

## **Acknowledgements**

The City of Albany thanks and recognises the valuable contributions made by the following individuals, agencies and groups in assisting with the preparation of the Cycle City Albany Strategy:

#### Bike Plan Project Control Group

City of Albany: Matthew Thomson, Cameron Woods, Samantha Stevens, Paul Camins, Andrew Greenwood, Kim Buttfield, Julie-Ann Gray and Keir Tunbridge

Department of Transport: Wayne Winchester and Noel Chambers

Main Roads: Murray Flett

**UWA Student Representative: Sacha Fawkes** 

Albany Cycle Club: Andy Bell

Albany Bicycle Users Group: Catlyne Hos

Albany Chamber of Commerce: Russell Clark Great Southern RoadWise: Erin McDonald-Lee Albany Schools Representative: Nikki Poulish

#### City of Albany Bike Plan Report

Cardno Consultants: Sam Laybutt, Jacob Martin

Cardno was commissioned by the City of Albany to prepare a Bike Planning Report for the Albany urban area and the immediate surroundings. The Cardno Report formed the basis for the Cycle City Albany Strategy.

## Supporting Businesses and Individuals

Oranje Tractor Winery and Cafe: Murray Gomm and Pam Lincoln

Bay Merchants Cafe: Ralph and Trish Flowers

Pam Dolley

#### **Photo Contributions**

City of Albany, Pam Dolley, Ralph Flowers, Murray Gomm, Erin McDonald-Lee, Brian Walters, and Over 50's Cycle Club, The Plyparazzi & Tour de Fleece - The Purly Queens, Dave Sobic & Albany Cycle Club, Kim Buttfield, ABUG, Department of Transport.

## **Contents**

Mayor's Message	9
ntroduction and Background	11
Introduction	11
Background	11
Study Area and Geographical Context	12
Why Cycle?	14
Methodology	15
Phase 1: Vision and Objectives	15
Phase 2: Community and Stakeholder Consultation	16
Phase 3: Existing Network Review and Network Planning	17
Phase 4: Infrastructure Assessment and Prioritization	18
Phase 5: Final Cycle City Albany Strategy (2014 – 2015)	18
Planning and Policy Context	19
Types of Cyclists	20
Casual Cyclists	20
Commuter Cyclists	21
Recreational Cyclists	21
Existing Priorities and Commitments	22
Albany Bike Network Projects for Grant Funding (2013)	22
Regional Bicycle Network Funding Projects – May 2014	23
Additional Projects Completed during 2013/2014	23
/ision, Objectives and Strategies	25
Vision	25
Objective 1:The Cycling Network	26
Objective 2: Cycling Participation	26
Objective 3: Safety and Respect for all Users	27
Objective 4: Cycle Tourism	2
Objective 5: Management and Implementation	28
Decision Making	29
Decision Making Matrix	29
Criteria Definitions *	30
Recommended Project Timeframes	30

Council adoption reference: OCM 26/08/2014 Resolution CS007

Synergy Reference: NS1654127

**Document Owner:** Executive Director Commercial Services

**Document Development Officer:** Manager Recreational Services

Objective 1: The Cycling Network The Cycling Network and Design Guidelines	31
1.1 The Overall Network Plan	31
1.2 Planning and Design Guidelines	32
Design Guidelines for On-Street Facilities  Design Guidelines for Off-Street Facilities	32 35
1.3 Maintenance	38
Cycling Routes	39
Cycle routes were categorised into On-Street Corridors, Off-Street Corridors or	
Recreational Road Riding Routes.	41
1.4 Cycling Route Signage	43
1.5 On Street Corridors	44
1.5.1 On Street Centre-Line Markings	44
1.5.2 Cycle Lane/Sealed Shoulder Termination Treatment	45
1.5.3 Emu Point Road/Golf Links Road/Troode Street	46
1.5.4 Ulster Road /Lower King Road	47
1.5.5 Ulster Road	49
1.5.6 Middleton Road	49
1.5.7 Chester Pass Road	51 52
1.5.8 Albany Highway (Chester Pass Road to Link Road) 1.5.9 Hanrahan Road/Princess Royal Drive	53
1.5.10 South Coast Highway	55
1.5.11 Lower Denmark Road	56
1.5.12 Frenchman Bay Road	57
1.5.13 Range Road	58
1.6 Albany Harbours Path	
(Lower Kalgan – Frenchman Bay)	59
Section 1 - Lower Kalgan Bridge to Lower King Bridge Section 2 - Lower King Bridge and approaches	60 61
Section 3 - Lower Killg Bridge and approaches	62
Section 4 - Lower King to Bayonet Head	63
Section 5 - Emu Point Drive Crossing	64
Section 6 - Emu Point	66
Section 7 - Griffiths Street	66
Section 8 - Flinders Parade (Surfers Beach) Car Park	67
Section 9 - Middleton Beach to City Centre	68
Section 10 - City Centre to Woolstores	68
Section 11 - Little Grove to Discovery Bay	69
1.7 Off-Street Corridors	71
1.7.1 Bayonet Head to Chester Pass Road Corridor	71
1.7.2 Chester Pass Road – Barnesby Drive – North Road Corridor	72
1.7.3 Albany Highway	73
1.7.4 Le Grande Avenue Intersection	74
1.8 Recreational (Road-Riding) Routes	75
1.8.5 Lower King Road to Chester Pass Road via Norwood Road	75
1 8 6 Lower King Road to Chester Pass Road via Greatrey Road	76

Area-Wide Network Improvements	79
1.9 Area 1 – Albany Central Area	80
1.9.1 Definitions	80
1.9.2 Background – Albany Central Area and Albany Regional Centre	81
Area 1 - Centennial Park	86
Area 1 - Albany Highway (including Chester Pass Roundabout)	88
Area 1 - Lockyer Avenue	89
Area 1 - York Street	90
Area 1 - York Street/Albany Highway/Lockyer Avenue roundabout	91
Area 1 - Grey Street West	92
Area 1 - Grey Street East	92
1.10 Area 2 – Lockyer/McKail	93
Area 2 - McGonnell Road	93
Area 2 - Clydesdale Road	93
Area 2 - Mueller/Cull Road	94
1.11 Area 3 – Milpara/Yakamia/Lange	95
Area 3 - Barnesby Drive	95
Area 3 - Anson Road/Newby Street	96
Area 3 - Dunn/Richard Street	97
Area 3 - Lion Street/Pioneer Road/Wellington Street	98
1.12 Area 4 – Spencer Park/Middleton Beach/Collingwood Heights	100
Area 4 - Warden Avenue	100
Area 4 - Campbell Road/Hardie Road/Hospital	101
Area 4 - Collingwood Road	102
Area 4 - Seymour Street	103
Area 4 - Lake Seppings Drive	104
Area 4 - Ulster Road	105
1.13 Area 5 – Bayonet Head/Lower King	106
1.14 Area 6 – Little Grove	108

Objective 2: Cycling Participation	111
2.1 Bike Route Information, Maps and Signage	111
2.2 End of Trip Facilities  Bicycle parking and short stay facilities  Long Stay Facilities	111 112 114
2.3 School Programs	115
2.4 Community Promotion	116
Objective 3: Safety and Respect for All Users	
Developing a Cycling Culture	119
3.1 Travel Speed and Shared Slow Zones	119
3.2 Signage  Welcome Signage  Safety Signage  Tourism Directional Signage  Regulatory Signage	120 120 121 123 123
3.3 Cycle Awareness and Safety Campaign Conflict between Cyclists Conflict between Shared Path Users Improved perception of Cyclists as Legitimate Road Users	124 124 12 12 125
3.4 Hazards and Safety Issues Reporting	125
Objective 4: Cycling Tourism	127
4.1 Cycle Tourist Routes  Albany Harbours Path  Munda Biddi	128 128 129
4.2 Cycle Promotion	130
Cycle Maps	130
4.3 End of Trip Facilities	131
4.4 Cycle Events	131
Objective 5: Management and Implementation	133
5.1 Coordination – Cycle City Albany Officer	133
5.2 Implementation Plan and Review	134
Bike Strategy Committee	134
Feedback Register	134
5.3 Measuring Success	135
Data Collection Review	135 135

٩p	pendix A - "Blank Slate" Community and Stakeholder Consultation Results	139 139 140 143 145 145 145 145 146 (1998) 146 (1998) 147 148 150 150 151 151 152 153 155 161 171 221
	Methodology	139
	Survey Results	139
	Demographics	140
	Qualitative Network Feedback	143
٩p	ppendix B - Existing Policies, Plans and Data	145
•	National Policies	145
	National Urban Policy: Our Cities, Our Future (2011)	145
	Moving Australia 2030 (2013)	145
	National Cycling Strategy (2010)	145
	State Policies	146
	Western Australian Bicycle Network Plan 2014 – 2031	146
	Western Australia Planning Commission Development Control Policy 1.5 – Bicycle Planning (1	
	Liveable Neighbourhoods (2009)	
	Main Roads WA (MRWA) Policy for Cycling Infrastructure (2000)	
	Local Policies	
	Town of Albany Town Planning Scheme No. 1A (TPS No. 1A) - District Scheme (Updated to 201	
	Community Strategic Plan – Albany 2023 (2013)	148
	Access and Inclusion Plan 2012-2017 (2012)	
	City of Albany Policy - Public Open Space (2013)	
	Asset Management Plan – Pathways (2013)	
	City of Albany Policy Gap Analysis	
	General Policy Overview	
	Previous Cycling-Related Feedback	152
	Previous Cycling Plans	152
	Bicycle Crash Data	153
٩r	ppendix C - Bike Plan Community Engagement Report	155
٠,١-	pename of the ran community in gagement report	
٩p	ppendix D - Cycle Network Plan	161
٩p	Appendix E - Network Mapping	
٩p	pendix F - Indicative Works and Funding	221
٩p	ppendix G - Collated Recommendations Sections 6-9	249



#### -----

## Mayor's Message

The City of Albany's vision is to be Western Australia's most sought after destination to live, work and visit.

This is a vision we take very seriously. It informs how we see the future of Albany and all the ways in which we are planning to capitalise on our potential.

One of the ways we are working towards this vision is by developing an exciting and unique cycling strategy – Cycle City Albany.

We already have a range of world class cycling trails and attractions, including one of the world's most significant bike trails – the Albany to Perth Munda Biddi Trail.

After working closely with the Albany community over a number of months, we have come up with a plan to cement our identity as a "Cycle City".

The vision is bold: we want to transform Albany into one of Australia's best cycling destinations, including both on and off road cycling.

We aim to do this by improving cycling infrastructure, encouraging cycling as a legitimate mode of transport, improving the culture surrounding cycling, and by encouraging more cycle tourism.

It's an exciting long-term goal, and one which will bring fantastic benefits to Albany when realised.

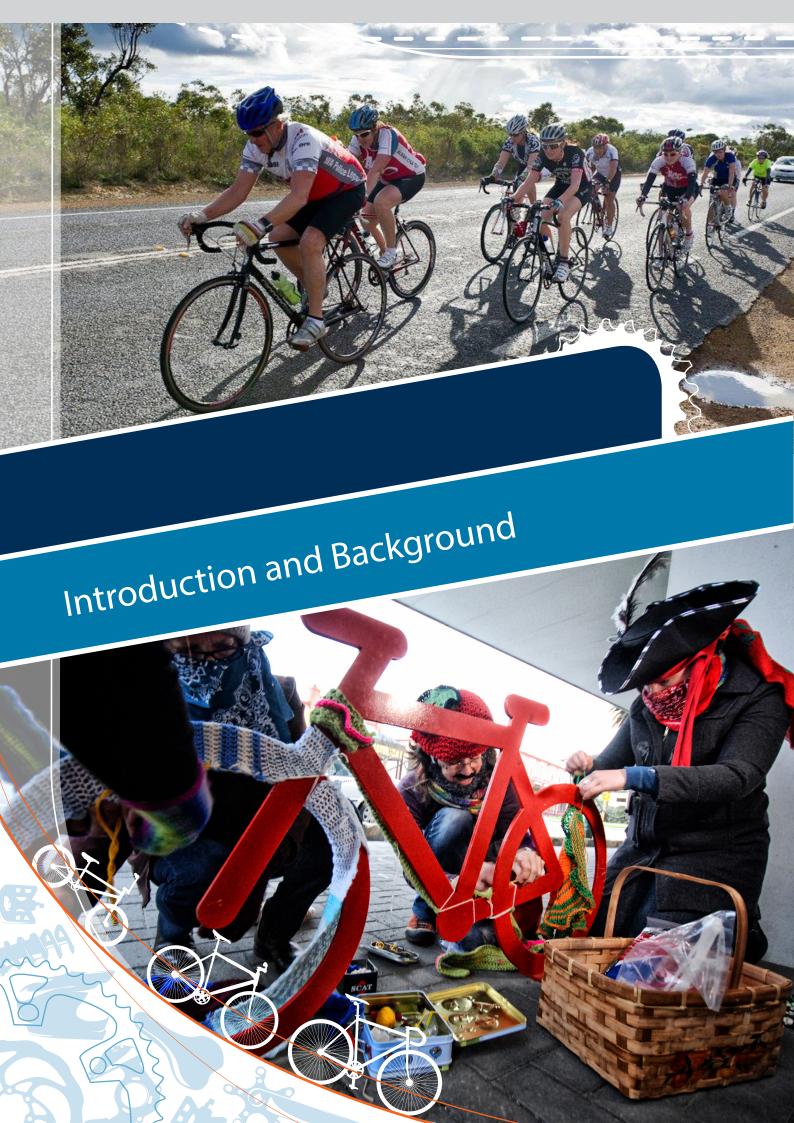
It aligns closely with several key themes in our Community Strategic Plan 2023: to be Smart, Prosperous and Growing, to be Clean Green and Sustainable and to have A Connected Built Environment.

Albany is on the cusp of great things, and initiatives like this are what is making that happen.

I thank our very capable City staff and Albany's positive cycling community for their hard work in developing this strategy.

Dennis Wellington City of Albany Mayor





## Introduction and Background

#### Introduction

The Cycle City Albany Strategy (2014 – 2019) aims to provide strategic guidance to enable the City of Albany to become one of Australia's primary cycling destinations.

The plan also includes a variety of integrated and interdependent initiatives, with recommended changes and programs proposed to encourage cycling throughout the City. These proposed changes are formed on the basis of comprehensive research, community engagements and analysis of cycling possibilities.

The strategy is aimed at improving commuting and recreational cycling facilities; providing infrastructure and programs which will encourage cycle tourism and support the community to become more active by linking to key community hubs. Encouraging a culture of 'sharing the road' is critical to ensure that all cyclists are welcomed by friendly road and path users.

## Background

During the 1990's there was a significant push in Albany to construct sections of shared paths along harbour foreshores to provide access to areas which were previously inaccessible for walkers, cyclists, parents with prams and the broader community.

Although the City of Albany has not had a formal Bike Plan, upgrades and new infrastructure have been constructed on an as-needed basis.

The closest document to a Bike Plan was the Albany Harbours Dual Use Path Planning Strategy (DUPPS) which was prepared in 1996 for the former Town of Albany and Shire of Albany. The DUPPS provides some excellent information to enable the selection of route and priorities for future sections of the harbour path link.

The DUPPS considered in detail the preferred alignment and form of a continuous link of shared paths between the Lower King Bridge, Frenchman Bay and Discovery Bay, skirting the harbour, as shown in Figure 1.2. At present, the path link has been completed between Lower King, Emu Point and Albany CBD, and from Woolstores Place to Little Grove. The key missing section is that between Brunswick Street, Albany, Woolstores, and particularly the Frenchman Bay Road railway level crossing and approach. The path finishes at Little Grove and has not been completed to Frenchman Bay and Discovery Bay. The conclusions reached in the DUPPS have been revisited as part of this strategy.

As a result of community advocacy and significant funding from Department of Transport (2013) for cycling infrastructure, the City of Albany identified the need to develop a strategic Bike Plan. Transport planners Cardno were commissioned by the City of Albany to prepare a five year cycle plan (City of Albany Bike Planning Report) for the Albany urban area and the immediate surroundings. The Cardno Report formed the basis for the Cycle City Albany Strategic Plan. The Cycle City Albany Strategy (2014 – 2019) is a culmination of the initial report developed by Cardno and includes recommendations and improvements to the draft, following extensive community and stakeholder feedback.

# Study Area and Geographical Context

# The City of Albany Local Government Area is located on the southern coast of Western Australia, approximately 400km from Perth.

It covers approximately 4,312km², most of which is sparsely populated farmland, forest and coastline. It is a major tourist region for both domestic and international visitors, with popular natural attractions including the spectacular coastline, natural rock formations and beaches. The City of Albany is the regional centre of the Great Southern Region with an approximate population of 33,650 (2011 Census).

The study area consists of the urban and semi-urban area of Albany, extending approximately 40km from Lower Kalgan to Frenchman Bay, as shown in Figure 1.3 - Albany and Figure 1.3 - Frenchman Bay. The study area also includes the semi-urban and future urban areas along the northern and western edges of Albany.

Cycling is gaining popularity in Albany among both residents and visitors. The relatively short distances, cool climate and beautiful scenery make Albany a fantastic natural environment for cycling. The existing network of shared paths and on road bike lanes linked to spectacular scenery and popular destinations has encouraged a significant increase in cycling. There are also many quiet streets for bike riders to use for local trips to community hubs.

The 2011 Census revealed that cycling's mode share for journey to work (i.e. commuter) trips is only 1%, a low percentage that generally reflects the lack of a comprehensive, connected and high-quality cycling network. Whilst high quality recreational facilities (e.g. the shared path from Emu Point to Middleton Beach) are provided, the existing cycling network generally does not encourage journey to work trips, particularly for employment areas outside of the City Centre.

Recreational cycling is growing in popularity, and is particularly attractive in Albany due to the quality of the shoreline infrastructure and attractive scenic destinations. Road cycling is also popular, despite the limited infrastructure taking advantage of the quiet rural roads and natural features of Albany.

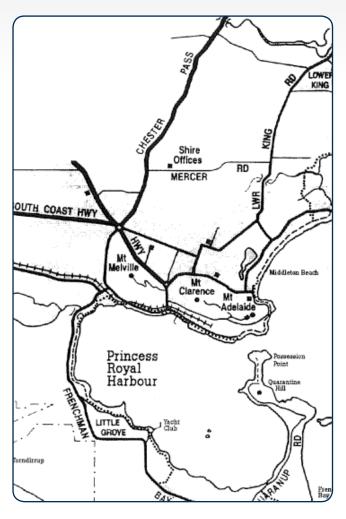


Figure 1.2 Albany Harbours Dual Use Path Planning Strategy – DUPPS (1996)

Figure 1.3 Study Area - Albany

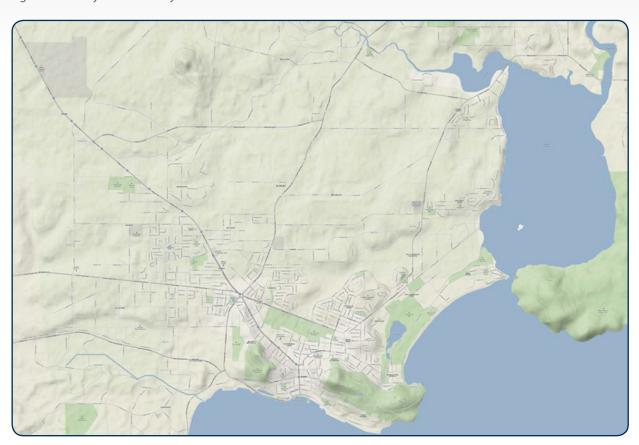


Figure 1.3 Study Area - Frenchman Bay



#### Why Cycle?

More people are riding bikes than ever before. Bicycles have outsold cars in Australia for the last decade and half of all households own at least one bike.<sup>1</sup>

The growing popularity of bike riding is due to a combination of factors including changing demographics, rising fuel costs, a greater recognition of the health benefits that riding provides and the development and recognition of better bike networks and facilities.

As a mode of transport cycling provides numerous and well documented benefits for individuals and communities. According to the Western Australian Bicycle Network Plan - 2014-2031<sup>2</sup> the benefits can be classified into three key categories:

#### **Economic Benefits:**

When a bike is substituted for a car there is reduced congestion costs, reduced infrastructure costs and reduced health costs. According to research commissioned by RAC<sup>3</sup>, investment in high standard cycling infrastructure, supported by programs to encourage cycling will generate \$3.4 in net economic return for every dollar invested.

#### **Environmental Benefits:**

Cycling is a carbon-neutral, energy efficient transport mode.

#### **Social Benefits:**

Cycling is a social activity, allowing riders to interact with each other and their environment. It can save time, and provides access for all. Well designed neighbourhoods encourage more cycling (and walking), allowing for more interaction between neighbours and increasing the sense of community in residents, resulting in mental and physical benefits. <sup>4</sup>

In addition to its well known economical, social and environmental benefits, cycling is unique in that it is able to combine affordable transport and recreation with physical activity.

These three categories align with the City of Albany's Community Strategic Directions and the City of Albany is committed to supporting and promoting cycling as a viable and attractive transport option.

As a key tourist destination and with the completion of the iconic Munda Biddi Trail (one of the longest off-road bicycle rides) with Albany as the start (or end) point, Albany is perfectly placed to become a hub for cycle tourists.



- AUSTROADS (2010) The Australian National Cycling Strategy 2011-2016, www.onlinepublications.austroads.com.au
- Western Australian Bicycle Network Plan 2014 20131,
   Department of Transport, Perth, WA www.transport.wa.gov.au
- Ian Ker for RAC WA Business Case for Investment in Cycling: Summary Report May 2012
- Billie Giles-Corti 2006, 'The impact of urban form on public health', 2006 Australian State of the Environment committee, Department of the Environment and Heritage, Canberra

#### Methodology

The City of Albany identified the need to develop a specific Bike Plan to consist of:

- → A clear vision, objectives and key priority areas with supporting strategies
- → A review of the existing cycling infrastructure, including local routes, shared paths and existing facilities, mapping key destinations and what remedial work or upgrading may be required
- New and amended maps of the network of routes

   ensuring there are key linkages (origins and destinations)
- Priorities for the network improvements, including an indicative works schedule.
- Planning and design guidelines to support cycling requirements (end of trip facilities, signage)
- → An Implementation Plan

The following outlines the key phases involved in preparing this comprehensive Cycle City Albany Strategy (2014 – 2019):

#### Phase 1: Vision and Objectives

Transport Planners Cardno were appointed in July 2013 to assist the City of Albany to develop a Bike Planning Report. To set the strategic direction, a vision and objectives were developed in collaboration with elected members, Council officers and the Project Control Group (PCG). The vision and objectives were also reaffirmed through the extensive consultation process with the wider community. The vision and objectives are supported by a suite of strategies, which have formed the basis of network planning, project selection and prioritisation.



## Phase 2: Community and Stakeholder Consultation

Extensive stakeholder consultation has been undertaken to enable the community to voice their concerns, ideas, identify opportunities and constraints. Consultation has been completed in three stages:

#### Stage One: Project Control Group

A Project Control Group (PCG) was set up by the City to strategically oversee the development of the Bike Plan. The PCG met regularly to provide local expertise and community input which has assisted in harnessing community support for the Plan from existing cyclists, potential cyclists, businesses and the wider community.

The PCG consisted of representatives from:

- → City of Albany (Works & Services, Planning and Development and Community Development)
- → Department of Transport
- → Main Roads WA
- → Albany RoadWise Committee
- → University of WA Albany Student Services
- → Albany Cycle Club (ACC)
- → Schools and Parent Groups
- → Albany Bicycle User Group (ABUG)
- Albany Chamber of Commerce & Industry (ACCI)

## Stage Two – 'Blank Slate' Community Consultation

The philosophy of the initial community consultation phase was to present a 'blank slate' to the community and to seek feedback on the issues and gaps in the existing network. During the 'blank slate' consultation period the City gathered information from the community through surveys and community workshops.

The survey questionnaire was available in hard copy and through the City's website. The survey included a map to allow respondents to highlight their favourite cycling routes and/or specific issues. A hard copy version of the survey was distributed throughout the City, with excellent assistance from the PCG, to maximise the level of participation and range of community views collected.

Survey distribution sites included:

- Council offices
- → Albany Leisure and Aquatic Centre (ALAC)
- → Albany Library
- → Great Southern TAFE (Albany)
- → UWA- University of WA Albany Campus
- → All three local bicycle shops
- School newsletters
- → Various local cycle friendly shops and cafes
- → Various cycling groups (formal and informal)
- → Staffed stalls at the Saturday and Sunday community markets



To complement the survey, a 'Blank Slate' Cycle Workshop was held at the Albany Civic Centre in October 2013 with 60 community participants and 4 Councillors attending. The workshop was jointly facilitated by Cardno and the City, with assistance from PCG members. The workshop enabled interested members of the community to provide feedback on the vision and objectives, and identify possible actions to help achieve them. See Appendix A for the full report.

#### Stage Three - Public Submission Period

A draft Bike Plan was prepared and adopted by Council in February 2014. The draft report was available to the public for a 29 day public comment period from 26 February to 28 March 2014. The public submission period closed on Friday 28 March 2014 with approximately 130 public submissions received.

The public submissions were collated and the feedback received from the community supported the development of the Cycle City Albany Strategy. See Appendix C for the Community Engagement Report.

## Phase 3: Existing Network Review and Network Planning

Cardno undertook a review of existing cycle and planning background documentation, as outlined in Objective 1, The Cycling Network

A desktop review of the existing cycle network was undertaken and subsequently confirmed by 3 days of site inspections. These site inspections included a 'saddle survey' of many sections of the existing network, during which the existing condition of road and path infrastructure was observed from the perspective of cyclists of varying confidence levels. Constraints and opportunities inherent in the geometry of the street network and existing path design were also assessed.

Members of the Project Control Group (PCG) accompanied the Cardno team on some of the site inspections to fully disseminate local knowledge on specific areas of concern.

A draft Cycle Network Plan was developed for the next 15-20 years. This plan is an integrated network of four route types:

- → Casual cycling routes generally off-street facilities for use by residents on utility trips. These routes are suitable for shorter journeys, slower speeds, lower confidence levels and use by other path users, e.g. pedestrians.
- → Commuter cycling routes generally on-street facilities for use by residents on utility trips or more confident cyclists riding for fitness. These routes are suitable for higher speed cycling in mixed traffic at lower speeds and separated from traffic at higher speeds.
- → Recreational (path) riding routes generally offstreet facilities for use by residents and visitors for sightseeing, fitness etc. Similar to the casual routes except that these do not necessary serve community hubs but form linear or loop routes, taking advantage of scenic outlooks and pleasant riding environments.
- Recreational (road) riding routes generally onstreet routes, often without dedicated cycling facilities, which are used by experienced, higher speed cyclists for fitness or enjoyment.

The Network Plan serves two purposes: firstly to outline the infrastructure that might be realistically funded in the next 15-20 years, and secondly to identify the type of cycling infrastructure required on key parts of the road network should the opportunity arise for improvements due to road upgrade projects. Future probable road and path corridors have been included where these can be reasonably foreseen.

## Phase 4: Infrastructure Assessment and Prioritization

# A schedule of recommended bicycle infrastructure improvements was developed in order to achieve the ultimate network.

This schedule includes specific priorities for infrastructure types and locations with an indication of potential constraints which may require additional investigation, detailed design or assessment. In addition to the network itself, end-of-trip facilities have also been considered.

Deficiencies in the existing bicycle network have been identified, with a schedule of remedial actions proposed to improve the operational safety and attractiveness for bicycle infrastructure in the City.

Ongoing maintenance works have been identified, with suggestions for modifications to existing regular maintenance schedules to mitigate recurring issues.

The proposed infrastructure improvements have been prioritised for gradual implementation. Longer term triggers that will require future infrastructure have also been identified.

#### Phase 5: Final Cycle City Albany Strategy

#### (2014 - 2015)

The Cycle City Albany Strategy is a culmination of the initial Draft Bike Planning Report, including recommendations and improvements following extensive community and stakeholder feedback.

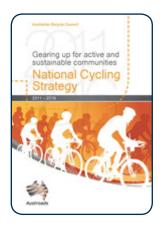
The Strategy aims to provide strategic guidance to enable the City of Albany to become one of Australia's primary cycling destinations. The plan includes a variety of integrated and interdependent initiatives, with recommended changes and programs proposed to encourage cycling throughout the City.



## **Planning and Policy Context**

Various national, state and local government policies and planning documents have influenced the development of this strategy and are part of a wider effort to increase bike riding across Australia. Cardno undertook a comprehensive analysis of the key policies and documents which support this Strategy. See Appendix B.

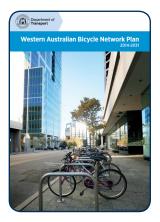
The key documents reviewed were:



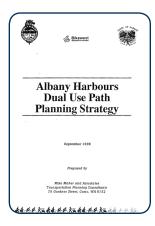
National Cyling Strategy 2010



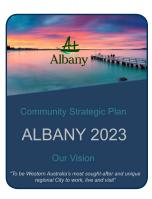
→ City of Albany Asset Management Plan



→ Western
Australian
Bicycle Network
Plan 2014 – 2031



→ Albany Harbours Dual Use Path Planning Study (DUPPS) 1996



→ City of Albany Community Strategic Plan (Albany 2023)

#### **Types of Cyclists**

Cycling as a transport mode is dependent upon a number of factors including population demographics, regional topography, weather and available cycling infrastructure. Cycling is increasingly becoming a viable mode of transport to social, educational and recreational destinations, as well as commuter transport to employment locations.

However, cycling infrastructure must be provided for the needs of a variety of different types of cyclists, recognising that some corridors will require two or more different types of facilities for different user groups.

For the purposes of this strategy, cyclists have been categorised into three main groups:

#### **Casual Cyclists**

Casual cyclists predominantly consist of family groups, school children and, young or inexperienced cyclists who tend to use the off-street path network to minimise conflict with motor vehicles. It is likely that casual cyclists will not travel a great distance, but rather tend to cycle for short trips, as well as for fitness and recreation.

This strategy, in addressing the needs of casual users, provides links between typical origin / destination pairs within a limited region. For instance from the centre of a residential community to local shops, schools and attractions. Therefore, the efficiency of available routes is not considered of primary importance, rather a comprehensive network of fully connected shared paths is preferred.

The proposed network provides sufficient connectivity for casual cyclists to reach their destinations as safely as possible. A focus on intersection legibility and way-finding by providing infrastructure such as grab rails, signage, line-marking and the use of coloured asphalt improves safety for casual riders who use the shared path network.

Some cyclists in the 'casual cyclist' category will also develop sufficient confidence to ride on high quality on-street facilities, such as wide cycle lanes with adequate intersection treatments and on quiet streets with low traffic volumes.

Utility cyclists are generally considered a sub-group of casual cyclists, and represent individuals who choose cycling for purposes other than commuting (e.g. shopping, entertainment etc.). These destination-based cyclists have similar requirements to casual cyclists, in that they generally prefer off-street facilities, but there are some additional needs (adjacent bike parking) that are unique to utility cyclists.



#### \_\_\_\_\_\_

#### **Commuter Cyclists**

The term 'commuter cyclists' represents riders with medium to advanced confidence levels who are comfortable riding on both off-street and on-street facilities but generally preferring to ride at higher speeds on the roadway.

Concerns for commuter cyclists generally result from interactions with other road users. Safety is again the priority, as well as efficient and direct access to major links external to the local community. Commuters tend to be habitual riders with experience and confidence in road riding.

Commuter cyclists' travel speeds are generally higher than what casual cyclists achieve which makes them more suited to riding in the roadway, rather than within a shared off-street environment. It is therefore expected that for quieter suburban streets and low speed urban environments, specific bicycle infrastructure is not necessary.



#### **Recreational Cyclists**

Recreational cycling is a popular pastime in Albany for both locals and visitors.

Recreational riders generally fall into one of the two groups above. Families, less confident and slower cyclists, as well as tourists interested in sightseeing, generally prefer slower speeds along off-street facilities. More experienced cyclists, riding for fitness or enjoyment, will tend to prefer longer rides at higher speeds along on-street routes. Many cyclists in this group will ride 'anywhere, anytime' but prefer lower volume rural roads and avoid interaction with heavy vehicles where possible.

Recreational road-riding routes are not necessarily designed to connect destinations, or to provide efficient one-way connections, but rather to present a circuit which provides picturesque or challenging components for the cyclist within an appropriate distance range. Therefore, recreational routes should not be designed merely as connections, but rather as a destination in themselves.

Road riders, having high confidence levels, will not necessarily stick to a single defined course, and will generally prefer to alter their course on a daily, weekly or monthly basis to provide variety in scenery and riding environments. For this reason, it is preferable to identify popular routes and improve specific locations which have safety concerns, rather than seek to define specific road riding loops.







For recreational path riders, speeds tend to be very slow, so high quality off-street paths are substantially more beneficial. Regardless of their preferred cycling speed, recreational cyclists tend not to use the same links as other demographics, preferring routes near to natural features, connecting to bike trails and locations with a scenic outlook.

A good example is the link from Albany City Centre to Middleton Beach, with recreational cyclists tending to prefer the shared path boardwalk around the base of Mount Adelaide and Mount Clarence while casual or commuter riders will tend to prefer the shorter route via Middleton Road.

## Existing Priorities and Commitments

## Albany Bike Network Projects for Grant Funding (2013)

In 2013 the City of Albany received a \$900,000 election commitment for cycling infrastructure over a three year period. To secure the Regional Bicycle Network Funding from the State Government, the City was required to submit a prioritised schedule of projects.

Priority projects for 2013/14 had to be determined prior to the completion of the draft Bike Plan. These projects were based on preliminary feedback received by the community and stakeholders, as well as the network planning and saddle survey. One of the key criteria for selecting projects for 2013/14 was that they were high priority and could be delivered within a short timeframe (i.e. minimal planning, design or environmental approval requirements).

The projects to be funded in 2014/15 have been identified through the consultation process and are the recommended priority projects from within this strategy.

The projects included in the Regional Bicycle Network Funding grant are shown below. Cost estimates include a 50% contribution by the City of Albany.

#### Regional Bicycle Network Funding Projects – May 2014

Year	Project	Cost Estimate
2012/13	Eyre Park Shared Path	\$190,000
	Anzac Peace Park Shared Path	\$120,000
	Middleton Road Missing Link Shared Path	\$70,000
	Albany Bike Plan (this project)	\$70,000
	NASHS/Anson Road Shared Path Connection	\$75,000
	Sub-total for 2012/13	\$525,000
2013/14		
	Emu Point to Middleton Loop - Griffiths Street Shared Path Missing Link	\$75,000
	Golf Links Road/Emu Point Drive/Troode St Shoulder Resealing and Widening	\$685,400
	Sub-total for 2013/14	\$760,400
2014/15	Priority Projects proposed include:	
	Priority 1 - Feasibility Study – Princess Royal Drive/Hanrahan Rd	
	Priority 2 – Albany Highway Shared Path – York St to Chester Pass Rd	
	Priority 3 – Barnesby Road Shared Path – North Rd to Bohemia RD\d	
	Priority 4 – Middleton Road On-road cycle lane upgrade (stage 1)	
	Sub-total for 2014/15	\$900,000

## Additional Projects Completed during 2013/2014

- → Great Southern Grammar Stage 1 (GSG to Kalgan Heights) \$155,000
- → Bottrill Road to Lancaster Road (link to the development)



## Vision, Objectives and Strategies

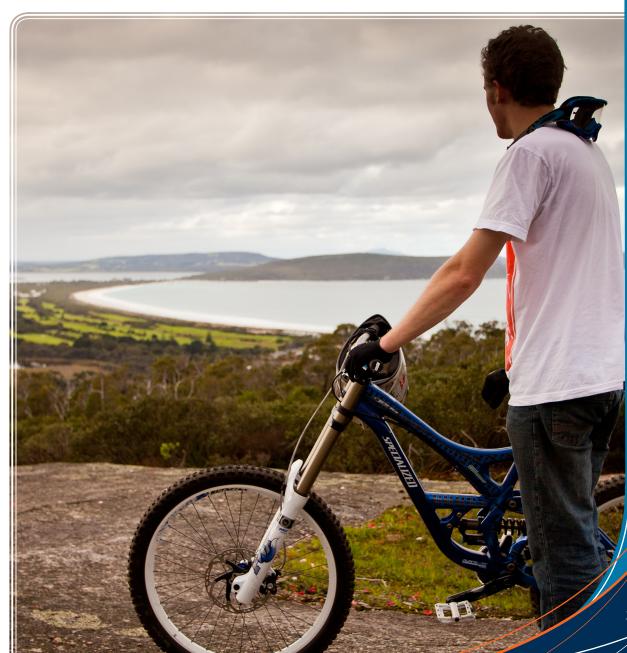
#### Vision

Acknowledging the growing levels of cycling in the Albany community and based on input from stakeholder consultations the City of Albany established a bold vision for Cycle City Albany:

For the City of Albany to become one of Australia's primary cycling destinations – a Cycling City where the community embraces the social, health, economic and environmental benefits provided by cycling

The Vision is bold and is expected to take 20+ years to achieve completely. It is supported by five objectives and a number of strategies to frame the way forward and enable Albany to become one of Australia's primary cycling destinations.

The Cycle City Albany (2014 – 2019) Strategy is a comprehensive document with a combination of projects incorporating network planning, infrastructure improvements, educational and promotional programs.



#### Objective 1: The Cycling Network

To develop and maintain a bicycle network of safe, connected and accessible routes and facilities

#### Strategies:

- 1.1 Plan and build a cycling network that is connected and encourages shared use between vehicle users, cyclists and pedestrians.
- 1.2 Identify and develop direct routes for commuters, and local bike routes which link to the CBD and local community hubs such as schools and recreation / activity centres.
- 1.3 Connect various cycling routes (on road, share path, off road, trails) in a coordinated and integrated manner.
- 1.4 Specify design guidelines for the cycling network that provide the highest practical level of service for cyclists; for all new works and upgrades undertaken by Government (Local, State, Federal) and the private sector.
- 1.5 Develop a Bike Design Guide that sets out the typical bike treatment, with the aim to integrate these across streetscapes.
- 1.6 Commit to a regular, well defined maintenance program for existing cycle/shared paths and routes.

This links with the City of Albany Community Strategic Plan: Key Theme 3 – A Connected Built Environment

#### **Objective 2: Cycling Participation**

To be a City where walking and cycling become easy choices of travel for trips of up to 5kms, around identified community hubs.

#### Strategies:

- 2.1 Develop and support activities and projects to encourage cyclists of all types, ages, backgrounds and skill levels.
- 2.2 Provide maps, signage and place details to encourage and make it easy for people to use local bike routes for commuting and short trips.
- 2.3 Support and encourage the building of appropriate end of trip facilities within the CBD and community hubs.
- 2.4 Support programs to encourage school students to ride to school.
- 2.5 In consultation and with support from the community encourage a series of cycle events to encourage cycling, for all levels of participants.

This links with the City of Albany Community Strategic Plan: Key Theme 2 – Clean Green and Sustainable.





## Objective 3: Safety and Respect for all Users

To develop a bike riding culture in the City of Albany so that cycling is seen as a legitimate and normal use of the road, with mutual respect between all users

#### Strategies:

- 3.1 Provide signage in key areas to signal the legitimate use of roads by cyclists and need for user safety.
- 3.2 Develop a Cycle Awareness and Safety Campaign to educate all road users of appropriate safe behaviour and promote 'Sharing the Road'.
- 3.3 Explore shared slow zones (cars, bikes and pedestrians) and other ways to reduce traffic speed on key cycle routes, in the CBD and around community hubs.
- 3.4 Set up a mechanism to report and address serious hazards and safety issues as a matter of priority.

This links with the City of Albany Community Strategic Plan: Key Theme 3 and 4 – A Connected Built Environment and a Sense of Community.

#### Objective 4: Cycle Tourism

To be a City that is recognised as a prominent regional cycling destination, delivering economic and tourism benefits for the community.

#### Strategies:

- 4.1 Identify and promote a series of unique 'tourist cycle routes' which direct riders to local attractions and tourist destinations; with appropriate signposting, tourist 'points of interest' resting points and destination facilities.
- 4.2 Develop and promote Cycle Maps and a Cycle Tourism Package to attract various types of cyclists (including Munda Biddi riders) to visit and cycle in and around Albany.
- 4.3 Support and develop cycle opportunities within Albany Heritage Park.
- 4.4 Embed cycle tourism within other major tourism plans/initiatives.

This links with the City of Albany Community Strategic Plan: Key Theme 1 – Smart Growing and Prosperous.





## Objective 5: Management and Implementation

To develop management mechanisms to support and guide the implementation of the Cycle City Albany Strategy (2014-2019).

#### Strategies:

- 5.1 Explore the feasibility of employing a 'Cycle City Albany' Officer to work with the City and the community to increase bicycle usage and coordinate all of the strategies designed to achieve the Plan's objectives.
- 5.2 Improve coordination across the City of Albany to seamlessly deliver bike infrastructure projects.
- 5.3 Establish a group/committee of people and agencies with the skills and knowledge to support and guide the implementation of the Cycle City Albany Strategy.
- 5.4 Develop an Annual Implementation Plan (priorities, budget and responsibilities) to ensure ongoing commitment and progress towards the Cycle City Albany Strategy over the next 5 years.
- 5.5 Commit to a regular survey program that collects comprehensive bi-annual bike and pedestrian count data.

This links with the City of Albany Community Strategic Plan: Key Theme 5 – Civic Leadership

Each Objective will be discussed in greater details in the following sections.





#### **Decision Making**

A Cycle City Albany Strategy Implementation Plan was developed to coordinate and prioritise the key cycle infrastructure projects over a five year period (2014 – 2019). Many projects will need to be implemented over a longer time frame (beyond 2019) and/or will require a staged works approach. The implementation of the Strategy relies on the allocation of significant internal and external funds and the timing and delivery of projects will be dependent on Council budgetary processes and grant opportunities.

While the responsibility for the implementation of the Cycle City Albany Strategy lies with the City of Albany, many of the proposed projects require input, funding and commitment from other organisations including, but not limited to the Department for Transport, Main Roads WA and developers.

In addition, schools and the Department of Education also need to be involved, given the potential to enhance cycling to school and Department of Health given the health and fitness benefits associated with cycling. The local cycling community also have a role to play in supporting the implementation of the Cycle City Albany Strategy.

#### **Decision Making Matrix**

The decision making process for bicycle infrastructure maintenance, renewal and creation of new bicycle infrastructure must be undertaken in a systematic way that reflects community needs.

The Decision Making Matrix (Figure 2.1) was developed by the City of Albany to assist the decision making process on all new infrastructure projects, for the 5 year Implementation Plan.

The City of Albany Asset Management Plan - Pathways (2013) provided the initial framework and criteria to assist the decision making process. The criteria used were also matched with the Cycle City Albany objectives.

Additional considerations for the priority and delay of infrastructure projects may include:

- → Additional funding opportunities
- → Shared works (e.g. with road/drainage projects). By combining cycle infrastructure projects with other builds (e.g. upgrade of existing roads) considerable savings can be made
- → Timing of works (weather, major events)

No	Criteria *	%	Link to Objectives
1	City Centre Connectivity	10	Cycling Participation, Cycling Network
2	Community Connectivity – Community Hubs	10	Cycling Participation, Cycling Network
3	Safe Routes to Schools	10	Cycling Participation Safety and Respect
4	Range of Users	10	Cycling Participation, Cycling Network
5	Cycle Tourism	10	Cycle Tourism
6	Path Classification & Hierarchy	10	Cycling Participation, Cycling Network
7	Potential Traffic	10	Cycling Network, Cycling Participation
8	Safety and Hazard Risk	10	Safety and Respect
9	Gaps to Connectivity	20	Cycling Participation, Cycling Network
Total		/100	

#### Criteria Definitions \*

City Centre Connectivity – the project will improve connectivity to the City Centre and major arterial routes into the CBD.

Community Connectivity - the project will improve the connectivity and access to local community hubs and activity centres such as local shopping areas, parks and health services.

Safe Routes to Schools – the project will improve the paths and routes to encourage children to ride to a local primary and/or high school.

Range of Users – the project will support cyclists of all types, ages, backgrounds and skill levels. The path and route will be used by a wide range of users.

Cycle Tourism – the project will provide access to a local, regional or tourist attraction for a wide range of users.

Path Classification & Hierarchy – the level of path design and usage:

- → Regional distributor path e.g. Albany Hwy, North Road
- → Principal distributor path e.g. Lockyer Avenue
- → Local distributor path e.g. Middleton Road, Ulster Road
- → Local access path e.g. Duke Street, Alicia Street

Potential Traffic – the level of path usage and connections to popular destinations.

Hazard Risk Safety – the project will provide separation from main traffic conflicts and/or greatly improve safety for cyclists and other path users.

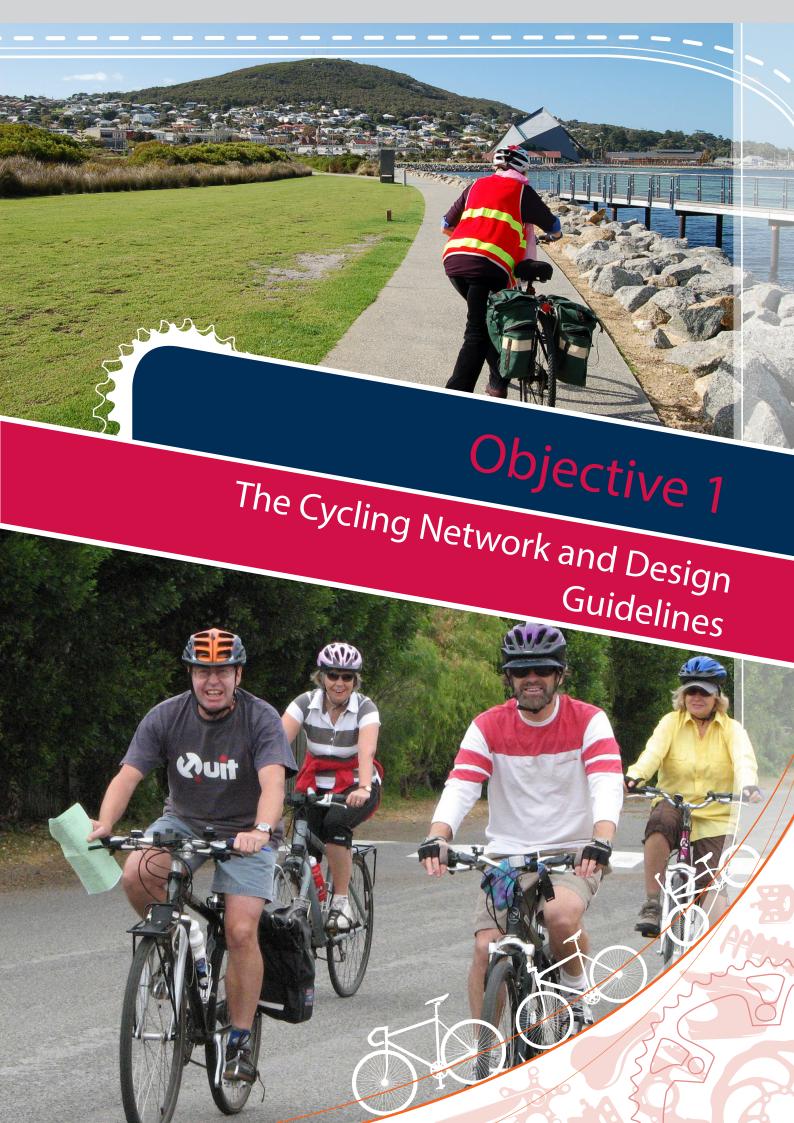
Gaps to Connectivity – the project will fill a gap or improve access to the cycling network and increase the potential use by a range of cyclists.

#### **Recommended Project Timeframes**

Short Term – planned works to be developed within 1-3 years

Medium Term – planned works to be developed within 3-5 years

Long Term – planned works to be developed within 5-10 years (beyond the scope of this strategy)



# Objective 1: The Cycling Network To develop and maintain a bicycle network of safe, connected and accessible routes

The Cycling Network and Design Guidelines

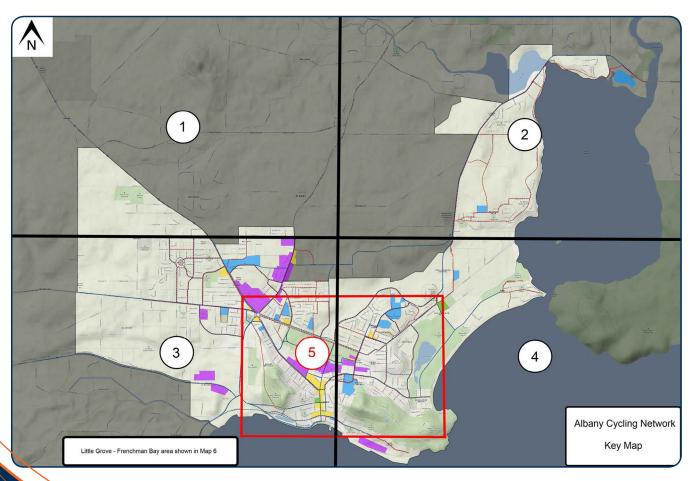
#### 1.1 The Overall Network Plan

The overall Network Plan includes:

and facilties.

- → Infrastructure projects for key cycling routes; both on and off street, that connect the different areas within the City of Albany;
- → Cycling Infrastructure projects for the five key areas within the City of Albany
- → An overview of the planning and design guidelines for key components of the network and
- A Maintenance project

The ultimate network plans and maps are shown in Appendix D and Appendix E. It includes proposed changes to the network, compared to existing facilities and additional maps showing the existing and ultimate path network for each cyclist category (casual, commuter and recreational).



#### 1.2 Planning and Design Guidelines

The key reference documents when planning and designing facilities for cyclists are:

- → Guide to Road Design Part 6A: Pedestrian and Cyclist Paths (Austroads, 2009)
- → Cycling Aspects of Austroads Guides (Austroads, 2011)

Austroads Guide has been adopted as fundamental design criteria for the provision of on and off-street paths, signage, grab rails and other bicycle infrastructure. Through this document, an acceptable minimum standard will be maintained, to ensure safe operation for cyclists, pedestrians and vehicular traffic.

This chapter is designed as an overview of key design considerations and not as a substitute for referring to guidance documents.

#### **Design Guidelines for On-Street Facilities**

Table 3.2 provides a summary of key design considerations when planning typical on-street facilities, alongside recommendations from Austroads guidelines for comparison purposes.

It is recognised that some of the designs may be challenging to achieve due to the constraints of a built-up environment in certain locations and a lower quality facility may be suitable to achieve an improvement in safety or riding conditions for the cyclists.

Table 3.2 Design considerations for on-street cycling facilities

Issue	Design Considerations	Austroads Guidelines
Traffic speed	<50km/h – sealed shoulders or cycle lanes may be desirable, depending on road layout (e.g. if continuous median islands are used) and traffic	Below 50km/h – not provided
	volumes, however these are generally not required. On-street cyclists can be expected to ride in mixed traffic when traffic speeds are <40km/h.	60km/h – 1.5m
	50km/h – sealed shoulders or cycle lanes may be desirable, depending	80km/h – 2.0m
	on the volume of cyclists, volume of vehicles and whether vehicles can overtake easily. On quiet streets with low traffic volumes or undivided carriageways wider than 7m these are generally not required.	100km/h – 2.5m
	60km/h-70km/h – sealed shoulders or cycle lanes should be provided with a minimum width of 1.5m.	
	80km/h+ - sealed shoulders or cycle lanes should be provided with an absolute minimum width of 1.8m, and a desirable width of 2.0m. This provides an additional buffer for cyclists alongside fast and heavy traffic.	
Continuous median islands	Wherever continuous median islands are used to separate traffic flows, 1.5m wide sealed shoulders should be provided to ensure that cyclists are not squeezed by vehicles.	Not addressed.
Single-lane roundabouts	Single lane roundabouts should be designed to reduce, as far as possible, the approach speed of vehicles on all legs.	Austroads provides multiple options. Figure
	Sealed shoulders or cycle lanes should be ended on approach to the intersection, with clearly defined merge areas, to encourage cyclists to 'claim the lane' through the intersection.	4.2 consistent with recommended treatment for Albany.
	Cycle lanes should not be painted at the edge of the circulating roadway.	Other treatments inadequately cater for the safety of cyclists at roundabouts.

Issue	Design Considerations	Austroads Guidelines
Multi-lane Roundabouts	Multi-lane roundabouts should be avoided on on-street cycle routes wherever possible. If a roundabout is required, cyclists should be given the option of 'claiming the lane' through the intersection or exiting onto the path network.	Austroads recommends cycle lanes within circulating roadway.
	Cycle lanes should not be painted at the edge of the circulating roadway.	These are not recommended due to significant safety issues.
Dutch-style roundabouts with cyclist and pedestrian priority	Dutch-style roundabouts should be considered for major intersections where low speed single lane roundabouts do not provided a sufficient level of safety for cyclists and on corridors with high quality cycle lanes. These roundabouts should not be used in high speed environments or in locations with high volumes of heavy vehicles.	Not addressed. Currently no standards exist for this design
	It must be noted that this type of roundabout has not been used in Australia previously and therefore further investigation is required to understand safety implications and suitability for use in Australian conditions.	
Priority- control intersections	Continuous sealed shoulders or cycle lanes should be provided on the through route. Deceleration lanes should be separate to cycle lanes, as per Main Roads WA standard design.	Consistent with Austroads.
	If a slip lane is provided for left turning traffic on the terminating leg, a cycle lane should be provided adjacent to the right turn lane to assist cyclists in turning right.	
Low speed, mixed traffic cycling environments	In many locations it is preferable to provide a low speed mixed traffic cycling environment, e.g. in quiet streets or in town centre areas where separate cycle lanes or paths cannot fit or would expose cyclists to greater conflicts with motor vehicles.	Consistent with Austroads, provided volumes are below 5,000 vehicles per day.
	The road environment must be designed for vehicle operating speeds of less than 40km/h through the use of features like speed humps, slow points, roundabouts, narrow lanes and landscaping.	
	On sections of road which involve steep or long inclines, where cyclists may struggle to keep up a reasonable speed, the provision of a cycle lane should be considered to assist in minimising conflicts between cyclists and vehicles.	
Traffic calming devices	On cycle routes with sealed shoulders or cycle lanes these should be continued through the traffic calming device, e.g. by providing a bypass around a slow point.	Consistent with Austroads.
	The bypass can be either at road level or path level. If the bypass is at path level, care needs to be taken to ensure suitable vertical transitions at either end.	
	On cycle routes where cyclists are expected to ride with mixed traffic, it is expected that cyclists would 'claim the lane' through any traffic calming devices and therefore bypasses are not required.	
	If bypasses are provided, e.g. around a single-lane slow point, the design needs to be aware of potential conflicts where cyclists will merge with vehicles after passing through the device.	

Ì	Issue	Design Considerations	Austroads Guidelines
	Local Area Traffic Management	Use of cul-de-sacs to prevent 'rat running' traffic, has the potential to provide low volume, low speed corridors for cycling. However, many of these end-of-street treatments do not appear to appropriately accommodate cyclists.  Any future creation of cul-de-sacs or one-way road sections must include provision for cyclists to easily travel both ways, retaining network access.	Consistent with Austroads.
	Sealed shoulders or cycle lanes?	Sealed shoulders are generally adequate in most locations as Western Australian drivers tend not to park on the carriageway.  Formal cycle lanes, signposted with regulatory signage as required under the Road Traffic Code 2000, should be used where it is likely that vehicles will park in the sealed shoulders and create an unsafe conflict between cyclists and vehicles.	Not addressed.
	Surface treatments for cycle lanes or sealed shoulders	For urban streets, the use of coloured surfaced treatment for sealed shoulders and cycle lanes will be considered. This treatment provides a high quality surface for cyclists, as well as clearly delineating the presence of the lane, improving lane-compliance and visually narrowing the street which reduces traffic speeds.  This should include roads on the rural/urban fringe which are used by	Not addressed by Austroads. 'Green Lane' treatments consistent with Austroads.
		high volumes of cyclists.  For rural roads, black asphalt or small stone 2 coat sealed is acceptable for sealed shoulders and cycle lanes. As cyclists, particularly road cyclists, are sensitive to rough or uneven road surfaces, the quality of pavement is critical.  'Green Lane' treatments should be used on cycle lanes at intersections where there is likely to be a significant conflict between cyclists and motorists – e.g. at the start of a left turn slip lane or at a location where significant volumes of traffic are likely to turn left across a cycle lane.  'Green Lane' treatments should, however, be used sparingly across the network to maintain their effectiveness as a warning device.	
	'Share the	In mixed traffic rural and semi-urban environments where there is a	Not addressed.

reasonably high on-street cycling demand, 'Share the Road' signage is

the appropriate behavior when overtaking.

recommended to remind drivers of the potential presence of cyclists and

Road' signage

#### Design Guidelines for Off-Street Facilities

Table 3.3 provides a summary of key considerations when planning typical off-street facilities, alongside recommendations from Austroads guidelines for comparison purposes.

Table 3.3 Design considerations for off-street cycling facilities

Issue	Design Considerations	Austroads guidelines
Footpath or Shared Path?	All new footpaths should be constructed as shared paths. The only exception is in locations with extraordinary safety issues where pedestrians and cyclists would be unable to safely co-exist on a path. In these locations, a safe alternative for cyclists of low confidence levels should be provided.	Not addressed.
Path Location	Shared paths within road reserves should be located as far from the property boundary as possible to maximise the sight distance at driveway crossings. A 0.5m buffer should be provided between the road carriageway and the dual use path where feasible.	Generally consistent with Austroads. Austroads recommends 1.0m clearance from carriageway but may not be achievable in many narrower road reserves. The property boundary clearance is considered more important.
Road Crossings	Road crossings should be located along the cycling desire line wherever possible. Path deviations to minimise crossing distance are appropriate for pedestrians, but require cyclists to undertake direction changes while looking over their shoulder and are considered to create an additional safety risk.  Where refuge islands are installed, these should be a minimum of 2.0m wide. Grab rails should be installed only where traffic volumes or speeds at the crossing point are high, and should always be located on the left side of the path for path users approaching the crossing point.  Consideration should be given to providing road crossings where pedestrians and cyclists have priority along key corridors. As this is a new treatment for Albany, the initial implementation of such crossings should involve a single corridor with all crossings converted. This will assist in introducing motorists to the new treatment with as little confusion as possible.	Consistent with Austroads.
Path Width	All new shared paths constructed in the City should be generally designed to a 2.5m width. However, this may be reduced to 2.0m path where constraints in the urban environment occur and the 2.5m width cannot be achieved. Additional width should be provided where the volume of pedestrian and cyclist traffic is likely to result in more passing maneuvers, using Austroads as a guide.	Consistent with Austroads.

Issue	Design Considerations	Austroads guidelines
Signage	Regulatory 'shared path' and 'end shared path' signs should not be installed (Ausralian Standards 1742.9). 'Shared path' symbolic stencils should be used instead, as a reminder to pedestrians to be aware that they are sharing the path with cyclists. Stencils should be placed in conformity with Austroads guidelines.	Consistent with Austroads.
	At important junctions on key routes, bicycle direction signage should be provided in accordance with Main Roads WA standard drawings. A signage strategy should be prepared to ensure that adequate follow up signage, or passive delineation, is provided along the routes.	
Linemarking	Line marking should be used on paths wider than 2.5m if the volume of cyclist and pedestrian traffic is significant or if there is a history of conflicts.	Consistent with Austroads.
Speed or access control devices	These should be avoided as far as possible. If there is a definite need to prevent unauthorised vehicle access to the paths, a single bollard placed in the middle of the path or a separate entry and exit terminal are recommended. Bollard visibility should be enhanced by use of retro-reflective material and supported by a widened centreline on the approaches, to ensure adequate visibility at night.	Consistent with Austroads.
	Where a definite, fully justified need exists to reduce cyclist speeds approaching a road crossing, gates (grab rails) should be used. Gates should be separated by a minimum of 3.0m to allow a cyclist to weave through them at approximately walking pace. In a town centre environment, well-placed street furniture is preferred to achieve the same aims. These should be located to support pedestrian amenity, without creating a hazard for cyclists (particularly in low-light situations). Bollards should not be used to reduce cyclist speeds.	
Grab Rails	Grab rails should be placed according to Austroads Guidelines and used sparingly along cycle routes where there are high vehicle crossing volumes or speeds. Grab rails can be used as a passive wayfinding technique to delineate the route of local bicycle routes.	Consistent with Austroads.
	Grab rails should always be located on the left side of the path approaching a road crossing and never in the centre of the path.	
Passive Wayfinding	Passive wayfinding should be incorporated into the design of shared path networks. Strategic placement of grab rails, linemarking and coloured asphalt can illustrate the route of the main shared path without the need for signs.	Consistent with Austroads.
Connectivity	All new shared paths should be implemented with maximum connectivity, including kerb ramps and crossings to facilitate movement between paths. Ensure that new developments do not introduce missing links in their path networks.	Consistent with Austroads.
Controlled Access Point (CAP) Roads/ Service Roads	CAP roads/Service roads should not be used as substitute for shared paths, though they may form part of an effective on-street cycling route if legibility is maintained.	Consistent with Austroads.

Issue	Design Considerations	Austroads guidelines
Separated Cycle Paths	Separated cycle paths may be considered in areas where there are high pedestrian volumes and the provision of high quality on-street cycle lanes is not possible.	Generally consistent with Austroads.
	Generally, separated cycle paths should be designed to include priority crossings over all side roads, otherwise the benefits of separation from pedestrians and traffic cannot be fully realized.	

Recommendation	Design Guidelines and Development Requirements
Short	Develop a Bike Design Guide that sets out the typical bike treatment, with the aim to integrate these across streetscapes
Short	Develop a detailed area plan or appropriate policy to include provisions for end of trip facilities.
Short/Medium	Review the City of Albany Structure Plans and other subdivisional requirements to incorporate the recommended network in this plan, including:
	Missing links through 'greenfield' development sites should be constructed as part of these developments;
	Any new urban or semi-urban streets that are constructed should include the relevant cyclist facilities
	Developers should be required to provide a fully connected path network within their development and integrated to the surrounding area.





### 1.3 Maintenance

A substantial capital investment has been committed to providing improved and new cycling infrastructure, which will help the City of Albany to reach its vision. Matching this, an adequate maintenance and renewal program is needed to ensure this infrastructure provides a high level of service.

Regular routine (or scheduled) maintenance is required to keep cycling facilities in a reasonable condition. Cyclists are particularly vulnerable to punctures and crashes caused by broken glass, loose gravel and vegetation. Maintenance activities should include the following:

- → Regular sweeping of paths to remove gravel, sand/earth, broken glass and vegetation;
- → Targeted sweeping of known problem areas e.g. paths through parks after a Saturday night;
- → Regular pruning of vegetation to ensure the full path width is available;
- → Prompt attention to reactive maintenance such as damage from storms, fires and other one-off events;
- → A regular, documented system of visual path inspections to monitor condition and identify maintenance issues will ensure cost effective and quality routine maintenance is undertaken. A user friendly system to encourage users to identify issues to enable timely response to reactive maintenance needs to be developed and integrated into the City's Asset Management Systems as a whole.
- → The current system of reporting is by email or phone to the City of Albany front office. A Works Request is then issued and responded to.

Project	Maintenance
Responsibility	City of Albany
Reference	
Links to Objectives	Cycle Network Safety and Respect Management and Implementation
Possible Solutions / Treatments	Review Asset Management Plan for Paths and Cycling Infrastructure. Integrate reporting of maintenance issues into an improved asset management systems utilising modern technologies (e.g. smart phones, web-based applications and GIS) allowing timely response.
Recommendation	
Short	Reactive maintenance to be undertaken as per existing works request systems. Encourage the cycling community to identify issues through the existing processes.
	Establish a regular inspection regime to enable development of maintenance schedules and renewal programs.
	Review Asset Management Plan for Paths and Cycling Infrastructure.
Medium	Make appropriate allocation in the Long Term Financial Plans for scheduled maintenance and renewal programs.
	Undertake a review of the maintenance reporting processes and works request systems and develop user friendly options utilizing modern technology (such as the City website).
Long	





## **Cycling Routes**

This section provides a detailed description of cycling routes and signage.

A review of the existing cycle routes was undertaken and then confirmed by 3 days of site inspections. These site inspections included a 'saddle survey' of many sections of the existing network; during which the existing condition of road and path infrastructure was observed from the perspective of cyclists of varying confidence levels and the most commonly routes used.

Cycle routes were categorised into On-Street Corridors, Off-Street Corridors or Recreational Road Riding Routes.

Each specific project has been categorised based on the ownership, its links to the objectives, its project reference number, possible solutions / treatments and short, medium and long term recommendations.

A summary of Indicative Works and Funding Schedule is included in Appendix F.

There are five sections under discussion which cover:

Section 1.4 Cycling Route Signage – which incorporates all levels of signage for both on and off street cycling routes

Section 1.5 On Street Corridors – which incorporates on Street centre-line markings and cycle lane/sealed shoulder terminations and including the following on-street corridors:

- 1.5.3 Emu Pont/Golf Links Road/Troode Street
- 1.5.4 Ulster/Lower King Road
- 1.5.5 Ulster Road
- 1.5.6 Middleton Road
- 1.5.7 Chester Pass Road
- 1.5.8 Albany Highway (Chester Pass Road to Link Road)
- 1.5.9 Hanrahan Road/Princess Royal Drive
- 1.5.10 South Coast Highway
- 1.5.11 Lower Denmark Road
- 1.5.12 Frenchman Bay Road
- 1.5.13 Range Road

Section 1.6 Albany Harbours Path (from Lower Kalgan to Frenchman Bay) has been divided into 11 sections. The following sections deal with the path in discrete sections:

- 1.6.1 Lower Kalgan Bridge to Lower King Bridge
- 1.6.2 Lower King Bridge and Approaches
- 1.6.3 Lower Kalgan Bridge and Approaches
- 1.6.4 Lower King to Bayonet Head
- 1.6.5 Emu Point Drive Crossing
- 1.6.6 Emu Point/Swarbrick Road
- 1.6.7 Griffiths Street
- 1.6.8 Flinders Parade (Surfers Beach Car Park)
- 1.6.9 Middleton Beach to City Centre
- 1.6.10 City Centre to Woolstores
- 1.6.11 Little Grove to Discovery Bay

#### Section 1.7 Off Street Corridors includes 4 off-street corridors:

- 1.7.1 Bayonet head to Chester Pass Corridor
- 1.7.2 Chester Pass Barnesby Drive North Road Corridor
- 1.7.3 Albany Highway
- 1.7.4. South Coast Highway

#### Section 1.8 Recreation (Road Riding) Routes includes two routes:

- 1.8.1 Lower King Road to Chester Pass Road (via Norwood Road)
- 1.8.2 Lower King Road to Chester Pass Road (via Greatrex Road)



## 1.4 Cycling Route Signage

#### Signage can be used to:

- → Promote the City of Albany as a Cycle Friendly City
- → Deliver important messages about appropriate road user behaviour (including cyclists)
- → Indicate safety and legal use of the off-street and on-street network (regulatory signage)
- → To aid navigation for those unfamiliar with the routes and are targeted at tourist and new cyclists (way-finding signage).

Generally the signage should comply with Main Roads guidelines for bicycle direction signage. However consideration could be given to naming or colour-coding the major routes in conjunction with mapping and signage.

When developed and targeted correctly, cycle signage is also linked to safer road user behaviour and this aspect is covered in more detail under Objective 3 – Safety for All Users' 'Developing a Cycling Culture

Project	Signage
Responsibility	City of Albany
Reference	
Links to Objectives	Safety and Respect for All Users Cycling Network Cycle Tourism
Possible Solutions / Treatments	It is recommended that a Signage Strategy be developed with the first detailed route plan undertaken for the Albany Harbours Path from Lower King to Little Grove, as one of the key existing cycle tourist routes.
Recommendation	
Short	A comprehensive Signage Strategy (including an audit and design guidelines) be developed to support the 5 year implementation plan
Medium	Roll out the signage strategy on specific new projects as determined in the implementation plan  Target key tourist and commuter routes for any signage upgrades on existing routes
Long	All major cycle routes have regulatory and way finding signage

### 1.5 On Street Corridors

#### 1.5.1 On Street Centre-Line Markings

During the saddle survey and site inspections it was identified that many of the on-street cycling routes through suburban Albany have a solid centre line. Remnant line-marking indicates that this was not always the case as the solid lines appear to have been marked within the past 2-3 years.

Discussions with stakeholders, and feedback received through the consultation process have revealed that cyclists are now experiencing many more 'close shaves' when vehicles pass, as drivers are reluctant to cross the solid centre-line. This is a significant safety issue on the cycling network.

Project	On Street Centre-Line Markings		
Responsibility	Main Roads		
Reference			
Links to Objectives	Safety and Respect for All Users Cycling Network		
Possible Solutions / Treatments	Review of all center-lines on the City's road network.  This would limit the solid centre-line to locations where visibility issues at a crest or curve prevent safe passing/overtaking or where cycle lanes that comply with Austroads guidelines are provided for both directions of travel.		
Recommendation	Recommendation		
Short	All centre-lines on the City's road network be identified and reviewed in detail		
Medium	Solid centre-lines should be removed and replaced by broken centre-lines in accordance with Austroads and MRWA standards, and where it is safe and appropriate to remove.		
Long			

#### 1.5.2 Cycle Lane/Sealed Shoulder Termination Treatment

Intersections are critical points on the bicycle network and, if the level of conflict or perception of danger is too high, will often become the almost invisible barrier to use of a cycle route.

The City of Albany has a growing number of generally two-lane, single carriageway streets with marked cycle lanes or sealed shoulders along them. The midblock sections are generally perceived as safe by cyclists but attention needs to be drawn to providing appropriate treatment of single lane roundabouts or other major intersections where the road with the cycle lane/sealed shoulder does not have priority

For intersections where the approach flares into two or more traffic lanes, the treatment is very simple. The most important aspect is to, wherever possible; avoid the situation where a vehicle in a left turn lane must turn left across the cycle lane at the intersection line as this is the most dangerous conflict point.

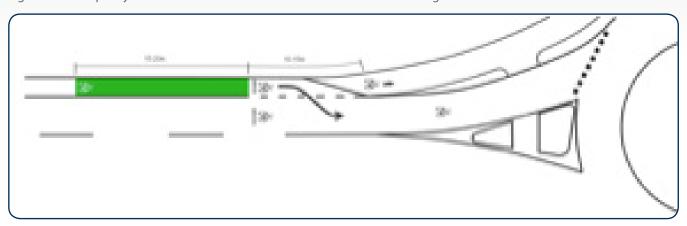
Where the left lane is a shared through/left lane, the through bicycle lane may be omitted, provided that the conflict point at the commencement lane is clearly marked.

At single lane roundabouts, current practice in the City of Albany is to terminate the shoulder or cycle lane before reaching the give way line. This is good practice, as it requires cyclists to either ride in primary position in the traffic lane where they are most visible to other users, or to use the off-street paths if they are not confident enough to use the road.

Project	Cycle Lane/Sealed Shoulder Termination
Responsibility	City of Albany
Reference	
Links to Objectives	Cycle Network
Possible Solutions / Treatments	The termination of the cycle lane/sealed shoulder needs to be clearly marked to indicate to both cyclists and motorists that cyclists will be merging at this point. This is not well covered in existing Australian Standards or state guidelines so an indicative concept sketch has been provided in Figure 1.5.
	This treatment should also be used on approach to multi-lane roundabouts. The most important aspects of this treatment are that:
	The termination of the cycle lane/sealed shoulder occurs well before the give way line at the roundabout
	The merge area is clearly marked with visual cues so that both cyclists and drivers are aware of the merge
	A kerb ramp leading to a shared path around the outside of the roundabout is provided at a gentle angle, to allow cyclists who are not confident to ride in mixed traffic to use the path network instead.
Recommendation	
Short	Undertake an assessment of existing cycle lanes approaching existing roundabouts for possible treatment trial
Medium	The treatment shown in Figure 1.5 trialed in identified locations in Albany.
	Main Roads WA, the City and cycling advocacy groups to undertake a comprehensive evaluation of the treatment
Long	

#### \_\_\_\_\_\_

Figure 1.5 Example Cycle Lane/Sealed Shoulder Termination Treatment at Single-lane Roundabout



#### 1.5.3 Emu Point Road/Golf Links Road/Troode Street

Golf Links Road, Troode Street and Emu Point Road form an important link for more confident cyclists riding between Middleton Beach, Emu Point and Lower King Road. It also provides an alternative loop for recreational cyclists, linking with the existing Middleton Beach-Emu Point shared path.

Project	Emu Point Road/Golf Links Road/Troode Street		
Responsibility	City of Albany		
Reference	9,10,11, 13		
Links to Objectives	Cycling Network, Cycle Tourism		
Possible Solutions / Treatments	Widening of the sealed shoulders to 1.5 m with Green Lane Treatment through the Troode Street/Golf Links Road intersection		
Recommendations	Recommendations		
Short	It is currently (2013/14 FY) being widened to provide minimum 1.5m wide sealed shoulders, with 'Green Lane' treatment through the Troode Street/Golf Links Road intersection.		
Medium			
Long			



### 1.5.4 Ulster Road /Lower King Road

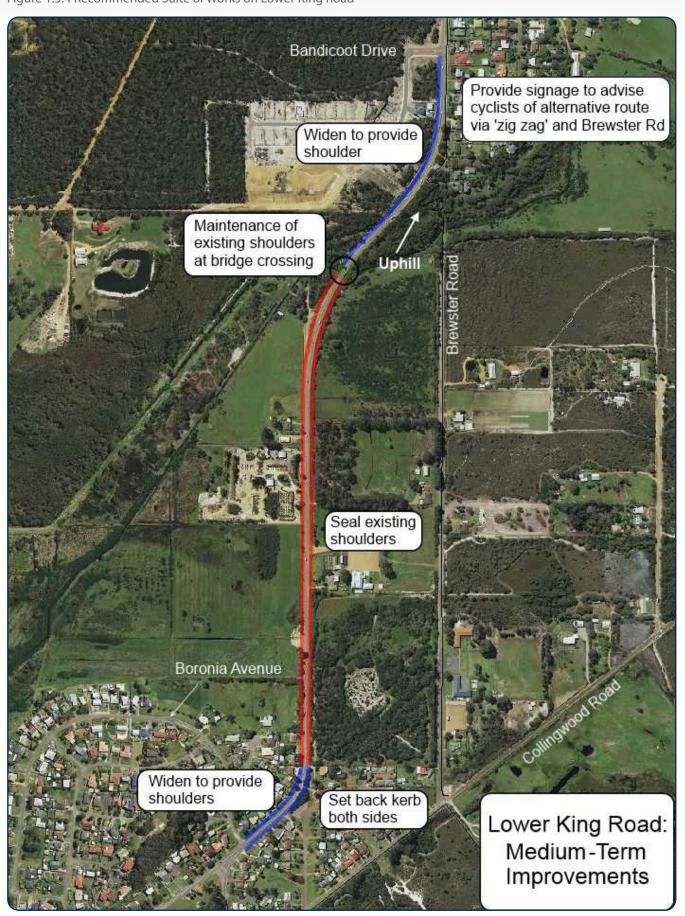
Lower King Road and Ulster Road form the most direct on-street cycling route and the only road connection between Albany Central Area and Bayonet Head/Lower King. However, it is an intimidating riding environment which results in only the most confident and experienced cyclists willing to ride on the road.

A reasonable quality shared path along the eastern side between Lower King and Bayonet Head caters for less confident or lower speed cyclists; however, it does not cater for more confident faster cyclists.

According to the survey results nearly 20% of respondents indicated that the section of the on-road riding network between Bayonet Head Road and Oyster Harbour was perceived as hazardous.

Project	Ulster/Lower King Road
Responsibility	City of Albany
Reference	21, 21a
Links to Objectives	Safety and Respect for all Users Cycling Network Cycling Participation
Possible Solutions / Treatments	The following safety measures are recommended for this road given the high traffic volumes, acknowledging this route is a major connector to the eastern suburbs of Albany and the 80km/h speed limit on some sections of the road which creates an intimidating environment for cyclists.  See Figure 1.5.4
	The end result of these works will be a cycling environment where medium to high confidence level cyclists feel comfortable riding on the road, and the only mixed traffic sections are located on the approach to roundabout intersections. Care should be taken to design the merge points of cycle lanes to manage conflict between cyclists and vehicles at these points (refer to guidance in Section 3.3).
Recommendations	
Short	As per new Signage Strategy consider:
	Share the Road Signage' at maximum 1.5km intervals along Lower King Road
	Bicycle symbols marked in the centre of the traffic lane (Advisory Treatment, Cycling Aspects Section 1.5.6) at squeeze points such as roundabout approaches where there is no adequate shoulder and marked in the shoulder where such a facility exists (shoulder should be a minimum of 1.5m in width to qualify)
Medium	Short term works between Ulster Road and Bandicoot Drive as shown in Figure 1.5.4 to provide separation between cyclists and vehicles at the most critical point.
	Uphill grades where cyclists will be unable to maintain 30km/h+ speeds, where unsealed shoulders exist
	Uphill grades where cyclists will be unable to maintain 30km/h+ speeds, where kerb and gutter exists. This should be achieved by either widening the road by 2.0m, or provide a separated "cycle path" whichever is more cost effective.
	Flat or downhill grades where unsealed shoulders exist.
	Flat or downhill grades where kerb and gutter exists.
Long	Pursue a program of gradually widening the road to provide 2.0m wide asphalt shoulders along the full length of Lower King Road

Figure 1.5.4 Recommended Suite of Works on Lower King Road



#### 1.5.5 Ulster Road

As previously stated, Lower King Road and Ulster Road form the most direct on-street cycling route between Albany Central Area and Bayonet Head/Lower King. However, it is an intimidating riding environment which results in only the most confident and experienced cyclists willing to ride on the road. Key issues with this route include:

- → Narrow carriageway which means that cyclists must ride in the traffic lane to avoid being 'close shaved' by passing vehicles.
- → Solid centreline along the full length which makes safe overtakes of cyclists illegal and encourages 'close shaves'. Less confident cyclists who try to be courteous to motorists and ride close to the left edge of the road put themselves in danger as drivers are encouraged to 'close shave' them as they

- are reluctant to cross the solid centreline.
- → The narrow carriageway, extensive underground drainage and steep terrain make widening the road to provide cycle lanes very expensive. As the road is kerbed and guttered for drainage purposes, it is not feasible to provide rural-type sealed shoulders.

The shared path which runs along the southern/eastern side is constructed to a reasonable standard given the constraints of the road reserve; however it is only suitable for low speeds due to absence of a buffer from traffic, frequent driveways and road crossings which require cyclists to give way in situations with restricted visibility. It is not a suitable alternative to road riding for cyclists wishing to maintain speeds above 20km/h.

Project	Ulster Road
Responsibility	City of Albany
Reference	21, 21a, 21b, 68
Links to Objectives	Cycling Network Cycling Participation Safety and Respect for all Users
Possible Solutions / Treatments	Due to the high cost, widening of Ulster Road is not considered a realistic proposition until the medium or long term. In the meantime it will continue to be used mainly by confident cyclists.  Development and promotion of Collingwood Road – Tassell Street – North Road as an alternative route for on-street cyclists.
	In the long term, construction of Range Road from North Road to Mercer Road is expected to take a significant amount of traffic off Ulster Road. This will provide some relief to the conflict between cyclists and vehicular traffic as well as providing a more direct route for commuter cyclists.
Recommendations	
Short	Solid centre-lines should be removed and replaced by broken centre-lines in accordance with Austroads and MRWA standards. The rationale for installing unbroken centre-lines along this route should be investigated (e.g. crash problems) to inform any future changes.
	As per new Signage Strategy consider:
	Large 'Share the Road' signs at each end of Ulster Road, and at least one intermediate point.
Medium	As per new Signage Strategy consider:  Bicycle symbols should be placed at regular intervals along the centre of the traffic lane to remind motorists of the presence of cyclists and encourage cyclists to ride in a position which does not encourage 'close shaves'.
Long	Investigate widening of Ulster Road.

#### 1.5.6 Middleton Road

Middleton Road is a commuter cyclist corridor between Albany Central Area and Middleton Beach, linking with other key cycling routes such as Golf Links Road. Middleton Road currently has cycle lanes in both directions from Tasman Street to Flinders Parade, which are used by medium/high confidence level cyclists. However, feedback from the community has identified several issues with the current lanes, including:

- → Narrow width
- → Poor road surface, particularly due to kerbing and drainage grates
- → Parking permitted along a portion of the cycle lane
- → Merge points at roundabouts are not appropriately designed
- → Western end disappears near Tasman Street, leaving cyclists to ride in mixed traffic to St Emilie Way

The western section of Middleton Road, between Tasman Road and St Emilie Way, is discussed as part of the Albany Central Area 1.

Project	Middleton Road
Responsibility	City of Albany
Reference	18, 20, 20a, 19
Links to Objectives	Cycling Network Cycling Participation Cycle Tourism
	Safety and Respect for all Users
Possible Solutions / Treatments	Removal of on-street parking near Bluff Street to ensure the cycle lane is continuous. If it is necessary to retain the handful of parking spaces, indented bays should be created to ensure the cycle lane is continuous.
	Improvement of the approaches to all roundabouts, clearly delineating the merge areas as shown in Section 1.5.2
	East of Golf Links Road consider rezoning to 40 km/h suitable for mixed traffic riding. Consider trial of 'Dutch Style' roundabouts through this slow zone – tourist precinct longer term.
	Medium term cycle improvements will occur during major road upgrades by 2016.
Recommendations	
Short	Upgrade on-road cycle lane to at least 1.5m (and preferably 1.8-2.0m) from St Emilie Way to Tasman Street.
	Provide 45 degree angle kerb ramp at the end of the marked lanes to allow cyclists to enter and re-enter the paths appropriately.
	Provide bicycle symbols and line marking along paths
Medium	Removal of on-street parking near Bluff Street
	Review parking, east of Golf Links Road, to widen for on-road cycle lane
	Narrowing of traffic lanes and widening of the cycle lane to at least 1.5m (excluding any part of the gutter) and preferably 1.8m-2.0m to provide a greater buffer from traffic.
	Asphalt resurfacing of the lane to provide an improved riding surface.
	40km/hr to encourage mixed traffic usage.
Long	Consider a trial of Dutch style roundabout at Golf Links Road creating a slow zone – tourist precinct

#### \_\_\_\_\_\_

#### 1.5.7 Chester Pass Road

Chester Pass Road is an important spine route for commuters and for recreational road riders. The current lack of cycling facilities, combined with high traffic volumes and road trains, makes it an extremely intimidating cycling environment and, as a consequence, it is used only by very confident and experienced cyclists.

Project	Chester Pass Road		
Responsibility	Main Roads & CoA responsible for area between the kerb and property boundary (urban area only)		
Reference	42,43		
Links to Objectives	Cycling Network Cycle Tourism Safety and Respect for all Users		
Possible Solutions / Treatments	There may be opportunities to review the cycling infrastructure following any future development of the Albany Ring Road. South of Menang Drive there is opportunity for either off road shared paths adjacent to Chester Pass Road or to seal and widen the shoulders to meet the standards. These will need to be achieved by widening the carriageway due to the high traffic volumes.		
	North of Menang Drive, Chester Pass Road will continue to serve as a road train route. On this section, the recommended treatment is to widen and seal the shoulders as far as Bakers Junction. This will enable commuter cyclists and road riders to use the route in relative safety, as well as provide access for tourists to/from the caravan parks on the banks of the King River.		
Recommendations	Recommendations		
Short			
Medium	South of Menang Drive construct an off road shared path		
Long	Construct an off road shared path from Menang Drive to link in with Willyung Road/Millbrook Road and Norwood Road. From there widen and seal the shoulders to Bakers Junction.		



#### ------

### 1.5.8 Albany Highway (Chester Pass Road to Link Road)

Between Chester Pass Road and Le Grande Avenue, Albany Highway is currently a four-lane divided road. Beyond this point, it is generally a two-lane road with shoulders of varying width. Feedback indicates that this route is avoided by road cyclists as it is a heavy traffic, intimidating cycling environment with no separation from traffic. However it is, and will continue to be, an important spine route for cyclists travelling between the Albany Central Area and the north-western suburbs.

Project	Albany Highway (Chester Pass Road to Link Road)
Responsibility	Main Roads & CoA responsible for area between the kerb and property boundary (urban area only)
Reference	44, 45
Links to Objectives	Cycling Network Safety and Respect for all Users
Possible Solutions / Treatments	It is understood that Main Roads is currently planning the upgrade of Albany Highway to four lanes from Le Grande Avenue to the edge of the urban area. It is recommended that any upgrade of Albany Highway should include cycle lanes, a minimum of 1.5m wide.
	South of Le Grande Avenue, widening will be required to provide cycle lanes, most likely on the outside of the carriageways. Alternatively an off road shared path could be constructed from the Albany roundabout to Le Grande Avenue. Note, at present there is already an off road shared path in place but is of a poor standard.
Recommendations	
Short	
Medium	Upgrade the off road shared path from the Albany roundabout to Le Grande Avenue
Long	Any upgrade of Albany Highway, from Le Grande Avenue should provide cycle lanes, a minimum of 1.5m wide.

Albany Highway from Chester Pass Road to York Street is under the jurisdiction of the City of Albany, and is discussed in detail as part of the Albany Central Area in Section 1.9..

#### 1.5.9 Hanrahan Road/Princess Royal Drive

Hanrahan Road and Princess Royal Drive form the current road train route to/from the Port. However they also form part of popular cycling routes. Princess Royal Drive, between Frenchman Bay Road and Carlisle Street, is also the only cycling access between Albany Central Area and Lower Denmark and Frenchman Bay Roads, making it a critically important link in the network. It is traversed by a wide range of cyclists – mountain bikers, medium confidence level riders (e.g. the Over 50's cycle club), experienced cyclists (e.g. road riders) as well as walkers following the Bibbulmun Track and more recently Munda Biddi riders.

Currently, some cyclists use informal routes to avoid the risk of interacting with heavy vehicle traffic. Informal routes used by less confident cyclists include the use of Woolstores Place and private land to cross the railway line and enter Princess Royal Drive via the driveway east of Carlisle Street. These routes, aside from traversing private property, involve dismounting to cross the railway line and the risk of injury and damage to bicycles.

The community consultation process identified that Princess Royal Drive/Hanrahan Road was one of the most significant areas for improvement and an additional 66 responses specifically commented on safety issues on Princess Royal Drive/Woolstores/Frenchman Bay Road. (See Appendix A and C)

East of Carlisle Street, cyclists are forced to ride on the road carriageway. This section is narrow, with an unbroken centreline, and a crest at the railway bridge, which creates a significant pinch point.

Hanrahan Road has sealed shoulders along most of its length and, whilst rougher than desirable, these are generally adequate. However, at the northern end of Hanrahan Road, the shoulders disappear, leaving cyclists to mix with traffic in very wide lanes

At the southern end of Hanrahan Road, the cycle lanes disappear at the entrance to the CSBP plant. From this point onwards, cyclists are required to ride in the traffic lane, mixing with road trains and general traffic. In many locations, e.g. between Carlisle Street and Festing Street, and at the railway bridge, there is insufficient width for vehicles to pass safely, particularly road trains, which results in a very dangerous situation for cyclists.





Project	Hanrahan Road / Princess Royal Drive
Responsibility	Main Roads
Reference	56,57,58
Links to Objectives	Cycle Tourism, Cycling Network, Safety and Respect for all Users
Possible Solutions / Treatments	It is recommended that the northbound sealed shoulders on Hanrahan Road be continued through the Menzies Street intersection as far as Parker Street, where an optional path transition should be provided.
	For southbound cyclists, the existing sealed shoulders should be extended north from Menzies Street as far as Parker Street, with a 45 degree connection provided from the existing path Both these recommendations could be achieved by adjustments to line-marking only.
	Fixing the section of road, particularly between Frenchman Bay Road and Festing Street, is considered to be one of the highest priority cycling works due to the inherent risks associated with the existing environment.
	There is no easy fix solution, though some short term improvements are possible. Short term improvements may include the provision of paths, changes to line-marking, and/or signage to manage conflicts between road users until an ultimate solution can be implemented.
	The ultimate solution for this section requires significant engineering investigation, and is therefore outside of the scope of this Strategy. However, several preliminary options have been considered at a strategic level and an indicative solution at this time consists of:
	Mixed traffic operation along Woolstores Place
	New shared path along the western boundary of the Woolstores site
	3.5m wide shared path, on a combined bridge/pontoon structure, from Woolstores to Anzac Peace Park. This structure should have several lookout bays constructed at particularly scenic locations to cater for pedestrians admiring the scenery
	Investigation into the most appropriate route to cater for less confident cyclists between Anzac Peace Park and the beginning of the shared path at Bridges Street.
	This option is expected to accommodate most cyclist types, however very experienced road riders may continue using Princess Royal Drive.
Recommendations	
Short	A comprehensive Feasibility Study, lead by the City to determine a preferred suite of short term and long term improvements, with a view to commencing short term improvements in the 2015/16 FY. The study to include the arterial roads into the CBD.
	On Hanrahan Rd, northbound sealed shoulders be continued through the Menzies Street intersection as far as Parker Street, by adjustments to line-marking only
	On Hanrahan Rd, southbound, the existing sealed shoulders should be extended north from Menzies Street as far as Parker Street, by adjustments to line-marking with a 45 degree connection provided from the existing path.
Medium	
Long	

## 1.5.10 South Coast Highway

South Coast Highway is a spine route serving the western suburbs of Albany. It is generally a two-lane undivided road, with a shared path provided for slower cyclists along the southern side. Presently it is used mainly by experienced road cyclists, as part of the various loop rides around Albany.

Albany Highway to Timewell Road is considered an urban environment while west of Timewell Road is considered a rural environment.

Between Albany Highway and Admiral Street, eastbound cyclists are able to use the sealed shoulder/parking lane, whilst the westbound lane is generally wide enough to allow vehicles to pass cyclists safely.

Between Admiral Street and Townsend Street, the carriageway narrows, passing adjacent to Mount Lockyer Primary School.

West of Townsend Street, as far as Cull Road, sealed shoulders are provided and these are generally suitable at the present time. West of Cull Road, the sealed shoulders are replaced by unsealed or formed shoulders only.

Beyond George Street, South Coast Highway is a relatively narrow rural highway with no sealed shoulders and a winding, undulating alignment. Feedback from cyclists has indicated that it is considered to generally be a 'no go' zone due to the safety issues of mixing with heavy and fast traffic.

Project	South Coast Highway
Responsibility	Main Roads & CoA
Reference	23,24,25,26, 249
Links to Objectives	Cycling Network, Safety and Respect for all Users Cycle Participation, Cycle Tourism
Possible Solutions / Treatments	Between Albany Highway and Admiral St, it is recommended that a bicycle lane be marked on the westbound lane, bicycle symbols installed on both lanes (this would require removal of roadside parking), and a small section of widening carried out in front of 40 South Coast Highway to remove a kerb extension which creates a pinch point.
	There is an existing shared path on the south side between Albany Highway and Bottlebrush Road.
	Cull Road to Timewell Road should be widened to provide 2.0m wide sealed shoulders.  These sealed shoulders should provide adequate width to enable kerbing to be installed in association with the underground drainage.
	Whilst generally outside of the scope of this Bike Plan, it is recommended that the highway be progressively widened to provide 2.0m wide sealed shoulders in both directions at least as far as Denmark. Combined with widening on Lower Denmark Road, this would open up a long loop ride (~100km), as well as potential cycling tourism synergies with the Shire of Denmark.
Recommendations	
Short	Between Albany Highway and Admiral St, a bicycle lane to be marked on the Westbound Lane, bicycle symbols installed on both lanes and widening in front of 40 South Coast Highway. The Carriageway should be widened on the North side in order to provide Cycle Lanes in both directions.
Medium	Between Admiral and Townsend St widen the path on the north side (adjacent to Mount Lockyer Primary) to provide cycle lanes in both directions.
	West of Cull Street to Timewell Road, widen to provide 2.0m sealed shoulders as part of the ongoing upgrade program
	Share the Road' type signage should be installed along the highway at intervals no greater than 5km.
Long	When future periodic road upgrades occur consideration be given to progressively widening South Coast Highway to provide wide sealed shoulders in accordance with the standards in both directions at least as far as Denmark

### 1.5.11 Lower Denmark Road

Lower Denmark Road is a popular recreational road riding route, ridden by experienced road cyclists, and recreational cyclists (such as the Over 50s Cycling Club) as well as being a commuter corridor for residents of Elleker and beyond.

The recent installation of kerbing along Lower Denmark Road westward for 500m from Frenchman Bay Road has generated significant feedback from cyclists. They have commented on safety issues as they felt it prevented cyclists from being able to leave the roadway onto the unsealed shoulder. It is noted that the seal is now significantly wider than previously and has been asphalted.

Project	Lower Denmark Road
Responsibility	City of Albany/Main Roads
Reference	27,28,29, 289
Links to Objectives	Cycling Network Safety and Respect for all Users Cycle Participation Cycle Tourism
Possible Solutions / Treatments	Given the number of complaints received about this section of road, and the safety risks due to high traffic volume and high cyclist volume, widening of the carriageway to provide minimum 1.5m wide sealed shoulders is recommended. This work should be extended beyond the end of the kerbed section, taking advantage of the existing unsealed shoulders, as funding permits.
	Improvement of the George and Robinson Road section would enable cyclists to avoid the section of Lower Denmark Road east of George Street, travelling via Robinson Road instead, until such time that the section east of George Street can have its safety issues addressed.
	Long term, combined with the previous described work on South Coast Highway, this would open up a long loop ride, as well as potential cycling tourism synergies with the Shire of Denmark. At present the route is generally not suitable for use by all but the most confident cyclists.
Recommendations	
Short	Investigate, as part of the Hanrahan/Princess Royal Drive Feasibility Study, options to improve cycling safety along Lower Denmark Road for 500m.
	Widening of the carriageway to provide minimum 1.5m wide sealed shoulders between George and Robinson Road,
	As part of the new Signage Strategy consider:
	Review of the existing signage along Lower Denmark Road and 'Share the Road' type signage at intervals no greater than 5km, particularly on the approach to pinch points (e.g. uphill grades)
Medium	As part of the Ring Road, Main Roads to consider as per their policy, including cycling infrastructure.
Long	Beyond Robinson Road, and beyond Elleker, it is recommended that Lower Denmark Road progressively be widened to provide a minimum 1.5m wide sealed shoulders in both directions.
	With the completion of Albany Ring Road, review the use of existing road for local access and encourage cycling from George Street to Frenchman Bay Road.

## 1.5.12 Frenchman Bay Road

Frenchman Bay Road is a popular recreational road riding route, as well as the only access to some of Albany's best known tourist attractions. Whilst a shared path currently extends from Woolstores Place to Little Grove, there are no facilities for cyclists beyond Little Grove. Anecdotal evidence collected during community and stakeholder consultation indicated that a growing number of tourists were attempting to cycle to Discovery Bay and complained about the intimidating cycling conditions.

An alignment for the shared path link was identified in the 1996 DUPPS report. However, there are significant land ownership issues and the alignment will need to be amended to acknowledge the existing landowner issues. (See Section 1.6)

In the long term Frenchman Bay Road should provide an on-street cycling environment suitable for medium/high confidence level cyclists with sealed shoulders. If a suitable cycling environment can be achieved, many cyclists will opt to use the loop created by the proposed shared path extension and Frenchman Bay Road.

Droject	Evenchman Pay Doad
Project	Frenchman Bay Road
Responsibility	City of Albany
Reference	30, 31, 32, 38, 39, 39a
Links to Objectives	Cycle Tourism
	Cycling Network
	Safety and Respect for all Users
	Cycle Participation
	eyere randispatien
Possible Solutions / Treatments	Advantage should be taken of resealing works, intersection upgrades, culvert replacements and other unrelated civil works to progressively provide sealed shoulders along the length of the route
	A new alignment has been proposed, which will go along Big Grove future sub-divisions, connect back onto Frenchman Bay Road and link with Limeburners Road.
	See Section 1.6
Recommendations	
Short	As per new Signage Strategy consider:
	'Share the Road' type signage along Frenchman Bay Road at intervals no greater than 5km, particularly on the approach to pinch points (e.g. uphill grades)
Medium	A new shared path extension from the end of Little Grove shared path, to go along Big Grove future sub-divisions, connect back onto Frenchman Bay Road then link with Limeburners Road
Long	Consider upgrading the shoulders on Frenchman Bay Road, to a minimum width of 1.5m (2.0m where possible, including if major works are being undertaken)

### 1.5.13 Range Road

Range Road is a proposed future arterial road connecting Sanford Road/North Road intersection with Mercer Road, designed to provide an alternative route for through traffic between Albany Central Area and the northern suburbs, relieving Ulster and Chester Pass Roads.

This road will serve future sub-divisional activity in Yakamia and Lange.

Project	Range Road
Responsibility	City of Albany
Reference	33
Links to Objectives	Cycle Participation Cycle Network
Possible Solutions / Treatments	Include minimum 1.5m wide cycle lanes to cater for cyclists residing in this area
Recommendations	Design Guidelines and Development Requirements
Short	
Medium	Range Road be developed with high quality 1.5m cycle lanes to cater for commuter cyclists
Long	

#### \_\_\_\_\_

# 1.6 Albany Harbours Path(Lower Kalgan – Frenchman Bay)

This is the spine route for casual and recreational cyclists, running along Albany's spectacular foreshore. In addition, it serves as the only physical link between Albany and the suburbs of Bayonet Head and Lower King, and to Little Grove in the south.

Along its length it serves numerous schools, tourist attractions, recreational facilities and of course the City Centre. As indicated in Section 1.4, a comprehensive Signage Strategy will need to be developed to support the continued promotion and use of this iconic trail for all users.

Recommendations	
Short	A comprehensive Signage Strategy (including an audit and design guidelines) be developed to support the 5 year implementation plan.
Medium	Roll out the signage strategy on specific new projects as determined in the implementation plan  Target key tourist and commuter routes for any signage upgrades on existing routes
Long	All major cycle routes have regulatory and way finding signage

The following sections deal with the path in discrete sections from Section 1 to Section 12.



#### Section 1 - Lower Kalgan Bridge to Lower King Bridge

There is currently no shared path between Lower King and Lower Kalgan Bridges. This has impact for the increasing number of students who attend Great Southern Grammar who are currently unable to safely walk or cycle to school. The school and local community have been advocating for this path for a considerable time, including submissions and petitions to Council. 40% of the students live within 10km of the school (providing cycling and walking options)

The development of this shared path will have additional benefit of linking the satellite communities of Lower Kalgan and providing tourist access to Luke Penn Walk, Kalgan fish traps, the Albany Rowing Club and the caravan park and to provide an off-road path to the Albany CBD. There is also potential to extend the DUPPS Plan (1996) from Lower King to Lower Kalgan Bridge and encourage cycle tourists.

During the 2013/14 FY, stage 1 work will commence on a shared path between Kalgan Heights and Great Southern Grammar School. See Figure 1.6.1.

Project	Lower Kalgan Bridge to Lower King Bridge
Responsibility	City of Albany
Reference	34, 35, 35a
Links to Objectives	Cycle Network, Cycle Tourism, Cycle Participation
Possible Solutions / Treatments	A staged approach for the development of a shared path between Lower Kalgan Bridge and Lower King Bridge, including approaches and cross over on both bridges.
	The stages could include Kalgan Heights (Fish Traps) to Coraki Park, Coraki Park to Lower King Bridge, GSG to Lower Kalgan Bridge western end (shared path).
Recommendations	
Short	Completion of Stage 1 shared path (Kalgan Heights to Great Southern Grammar)
Medium	Completion of Stage 2 shared path (Kalgan Heights to Lower King Bridge)
Long	Completion of Stage 3 shared path (GSG to Lower Kalgan Bridge)



Figure 1.6.1 Lower King Bridge to Lower Kalgan Bridge

### Section 2 - Lower King Bridge and approaches

The proposed shared path from Great Southern Grammar intersects with Lower King Road at the northern end of the Lower King Bridge. As this crossing is located on a curve, it can be difficult to cross in peak periods.

The Lower King Bridge currently has a shared path on the western side, which is too narrow for cyclists to pass safely and is used regularly by fishers. This is manageable on weekdays where the flows are generally low and peak directional, however during weekends and holiday periods the volume of users can cause significant conflicts.

The southern approach to the bridge is a causeway through the mud flats on the edge of the King River. Currently, pedestrians and cyclists are required to use a narrow shoulder on the western verge of the road, which becomes a reasonable quality shared path after approximately 350m.

Project	Lower King Bridge and Approaches
Responsibility	City of Albany/Main Roads
Reference	34, 35b, 35d
Links to Objectives	Cycle Participation Cycle Tourism Cycle Network
Possible Solutions / Treatments	The ultimate solution for the Lower King Bridge path is to provide a dedicated shared path bridge on the eastern side of the traffic bridge, leaving the existing footway for use by pedestrians only. Constructing the path on the east side would also eliminate the need for path users to cross Lower King Road twice (once at the northern end of the bridge and once again near the Lower King store).
	If a new bridge across the river is constructed, the shared path should be continued along the eastern side of the road as far Rae Road, with a branch to the end of The Esplanade.
	In the short term, signage should be installed to make sure drivers are aware of the presence of pedestrians close to the road and the 'Lower King River' sign should be relocated to avoid obstructing the path.
	Consideration should be given to providing a refuge island and signage to warn motorists of the possibility of children crossing.
Recommendations	
Short	As part of the new Signage Strategy consider:
	Signage should be installed to make sure drivers are aware of the presence of pedestrians/ cyclists close to the road
	'Lower King River' sign should be relocated to avoid obstructing the path
Medium	Explore upgrading existing shared path to create a separate dual use raised path across the causeway section from Coraki Park to start of shared path (south of Lower King Bridge).  Consideration should be given to providing a refuge island and signage to warn motorists of the possibility of children crossing
Long	Investigate options for a dedicated shared path bridge on the eastern side of the Lower King Bridge traffic bridge, when the bridge is due for replacement and/or major upgrade.  Shared path continued along the eastern side of the road as far as Rae Road.

#### \_\_\_\_\_\_

#### Section 3 - Lower Kalgan Bridge and approaches

Currently, pedestrians and cyclists must use the traffic lanes across the narrow Lower Kalgan Bridge and the narrow Lower King Road/Nanarup Road. The speed of 80km/hr over this bridge, combined with the lack of width creates a considerable safety concern. As a rural road and arterial route to the eastern precinct it carries noteworthy heavy vehicles.

Section 3 is also a popular recreational route and cycling route for road cyclists to Nanarup and return. There is currently a 'Share the Road' sign on each end of the bridge.

From Great Southern Grammar to the Lower Kalgan Bridge there is currently no safe pedestrian or shared path option. Similar to Lower King Bridge there is a curve which makes crossing difficult. There are various recreational activities based at the western edge of the bridge (Bridge Park), including the Albany Rowing Club, Cricket ground and boat ramp facilities and a car park. Currently GSG students are bused the 50m as access by foot is too dangerous.

Project	Lower Kalgan Bridge and approaches
Responsibility	City of Albany/Main Road
Reference	35, 35a, 35c
Links to Objectives	Cycle Participation Cycle Tourism Cycle Network
Possible Solutions / Treatments	In the short term ensuring consistent signage for both Lower Kalgan and Lower King Bridge will help to highlight appropriate road user behavior.  In the medium term, as part of the staged approach a shared path from GSG to Lower Kalgan Bridge western end (to Bridge Park)  In the long term, the bridge will either need to be widened to provide a shared path or a separate shared path bridge be constructed across the river.
Recommendations	
Short	As part of the new Signage Strategy consider:  Consistent Signage be installed to make sure drivers are aware of the presence of cyclists/ pedestrians on the bridge.
Medium	As part of the staged approach a shared path from GSG to Lower Kalgan Bridge western end (to Bridge Park)
Long	Investigate options which could include, but not limited to, widening of the Lower Kalgan bridge or a separate shared path bridge over the Lower Kalgan river.

#### Section 4 - Lower King to Bayonet Head

Between Lower King and Bayonet Head, there is currently a reasonable quality shared path along the eastern side of Lower King Road. This is generally adequate for existing low speed cyclists.

However, in the medium to long term, a continuous shared path route along the harbour foreshore should be created, linking Lower King with Bayonet Head. This route would include:

- 1. The Esplanade (short term mixed traffic operation, medium to long term shared path along the eastern side)
- 2. Shared path along Simmons Street and Alison Parade
- 3. Shared path link between Alison Parade and Allwood Parade
- 4. Shared path along Allwood Parade, connecting to the existing path on Bayonet Head Road
- 5. Branch path along Warlock Road to connect with existing paths leading to Flinders Park Primary School

The development of this route should generally proceed commensurate with subdivisional development in the area.

Project	Lower King to Bayonet Head
Responsibility	City of Albany
Reference	36, 36a
Links to Objectives	Cycle Network Cycle Participation
Possible Solutions / Treatments	The link between Alison Parade and Allwood Parade should be implemented as soon as possible, even before the vehicle link, as this would significantly shorten the distance for Lower King residents to Flinders Park Primary School and provide a convenient loop for exercise/recreational riding in the area.
	A higher quality shared path should be developed on the southern approach to the Mercer Road Roundabout, at the new Bayonet Head Shopping Centre, as the increased residential development in the area this section of path will see a significant increase in usage.
Recommendations	
Short	
Medium	Shared path between along Allwood Parade from the Outlook to Bay View Heights Development
	Shared path along Alison Parade should be considered
Long	

#### ------

### Section 5 - Emu Point Drive Crossing

The existing crossing at Emu Point Drive (opposite Griffiths Street) has several issues including:

- → Right-angle bends on northern path approach
- → No ability to stage crossings
- → Southern kerb ramp is not angled directly across the intersection
- → Crossing cyclists must deal with through traffic on Emu Point Drive as well as traffic turning in/out of Griffiths Street
- → Obstacles blocking the path on the northern approach

Works are currently being undertaken to widen Emu Point Drive/Golf Links Road, which may provide an opportunity for short term remedial works.

Project	Emu Point Drive Crossing
Responsibility	City of Albany
Reference	81, 81a
Links to Objectives	Cycle Network
Possible Solutions / Treatments	It is not feasible to significantly relocate the crossing but it is recommended that the work priorities should be as follows:
	Clear vegetation to improve visibility on northern approach
	Realign path to remove dog-leg and obstructions on northern approach, replace with a gentler curve to relocated crossing
	Shift crossing to the west by approximately 10m
	Widen Emu Point Drive to provide a 2m wide refuge island
	Reduce the radius of the southwestern corner of the intersection to slow vehicles entering and exiting Griffiths Street
Recommendations	
Short	Clear vegetation to improve visibility on northern approach
	Realign existing shared path, shift crossing to the west by 10m and improve crossing point
Medium	
Long	Incorporate shared path as part of planning, when realignment of Griffiths St and Emu Point Road intersection occurs with future development works.

#### -------

#### Section 6 - Emu Point

A spur of the Albany Harbours Path extends from Griffiths Street to Emu Point, currently terminating at the end of Cunningham Street

This is a very popular recreational and tourist route and is used extensively throughout the year. It also misses the link to Swarbrick Street, to pick up a shared path which follows the bush reserve along Swarbrick Street and back to Mermaid Avenue.

This would result in a convenient loop for residents or visitors of Emu Point, as well as increase the attractiveness of the current shared path which requires cyclists to retrace their steps.

Current planning for a Coastal Parks Enhancement Project along Emu Point Estuary includes a shared path through the existing park extending from the end of Cunningham Street to Swarbrick Street.

The existing shared path at the front of the Emu Point café is narrow and requires widening to a minimum of 2.0m and it currently terminates at the disabled parking bay at the end of Mermaid Avenue.

Project	Emu Point – Swarbrick St Connection
Responsibility	City of Albany
Reference	5, 5a
Links to Objectives	Cycle Network Cycle Tourism
Possible Solutions / Treatments	Extend the path from Cunningham Street, along Roe Parade and Swarbrick Street, to connect with the existing path adjacent to the Swarbrick St/Miller St intersection.  End of trip facilities would improve this important tourist and community hub.
Recommendations	
Short	
Medium	As part of the Coastal Parks Enhancement Project complete the following:  Missing link between Cunningham and Swarbrick St  Widening of the path in front of Emu Point Café to 3m shared path and realign end point away from disabled parking bay  Upgrade end of trip facilities at Emu Point
Long	

### Section 7 - Griffiths Street

The Albany Harbours Path and the Emu Point spur junction at the end of Griffiths Street.

During the 2013/14 FY, a missing section of path along Griffiths Street was constructed, including a realignment of the existing path junction and associated visibility improvements. This section of path forms part of the Albany Harbours Path but also completes the path from Middleton Beach to Emu Point.

Project	Griffiths Street	
Responsibility	City of Albany	
Reference	6	
Links to Objectives	Cycle Network Cycle Tourism	
Possible Solutions / Treatments	It is recommended that direction signage be installed at the reconstructed path junction.  As this is a low cost item, it should be implemented as part of this project and then can be updated as necessary to conform to the recommended signposting strategy.	
Recommendation		
Short	As part of the new Signage Strategy consider:  Directional signage be installed at the path junctions	
Medium		
Long		

### Section 8 - Flinders Parade (Surfers Beach) Car Park

At the southern end of the Flinders Parade Car Park, the path crosses from the western side to the eastern side of the roadway. The present crossing is extremely poor – a right angle bend, which is not negotiable on a bicycle, combined with a sand hazard right on the bends. It is noted that many cyclists simply ignore the crossing and instead cross diagonally along the desire line.

Project	Flinders Parade (Surfers Beach) Car Park
Responsibility	City of Albany
Reference	7
Links to Objectives	Cycle Network, Cycle Tourism
Possible Solutions /	Two options have been considered to improve this crossing:
Treatments	Option 1: Realign the path to pass along the eastern side of the car park.
	Option 2: Realign the path to cross Flinders Parade on the diagonal desire line, via a raised crossing over which pedestrians and cyclists have priority.
	Current planning for a Coastal Parks Enhancement Projects has suggested realigning the cycle path along the eastern side of the car park (Option 1).
	Option 2 is recommended for the following reasons:
	It matches the cycling desire line
	It avoids conflict between cyclists and people entering/exiting/loading vehicles, including children
	It avoids the sand hazard on the eastern side the car park
	The raised crossing would assist in keeping vehicle speeds low on entry to the car park.
Recommendations	
Short	
Medium	Realign the path to pass along the eastern side of the car park
	As part of the new Signage Strategy consider:
	Directional signage being installed at the path junctions
Long	

#### \_\_\_\_\_\_

#### Section 9 - Middleton Beach to City Centre

The existing path which runs along Stirling Terrace, Brunswick Road and the harbour is generally satisfactory. West of Bridges Street cyclists are then required to either ride on a narrow path, which appears to be a footpath, or to ride in mixed traffic due to the narrow road reserve.

Due to the constraints of the narrow road reserve, it is not feasible to either widen the path or widen the carriageway to provide cycle lanes.

Recent work undertaken on the western end of Stirling Terrace, near York Street as part of the Anzac Commemorations in November has seen some initial work done to create a low speed, mixed traffic environment. This will need to be continued through the remainder of Stirling Terrace, to Bridge Street.

Project	Middleton Beach to City Centre (Stirling Terrace)
Responsibility	City of Albany
Reference	37
Links to Objectives	Cycle Network Cycle Tourism
Possible Solutions / Treatments	Continue the low speed, mixed traffic cycling environment along Stirling Terrace, from the new works to Bridges St.
	To achieve this, the following will be required as a minimum:
	Raised threshold entry statements at both ends of the section
	Bicycle symbols and signage
	A broken centreline, to encourage safe overtaking, particularly in the eastbound (uphill) direction
	A reduction in speed limit to 40km/h
Recommendations	
Short	Continue the low speed, mixed traffic cycling environment along Stirling Terrace, from the new works to Bridges St including:
	Raised threshold entry statements at both ends of the section
	Bicycle symbols and signage
	A broken centerline, to encourage safe overtaking, particularly in the eastbound (uphill) direction
	A reduction in speed limit to 40km/h
Medium	
Long	

### Section 10 - City Centre to Woolstores

This section has been discussed in Section 4.2

#### Section 11 - Little Grove to Discovery Bay

The current shared path ends at Stubbs Road, Little Grove. Beyond this point, cyclists are required to ride on the road along—i.e. Bay View Drive, Chipana Drive then Frenchman Bay Road. At present, generally only confident road cyclists are able to ride to/from Goode Beach and Frenchman Bay. Discussions with local cyclists have indicated that less confident cyclists choose to drive to Little Grove and then begin cycling to Albany due to the intimidating cycling environment along Frenchman Bay Road. Anecdotal evidence collected during community and stakeholder consultation has also indicated that a growing number of international tourists were attempting to cycle to Frenchman Bay and complained about the intimidating cycling conditions.

An alignment for the shared path link was identified in the 1996 DUPPS report. However, there are significant land ownership issues and the alignment will be amended to acknowledge the existing landowner issues.

Shared paths along the remaining sections of this route are not considered necessary within the life of this plan, due to low traffic volumes and higher priorities elsewhere. However, any upgrade works along the route should include provision of sections of the shared path, to take advantage of cost efficiencies.

#### See Figure 4.3.12

Project	Little Grove to Discovery Bay
Responsibility	City of Albany
Reference	38, 39, 39a
Links to Objectives	Cycle Network
Possible Solutions / Treatments	The highest priority section of this link is between Harbour Esplanade, Little Grove and the intersection of Quaranup Road/Shoal Bay Retreat.
	This route would enable cyclists to avoid Frenchman Bay Road completely by riding along Chipana Drive, Harbour Esplanade, the new path link, Shoal Bay Retreat, the emergency vehicle access connection to Goode Beach, then McBride Road, Austin Road and Vancouver Road to Frenchman Bay. The on-street sections are on very quiet streets, which are generally suitable for cyclists of all confidence levels.
	Bicycle symbols would be necessary to provide passive wayfinding and assist in cyclist positioning and driver behaviour.
	The second highest priority section is to continue the shared path from Stubbs Road, along Bay View Drive, to Chipana Drive. The next section from Chippana Drive to Harbour Esplanade is along quiet streets and would only require on-road signage. This would enable less confident cyclists to ride on the path through the busiest on-street section of this route, as well as provide improved walking facilities for Little Grove residents and children walking to Little Grove School.
Recommendations	
Short	A comprehensive planning study be undertaken to select the best alignment and design, acknowledging the existing landowner issues between Little Grove and Quaranup Road.  Continue the shared path from Stubbs Road, along Bay View Drive, to Chippana Drive.
Medium	Complete the shared path from Harbour Esplanade, to the intersection of Quaranup Road/ Shoal Bay Retreat.
	As part of the new Signage Strategy consider:
	Consistent Signage be installed along the route
	Include signage from path into King George Street through to Wilson Street, providing an alternative route to Chippana Drive
	Chippana Drive to Harbour Esplanade is along quiet streets and would only require on-road signage

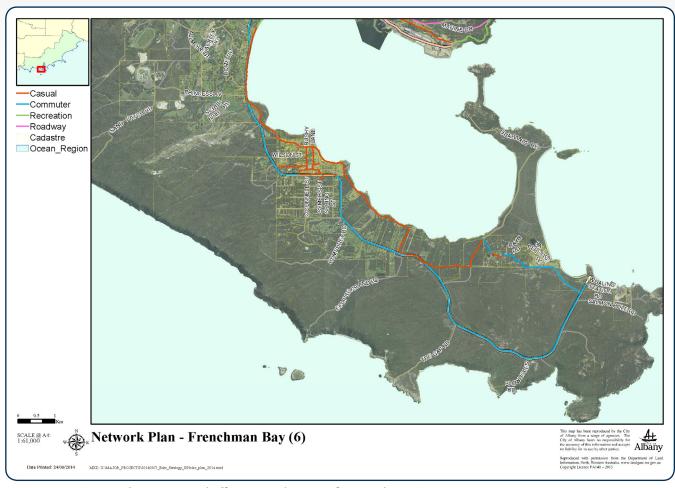


Figure 1.6.11 Proposed on-street and off-street cycle routes for Frenchman Bay

### 1.7 Off-Street Corridors

#### 1.7.1 Bayonet Head to Chester Pass Road Corridor

There is currently no east-west cycling link from Bayonet Head/Lower King to Chester Pass Road which is suitable for cyclists other than experienced road riders. Alternatives are riding along Mercer Road, which is a high speed, high traffic route with no shoulders, curves and crests, or a significantly longer route via Collingwood Park and North Road.

The absence of a direct east-west connection means that journeys to significant destinations such as shopping centres and employment lands along Chester Pass Road, and North Albany Senior High School, are unable to be undertaken by bicycle due to the added distance and/or the danger of riding on Mercer Road. As subdivisional development in Bayonet Head and Oyster Harbour continues, demand for east-west travel will continue to grow.

Project	Bayonet Head to Chester Pass Road	
Responsibility	City of Albany	
Reference	40, 40a	
Links to Objectives	Cycle Participation Cycle Network	
Possible Solutions / Treatments	Several alternatives were considered for providing this link, including widening Mercer Road, providing a shared path along Mercer Road, or constructing a shared path from Ulster Road to link with Lockheed Road. The recommended proposal is generally along the line of Catalina and Mason Roads, as shown in Figure 1.7.1. The proposal utilises a mixture of quiet street mixed traffic operation and several short path links within existing road reserves to provide a continuous route, free from heavy traffic. As subdivision development expands along Catalina Road, minimum 1.5m wide cycle lanes should be provided to cater for cyclists of most confidence levels	
Recommendation		
Short		
Medium	Investigate the linking from Bandicoot Drive to Mason Road, including cycle lanes along Catalina Road as development expands	
Long	As subdivision development expands along Catalina Road, minimum 1.5m wide cycle lanes and a shared path should be provided to cater for cyclists of all confidence levels	



Figure 1.7.1 Recommended Bayonet Head to Chester Pass Road link

# 1.7.2 Chester Pass Road – Barnesby Drive – North Road Corridor

This route is the proposed northern spine route for casual and slower commuter cyclists, extending from Chester Pass Road/Mercer Road intersection to the Albany Central Area.

Feedback received from Yakamia Primary School indicated that construction of a high quality shared path along Barnesby Drive between Chester Pass and North Roads is a high priority to cater for their children. This work will also serve Brooks Garden and North Road Shopping Centres, John Calvin School, Bethel Christian School, and the employment area along Chester Pass Road. Furthermore, the works will also provide a safer route for children and families accessing the Centennial Park precinct and Albany Leisure and Aquatic Centre. It is understood that there are currently private land issues between Butt Road and Chester Pass Road. However it is the critical link in the corridor and should be completed as soon as possible.

Project	Chester Pass Road – Barnesby Drive – North Rd
Responsibility	City of Albany & Main Roads
Reference	1, 1a, 1b, 2, 41,16, 82
Links to Objectives	Cycle Participation Cycle Network
Possible Solutions / Treatments	The works required to complete this route are as follows:  Extension of shared path from Harvey Norman to Mercer Road, allowing cyclists using Mercer Road to connect to/from the path without travelling on Chester Pass Road  Construction of high quality shared path from Chester Pass Road to the intersection of Barnesby Drive/Butts Road.  Construction of a new high quality shared path along the western side of Barnesby Drive from Butts Road to North Road.  Construction of a median opening and kerb ramps on North Road west of the crossing of Yakamia Creek, enabling cyclists to directly connect from Barnesby Drive to the path through Centennial Park. The newly constructed roundabout intersection should be considered when determining the location of crossing facilities.  Upgrade and construction of the path through Centennial Park, as discussed in Section 1.9  Consideration should also be given to upgrading the older sections of shared path on Chester Pass Road, from Barnesby Drive to Catalina Road, to provide a high quality asphalt surface and improved crossings.
Recommendations	
Short 6	Remove the fence and install grab rails at the North Road/Beaufort Rd Pedestrian crossing  Construction of a new high quality shared path along the western side of Barnesby Drive from  Butts Road to North Road
Medium	A staged approach to the completion of a shared path from Mercer Road, along Chester Pass Road, Butts Road and Barnesby Drive to connect with Centennial Park.
Long	Upgrade the shared path on Chester Pass Road from Barnesby Drive to Catalina Drive

# 1.7.3 Albany Highway

North of Chester Pass Road, there is currently only a path on the eastern side as far as the bridge over Willyung Creek, where the path then crosses to the western side, continuing until Bottrell Place.

There is a missing link in this path through the service station on the corner of Lancaster Road. During the saddle survey, walkers were observed walking on the shoulder/verge due to the absence of a path in this section.

The path south of Willyung Creek, whilst serving the business located along the eastern side of Albany Highway, is only suited to slow speeds as it involves frequent driveway crossings and several street crossings. It is also does not serve the residential area on the western side of the highway.

Project	Albany Highway (North of Chester Pass Rd)
Responsibility	Main Roads/City of Albany
Reference	46, 47, 46a, 47a
Links to Objectives	Cycle Participation Cycle Network
Possible Solutions / Treatments	Continue with off-street shared path along the western side of Albany Highway from Willyung Creek south to South Coast Highway.
Recommendations	
Short	Construction of the missing link through the service station on the corner of Lancaster Road  Completion of a dual use path from Bottrell to Kooyong Avenue
Medium	Extending the path from Kooyong Avenue to Federal Street to cater for residents living beyond the end of the current path
Long	Construction of a path along the western side of Albany Highway from Willyung Creek south to South Coast Highway

The section of Albany Highway between York Street and Chester Pass Road is discussed in Section 1.9.

#### \_\_\_\_\_\_

# 1.7.4 Le Grande Avenue Intersection

This route includes a shared path along the southern side of South Coast Highway which is generally adequate for current usage. The project will link Le Grand Avenue to the path on the southern side of South Coast Highway.

Project	Le Grand Avenue Intersection
Responsibility	Main Roads and City of Albany
Reference	4
Links to Objectives	Cycle Participation Cycle Network Cycle Tourism
Possible Solutions / Treatments	Construct the missing link between the South Coast Highway shared path and the Le Grand Avenue shared path
Recommendations	
Short	Extending the Le Grande Avenue shared parth to South Coast Highway, including a short section on South coast Highway to enable a safe crossing location  Construction of kerb rampts to provide a connection between the two paths, east of the intersection
Medium	IIICISCCIOII
Long	





# 1.8 Recreational (Road-Riding) Routes

Recreational road cyclists tend not to stick to a single route, preferring to periodically change routes to maintain interest or to match terrain with training requirements. Discussions with representatives of the road cycling community have identified the current popular routes, as well as roads which are avoided. The popular routes are shown in Figure 1.8.

As this network is quite extensive and subject to change from time to time, it is not proposed to develop a specific route for recreational road riding. However, there are identified key sections of the network which should be improved to cater for road riding cyclists. The East-West route is limited as there are considerable safety issues on all the major connectors and two options have been proposed:

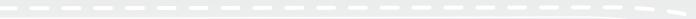
## 1.8.5 Lower King Road to Chester Pass Road via Norwood Road

Currently road riders use either Mercer Road or Norwood Road to connect between Lower King Road, depending on the intended route west of Chester Pass Road. As a general rule, riders try to avoid travelling on Chester Pass Road and Albany Highway as far as possible due to the heavy traffic, including road trains

Mercer Road is an intimidating environment to cycle in, even for experienced road riders. Initially consideration was given to widening this road to provide cycle lanes, however it was preferable to provide cyclists with an alternative route that does not carry such heavy traffic volumes.

Norwood Road with reconstruction and widening was recommended as the better option. This is the preferred east-west route for any potential upgrade.

Project	Lower King to Chester Pass Road/Norwood Road
Responsibility	City of Albany
Reference	54
Links to Objectives	Cycle Network
Possible Solutions / Treatments	Norwood Road is due for reconstruction and widening in the near future and would form an effective east-west connection. Riders can then use Willyung Road and Rocky Crossing Road to get to Menang Drive.
	An alternative route for road cyclists is the proposed off-street/quiet streets link via Mason and Catalina Roads (see Section 1.7.1.)
Recommendations	
Short	
Medium	Widening of Norwood Road to include sealed shoulders/on-road cycle lane
Long	



## 1.8.6 Lower King Road to Chester Pass Road via Greatrex Road

As an alternative to either Mercer or Norwood Roads, an east-west route could be constructed for road cyclists utilising the Greatrex Road, road reserve. This road is currently sealed from Chester Pass Road, eastward for a distance of 1.5km, unsealed for a further 1km, then unconstructed for the remaining 1km to Lower King Road.

These works would result in the provision of an east-west link from Lower King to Chester Pass Road which is void of traffic for its entire length but still caters for road cyclists. It would also enable cyclists to reach Menang Drive (which has wide shoulders and low traffic volumes) without travelling on Chester Pass Road for more than 200m. This would facilitate a loop around Albany which requires less than 1km of riding on road train routes.

One of the main advantages of this option is the spectacular forested corridors along the Greatrex Road alignment. However, the high costs of construction are likely to outweigh the benefits of this particular link, suggesting that the Norwood Road alignment is a more appropriate choice for recreational road riding connectivity. This option has therefore been omitted from the Network Plan.

Project	Lower King Road to Chester Pass/Greatrex Road
Responsibility	Main Roads/City of Albany City of Albany
Reference	53
Links to Objectives	Cycle Network
Possible Solutions / Treatments	The recommended works include:  Sealing the 1km unsealed section of Greatrex Road to a width of at least 6m  Constructing a high quality shared path to a standard suitable to attract road riders (i.e. excellent alignment allowing speeds of 40km/h+ to be maintained) from the end of the unsealed road to the intersection of Lower King Road and Elizabeth Street  Sealing the southbound shoulder of Chester Pass Road to a width of 2.0m between Menang Drive and Greatrex Road.
Recommendations	
Short	
Medium	Investigate the alternate east-west route discussed
Long	



Figure 1.8 Popular Recreational (Road Riding) Routes



Figure 1.8 Popular Recreational (Road Riding) Routes



# **Area-Wide Network Improvements**

In addition to the above corridor improvements, each precinct or area within Albany has been assessed to identify critical links which would benefit from infrastructure upgrades.

The overall study area has been split into 5 Sub-Areas which are:

- → 1.9 Area 1 Albany Central Area
- → 1.10 Area 2 Lockyer/McKail
- → 1.11 Area 3 Milpara/Yakamia/Lange
- → 1.12 Area 4 Spencer Park/Middleton Beach/Collingwood Heights
- → 1.13 Area 5 Bayonet Head/Lower King
- → 1.14 Area 6 Little Grove

Each area has been looked at in depth, with recommendations to improve connectivity, mobility and safety between the local cycling generators and attractors. These links are particularly important for casual riders and provides access to the city centre, schools, business, community and recreation nodes.

See Figure 1.9 and Appendix D and E for detailed maps

Figure 1.9 Area Wide Improvements Key Map



# 1.9 Area 1 – Albany Central Area

The Cycle City Albany (2014 – 2019) strategic vision for Albany Central Area is to create an urban environment where vulnerable road users are the priority modes, where cyclists of all confidence levels feel safe. Currently there are a significant number of large infrastructure projects and improvements being undertaken within the Albany Regional Centre and Albany Central Area that will have an impact on future cycling infrastructure projects.

High pedestrian volumes, particularly in tourist season, make a primarily off-street cycling network impractical. Accordingly, a primarily on-street cycling network is proposed, designed with a mixture of high quality cycle lanes and low speed, mixed traffic riding. The area under discussion in this section incorporates the Albany Central Area and Albany Regional Centre.

### 1.9.1 Definitions

The definitions for the areas under discussion are:

Albany Central Area as defined in the Albany Central Area Master Plan (2010) and shown in Figure 1.9.1 incorporates the area bounded:

- → to the east by Campbell Road, Spencer Street, Frederick Street and Bolt Terrace
- → to the south by the Princess Royal Harbour foreshore
- → to the west by Melville Street, Collie Street,
- → to the north/west by Serpentine Road, Albany Highway, Barker Road and along the north western boundary of Centennial Park.

It incorporates the main arterial routes into the Albany Regional Centre.

Albany Regional Centre as shown in Figure 1.9.1 incorporates Stirling Terrace, Aberdeen Street, York Street, Collie Street, Lockyer Avenue (to Stead Road), Grey Street East, Grey Street West and Albany Highway (to east of Sanford Road).



## 1.9.2 Background - Albany Central Area and Albany Regional Centre

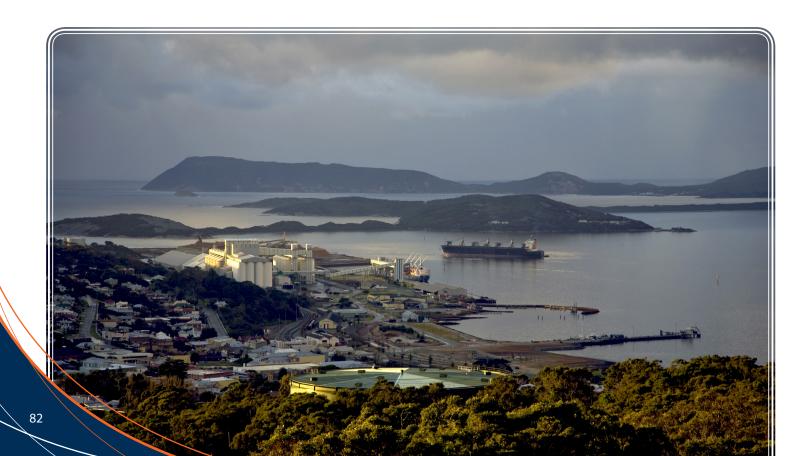
The Albany Central Area and Albany Regional Centre has a vast array of competing needs and any on-street infrastructure recommended will need to undergo detailed design works to ensure that the impact to other modes is considered. In particular, it is understood that there may be an impact on car parking and/or pedestrians as a result of the proposed works, in addition to the requirements for cars and bicycles to mix within the slow-speed town centre environment.

The cycling facilities recommended for the Albany Regional Centre, outlined in the following sections, will require extensive planning, design and consultation prior to implementation. It is essential that all cycle infrastructure projects fit with the clear future directions for the Albany Regional Centre and work towards integration. It is likely that it may be 2-3 years before the first of the facilities are available for use and up to 20 years before the full suite of facilities have been designed, funded and completed.

However, many of the recommended improvements within the Albany Central Area can be implemented within a short to medium term. They have been developed up as specific projects which provide a relatively convenient cycle route connecting the key demand generators within the Central Area; such as UWA, York Street, Albany Plaza, Dog Rock Shopping Centre's, and ALAC. This route would cater for casual cyclists of medium confidence levels and above, being primarily on-street but in either low speed mixed traffic situations or formal cycle lanes

In essence these projects encourage and support cycling infrastructure on the main arterial routes, bringing cyclists into the Albany Regional Centre.

The recommended improvements for the Albany Regional Centre remain in the strategy as possible options for the longer term vision of Albany to become one of Australia's primary cycling destinations. A comprehensive integrated transport plan will need to be undertaken, in conjunction with future planning for the Albany Regional Centre.



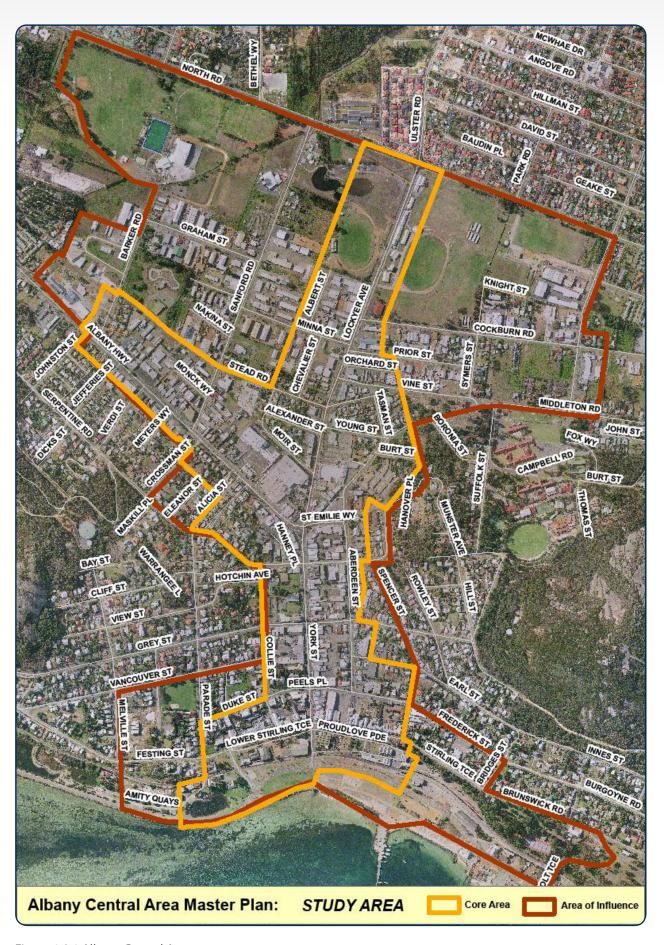
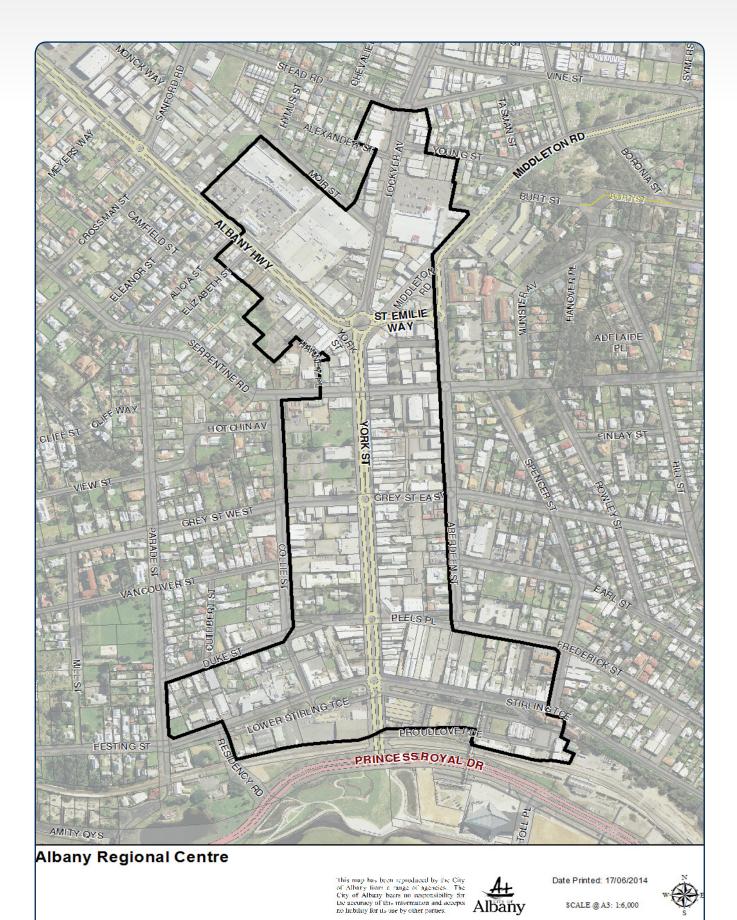


Figure 1.9.1 Albany Central Area



Albany

Reproduced with permission from the Department of Land Information, Parth, Western Australia, www.landpate.wa.gov.au. Copyright Licence PA140 – 2013 MXD: X-IQEVEL SERVICE Protect

Figure 1.9.2 Albany Regional Centre

Project	Albany Central Area/Albany Regional Centre
Responsibility	City of Albany
Reference	76, 76a, 77, 14, 15, 16, 18
Links to Objectives	Cycle Participation
	Cycle Network
	Cycle Tourism
Possible Solutions / Treatments	The recommended route and improvements are illustrated in Figure 1.9.3 and include the following:
	Mixed traffic operation along York Street and Peels Place.
	Northbound (uphill) cycle lane along Aberdeen Street, created by relocating the centreline to the east where necessary. This lane should be between 2.0-2.5m wide where adjacent to parking spaces to reduce the risk of dooring incidents. Southbound cyclists would ride in mixed traffic.
	Widening of the northbound lane on Middleton Road between St Emilie Way and the existing cycle lane at Tasman Street to provide a cycle lane. The width should be a minimum of 1.5m, with a reduction in width to 1.2m adjacent to Dog Rock where widening is not possible.
	Minor adjustments to the southbound lane on Middleton Road between Tasman Street and St Emilie Way to provide a cycle lane and a 45 degree ramp to the path on approach to the roundabout.
	Modifications to the Middleton Road/Tasman Street intersection to permit right turns for cyclists from Tasman Street into Middleton Road (design to be determined by detailed design).
	Mixed traffic operation along Tasman Street and Stead Road to Lockyer Avenue.
	Eastbound contra-flow cycle lane along Stead Road between Lockyer Avenue and Hymus Street, in red asphalt to improve the visibility of this infrastructure and reinforce the status of the contra-flow cycle lane
	Mixed traffic operation along Stead Road and Barker Road from Hymus Street to ALAC.
	Reconstruction of the existing path, or construction of a new path, from ALAC to North Road at Barnesby Drive, as part of the Centennial Park redevelopment works
Recommendation	
Short	Reconstruction of the existing path, or construction of a new path, from ALAC to North Road at Barnesby Drive, as part of the Centennial Park redevelopment works
	Widening of the northbound lane on Middleton Road between St Emilie Way and the existing cycle lane at Tasman Street to provide a cycle lane.
Medium	Support the staged approach to cycle friendly improvements, within the Albany Central Area including:
	Mixed traffic operation along Tasman Street and Stead Road to Lockyer Avenue.
	Eastbound contra-flow cycle lane along Stead Road between Lockyer Avenue and Hymus Street, in red asphalt to improve the visibility of this infrastructure and reinforce the status of the contra-flow cycle lane
	Mixed traffic operation along Stead Road and Barker Road from Hymus Street to ALAC.
	Trial reduced speed to 30km/hr into the Albany Regional Centre
· · · · · · · · · · · · · · · · · · ·	

#### Recommendation

Long

A comprehensive integrated transport plan will need to be undertaken, in conjunction with future planning for the Albany Regional Centre.

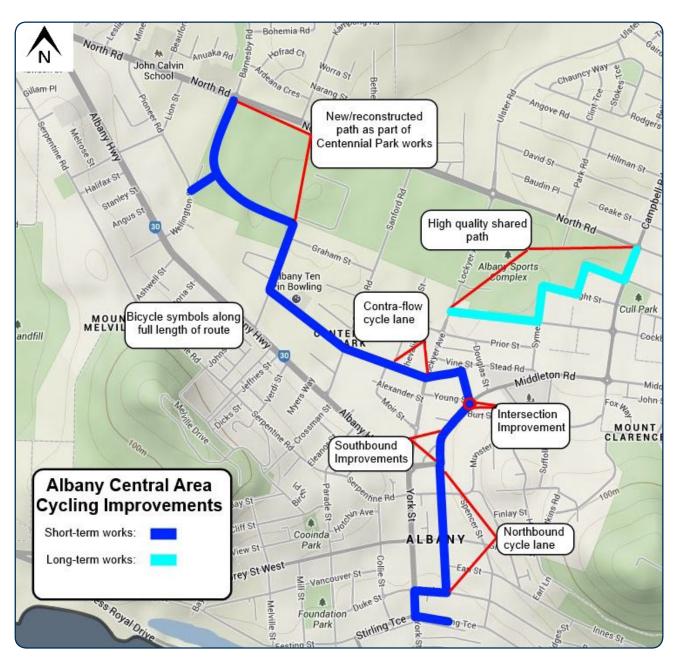


Figure 1.9.3 Albany Central Area Cycling Improvements

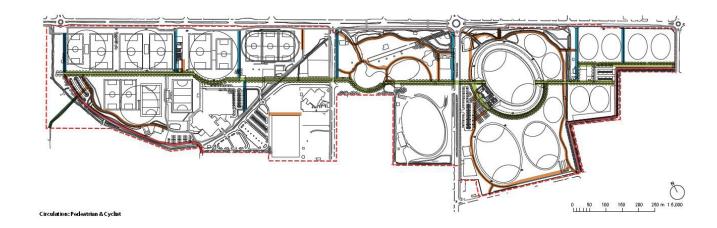
### Area 1 - Centennial Park

Centennial Park is well located to cater for cyclists travelling between the City Centre and the northern and north-western suburbs. It is also a major destination in itself with several sporting fields, the Albany Leisure and Aquatic Centre (ALAC) and Showground. The imminent redevelopment of this park, which will include a redeveloped picnic area adjacent to the lakes, presents a significant opportunity to provide high quality infrastructure to serve cyclists travelling to and through the park.

The key cycling routes to and through Centennial Park will feed into Lockyer Avenue as the designed City Centre access route from the north. East-west travel across the park will also be popular, avoiding North Road and serving ALAC and the redeveloped park.

The shared paths around the redeveloped lakes area will provide a great loop for children on which to learn to cycle. However, it is desirable to separate utility/commuter cyclists from slower children and family cyclists.

Due to the presence of several old houses along Sanford Road, it is not possible to take a direct route to Lockyer Avenue in the short term. However this should be identified in long term planning and the opportunity taken to acquire land to provide the path link at a suitable time.







Project	Centennial Park
Responsibility	City of Albany
Reference	14, 14a, 69, 78, 78a, 78b, 16, 15, 15a,
Links to Objectives	Cycle Participation Cycle Network
Possible Solutions / Treatments	The recommended network through Centennial Park includes: High quality shared path from the North Road/Barnesby Drive intersection, skirting the western and southern boundaries of the park to ALAC, then eastward to Lockyer Avenue. The interim alignment will pass along the southern side of the lakes, and it should be kept separate from the low speed shared paths around the lake.  A high quality (minimum 3.5m) shared path through Centennial Park re-development.  A medium quality shared path from the south western corner of Centennial Park to link with Wellington Street/Pioneer Road.  A high quality shared path from Lockyer Avenue, eastward, skirting the southern and eastern boundaries of the park to the intersection of North Road/Campbell Road.  Medium quality 2.5m shared paths, designed for lower speeds, around the lake, suitable for walkers and children learning to cycle
Recommendations	
Short	The following shared path development is included in the future works for Centennial Park re-development including:  High quality shared path from the North Road/Barnesby Drive intersection, skirting the western and southern boundaries of the park to ALAC, then eastward to Lockyer Avenue. The interim alignment will pass along the southern side of the lakes, and it should be kept separate from the low speed shared paths around the lake.  A high quality (minimum 3.5m) shared path through Centennial Park re-development. See CPSP Schematic Design for details  A high quality shared path from Lockyer Avenue, eastward, skirting the southern and eastern boundaries of the park to the intersection of North Road/Campbell Road.  Medium quality 2.5 m shared paths, designed for lower speeds, around the lake, suitable for walkers and children learning to cycle
Medium	Shared path from the south western corner of Centennial Park to link with Wellington Street/Pioneer Road.
Long	



# Area 1 - Albany Highway (including Chester Pass Roundabout)

Albany Highway is currently the major access route to the Central Area for vehicular traffic carrying approximately 13,500 vehicles per day (Statewide Traffic Digest, 2013 data). It is also an important access route for cyclists, being the most direct link to/from the northern suburbs of Albany. However, it is generally avoided due to the unfriendly on-street cycling environment and the narrow, poor quality paths.

Project	Albany Highway (including Chester Pass Roundabout)		
Responsibility	City of Albany, Main Road		
Reference	55a, 55b		
Links to Objectives	Cycle Network		
	Cycle Participation		
	Cycle Tourism		
Possible Solutions / Treatments	The Albany Central Area Master Plan (2010) proposal to narrow Albany Highway to two-lanes east of Sanford Road, with cycle lanes was supported by Cardno. They also supported a high quality cycling facility on a major corridor to the City Centre from Sanford Road to Chester Pass Road. A detailed corridor study would be required, including a feasibility study for the potential road modification works.		
	Cardno also suggested an alternative arrangement be investigated as part of the feasibility study, which would consist of retaining the current 4-lane configuration, widening the existing carriageway slightly and installing on-road cycle lanes. This recommendation has more merit in the medium to long term. If the case for narrowing the road form can be justified, it is recommended that the left lane of Albany Highway, in both directions, from York Street to Mawson Street, be converted into a high quality cycle lane.		
	Special care would need to be taken in the design of intersections along the route, particularly the junction with Sanford Road and any other proposed roundabouts. The aim should be to design intersections at which even medium confidence level cyclists feel comfortable using without reverting to the path network.		
	At the Chester Pass Road end of Albany Highway, the cycle lanes would then transition to/from the path network on approach to the Chester Pass roundabout. Any significant changes to the roundabout seem unlikely until the Albany Ring Road is completed, which is considered to be a long term project. In the meantime, all but the most confident cyclists will tend to use the path network to traverse this intersection and these should be maintained in the best possible condition for safe use by cyclists.		
Recommendations	Recommendations		
Short	Off road shared path, to a minimum width of 2.5 (up to 3 m if possible) on western side from Chester Pass Roundabout to BP Service Station (just west of York Street)		
Medium	Investigate options of retaining the current 4-lane configuration, widening the existing carriageway slightly and installing on-road cycle lanes or reducing the road to two lanes east of Sanford Road with on road cycle lanes.		
Long			

# Area 1 - Lockyer Avenue

Between Centennial Park Central and Eastern Precincts, Lockyer Avenue forms the major cycling access route into the Albany Centre Area from Chester Pass Road, Yakamia, Spencer Park and Collingwood Heights. Due to the narrow road reserve, the numerous intersections and frequent driveway crossings, a high quality shared path is considered impractical for this corridor. Instead, a suite of on-street facilities is recommended to cater for cyclists of all confidence levels.

Project	Lockyer Avenue
Responsibility	City of Albany
Reference	69, 69a
Links to Objectives	Cycle Network
	Cycle Participation
	Cycle Tourism
Possible Solutions / Treatments	Between the proposed Centennial Park path and Minna Street, Lockyer Avenue should be provided with high quality cycle lanes, at least 1.5m wide, in both directions.
	Between Minna Street and Albany Highway, a southbound cycle lane should be provided, created by narrowing the traffic lane and the median island. Mixed traffic cycling, even in slow speed, on this section is considered undesirable due to the uphill climb where cyclists will not be able to maintain the prevailing traffic speed, even at 30km/h. The cycle lane should be clearly marked with the 'Green Lane' treatment at and adjacent to all driveway crossings in order to reduce the risk of 'left hooks'.
	For northbound cyclists, a cycle lane is not considered necessary due to the gradual downhill slope which will enable cyclists to maintain a reasonable speed (20-30km/h). The expense of widening the road and the numerous driveways also make providing a cycle lane on this section undesirable.
Recommendations	
Short	Between the proposed Centennial Park path and Minna Street, Lockyer Avenue should be provided with high quality cycle lanes, at least 1.5m wide, in both directions
	Create a slow zone of 30km/hr along Lockyer Avenue to Stead Road
Medium	Between Minna Street and Albany Highway, a southbound cycle lane should be provided
Long	

### Area 1 - York Street

The Albany Central Area Master Plan (2010) proposed some significant changes to York Street between Albany Highway and Grey Street, reducing the current six-lane divided carriageway to a two-lane divided carriageway with median parking, similar to the layout south of Grey Street. In response to the Master Plan, ABUG has been campaigning for the inclusion of cycle lanes on any modified layout of York Street.

York Street will be the main cycling route through the town centre and it is therefore important that it caters to less confident cyclists as well as experienced riders. The following represents a concept for consideration; detailed design and feasibility works are recommended to specify the changes.

It is recommended that a low speed (30km/h) traffic environment should be created by narrowing the road to a single lane in each direction, with kerbside parking on both sides and angled parking in the median island which would be accessed by southbound vehicles. The present left-in-left-out intersection at Serpentine Road would be replaced by a single-lane roundabout to assist in further slowing traffic speeds.

Southbound (downhill) cyclists would be expected to ride in primary position in the traffic lane, and this would be supported by the use of bicycle symbols in the lane. A southbound cycle lane is not considered appropriate for the following reasons:

- → Cyclists of most confidence levels should feel comfortable riding in the lane in a low speed traffic environment, particularly as the downhill slope does not require much effort to maintain a reasonable speed.
- → A southbound cycle lane would have to be located between parked vehicles and moving traffic, i.e. in the 'door zone'. As the parking would be short term, turnover would be high which increases the risk of cyclists being 'doored'.
- → The downhill slope would encourage some cyclists to travel at higher speeds, further increasing the risk of dooring incidents.
- → The number and frequency of roundabout intersections would require cyclists to merge into traffic regularly, which increases the risk of conflicts.

In contrast, a northbound cycle lane is recommended along the full length of York Street, to cater for cyclists travelling at slow speeds up the steep hill. The cycle lane should be between 2.2 and 2.5m wide, utilising the road space freed up by omitting the southbound cycle lane, to mitigate the risk of dooring incidents. Care should be taken to design appropriate merge points at each roundabout to maximise safety for cyclists.

The layout described above should be applied to the full length of York Street between Albany Highway and Princess Royal Drive. In addition, an appropriate link from the Princes Royal Drive intersection into Anzac Peace Park should be provided to facilitate cycling access to/from the waterfront precinct. In the medium to long term, consideration could be given to providing Dutch-style roundabout (bicycle/pedestrian priority) treatments at each of the roundabouts on York Street.

# Area 1 - York Street/Albany Highway/ Lockyer Avenue roundabout

This intersection is the focal point for several of the key cycling corridors which feed into the Albany Central Area including Albany Highway; Chester Pass Road – Barnesby Drive – Centennial Park – Lockyer Avenue; Spencer Park – Centennial Park – Lockyer Avenue; Middleton Road; and the commencement of Albany's main street. At present it is a two-lane roundabout which is extremely unfriendly for cyclists riding on-street and a significant barrier for pedestrian and cyclist movement along the paths.

As part of the Albany Central Area Master Plan (2010), major changes were envisaged to this intersection to make it friendlier for pedestrians and cyclists. The concepts associated with this Master Plan layout are generally supported as beneficial to cyclists, but are not considered to take full advantage of the opportunities available at this location. Modifications to the concept are proposed to provide high quality cycling facilities and cyclist priority at this location.

Therefore, a slightly modified Dutch-style roundabout layout, as shown in Figure 1.9.5 is recommended for consideration as an option for this intersection. Key benefits include:

- Much smaller motor vehicle footprint than the existing roundabout layout
- → Lower vehicle speeds due to crossings on all approaches and tighter roundabout geometry
- → Pedestrian and cyclist priority over motor vehicles improving safety for vulnerable road users
- → Layout is suitable for cyclists of confidence levels
- Seamless transition between cycle lanes (on York Street, Albany Highway) and low speed mixed traffic cycling (on Lockyer Avenue, St Emilie Way)
- → Removes one of the most significant barriers to cycling in the Albany Central Area

In addition to these benefits, it would present a significant statement to residents and visitors alike that Albany truly is a 'Cycling City'.

It is understood that the concept shown is radical in the

Australian context and that there are many design and implementation issues associated with the approval and construction of the roundabout as indicated. Justification would need to be sourced from international studies including the potential impact on pedestrian, cyclist and driver safety, compliance issues, geometric guidelines etc. However, the benefits of such an iconic and functional piece of infrastructure are considered to warrant continued investigation.



1.9.5 Cardno Proposed Roundabout Layout

An example of the Dutch-style urban roundabout layout used as inspiration for the proposed concept is shown in Figure 5.5



Sigure 1.9.6 Example of Dutch Style Urban Roundabout with Cyclist Priority



### Area 1 - Grey Street West

Until such time as the shared path from Woolstores to the Anzac Peace Park is completed, Grey Street West and Festing Street will serve as the primary entrances to Albany Central Area from the west. As with other streets in the central area, a low speed environment is desirable in order to facilitate on-street cycling for cyclists of most confidence levels.

Between York Street and Collie Street, a low speed, mixed traffic cycling environment should be provided, supported by bicycle symbols located in primary position within the traffic lane. Traffic calming devices, such as raised or flat threshold entry statements, may be desirable to reduce traffic speeds to 30km/h.

Between York Street and Melville Street, the existing carriageway is relatively wide, facilitating the provision of cycle lanes at minimal expense. A westbound cycle lane is recommended along the full length of this section, allowing cyclists to climb the steep hill with protection from vehicle conflicts. To achieve this, it may be necessary to shift the centreline in some sections to provide sufficient width. It is considered that an eastbound cycle lane is not necessary along this section as it is a steep downhill slope and cyclists should be able to ride comfortably in mixed traffic.

If it is desired to retain the on-street parking between Collie Street and Melville Street, it is recommended that indented parking bays be created on the northern side of the carriageway. This means that the westbound cycle lane will not be located in the door zone and eastbound cyclists will be riding in primary position.

West of Melville Street, the carriageway narrows and widening is very expensive due to the steep terrain. Given the cost of widening to provide cycle lanes, this is considered to be a low priority which would divert funds from the Woolstores-Anzac Peace Park link which is a higher priority. Once this has been constructed, use of Grey Street will reduce significantly and therefore reduce the need for changes to this street.

Along a 300m section of Grey Street West, near the top of the hill, a service road exists along the southern side. This service road should be marked for two-way use by bicycles and pedestrians, as an alternative to using the road in this section which includes a curve with restricted visibility.

## Area 1 - Grey Street East

Grey Street East links to the proposed primary trail head for the Mount Clarence Parklands.

Between York Street and Aberdeen Street, Grey Street is one-way eastbound, which creates a barrier for westbound cycling movements. In addition to through traffic, this section also includes a number of car park accesses which may be used by cyclists. Accordingly, it is recommended that a contra-flow cycle lane be provided along this section. This lane would most appropriately be located along the southern kerb line, by reducing the depth of the angled parking spaces and the width of the traffic lane. The impact on car parking geometry will need to be identified to ensure appropriate standards can be maintained.

Due to the steep grade, it is expected that most of the demand along this street will be for cyclists leaving the trails and returning to the City Centre. Therefore no specific infrastructure east of Aberdeen Street is proposed.

1.10 Area 2 – Lockyer/McKail

# Area 2 - McGonnell Road

The only significant missing link in the present path network is on McGonnell Road between Edinburgh Road and south of Todd Road.

Project	McGonnell Road		
Responsibility	City of Albany		
Reference	66		
Links to Objectives	Cycle Network		
Possible Solutions / Treatments	A shared path should be constructed between Edinburgh Road and south of Cleave Close to fill this missing link		
Recommendations	Recommendations		
Short			
Medium	A shared path should be constructed between Edinburgh Road and Cleave Close		
Long			

# Area 2 - Clydesdale Road

The only significant missing link in the present path network is from Clydesdale Cul-de-sac to South Coast Highway. This would provide a direct shared path for children riding to Mount Lockyer Primary School from the new suburbs in McKail. However, due to unsafe scooter behaviour in this area, appropriate access controls need to be considered.

Project	Clydesdale Road		
Responsibility	City of Albany		
Reference	67		
Links to Objectives	Cycle Network		
Possible Solutions / Treatments	Complete the missing link from Clydesdale Cul-de-sac to South Coast Highway		
Recommendations	Recommendations		
Short	Complete the missing link from Clydesdale Cul-de-sac to South Coast Highway, incorporating appropriate access controls.		
Medium			
Long			

The only significant missing link in this section of path network is on Mueller Street (from Cull Road Hanrahan Road). This would provide a direct shared path for children riding to/from Mount Lockyer Primary School and Parklands Primary School. It will also provide a missing link to connect to Hanrahan Road and the on-road cycle lane.

Project	Mueller/Cull Road	
Responsibility	City of Albany	
Reference	65, 65a	
Links to Objectives	Cycle Network	
	Cycle Participation	
Possible Solutions / Treatments	Shared path on Mueller Street (from Cull Road to Hanrahan Rd)	
Recommendation		
Short		
Medium	Construction of a shared path on Mueller Street (from Cull Road to Hanrahan Rd)	
Long		



# 1.11 Area 3 – Milpara/Yakamia/Lange

Key links in this area include:

- → North Road
- → Lion Street/Pioneer Road/
- → Barnesby Drive (discussed in Section 4)
- → Chester Pass Road (discussed in Section 4)
- → Dunn Street Richard Street Anson Road path
- → Beaufort Road

### Area 3 - Barnesby Drive

During the 2013/14 FY, the missing link on Anson Road between the Richard Street path and the existing path was completed. This now provides a continuous shared path link between Albany Highway and Chester Pass Road. Combined with Barnesby Drive, it will significant improve access in this area for casual cyclists in addition to providing a shared path link to North Albany Senior High School and GS TAFE.

Access from the Target Road/Galle Street area in Yakamia is currently difficult for casual cyclists as grades are steep and the path network is disconnected

Intersection with Barnesby Drive and Chester Pass Road is yet to be resolved with Main Roads, as it is subject to a private subdivision in process. The continuation of Barnesby Drive shared path to Chester Pass Road, as recommended is currently not possible. See Section 1.7.2

Project	Barnesby Drive
Responsibility	City of Albany
Reference	1, 1a, 1b, 33
Links to Objectives	Cycle Network
Possible Solutions / Treatments	Construction of the Barnesby Drive path, south of Butts Road, will assist in the short term by providing an outlet via Target Road with continuous shared path and reasonable grades.
	In the long term, the construction of Range Road will provide an alternative access route to this area.
	Range Road will be constructed with a high quality shared path from the beginning, with appropriate connections to local streets, to cater for casual cyclists. The path should be provided by the first stage of construction.
Recommendations	
Short	Continuation of shared path along Barnesby Drive from Butts to Erindale Road
Medium	
Long	Construction of Range Road, incorporating a high quality 3m dual use cycle lane (see section 1.5.13)

# Area 3 - Anson Road/Newby Street

Newby Street provides a direct link between North Albany Senior High School, GS TAFE and the shopping and light industrial area along Chester Pass Road. The link to Chester Pass Road would also provide an alternative route for commuter and recreational cyclists towards North Road and into the CBD. The newly completed Anson Road shared path provides links to Richard Street and the southern end of Chester Pass Road. There is currently a missing link to the northern end of Chester Pass Road and to the east-west links.

Project	Newby Street/Anson Road
Responsibility	City of Albany
Reference	70
Links to Objectives	Cycle Network Cycle Participation
Possible Solutions / Treatments	Shared path on Newby Street from Chester Pass Road to connect with Richard Street.
Recommendations	
Short	
Medium	Investigate shared path to link Brooks Garden Precinct/Chester Pass Road to connect with Anson Road
Long	



# Area 3 - Dunn/Richard Street

Dunn and Richard Street provide a direct link between North Albany Senior High School, GS TAFE and the shopping and light industrial area along Chester Pass Road.

The link to Chester Pass Road would provide an alternative route for commuter and recreational cyclists towards North Road and into the CBD. The newly completed Anson Road shared path provides links to Richard Street and the southern end of Chester Pass Road. There is currently a missing link to Chester Pass Road and to the east-west links.

Project	Dunn/Richard Street
Responsibility	City of Albany
Reference	70, 70a
Links to Objectives	Cycle Network Cycle Participation
Possible Solutions / Treatments	Shared path on Richard Street from Corner of Turner Street to Chester Pass Road to connect with Richard Street.
Recommendations	
Short	
Medium	Shared path on Richard Street from Corner of Turner Street to Chester Pass Road
Long	



# Area 3 - Lion Street/Pioneer Road/Wellington Street

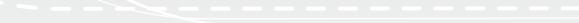
Wellington Street, Pioneer Road and Lion Street form an important local link between Albany Highway and North Road, serving several schools, the North Road shopping complex and several other small businesses. Feedback received from Yakamia Primary School raised this section of road as a concern for their students who ride from the residential properties on the slopes of Mount Melville.

The use of cycle lanes for this project would provide several benefits including:

- → A visual narrowing of the carriageway due to the use of red asphalt which reduces vehicle speeds
- → A clear visual cue that this is space for cyclists and that vehicles are 'guests' in this part of the road
- → Allow full use of a carriageway to cater for all modes
- → A superior facility for cyclists compared to a traditional shared path on a section of road with numerous driveways.

This treatment should be extended along Pioneer Road and Wellington Street to Albany Highway. It is expected that this arrangement would cater for cyclists of most confidence levels and avoid the need to upgrade the footpath.

Project	Lion St/Pioneer Rd/Wellington St
Responsibility	City of Albany
Reference	78, 78a, 78b
Links to Objectives	Cycle Participation Cycle Network
Possible Solutions / Treatments	It is recommended that the provision of cycle lanes be investigated, subject to the existing carriageway having sufficient width. If sufficient width is not available, then 'advisory cycle lanes' should be considered, as shown in Figure 1.11
	In the longer term, a shared path connection between Albany Highway and North Road would provide opportunity to link the shops and schools, as well as these two major transport corridors.
Recommendations	
Short	It is recommended that the provision of cycle lanes or advisory cycle lanes be investigated
Medium	Based on above, identify potential sites for trial of the advisory cycle lanes, including Pioneer/Link Road
Long	



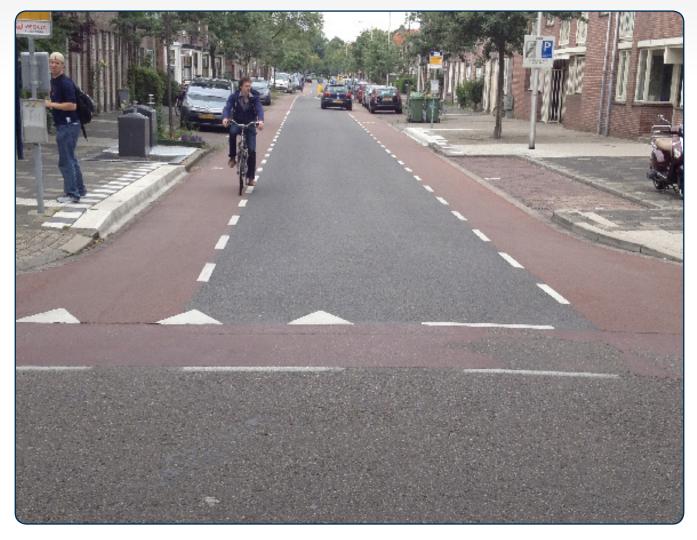


Figure 1.11 Example of Advisory Cycle Lanes in The Netherlands

Source: Northeastern University (http://wiki.coe.neu.edu/groups/nl2011transpo/wiki/555b9/)

#### ------

# 1.12 Area 4 – Spencer Park/Middleton Beach/Collingwood Heights

Key issues in this area include:

- → Casual cyclist access to Spencer Park Primary School and Albany Regional Hospital via Warden Avenue east
- → Commuter cyclist access along Campbell Road and Hardie Road
- → Casual and commuter cyclist access along Collingwood Road
- → Casual cyclist access along Seymour Street

### Area 4 - Warden Avenue

Warden Avenue is a key link for school children to Spencer Park Primary, St Josephs College and Albany Primary and ASHS. It also is an important link for workers accessing the hospital from the east.

At present there is no path from Collingwood Road to Hardie Road, forcing less confident cyclists onto the road.

Project	Warden Avenue
Responsibility	City of Albany
Reference	63
Links to Objectives	Cycle Network Cycle Participation
Possible Solutions / Treatments	It is recommended that a shared path be constructed along the western side of Warden Avenue, with a branch along Reidy Drive to Spencer Park Primary School.
Recommendations	
Short	Construction of a shared path along the western side of Warden Avenue from Collingwood Rd to Hardie Road, with a branch along Reidy Drive to Spencer Park Primary School
Medium	
Long	

#### \_\_\_\_\_.

# Area 4 - Campbell Road/Hardie Road/Hospital

Albany Regional Hospital is one of the City's major employers and potential trip generators; however cycle access is generally poor for commuter cyclists. Hardie Road is too narrow to provide cycle lanes and has a solid centreline, which encourages drivers to 'close shave' cyclists. In addition, the intersection of Hardie Road and Angove Road is difficult for cyclists to negotiate due to high traffic volumes and conflicts with vehicles. For less confident cyclists there is a good existing shared path along the eastern side of Campbell and Hardie Road.

Project	Campbell Road/Hardie Road
Responsibility	City of Albany
Reference	49
Links to Objectives	Cycle Network, Cycle Participation
Possible Solutions / Treatments	To improve access along this corridor for commuter cyclists, the following works are recommended:
	Solid centrelines should be removed and replaced by broken centrelines in accordance with Austroads and MRWA standards.
	Bicycle symbols along the route, located in the traffic lane
	Promotion (by bicycle symbols, maps and signage)
	of the alternative route via Wansborough Street and Dickson Street which allows cyclists to avoid the Hardie Road/Angove Road intersection
	Widening of Campbell Road to provide an eastbound cycle lane between North Road and Angove Road. This will assist cyclists to climb the hill without conflicting with vehicles.
Recommendations	
Short	Solid centrelines should be removed and replaced by broken centrelines in accordance with Austroads and MRWA standards
Medium	As part of the new Signage Strategy consider:
	Bicycle symbols along the route, located in the traffic lane along Campbell to Wansborough road
	Promotion (by bicycle symbols, maps and signage) of the alternative route via Wansborough Street and Dickson Street which allows cyclists to avoid the Hardie Road/Angove Road intersection
Long	Widening of Campbell Road to provide a north-eastbound cycle lane between North Road and Angove Road



# Area 4 - Collingwood Road

As well as serving Spencer Park, Collingwood Park and Seppings, Collingwood Road also provides an alternative cycling route to Ulster Road for both casual and commuter cyclists. Combined with Tassel Street and North Road, cyclists can proceed on a 'quieter' route into the Albany Central Area and connect with the proposed Centennial Park paths.

For casual cyclists, a shared path runs along the northern/western side of Collingwood Road, although this path includes several detours away from the road and a missing link at Burville Street where cyclists must ride on the pavement

The difficult crossing at Lower King Road/Troode Street has also been identified as an issue in the community consultation. For commuter cyclists, no facilities are provided and feedback received during the community consultation has indicated that it can be an intimidating environment to ride in due to traffic volume, speed and the absence of cycle lanes.

Project	Collingwood Road
Responsibility	City of Albany
Reference	50, 50a, 50b
Links to Objectives	Cycle Network, Cycle Participation, Cycle Culture
Possible Solutions / Treatments	The recommended works along Collingwood Road to provide for casual cyclists include, in order of relative priority:
	Improving the crossing at Lower King Road/Troode Street. Several options have been considered but a more detailed study is recommended to determine the best option. Consideration should be given to locating a single crossing in between the two T-junctions, with associated tightening up of the intersection throats.
	Provision of wayfinding signage and pavement markings to assist cyclists in navigating the path where it detours from the roadway between Rycraft Drive and Mokare Road, and the connection from Collingwood Road to North Road via Tassel Street.
	Construction of a shared path along the southeastern side of Collingwood Road to serve residents located on this side of the road. The present path, being located in bushland for much of its length, does not serve these properties
	For commuter cyclists, it is recommended that:
	In the long-term Collingwood Road be widened with 1.5m wide cycle lanes in both directions. The priority for this work should be to provide a south-westbound cycle lane from Sheoak Place to Angove Road to allow cyclists to climb the hill without conflict from vehicles.
Recommendations	
Short	Investigate options and costings for crossing at Lower King Rd/Troode St
	As part of the new Signage Strategy consider:
	Wayfinding signage between Rycraft & Mokare St & Collingwood Road to North Road, via Tassel St
Medium	Construction of a shared path, along southeastern side of Collingwood Rd between Rycraft and Warden Streets
Long	Collingwood Road be widened in the long-term to provide 1.5m cycle lanes in both directions

#### \_ - - - - - - - - - - - -

# Area 4 - Seymour Street

Seymour Street provides a link between Spencer Park and Middleton Beach. The section between Collingwood Road and Nelson Street does not currently have a shared path, forcing casual cyclists onto the road, including school children.

The Lake Seppings Drive route (next section) represents the best future option for cyclists wishing to avoid crossing the ridgeline, with Campbell Road providing a more circuitous connection in the short-term.

Project	Seymour Street
Responsibility	City of Albany
Reference	51
Links to Objectives	Cycle Network Cycle Participation
Possible Solutions / Treatments	The Seymour Street link is direct and forms a useful connection between these two suburban areas. However, it crosses a significant ridgeline which will be a barrier for some cyclists.
Recommendations	
Short	
Medium	A shared path on Seymour St, between Collingwood Road and Nelson St, be constructed to fill this missing link
Long	

### N

# Area 4 - Lake Seppings Drive

Lake Seppings Drive is a partially constructed road linking Middleton Beach to Spencer Park. Once completed, it will bypass the steep grades via other routes such as Seymour Street, making it an attractive route for both casual and commuter cyclists.

Project	Lake Seppings Drive
Responsibility	City of Albany
Reference	52
Links to Objectives	Cycle Network Cycle Participation
Possible Solutions / Treatments	It is recommended that a shared path be constructed along the eastern side of Lake Seppings Drive, with a connection to the Collingwood Road shared path at its northern end.
Recommendations	
Short	
Medium	
Long	A shared path along eastern edge of Lake Seppings Drive, to connect with Collingwood Road shared path

# Area 4 - Ulster Road

Due to relatively heavy traffic volumes and the absence of a central median island, Ulster Road can be difficult to cross safely for both pedestrians and cyclists. This is not a significant issue along most of Ulster Road, as there is little development on the north/western side. However, the Collingwood Heights 'Eclipse Estate' is located on the north-western side of Ulster Road, which separates this residential area from schools, beaches and shared paths.

Consideration was given to the provision of shared paths on streets within Eclipse Estate, e.g. Eclipse Drive and Boronia Avenue, however given the small catchment and low traffic volumes it was not considered appropriate to include these in the works schedule at the present time. See Figure 1.12

Project	Ulster Road
Responsibility	City of Albany
Reference	79, 80
Links to Objectives	Cycle Network Cycle Participation
	Cycle Participation
Possible Solutions / Treatments	In order to provide safer access for pedestrians and cyclists across Ulster Road, the following is recommended:
	Provision of a refuge island on the eastern side of the Ulster Road/Eclipse Drive intersection, with associated path connections.
	Provision of a shared path from the intersection of Lower King Road/Boronia Avenue, along the northern side of Lower King Road to Ulster Road, then crossing the eastern and southern legs of the Lower King Road/Ulster Road intersection, with shared path connections to existing paths on Ulster Road (south side) and Lower King Road (east side at Collingwood Road).
Recommendations	
Short	
Medium	Provision of a refuge island on the eastern side of the Ulster Road/Eclipse Drive, with associated path connections
	Provision of a shared path from the intersection of Lower King Road/Boronia Avenue, along the northern side of Lower King Road to Ulster Road, then crossing the eastern and southern legs of the Lower King Road/Ulster Road intersection, with shared path connections to existing paths on Ulster Road (south side) and Lower King Road (east side at Collingwood Road).
Long	



Figure 1.12 Ulster Road/Eclipse Drive shared path

# 1.13 Area 5 – Bayonet Head/Lower King

Feedback from Flinders Park Primary School identified a number of issues for children attempting to ride to school including:

- 1. Safety issues with the crossing point at Yatana Road and Taylor Street.
- 2. The existing route to reach the school from Lower King (via Lower King Road) was circuitous and added significant extra distance to the journey.

Elizabeth Street was identified as an issue for casual cyclists and pedestrians. This route forms an important connection to Lower King Road for many Lower King residents, serves the retirement village and as part of a loop walk/cycle route around Lower King.

Between Paul Terry Drive and Alison Parade, no shared path is provided, which forces cyclists to use the road which is currently in poor condition and subject to poor driver behaviour. It is understood that a shared path will be provided as subdivisional development proceeds along Elizabeth Street. However the timing of this development cannot be predicted and it may result in a wait of many years for this path to be completed. This is also a missing link in a walk/cycle loop around Lower King (via Lower King Road, Thorne Street/Rae Road, The Esplanade and Elizabeth Street)

Project	Bayonet Head/Lower King/Elizabeth Street
Responsibility	City of Albany
Reference	60, 61
Links to Objectives	Cycle Tourism, Cycle Participation, Cycle Network
Possible Solutions / Treatments	The shared path at Yatana/Taylor St be relocated to cross only the western leg of this intersection, removing the conflict between pedestrians, cyclists and vehicles
	With the increase in sub-divisional activity in the Oyster Harbour/Lower King area, the number of children travelling to the school from that direction is expected to increase and therefore the need for a more direct route will become more important. An indicative alignment for a shared path connection between Flinders Park Primary and Oyster Harbour has been shown on the Network Plan and it is recommended that this be incorporated into structure planning for the area.
	Connecting the missing link on Elisabeth Street (between Paul Terry Drive and Alison Parade) will create a Lower King Loop.
Recommendations	
Short	The shared path at Yatana/Taylor St be relocated to cross only the western leg of this intersection, removing the conflict between pedestrians, cyclists and vehicles
Medium	
Long	A shared path on Elizabeth Street, between Paul Terry Drive and Alison Parade will connect the missing link, is subject to private development Indicative alignment for a shared path between Flinders Park PS and Oyster Harbour Development

### **W**

## 1.14 Area 6 – Little Grove

The major cycling improvements for Little Grove are outlined under the Albany Harbours Path (Section 1.6) and 1.5.9 Hanrahan Road/Princess Royal Drive. In particular Princess Royal Drive is the only cycling access between the Albany Central Area and Frenchman Bay Roads.

Overall, around the Little Grove School and local shop there is a network of shared paths and quiet streets creating a relatively safe environment for both pedestrians and cyclists. At present there is a red asphalt shared pathway on Bay View Drive that takes cyclists around the harbour. The path ends at Bay View Drive just past Stubbs Road directing the rider and pedestrian onto the road.

There is though an alternative concrete path at the end of the shared path linking Bay View Drive - King George Street - Gordon Street past the school and onto the shop.

Feedback from a recent community forum in Little Grove (2014) highlighted that Bay View Drive was a popular route and that there was a need for a connecting link from where the shared path ends at Bay View Drive through to the shop on Frenchman Bay Road completing the safe network around the community hub.

Project	Bay View Drive to Frenchman Bay Road
Responsibility	City of Albany
Reference	
Links to Objectives	Cycle Network, Cycle Participation, Cycle Tourism,
Possible Solutions / Treatments	There are a number of possible solutions and treatments including:  In the short term improving the signage highlighting the concrete path link from Bay View Drive - King George Street - Gordon Street past the school and onto the shop.  In the longer term extending the red asphalt shared path from Bay View Drive around to Chippana Drive and onto the shop.
Recommendation	
Short	Further investigate treatment options and prioritize into the Indicative Works and Funding Schedule.
Medium	
Long	



## **Objective 2: Cycling Participation**

To be a City where walking and cycling becomes the easy choice of travel for trips of up to 5kms, around identified community hubs.

Cycling is recognized as being good for our community. Cycling creates good social capital – it helps to make connections within and between social and community networks. It appears that well designed neighbourhoods encourage more cycling and walking, allow more interactions between neighbours and increases the sense of community in residents, with additional mental and physical benefits.

## 2.1 Bike Route Information, Maps and Signage

Cycle maps are covered in Section 4.2

Signage is covered in Section 3.2

Recommendation	Cycle Maps/Signage
Short	In consultation and with support from DoT revise format and reprint Go Cycle Albany brochure map publication. Align with new Amazing Albany branding (currently being developed - Adventure Albany, Taste Albany, Cycle Albany) and reformat publication.
Medium	Identify appropriate tourist, corporate and community outlets where the map will be stocked and a process to keep the supply stocked
Long	Ensure future maps are available and distributed in different formats, including electronically and via mobile phone applications

## 2.2 End of Trip Facilities

End of trip facilities are a critical, but often forgotten, component of the cycling network. The presence and/or quality of end of trip facilities can often make or break the decision to cycle for many trips.

Different trip purposes will have different needs when it comes to end of trip facilities. For example:

- → A commuter may want a secure place to park their bicycle inside their workplace, along with showers, lockers and ironing facilities to enable them to freshen up before commencing work.
- A shopper may only want a secure short stay place to park their bicycle, conveniently located to their destination (e.g. close to the entrance of a shopping centre, or on the footpath in a 'main street' environment) which is ideally protected from wet weather;
- → A recreational rider generally has end of trip facilities at their own home but may require a secure place to park their bicycle at an intermediate destination, such as a cafe or a park.

The City is responsible for providing bicycle parking on public land such as road reserves, parks, recreational facilities and Council buildings.

End of Trip facilities are covered in Section 4.3.

### Bicycle parking and short stay facilities

A common theme in the survey responses was the lack of bicycle parking (i.e. u-rails) particularly in the CBD area and this should be the highest priority location.

Short stay end of trip facilities should generally be in the form of simple u-rails or other design which facilities the secure parking of a bicycle. U-rails are more than just utilities for parking bicycles; they can also enhance the streetscape if designed cleverly, and can contribute to the image of Albany as a Cycling City.

In accordance with Austroads guidelines, U Rails should be located approximately every 30 metres along 'main street' type shopping strips and in small clusters at the entrances to shopping centres and other significant destinations.

Due to the volume of parking which is required, parking at many locations will need to be progressively provided over multiple years.

It is recommended that the City investigate a scheme where local businesses can apply for 50% contributions to the installation of u-rails. Such a scheme would reward businesses who support cycling by providing parking ahead of other businesses that do not. If such a scheme included the City Centre precinct, it would also assist the City in determining the precise locations and style for u-rails.

→ With the focus on cycling tourism, popular tourist attractions should have bicycle parking installed to enable tourists to visit as part of a cycling tour of Albany. Bike racks need to be considered at key tourist attractions- such as WA Residency Museum, Anzac Peace Park, Albany Heritage Park (incorporating Princess Royal Forts, Mt Melville lookout, Anzac Memorial), Albany Entertainment Centre, Waterfront, Patrick Taylor Cottage, Strawberry Cottage, Middleton Beach, Emu Point and Vancouver Arts Centre.

The Munda Biddi Albany Cycle Tourism Strategic Plan provides a range of suggestions regarding the location of short-stay and recreational bike parking facilities which are endorsed in this Strategy:

- → Bicycle parking facilities at key attractions- such as Brig Amity, WA Museum, Anzac Peace Park, Princess Royal Fortress, Light Horse Memorial, Mt Melville lookout, Albany Entertainment Centre, Waterfront, WA Museum, Patrick Taylor Cottage and Vancouver Arts Centre
- → Multi-purpose street furniture e.g. tree guards that double up a bike racks
- → A bicycle repair stand at the Visitor Centre

The City, in conjunction with key cultural groups, could support a public art competition to develop unique and innovative designs for simple on-street bicycle parking. The designs should, first and foremost, be suitable for locking up a variety of bicycles, but the design possibilities are endless. Potential themes could include cycling culture, Albany's natural features, wildlife, or Albany history. As well as providing tangible benefits to cyclists, the public art competition would continue to encourage more sectors of the community to support cycling.

Some examples of artistic bicycle parking facilities are shown in Figure 2.1



Recommendation	Bicycle Parking and Short Stay Facilities
Short	Complete an audit of City owned end of trip facilities.
Short	Develop a detailed area plan and/or appropriate policy for provisions for end of trip facilities.
Short	Trial suitable cycle parking facility designs with a view to permanent installation at key locations around the city.
Medium	Establish incentives and support for local businesses to install bicycle parking facilities.
Medium	Provide bicycle parking facilities at key tourist attractions (see Section 8)
Long	Provide U-rails, with capacity for a minimum of 10 bicycles, at all major recreational facilities and Council buildings.

Figure 2.1 Example of use of public art to provide End of Trip Facilities





Source: City of Albany and Randwick City Council

#### **Long Stay Facilities**

The Local Planning Scheme No. 1 does not include any requirements for end of trip cycle facilities, other than bicycle parking, such as:

- Showers
- Lockers
- → Secure and/or undercover bicycle parking
- → Washing/drying/ironing facilities

Whilst simple bicycle parking may be sufficient for short-stay cycling trips, these facilities are critical to encouraging long-stay (i.e. commuter) cycling trips to private developments.

Long stay end of trip facilities for commuters should generally be provided by the employer. Council's involvement in the provision of end of trip facilities should be in the form of:

- → Requiring, through its Town Planning Scheme, new developments to provide a certain minimum standard of end of trip cycle facilities for both employees and visitors; and
- → Providing suitable end of trip cycle facilities for employees and visitors at its own offices, depots and community facilities.

In many cases workplaces, particularly in the hospitality industry, will already provide showers and lockers for staff so meeting these requirements for many developments is not considered to be particularly onerous.

The Green Building Council of Australia's Green Star ratings for end of trip facilities are an appropriate benchmark.

Recommendation	Long Stay End of Trip Facilities
Medium	Provide end of trip facilities, such as showers, lockers, secure parking and washing/drying/ironing facilities at Council workplaces for use by staff.
Medium	Review the Local Planning Scheme No 1 to encourage end of trip cycle facilities to be considered





## 2.3 School Programs

School children are a critically important component of the cycling community as they are the current and future generation of cyclists and road users. The early exposure of children to cycling as an enjoyable way to spend their leisure time and to get to/from school has been proven to contribute significantly to children continuing to cycle into adulthood.

The major opportunities for encouraging school children to ride bicycles include:

- → Cycling to/from school the majority of children live within 5km of their school which is a comfortable cycling distance
- → Cycling lessons at school teaching children the basics of riding a bicycle and safety on and around the roads
- Organised cycling sport, either at school or on weekends, ranging from simple leisurely rides, to road riding and mountain biking
- Reduction in traffic congestion at drop off and pick up times
- → Increased and incidental physical activity by riding their bikes to and from school

Schools should be encouraged to provide secure bicycle parking for their students. To facilitate procurement of bike racks, schools should explore various funding opportunities to install bike racks on their grounds.

Initiatives such as Bike Week, Cycle to School and Cycle to Work should be encouraged and supported, with specific activities and promotions targeting different age groups. A key focus should be children in the 10-14 age group who are reaching the age where they may consider independently cycling to school.

A school focus is important particularly at high school level, so that children (and their parents) understand safe cycling methods. In addition, when students become drivers themselves they will then also understand the needs of cyclists.

Recommendation	School Programs
Short	City of Albany to promote, endorse and support programs to encourage school students to ride to school (eg Bike Week, Cycle to School)
Short	City of Albany to continue to endorse and support the development of school's end of trip facilities
Short	City of Albany to promote, endorse and support Bike Education programs within schools

## 2.4 Community Promotion

There are a number of initiatives that can be employed to promote cycling in Albany. Fundamental to this effort are the infrastructure improvements proposed as part of this strategy; it is difficult to increase cycling ridership if the network has significant gaps or is considered 'unsafe'.

A number of events are already being held in and around Albany for the active recreational cycling community. Future events could be tied to the opening of specific bicycle routes as they occur, or an event can be expanded to incorporate a cycle initiative. This will tend to encourage a completion timeframe for infrastructure improvements and will actively promote and acknowledge the effort of the City and celebrate the City's success outside the existing bicycle user groups. It is also important to ensure the community is aware of the progress being made on developing the cycling network – many less prominent works are often completed without the wider community noticing.

Other events should be used to promote the casual and scenic nature of the proposed bicycle network with Cycle to School and Cycle to Work days organised to coincide with local shared path improvements. The organisation of Cycle to School initiatives should include parents and teachers and follow educational programs to ensure children understand safe cycling.

Local recreation facilities should be promoted by organising bicycle tours for recreational riders, combining these with tourist attractions within the City. Information regarding the improved bicycle infrastructure should be distributed not only to local cyclists and businesses, but also to adjoining Local Government Areas.

Safe cycling to school routes could be promoted through the preparation of walking and cycling maps for each school, which are then distributed to parents. This could be complemented by providing bicycle education lessons to demonstrate safe routes to school and safe riding techniques.

It is recommended that the City engage in annual or bi-annual cycling marketing and research activities to keep the community actively involved in cycling improvements and to promote the concept of cycling for transport and recreation. This initiative could be undertaken in conjunction with existing cycling events and could be incorporated into a Regional Bicycle Week which extends beyond the City boundaries. Involvement by BikeWest, the Department of Sport and Recreation, Department of Education and Training and local bicycle user groups would be encouraged to expand the marketing and advocacy base, and may contribute to a regional draw for Albany in its role as a Cycling City.

Significant synergies can be obtained between cycling promotion and cycling safety and awareness campaigns, such as the example shown in Figure 4 from the Bunbury region. Combined with a map identifying popular riding routes, or maps showing the difficulty levels for various routes, the brochures can simultaneously promote safe road user behaviour and encourage cycling. These synergies could also be developed with the mountain bike trails and the Munda Biddi Trail – mapping and brochures indicating not only the location of the trail but showing potential trail users that they can cycle to/from the trail rather than drive.

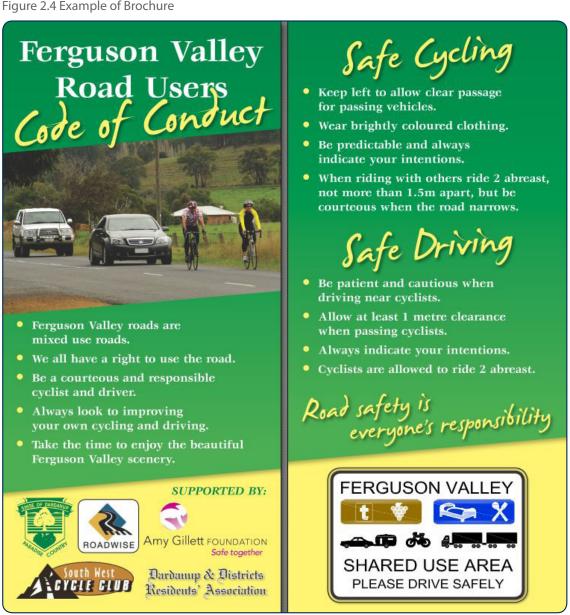
In order to recruit new cyclists or encourage 'old' cyclists back onto their bikes, every opportunity should be taken to promote and publicise the Cycle City Albany Strategy and the vision for Albany to become one of Australia's primary cycle destinations. New cyclists should feel encouraged and welcomed and existing cyclists congratulated and supported. Every new bicycle sold in Albany could receive 'A Cycle City Albany Welcome Pack' provided by the Council and include promotional material, stickers, maps and web links.





Recommendation	Community Promotion
Short	City support a yearly cycle count, to collect data on usage and act as a promotional and recognition activity
Short	In consultation and with support from the community encourage a series of cycle events to encourage cycling, for all levels of participants
Short	Promote bike access in all council planned events, where possible
Short	City to host an annual cycling forum to engage, promote, inform and evaluate the achievements made as a Cycle Friendly City.
Short	Publicise any new cycle routes and make information available through the City of Albany website
Medium	Gain support from local cycle businesses and develop a 'Cycle Welcome Pack' for new cycle purchasers.

Figure 2.4 Example of Brochure





# Objective 3: Safety and Respect for All Users Developing a Cycling Culture

#### Objective 3: Safety and Respect for all Users

To develop a bike riding culture in the City of Albany so that cycling is seen as a legitimate and normal use of the road, with mutual respect between all users

In order for Albany to achieve its vision to become a Cycling City, a significant culture change is required within the community and amongst road users.

The Albany community must embrace a culture which consists of safe cycling, safe walking and safe driving. Not necessarily a culture where every person is a cyclist, but one where cyclists are seen as legitimate road users and treated in a considerate and equitable manner.

## 3.1 Travel Speed and Shared Slow Zones

As Albany's cycling network develops, and the number of cyclists grows, interactions between cyclists and vehicles will increase. Much of the proposed cycling network is based around the premise of shared environments and on-street facilities, and developing an environment where cyclists of all confidence levels can feel comfortable riding on the street. In the proposed network, shared environments will generally be low speed environments, with separated on-street cycling facilities provided in higher speed areas. Managing driver and rider behaviour at these conflict points will need to be a key focus of educational and promotional efforts.

Low speed environments have significant positive impacts on road safety, amenity, the environment and sustainability, aligning with the City of Albany's corporate objectives. The most effective way of managing conflicts between cyclists and other road users is to use infrastructure to provide separation between user types. However, infrastructure takes a significant investment of time and money to be realised, so there will naturally be an interim period of many years before a truly separated network will be available. In the meantime the road will need 'to be shared'.

Recommendation	Travel Speed and Shared Slow Zones
Short	Trial of Shared Slow Zones in key zones when opportunities arise and investigate compliance, traffic flows and any issues
Medium	Using online survey tools and annual event, such as Super Tuesday Bike Count, assess the confidence from cyclists and support for shared slow zone areas from all road users

## 3.2 Signage

When targeted correctly, signage is a relatively low cost but effective way to encourage safer road user behaviour, way finding and regulate road user behaviour.

Cycling signage for Albany would consist of four main 'purposes' including welcome signage, safety signage, tourism directional signage and regulatory signage. It's important to note that for Albany to reach its vision a separate signage strategy would be required. The strategy would clearly identify the different purposes but still link together and fit with the broader City of Albany/Amazing Albany branding and marketing initiatives. The following sections outline some of the recommended signage which should be included.

Also see Section 1.4

#### Welcome Signage

It is recommended that 'Welcome' signage be installed on all major approaches to the Albany urban area including:

- → Frenchman Bay Road (near Woolstores)
- Lower Denmark Road (near Woolstores)
- South Coast Highway (near Timewell Road)
- → Albany Highway (at the current 'Albany' town name sign)
- Chester Pass Road (north of Mercer Road)
- → Lower King Road (on the Nanarup side of the Lower King Bridge)

A "Welcome to Albany: A Cycle Friendly City" signage would highlight to community and visitors that cycling is an activity that is central to the culture in Albany and something anyone can participate in.

To reinforce the message, 'repeater' signs should be installed on major cycling corridors within the City, such as:

- Ulster Road
- → Hanrahan Road/Princess Royal Drive
- Albany Highway
- → Middleton Road
- Golf Links Road



## Safety Signage

Safety signage, aside from ordinary warning signage, should focus on delivering important messages about appropriate road user behaviour. Key road user behaviour themes have emerged from the feedback of existing cyclists and it is recommended that signage target the following key areas of concern:

- > Vehicles passing cyclists emphasise safe passing distance of at least 1m (urban) and 1.5m (rural / heavy vehicle).
- → Merging / squeeze points particularly on Princess Royal Drive near the railway bridge, and the approach to roundabouts but wherever cycle lanes and sealed shoulders merge. As an example, the signs could include the message to 'Merge in Turn' with a graphic showing a cyclist merging into the traffic stream between two cars, at the end of a cycle lane.
- → Roundabouts signs should convey messages to guide both driver and rider behaviour. A message for cyclists such as 'Use the Path or Claim the Lane' to discourage cyclists from riding in the gutter, and 'Watch for Cyclists' signs to remind drivers approaching roundabouts that they must look out for cyclists using these traffic devices.
- → Mixed traffic riding particularly in the Albany Central Area where cyclists and motorists will share the road but overtaking should be discouraged. The sign graphic could incorporate a photograph of cyclists riding in primary position in mixed traffic with the message 'The Road is there to Share'.

In the majority of cases, there isn't existing Australian or Main Roads WA standard designs for these signs and therefore the City will be required to create the new designs. It is recommended that signs generally conform to the general colours, shapes and layouts prescribed in Australian Standards but with the necessary modifications to deliver the appropriate message.

Figure 3.2 illustrates some examples of signage which has been developed to deliver the 'Share the Road' message in Australia and New Zealand. The common theme with these signs is that the message is clear and concisely displayed, even for drivers who see the sign for the first time. Where installed on road train routes, the signs could include a graphic of a road train, rather than a car, to emphasise the need for heavy vehicle drivers to take extra care when passing cyclists. A review of current legislative trends for safe passing distances should be undertaken, with a view to incorporating larger distances on signs on higher speed roads.



Figure 3.2 Examples of Signage Encouraging Safe Behaviour







- 1. City of Albany signage on Lower King Road (Source: Cardno)
- 2. New Zealand signage on a rural State Highway (Source: Cycling Wellington blog cyclingwellington.co.nz)
  3. New Zealand signage on a rural minor road (Source: Andrew Priest)

### **Tourism Directional Signage**

Also see Objective 4

Guidance signage provides directional information, including destination distances and directional arrows at key points. These signs aim to maximise the proportion of cycle journey spent on the cycle network by ensuring that users are aware and make use of available infrastructure. Ideally, paths should be marked continuously across intersections with indications of path direction and possible destinations and T junctions and terminations. Signage can provide a considerable benefit to both safety and wayfinding, if managed well. They are also particularly important for cycle tourists, who may not be aware of the route and require additional information to inform their rides. Way-finding signage will direct people to important local and regional attractions and community facilities such as key shopping areas, schools, parks and tourist attractions.

In addition, maps with greater detail and information can complement way-finding signage, distributed in different formats, including electronically and via mobile phone applications.

### **Regulatory Signage**

Regulatory signage is placed along shared pedestrian paths, permitting cyclists who are over the age of 12 to legally use the off-street cycle network. Line marking is recommended over free-standing signage.

These regulatory signs will need to meet Austroads Guidelines.

<i>y</i> , <i>y</i>	
Recommendation	Signage
Short	A comprehensive Signage Strategy (including an audit and design guidelines) be developed to support the 5 year implementation plan. This will include welcome signage, safety signage, directional signage and regulatory signage.
Short/Medium	Roll out the signage strategy on specific new projects as determined in the implementation plan  Target key tourist and commuter routes for any signage upgrades on existing routes
Long	All major cycle routes have regulatory and way finding signage

## 3.3 Cycle Awareness and Safety Campaign

Changing people's attitude towards bike riding is also a key component to the success of this strategy. A small component of the community believe that compared to a car, bike riding is slower, creates congestion, is inconvenient and dangerous. We need to build a culture of respect and understanding between cyclists and car drivers, cyclists and pedestrians, particularly on shared paths.

The City of Albany community must embrace a culture which consists of safe cycling, safe walking and safe driving. Not necessarily a culture where every person is a cyclist, but one where cyclists are seen as legitimate road users and treated in a considerate and equitable manner.

#### Conflict between Cyclists

The range of types of cyclists is extremely varied, as discussed in the introduction. Sometimes this can cause conflict between different cycle users. Although less experienced riders tend to be confined to the off-road network and provide less conflict between riders, on-road commuters can have a variety of riding skills, travel speeds and purpose for riding. An education program is required so that all cyclists have an understanding of each other's needs and protocols.

#### Conflict between Shared Path Users

Our shared path network is extensive and runs along some of the most scenic coastline in Australia. On occasion, and particularly during our busier tourist seasons, there may be conflict between cyclists, walkers, runners and dogs. The majority of these issues result from poor behaviour, and a lack of understanding and consideration, rather than a question of poor infrastructure or design. Basic road (and path rules) of keeping to the left, and the common courtesy of ringing a bell, will often overcome any potential conflict. As the number of shared pathway users continues to increase, it will be important that an education campaign and clear signage be installed. The image below illustrates an example of signage which has been developed to deliver the "Share the Path" message in the City of Perth.



#### Improved perception of Cyclists as Legitimate Road Users

There is a perception among some non-cyclists, that cyclist are not legitimate road users and should be on the 'shared path's where ever possible. Driver education, when targeted properly, can be an effective tool in encouraging better road user behaviour. Programs need to be run to educate cyclists and motorists on the rights of cyclists on the road. Educating drivers on cyclists' rights and on safe cycling is the first step in safely sharing the road. Cyclists also need to abide by the road rules if they want to be seen as legitimate road users.

Driver training is particularly important if Albany is promoting itself as a cycling tourism destination, as their behaviour can have serious impacts on the viability of the 'Cycling City' brand.

All agencies and groups with an interest in road and cycle safety can support and build a culture of respect and understanding between all road users. It may be worth exploring the Department of Transport's TravelSmart officer program, to support any improvements in sharing the road practises.

Recommendation	Cycle Awareness and Safety Campaign
Short	A comprehensive Signage Strategy be developed – including regulatory signs.
Short	In conjunction with community groups and key cycle and road safety agencies support a Share the Roads Campaign and/or Bike Safety Campaign, including the development and distribution of educational material
Short	Investigate the resources to support a Cycle City Albany Officer to assist with the coordination of the Share the Road and/or Bike Safety Campaign

## 3.4 Hazards and Safety Issues Reporting

The quality and condition of the roads and shared paths used by cyclists is important in encouraging more cycling. Cyclists can be adversely affected by tree roots, glass, potholes and changes in the surface conditions. Paths, roads and on-lane shoulders should be regularly inspected and maintained to ensure quality does not fall below acceptable levels.

It is important that the cycling community are educated on how to report a hazard and who is responsible for that level of road/path. The current system of reporting hazards or safety issues for the City of Albany is by email or phone to the City of Albany front office. The report is then forwarded to the appropriate directorate and/or officer responsible for review and action. There is potential to improve this system, with a possible online link to identify and address maintenance issues.

The responsibility for addressing any hazards on specific roads or shared paths is dependent on the owner of the section, the severity of the hazard and the maintenance and repair schedule. There is potential to educate and inform all path users of the reporting processes, as part of a 'Share the Road' Campaign.

Also see Section 1.3.

Recommendation	Hazards and Safety Reporting
Short	As part of the Share the Road/Bike Education campaign, include information on reporting hazards and safety issues
Short	Maintenance work prioritization will be undertaken as per existing documentation and processes  Promote the existing processes to report routine maintenance issues
Medium	Undertake a review of the maintenance reporting processes



## Objective 4: Cycling Tourism

To be a City that is recognized as a prominent regional cycling destination, delivering economic and tourism benefits for the community

Cycling tourism has been identified by the City as a key driver of Albany's future and it is inextricably linked with this Strategy. This Strategy has set out how the infrastructure should be developed to create a high quality cycling network and the promotional strategies to foster a community which considers cycling to be part of the fabric of the City's culture. These strategies will also support and enhance cycle tourism.

This section deals specifically with strategies which particularly target the growing area of cycle tourism.

Recreational cycling is growing in popularity, and is particularly attractive in Albany due to the quality of the shoreline infrastructure, attractive scenic destinations and variety of cycling opportunities.

There are several key growth areas for cycle tourism which should be targeted, including:

- → Cycling holidays (where cycling is the main purpose)
- → Holiday cycling (cycling being one of a number of activities whilst on holidays)
- Cycling day visits
- Cycling Events (competitive, recreational and social)
- End of trip experiences

Within these growth areas, there are several key demographics which fit into one or multiple categories:

- Ordinary holiday makers (e.g. families travelling in holidays) who hire a bicycle for recreational purposes
- → Recreational (path or road) cyclists who visit Albany specifically for the cycling experience
- → Recreational (trail) cyclists who visit Albany to ride trails such as the Munda Biddi or the Denmark Rail Trail
- → Mountain bike trail cyclists who visit Albany specifically to ride trails
- → Tourists visiting Albany for whom cycling can fulfil their travel needs, without the expense of hiring a vehicle
- → Long distance touring cyclists
- → Competitive cyclists taking part in cycling events

## 4.1 Cycle Tourist Routes

The Cycle City Albany Strategy incorporates improvements to a number of existing cycle routes which would be of interest to cycle tourists.

#### **Albany Harbours Path**

The Albany Harbours Path is a spine route for casual and recreational cyclists, running along Albany's spectacular foreshores from Lower Kalgan and Lower King (Oyster Harbour) along Middleton Beach (King George Sound) around the Boardwalk and into the CBD. It then follows the Princess Royal Harbour around to Little Grove.

The feedback from the community was particularly strong on this project, with 91% of respondents agreeing or strongly agreeing for a priority to be the completion of the Albany Harbours Plan to link Lower Kalgan in the north and Discovery Bay in the south. The Cycle City Albany Strategy includes recommendations to complete the 'missing links' to the Albany Harbours Path and potentially extend it to Discovery Bay in the south and Lower King in the north-east. See Section 1.6 for details.

This shared path cycle route is already acknowledged as one of Australia's iconic cycle shared-paths. With a commitment to completing the 'missing links' in the route, it will further enhance the region and continue to draw cycle tourists.

An opportunity has been identified within the City of Albany, working collaboratively across directorates to develop a 'Nature Play Trail' project. The Nature Play Trail could link existing 'community hubs play spaces' in identified regional parks, which also have a strong tourism focus and align with the Albany Harbours Path. This project has the potential to market Albany as the Natural Play Regional Centre of WA, and aligns with the overall vision of this strategy 'For the City of Albany to become one of Australia's primary cycling destinations'.



#### Munda Biddi

According to the Munda Biddi Foundation cycle tourist's (unlike other forms of tourists) require a variety of services because they travel light and are more reliant on local services than car based tourists.<sup>5</sup>

Cycle tourism has the potential to inject significant spending into the local economy – the Munda Biddi Trail Foundation conservatively estimated that cycling touring could inject \$13 million per annum into the South West and Great Southern economies (based on an average trip of 3.5 days and spending \$150 per day on transport, accommodation, supplies and equipment). Munda Biddi is recognised as one of Australia's top 50 Bike riding experiences, according to Australia's most widely read bike magazine Ride On

According to the Draft Trails Hub Strategy for Albany – based on data from DEC "There were 9,590 Munda Biddi trail visits in 2010" (DEC: User Survey Data). This figure is low given it is based on the trail being from Perth to Nannup and excludes usage of Nannup to Albany. With the trail now completed this figure is considered a significant underestimate of total users on the Trail.'

The Munda Biddi Albany Cycle Tourism Strategic Plan (2011)<sup>6</sup> suggested a suite of opportunities and actions to develop cycle tourism in the region. Some of these recommendations have been incorporated into the Cycle City Albany Strategy.

The re-alignment of Mundai Biddi along Lower Denmark Road and into the Albany Regional Centre has been identified as a priority by the City of Albany and solutions are currently being explored.

Recommendation	Cycle Tourist Routes
Short	Solutions for the re-alignment of Munda Biddi into the Albany Regional Centre, to be incorporated in the Feasibility Study for Hanrahan/Princess Royal Drive
	Consider realign Munda Biddi Trail to include more scenic locations, specifically Elleker to Wind Farm sections.
Short/Medium	Prioritise and stage projects to complete the missing links between Lower King and Discovery Bay to create an iconic cycle tourism shared path.
Medium	Support the concept and development of the 'Nature Play Trail', aligning with the existing Albany Harbours Path along Emu Point and Middleton Beach and encourage cycle tourist stopping points.
Medium	Explore the re-location of the End Terminus for Munda Biddi to be incorporated within the Albany Heritage Park

#### \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ .

## 4.2 Cycle Promotion

## Cycle Maps

Cycle specific maps are a vital pre-planning tool and a useful navigational resource while cycling. The items within the map required by cycle tourists are directly related to safety such as indications of roads not suitable for cycling and the locations and option of cycling routes that provide separation from traffic. Because cycle touring is slow paced and self-propelled in nature, it is important that rest areas and water facilities, along with distances between them are accurately provided on maps.

The Go Cycle Albany map was produced in 2007 and available in hard copy and electronically on the City of Albany and BikeWest websites. However, the resource is now out of date as there have been considerable additions to the cycle network. Upgrading the Department of Transport Go Cycle Albany map is recommended, with a hard copy and online version made available. The online map would be accessed through the City of Albany website with supplementary links to other cycling sites such as the ACC webpage and the Munda Biddi webpage.

Following approval of the strategy, maps detailing the extent and type of paths should be made available to residents and tourists, similar to those provided by the Department of Transport. An increased awareness of safe, well signposted bicycle routes will unlock some of the latent demand in the area. Maps should also be distributed concurrent with educational drives, through schools and community events. The Go Cycle Albany could be utilised as a logo to aid with promotion and to align with other City of Albany tourist marketing strategies.

Recommendation	Cycle Maps
Short	Revise format and reprint Go Cycle Albany brochure map publication. Align with new Amazing Albany branding (currently being developed - Adventure Albany, Taste Albany, Cycle Albany) and reformat publication.
Short	Identify appropriate tourist, corporate and community outlets where the map will be stocked and a process to keep the supply stocked
Short	Ensure future maps are available and distributed in different formats, including electronically and via mobile phone applications
Short	Align any cycle promotion within the City of Albany's Tourism Marketing strategies
Medium	Research and produce other Cycle Albany marketing collateral, investigate online delivery, smart phone/tablet capabilities. Include Cycle Albany as a key message in broader destination marketing strategies





## 4.3 End of Trip Facilities

Cycle tourists are a varied demographic, as identified in the beginning of the chapter. However, the availability of secure and accessible cycle parking is essential for most cycle tourists, and is as important as cycle routes, for encouraging and supporting more people to travel by bike.

Cycle parking should be placed in convenient, highly visible location, with good passive surveillance. Other facilities such as long term lockers, changing rooms and showers are also essential for cycle tourists.

Also see Section 2.2

Recommendation	End of Trip Facilities/Tourist Stopping Points
Short	Explore and support end of trip facilities at the Albany Heritage Park (incorporating Princess Royal Fortress, Mt Melville lookout, National Anzac Centre)
Medium	Audit existing bike racks at key tourist points and identify a list for upgrade, replacement and/ or installation
Medium	Install a bicycle repair stand at the Visitor Centre
Medium	Explore funding opportunities to install creative bike racks at key tourist attractions - such as WA Residency Museum, Anzac Peace Park, Albany Heritage Park (incorporating Princess Royal Fortress, National Anzac Centre) Mt Melville lookout, Albany Entertainment Centre, Waterfront, Patrick Taylor Cottage and Vancouver Arts Centre
Long	Expand the end of trip facilities to include innovative tourist 'stopping' points such as geocaching points, photo-shoot stops, rest/shelter stops.
Long	Support and facilitate local investment in establishing bike hire and/or bike tour businesses in high profile visitor locations (Middleton Beach, Emu Point, Albany Heritage Park, Albany foreshore/marina, WA Museum/Brig precinct).

## 4.4 Cycle Events

Cycle events can be a strong attractor of visitors to the region and are also keenly supported by local communities. In 2007 the City of Albany hosted the start of the Bike Victoria Great Escapade with nearly 3,000 cyclists undertaking a 9 day cycle from Albany to Perth. This was the first time a cycle event of this size was held in Western Australia and the economic benefit from this ride for the local communities was unprecedented.

Within the City of Albany there are a number of cycling events in the road cycling, Mountain Bike, triathlon, adventure racing and charity categories. However, there is the opportunity to improve the capacity of these to benefit the local economies and also to attract and/or develop a suite of new cycle-focused events to help build visitation and capacity.

The inaugural Albany Urban Downhill event held in August 2014 also highlighted the opportunity to attract visitors to the region.

Recommendation	Cycle Events
Short/Medium/Long	Attract and support iconic cycle events via the City's Regional Events Sponsorship program and Major Event Attraction program (one off and annual events; road, track, and mountain; competitive and amateur; single day and stages)
Short	In consultation and with support from the community encourage a series of cycle events to encourage cycling, for all levels of participants



# Objective 5: Management and Implementation

To develop management mechanisms to support and guide the ongoing implementation of the Cycle City Albany Strategy (2014-2019)

## 5.1 Coordination – Cycle City Albany Officer

Better coordination across Council will help deliver the recommendations and actions of this Strategy seamlessly and cost effectively. Considerable work has been undertaken to ensure the strategy and actions have been embedded in all strategic and operational documents. To coordinate the implementation of the strategy it is recommended the City investigate resourcing a Cycle City Albany Officer. This position can work across all directorates and with partners and key stakeholders, to support the 5 year implementation plan.

Recommendation	Cycle City Albany Officer
Short	The City investigate resourcing a Cycle City Albany Officer to support the 5 year implementation plan

# 5.2 Implementation Plan and Review

## **Bike Strategy Committee**

The development of the City of Albany's first strategy involved considerable strategic guidance from a Project Control Group (PCG). There is merit in considering a similar group to oversee and provide guidance on the implementation of the Strategy over the coming years.

## Feedback Register

Feedback is received from time-to-time from residents and visitors about the cycling network. If this feedback is not addressed immediately, it should be kept on a feedback register to ensure that when the next strategy is being prepared, the feedback can be incorporated.

Recommendation	Implementation Plan and Review
Short	Consider the establishment of a Cycle City Albany Strategy Committee to meet regularly to oversee and provide guidance on the implementation of the Strategy.
Medium	Develop a feedback register, to inform future cycle network projects

## 5.3 Measuring Success

#### **Data Collection**

Collecting data is an important aspect of planning for future infrastructure. Currently, the City does not collect data on the frequency or type of cycling, which routes are used, and what the major issues are for cyclists.

A small sample of current cycling patterns was obtained from survey respondents who filled out the map. This is a good base from which to work but the data is not robust enough to fully inform business cases for funding. Bicycle crash data was obtained from MRWA for the most recent five year period. See Appendix B

Commencing in Spring 2014, it is recommended that the City undertakes data collection activities along major cycling routes to identify their current usage. Base level (mid-block) data should be collected using automated counters on a rotational basis. This should be complimented by manual counts conducted periodically at major junctions on the network to identify turning movements. A good, low cost method of collecting data is to get involved with the 'Super Tuesday' annual bike counts organised by Bicycle Network (formerly Bicycle Victoria) or the equivalent surveys conducted by the Department of Transport.

Collecting cyclist volume data before and after implementing significant improvements to a route should be strongly considered. The results can be used to understand the impact of these improvements, as well as assist in the preparation of business cases and funding applications for future improvements. If the City can demonstrate an increase in cycling numbers is likely to occur following a project, then the application is likely to be well received by the Department of Transport.

#### Review

It is important to measure the success of the Cycle City Albany Strategy. The Strategy has been developed with short, medium and long term recommendations.

It is suggested that a review should be undertaken to align with these timeframes:

Short Term Review by April 2015 Medium Term Review by April 2016

Long Term Review by April 2018 and to include a full review of the Strategy

As part of the reviews, there needs to be mechanisms developed to assess projects completed and recommendations achieved.

Recommendation	Measuring Success
Short	Develop some mechanisms to measure the success and capture projects completed and achievements.
Short/Medium	Collecting cyclist volume data before and after implementing significant improvements to a key routes
Short	Gain community support for the Super Tuesday' annual bike counts organised by Bicycle Network (formerly Bicycle Victoria) or the equivalent surveys conducted by the Department of Transport.
Medium	Establish a review process aligned with the timelines for recommendations
Medium	A review of crash data is recommended for 5-year increments to assist in identifying any safety impacts of improved infrastructure, and any ongoing trends in bicycle crashes.