some mountain biking activity has been recorded in Dergholm State Park. Further investigation of the opportunities for a formalised cross-country circuit should be considered. Alternatively, Bailey Rocks may be investigated for mountain biking.

BLACK HILL STATE PARK

There is opportunity to establish mountain bike trails at Black Hill State Park in proximity to Stawell.

FAT BIKING IN THE WIMMERA - MALLEE

Edenhope Fat Bike Cross Country Loop

Edenhope in the West Wimmera has several tourism assets that have potential for enhancement including Lake Wallace, Edenhope Golf Club, racecourse and airport. The development of a small mountain bike course that would be complement the township and provide locals and visitors an easy and fun circuit to explore. The Edenhope bushland can be explored for this.

MOREE RESERVE TO BILLY HO

This is an isolated Sandy Reserve south of Kaniva. There is opportunity to explore fat biking in this scenic location.

LITTLE DESERT NATIONAL PARK

Little Desert National Park is popular with four-wheel drivers and campers. The park may also be suited to Fat Biking given the sandy soils present.

CASE STUDY: BEECHWORTH

Beechworth Mountain Bike Park on the edge of Beechworth is a formalised signed trail network of around 15 kilometres. It is a short and technical circuit however it is of great importance to the town in terms of providing a high-quality mountain bike experience for visitors. Its proximity to the township means that visitors can stay in town and ride to the park. It is a strong asset for visitors and for locals.

Since the development of the Beechworth Mountain Bike Park, Beechworth has developed a strong cycling culture and in some ways the mountain bike park has become part of the township's identity.



Source: Flow Mountain Bike

4.5.3. FORMALISATION OF CURRENT NETWORKS

WOOWOOKARUNG REGIONAL PARK

Woowookarung Regional Park already has developed single track networks, however there is a lack of signage, clear trail head and some trails do not link.

Work should be undertaken to formalise the trail network further including mapping, signage and link trails to establish a continuous trail network.

BUNINYONG

Buninyong mountain bike loop should be formalised with signage and trail head implemented. There is a section of the trail that needs further single track to complete the loop.

BACCHUS MARSH TO DAYLESFORD CONNECTION

There is opportunity to provide a new link between Bacchus Marsh and Daylesford which links parts of Lerderderg Park and Wombat Forrest. This would utilise existing fire trails and 4WD tracks. This would be suited to mountain bike or gravel bike.

CASE STUDY: WOODEND

The Woodend Mountain Bike trail network was established by local riders. A project was completed some years ago to formalise the trail with clear

mapping, signage and promotion. Whilst the trail itself is considered a simple mountain bike trail, the fact that it is formalised means that it attracts greater visitation than other trail networks that are considered better but not formalised.



Source: www.visitmacedonranges.com.au

5. ROAD CYCLING ASSESSMENT

5.1. INTRODUCTION

This section of the report provides an analysis of current popular road cycling routes within the Grampians RDV region and explores opportunities for further investment and formalisation

5.2. KEY FINDINGS

Road Cycling in the Grampians RDV region is focused towards four identified clusters, these include:

- Ballarat/Hepburn Cluster;
- Halls Gap Stawell Ararat Cluster;
- Horsham Natimuk Cluster;
- Nhill Cluster.

The attributes of each of these clusters varies, however across the region the type of road cycling that is available is suited to all road cycling market segments including cyclists that prefer flat and fast loops and those that prefer hill climbs.

The Ballarat/Hepburn cluster of road cycling shows some of the highest road cycling activity in Victoria. This is likely to be linked to the high population base in the region, the strong road cycling culture in Ballarat and the variable terrain suitable for all levels of cyclists. The gap in the Ballarat cluster is the lack of category 1 or 2 road cycling climbs.

The Halls Gap-Stawell -Ararat Cluster also provides for a mix of road cycling preferences including largely flat loops and importantly around Grampians National Park, some of the toughest road cycling climbs in Victoria. Mt William is the only *Hors* Category climb outside of the Victorian Alps in Victoria.

The highly scenic area around the Grampians National Park presents a strong opportunity to grow road cycling as a key visitor activity and with further promotion and some safety improvements, could become one of the leading areas for road cycling in Australia.

The WSM region includes two key nodes of road cycling activity, centred around Natimuk and Nhill. Whilst there are no mountains, the there are areas within the Wimmera Mallee that have an undulating landscape and would be suited to a variety of road cycling participants and enthusiasts.

Given the diversity of the region there are not many gaps in road cycling product, with large flat loops available and a 'hors' category climb in the Grampians RDV region. The key short-term opportunity for development of road cycling is promotion and marketing of current safe loops.

Gravel cycling also presents opportunity throughout the broader Grampians RDV region with a large amount of scenic unsealed roads and fire trails ideal for this growing market.

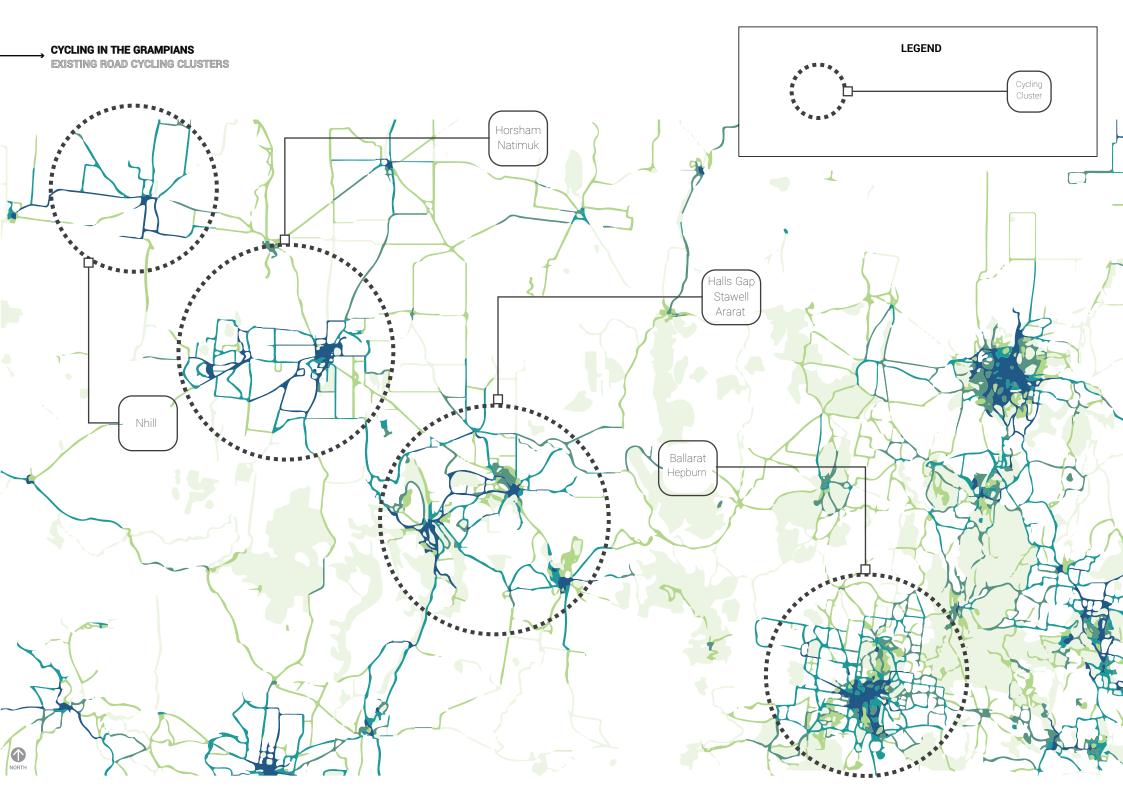
5.3. EXISTING SUPPLY OF ROAD CYCLING

Technically most roads in the Grampians RDV region can be used for road cycling, however there are certain routes that are used more frequently due to their appeal to road cyclists. This is usually because they provide greater levels of safety and amenity to accommodate recreational cyclists. The assessment of road cycling supply is drawn from discussions with bike club members and by using Strava which is an effective way to map out popular routes.

Figure 9 provides a Strava heat map of road cycling in the Grampians RDV region. This shows the relative level of road cycling activity in the region.

Four clusters of road cycling activity were identified in the region, these include:

- Ballarat/Hepburn Cluster;
- Halls Gap Stawell Ararat Cluster;
- Horsham Natimuk Cluster;
- Nhill Cluster.



5.4. BALLARAT-HEPBURN CLUSTER

BALLARAT

Analysis of road cycling in Ballarat shows that there is a large amount of road cycling activity, commencing in Ballarat.

Much of the existing road cycling focuses on loops into Ballarat's hinterland and includes quieter roads with small hill climbs.

The Strava Heat Map (figure 9) shows that Ballarat has the highest participation in road rides. This is largely due to Ballarat's large population and strong road cycling culture.

Long rides that extend into the hinterland such as the Ballarat Classic which includes climbs of Mount Buninyong and Mount Burrumbeet may be promoted to attract recreational road cyclists to visit Ballarat. This loop includes part of the National Road Cycling Championships circuit and is long enough to provide a challenging ride for most cyclists.

The opportunity to promote rides leading from the Ballarat train station represents an opportunity for visiting cyclists from Melbourne. Given the large number of road riding opportunity, Ballarat has potential to become a multi-day stay for road cyclists.

Formalisation of road cycling loops and analysis of safety of these loops is critical for development of road cycle tourism in Ballarat.

HEPBURN

Road cycling events such as Ride Daylesford provide opportunity to promote the region and leverage direct economic benefit from attracting large numbers of overnight visitors to the region.

There are a number of rides that link Hepburn Shire towns with surrounding areas, creating an interlinked road cycling trail network. This includes strong linkages with the Macedon Ranges and Ballarat Creswick presents as a destination to commence road cycling journeys throughout the Daylesford Macedon Ranges Region.

MOORABOOL/ GOLDEN PLAINS

To the south of Ballarat, Moorabool and Golden Plains have several medium and large loops that would be suitable for attracting road cyclists from Melbourne who are looking for a daytrip ride away from Melbourne's traffic.

The ride loops include:

- Bacchus Marsh to Ballan:
- 'Hell of the West' loop (already used for road racing); and
- Meredith to Anakie.

Given Bacchus Marsh is close and very accessible to Melbourne via car or train, it presents an opportunity for a starting point for road riding. The Hell of the West ride already has a reputation in Melbourne for its gruesome hill climb that can be leveraged.

PYRENEES

The Pyrenees are partly connected to Ballarat and partly connected to the Grampians RDV Region.

There are a couple of road cycling loops that are scenic and very popular for cyclists who enjoy longer flat rides. This is a large cohort of cyclists according to market research.

The two large cycling routes on largely guiet flat roads include:

- Mt Misery loop commencing in Learmouth;
- Mount Avoca loop commencing in Avoca.

5.5. HALLS GAP - STAWELL - ARARAT CLUSTER

The Halls Gap – Stawell – Ararat cluster is well connected as a road cycling destination with most cycling activity being centred within or close to the Stawell-Ararat – Halls Gap triangle.

For an area that has only moderate population levels the Strava Heat Map shows a substantial amount of road cycling participation in the area (refer to Figure 8).

This is supported by local clubs in Stawell and Ararat, but importantly the area is also popular for visiting road cyclists.

The cluster includes a mix of terrain including flat road circuits and the only Hors Category climb in Victoria outside of the Victorian Alps.

Anecdotal evidence suggests that the cluster attracts a substantial number of visitors for road cycling. This is demonstrated by the exceptionally high level of road cycling activity around the Grampians National Park.

ARARAT

There are high levels of road cycling participation around Ararat, with several smaller rides being out and back rides of between 30-60kms. Whilst these are popular, the preference for road cyclists is for loop rides which cannot be readily achieved around Ararat due to the road structure and lack of connected sealed roads.

Ararat has a mix of hilly and flat rides suitable for various cycling capabilities.

The hill climb into the Ararat Hills is a popular local climb, however it again is an out and back ride.

Popular weekend rides for local road cyclists and visitors to Ararat include the ride to Halls Gap along the Ararat -Halls Gap Rd.

Whilst the Ararat to Halls Ga Road is popular it is limited in road width and lack of shoulders for cycling.

STAWELL

Stawell is near the Grampians National Park and provides a good base for road cyclists wishing to explore the region. There are numerous quiet roads around Stawell that are utilised for cycling which has led to high participation in the local community.

Stawell has a mix of loop rides that include flat and hilly loops. This provides mixed terrain suitable for several road cycling markets.

5.6. HORSHAM - NATIMUK CLUSTER

Horsham has a strong local road cycling culture, and whilst there are several highways that meet in Horsham that are not suited to road cycling due to safety concerns, there are short to medium loops that are largely flat that start from Horsham.

Longer road rides from Horsham include out to Natimuk and Mt Arapiles which provide improved amenity and are potentially a stronger tourism cycling product.

Loops around Mt Arapiles and up Mt Arapiles are also popular with local and visitors alike.

5.7. NHILL CLUSTER

The Strava Heat Map (figure 8) and review of Strava segments highlight that Nhill has a high level of cycling activity. A review of cyclists shows that some of these are locals, however there are also visitors who utilise the favoured loops around Nhill.

TABLE 8 ROAD CYCLING AUDIT

RIDE NAME	LOCATION START/FINISH	DISTANCE	RIDE TYPE	ELEVATION CLIMBED
BALLARAT -HEPBURN CLUSTER				
Ballarat - Buninyong - Mt Mercer Loop	Ballarat CBD	70km	Undulating	700m
Ballarat – Mt Buninyong Nationals Return Loop	Ballarat CBD	30km	Undulating / Climb	370m
Lake Wendouree Loop	Lake Wendouree	6.1km	Flat/ Criterium Loop	13m
Smythesdale Loop	Ballarat CBD	70km	Undulating	640m
Ballarat White Swan Loop	Ballarat CBD	32km	Undulating	230m
Ballarat Classic	Ballarat CBD	100km	Hilly	807m
Northern Ballarat Ride	Ballarat CBD	80km	Hilly and Undulating	615m
Mt Misery Loop	Learmoth	40km	Hilly and Flat	250m
Ride Daylesford	Daylesford	155km	Granfondo	1890m
Hell of the West Loop	Bacchus Marsh	95km	Hilly	639m
Bacchus Marsh - Ballan Loop	Bacchus Marsh	75km	Hilly Loop	560m
Meredith – Anakie Loop	Meredith	53km	Hilly Loop	609m
Mount Avoca loop	Avoca	100km	Hilly Loop	590m
HALLS GAP - STAWELL - ARARAT CLUSTER				
angi Logan Out and Back	Ararat	30km	Flat – out and back	194m
Ararat-Moyston Loop	Ararat	32km	Undulating	154m
Crowlands Out and Back	Ararat	55km	Flat	369m
rarat - Halls Gap - Ararat Out and Back	Ararat	95km	Flat with hill limb	606m
Stawell Mt William Return [Grampians Wildflower Ride]	Stawell	120km	Granfondo / Mountain Climb	1353m
Stawell Landsborough Loop	Stawell	60km	Flat	313m
Stawell -Halls Hap - Roses Gap Loop	Stawell / Halls Gap	120km	Flat with Mountain Climb / Granfondo Loop	1206m
Wonderland -Silverband Loop	Halls Gap	20km	Hill Climb Loop	406m
Halls Gap – Mt William Return	Halls Gap	50km	Mountain Climb (HC Climb 817m vertical)	1007m
Halls Gap - Moyston Loop	Halls Gap	130km	Gran Fondo with Mt William	1712m
Halls Gap to Dunkeld and Return	Halls Gap	130km	Out and Back, flat and some climbs	1000m
HORSHAM - NATIMUK CLUSTER				
Plush Loop	Horsham	35km	Flat, out and back	43m
Rifle Butts Loop	Horsham	50km	Flat loop	124m
Mt Arapiles Loop	Natimuk	50km	Flat Loop with Hill Climb	335m

RIDE NAME	LOCATION START/FINISH	DISTANCE	RIDE TYPE	ELEVATION CLIMBED
Natimuk Lake Loop	Natimuk	22km	Flat	28m
Horsham - Mt Arapiles Loop	Horsham	95km	Flat and Hill Climb	428m
Horsham Dooen Loop	Horsham	35km	Flat	190m
Nhill Cluster				
Nhill West Wimmera Loop	Nhill	45km	Flat	161m
Winiam Loop Time Trial	Nhill	25km	Flat Time Trial Loop	30m

5.8. MATCHING DEMAND WITH SUPPLY

Table 9 matches the key road cycling segments that are likely to travel for cycling activity with the four identified clusters.

Based on the type of road cycling in the Grampians RDV region the Halls Gap – Stawell – Ararat Cluster has the best prerequisites for attracting road cycling visitors. Its combination of challenging categorised climbs, scenic landscape and flat road riding would make it attractive to road cycling markets that are most likely to travel for cycling.

The Ballarat -Hepburn cluster also has potential to attract low intensity climbers and fitness flat riders and enthusiasts.

The Horsham – Natimuk Cluster has good potential to attract fitness flat riders and flat riding enthusiasts. The scenery around Mount Arapiles and Natimuk would appeal to these groups.

TABLE 9 MATCHING ROAD CYCLING SUPPLY WITH MARKET DEMAND - GRAMPIANS REGION CLUSTERS

	GENERAL ROAD CYCLING TYPOLOGY	KEY ROAD CYCLING MARKET ALIGNMENT	% OF MARKET
Ballarat/Hepburn Cluster	Hilly Flat Granfondo	Low Intensity Climbers Fitness Flat Riders Flat Riding Enthusiasts	14% of participants, 8% of kilometres ridden 18% of participants, 15% of kilometres ridden 14% of participants, 26% of kilometres ridden
Halls Gap – Stawell – Ararat Cluster	Flat Mountain Climbs	Higher Intensity Climbers Fitness Flat Riders Flat Riding Enthusiasts	19% of participants, 42% of kilometres ridden 18% of participants, 15% of kilometres ridden 14% of participants, 26% of kilometres ridden
Horsham – Natimuk Cluster	Flat	Fitness Flat Riders Flat Riding Enthusiasts	18% of participants, 15% of kilometres ridden 14% of participants, 26% of kilometres ridden
Nhill Cluster	Flat	Fitness Flat Riders Flat Riding Enthusiasts	18% of participants, 15% of kilometres ridden 14% of participants, 26% of kilometres ridden

5.9. ROAD CYCLING PROJECTS

FORMALISATION AND PROMOTION OF ROAD CYCLING LOOPS

There are many existing road cycling loops in the Grampians RDV region that are of a quality that can be formalised and promoted as they currently stand. Key loops which should be further investigated for formalisation include:

- Ballarat Buninyong Mt Mercer loop;
- Ballarat Mt Buninyong Nationals return loop;
- Lake Wendouree loop;
- Victoria Park loop;
- Ballarat White Swan loop;
- Ballarat Classic:
- Northern Ballarat Ride:
- Mt Misery loop;
- Ride Daylesford;
- Hell of the West loop;
- Meredith Anakie loop;
- Mount Avoca loop;
- Ararat-Moyston loop;
- Stawell Mt William Return [Grampians Wildflower Ride];
- Stawell Landsborough loop;
- Stawell -Halls Hap Roses Gap loop;
- Wonderland -Silverband loop;
- Halls Gap Moyston loop;

- Wetlands/Lakes Trail;
- Mt Arapiles Loop;
- Horsham Mt Arapiles Loop;
- Nhill West Wimmera Loop.

BUNINYONG NATIONALS ROAD CIRCUIT

The Buninyong Road Nationals Circuit has a high profile in the road cycling fraternity.

The circuit attracts Australia's best riders annually. The Nationals is held on a closed road, however in order to improve the circuit as a year-round road cycling loop, further enhancements should be made. This should consider:

- Interpretive signage to celebrate the National Champions;
- Improved directional signage at intersections;
- Pull out zone/ rest point at the top of the KOM with interpretive information;
- Road shoulder enhancement for safety;
- Safety signage that reinforces it as a road cycling loop;
- Link to CBD including road shoulder enhancement and directional signage.

GRAMPIANS GRANFONDO LOOPS FORMALISATION AND IMPROVEMENT

East Loop

One of the most scenic and epic rides in the region is a loop that traverse the Grampians National Park linking Halls Gap with Moyston. However, there is about 20 kilometres that remain unsealed on the east side of the Grampians. Similar to the sealing of the back of falls creek, a 20 kilometre seal of this loop will greatly enhance potential for the Grampians to host large cycling granfondo events.



Grampians 3 Peaks V1

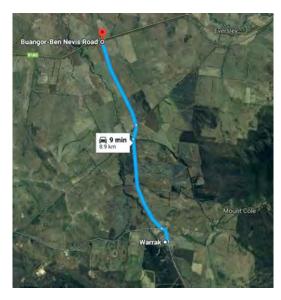
Another granfondo option which could be explored as a 3 peaks type route is shown below. This includes and ascent of Mt William (980m), Mt Difficult (850m) and Sundial (680m).



ARARAT LOOPS - WARRAK TO DUNNEWORTHY

Ararat is a substantial hub for road cycling, however there are limited smaller loops around town, with most cycling in out and back formats.

To improve road cycling in Ararat, consideration of sealing the following 9km link road would provide a 50-kilometre circuit near the scenic Mt Cole Forest.



ARARAT - HALLS GAP ROAD [C222] CYCLE **SAFETY IMPROVEMENTS**

The Ararat to Halls Gap road is an important road cycling link and is used frequently by road cyclists.

The road does however have a significant amount of traffic, particularly during holiday periods.

Safety improvements are needed including road shoulders and safety signage.

ROSES GAP - HALLS GAP LINK SEALING

The Grampians Ring Road Study highlights the potential to seal the road that links Halls Gap with Roses Gap (Mt Zero Road). This will provide a missing piece of the puzzle for road cyclists and allow for new a new iconic road cycling loop of around 77kms.



CASE STUDY:7 PEAKS - RIDE HIGH COUNTRY

An ongoing and effective marketing program operated by Tourism North East is the 7 Peaks promotion which encourages cyclists to visit the High Country and complete each of the Victorian Alps most challenging 7 peaks from 27th October to 29th April.

All climbs are formalised and timed with the assistance of Strava allowing visitors to challenge themselves against some of the best riders in the World who have recorded times on each of the hill climbs.

This case study provides an excellent example of formalising existing road cycling trails to be considered by the Grampians Region.



CASE STUDY: SEALING BACK OF FALLS CREEK

The back road to Falls Creek from Anglers Rest was sealed several years ago providing a second option for accessing Falls Creek via sealed road during the summer months.

The road has proven to be a highly popular road cycling link and is now known as the 2nd toughest climb in Victoria.

Importantly, the sealing of the road has allowed for development of events such as the iconic Peaks Challenge that attracts around 3500 riders every year to take on Australia's toughest participation event.

SILO ART TRAIL

The silo art trail could be used by road cyclists to tour through the Wimmera. This could be a potential bike packing experience.

6. RECREATIONAL AND MIXED-USE CYCLING TRAILS ASSESSMENT

6.1. INTRODUCTION

Mixed use trails would appeal to walkers, cyclists and other trail users (e.g. equestrian). Trails are wide enough to accommodate walkers and cyclists to pass comfortably. A rail trail is an example of this type of trail, as well as purpose-built trails.

6.2. KEY FINDINGS

Recreational cycling trails in the Grampians RDV region that are formalised and promoted for tourism use are limited. Ballarat to Skipton Rail Trail is the only extensive recreational trail that is well formalised and marketed for general recreational cycling use.

There are many other recreational cycling trails in the Grampians RDV region that present opportunity for further investment and expansion to be suitable for tourism use such as the Domino Rail Trail to be transformed into the Daylesford to Hanging Rock Rail Trail.

There are three categories of recreational trails that have been identified in the Region, these include:

- Iconic trails that have high scenic amenity and strong complementary tourism product;
- Trails that link townships, allowing for connectivity for visitors and residents and provision of clear destinations;
- Small township trails that provide activity for visitors and residents.

One of the advantages for the Grampians RDV region in the provision of trail networks is the extensive amount of public land reserves because of former mining activity which provide public land linkages between townships. Where

these public land areas provide high amenity and further tourism product, they may support development for investment in cycle tourism.

Creek and river valleys also provide opportunity to create recreational cycle linkages across the region.

Market research confirms that most cyclists prefer no more than 30-kilometre trails with clear destination points. Flatter trails are preferred.

Overall recreational trails are of low supply in the region, particularly those that can form the basis of a tourism experience. There are several projects identified in this Master Plan that will go a long way to meeting this opportunity.

6.3. SUPPLY OVERVIEW

An assessment of recreational trails in the Grampians RDV Region, highlights that there is a lack of iconic recreational rides that service current visitor markets and encourage recreational riders to visit the region.

An example of iconic recreational ride is the Murray to Mountains, which attracts around 100,000 users per annum.

The closest recreational cycling experience which is well formalised with signage and clear destination points is the Ballarat to Skipton Rail Trail. Anecdotally, this trail is underutilised and doesn't provide the level of 'iconic' scenery that top recreational rides have to attract visitors.

Formalisation of existing recreational trails is required to at the very least encourage greater use of current infrastructure.

This Master Plan should consider the expansion of existing or identification of new trails that will deliver a unique, scenic experience with supporting complementary product such as accommodation, food and beverage.

TABLE 10 SUPPLY OF RECREATION CYCLING TRAILS

NAME	LGA	DISTANCE	MANAGEMENT	DESCRIPTION			
Wimmera Southern Mallee							
Grampians Rail Trail (Heatherlie Rail Trail)	Northern Grampians	11km	Friends of Grampians Rail Trail (Community Group)	The Grampians Rail Trail is a community-built project extending west of Stawell towards Halls Gap at the edge of the Grampians National Park.			
Arapiles Big Sky Bicycle Trail	Horsham	33.5km		The Arapiles Big Sky Bicycle Trail is a cycling loop that links Mt Arapiles with Natimuk. The trail combines a mix of on and off-road linkages.			
Wimmera River Trail	Horsham	5.8km	Horsham	This trail follows the Wimmera River along a paved, shared bike path within and to the south west of Horsham.			
Lake Wallace Track	West Wimmera			The trail is a complete circuit of Lake Wallace – with distance markers, exercise equipment.			
Wyperfeld National Park	Yarriambiack		DELWP Parks Victoria	Cycling is listed as one of the viable activities within Wyperfeld National Park, however limited additional information is available on the location, quality and variety of these trails.			
St Arnaud to Moonambel	Northern Grampians	68km	Councils Parks Vic	This trail traverses from St Arnaud through a conservation reserve and uses Centre Road along the top of the ranges until reaching Moonambel. Promotional / marketing material is old (2008) yet detailed, a good format for identifying points of interest and could easily be interpreted to a consolidated online platform.			
St Arnaud View Point Lookout Tour	Northern Grampians	8km		This trail branches off the St Arnaud to Moonambel trail very close to St Arnaud and loops around while passing designated lookout points with views of the township of St Arnaud. Promotional / marketing material is old (2008) yet detailed, a good format for identifying points of interest and could easily be interpreted to a consolidated online platform.			

NAME	LGA	DISTANCE	MANAGEMENT	DESCRIPTION
St Arnaud Winery Tour Ride	Northern Grampians	19km		This trail branches off the St Arnaud to Moonambel trail and passes by several wineries and can loop back to St Arnaud or continue to the Stuart Mill / Berry's Bridge Winery and Teddington Tour trails. Strong social appeal for group cycling which is broadly the largest portion of the market. Possibly less suitable for families with children unless child-friendly activities are promoted at the wineries.
Aliens Camp Tour	Northern Grampians	13.25km		This trail detours off the St Arnaud to Moonambel trail and passes several heritage sites before looping back on to the main trail.
St Arnaud Stuart Mill & Berry's Bridge Winery	Northern Grampians	26km		This trail branches off the St Arnaud to Moonambel Trail and loops back towards St Arnaud, connecting to the St Arnaud Winery Tour Ride.
Barkly/St Arnaud Tour	Northern Grampians	23km		This trail runs nearly parallel with the St Arnaud to Moonambel trail, through forested areas and Barkly Village, looping back towards St Arnaud.
Teddington Tour	Northern Grampians			This trail is an alternate route off the St Arnaud to Moonambel Trail, which runs in parallel and loops back on to the main trail without significant detour, however is notably more challenging terrain. Challenging terrain may be suitable to promote as an MTB trail
Nhill Lake	Hindmarsh	1km		Circular loop around Nhill Lake
Rainbow	Hindmarsh	1.6km		Township trails in proximity to rainbow centre.
Central Highlands				
Kuruc-a-ruc Trail	Golden Plains	13.3km		The Kuruc-a-ruc Trail is 13.3 km and travels through this historic gold mining countryside and links the three goldfield townships of Dereel, where the Trail begins, Corindhap and Rokewood

NAME	LGA	DISTANCE	MANAGEMENT	DESCRIPTION
The Rainbow Bird Trail	Golden Plains	35.5km	Golden Plains Shire Council CFA	The Rainbow Bird Trail runs from Scarsdale to Dereel along roads (sealed and unsealed) and fire management tracks. The trail passes through many scenic areas including reserves, reservoirs, former mine sites and historic structures.
The Domino Rail Trail	Hepburn	5.5km		The Domino Rail Trail is to the north east of Ballarat between Trentham and Lyonville. It follows the original railway route from Daylesford to Carlsruhe.
Yarrowee River Trail	Ballarat	17.4km	Ballarat City Council	The trail follows the Yarrowee River in Ballarat between the Gong Gong Reservoir Park and Magpie. The trail begins and ends at the Ballarat Railway station and passes a variety of landscapes including reserves, wetlands and swamplands.
Ballarat-Skipton Rail Trail	Ballarat Golden Plains	53km	Ballarat City Council Golden Plains Shire Council Ballarat Bicycle User Group (BalBUG)	The Ballarat-Skipton Rail Trail is a gravel trail between the city of Ballarat and Skipton, passing through townships such as Haddon, Smythesdale and Linton. The trail passes through farmland, bushland and areas of conservation and historic significance.
Ballarat internal trail network	Ballarat		Ballarat City Council	Ballarat has an extensive internal trail network that will be improved overtime in line with the Ballarat Cycling Strategy.

6.4. RECREATIONAL CYCLE TRAIL PROJECTS

6.4.1. POTENTIAL ICONIC TRAILS WITH HIGH SCENIC AMENITY

Iconic recreational trails that should be considered are highlighted below. These trails have high amenity and are able to link tourism destinations with dispersed tourism product.

DAYLESFORD TO HANGING ROCK RAIL TRAIL

The Hepburn Shire and Macedon Ranges Shire have a proposal for the establishment of a rail trail that will link Daylesford with Hanging Rock, creating a highly scenic rail trail in Victoria's Central Highlands.

The trail will take around 3-3.5 hours to ride from Woodend Station to Daylesford (around 44 km), cyclists will be able to conduct a return trip in a day from Woodend or Daylesford, or cycle one way, stay overnight at the end of the trail and return the next day.

A feasibility study for the Rail Trail has been completed which identifies the target markets, trail concept, economic benefits and the possible trail network.

Sections include:

- S1 Daylesford to Bullarato 9.4 km
- S2 Bullarto to Lyonville 3.7 km
- S3 Lyonville to Trentham 6.3 km

- S4 Trentham to Carlsruhe Station 17km
- S5 Carlsruhe Station to Woodend 7 km

Between 31,300 and 62,580 visitors are expected to use the trail per annum.

The project requires funding for business case, detailed design and construction.

WIMMERA RIVER DISCOVERY TRAIL

The Wimmera River Discovery Trail includes the following stages.

Stage 1: Wimmera River Discovery Trail: Dimboola to Lake Hindmarsh (45km) [Shovel ready]

There is existing planning and feasibility work for this section of trail. The trail also has commitment from Council

Stage 2: Horsham to Dimboola (65km)

Further feasibility work is required for this section of trail. It will however link to Horsham which is an important visitor destination and large population node.

HORSHAM TO WARTOOK - MT ZERO LOOP

There is opportunity to create a link trail between Horsham and Wartook using the McKenzie River reserve. This trail would strengthen the link between Horsham and Wartook from a tourism perspective and be highly scenic with the Grampians as a backdrop.

This will also create a link from the Grampians to the proposed Wimmera River Discovery Trail.

A return loop which includes Mt Zero via Green Lake should be considered.

PYRENEES WINE CYCLE TRAIL

A trail that links the key wineries of the Pyrenees around Avoca and Moonambel will provide a recreational cycling product that is activated by wineries and cellar doors.



THREE TRAILS PROJECT

The Three Trails Project is a key project identified for Golden Plains and will join several existing trails to create connected villages and communities. The three trails project includes the follow trail networks:

- Ballarat to Skipton Rail Trail;
- Rainbow Bird Trail;
- Kurac-A-Ruc Trail.

An outline of the trail network is provided below.



GRAMPIANS TRAIL

The linking of the three Grampians Region towns will provide an excellent touring route for a variety of cyclists. This will include the proposed Rail Trail link between Halls Gap and Stawell and a new link between Stawell and Ararat.

This link will also provide opportunity for wine cycle experiences as well as the villages of Halls Gap, Pomonal, Moyston and Great Western.

Below is an outline of potential route options. A feasibility study is required to progress the concept.

Halls Gap to Pomonal



Pomonal to Moyston



Moyston to Ararat



Ararat to Great Western



Stawell to Great Western



CASE STUDY - MURRAY TO MOUNTAINS

The Murray to Mountains is considered Australia's premium rail trail experience. The trail is the second longest rail trail in Australia and is sealed, which makes it suitable for both road bikes and mountain bikes.

The key to the rail trail experience is the scenic views of Mount Buffalo and the lush Ovens Valley, combined with small villages and food and wine experiences as key stopping points.

Focus should be made to recreational trails that have high scenic amenity and are supported by clear destinations.



LIVING MOORABOOL TRAIL

The Living Moorabool Trail project will deliver a recreational trail along the scenic Moorabool River, providing a link to the current trails along the Barwon river into Geelong. Offering an abundance of natural, cultural and environmental attractions, the Trail will provide opportunities for linkages to numerous townships and wineries

YARRIAMBIACK CREEK TRAIL

There is potential to develop a formalised trail along the Yarriambiack Creek.

Concept planning and ground truthing is required to determine the extent of the trail.

Key elements to be explored include:

- Potential to link Silo Art towns using the creek corridor:
- Linking the towns to weir pools;
- Formalising existing trails along the creek corridor;
- Indigenous site interpretation;
- Long term opportunity to link to the Wimmera River Discovery Trail, creating a Silo Art Trail loop.

6.4.2. RECREATIONAL CYCLE TRAILS THAT COMPLEMENT TOWNSHIPS

There is a need to provide local recreational trails that complement townships allowing for short rides within or close to townships.

BARRABOOL NATURE CONSERVATION RESERVE TO MURTOA

Establishment of a trail link between Barrabool Conservation Reserve to Murtoa. This will provide a recreational trail for visitors and locals alike.

HALLS GAP TO LAKE FYANS

A nature reserve exists between Lake Fyans that may be explored as cycling link between Halls Gap and the lake. This will provide a long off-road circuit for cyclists.

WARTOOK TO ZUMSTEINS

A cycling link between Wartook and Zumsteins already exists, however the trail needs improved formalisation and investment in all-weather infrastructure.

YARROWEE RIVER TRAIL

A proposed local trail in Ballarat that forms part of the Ballarat Cycling Strategy.

LAKE FYANS CIRCUIT RIDE IMPROVEMENT

Lake Fyans circuit ride already exists, signage and surface improvements are required to provide an improved visitor experience. Further promotion of the trail is required.

ARAPILES BIG SKY BICYCLE TRAIL IMPROVEMENT

This trail includes sections of off and on road. It circumnavigates Mt Arapiles.

The trail could use further promotion; however, it is generally well marked.

WARTOOK TO MOUNT ZERO TRAIL

Provision of a trail that links Wartook with Mount Zero should be explored.

HALLS GAP TO BELLFIELD BIKE PATH UPGRADE

Improvements required for the Halls Gap to Lake Bellfield Bike Path. May consider enhancements on the bike path.

ST ARNAUD TO MOONAMBEL VIA STATE PARK IMPROVEMENTS

This existing link path that traverses through the State Forrest should be improved with signage and stopping points.

YARRIAMBIACK SMALL TOWNS CYCLE LOOPS AND BIKE HIRE

A concept has been suggested by Yarriambiack Shire to provide township bike loops and bike hire to support visitors to the region. This project may be extended to all small Wimmera towns.

Hopetoun would provide a potential pilot project for this. The bike hire concept should also include directional signage for cycle loops and supporting visitor information.

GREAT WESTERN WINE CYCLE TRAIL

A bike trail that links Grampians Estate, Seppelts and Bests Wines. This could form part of the broader Grampians Trail.

BEAUFORT TOWNSHIP TRAILS

Establishment of a recreational trail loop around Beaufort for visitors and community to use. These are identified in the Beaufort Walkability Study.

6.4.3. TOWNSHIP LINK TRAILS

STAWELL TO HALLS GAP RAIL TRAIL

11 kilometres of the rail trail exists, however there is further opportunity to extend the rail trail to link with Halls Gap. This will provide a scenic recreational cycling experience that will strengthen both Halls Gap and Stawell as cycling destinations.

SMYTHESDALE TO ROKEWOOD TRAIL

Golden Plains Shire are seeking ways to improve the connections between townships to encourage greater levels of social connectivity and exercise.

One project that is currently being investigated by Golden Plains is a link between Smythesdale and Rokewood.

Part of the trail exists through Enfield State Forrest. The proposed trail is estimated to be around 35 kilometres in length.

ARARAT TO AVOCA RAIL TRAIL

Establishment of a rail trail which follows the existing open railway line to Ararat. This would provide a 62km link.

HORSHAM TO NATIMUK TRAIL

Establishment of a trail link in the easement of the highway that links Horsham with Natimuk.

ST ARNAUD TO MOONAMBEL TRAIL IMPROVEMENTS

There is an existing trail that follows the ridgeline of the forest between the towns.

Improvement of the trail including signage and surface improvements will support greater use.

THE RAINBOW BIRD TRAIL IMPROVEMENTS

The Rainbow Bird Trail in Golden Plains is an existing trail that requires further formalisation and improvement.

CONNECT TEESDALE TO BANNOCKBURN

This project is a project proposed by Golden Plains which will link Teesdale to Bannockburn. It will provide an off-road trail connection between towns.

GOROKE TO NATIMUK RAIL TRAIL

There is potential for a link trail using the rail alignment to link Goroke to Natimuk. This would traverse through scenic areas including Arapiles State Park



KANIVA TO SERVICETON RAIL TRAIL

There is a proposal to link Kaniva to Serviceton via a rail easement. The trail would be around 25 kilometres in length.

7. CYCLING EVENTS

7.1. INTRODUCTION

The following section provides an assessment of cycling events held across the Grampians Region. This draws on information collected during consultation and online research.

7.2. KEY FINDINGS

The Grampians RDV region has a limited calendar of cycling events, with the only signature event being the National Road Championships held in Ballarat.

There are very few mountain bike events, which reflects the lack of formalised mountain biking in the region and very few events held within the Wimmera Southern Mallee.

Events that could be explored that address the gaps in the region and complement the strengths are identified below. These would be unique to the region and would position the Grampians RDV region better within cycling markets:

- Grampians Road Cycling Granfondo Event A major participation event held during the off peak (cooler months);
- Grampians Gravel Grind Event A large participation gravel event taking in some of the backgrounds around Grampians National Park;
- National Road Championship Participation Event A participation event which allows recreational riders to cycle with the 'heroes of Australian road cycling;
- Goldfields Mountain Bike Multi Day Event taking in Buninyong, Woowookarung Regional Park, Creswick and Harcourt as major hubs;

- Ararat 12 Hour Mtn Bike Race Held in Ararat Hills and encouraging overnight stay;
- Mt William KOM A prize money race which will attract Australia's elite climbers;
- Wimmera Cycling Granfondo A 200km Wimmera loop.

7.3. SUPPLY

An analysis of cycling events held in the region shows that there is only one event that may be considered a 'signature event', that being the National Road Cycling Championships held in Ballarat.

There are several smaller competitive and professional events and club races held throughout the region, mostly road cycling.

There are a limited number of mountain bike events held which reflects the lack of existing trail networks in the region.

From a geographical perspective most events are in and around the Central Highlands with very few events held in the Wimmera Southern Mallee.

Given the quality of road cycling in the Grampians there is a substantial opportunity for further event development there.

Gaps include:

- Large participation events across the entire region;
- Road cycling Granfondo events in the Grampians Region;
- Flat road cycling participation events in the Wimmera;
- Mountain biking events across the region.

TABLE 11 CYCLING EVENTS – GRAMPIANS RDV REGION

EVENT NAME	EVENT TYPE	LGA		DISCIPLINE	OUTLINE	POTENTIAL IMPROVEMENTS
Arapiles Cycling Event	Participation Event	Horsham	123km or 56km	Road Cycling	Held annually, the ride supports the Wimmera Drug Action Task Force. It offers a 123km or 56km route, catering to people who are just getting into the sport or cycling enthusiasts. The ride is well serviced with an option fully catered meal option and bus back to Horsham.	Investigate option to include participation routes and complementary activities
Ararat Junior Tour	Competitive Event	Ararat	30km	Road Cycling	Held annually as part of the Victoria Junior Road Series. 2 day / 3 stage road tour encompassing road races and an individual time trial catering to cycling enthusiasts and serious cyclists who classify in the 'junior' category.	Investigate option to include participation routes, complementary activities and events that cater to a broader range of ages.
Cycling Australia Road Nationals, Buninyong	Competitive Event	Ballarat	Various	Road Cycling	Held annually in Ballarat or Buninyong. Held over five days featuring a criterium, time trial and road race catering to cycling enthusiasts and serious riders.	Investigate option to include participation routes or complementary activities.
Ballarat Cycle Classic Reach 4 Research	Participation Event	Ballarat Moorabool	100km	Road Cycling	Held annually, fund raising with all fees donated to the Fiona Elsey Cancer Research Institute. Option for 50, 60, 85 or 100km road class, 28, 33, 40 and 50km mountain bike ride or 2.5hr lake relay or 6km lake walk.	
Ballarat Autumn Day Ride	Participation Event	Ballarat Hepburn Moorabool	105km	Road Cycling	Held annually, funds raised support a different local organisation each year. Up to 1000 riders each event. 50km or 100km route with a lunch stop.	
Tour De Frances	Participation Event	West Wimmera	40-80km	Road Cycling	Held annually with registration fees including admission to Aspley races. Caters to a broad range of age groups and skill levels. Fund raising event, with all proceeds given to the Edenhope District Hospital.	Retain and enhance partnerships with local businesses.
Tour De Henley	Participation Event	West Wimmera	35Kkm- 75km- 93km	Road Cycling	Held annually in conjunction with the Henley on Lake Wallace event. The event caters to all age groups and skill levels with a 9, 33 or 66km route to choose from. All proceeds go towards the Edenhope & District Memorial Hospital Murray to Moyne team.	Increase media and online coverage.
Murray to Moyne	Participation Event	Ararat Horsham Northern Grampians Yarriambiack	471km	Road Cycling Bike Packing	Team relay, held annually. Attracts approx. 1000 cycling enthusiasts. There is the 520km night ride, approx. 390km day ride or 90km Sunday striders. Participants raise funds for hospitals, health services and related charities.	
Eureka Veterans Ron Rivette Classic	Competitive Event	Hepburn Pyrenees	52km	Road Cycling	Held annually, attracts approx. 100-120 competitors and is classified as an 'open' category competition.	Increase media and online coverage to ensure other clubs are aware that they

EVENT NAME	EVENT TYPE	LGA		DISCIPLINE	OUTLINE	POTENTIAL IMPROVEMENTS
						can partake in this event and access information easily.
Ride Daylesford	Participation Event	Hepburn	81km	Road Cycling	Held annually, the event fund raises for Breast Cancer Network Australia (BCNA). Attracts approx. 2000 participants and offers 33, 63 or 146km catering to a broad range of age groups and skill levels.	
Brackenbury Challenge	Participation Event	Hepburn	20km	Mountain Biking	An annual event held by the VOGA mountain bike club with assistance from RACV Resort, Creswick. Event includes mountain biking and cx disciplines.	
Grampians Challenge - Run	Competitive Event	Northern Grampians	36km	Mtn Biking	Held annually, consists of three legs: MTB, kayaking and running. The event is a race for all adventure enthusiasts and can be completed individually, in a team or relay team.	Investigate options to include packages or partnerships with local businesses.
Victorian Mountain Bike Orienteering Championships	Competitive Event	Hepburn Moorabool		Mountain Biking	Held annually at altering locations. Caters to participants of all ages who are mountain bike orienteering enthusiasts.	Investigate option to regularly hold the championships instead of altering locations annually.
Northern Combine Club Races	Competitive Event	Moorabool		Road Cycling	The Northern Combine Cycling Organisation runs several events each year during its road cycling calendar in Moorabool Shire with the 'Hell of the West' climb included.	
Geelong Cycling Club Races – Moorabool Valley	Competitive Event	Moorabool		Road Cycling	The Geelong Cycling Club undertakes club races in the Moorabool Valley several times each year.	

7.4. KEY EVENT OPPORTUNITIES

GRAMPIANS TOURISM REGION ROAD CYCLING GRANFONDO EVENT

There is potential for a Grampians road cycling event to be held from Halls Gap in the off peak. This event should be a must do event for the enthusiastic cyclist. It could be used as a lead up event for the Peaks Falls Creek ride.

The event should consider several climbs including the Silverband loop, Mt William. A course of 200 kilometres is needed to create a challenging granfondo.

Another option to explore is a loop which takes in the western part of the Grampians Range including Wartook, Halls Gap, Dunkeld, Cavendish loop.

GOLDFIELDS - MULTI DAY CROSS COUNTRY EVENT

A multi day mountain bike event should be considered for the Goldfields. This could include courses at:

- Buninyong;
- Woowookarung Regional park;
- Creswick;
- Harcourt.

This would utilise existing trail networks and overtime be improved as new networks and trial improvements come on board.

RECREATIONAL GRAVEL GRIND EVENT – GRAMPIANS TOURISM REGION

The Grampians National Park and surrounds has an extensive network of gravel roads suitable for cycling.

Gravel riding is a version of road cycling with bikes specifically customised for unsealed road surfaces.

This is a major growth area in cycling and there are very few gravel events in Australia currently.

Using the Grampians Brand would allow for a high-profile gravel cycling event.

GRAVEL NATIONAL CHAMPIONSHIPS - GRAMPIANS TOURISM REGION

Building on the growth of gravel riding, a new gravel National Championships will be held in conjunction with Amy's Granfondo.

Exploring the acquisition of this event in the Grampians National Park region should be considered

NATIONAL CHAMPIONSHIPS PARTICIPATION EVENT

The development of a participation event during the National Championships in areas surrounding Ballarat will strengthen visitor numbers to the National Championships and encourage more visitors to the event. This participation event could consider a few ride distances for various levels, with all events including the Mt Buninyong Climb.

ARARAT DIRT MTN BIKE 12 HR RACE

The network of trials in Ararat Hills, whilst not formalised, is already extensive enough to support mountain bike events.

A 12-hour race may be considered for the Ararat Hills and developed further as investment in the mountain bike network comes on board.

MT WILLIAM KOM

A time trail KOM event should be considered for Halls Gap to Mt William. This is one of the most gruelling climbs in Australia with the last 2 kilometres of Mt William reaching over 20% in some locations.

Prize money could be considered to attract riders.

WIMMERA CYCLING GRANFONDO

The Wimmera is not well known for cycling, however is well suited to road cyclists who prefer flatter rides

A gran fondo loop should be devised, commencing in Horsham and traversing through the towns and villages of the Wimmera.

HERALD SUN TOUR

Potential to capture the Herald Sun Tour in the region for the 'Queens Stage'. This could include an accent of Mount William. Ararat could be used as a base.

GREAT VICTORIAN BIKE RIDE

The Great Victorian Bike Ride has previously been hosted in the region. There is opportunity to attract this event again in the future.

CASE STUDY: AMY GILLET RIDE LORNE

The Amy Gillet Ride in Lorne provides an example of a professionally run event that has a high economic impact in the Great Ocean Road Region. The event has 5,500 participants and runs over three days encouraging a minimum of two nights stay.

Importantly, the event is held during the off peak, which means the local businesses would otherwise have very little trade if the event were not held.

8. COMPETITOR ASSESSMENT

8.1. KEY FINDINGS

The Grampians RDV region has strong road cycling credentials, however mountain biking and recreational road cycling which require targeted investment are in low supply.

The region has a diverse geography with various terrain types that can support cycle tourism development in mountain biking and recreational trail cycling.

A key focus for investment in cycling in the Grampians RDV region should be on destination mountain biking and recreational trails. This would strengthen the region's market presence. Road cycling is already considered a strength within the Grampians RDV Region and requires formalisation and marketing.

8.2. MOUNTAIN BIKING IN VICTORIA

Within Victoria the North East has most of quality formalised mountain bike singe track. Other regions which provide strong mountain bike credentials include The Great Ocean Road with Forrest and more recently the Yarra Valley and the Dandenongs with Buxton and Marysville. The trail work at Harcourt has recently provided a high-quality mountain bike option in the Bendigo Region.

The key gaps outside of the North East of Victoria and Yarra Valley and the Dandenong are quality gravity trails. The Grampians Region with its hilly and mountainous terrain provides a unique opportunity to support gravity trails.

8.3. ROAD CYCLING

Within Victoria there are two premier road cycling destinations, based on the level of cycling, the quality of terrain and events. These are North East Victoria and the Great Ocean Road.

The Grampians RDV region has road cycling terrain that can match these areas, and the high scenic amenity around the Grampians National Park provides a backdrop unmatched by most destinations in Australia.

8.4. RECREATIONAL RIDING

Recreational riding is largely dependent on investment made in off road trails networks. In this regard the North East of Victoria leads, with three large rail trails and Victoria's premier rail trail.

Gippsland also has an extensive amount of recreational trail riding through scenic areas.

8.5. OVERALL CYCLING CREDENTIALS

Table 11 provides a qualitative assessment of the various cycling typologies in the Grampians Region, benchmarked with North East Victoria.

This shows that comparatively only road cycling is comparable as strength. Much investment is needed in recreational cycling and mountain biking to meet the compete with Victoria's premier cyclin g region.

TABLE 12 SUMMARY OF CYCLING STRENGTHS AND WEAKNESSES

	Central Highlands	Wimmera Southern Mallee	Grampians RDV region	North East Victoria
Road Cycling				
Flat and Safe Road Loops				
Hilly Road Cycling Loops				
Mountain Climbs (Cat 2 or higher)				
Granfondo Loops				
Signature Events				
Mountain Biking				
Formalised Cross-Country Trails				
Epic Rides				
Multi Day Mtn Bike Experience				
Downhill/Gravity Trails				
Signature Events				
Recreational Cycling Trails				
In Town Recreational Cycling Trails				
Town to Town Cycle Links				
Iconic Recreational Trail Products				
Signature Events				

KEY

	Not available	Emerging	Secondary	Primary
Cycling Strengths				





9. STRATEGIC CONSIDERATIONS

9.1. LARGE AND GROWING MARKET

Visitor projections show that the Grampians RDV region will continue to grow in visitation and similarly the number of visitors undertaking cycling activity will also increase

Visitation is projected to grow by 1 million visitors to the Grampians RDV region by 2025.

Cycling as a recreational activity has grown, particularly road cycling and mountain biking. The growth in these two cycling disciplines and the potential to attract high involvement participants is high, providing quality trails are developed in areas with high amenity.

Cycling infrastructure should be planned to meet growing demand by visitors and to attract the large domestic cycling market in Australia.

9.2. NEED TO LEVERAGE FROM KEY DESTINATIONS

To maximise the benefits from investment in cycle tourism, investment needs to target the key visitor population nodes. This will ensure that infrastructure is maximised and that there is complementary tourism product to support visitors including accommodation, food, beverage and other activities.

This is not to say that major iconic cycling investment will not occur in areas that don't have high visitation, however larger scale investment in areas that do not have a high level of visitation should in some way link or encourage dispersal from key nodes.

Major investment in cycling should commence in key destinations and disperse from there.

9.3. LIMITED MOUNTAIN BIKING ACTIVITY

Whilst there is some mountain biking activity in the Grampians RDV region, all the mountain biking areas except for Black Hill Reserve, Ballarat and RACV Resort Creswick have poor signage, trail head facilities and are not well formalised.

Whilst mountain biking is not currently considered a strength of the region, the region does have many opportunities for mountain bike investment.

It is critical that future investment is planned and has some linkage to townships that can provide supporting infrastructure.

In addition, minor investment to formalise some trails such as Buninyong will provide a readymade mountain bike park for visitors.

9.4. ROAD CYCLING - A STRENGTH OF THE GRAMPIANS RDV REGION

Road cycling is a strength of the Grampians RDV region, with several primary and secondary nodes that have high levels of road cycling. The Ballarat and Hepburn Cluster attract large number of road cyclists through events and have a well-established network of loop rides.

The Grampians RDV Region area including Halls Gap, Stawell and Ararat has some of the best cycling credentials in Victoria, with many categorised climbs around the Grampians National Park, combined with scenic valley roads.

Formalisation of road cycling loops through maps, information, signage and digital marketing in key clusters will provide a strong short-term solution for growing road cycling activity.

9.5. LIMITED RECREATIONAL CYCLING TRAILS

There are very few good quality recreational cycling trails that act as attractors to the region. Only Ballarat to Skipton Rail Trail presents a long and well developed recreational cycling experience in the region.

There are however several projects identified through the master plan process which will create new iconic recreational cycling experiences that can be packaged.

Investment in recreational trails that lead from key township destinations and link to secondary destinations will encourage visitor dispersal. These trails will provide a complementary experience for visitors to the region and where possible link with wineries, food and beverage experiences.

9.6. MARKETING OF CYCLING

There are several marketing bodies across the region funded by Visit Victoria and Local Government (to varying degrees) including Grampians Regional Tourism Board, Visit Ballarat, Daylesford Macedon Ranges Tourism, Tourism Greater Geelong and the Bellarine and Wimmera Mallee Tourism.

However, many of the cycling loops and experiences do not align with Regional Tourism Boards. As an example, the Goldfields Track traverses through three Regional Tourism Board areas and there are numerous road cycling experiences that link from Ballarat into surrounding areas that are not part of the Visit Ballarat area.

The role of Goldfields Track Incorporated (GTI) could be expanded and supported as the lead cycle tourism organisation in Central Highlands. This could be supported by RTB's and LGA's.

In combination with investment in cycling infrastructure delivery of coordinated visitor information on cycling and marketing of cycling opportunities is needed.

9.7. NEED FOR BIKE HUBS

One of the objectives for consideration of this Master Plan was to explore the need for 'bike hubs'. Bike hubs provide information and services for cycle visitors. Work undertaken in North East Victoria has identified the following activities for bike hubs to service cycle visitors:

- Commercial opportunities:
 - Hire:
 - Training and skills;
 - Food and beverage;
 - Bicycle mechanic;
 - Tour businesses:
 - Shuttle bus services; and
 - Bike sales.
- Additional services:
 - Trail network information and maps;
 - Bike maintenance equipment and tools;
 - Skills area including pump track;
 - Bathroom and shower facilities;
 - Events facilities: and
 - Bike wash down area.

Bike hubs will only be feasible where there is a critical mass of visiting cyclists that require the above services.

Currently, there are no destinations that have a level of cycle tourism visitation where a bike hub is required. This is not to say this shouldn't be delivered in the medium or long term. However, the immediate focus for cycle tourism in the Grampians RDV region should be focused towards formalisation, marketing and investment in trail infrastructure.

The North East of Victoria has had more than 20 years of investment in cycle tracks and trails and is only now exploring the role of bike hubs in its key cycle destinations.

In the future bike hubs may be considered in the following destinations:

- Ballarat Railway Station;
- Ararat Railway Station/VIC;
- Halls Gap;
- Creswick;
- Horsham.

With continued investment in cycle infrastructure these locations may at some point require bike hub investment. Ballarat is the only location which may be able to support a bike hub in the short term.

9.8. MOUNTAIN BIKE PARK LAND TENURE AND MANAGEMENT

There has been significant investment in mountain bike trails across Australia, however the sustainability of maintaining large areas of formalised single track is often overlooked.

The planning for mountain bike paths and future trail investment requires the support of land owners and land managers. The Master Plan needs to carefully consider whether projects have the support of land managers or identify strategies to gain support.

A risk to investment is the development of costly infrastructure within areas that are controlled by other users and then not maintained to a high standard.

Mountain bike parks need to be considered as a key recreation asset, similar to other sporting and recreational assets that are managed by Local Government or State Government agencies.

Responsibility of maintaining public mountain bike assets ultimately should be the respective Local Government, State Government agency or land manager due to their importance for local community health and wellbeing and economic benefits that they bring to the region.

The use of volunteers is also important as these can provide a valuable resource to support land managers or owners which may have limited resources to maintain a large trail network. The You Yangs provides an example of a partnership between Parks Victoria and the local mountain bike club to maintain trails.

The cost for trail maintenance will ultimately fall on the land manager and the raising of funds to maintain trails is an ongoing concern for mountain bike parks. Some options for raising funds to support trail maintenance include:

- Running an event with entry fees that support trail upgrade and maintenance;
- Gate entry (similar to the newly establish private mountain park: Maydena in Tasmania);
- Establishment of a trail software application that provide maps and allows for donations;
- Financial support through Local Government or State Government agencies (e.g.: land managers).

It is difficult to recommend one appropriate structure to support trail management and maintenance given the complexities and variety of projects identified in this masterplan. The following diagram presents an outline of key stakeholders who will need to be considered for effective management and maintenance of trails. This would need to be mapped out on a case by case basis

Any proposals for new mountain bike investment in the Grampians RDV Region need to demonstrate how trails will be maintained and which authority or group will be responsible for this.

FIGURE 10 TRAIL MANAGEMENT AND MAINTENANCE RESPONSIBILITIES

Land Manager

Could include:

- DELWP
- Local Government
- Catchment Management Authority
- Parks Victoria or
- Community group (e.g.: Under Section 52 of Forest Act).
- Committee of management
- Private landowner

Key Management Responsibilities:

- Preparation/ amendments to Management Plans to support trail investment
- Agreements with user groups
- Trail planning
- Permit applications
- Indemnity insurance
- Annual works plans
- Construction work aligns with Australian Safety Standards
- Monitor vegetation and cultural heritage
- Ensure trail safety

Maintenance

Could include:

- DELWP
- Local Government
- Parks Victoria
- Local Cycling Clubs
- Friends of Groups

Key Maintenance Responsibilities

- Preparing a maintenance schedule
- Signage repair
- Trail repair
- Removal of vegetation
- Safety improvements
- Trail enhancements to improve trail experience
- Environmental works such as responding to erosion

9.9. FORMER GOLDFIELD FORESTS AND RESERVES

A large part of the Grampians RDV region is former goldfields reserves that are now mostly public land controlled by various agencies. This is a unique element to most of the region (other than the Wimmera). These former goldfields parks and reserves allow for public connections between towns and create opportunities for cycle tourism such as mountain biking.

In some of the existing informal mountain bike parks the unique character of the trails includes riding around mine shafts and along water races.

This should be the point of difference that is explored in the Grampians Region further. The Grampians RDV region may not have as many former railway reserves that can be used for rail trails, however former goldfields land provides an excellent opportunity to link towns.

For the Central Highlands area and extending into the Pyrenees, Northern Grampians and Ararat, the goldfields forests and reserves provide the key public land assets that can be explored for off ride cycling and mountain biking. This should be explored as part of the uniqueness of the experience and brand proposition for cycling in the region

9.10. WIMMERA MALLEE AS HOME OF FAT BIKES

An unusual niche which can be explored is the development of mountain bike trails specifically for Fat Bikes. Fat Bikes are designed for snow and sand, and the Wimmera has unique soils in the context of Victoria that are very sandy. This could be created as a niche for the area which sets it apart from other mountain biking areas in Victoria.

There is opportunity for the Wimmera Mallee to become home to Fat Biking in Victoria. This will require purpose designed tracks throughout the region.

9.11. TIERED APPROACH TO INVESTMENT

There are a variety of trail investment opportunities identified for the region. Some of these are clearly large-scale projects that will drive tourism, others are complementary trail products to townships.

For recreational trails and mountain bike trails there needs to be a tiered approach to investment. This will allow for smaller in town trails, through to designated major investments that become key drivers for visitation.

9.12. DRY WEATHER IN WIMMERA SOUTHERN MALLEE

The Wimmera Southern Mallee has dry weather when compared with other destinations in Victoria's east and south. The Wimmera Southern Mallee presents as a good winter cycling destination when much of the remainder of the State faces wet conditions.

There is opportunity to promote the Wimmera Mallee and Grampians Tourism regions as winter cycling destinations.

9.13. SERVICE TO THE CYCLING MARKET

One of the current gaps in the region is bike friendly businesses and services that support the cycling sector. This includes cycle friendly accommodation, cycle tours and shuttle buses, food, beverage and equipment hire.

The implementation of bike friendly business programs should be considered in locations that are attracting large numbers of cycle visitors.

10. MASTER PLAN FRAMEWORK

10.1. VISION

By 2028 the Grampians RDV region will be recognised as a premier destination for cycling. The region will host compelling cycle related experiences for road cyclists, mountain bikers and recreational bike path cyclists.

Investment in cycle tourism trail infrastructure, supporting tourism product and improved visitor information and marketing will lead to substantial growth in cycle visitors to the region.

It is envisaged that the profile of the cycling offer will increase substantially with much improved information specific to cycling in each of the region's destination and a cohesive approach to cycling development and marketing.

10.2. TARGETS

By 2024:

- Attract an additional 50,000 cycle visitors per annum across the Grampians RDV Region. (Effectively doubling cycle visitors).
- Deliver five priority or tier 1 cycling projects.
- Attract \$10 million investment in businesses servicing the cycle tourism sector.

10.3. MASTER PLAN THEMES AND OBJECTIVES

NEW AND ENHANCED ICONIC CYCLING EXPERIENCES

OBJECTIVE A Establish new iconic trails in the Grampians RDV region that will be a motivator for cycle tourism visitation to the region in strategic locations

NEW AND ENHANCED TOWNSHIP FOCUSED CYCLE INFRASTRUCTURE THAT COMPLEMENTS PRIMARY AND SECONDARY DESTINATIONS

OBJECTIVE B Deliver improvements to cycle tourism infrastructure in the Grampians RDV region at primary and secondary visitor nodes to encourage cycling to increase length of stay and yield from visitor markets

FORMALISATION OF EXISTING TRAILS TO MAKE THEM VISITOR READY

OBJECTIVE C Formalise existing trails to provide destinations that are visitor ready

DELIVER A PROGRAM OF CYCLING EVENTS

OBJECTIVE D Deliver a calendar of cycle tourism events that support the cycle strengths of the Grampians RDV region.

CYCLE TOURISM MANAGEMENT, MARKETING AND SERVICING

OBJECTIVE E Raise the awareness of cycling opportunities and provide a cohesive visitor experience for cycle visitors

10.4. DELIVERY

Cycling infrastructure in the Grampians RDV region is in its infancy, with very few iconic recreational trails, quality township trails and formalised mountain bike parks.

Figure 10 provides an outline of the required approach for delivery of the Grampians RDV region Cycling and Trails Infrastructure Business and Master Plan. It highlights the need firstly to formalise and improve existing assets, improve visitor information services in relation to cycling and commence investment in iconic trails to establish a cycling product which will attract cycle visitors and encourage existing visitors to cycle the region. Investment in in infrastructure such as bike hubs and broader marketing of cycling needs to follow the formalisation and establishment of cycle trails.

FIGURE 11 DELIVERY STRATEGY

2018-2019	2019-2022	2022-2024	2024-2028
Establish and Plan	Invest	Market and Support	Review
Establish baseline information Establish cycle tourism delivery entities Formalise existing trail assets Undertake business cases for priority projects Commence planning for tier 1 projects Seek funding support for tier 1 projects Commence planning for township-based cycle assets Establish information and collateral for cycling infrastructure Improve digital presence of current assets Initiate cycle friendly programs Establish baseline market research for awareness of cycling product	Develop marketing action plans Commence market awareness programs Implement priority projects Commence planning for bike hubs at primary cycle destinations Implement township-based cycle infrastructure Expand cycle friendly business programs Undertake market research update Continued improvement in visitor information Seek partners for cycle events	Deliver marketing programs Continue to deliver tier 1 cycle tourism projects Implementation of bike hubs at primary cycle destinations Commence planning for secondary bike hubs Update to market research	Revision of marketing action plans Deliver 2nd tier cycle projects Implement secondary bike hubs Update to market research Commence review of draft master plan

10.5. PROJECT PRIORITISATION

Table 13 provides an outline of criteria used to identify project prioritisation across the Grampians RDV region. Projects are prioritised as the following:

- Priority Project (Business Case) Tier 1
 projects that will be progressed with business
 case within this Master Plan that have initial
 feasibility work complete and have Council
 support;
- Tier 1 Project Major trail projects that meet market demand and will drive visitation to the region;
- Tier 2 Project Projects that will encourage visitors to cycle whilst in the region or are major projects that are unlikely to commence within the next four years
- Tier 3 Project Smaller scale projects that complement secondary visitor nodes.

To achieve status of a Tier 1 project it is expected that the project will meet the criteria identified.

TABLE 13 PROJECT PRIORITISATION FRAMEWORK

	PRIORITY PROJECT	TIER 1 PROJECT	TIER 2 PROJECT	TIER 3 PROJECT
Project planning complete. (Project has undergone feasibility and business case, concept design work and corresponding planning work).	•	•	•	
Project has stakeholder support. (Project is identified in Council's or stakeholder budget or is clearly supported by stakeholder)	•			
Project has scale will provide an iconic cycling asset for the region. (Project clearly links to key tourism assets, requires higher investment cost and will deliver a unique cycling asset in the context of Victoria)	•	•		
Project will drive visitation by delivering an asset to identified target cycling markets (Project will be supported by high participation road cyclists, mountain bikers and lifestyle leader markets for recreational trails)	•	•		
Project will meet a gap identified in cycling infrastructure in the region. (Gaps in cycling assets are identified in the audit of cycling tracks and trails)	•	•	•	•
Project connects with a primary visitor destination. (Project is near or connects to key visitor nodes such as Ballarat, Daylesford, Halls Gap, Ararat and Horsham).	•	•		
Project connects with a secondary visitor destination	~	~	✓	
Project is identified for delivery within a four-year timeframe	~			
Local cycling population catchment. High level of local population catchment to support trail use and to provide a volunteer base	•	•		

11. NEW AND ENHANCED ICONIC CYCLING EXPERIENCES

11.1. OBJECTIVE

Establish new iconic trails in the Grampians RDV region that will be a motivator for cycle tourism visitation to the region in strategic locations.

There are several existing and potential iconic cycling experiences in the Grampians RDV region that if developed or enhanced would be key motivators for cycle visitation.

The research undertaken to inform the Master Plan clearly identifies a lack of iconic cycling tracks and trails and those that are in existence such as the Goldfields Track require additional investment to reach a level fitting of interstate and international visitor markets.

This theme deals with projects that require substantial investment to create iconic cycling experiences.

11.2. PERFORMANCE MEASURES

- Attraction of grant funding to support investment;
- Implementation of trail infrastructure;
- Growth in cycle visitors.

11.3. PRIORITY PROJECTS

An analysis of projects against the prioritisation framework highlights the following as priority business case projects.

- Ararat Trails Mountain Bike Park:
- Goldfields Track;
- Wimmera River Discovery Trail:
 - Stage 1: Dimboola to Lake Hindmarsh
 - Stage 2: Horsham to Dimboola

Other Tier 1 projects identified that are also considered as potential iconic trails in the region include:

- Creswick Mountain Bike Mecca;
- Bald Hill Gravity Park;
- Buninyong Nationals Road Circuit Improvement;
- Grampians Granfondo Loop;
- Daylesford to Hanging Rock Rail Trail;
- Grampians Trail;
- Pyrenees Wine Cycle Trail.

TABLE 14 NEW AND ENHANCED ICONIC CYCLING EXPERIENCES

PROJECT TIER	PROJECT TITLE	TYPE	REGION	PROJECT LEAD	PROJECT PARTNERS	TOTAL DELIVERY COST ESTIMATE	TIMEFRAME	ACTIONS/STATUS
T1	Creswick Trails (FUNDED)	Mountain Biking	Hepburn Shire	Hepburn Shire	RDV, Daylesford Macedon Ranges Tourism	\$2 Million (Funding already received)	2018-2020	Funding received Detailed planning and design complete Undertake construction
P1	Ararat Trails Mountain Bike Park	Mountain Biking	Ararat City	Ararat City	RDV, Grampians Regional Tourism	\$2.2 Million	2018-2022	Complete Master plan Seek Funding for Stage 1 Undertake design work for Stage 2
P1	Goldfields Track [Multi Day Mountain Biking Adventure]	Mountain Biking	Goldfields	GTI	RDV, Local Governments	\$2 Million [Stage 1]	2018-2022	Seek funding for phase 1 implementation Implement track works and signage improvements Undertake additional planning work Digital strategy and implementation Seek funding for detailed concept planning for stage 2
P1	Wimmera River Discovery Trail: Stage 1: Wimmera River Discovery Trail [Dimboola to Lake Hindmarsh] Stage 2: Horsham to Dimboola	Recreational Cycling	Hindmarsh Shire/ Horsham Rural City	Hindmarsh Shire/ Horsham Rural City	RDV	\$1 Million (Stage 1)	2018-2022	Seek funding for Stage 1 Complete any detailed environmental and planning work for Stage 1 Implement Stage 1 Prepare detailed concept work for Stage 2 Seek funding for Stage 2
T1	Bald Hill Gravity Park	Mountain Biking	Moorabool	Moorabool Shire	RDV	\$2.5 Million	2020-2024	Prepare feasibility and business case Seek funding support
T1	Buninyong Nationals Road Circuit Improvement	Road Cycling	Ballarat City	City of Ballarat, Ballarat Regional Tourism	RDV	\$250K	20182022	Develop an enhancement plan for the Road Nationals Circuit Seek funding for implementation

PROJECT TIER	PROJECT TITLE	TYPE	REGION	PROJECT LEAD	PROJECT PARTNERS	TOTAL DELIVERY COST ESTIMATE	TIMEFRAME	ACTIONS/STATUS
T1	Daylesford to Hanging Rock Rail Trail	Recreational Cycling	Hepburn Shire	Hepburn Shire	RDV/ Macedon Ranges Shire		2018-2022	Undertake a business case for the project Seek funding support
T1	Grampians Granfondo Loop – East Loop	Road Cycling	Ararat Rural City/Northern Grampians	Ararat Rural City/Northern Grampians	RDV	N/A	2020-2024	Undertake a cost benefit assessment of road sealing near Pomonal to complete the loop Investigate funding options
T1	Grampians Trail	Recreational Trail	Northern Grampians/ Ararat Rural City	Ararat Rural City	RDV		2018-2022	Prepare detailed concept and business case Seek funding partners
Т1	Pyrenees Wine Cycle Trail	Recreational Cycling	Pyrenees Shire	Pyrenees Shire Council	RDV/ Northern Grampians?	N/A	2018-2022	Undertake a concept plan and feasibility study and business case Seek funding support
T2	Three Trails Project	Recreational Cycling	Golden Plains	Golden Plains	RDV		2018-2022	Finalise project plans and business case Seek funding partners
T2	Pyrenees State Forrest Destination Mountain Bike Park	Mountain Biking	Pyrenees Shire	Pyrenees Shire	RDV/ DELWP	\$2 Million	2020-2024	Undertake concept feasibility study Prepare business case Seek funding Undertake required planning work
T2	Mount Buangor State Park and Mt Cole State Forest	Mountain Biking	Pyrenees / Ararat Rural City		RDV, DELWP	\$3 Million	2024-2030	Undertake concept feasibility study Prepare business case Seek funding Undertake required planning work
T2	Roses Gap Loop	Road Cycling	Ararat Rural City/Northern Grampians	Northern Grampians	RDV Horsham Rural City		2020-2024	Undertake a cost benefit assessment of road sealing to complete the loop Investigate funding options

PROJECT TIER	PROJECT TITLE	TYPE	REGION	PROJECT LEAD	PROJECT PARTNERS	TOTAL DELIVERY COST ESTIMATE	TIMEFRAME	ACTIONS/STATUS
T2	Horsham -Wartook-Mt Zero Loop	Recreational Cycling	Horsham Rural City	Horsham Rural City	RDV	N/A	2022-2026	Undertake a concept plan and business case Prepare detailed design work Seek funding partners
T2	Bacchus Marsh to Daylesford Connection	Recreational Trail	Moorabool Shire/ Hepburn Shire	Moorabool Shire	RDV		2022-2026	Undertake a concept plan and business case
T2	Living Moorabool Trail	Recreational Trail	Golden Plains	Golden Plains	SRV RDV	N/A	2022-2026	Undertake concept planning for the trail
T2	Yarriambiack Creek Trail	Recreational Trail	Yarriambiack Shire	Yarriambiack Shire	RDV		2018-2022	Undertake a feasibility study into a potential route and concept for the trail. Considerations include: Potential to link Silo Art towns using the creek corridor; Linking the towns to weir pools; Formalising existing trails along the creek corridor; Indigenous site interpretation; Long term opportunity to link to the Wimmera River Discovery Trail, creating a Silo Art Trail loop.

12. NEW AND ENHANCED TOWNSHIP FOCUSED CYCLE INFRASTRUCTURE

12.1. OBJECTIVE

Deliver improvements to cycle tourism infrastructure in the Grampians RDV region at primary and secondary tourism nodes to encourage cycling to increase length of stay and spend of visitor markets.

Trails within visitor destinations are often utilised by visitors as a key activity, whether be for walking or cycling. In town trail experiences that link to higher amenity locations around town will improve the visitor experience and encourage visitors to be active and explore the outdoors. This has positive effects on visitor experience and yield.

12.2. PERFORMANCE MEASURES

- Investment in new and enhanced trails;
- Growth in the proportion of visitors undertaking cycling;
- Increase in length of stay and yield.

12.3. PRIORITY PROJECTS

Priority projects identified for new and enhanced township cycle infrastructure include:

- Ballarat Cycling Action Plan;
- Halls Gap Mountain Biking;
- Wartook to Zumsteins;
- Yarrowee River Trail;
- Yarriambiack Small Towns Cycle Loops;
- Great Western Wine Cycle Trail.

TABLE 15 NEW AND ENHANCED TOWNSHIP FOCUSED CYCLE INFRASTRUCTURE PROJECTS

PROJECT TIER	PROJECT TITLE	TYPE	REGION	PROJECT LEAD	PROJECT PARTNERS	TOTAL DELIVERY COST ESTIMATE	TIMEFRAME	ACTIONS
T1	Ballarat Cycling Action Plan	Recreation and Transport		Ballarat City	Ballarat Regional Tourism Vic Roads	\$9.2m	2018-2022	Implement actions with Ballarat Cycling Action Plan to make Ballarat a cycle friendly City
T1	Halls Gap Mountain Biking	Mountain Biking	Northern Grampians	Northern Grampians	RDV Grampians Tourism Catchment Management	N/A	2018-2022	Undertake an assessment of mountain biking opportunities around Halls Gap including development of concept and feasibility Undertake a business case for concepts Seek funding partners
T1	Wartook to Zumsteins	Recreational Trail	Horsham Rural City	Parks Victoria	Horsham Rural City		2020-2024	Develop a business case for trail investment to make the trail 'all weather' Seek funding for implementation
Т1	Yarriambiack Small Towns Cycle Loops	Recreational Trails	Yarriambiack Shire	Yarriambiack	RACV?		2018-2022	Undertake an audit of cycling loops Develop a works program including trail improvement and signage Seek funding to implement the concept including potential partners such as RACV
T1	Great Western Wine Cycle Trail	Recreational Trail	Northern Grampians	Northern Grampians Shire			2020-2022	Undertake a concept plan in conjunction with the wider Grampians Trail project
T2	Yarrowee River Trail	Recreational Trail	City of Ballarat	City of Ballarat			2018-2022	Prepare detailed design work Seek funding
T2	Blackwood Cross Country Loop	Mountain Biking	Moorabool Shire	Moorabool Shire		N/A	2018-2022	Undertake a detailed audit of existing trails in Wombat Forrest Develop a concept plan for a 10km mtn bike loop

PROJECT TIER	PROJECT TITLE	TYPE	REGION	PROJECT LEAD	PROJECT PARTNERS	TOTAL DELIVERY COST ESTIMATE	TIMEFRAME	ACTIONS
								Undertake costings of the trail and business case
T2	Smythesdale Cross Country Loop	Mountain Biking	Golden Plains	Golden Plains		N/A	2018-2022	Undertake a concept plan and feasibility study to link Boden's run to town with new single track creating a 20 km circuit.
T2	St Arnaud Mountain Bike Loop	Mountain Biking	Northern Grampians	Northern Grampians		N/A	2020-2024	Investigate the development of a 15km mountain bike circuit to complement town
T2	Black Hill State Forrest	Mountain Biking	Northern Grampians	Northern Grampians	DELWP		2018-2022	Undertake a feasibility assessment to investigate mountain bike opportunities in Black Hill
T2	Halls Gap to Lake Fyans	Recreational Trail	Northern Grampians	Northern Grampians	DELWP		2020-2024	Undertake a feasibility study for the establishment of a new link trail
T2	Lake Fyans Circuit Ride	Recreational Trail	Northern Grampians	Northern Grampians			2020-2024	Identify improvement works including signage to formalise the trail
T2	St Arnaud to Moonambel	Recreational Trail	Northern Grampians/ Pyrenees Shire	Northern Grampians			2020-2026	Undertake an audit of the existing trail Develop a works program for the trail network
T2	Secondary Cycling Destination Bike Hubs Daylesford Bacchus Marsh Ararat Horsham Halls Gap	All	Grampians RDV region	Corresponding Local Government			2022-2024	Following investment in improved cycle assets and growth in cycle visitation plan for bike hub facilities where demand is exhibited.

PROJECT TIER	PROJECT TITLE	TYPE	REGION	PROJECT LEAD	PROJECT PARTNERS	TOTAL DELIVERY COST ESTIMATE	TIMEFRAME	ACTIONS
T2	Ballarat Station as Key Regional Cycling Hub	All	Ballarat	Ballarat City	VicTrack Ballarat Regional Tourism		2019-2022	Develop a plan to establish Ballarat Train Station as a premium bike hub including facilities, signage and clear trail linkages to the railway station.
T2	Kaniva to Serviceton	Recreational Trail	West Wimmera	West Wimmera			2022-2026	Undertake a feasibility study for the trail link
T2	Lake Wallace Cycle Trail	Recreational Trail	West Wimmera	West Wimmera			2022-2026	Investigate route options
T2	Natimuk to Nhill Trail [Via Garoke]	Recreational Trail	West Wimmera	West Wimmera			2022-2026	Investigate route options
Т3	Dergholm / Bailey Rocks Mountain Bike Trail	Mountain Biking	West Wimmera	West Wimmera	DELWP, RDV	N/A	2020-2024	Undertake a concept plan for a cross country mountain bike circuit at Bailey's Rocks Seek funding partners
ТЗ	Edenhope Fat Bike Cross Country Loop	Mountain Biking	West Wimmera	West Wimmera			2018-2022	Undertake a concept plan and feasibility study for a short track fat bike cross country circuit – The first in Victoria
ТЗ	Beaufort Township Trails	Recreational Trail	Pyrenees Shire	Pyrenees Shire			2020-2022	Undertake a feasibility study and concept plan for the Beaufort township
ТЗ	Moree Reserve Fat Bike Cross Country Loop	Mountain Biking	West Wimmera	West Wimmera			2022-2028	Undertake a concept plan and feasibility study for a short track fat bike cross country circuit
Т3	Barrabool Nature Conservation Reserve to Murtoa	Recreational Trail	Yarriambiack Shire	Yarriambiack Shire			2020-2024	Develop a concept plan and feasibility study

	ROJECT	PROJECT TITLE	TYPE	REGION	PROJECT LEAD	PROJECT PARTNERS	TOTAL DELIVERY COST ESTIMATE	TIMEFRAME	ACTIONS
TS	3	Barrabool Nature Conservation Reserve Cycling Trails	Recreational/ Mountain Bike	Yarriambiack Shire	Yarriambiack Shire			2022-2026	Investigate trail opportunities within Barrabool Nature Conservation Reserve

13. FORMALISE EXISTING CYCLE TRACKS AND TRAILS

13.1. VISION

Formalise existing trails to provide destinations that are visitor ready

There are a number of mountain biking trails, road cycling loops and bike paths which require further enhancement to make them 'visitor ready'. Many of the existing trails throughout the region are not formalised and are 'hidden' from visitors due to the lack of information, signage and visibility.

13.2. PERFORMANCE MEASURES

- Formalisation of trails;
- Growth in trail usage;
- Improved awareness of cycle assets.

13.3. PRIORITY PROJECTS

Trails that have been identified for formalisation include:

- Woowookarung Regional Park Mountain Biking Destination;
- Buninyong Mountain Bike Course;
- Various Grampians RDV region Road Cycling Loops;
- Silo Art Trail.

These can be undertaken in a short time period and will create a base product to grow cycle tourism.

TABLE 16 FORMALISATION OF EXISTING TRAILS

PROJECT TIER	PROJECT TITLE	TYPE	REGION	PROJECT LEAD	PROJECT PARTNERS	TOTAL DELIVERY COST ESTIMATE	TIMEFRAME	ACTIONS
T1	Woowookarung Regional Park Mountain Biking Destination	Mountain Biking	Ballarat	Parks Victoria	Ballarat City Council		2018-2020	Complete master plan Undertake works that link cycle tracks and trails Undertake formalisation works including trail signage, mapping and trail head facilities
Т1	Buninyong Mountain Bike Course	Mountain Biking	Ballarat	DELWP	Ballarat City Council		2018-2020	Prepare a master plan and works plan Undertake formalisation works including trail links, signage and trail head facilities.
т1	Wyperfeld National Park Fat Biking	Mountain Biking	Yarriambiack	Parks Victoria	Yarriambiack Shire		2018-2022	Work with Parks Victoria to promote Fat Biking on existing tracks within Wyperfield National Park Investigate the potential for Fat Bike hire in Hopetoun for use in Wyperfield National Park and Lake Coorong Reserve
T1	Grampians Region Road Cycling Loops Formalisation. Loops include: Ballarat – Buninyong – Mt Mercer loop; Ballarat – Mt Buninyong Nationals return loop; Lake Wendouree loop; Victoria Park loop; Ballarat White Swan loop; Ballarat Classic; Northern Ballarat Ride; Mt Misery loop; Ride Daylesford; Hell of the West loop; Meredith – Anakie loop; Mount Avoca loop;	Road Cycling	Grampians Region	Tourism Boards	Local Governments Vic Roads		2018-2020	Develop working groups in each of the tourism regions which includes road cycling clubs and rider to identify routes to be formalised that provide premium road cycling experiences. Establish and apply criteria Map and mark routes for formalisation

PROJECT TIER	PROJECT TITLE	TYPE	REGION	PROJECT LEAD	PROJECT PARTNERS	TOTAL DELIVERY COST ESTIMATE	TIMEFRAME	ACTIONS
	Ararat-Moyston loop; Stawell Mt William Return [Grampians Wildflower Ride]; Stawell Landsborough loop; Stawell -Halls Hap – Roses Gap loop; Wonderland -Silverband loop; Halls Gap – Moyston loop; Wetlands/Lakes Trail; Mt Arapiles Loop; Horsham - Mt Arapiles Loop; Nhill West Wimmera Loop.							
Т1	Silo Art Trail	Road Cycling	Wimmera Mallee	Yarriambiack	Vic Roads			In conjunction with Vic Roads assess cyclist safety of the proposed route prior to any formal information and signage. Develop material to formalise road cycling along the silo art trail
T1	Gravel Cycling in and Around the Grampians National Park	Gravel Bikes	Grampians National Park	Grampians Tourism				Identify and promote road cycling loops in and around Grampians National Park

14. DELIVER CYCLE TOURISM EVENTS

14.1. VISION

Deliver a calendar of cycle tourism events that support the cycle strengths of the Grampians RDV region.

Analysis of cycle regions that have grown rapidly in attracting cycle visitors highlight the important role of cycle events in growing brand recognition and attracting visitors to the region. Examples include North East Victoria with events such as the Peaks Falls Creek and Great Ocean Road Region with events such as Amy's Granfondo.

To grow awareness of cycle tourism strengths in the Grampians Region, the delivery of cycle tourism events is necessary. This also has direct benefits generated from the event.

Event delivery needs to consider seasonality. The opportunity for the Wimmera Southern Mallee area to deliver events during the winter.

14.2. PERFORMANCE MEASURES

- Establishment of sustainable cycle tourism events;
- Growth in cycle visitors;
- Improved awareness of cycling assets in the region.

14.3. PRIORITY PROJECTS

Tier 1 events include:

- Grampians Gran Fondo Event
- Gravel Grind Event Grampians National Park
- National Championships Participation Event
- Wimmera Region Cycling Granfondo

These events were identified as tier one events as they have the potential to attract large numbers of participants to the region and contribute the cycle positioning of the region.

TABLE 17 CYCLING TOURISM EVENTS PROJECTS

PROJECT TIER	PROJECT TITLE	TYPE	REGION	PROJECT LEAD	PROJECT PARTNERS	TOTAL DELIVERY COST ESTIMATE	TIMEFRAME	ACTIONS
T1	Grampians Gran Fondo Event	Road Cycling	Grampians National Park	Grampians Tourism	Horsham Rural City Northern Grampians Shire Ararat Rural City		2018-2020	Undertake a feasibility including route audits to identify the best option to pursue Seek to raise funding to attract an event operator through regional stakeholders
ті	Gravel Grind Event – Grampians National Park	Road/Gravel	Grampians National Park	Grampians Tourism	Northern Grampians Shire, Horsham Rural City, Parks Victoria		2018-2022	Undertake discussions with leading cycling event organisers to determine the opportunity for a gravel cycling event in the iconic Grampians National Park
T1	National Championships Participation Event	Road Cycling	Ballarat	Ballarat Regional Tourism/ Ballarat City Council			2018-2020	Develop a large participation event to coincide with the National Championships
Т1	Wimmera Region Cycling Granfondo	Road Cycling	Wimmera Mallee	Wimmera Mallee Tourism	Local Governments			Undertake a route audit to establish a winter granfondo in the Wimmera Mallee Seek funding partners for the event Promote the event opportunity
T2	Goldfields – Multi Day Cross Country Event	Mountain Biking	Ballarat, Hepburn	Ballarat Regional Tourism	Hepburn Shire, City of Ballarat, Mount Alexander Shire		2020-2022	Following completion of the Creswick Mountain Bike Trails develop a new multi-day event across trail networks Seek funding support for the event

PROJECT TIER	PROJECT TITLE	TYPE	REGION	PROJECT LEAD	PROJECT PARTNERS	TOTAL DELIVERY COST ESTIMATE	TIMEFRAME	ACTIONS
T2	Gravel National Championships	Gravel	Grampians National Park	Grampians National Park	Parks Victoria		2020-2024	Seek to attract the Gravel National Championships to the Grampians
T2	Ararat Hills 12 Hour Race	Mountain Biking	Ararat	City of Ararat	Parks Victoria		2018-2020	Establish a steering group to lead the establishment of a 12-hour race cross country race in Ararat
T2	Mount William King of the Mountain	Road Cycling	Grampians National Park	Grampians Tourism	Parks Victoria, Northern Grampians Shire		2018-2020	Seek funding partners to develop a prize pool for a King of the Mountain competition to be held over two days
T2	Herald Sun Tour	Road Cycling	Grampians RDV region	Grampians Tourism	Local Government		2020-2022	Undertake discussions with the Herald Sun Tour organisers to capture the Queens Stage of the race. Identify funding requirements for this
T2	Great Victorian Bike Ride	Road Cycling	Grampians RDV region	Wimmera Mallee Tourism			N/A	Support the attraction of the Great Victorian Bike Ride when offered to the region.
T2	Creswick Trails Mountain Bike Festival	Mtn Biking	Hepburn Shire	Hepburn Shire	Daylesford Macedon Ranges Ballarat Regional Tourism		2019-2022	Develop a three-day mountain bike festival for Creswick including an endurance events such as a 24 hour race

15. DELIVERY: CYCLE TOURISM MANAGEMENT, MARKETING AND SERVICING

15.1. OBJECTIVE

Raise the awareness of cycling tourism opportunities and provide a cohesive visitor experience for cycle visitors.

There is a need for a cohesive approach to cycle tourism management, marketing and servicing. This is a difficult task, given the size of the Grampians RDV region and the various tourism organisations across the region.

Delivery agencies responsible for management, marketing and servicing cycle tourism market need to be clearly defined.

Current information and marketing of cycle tourism product and experiences is very limited across the Grampians RDV region. This report provides an excellent starting point for defining product and experiences that can be formalised and marketed further in the region.

Tourism North East provide an excellent case study for visitor information services and marketing of cycle tourism. Some of the highlights of their approach to cycle tourism include:

- A dedicated cycle tourism officer who works with cycle tourism businesses;
- A cycle friendly business program;
- Excellent high-quality cycle tourism content including digital content to quide visitors to the cycle tourism assets within the region;
- Marketing program targeted to cycle tourism including social media advertising and awareness programs.3

15.2. PERFORMANCE MEASURES

- Establishment of quality cycle information for pre and during trip planning;
- Clear lines of responsibility for cycle tourism across the region;
- Increased awareness of cycle product.

15.3. PRIORITY PROJECTS

Projects have not been prioritised for this theme as there is a logical sequence that requires implementation. The sequence is as follows:

- 1. Establish delivery agencies for cycle tourism management, marketing and servicing;
- 2. Cycle market research this will be used to inform marketing and visitor services offer;
- 3. Cycle friendly upskilling program;
- 4. Develop collateral and visitor information;
- Cycle marketing action plans;
- Websites for iconic trails.

15.4. CYCLE TOURISM STRUCTURE AND ROLES

Cycle Tourism Authority	Roles and Responsibilities
Grampians Tourism	Establishment of information and collateral for cycling tracks and trails
Goldfields Track Incorporated Visit Ballarat	Implementation of cycle friendly programs
Daylesford Macedon Ran- Tourism	ges Improvement of digital media to enhance the cycling experience
Bendigo Regional Tourism Victorian Goldfields Touri	Cooperative market research across the Grampians Region
Executive	Cycle tourism Marketing action plans and implementation
	Leadership in events development

15.5. TRAIL IMPLEMENTATION

Most trail projects will need to consider the following program for development. Costings are included.

- Ground Truthing. This will require fieldwork to determine the alignment of
 the new trail. The concept plan provided will be a guide, however through
 ground truthing the trail alignment may change depending on conditions
 encountered in the field. Ground truthing would need to be undertaken by
 an experienced trail design and construction firm and GPS coordinates
 collected.
- 2. **Additional Specialist Work**. In order to proceed with the planning process, the following specialist reports will be required to accompany a planning application:
 - Heritage and Cultural Heritage Study. This would need to review the proposed alignment to determine any impact on heritage sites or cultural heritage sites. This would include recommendations to the trail alignment if required.
 - Environmental Assessment. This would provide an assessment of the environmental factors relating to the proposed trial alignment. This assessment will provide advice on the trial alignment and provide recommendations in relation to trail design if required.
- 3. **Detailed Concept Design**. A detailed concept design will follow the specialist reports, with final refinement of the alignment using GPS coordinates. This will also include confirmed cost for delivery.
- 4. Business Case. A business case will be prepared to support the project in order to attract Government Funding. This will build on the scoping study undertaken and the above detailed concept design, ground truthing and specialist work.
- 5. **Planning Application**. A planning application will need to be prepared to seek approval from Council and the relevant referral authorities.
- Construction. Construction of the trail will commence with funding from Government sources once secured. This will include trail construction, trail heads and signage.

7. **Marketing and Branding**. A marketing and brand strategy should be considered for larger trail project. This would need to align with the Ride High Country brand and also be reflected though on ground signage.

Table 18 below provides an outline of estimate costs for larger trial projects. A range is provided depending on the size and complexity of the project. This should be used as a guide only and estimated costs should be confirmed with relevant consultants.

TABLE 18 IMPLEMENTATION COSTS- CONSULTANCY

STAGE	ESTIMATED COST
Ground Truthing	\$30K-\$80K
Heritage and Cultural Study	\$30K-\$80K
Environmental Assessment	\$30K-\$80K
Detailed Design Concept	\$30K-\$80K
Business Case	\$15K-\$60K
Planning Application	\$20K-\$50K
Marketing and Branding	\$10K-\$30K
Total	\$165-\$460

TABLE 19 CYCLE TOURISM MANAGEMENT, MARKETING AND SERVICING PROJECTS

PROJECT TITLE	TYPE	REGION	PROJECT LEAD	PROJECT PARTNERS	TOTAL DELIVERY COST ESTIMATE	TIMEFRAME	ACTIONS
Establish delivery agencies for cycle tourism management, marketing and servicing. This should consider: Grampians Regional Tourism Ride Walk Goldfields (combination of 6 goldfields LGAs and RTBs)	All	Grampians RDV region	RDV	Cycle Master plan Steering Committee		2018-2020	Establish a cycle master plan steering committee to oversee delivery of the Master Plan (may be an extension of existing group) Investigate the opportunity to establish or reposition GTI into a lead marketing and delivery organisation
Develop collateral and visitor information for cycle tourism assets	All	Grampians RDV region	Wimmera Mallee Tourism Grampians Tourism			Ongoing	Establish a cycling subcommittee to each regional tourism organisation Each tourism organisation to improve information available on cycle tourism and greater presence in all digital and web-based material including pre-trip planning information, cycle tourism trails and advice, downloadable maps, up to date trail information, suitable accommodation and cycle friendly businesses Clearly identify cycling infrastructure and cycle tourism strengths in web-based material for all tourism organisations Establish a web-based presence -RWG with broader content
Cycle Friendly Upskilling Program	All	Goldfields	GTI			2018-2020 Ongoing	Undertake a pilot program for creating cycle friendly businesses. Attract funding for the pilot program
Cycle Market Research	All	Grampians RDV region	RDV	Cycle Master plan Steering Committee	\$50K	2018	Undertake baseline research to establish the level of awareness of cycling in the Grampians Region Update the research on a two-year basis to determine the impacts of marketing and investment in cycle tourism

PROJECT TITLE	TYPE	REGION	PROJECT LEAD	PROJECT PARTNERS	TOTAL DELIVERY COST ESTIMATE	TIMEFRAME	ACTIONS
Cycle Marketing Action Plans	All	Grampians RDV region	Wimmera Mallee Tourism Grampians Tourism			2020-2022	All tourism bodies to develop a marketing action plan. This should include consideration of digital material, collateral, social media and events
Websites for Iconic Trails	All	Grampians RDV region	Wimmera Mallee Tourism Grampians Tourism			2018-2022	Develop cohesive cycling marketing websites for Iconic Trails, once trail work is complete.



16. OVERVIEW OF BUSINESS CASE

16.1. INTRODUCTION

This section of the report provides high level business cases for the three identified priority projects for the Grampians RDV Region.

Projects include:

- Goldfields Track;
- Wimmera River Discovery Trail; and
- Ararat Trails Mountain Bike Park.

These projects all have previous feasibility and concept planning work complete which have been used as inputs to the business case preparation.

Key documents which provide background to these projects include:

- Ararat Hills Trails Formalisation Interim Report, World Trail, November 2017;
- RWG Master Plan 2018-2022, Remplan, 2017;
- Hindmarsh Trail Feasibility Assessment, TRC Tourism, March 2016;
- Hindmarsh Trail Master Plan, TRC Tourism, March 2016.

The business cases utilise guidelines prepared by the Victorian Department of Treasury and Finance.

16.2. KEY FINDINGS

Urban Enterprise has undertaken economic modelling of potential impacts from the three priority business case projects.

The modelling included a net present value cash flow of capital, ongoing and improvement costs over the course of five years following the proposed investments.

Benefits consider the direct spend impacts in the region generated from visitors attracted to the region and who use the trail.

Economic impact modelling has also been undertaken to show 'output' generated from the trail projects including direct and flow on impacts and total jobs generated from visitor spend.

The three trail projects identified as priority projects for funding include Ararat Trails, Goldfields Track and Wimmera River Discovery Trail. If realised, they will generate the following collective benefits if delivered to their full potential:

- More than 388,000 cycle visitors for the Grampians (over the first five years of operation);
- \$87.5 million per annum in output;
- 333 jobs per annum (direct and indirect);
- A net present value of over \$37 million; and
- A benefit cost ratio of 3.5.

An overview of each individual project is outlined in, while the detailed contributions are included in subsequent sections of this report.

TABLE 20 BUSINESS CASE MODELLING OVERVIEW⁶

	COST	VISITATION (YEARS 1-5)	ECONOMIC IMPACT (OUTPUT)	JOBS (DIRECT & INDIRECT)	BCR
Goldfields Track ⁷					
Phase 1: Implementing Current Master Plan	\$977k		\$20.1m	94	10.8
Phase 2: Industry Support, Upskilling & Development	\$761k		\$2.3m	7	8.28
Phase 3: Master Plan and Delivery of International Icon	\$10m (est.)		\$30.9m	86	2.2 ⁹
Total	\$11.7m	166,276	\$53.3m	187	
Wimmera River Discovery Trail ¹⁰				'	
Stage 1: Wimmera River Discovery Trail [Dimboola to Lake Hindmarsh]	\$1m	106,530	\$14.6m	66	9.0
Ararat Trails					
Stage 1: Implementation of Core Network	\$654k				
Stage 2: Implementation of Future Development Trail 8 and development of Primary Trailhead	\$827k				
Stage 3: Implementation of Future Development Trail 9, 10 and One Tree Hill Walking Track	\$673k				
Stage 4: Linkages to Ararat and rehabilitation of unnecessary/duplicate trails	\$588				
Total	\$2.7m	115,748	\$19.5m	80	5.4
3 Project Total	\$15.5m	388,554	\$87.5m	333	3.5

Urban Enterprise 2018. Note: Visitation between years 1-5 represents total visitors, not unique visitors (e.g. one person can visit multiple times).

⁶ Includes direct and indirect effects.

⁷ Demonstrating the financial and economic impact of each project phase was requested by RDV. For all other projects, only the total project impact was required.

⁸ Refers to BCR from implementing and funding phases one and two.

⁹ Refers to BCR from implementing and funding all three phases.

¹⁰ Stage 2 (Horsham to Dimboola) not included in the business case modelling as costs are indicative only and subject to further investigation

17. GOLDFIELDS TRACK

17.1. INTRODUCTION

The Goldfields Track is a 210km bushwalking and mountain biking shared track that connects Bendigo to Ballarat, traversing the historic townships of Buninyong, Creswick, Daylesford, Hepburn and Castlemaine. The concept for this project is to transform the trail from its current state significance rating by Visit Victoria, to an iconic destination for domestic and international cycling and walking visitors. This requires investment in route design to make shorter and less technical routes, town loops, new signage and infrastructure.

The investment required for this includes implementation of the current Ride/Walk Goldfields Master Plan prepared by REMPLAN for GTI and, following that, a detailed concept plan to bring the track to international standard.

17.2. LOCATION

The Goldfields Track is located in Victoria's Goldfields region and connects the two major centres of Ballarat and Bendigo. Figure 11 provides an outline of the location.

FIGURE 12 LOCATION



Source: Urban Enterprise, 2018

17.3. INVESTMENT LOGIC MAPPING

17.3.1. PROJECT DRIVERS

- Tourism is an important contributor to the Grampians RDV region. Annually 4.1 million visitors are attracted to the region, contributing \$711 million to the region's economy. (Source Remplan 2017).
- Cycle tourism is an important contributor to the Grampians RDV region. It
 is estimated that cycling visitors contribute approximately \$119 million in
 Output to the Grampians RDV region.
- Projected growth in visitors. Visitor growth projections highlight the need for continuous investment in tracks and trails to provide for growing visitor markets and delivery of tourism infrastructure.
- Participation in cycling is substantial and provides a large market base for growth. 6.2% of the population of key domestic markets in Vic, NSW, SA, Qld and ACT participated 6.2% in mountain biking in 2017. This equates to a market of 1.19 million mountain bikers to draw on. Participation in adventure and cycling tourism is expected to grow significantly.
- **Investment in cycle tourism will lead to growth.** Cycle tourism growth has outstripped growth rates of non-cyclists.
- Ability to build on current resources and assets. Key parts of the trail are already developed, and this investment will transform existing infrastructure into a key tourism product for the region.
- Leverage from the concentrated visitation to Ballarat and Bendigo. There
 is a pronounced concentration of visitor activity in Ballarat and Bendigo. A
 trail starting from these cities would disperse visitors from the visitor node.
 Investment in the Goldfields Track would disperse visitors throughout the
 surrounding region.

Potential as an international icon. Goldfields track is a unique combination
of nature-based product with heritage. There is potential for the track to
become a major iconic trail of international significance for walkers and
cyclists.

17.3.2. ISSUES

- Regional Victoria faces low visitor dispersal, particularly from international markets. International visitors are predominantly concentrated to Melbourne and surrounding destinations. Further development of international products of significance will assist in dispersing visitors.
- Track services and experiences require improvement. There has been
 investment in the past in infrastructure along the Goldfields Track, however
 Track signage and the quality of the trail is inconsistent. The services and
 experience of the Goldfields Track needs improvement to capture interstate
 and international visitor markets.
- Services and infrastructure are needed to meet visitation growth requirements. Visitation projections show a substantial increase in visitation will occur in the Grampians RDV Region. There is a need to deliver infrastructure and services to cater for this growth.
- Low awareness of cycling and walking tourism and uncoordinated marketing of cycling and walking online information. Market research has identified that intention to visit the Goldfields region of Victoria for mountain biking is low. This reflects the lack of highly regarded mountain bike destinations in the region.
- No clear branding of product to meet market requirements. Online cycling and walking information inadequately tailored to cycling and walking market. There is a need for improved digital content and interpretation.

17.3.3. INTERVENTIONS

- Investment in Goldfields Track improvement that creates a new 'Iconic'
 cycling experience. The unique historic and cultural setting of the Goldfields
 Track provides ideal product and brand positioning to develop a trail with
 interstate and international appeal.
- Investment in trail enhancements that improve visitor experience.

 Investment in trail upgrades are required to increase accessibility and appeal to a broader range of users.
- Accessibility to new food and wine products and accommodation to support cycle tourism growth. Market research clearly highlighted that cyclists were also motivated to visit by food, wine and beer experiences.
 Better connecting the trail to existing townships will increase opportunities for improved food, wine and beer experiences.
- Marketing to improve awareness of the cycling assets and motivate visitation. Stakeholder workshops and surveys identified that the region and its cycling assets have low awareness in key source markets.
- Interpretive digital content will improve the visitor experience of the trail.

 The development of applications that improve the way visitors engage with the cultural heritage of the trail will greatly improve visitor experience.

17.3.4. THE SOLUTION

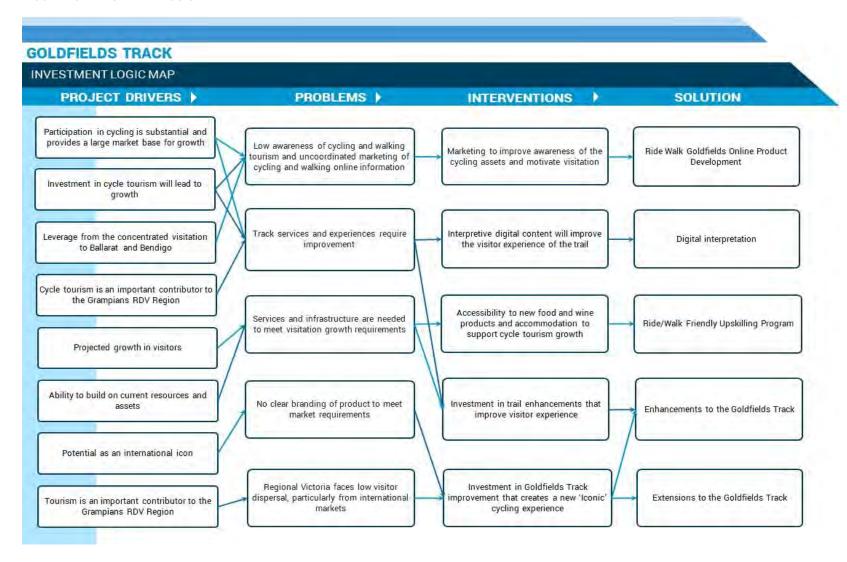
Phase One interventions to address the problems or project drivers identified above include:

- **Enhancements to the Goldfields Track**, which will improve the visitor experience by making the track accessible to a broader range of users, therefore increasing the yield potential of the existing network;
- **Extensions to the Goldfields Track** will link several existing mountain bike parks, including Creswick, Black Hill Reserve, Woowookarung Regional Park and the newly established Harcourt park.
- Ride Walk Goldfields (RWG) Online Product Development of a new RWG
 online tourism platform including marketing collateral and product
 campaign which will leverage from the existing and proposed investment in
 cycling infrastructure. Investment into digital media to increase awareness
 of track and interpretive experience.
- Ride/Walk Friendly Upskilling Program. Industry upskilling and training to improve customer service and visitor experiences.
- **Digital interpretation.** An application to be developed which provides contemporary interpretation of cultural heritage along the trail.

Phase Two includes:

Preparation of a new detailed master plan that reimagines the Goldfields
 Track as a truly international destination with substantial improvements to the layout and design of the track.

FIGURE 13 INVESTMENT LOGIC MAP



17.4. CONCEPT

INTRODUCTION

The Goldfields Track has recently undergone a master planning exercise to improve some of the key elements to the track and marketing activities.

There is, however, potential to think bigger in relation to the Goldfields Track, so that there is industry support/product development, as well as an experience is delivered of international standard. This is driven by the VGTE/Visit Victoria support to join Ballarat and Bendigo and surrounding villages, showcasing the Goldfields heritage destination. The concept has, therefore, been broken down into three phases.

PHASE 1 IMPLEMENTING THE CURRENT MASTER PLAN 2017-2022

The Central Highlands Region of Victoria aspires to have an internationally recognised bushwalking track and IMBA Epic Trail, a worldwide recognised significance classification of MTB trails. The Ride Walk Goldfields (RWG) Master Plan has been developed to assist in realising this vision and proposes track and trail works in the form of physical improvements and new sections that will differentiate the regional offering from its competitors, and act as a key tourism driver across the region.

The Victorian Goldfields is a historically and culturally rich region providing significant tourism experiences for visitors. The Goldfields Track is a key active transport link, connecting the major towns of Bendigo with Ballarat, scenically traversing through Daylesford, Hepburn, Creswick and Castlemaine.

The Goldfields Track will be the central north-south running "spine" of the RWG experience, which will connect key destinations and encourage visitors to explore and experience the unique landscapes in the region. By expanding its scope to cater for less experienced riders, the Goldfields Track will become a true touring experience, where riders travel between towns, staying overnight, and experiencing what's on offer. Walkers and riders will be provided with an

expanded experience in, around and between townships and villages along the central spine.

The Master Plan proposes physical improvements and new sections to the Goldfields Track. The concept design (and indicative costings) is illustrated in Figure 14.

PHASE 2 INDUSTRY SUPPORT, UPSKILLING & DEVELOPMENT

The next phase of the project, following the track and trail capital works, is about implementing online product development, business training and marketing, intends to create an iconic tourism product that will be central to delivering strong outcomes for the local visitor economy.

This includes:

- Trail infrastructure improvements and development;
- The RWG online portal;
- Tourism product development and upskilling; and
- Stakeholder engagement, marketing activation and promotion.

PHASE 3 REIMAGINING THE GOLDFIELDS TRACK AS AN INTERNATIONAL TOURISM ICON 2022-2028

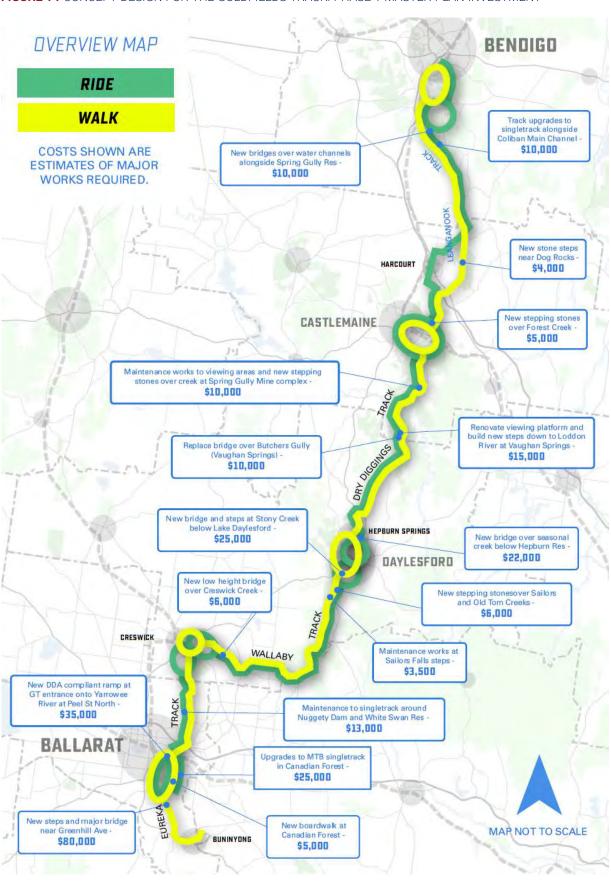
A phase 3 Master Plan should be explored which takes the existing track to a new level of experience with substantial improvement to the track quality and route.

The phase 2 investment will consider the following:

- Enhancing the current experience with an alternative route that focuses on a high quality single track experience, almost the entire length of the trail;
- Focus on establishing Bendigo and Ballarat as hubs with bike facilities at Bendigo and Ballarat railways stations. This could play a role in driving the growing adventure and cycling tourism market, particularly from surrounding areas; and
- Improvement to trail infrastructure including enhancement locations



FIGURE 14 CONCEPT DESIGN FOR THE GOLDFIELDS TRACK: PHASE 1 MASTER PLAN INVESTMENT



Source: Ride Walk, Goldfields Master Plan, REMPLAN | 2017-2022

17.5. COSTS

Table 21 outlines the proposed costings, timelines and funding requirements for each phase as follows:

- Phase 1 \$977,000 (Year 0);
- Phase 2 \$761,000 (Year 2); and
- Phase 3 \$10,000,000 (Year 4) (note: the cost for a new visionary trail master plan that will take the Goldfields Track to one of National Significance is estimated at \$250,000, and a total of \$10 million would be needed to bring the trail to that of National Significance).

The implementation and funding for each phase would occur over separate years, likely over a 3-5-year period (which is used to develop the cost-benefit assessment). Should all three phases be realised, total project costs would be \$11.8 million.

TABLE 21 PROJECT COMPONENTS AND FUNDING REQUIREMENTS

PROJECT COMPONENT DESCRIPTION FUNDING REQUIREMENT	COST
PHASE 1 IMPLEMENTING CURRENT MASTER PLAN	
Track and Trail Capital Works (Upgrade and new works to the iconic Goldfields Track)	\$977,000
PHASE 2 INDUSTRY SUPPORT, UPSKILLING & DEVELOPMENT	
Ride Walk Goldfields Online Product Development of a new online tourism platform including marketing collateral and product campaign.	\$213,000
Ride/Walk Friendly Business Program Industry upskilling and training.	\$40,000
Marketing, and Stakeholder and Tourism Product Implementation Stakeholder engagement, marketing activation and tourism product development	\$258,000
Planning Allowance: Environmental and cultural heritage studies for new track sections	\$250,000
Sub-Total	\$761,000
PHASE 3 MASTER PLAN FOR INTERNATIONAL ICON	
Detailed Master Plan for international level experience. This includes detailed route audit and alignment assessment, concept plan, ground truthing, cultural and environmental heritage studies.	\$250,000
Major infrastructure delivery (indicative only)	\$9,750,000
Sub-Total	\$10,000,000
TOTAL (PHASE 1,2,3)	\$11,738,000





17.6. DEMAND

VISITATION

The Goldfields Track improvements will generate visitation from the following segments:

- Existing visitors to the region who will ride or walk the track through a greater presence and quality of offer;
- New visitors attracted to the track in either multi day or singe day experiences sourced from mountain bike cycling markets;
- New international 'experience seeker' visitors wishing to undertake the Goldfields Track as an iconic heritage and nature-based experience in Victoria; and
- New and existing visitors attracted to the end-to-end experiences with public transport and accommodation options.

Visitation Estimates

The *Ride Walk Goldfields Master Plan* provides modelling of visitors as a result of the master plan investments.

Based on Master Plan estimates there is expected to be total visitation of approx. 32,000 in Year 1 (which Urban Enterprise escalated to 36,000 by year 5). The Master Plan assumes that 10% of visitors are day visitors, while the remaining 90% are overnight (predominantly domestic). It is important to note that these estimates are based on phase 1 investment only.

For the purposes of this report, this modelling has been refined to capture both existing visitors to the area, as well as the additional (i.e. new) visitors. Urban Enterprise assumes that approx. 25% of total visitors to the track will be classified as 'new', while the remaining 75% are existing.

Table 22 details the visitation estimates, which is expected to increase from around 31,000 in Year 1 to 35,900 in Year 5.

 TABLE 22 GOLDFIELDS TRACK VISITATION ESTIMATES (PHASE 1)

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
New visitors	7,828	7,984	8,224	8,553	8,980
Existing visitors	23,483	23,953	24,672	25,658	26,941
Total visitors	31,311	31,937	32,895	34,211	35,922

Source: Ride Walk Goldfields Master Plan; Urban Enterprise 2018

Although the visitation estimates are based on phase 1, for the purpose of this analysis it is assumed that visitation remains consistent across all three phases in order to accurately compare and contrast the cost-benefit results. Additional visitor modelling would need to be undertaken to project the likely increases in demand that phase 2 and phase 3 would generate.

17.7. SOCIAL AND ECONOMIC BENEFIT

SOCIAL BENEFITS

- Improved health and fitness of local communities, through improved infrastructure for cycling. Cycling is a healthy low-impact exercise that can be enjoyed by people of all ages, from young children to older adults. It is fun and low cost and can reduce long term health problems associated with sedentary lifestyles;
- Cycling provides independent travel for those who might otherwise have their travel options restricted. It offers increased mobility to many groups of the population with low rates of car ownership, such as low-income earners, unemployed people, seniors and those under 18 years of age. Cycling can also help older people avoid isolation, as well as stay mentally and physically healthy;
- High quality world class product will increase local pride and encourage thriving town centres associated with the track;
- An increase in demand for services related to cycling and the food and beverage industry will result in more diverse local employment opportunities;
- Increased connectivity between townships will provide stronger linkages between communities. Cycling increases social interaction, social networks and

social capital. Cycling enables people to interact socially and feel more at home in their local community. More people cycling and walking provides additional opportunity for social interaction and this enhances a sense of community.

ECONOMIC BENEFITS

The feasibility report identified the proposed improvement and new works to the Goldfields Track and development of the RWG tourism product is considered to have significant economic and tourism benefits including:

- Attraction of new visitors to the region and increasing levels of expenditure to support the local economy;
- Creating a critical mass of Goldfields Track users to support private sector businesses which service the track.
- Attracting internationally ready operators to the region, through the establishment of an internationally recognised product;
- Increased visitor yield through improvement to township links and improvement to businesses which are engaging and service track visitors.
- Short term construction impacts;
- Ongoing economic benefits from visitor spend.

17.7.1. NET PRESENT VALUE ASSESSMENT AND COST BENEFIT

The table below provides an overview of the cost benefit impact of the Goldfields Track development, projected over a 5-year cashflow period and based on:

- Visitation estimates and visitor spend;
- Capital/development costs;
- Ongoing expenditure estimates (maintenance costs of \$1,200 per kilometre); and
- Direct benefit derived from additional visitor spend to the region.

11 Visitor spend was derived from the RWG Master Plan, which was based on daytrip and overnight visitor markets. These figures were converted by Urban Enterprise to account for new/existing visitors.

The direct benefit is based on additional visitor spend in the region that is directly attributed to demand, assuming:

- Day trippers spend an average of \$89 per trip.; and
- Overnight visitors spend on average \$244 per trip (based on an average length of stay of 2.8 nights).11

These spending patterns reflect increases in TRA expenditure averages, as visitors are likely to increase spending on accommodation, food and new product as a result of the high level of capital investment.

As there are three distinct project phases, the cost benefit results are separated as follows in order to determine the impact of funding each subsequent phase.

PHASE 1 RESULTS

According to Table 23, implementation of phase 1 only will generate a positive financial and economic impact, demonstrated by a positive net present value (NPV) of \$20.3 million; and a benefit-cost ratio (BCR) of 10.8.

Having a positive NPV and a BCR greater than one implies that the benefits to the region will exceed total costs. As such, funding this stage of the project can be classified as viable and sustainable.

TABLE 23 GOLDFIELDS TRACK COST-BENEFIT ASSESSMENT (PHASE 1)

	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Direct Benefit	\$0	\$4,907,555	\$5,130,849	\$5,416,894	\$5,774,409	\$6,214,707
Ongoing Expenditure	\$0	\$252,000	\$258,300	\$264,758	\$271,376	\$278,161
Development Costs	\$977,000	\$0	\$0	\$0	\$0	\$0
Net Impact	-\$977,000	\$4,655,555	\$4,872,549	\$5,152,136	\$5,503,032	\$5,936,546
NPV	\$20,266,449					
BCR	10.8					

Note: All benefit and expenditure estimates are inflated by 2.5% per annum

PHASE 2 RESULTS

Funding and implementing phase 2 of the project (assumed to be in Year 2), costing an additional \$761,000 in industry support and development, will have a slight negative impact on the project. The NPV is likely to decrease to \$19.6 million; while the BCR decreases to 8.2.

While the impact of additional development costs will alter the NPV/BCR, overall, the cost-benefit results are likely to remain positive. Again, this assumes that visitation would remain consistent with phase 1 levels; however, visitation is likely to increase through additional marketing, upskilling, etc, which would further improve the net financial and economic result

TABLE 24 GOLDFIELDS TRACK COST-BENEFIT ASSESSMENT (PHASE 2)

	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Direct Benefit	\$0	\$4,907,555	\$5,130,849	\$5,416,894	\$5,774,409	\$6,214,707
Ongoing Expenditure	\$0	\$252,000	\$258,300	\$264,758	\$271,376	\$278,161
Development Costs	\$977,000	\$0	\$761,000	\$0	\$0	\$0
Net Impact	-\$977,000	\$4,655,555	\$4,111,549	\$5,152,136	\$5,503,032	\$5,936,546
NPV	\$19,601,762					
BCR	8.2					

Note: All benefit and expenditure estimates are inflated by 2.5% per annum

PHASE 3 RESULTS

Table 25 outlines the overall impact should all project phases be funded/implemented, with phase 3 development costs occurring in Year 4 of the cashflow period. The impact to the NPV/BCR would be:

- A further decrease in the NPV to around \$12 million; and
- A further decrease in the BCR to 2.2.

However, despite these decreases the financial impact remains positive, typified by a positive NPV and BCR greater than 1. This demonstrates that, even with conservative visitation estimates, a fully funded project across three phases would continue to be financially viable.

TABLE 25 GOLDFIELDS TRACK COST-BENEFIT ASSESSMENT (PHASE 3)

	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Direct Benefit	\$0	\$4,907,555	\$5,130,849	\$5,416,894	\$5,774,409	\$6,214,707
Ongoing Expenditure	\$0	\$252,000	\$258,300	\$264,758	\$271,376	\$278,161
Development Costs	\$977,000	\$0	\$761,000	\$0	\$10,000,000	\$0
Net Impact	-\$977,000	\$4,655,555	\$4,111,549	\$5,152,136	-\$4,496,968	\$5,936,546
NPV	\$11,972,810					
BCR	2.2					

Note: All benefit and expenditure estimates are inflated by 2.5% per annum

17.7.2. ECONOMIC IMPACT ASSESSMENT

The project's economic impact is based on REMPLAN economic data for Victoria, assuming the key benefits of the project will positively impact the Victorian economy (both directly and indirectly). For the purposes of this report, the indirect effects refer to flow-on supply chain and consumption impacts other sectors of the economy.

As above, the economic assessment is examined across all three phases to demonstrate the individual impacts of each.

PHASE 1 RESULTS

SHORT TERM CONSTRUCTION IMPACTS

As shown in the table below, the initial development costs of almost \$977,000 will generate relatively minor economic benefits as follows:

- Total output of \$3 million (i.e. gross revenue generated by businesses in each industry sectors);
- 8 jobs (measured as FTEs), leading to a \$591,000 increase in wages. Noting
 that 'direct' jobs relate to additional construction/development requirements
 and 'indirect' jobs are flow-on impacts to other sectors of the economy; and
- \$1.2 million in value-added (i.e. the marginal economic value that is added by each industry sector).

TABLE 26 SHORT TERM CONSTRUCTION IMPACTS (PHASE 1)

	DIRECT EFFECT	INDIRECT EFFECT	TOTAL FEFECT
Output (\$m)	\$0.977	\$2.042	\$3.019
Employment	2	6	8
Wages (\$m)	\$0.148	\$0.442	\$0.591
Value-added (\$m)	\$0.288	\$0.873	\$1.161

Source: REMPLAN data

ONGOING EXPENDITURE IMPACTS

In addition, the ongoing economic impact has been calculated by applying the year 5 (i.e. final year of cashflow period) figures to REMPLAN, including the direct visitor spend, ongoing expenditure and capital refresh. As shown in the table below, the ongoing annual economic benefits (both direct and indirect) are demonstrated by:

- Total output of \$17 million;
- 86 jobs, leading to a \$4.2 million increase in wages. Noting that 'direct' jobs relate to sectors servicing the tourism industry and 'indirect' jobs are flow-on impacts to other sectors of the economy; and
- \$7.9 million in value-added.

TABLE 27 ONGOING EXPENDITURE IMPACTS (PHASE 1)

	DIRECT EFFECT	INDIRECT EFFECT	TOTAL EFFECT
Output (\$m)	\$6.493	\$10.556	\$17.049
Employment	52	34	86
Wages (\$m)	\$1.889	\$2.323	\$4.212
Value-added (\$m)	\$2.930	\$4.963	\$7.894

Source: REMPLAN data

PHASE 2 RESULTS

SHORT TERM CONSTRUCTION IMPACTS

As phase 2 does not include any additional construction budget, the short term construction impacts are the same as phase 1 (see Table 26).

ONGOING EXPENDITURE IMPACTS

To measure the impacts of phase 2, the phase costings of \$761,000 were included *in addition to* the year 5 ongoing expenditure and applied to REMPLAN. Table 28 details the direct and indirect economic benefits as follows:

- Total output of \$19.4 million;
- 93 jobs, leading to a \$5 million increase in wages; and
- \$9.1 million in value-added.

TABLE 28 ONGOING EXPENDITURE IMPACTS (PHASE 2)

	DIRECT EFFECT	INDIRECT EFFECT	TOTAL EFFECT
Output (\$m)	\$7.254	\$12.126	\$19.380
Employment	55	38	93
Wages (\$m)	\$2.247	\$2.704	\$4.951
Value-added (\$m)	\$3.332	\$5.747	\$9.080

Source: REMPLAN data

These figures represent additional economic benefit over and above the phase 1 results.

PHASE 3 RESULTS

SHORT TERM CONSTRUCTION IMPACTS

Finally, the phase 3 components were included in the economic impact assessment to determine the effects of implementing and funding a new master plan and building major infrastructure to transform the trail into an international icon.

As such, the construction impact takes into account the initial phase 1 development costs of \$977,000, as well as the \$10 million required to plan and develop the major infrastructure component. This generates the following results:

- Total output of \$33.9 million;
- 94 jobs, leading to a \$6.6 increase in wages; and
- \$13 million in value-added.

TABLE 29 SHORT TERM CONSTRUCTION IMPACTS (PHASE 3)

	DIRECT EFFECT	INDIRECT EFFECT	TOTAL EFFECT
Output (\$m)	\$10.977	\$22.937	\$33.915
Employment	24	70	94
Wages (\$m)	\$1.665	\$4.970	\$6.635
Value-added (\$m)	\$3.233	\$9.814	\$13.047

Source: REMPLAN data

The economic impact from phase 3 clearly outweighs the benefits realised from phases 1 and 2.

ONGOING EXPENDITURE IMPACTS

As there is no additional ongoing expenditure or revenue items included in the costbenefit analysis, the impact for phase 3 replicates phase 2 (see Table 28).

Although the economic benefits are greatest when incorporating all project phases, the funding requirements are also the highest. This should be considered when examining the overall project impact.

17.8. IMPLEMENTATION PLAN AND PROCUREMENT FOR GOLDFIELDS TRACK MASTER PLAN

The following implementation plan is sourced from the Goldfields Track Master plan.

OBJECTIVE	KEY ACTIONS	LEAD	PARTNER	TIMING	OUTPUT
PHASE 1 MASTER PLAN			·		
Positioning and Marketing Actions					
Formalise the roles and responsibilities of RWG	Establish a RWG subcommittee, under the GTI structure to develop and deliver the master plan	GTI		Year 1	RGW sub-committee established
Lead engagement to support walking and cycling within the region	Undertake ongoing advocacy with stakeholders to realise high priority, longer term projects.	GTI	Regional Stakeholders	Ongoing	Stakeholders are aware of high priority, long term projects
Understand and engage with walking and cycling visitors who use RWG	Adopt processes to support RWG website usage and visitor engagement through analytic tools.	GTI	RTBs, Tourism Product	Quarterly	Analytic tools provide GTI with an understanding of website usage and engagement
Foster a process of continuous improvement	Annual review of objectives and actions to monitor progress and ensure outcomes are achieved.	GTI		Annually	Annual review completed
	Review master plan within 5 years to examine implementation and to ensure its ongoing relevance	GTI	RTBs, Tourism Product, LGAs	Year 5	Master plan review completed
Understand and engage with businesses who leverage the RWG trail	Provide RWG product knowledge to referral agents and trail side businesses	GTI		Ongoing	Referral agents and trail side businesses are aware of RWG product information
Infrastructure Implementation and Proc	urement		'		
Planning	Undertake any required planning studies such as environment and heritage studies for new sections of track.				
Deliver Infrastructure Improvements	Developed detailed design work and construction drawings for identified infrastructure	GTI		Year 1	Detailed Plans
Identify updated costings	Update costings for identified infrastructure	GTI	Quantity Surveyor	Year 1	
Tender Drawings	Undertake a tender for construction elements of the project Appoint preferred contractor	GTI	Engineers	Year 1	
	Undertake construction		Preferred contractor Volunteer labour	Year 2-4	

OBJECTIVE	KEY ACTIONS	LEAD	PARTNER	TIMING	OUTPUT
PHASE 2: ICONIC MASTER PLAN					
Project Brief	Develop a project brief for a new visionary master plan that will deliver a trail of National Significance.	GTI		Year 2	
Tender	Tender out project brief for new visionary master plan	GTI		Year 2	
Undertake New Visionary Master plan	Prepare new visionary master plan for Goldfield Track			Year 2-3	

18. WIMMERA RIVER DISCOVERY TRAIL

18.1. INTRODUCTION

The Wimmera River Discovery Trail is a two-stage bike trail that follows the Wimmera River, travelling from Horsham to Lake Hindmarsh.

The two stages of the Wimmera River Discovery Trail include:

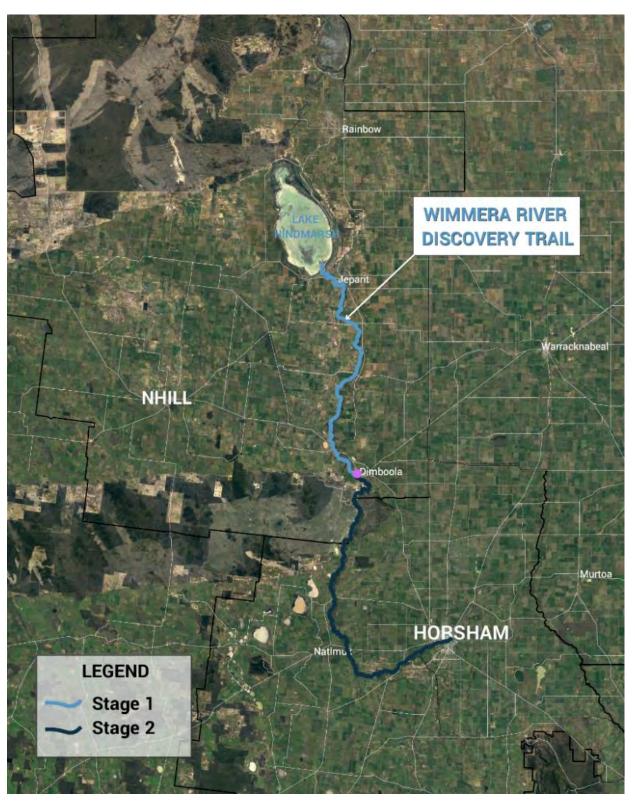
- Stage 1: Dimboola to Lake Hindmarsh; and
- Stage 2: Horsham to Dimboola.

This business case draws on a previous detailed feasibility study which was undertaken by TRC Tourism for Hindmarsh Council (for Stage 1 Dimboola to Lake Hindmarsh.

18.2. LOCATION

The Wimmera River Discovery Trail is located in the Wimmera Mallee region and connects a number of towns within the Wimmera Mallee area. Figure 14 provides an outline of the location.

FIGURE 15 LOCATION



Source: Urban Enterprise, 2018

18.3. INVESTMENT LOGIC MAPPING

18.3.1. DRIVERS

- Create new employment opportunities in the region. Wimmera Southern
 Mallee is projected to decrease at an average annual rate of 0.83% per
 annum which would result in a loss of 3,201 people by 2031. New
 employment opportunities are urgently needed to stimulate the local
 economy and create jobs for the existing community.
- Lifestyle attraction. Investment in tourism and community assets is critical
 for attraction of residents to regional and rural Victoria. This project will
 deliver a major piece of infrastcutrue which will be used by the local
 community as well as visitors to the region.
- Increase visitation to the region. Attracting new visitors to the region is a
 key driver for further investment in tracks and trails, as well as providing for
 cycling as an activity for existing visitor markets.
- Leverage off visitors to Horsham. There is a pronounced concentration of
 visitor activity in Horsham. Horsham has a high level of visitors travelling
 for business and visiting friends and relatives. A trail starting from that point
 would enhance cycling infrastructure within Horsham, while dispersing
 visitors from this visitor node. Investment in the Wimmera River Discovery
 Trail would disperse visitors throughout the surrounding region.
- Leverage off Silo Art Trail. The Silo Art Trail has revitalised small towns and brought thousands of new visitors to the region. Investment into bike riding and bushwalking infrastructure will provide additional visitor experiences, to encourage visitors to stay and explore the region. There are synergies between the trail location and proposed stage 2 of the Silo Art project which may create destinations along the trail.
- Large domestic market potential. 11.6% of the population within Queensland, Victoria, South Australia and New South Wales engage in bike riding on designated recreational bike trails. This equates a total domestic market of 2.2 million

- International market potential. There are a number of tourism products in
 the Wimmera Southern Mallee that are gaining interest in international
 markets. These include the Silo Art Trail, Grampians National Park and Lake
 Tyrell. The Wimmera River Discovery Trail will provide a new way for
 international visitors to experience the Wimmera Mallee.
- Indigenous tourism. The Wimmera River is rich indigenous cultural heritage.
 Many sites have been identified along the trail which provide the opportunity for interpretation. The Barengi Gadjin Lands Council has been deeply involved in this project since its inception and are one of the key stakeholders. As such, the trail has the potential for experiences of indigenous culture in the region.

18.3.2. ISSUES

- Limited recreational cycling trails. There are few quality recreational cycling trails in the region. Investment in recreational trails that lead from key township destinations and link to secondary destinations will encourage visitor dispersal.
- Deliver infrastructure that visitors want. Market research shows that target
 cycling markets are seeking services and infrastructure to complement their
 visit. This includes food and beverage experiences, accommodation and
 cycle tourism services.
- Commencement from Dimboola. Whilst Dimboola is an attractive visitor location, the project is strengthened if it eventually commences from Horsham. This provides a large visitor and population catchment for the trail.
- Lack of visitor experiences that leverage from the Silo Art Trail. The Wimmera River Discovery Trail will provide a complementary nature-based trail experience to the Silo Art Trail. With delivery of stage 2 of the Silo Art Trail the Wimmera River Discovery Trail will provide a link between destination villages.

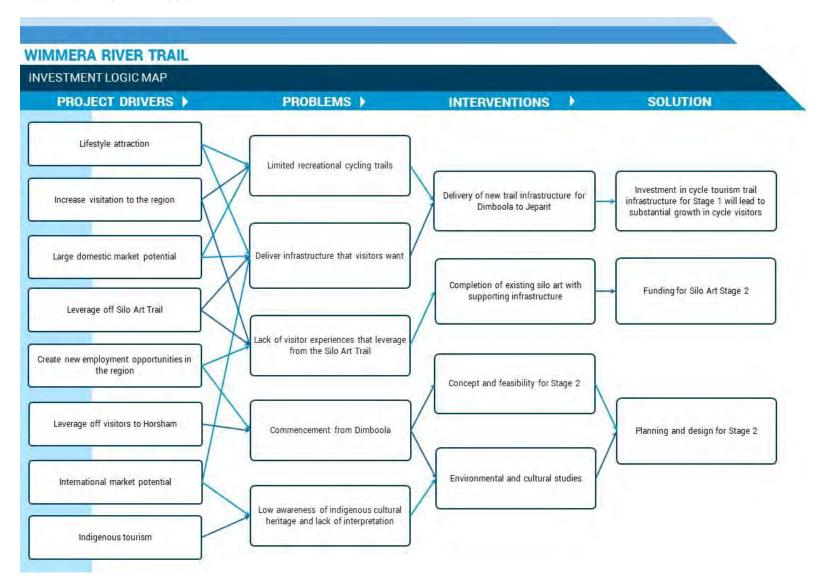
18.3.3. INTERVENTIONS

- Delivery of new trail infrastructure for Dimboola to Lake Hindmarsh.
 Feasibility and concept planning work is complete for the Dimboola to Lake Hindmarsh section of the project. This section requires investment funding to proceed.
- **Investment into silo art**. Stage 2 of the Silo Art project is a critical component of this study. This will strengthen the village destinations along the trail route.
- **Environmental and cultural studies**. Additional environmental and cultural studies will be required to progress stage 1 and stage 2 delivery.
- Concept and feasibility for Stage 2. Further concept and feasibility studies are required for Stage 2 Horsham to Dimboola. This will finalise the route options for the project.

18.3.4. SOLUTION

- Investment in cycle tourism trail infrastructure for Stage 1 will lead to substantial growth in cycle visitors.
- Planning and design for Stage 2 will be required to progress the project.
- Funding for Silo Art Stage 2.

FIGURE 16 INVESTMENT LOGIC MAP



18.4. CONCEPT

18.4.1. VISION

The Wimmera River Discovery Trail is recognised for providing a rich nature and heritage experience for growing numbers of visitors and making a positive contribution to local communities and businesses.

18.4.2. OVERVIEW

The Wimmera River Discovery Trail will be developed and promoted as a suite of experiences for a number of markets offering journeys of different lengths along the river corridor as well as visitor experiences at key hubs including Horsham, Dimboola, Jeparit and Ebenezer where visitors may do short walks or experience the river, environment and cultural stories without actually doing major sections of the Trail.

Because of the long distances, the relatively unchanging landscape along the route, and the degree of disturbance by other users in some sections, it is recommended that there is staged development of a cycling route which is also available to walkers. Cyclists can cover the distances across the gentle terrain with ease and their experience is generally less impacted by disturbance by other users.

Development of a board walk/wetland experience associated with the wetlands adjacent to the museum at Jeparit and redevelopment of the old Jeparit railway bridge, along with the establishment of a pedestrian bridge upstream of Dimboola to complete the town walking loops would also be a key part of the Wimmera River Discovery Trail experience that would appeal to a broader market and assist in better positioning the overall trail experience.

The Silo Art Trail Stage 2 and development of indigenous experiences along the trail with strengthen its potential as a key product in the region.

18.4.3. STAGE 1 DIMBOOLA TO LAKE JEPARIT [WIMMERA RIVER DISCOVERY TRAIL]

Length: 61 Kms

The route would follow the eastern side of the river initially through Dimboola Common to the vicinity of the Dimboola Weir, and then a series of vehicle tracks on the eastern side of the Wimmera River to a potential underpass beneath the Western Highway and then a road into the Lochiel Rest Area. There is one important gap where private tenure crosses the river about 2km north of Dimboola (Wimmera St).

From the northern end of the sealed Lochiel Rest Area, the route could follow an old road to pass under the railway, then existing vehicle tracks along the eastern side of the river to join Five Chain Road and follow it to Wundersitz Crossing. From here the route would follow existing vehicle tracks along the eastern side of the river to Spears Crossing Road and onward to a track running off Ebenezer Mission Road. From here much of the route is indistinct but would remain on the eastern side of the river until it again can utilise existing tracks all the way to Jeparit.

Near Jeparit the track would need to run along the Dimboola-Rainbow Road near the Pioneer Museum, or alternately utilise a wetlands walk which would cross the river and access some of the extensive wetlands to the south of Jeparit. This wetlands walk could be an important attraction in its own right.

From the Pioneer Museum the route would utilise the Edward John Eyre Heritage River Walk, which in places is poorly defined and subsumed by vehicle activity. Extensive vehicle control works would be required to improve the amenity of this section. The route continues on the eastern side of the river past the golf course and to the old railway bridge. Subject to structural assessment, and any necessary repairs and modifications, the route would cross the bridge to the western side of the river and continue to the lake shore then around to Four Mile Beach. An adaptation of the old railway bridge could become an attraction in its own right and could form the basis of an adventure attraction.

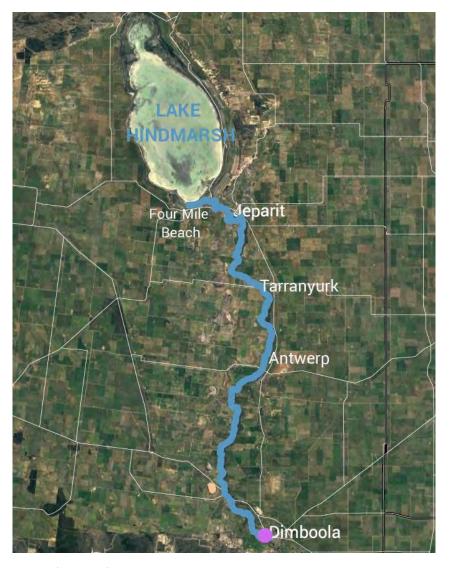
If the old railway bridge is not structurally suitable for adaptation, then the route would need to cross the river either via the historic road bridge near the golf course, or on the Nhill-Jeparit road bridge.

Estimates have been prepared assuming adaptation of the old railway bridge, likely a more expensive but more interesting choice.

TRAIL FEASIBILITY

- A continuous trail on public land for walking and cycling could be created along this section, either using existing trails (for most of the distance) or a purpose-built trail, except for the section of private land just north of Dimboola.
- The natural substrate provides a good surface for much of the distance, with short sections of sand and potentially boggy ground.
- No structures are required along most of the route, although clear trail delineation would be required at gullies.
- Any trail on the river floodplain will be prone to (infrequent) flood impacts.
- Structures will be required to access the Jeparit wetlands via a boardwalk and bridging, and to adapt the old railway bridge for safe pedestrian and cycle use.

FIGURE 17 STAGE 1: DIMBOOLA TO LAKE HINDMARSH



Source: Urban Enterprise, 2018



COSTS

TABLE 30 PROJECT BUDGET FORECAST OF STAGE 1 OF THE WIMMERA RIVER DISCOVERY TRAIL

PROJECT BUDGET FORECAST	COST
Track General:	
Cultural Heritage Management Plan	\$100,000.00
Land Surveys	\$5,000.00
Flora/Fauna Surveys	\$10,000.00
EIA Reports and works approvals	\$20,000.00
General track works	\$36,000.00
Specific track hardening	\$36,000.00
6 x 6m bridges (side gullies etc)	\$48,000.00
track markers and interpretive signage	\$20,000.00
Fencing/bollards	\$50,000.00
Sub-Total	\$325,000.00
Jeparit Rail Bridge retrofit:	
Surveys/consultant fees	\$8,000.00
Design/Construction/Installation	\$600,000.00
Sub-Total	\$608,000.00
Total Expenditure	\$933,000.00
Contingency 10%	\$93,300.00
Total Project Expenditure	\$1,026,300.00

Source: Commercial in confidence indicative quotes

18.4.4. STAGE 2: DIMBOOLA TO HORSHAM

This stage requires further concept development and will provide a link between Horsham and Dimboola. The proposed route will include the following sections:

SECTION 1: DIMBOOLA TO QUANTONG

There exists a network of informal tracks and trails that may be utilised. It is estimated that this section of trail would be around 40 kms. Key challenges will include:

- Crossing of the Wimmera Highway;
- Extent of private land holdings;
- Billabong crossings;
- Potential requirement of a bridge to cross over the Wimmera River to take advantage of public land reserves.

SECTION 2: HORSHAM TO QUANTONG

Informal roads and trails already exist through much of this section – approximately 25 kms. Key challenges will include:

- A bridge over the McKenzie River;
- Linkages into Horsham CBD;
- Extent of private land holdings;

SECTION 3: NATIMUK TO QUANTONG

This section links Natimuk to Quantong and is approximately 8 kilometres.

There is opportunity to utilise the proposed rail trail between Horsham and Natimuk

COSTS

Project costs are estimated around \$1.5 million. The exact costs would need to be determined following ground truthing and a feasibility study. As such, these costings are not included in the cost-benefit assessment below and the analysis focuses on stage 1 only.

18.5. DEMAND

Demand for the trail will be generated from the following markets:

- Residents within the catchment and the large residential market located in Horsham;
- Visiting friends and relatives leveraging off the large residential catchment;
- Existing visitors who are already travelling through the region to visit Silo Art and staying in destinations such as Horsham and Dimboola would utilise sections of the trail:
- Attraction of recreational trail enthusiasts wishing to explore part of Victoria;
- Grampians visitors seeking new experiences;
- International 'experience seeker' visitors drawn to the indigenous experience provided by the trail.

VISITATION PROJECTIONS

Demand has been modelled for visitation for Stage 1 and 2 combined. This is presented in Table 311.

Over the first five years of operation, total visitation to the region is expected to increase from 19,889 in year 1 to 22,723 in year 5, based on 8,551 existing visitors to the region using the trail; as well as attracting new visitors, peaking at 14,173 by year 5.

The existing visitor usage assumes that 2% of the existing holiday and visitor market to the region will visit the trail¹²; and new visitors to the region are based on a proportion of the rider market that intends to visit the trail, provided through a survey.

These estimates are sourced from Tourism Research Australia market figures, with internal calculations determining the penetration rate for the Wimmera River Discovery Trail. Detailed market assessment was undertaken into key cycling

¹² The region includes Horsham and Hindmarsh.

markets for Victoria's North East, which was used to determine capture rates for attracting new cycle visitors.

TABLE 31 WIMMERA RIVER DISCOVERY TRAIL VISITATION ESTIMATES

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
New visitors	11,338	12,047	12,755	13,464	14,173
Existing visitors	8,551	8,551	8,551	8,551	8,551
Total visitors	19,889	20,597	21,306	22,015	22,723

Source: TRA NVS & IVS Visitation; Urban Enterprise estimates



18.6. SOCIAL AND ECONOMIC BENEFIT

SOCIAL

- Improved health and fitness of local communities, through improved infrastructure for cycling. Cycling is a healthy low-impact exercise that can be enjoyed by people of all ages, from young children to older adults. It is fun and low cost and can reduce long term health problems associated with sedentary lifestyles;
- Cycling provides independent travel for those who might otherwise have their travel options restricted. It offers increased mobility to many groups of the population with low rates of car ownership, such as low-income earners, unemployed people, seniors and those under 18 years of age. Cycling can also help older people avoid isolation, as well as stay mentally and physically healthy;
- High quality product will increase local pride and encourage thriving town centres:
- An increase in demand for services related to cycling and the food and beverage industry will result in more diverse local employment opportunities.

ECONOMIC BENEFITS

- Attraction of new visitors to the region and increasing levels of expenditure to support the local economy;
- Increased visitor yield through improvement to township links and improvement to businesses which are engaging and service track visitors;
- Dispersing visitors from Horsham deeper into the Wimmera Mallee;
- Supporting the economic health of the small villages of the Wimmera Mallee:
- Short term construction impacts;
- Ongoing economic benefits from visitor spend.

18.6.1. NET PRESENT VALUE ASSESSMENT AND COST BENEFIT

As shown in the five-year cashflow below (and based on a 7% discount rate) the project will generate economic benefits, demonstrated by:

- A positive NPV of \$13.1 million; and
- A BCR of 9

These results have been derived from significant direct benefit, generated through additional visitor spend of \$217 per trip for new visitors (assuming an average length of stay of 2.8 nights); and \$77.50 for existing visitors (assuming they will spend an additional night in the region).

The ongoing expenditure estimates assumes a marketing budget of \$50,000 per annum, as well as ongoing maintenance costs of \$1,200 per kilometre.

TABLE 32 WIMMERA RIVER DISCOVERY TRAIL COST-BENEFIT ASSESSMENT

	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Direct Benefit	\$0	\$3,123,035	\$3,358,726	\$3,604,251	\$3,859,952	\$4,126,186
Ongoing Expenditure	\$0	\$123,200	\$126,280	\$129,437	\$132,673	\$235,333
Development Costs	\$1,026,300	\$0	\$0	\$0	\$0	\$0
Net Impact	-\$1,026,300	\$2,999,835	\$3,232,446	\$3,474,814	\$3,727,280	\$3,890,853
NPV	\$13,054,760					
BCR	9.0					

Note: All benefit and expenditure estimates are inflated by 2.5% per annum

18.6.2. ECONOMIC IMPACT ASSESSMENT

The project's economic impact is based on REMPLAN economic data for Victoria, assuming the key benefits of the project will positively impact the Victorian economy.

SHORT TERM CONSTRUCTION IMPACTS

As shown in the table below, the initial capital costs will generate:

- Total output of \$3.2 million;
- 9 jobs, leading to a \$621,000 increase in wages; and
- \$1.2 million in value-added.

TABLE 33 SHORT TERM CONSTRUCTION IMPACTS

	DIRECT EFFECT	INDIRECT EFFECT	TOTAL EFFECT
Output (\$m)	\$1.026	\$2.144	\$3.170
Employment	2	7	9
Wages (\$m)	\$0.156	\$0.465	\$0.621
Value-added (\$m)	\$0.302	\$0.917	\$1.219

Source: REMPLAN data

ONGOING EXPENDITURE IMPACTS

In addition, the ongoing economic impact (using year 5 capital, consumption and expenditure estimates) is demonstrated by the following direct and indirect benefits:

- Total output of \$11.5 million;
- 57 jobs, leading to a \$2.8 million increase in wages; and
- \$5.3 million in value-added.

TABLE 34 ONGOING EXPENDITURE IMPACTS

	DIRECT EFFECT	INDIRECT EFFECT	TOTAL EFFECT
Output (\$m)	\$4.362	\$7.096	\$11.458
Employment	35	22	57
Wages (\$m)	\$1.273	\$1.561	\$2.834
Value-added (\$m)	\$1.973	\$3.335	\$5.308

Source: REMPLAN data

18.6.3. IMPLEMENTATION AND PROCUREMENT PLAN (WIMMERA RIVER DISCOVERY TRAIL)

OBJECTIVE	KEY ACTIONS	LEAD	PARTNER	TIMING	OUTPUT
STAGE 1 DIMBOOLA TO LAKE HINDN	1ARSH	<u> </u>	·		·
Diagning	Undertake any required planning studies such as Environment				
Planning	and heritage studies for new sections of track.				
Deliver Infrastructure Improvements	Developed detailed design work and construction drawings for	Hindmarsh		Year 1	Detailed Plans
	identified infrastructure	Council		real I	Detailed Flairs
Identify updated costings	Update costings for identified infrastructure	Hindmarsh	Quantity	Year 1	
identify updated costings	Opdate costings for identified infrastructure	Council	Surveyor	real I	
Tender drawings	Undertake a tender for construction elements of the project	Hindmarsh	Engineers	Year 1	
	Appoint preferred contractor	Council		T Cal 1	
			Preferred		
	Undertake construction		contractor	Year 2	
			Volunteer labour		
STAGE 2: DIMBOOLA TO HORSHAM					
	Appoint a qualified consultant to undertake a detailed concept				
	and feasibility study. This will consider the following:				
	Ground truthing of trail;	Horsham	Trail consultant		
Concept and Feasibility Study	Any trail works required	Rural City	and engineer	Year 2	
	Any major infrastructure items (bridges)	riural City	and engineer		
	Proposed route				
	Costs for proposed route				

19. ARARAT TRAILS MOUNTAIN BIKE PARK

19.1. INTRODUCTION

The Ararat Trails Mountain Bike Park will formalise the existing trails in the Ararat Hills to create a network of mountain bike trails.

Following formalisation of existing trails including trail head facilities, signage and trail improvement (Stage 1), a subsequent stage is also considered which will expand the trail network to create new cross country and gravity trails.

This business case builds on master planning and concept work undertaken by WorldTrail specialist mountain bike consultants (for Parks Victoria).

19.2. LOCATION

Ararat Trails Mountain Bike Park are located in the Ararat Hills just north of Ararat township as shown in Figure 16.

FIGURE 18 LOCATION OF ARARAT TRAILS



Source: Urban Enterprise, 2018

19.3. INVESTMENT LOGIC MAPPING

19.3.1. PROJECT DIVERS

- Gap in mountain bike infrastructure in region. There are limited mountain
 biking opportunities to support nature-based tourism in the region.
 Mountain biking in the Grampians RDV region is very limited in terms of
 quality single track mountain bike trails and parks. There are gaps across
 all mountain biking typologies including cross country, epic trail rides and
 downhill/ gravity parks.
- Need to leverage from Grampians National Park. Grampians National Park
 is a major nature-based destination in Victoria, however there is limited
 mountain biking opportunities for formalised 'single track' due to
 policy/planning restrictions in place. Ararat Trails Mountain Bike Park is near
 the Grampians National Park and will complement the existing product mix.
- Participation in cycling is substantial and provides a large market base for growth. 6.2% of the population of key domestic markets in Vic, NSW, SA, Qld and ACT participated 6.2% in mountain biking in 2017. This equates to a market of 1.19 million mountain bikers to draw on.
- Health benefits for residential population. The Ararat Trails Mountain Bike Park will provide infrastructure to encourage active recreation within the local population.
- Cycling community. Ararat and the surrounding area has a strong cycling culture and has a number of registered clubs which would make use of the trails. These clubs include Ararat Dirt Riders, Ararat & District Cycling Club and Grampians Vets Cycling Club.
- Need to strengthen tourism in Ararat. Ararat is the gateway for many visitors to the Grampians, however the township has limited tourism product that appeals to Grampians nature-based market. The development of mountain bike trails will encourage Grampians visitors to stop and potentially stay in Ararat.

19.3.2. ISSUES

- Limited mountain biking activity When benchmarked with other regions
 there is very limited formalised mountain biking in the Grampians Region It is critical that future investment is planned and has some linkage to
 townships which can provide supporting infrastructure.
- The Ararat Hills Mountain Bike trails are currently very limited. There is no trail head, signage or clear mapping of the trails and unless the rider has local knowledge of the network navigation is difficult. This project will not only improve but formalise the existing trail network.
- Local resident inactivity. Physical inactivity costs the Australian economy approximately \$13.8 billion per year (Department of Infrastructure and Transport, 2012). Cycling is a very effective way to increase daily physical activity.

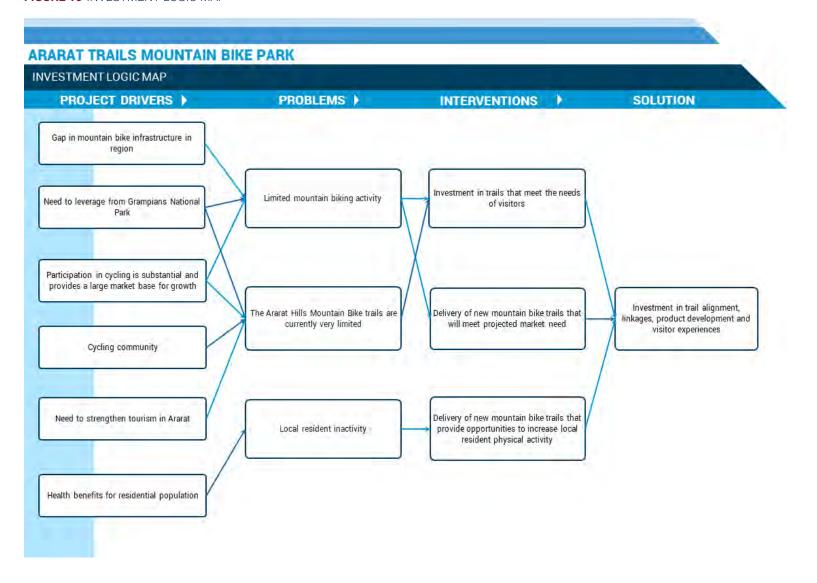
19.3.3. INTERVENTIONS

- **Investment in trails that meet the needs of visitors.** Cycling infrastructure should be planned to meet growing demand by visitors and to attract the large domestic cycling market in Australia.
- Delivery of new mountain bike trails that will meet projected market need.
- Investment in public transport and associated infrastructure.

19.3.4. SOLUTION

Investment in trail alignment, linkages and visitor experiences. Create an
extensive well-designed trail network, which will include a mix of gravity flow
trails and cross trails.

FIGURE 19 INVESTMENT LOGIC MAP



19.4. CONCEPT

The concept, based on information received from Parks Victoria, includes four stages of works for Ararat Trails Mountain Bike Park, assumed to be implemented in consecutive years. This includes:

- Stage 1 (Year 0): Implementation of Core Network, including development of Secondary Trailhead (28.4km of both new and existing trail));
- Stage 2 (Year 1): Implementation of Future Development Trail 8 and development of Primary Trailhead (4.7km);
- Stage 3 (Year 2): Implementation of Future Development Trail 9, 10 and One Tree Hill Walking Track (25km); and
- Stage 4 (Year 3): Linkages to Ararat and rehabilitation of unnecessary/duplicate trails.

The costings and individual components are detailed in Table 35, assuming that:

- Sections of trail using existing MVT do not require any improvement works and hence are allocated no funding;
- Sections of trail using existing MTB singletrack require some improvement works generally, with an allowance of \$10/m applied;
- All MTB trails to be constructed are costed at the same rate, regardless of trail difficulty rating, style and location within ARP; and
- The proposed new walking/fitness track is assumed to require a high level
 of detailed work and finishings, including numerous steps and other
 infrastructure items like handrails, landings, furniture and an imported
 surface material. This is reflected in the higher per metre cost rate used.

FIGURE 20 EXISTING TRAIL NETWORK

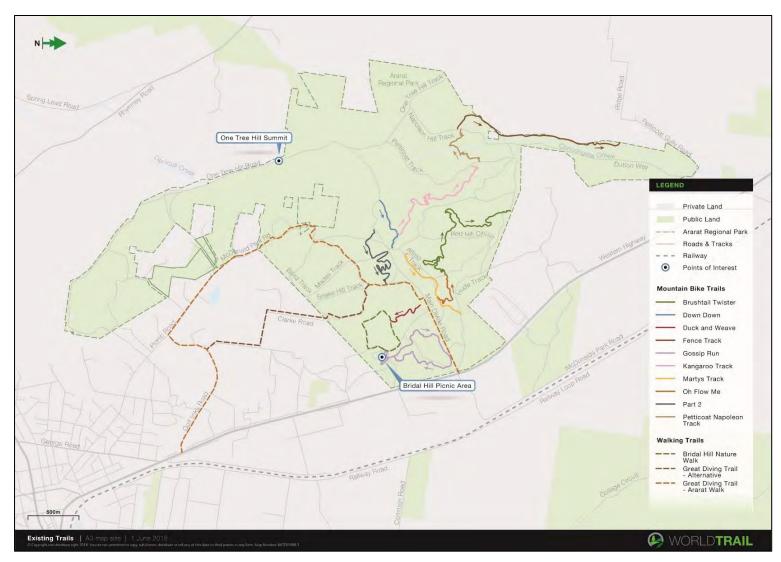


FIGURE 21 POTENTIAL TRAILHEAD SITES

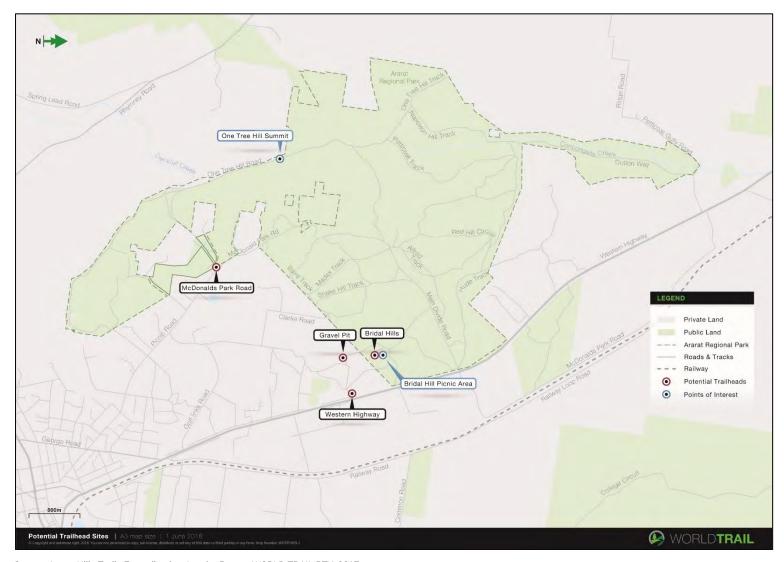


FIGURE 22 TRAIL NETWORK LAYOUT

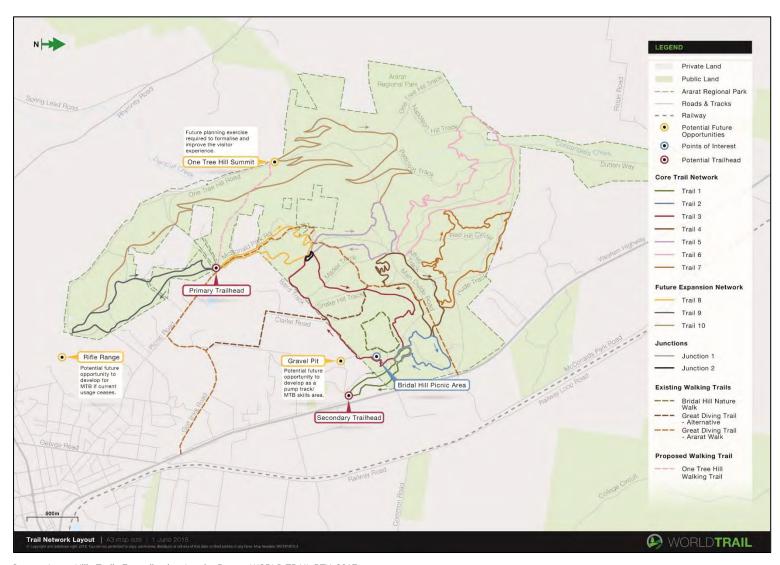
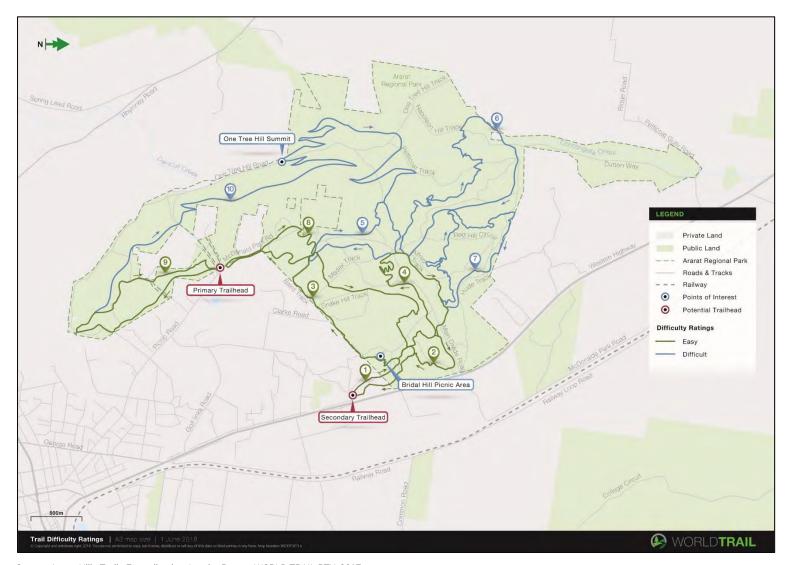


FIGURE 23 TRAIL DIFFICULTY RATINGS



19.5. COSTS

The total project development cost, for all project components, is estimated at \$2.7 million. These costs were provided by World Trail. As mentioned above, Urban Enterprise assumes the project stages are funded and implemented over consecutive years.

TABLE 35 PROJECT COMPONENTS AND BUDGET

STAGE	ITEM	COST
1 - Implementation of Core Network, including development of Secondary Trailhead.	Ground-truthing of new trails, flora and fauna assessment, cultural heritage assessments, surveys etc.	\$46,500.00
,	Construction of Core Network trails 1-7.	\$301,990.00
Includes 22.3km (58%) of overall trail network.	Design and construction of Secondary Trailhead	\$110,000.00
Includes 6.1km (31%) of new	Installation of trail signage	\$46,400.00
trails.	Project management	\$40,000.00
Stage Sub-total		\$544,890.00
2 - Implementation of Future Development Trail 8 and development of Primary	Ground-truthing of new trails, flora and fauna assessment, cultural heritage assessments, surveys etc.	\$16,500.00
Trailhead.	Construction of Future Development Trail 8.	\$86,850.00
Includes 2.5km (7%) of overall trail network.	Design and construction of Primary Trailhead	\$540,000.00
Includes 2.2km (11%) of new	Installation of trail signage	\$5,600.00
trails.	Project management	\$40,000.00
Stage Sub-total		\$688,950.00
3 - Implementation of Future Development Trail 9, 10 and	Ground-truthing of new trails, flora and fauna assessment, cultural heritage assessments, surveys etc.	\$87,000.00
One Tree Hill Walking Track.	Construction of Future Development Trail 9, 10 and One Tree Hill Walking Track.	\$405,810.00
Includes 13.5km (35%) of overall trail network.	Installation of trail signage	\$28,000.00
Overall trail HetWOIK.	Project management	\$40,000.00

STAGE	ITEM	COST
Includes 11.5km (58%) of new trails.		

Stage Sub-total		\$560,810.00
4 - Linkages to Ararat and rehabilitation of	Cycling & walking linkages to Ararat, in line with recommendations of 'Ararat on the Move', ARC's active transport strategy. Note - estimate only.	\$200,000.00
unnecessary/duplicate trails.	Closure and rehabilitation of unnecessary/duplicate trails. Note - estimate only.	\$200,000.00
	Marketing including development of website and trail maps.	\$50,000.00
	Project management	\$40,000.00
Stage Sub-total		\$490,000.00
Project Sub-Total		\$2,284,650.00
Contingency (20%)		\$456,930.00
Project Total		\$2,741,580.00

Source: World Trail 2018

19.6. DEMAND

Demand is likely to be derived from the following markets:

- Local use including the local mountain bike club (Ararat Dirt Riders);
- Regional use Ballarat is less than one hour away, and it is envisaged that
 mountain bikers from the broader regional catchment would visit (via car
 and public transport) and use the trails;
- Grampians visitors Grampians is already a key nature-based destination and attracts a number of road cyclists. Market research shows that there is large cross over of cycling activity which would encourage existing road cyclists to utilise Ararat Trails
- New mountain bike visitors The Ararat Trails will attract new crosscountry mountain bikers to Ararat.

VISITATION PROJECTIONS

Table 36 provides an overview of projected visitors to the Ararat Trails based on modelling of mountain bike markets and existing visitor capture.

Over the first five years of operation, total visitation to the region is expected to increase from 21,810 in year 1 to 24,489 in year 5, based on 11,092 existing visitors to the region using the trail on an annual basis; as well as attracting 13,398 users (by year 5) from new visitors to the region.

The existing visitor usage assumes that 2% of the existing holiday and visitor market to the region will visit the trail¹³; and new visitors to the region are based on a proportion of the rider market that intends to visit the trail, provided through a survey.

TABLE 36 ARABAT TRAILS VISITATION ESTIMATES

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
New visitors	10,718	11,388	12,058	12,728	13,398
Existing visitors	11,092	11,092	11,092	11,092	11,092
Total visitors	21,810	22,480	23,150	23,819	24,489

Source: TRA NVS & IVS Visitation; Urban Enterprise estimates

19.7. ECONOMIC BENEFIT

The following economic benefits are likely to be generated:

- Attraction of new visitors to the region and increasing levels of expenditure to support the local economy;
- Increased visitor yield through improvement to township links and improvement to businesses which are engaging and service track visitors;
- Dispersing visitors from Grampians National Park;
- Short term construction impacts; and
- Ongoing economic benefits from visitor spend.

19.7.1. NET PRESENT VALUE ASSESSMENT AND COST BENEFIT

The Ararat Trails project also generates a positive NPV and BCR greater than one. Based on the cost-benefit assessment in the table below, and using a discount rate of 7%, the project's NPV is \$12.1 million and the BCR is 5.4. Therefore, the project can be classified as financially viable and sustainable.

The direct benefit is again generated from additional visitor spend in the region, based on new visitor spend of \$217 per trip (assuming an average length of stay of 2.8 nights); and \$77.50 for existing visitors (assuming they will spend an additional night in the region).

The ongoing expenditure estimates assumes ongoing maintenance costs of \$58,000 per annum (indexed over time).

TABLE 37 ARARAT TRAILS COST-BENEFIT ASSESSMENT

	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Direct Benefit	\$0	\$3,185,418	\$3,414,050	\$3,652,123	\$3,899,966	\$4,157,919
Ongoing Expenditure	\$0	\$58,000	\$59,450	\$60,936	\$62,460	\$64,021
Development Costs	\$653,868	\$826,740	\$672,972	\$588,000	\$0	\$0
Net Impact	-\$653,868	\$2,300,678	\$2,681,628	\$3,003,187	\$3,837,507	\$4,093,898
NPV	\$12,136,540					
BCR	5.4					

Note: All benefit and expenditure estimates are inflated by 2.5% per annum

19.7.2. ECONOMIC IMPACT ASSESSMENT

The project is expected to generate economic benefits for the region and Victoria in general, from both an initial capital investment as well as ongoing expenditure and consumption impacts.

¹³ The region includes Horsham.

SHORT TERM CONSTRUCTION IMPACTS

As shown in the table below, the development costs of \$2.7 million (provided by Parks Victoria), spent over four project stages, will generate in the short term:

- Total output of \$8.5 million;
- 24 jobs, leading to a \$1.7 million increase in wages; and
- \$3.3 million in value-added to all sectors of the economy.

TABLE 38 SHORT TERM CONSTRUCTION IMPACTS

	DIRECT EFFECT	INDIRECT EFFECT	TOTAL EFFECT
Output (\$m)	\$2.742	\$5.729	\$8.471
Employment	6	18	24
Wages (\$m)	\$0.416	\$1.241	\$1.657
Value-added (\$m)	\$0.807	\$2.451	\$3.258

Source: REMPLAN data

ONGOING EXPENDITURE IMPACTS

In addition, the ongoing economic impact (using year 5 capital, consumption and expenditure estimates) is demonstrated by the following direct and indirect benefits:

- Total output of \$\$11.5
- 56 jobs, leading to a \$2.7 million increase in wages; and
- \$5.1 million in value-added for each industry sector.

TABLE 39 ONGOING EXPENDITURE IMPACTS

	DIRECT EFFECT	INDIRECT EFFECT	TOTAL EFFECT
Output (\$m)	\$4.222	\$6.852	\$11.074
Employment	34	22	56
Wages (\$m)	\$1.220	\$1.507	\$2.727
Value-added (\$m)	\$1.896	\$3.225	\$5.121

Source: REMPLAN data

19.8. IMPLEMENTATION PLAN

TASK	KEY ACTIONS	LEAD	PARTNER	TIMING	OUTPUT
Planning	Undertake any required planning studies such as Environment	Parks	Ararat Rural City		
i iai ii iii ig	and heritage studies for new sections of track.		Alalat Nulai City		
Deliver Infrastructure Improvements	Developed detailed design work and construction drawings for	Parks	Ararat Rural City	Year 1	Detailed Plans
Deliver illinastructure improvements	identified infrastructure	Victoria	Ararat Nurai City	real i	Detailed Flairs
Identify updated costings	Update costings for identified infrastructure	Parks	Quantity	Year 1	
	opuate costings for identified infrastructure	Victoria	Surveyor	real I	
Tender drawings	Undertake a tender for construction elements of the project	Parks	Engineers	Year 1	
render drawings	Appoint preferred contractor	Victoria	Liigiileeis	real I	
			Preferred		
Undertake construction			contractor	Year 2	
			Volunteer labour		

20. SUMMARY ECONOMIC ANALYSIS OF PRIORITY INVESTMENT PROJECTS

20.1. INTRODUCTION

This section combines the economic and financial impact from the individual projects to provide an overview of the total economic benefit that could be generated from the Grampians RDV Region Cycling Master Plan – Priority Projects. This analysis assumes all three project phases from the Grampians Trail project is fully funded and implemented.

20.2. DEMAND

VISITATION

Total visitation estimates to the region, based on visitor numbers to each of the projects, is forecast to increase from 73,010 in year 1 to 83,134 in year 5. This is comprised primarily of existing visitors, as well as new visitors.

It is expected that existing visitors to the region are more likely to be attracted to the various bike trails as they will seek out new product and activities to experience. In contrast, it is difficult to attract new visitors initially, as it requires a new market to be drawn to the region. Therefore, this figure is conservative and increases over time as the product brand and recognition also increases.

However, additional visitor modelling will be required, particularly to determine the impacts of each project phase for the Grampians Trail.

TABLE 40 TOTAL VISITATION ESTIMATES

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
New visitors	29,884	31,419	33,037	34,744	36,550
Existing visitors	43,126	43,596	44,314	45,301	46,584
Total visitors	73,010	75,014	77,351	80,045	83,134

Source: TRA NVS & IVS Visitation; Urban Enterprise estimates

20.3. ECONOMIC BENEFIT

20.3.1. NET PRESENT VALUE ASSESSMENT AND COST BENEFIT

As shown in the table below, the entire project is expected to generate significant economic benefits, demonstrated by a positive NPV of \$37.2 million as well as a BCR of 3.5. These figures reflect the viability and sustainability of the aggregated projects.

Due to the increases in visitation, it is assumed that there will be significant increases in visitor spend in the region, increasing from \$11.2 million in year 1 to approx. \$15 million by year 5. These benefits will outweigh total expenditure (both capital and ongoing), generating an overall positive net impact for the project.

TABLE 41 AGGREGATED COST-BENEFIT ASSESSMENT

	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Direct Benefit	\$0	\$11,216,008	\$11,903,625	\$12,673,268	\$13,534,327	\$14,498,813
Ongoing Expenditure	\$0	\$433,200	\$444,030	\$455,131	\$466,509	\$577,515
Development Costs	\$2,657,168	\$826,740	\$1,433,972	\$588,000	\$10,000,000	\$0
Net Impact	-\$2,657,168	\$9,956,068	\$10,025,623	\$11,630,137	\$3,067,818	\$13,921,298
NPV	\$37,164,109					
BCR	3.5					

Note: All benefit and expenditure estimates are inflated by 2.5% per annum

20.3.2. ECONOMIC IMPACT ASSESSMENT

In line with the positive NPV and BCR, the project is expected to generate significant economic benefits for the region and Victoria in general.

SHORT TERM CONSTRUCTION IMPACTS

As shown in the table below, the total development costs of approx. \$15 million is estimated to generate:

- Total output of \$45.6 million;
- 127 jobs, leading to a \$8.9 million increase in wages; and
- \$17.5 million in value-added.

TABLE 42 SHORT TERM CONSTRUCTION IMPACTS

	DIRECT EFFECT	INDIRECT EFFECT	TOTAL EFFECT
Output (\$m)	\$14.745	\$30.810	\$45.555
Employment	32	95	127
Wages (\$m)	\$2.237	\$6.676	\$8.913
Value-added (\$m)	\$4.342	\$13.182	\$17.524

Source: REMPLAN data

ONGOING EXPENDITURE IMPACTS

In addition, the ongoing economic impact (including any ongoing capital, consumption and expenditure estimates) is demonstrated by the following direct and indirect benefits:

- Total output of \$41.9 million;
- 206 jobs, leading to a \$10.5 million increase in wages; and
- \$19.5 million in value-added for each industry sector.

TABLE 43 ONGOING EXPENDITURE IMPACTS

	DIRECT EFFECT	INDIRECT EFFECT	TOTAL EFFECT
Output (\$m)	\$15.838	\$26.074	\$41.912
Employment	124	82	206
Wages (\$m)	\$4.740	\$5.772	\$10.512
Value-added (\$m)	\$7.201	\$12.307	\$19.508

Source: REMPLAN data

Overall, the project is of a size, scale and function that will generate increases in output, employment and economic value to the region and Victoria in general (both directly and indirectly).

20.4. SENSITIVITY ANALYSIS

A sensitivity analysis was applied to the economic benefit model to test the key area of risk, which we identified as the level of visitor demand. To mitigate the uncertainty around future visitor demand, which is based on trend data, Urban Enterprise applied a reduction of 50% to visitor numbers for each project to identify the financial and economic impact.

20.4.1. DEMAND

The table below shows the effect of a 50% reduction in visitation, which reduces to 36,505 in year 1 and 41,567 by year 5.

TABLE 44 TOTAL VISITATION ESTIMATES - 50% REDUCTION

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
New visitors	14,942	15,709	16,518	17,372	18,275
Existing visitors	21,563	21,798	22,157	22,650	23,292
Total visitors	36,505	37,507	38,675	40,023	41,567

Source: TRA NVS & IVS Visitation; Urban Enterprise estimates

20.4.2. NET PRESENT VALUE ASSESSMENT AND COST BENEFIT

Although visitor numbers are reduced in this scenario, it is assumed that all other variables remain constant, including visitor spend, development costs and ongoing expenditure requirements. In effect, the only variable that has been changed is the level of visitor spend, which, although reduced, increases from \$5.6 million in year 1 to \$7.2 million in year 5.

As shown in Table 45, even with a 50% reduction in visitation, the level of visitor spend is high enough to ensure the project is financially viable (albeit at a reduced level). This is demonstrated by an NPV of \$11.2 million and a BCR of 1.8.

TABLE 45 AGGREGATED COST-BENEFIT ASSESSMENT - 50% REDUCTION IN VISITATION

	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Direct Benefit	\$0	\$5,608,004	\$5,951,813	\$6,336,634	\$6,767,164	\$7,249,406
Ongoing Expenditure	\$0	\$433,200	\$444,030	\$455,131	\$466,509	\$577,515
Development Costs	\$2,657,168	\$826,740	\$1,433,972	\$588,000	\$10,000,000	\$0
Net Impact	-\$2,657,168	\$4,348,064	\$4,073,811	\$5,293,503	-\$3,699,345	\$6,671,891
NPV	\$11,220,496					
BCR	1.8					

Note: All benefit and expenditure estimates are inflated by 2.5% per annum

20.4.3. ECONOMIC IMPACT ASSESSMENT

Therefore, as the NPV and BCR remain positive, the project is expected to generate ongoing economic benefits.

SHORT TERM CONSTRUCTION IMPACTS

As the level of capital investment is unchanged, the short-term construction impacts remain consistent with the levels identified in Table 42.

ONGOING EXPENDITURE IMPACTS

However, due to the decreases in overall visitor spend, the following table demonstrates the changes to the projected ongoing economic impact as follows:

- Total output of \$20.6 million;
- 102 jobs across industry sectors, leading to a \$5.1 million increase in wages;
- \$9.5 million in value-added for each industry sector.

TABLE 46 ONGOING EXPENDITURE IMPACTS - 50% REDUCTION IN **VISITATION**

	DIRECT EFFECT	INDIRECT EFFECT	TOTAL EFFECT
Output (\$m)	\$7.827	\$12.749	\$20.576
Employment	62	40	102
Wages (\$m)	\$2.295	\$2.807	\$5.102
Value-added (\$m)	\$3.553	\$5.989	\$9.542

Source: REMPLAN data

Accounting for a reduction in visitor numbers, the sensitivity analysis still demonstrates benefits in total output, employment and economic value to the region and Victoria.

This provides a degree of comfort in the overall economic analysis, in that the project appears viable and sustainable even after applying changes to key variables



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