Byron Shire Pedestrian Access & Mobility Plan

Draft



7 June 2019



Document Control

Document:Project Name:Byron Shire Pedestrian Access & Mobility PlanPSA Job Number:0804Report Name:Draft for Consultation

This document has been prepared for:



Contact: Daniel Strzina Project Engineer Byron Shire Council (02) 6626 7241 daniel.strzina@byron.nsw.gov.au

This document has been prepared by:



Contact:

Aaron Donges PSA Consulting (Australia) Pty Ltd PO Box 10824, Adelaide Street, Brisbane QLD 4000 Telephone +61 7 3220 0288 aaron.donges@psaconsult.com.au www.psaconsult.com.au

Revision History

VERSION	DATE	DETAILS	AUTHOR	AUTHORISATION
V9	7 June 2019	DRAFT FOR CONSULTATION	Aaron Donges Hannah Richardson	Hannah Richardson

General Disclaimer

The information contained in this document produced by PSA Consulting (Australia) Pty Ltd is for the use of Byron Shire Council for the purpose for which it has been prepared and PSA Consulting (Australia) Pty Ltd undertakes no duty of care to or accepts responsibility to any third party who may rely upon this document.

All rights reserved. No section or element of this document may be removed from this document, reproduced, electronically stored or transmitted in any form without the written permission of PSA Consulting (Australia) Pty Ltd.



FOREWORD

Congratulations to everyone who has been involved in shaping what is our very first ten-year Pedestrian Access and Mobility Plan (PAMP) for the Byron Shire.

The aim of this plan is to look at existing footpath networks and identify and prioritise proposed future walk and roll networks that will improve access, mobility, safety and connectedness for the whole community.

Like many of you, I love to leave the car at home and walk, roll and ride – as often as I can. I love a good footpath and I have many opinions on how we can greatly improve our existing paths and cycle ways across the Shire.

Pedestrian networks are obviously of high value, importance and interest to lots of people in the Byron Shire, which has been reflected in the large quantity of thoughtful responses and helpful input and ideas we received towards the new PAMP.

If you were one of the 700 people who completed our online survey, thank you for taking the time to make a contribution. Your input has enabled Council to get a better understanding of the key issues and specific problems you'd like to see addressed in our pedestrian networks now and in the future.

We also extend our gratitude to more than 150 people who took time out of their busy schedules to attended one of the five PAMP design workshops held across the Shire in September and October 2018. Your participation in this process has been invaluable and has enabled Council to gain a more localised and in-depth understanding of where our community's priorities for future pedestrian works lie.

With the benefit of all of your ideas and local expertise, the Byron Shire PAMP is a locally-informed, holistic and intelligent document that sets out a plan with real goals and specific actions. It includes a schedule of works that identifies the actions required over the next decade across many of our towns and villages including Mullumbimby, Byron Bay, Suffolk Park, Bangalow, Ocean Shores, South Golden Beach, New Brighton, Billinudgel, Brunswick Heads, Main Arm and Federal. Some of the main types of improvements identified as actions in the 10 year Byron Shire PAMP include:

- New footpaths (and exactly where they are needed) that meet accessibility requirements – suitable for walking and rolling;
- Maintenance of existing footpaths;
- Connectivity between footpaths within towns and also between some towns;
- Safety functionality (such as shared paths to separate pedestrians, cyclists and motorists where required, safer crossing points, improved lighting and accessibility features), and;
- Non-infrastructure projects to encourage walking and rolling as healthy and enjoyable transport alternatives.

It is imperative that we invest generously in our footpath infrastructure because it underpins wellbeing and social cohesion for our community.

Through this new Plan, and thanks to the quality of ideas and feedback provided by you all, and the expertise of Council staff and consultants, Council can take a longer-term approach to planning effectively for the different walking, rolling and riding needs of our community.

Byron Shire Acting Mayor, Michael Lyon



TABLE OF CONTENTS

FOREWORDI					
1	INTRODUCTION	1			
1.1	Background	1			
1.2	Developing the PAMP	1			
1.3	Directing the PAMP	2			
1.4	Structure of the PAMP	3			
2	EXISTING PEDESTRIAN AND MOBILITY SITUATION	4			
2.1	State plans and policies	5			
2.2	Local plans and policies				
2.3	Walking and rolling in Byron Shire	7			
2.4	Walking and rolling in Mullumbimby	8			
2.4.1	Existing walk and roll network	8			
2.4.2	Network quality and accessibility	9			
2.4.3	Pedestrian crash history	9			
2.4.4	Passenger transport	9			
2.4.5	Issues and opportunities	.10			
2.5	Walking and rolling in Byron Bay	.13			
2.5.1	Existing walk and roll network	.13			
2.5.2	Network quality and accessibility	.14			
2.5.3	Pedestrian crash history	.14			
2.5.4	Passenger transport	.15			
2.5.5	Issues and opportunities	.15			
2.6	Walking and rolling in Suffolk Park	.21			
2.6.1	Existing walk and roll network	.21			
2.6.2	Network quality and accessibility	.21			
2.6.3	Passenger transport	.22			
2.6.4	Issues and opportunities	.22			
2.7	Walking and rolling in Bangalow	.24			
2.7.1	Existing walk and roll network				
2.7.2	Network quality and accessibility	.24			
2.7.3	Passenger transport	.25			
2.7.4	Issues and opportunities				
2.8	Walking and rolling in Ocean Shores, South Golden Beach, New Bright	on			
and Billi	and Billinudgel28				
2.8.1	Existing walk and roll network	.29			

2.8.2	Network quality and accessibility	29
2.8.3	Pedestrian crash history	30
2.8.4	Passenger transport	30
2.8.5	Issues and opportunities	
2.9	Walking and rolling in Brunswick Heads	
2.9.1	Existing walk and roll network	
2.9.2	Network quality and accessibility	
2.9.3	Pedestrian crash history	
2.9.4	Passenger transport	
2.9.5	Issues and opportunities	
2.10	Walking and rolling in Main Arm and Federal	38
3	COMMUNITY CONSULTATION	41
3.1	Stage 1 consultation – online survey	41
3.2	Stage 2 consultation – local design workshops	
4	THE FUTURE WALK AND ROLL NETWORK	46
4.1	Designing for users	46
4.1.1	Design philosophy and principles	
4.1.2	Design typologies	
4.2	Supporting facilities	
4.3	Proposed walk and roll network	
5	ACTION PLAN	67
5.1	Action Plan methodology	67
5.2	Works prioritisation and packaging	
5.3	Schedule of future works	
5.4	Funding	
5.4.1	Byron Shire Council	96
5.4.2	State and Federal Governments	96
5.4.3	Other sources	96
5.5	Monitoring and evaluation	96
5.5.1	Network monitoring and evaluation	
5.5.2	PAMP monitoring and evaluation	97
APPEND	DIX 1 – COMMUNITY CONSULTATION NETWORK MAPS	98
APPEND	DIX 2 – PRIORITISED INFRASTRUCTURE MAPS	109

LIST OF FIGURES

Figure 1: Byron Shire local government area1
Figure 2: Pedestrian Access and Mobility Plan methodology2
Figure 3: Policy and stakeholder context for developing the PAMP4
Figure 4: Annual pedestrian crashes in Mullumbimby (2012-2017)9
Figure 5: Pedestrian crashes by severity in Mullumbimby (2012-2017)
Figure 6: Existing walk and roll network and pedestrian crash locations –
Mullumbimby11
Figure 7: Existing walk and roll network and pedestrian crash locations –
Mullumbimby Town Centre12
Figure 8: Annual pedestrian crashes in Byron Bay (2012-2017)14
Figure 9: Pedestrian crashes by severity in Byron Bay (2012-2017)
Figure 10: Existing walk and roll network and pedestrian crash locations – Byron
Bay (West)17
Figure 11: Existing walk and roll network and pedestrian crash locations – Byron
Bay (Central)18
Figure 12: Existing walk and roll network and pedestrian crash locations – Byron
Bay (Central) Town Centre19
Figure 13: Existing walk and roll network and pedestrian crash locations – Byron
Bay (South)20
Figure 14: Existing walk and roll network – Suffolk Park
Figure 15: Existing walk and roll network – Bangalow
Figure 16: Existing walk and roll network – Bangalow Town Centre27
Figure 17: Existing walk and roll network and pedestrian crash locations – Ocean
Shores, South Golden Beach, New Brighton and Billinudgel
Figure 18: Existing walk and roll network and pedestrian crash locations – South
Golden Beach and Billinudgel32
Figure 19: Existing walk and roll network and pedestrian crash locations – Ocean
Shores and New Brighton33
Figure 20: Existing walk and roll network and pedestrian crash locations –
Brunswick Heads
Figure 21: Existing walk and roll network and pedestrian crash locations –
Brunswick Heads Town Centre37
Figure 22: Existing walk and roll network – Main Arm
Figure 23: Existing walk and roll network – Federal40
Figure 24: Key words and phrases mentioned by the community during Stage 2
consultation44
Figure 25: Issues and opportunities identified by the community during Stage 2
consultation45



Figure 26: Prioritised issues and opportunities as nominated by the community during Stage 2 consultation	
Figure 27: Example cross-sections of a 1.2m and a 1.8m pedestrian footpath48	,
Figure 28: Example cross-sections of a 2.5m shared path and a 2.4m pedestrian	
footpath48	
Figure 29: Crossing typology examples49	
Figure 30: Future walk and roll network – Mullumbimby51	
Figure 31: Future walk and roll network – Mullumbimby Town Centre52	
Figure 32: Future walk and roll network – Byron Bay (West)53	5
Figure 33: Future walk and roll network – Byron Bay (Central)54	ļ
Figure 34: Future walk and roll network – Byron Bay (Central) Town Centre55	j
Figure 35: Future walk and roll network – Byron Bay (South)56	j
Figure 36: Future walk and roll network – Suffolk Park57	'
Figure 37: Future walk and roll network – Bangalow	5
Figure 38: Future walk and roll network – Bangalow Town Centre59)
Figure 39: Future walk and roll network – Ocean Shores, South Golden Beach,	
New Brighton and Billinudgel60)
Figure 40: Future walk and roll network – South Golden Beach and Billinudgel61	-
Figure 41: Future walk and roll network – Ocean Shores and New Brighton62	
Figure 42: Future walk and roll network – Brunswick Heads63	;
Figure 43: Future walk and roll network – Brunswick Heads Town Centre64	ļ
Figure 44: Future walk and roll network – Main Arm65	j
Figure 45: Future walk and roll network – Federal66	j
Figure 46: Factors influencing priority implementation69)
Figure 47: PAMP estimated cost by priority category70)

LIST OF TABLES

category and location.....70

Figure 48: PAMP estimated cost and quantity of works packages by priority

Table 1: Path width guide	47
Table 2: Implementation priority	
Table 3: Priority Components by Category	
Table 4: Schedule of future works – Mullumbimby	71
Table 5: Schedule of future works – Byron Bay (West)	76
Table 6: Schedule of future works – Byron Bay (Central)	78
Table 7: Schedule of future works – Byron Bay (South)	84
Table 8: Schedule of future works – Suffolk Park	85
Table 9: Schedule of future works – Bangalow	87



Table 10: Schedule of future works – Ocean Shores, South Golden Beach, New		
Brighton and Billinudgel	90	
Table 11: Schedule of future works – Brunswick Heads	93	
Table 12: Schedule of future works – Main Arm	95	
Table 13: Schedule of future works – Federal	95	

LIST OF ACRONYMS

ACWG	Access Consultative Working Group	_
DCP	Development Control Plan	_
GIS	Geographical Information System	7
LEP	Local Environmental Plan	
LGA	Local Government Area	
NSW	New South Wales	_

PAMP	Pedestrian Access and Mobility Plan
RMS	Roads and Maritime Service
TIAC	Transport Infrastructure and Advisory Committee



1 Introduction

1.1 Background

Mobility, as experienced by walking or other mobility-enabling devices such as wheelchairs, skateboards and scooters, is a fundamental element of the human experience and one that is critical to the strength of the community and the relationship with surroundings. There are also numerous health, environmental and economic benefits for the individual and the community as a whole that naturally stem from greater focus on such human-scale mobility. For convenience, the overarching term 'pedestrian' has been adopted throughout this document to describe this broad, human-scale mobility (excluding cycling).

Despite the importance of pedestrian movements and a substantial amount of existing and planned new infrastructure, Byron Shire Council (Council) has never had a single, consolidated plan to coordinate planning and investment of pedestrian infrastructure across the entire Byron Shire local government area (LGA). In recognition of this, Council has committed to the development of a Pedestrian Access and Mobility Plan (PAMP) for the entire Byron Shire in order to coordinate investment in safe, convenient and connected pedestrian routes. Once complete, the PAMP will provide a framework for developing pedestrian routes and areas that have been identified by the community as important. As the development of a PAMP is a New South Wales Government initiative, local governments are better positioned to receive grant funding for applicable projects if a PAMP exists and is less than five years old. State Government grant funding eases the financial burden on Byron Shire and means that key pedestrian projects can be implemented sooner for the benefit of the community. Collaboration and partnerships between the community, state and local governments, developers and other stakeholders will therefore be critical to ensure the development of a PAMP that is representative of community needs and aspirations and supports the continual improvement of Byron Shire.

While the PAMP has been prepared for the entire Byron Shire, specific attention has been paid to existing areas of relatively high pedestrian activity. This allows for a more focused prioritisation of projects, a more efficient use of limited funds and resources, and, importantly, the ability to undertake strategic network improvements in order to quickly build momentum and achieve more

widespread improvements throughout the Shire. The Byron Shire LGA, which includes the specific study areas, is shown in Figure 1.

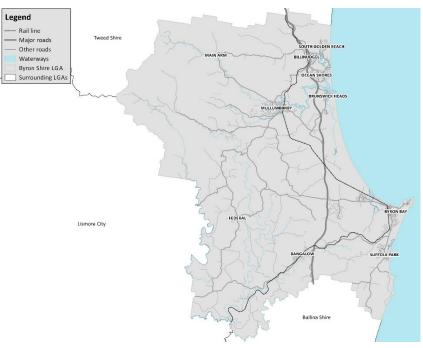
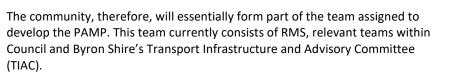
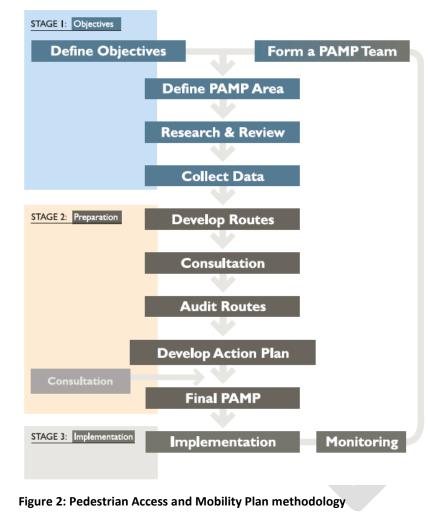


Figure 1: Byron Shire local government area

1.2 Developing the PAMP

This PAMP has been prepared in line with the core methodology outlined in the Roads and Maritime Service's (RMS) *How to Prepare a Pedestrian Access and Mobility Plan* document (refer to Figure 2). Due to the importance of the PAMP, however, and its ability to directly impact on both residents and visitors to Byron Shire, community consultation has been identified as a critical element in its development. In light of this, the scope of consultation tasks has been expanded beyond that outlined in the RMS guideline in order to facilitate genuine community consultation and to provide as many opportunities as possible for the community to inform the PAMP and advise how and where Byron Shire's walk and roll network should evolve in the future.





1.3 Directing the PAMP

The ultimate outcome of the Byron Shire PAMP is to provide a consolidated, clear and representative plan that can be reliably used to coordinate investment in safe, convenient and connected walk and roll routes in the Byron Shire for the benefit of the community and visitors. The following objectives have been developed for this PAMP to help work towards this desired outcome:

- To improve the accessibility and connectivity of all pedestrians within and between residential, commercial and recreational areas and in areas of high pedestrian activity
- To facilitate improvements in the level of personal mobility for pedestrians of all ages, mobility levels and needs through the provision of appropriate pedestrian infrastructure and facilities
- To improve the safety of all pedestrians, particularly in strategic pedestrian activity areas and at identified pedestrian crash clusters
- To plan and design pedestrian facilities that are informed by national and international best practice and technical standards and that reflect the local context
- To ensure pedestrian facility provision integrates with and supports land uses, key natural assets, existing and proposed tourist attractions and other transport modes, where appropriate
- To propose prioritised measures with associated costs that can be realistically implemented over a ten year period and can inform Council spending
- To develop a program of pedestrian infrastructure and noninfrastructure works that is integrated with other planning and that may attract funding from the NSW State Government to help increase rates of walking.

Not only do these objectives help inform the development of this PAMP, they also guide how and why pedestrian facilities are provided in Byron Shire as well as providing an accountable basis for monitoring and measuring the success of the PAMP.

1.4 Structure of the PAMP

Beyond this first introductory section, the remainder of the PAMP is divided into the following four sections.

Section 2: Characteristics of the study areas

This section provides a summary of the existing walk and roll environment in Byron Shire, including the existing policy context, demographics, land uses, attractors, and pedestrian and road networks. This section also identifies a range of opportunities and constraints which will be used as a basis for developing the future walk and roll network.

Section 3: Community consultation

This section provides a summary of the findings of the community consultation undertaken to inform the PAMP.

Section 4: The future walk and roll network

This section presents the proposed walk and roll network for each of the key study areas within Byron Shire as well as the design philosophy and principles that underpinned its development.

Section 5: Action plan

This section presents the detailed schedule of future works and identifies opportunities to fund, monitor and evaluate the PAMP.





2 Existing pedestrian and mobility situation

The existing pedestrian and mobility situation in Byron Shire extends beyond the physical infrastructure that is currently provided to include consideration of all relevant plans and policies as well as town and Shire-wide demographics, current network use, and identified issues and opportunities. These elements, and their relevance to the Shire, are discussed in greater detail throughout this section.

This PAMP has been developed to align with and support all relevant plans and policies at all levels of government.

STATE/NATIONAL

Relevant plans, studies and other documents

- How to Prepare a PAMP
- North Coast Regional Plan 2036
- Northern Rivers Regional Transport Plan
- Casino to Murwillumbah Rail Trail Study
- Disability legislation

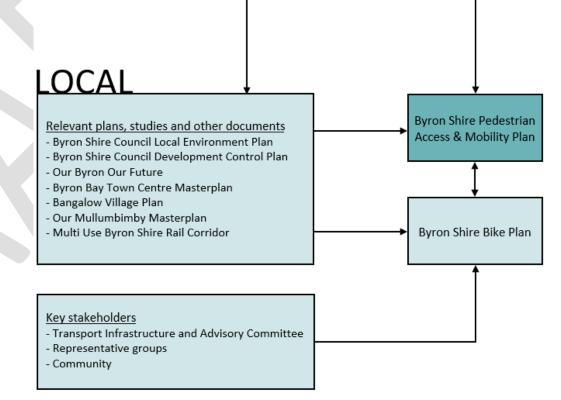


Figure 3: Policy and stakeholder context for developing the PAMP

2.1 State plans and policies

How to Prepare a PAMP

In 1998, the NSW Government authorised a new program to improve planning for pedestrian mobility. These plans are referred to as a Pedestrian Access and Mobility Plan and are mandatory for all NSW councils to implement with many PAMPs having since been established. The intention of a PAMP is to endorse walking as a preferred transport alternative as opposed to private vehicle usage, whilst conveying a clear strategy for the provision of safe, convenient and connected pedestrian routes. A PAMP should also help facilitate the coordination of local level and state planning instruments, such as:

- Local Environment Plans (LEPs)
- Development Control Plans (DCPs)
- Councils' requirements under Sections 79c and 94 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

The *How to Prepare a Pedestrian Access and Mobility Plan* document is a guideline prepared by RMS to assist policy and decision makers to prepare a PAMP for local councils or smaller communities.

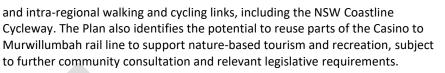
The guideline outlines a process (refer to Figure 2) to ensure a PAMP is properly made and that the approach to achieve its aims is coordinated and strategic. This includes the development of a set of objectives and associated actions required in order to accomplish them. This ensures that the PAMP can be clearly interpreted to key stakeholders such as the community, whilst helping to validate the overall strategy to secure funding.

This document is the key guiding document for the development of the Byron Shire PAMP.

North Coast Regional Plan 2036

The North Coast Regional Plan 2036 is the NSW Government's blueprint to guide the development of the region over the next two decades. In support of this, the Plan outlines a vision with goals and actions that reflect community and stakeholder aspirations and that have been geared towards delivering greater prosperity for those who live, work and visit this important region.

Of particular relevance to the PAMP, the Plan identifies as an action the desire to facilitate more recreational walking and cycling paths and expand interregional



Northern Rivers Regional Transport Plan

The Northern Rivers Regional Transport Plan outlines a variety of short, medium and long term actions and projects to support development and change and to address the unique challenges of the region. The Plan identifies three regional actions and one area-specific project of relevance to the PAMP. These actions are:

• Support proposals to investigate walking and cycling trails including disused rail lines

The NSW Government has outlined their support for an investigation into the feasibility of a walking and cycling trail along the disused sections of the Casino-Murwillumbah rail line to the north-west of Byron Bay. This investigation will be subject to community and business interest in advancing this proposal.

• Roll out the Walking Communities Program

This program will deliver state infrastructure investments and contribute to local government initiatives to help boost rates of walking. The NSW Government has outlined their commitment to provide dedicated funding to help local councils improve walking infrastructure within two kilometre catchments of centres and transport interchanges.

• Improve information about walking and cycling routes and facilities

The NSW Government outlined their commitment to promoting the benefits of active transport, improving customer information, and developing guidelines and resources for local government in order to get people walking and cycling more. This will include improved on-line resources (for example, trip planning), other promotion programs and sponsorship of relevant events and community programs.

Improve opportunities for walking and cycling

The NSW Government outlined their support for the implementation of better facilities for walking and cycling in Byron Bay, including the provision of cycle parking facilities at transport interchanges, centres,



schools and hospitals. The State also acknowledged that Byron Shire Council has opportunities to seek support for new links through existing funding mechanisms.

Casino to Murwillumbah Rail Trail Study

In 2012, the NSW Government commissioned the Casino to Murwillumbah Transport Study to explore the feasibility of reintroducing passenger services on the 130km long Casino to Murwillumbah rail line. Building on the findings of this report, the NSW Government commissioned the Casino to Murwillumbah Rail Trail Study to examine the feasibility of converting the rail corridor into a trail for walking and cycling.

The study concluded in 2014 that the preliminary cost for the development of a rail trail would be \$75.5 million due, in most part, to the significant number of bridges (roughly 160) along the corridor. An economic analysis showed that with a base scenario of 88,320 visitors annually and a net present value of \$121.8 million, the rail trail would be financially viable with a benefit cost ratio of 2.54; meaning that for every dollar invested, a return of \$2.54 may be possible. This analysis also concluded that to achieve a break-even scenario, the trail would have to receive at least 34,802 visitors annually.

These findings and the study more broadly focused on a largely single use for the corridor. Council is committed to the multi use of the corridor, which could include walking and cycling, as evidenced in the Council-funded Multi Use Byron Shire Rail Corridor study which is currently being prepared (refer to Section 2.2).

Disability legislation

There are currently two key pieces of disability legislation that will influence the PAMP. These are the Disability Discrimination Act 1992 (Commonwealth) and the Disability Inclusion Act 2014 (NSW).

The Disability Discrimination Act 1992 makes it unlawful to discriminate against a person, in many areas of public life, including: employment, education, getting or using services, renting or buying a house or unit, and accessing public places, because of their disability. This Act has direct implications for the more detailed design of pedestrian facilities, including but not limited to path widths, crossing points, and sight lines to approaching vehicles.

The second key piece of legislation is the Disability Inclusion Act 2014. Some of the key objectives of this Act are to promote the independence and social and economic inclusion of people with disability and to enable people with disability

to exercise choice and control in the pursuit of their goals and the planning and delivery of their supports and services.

It is critical that Byron Shire's walk and roll network facilitates the movement of pedestrians of all ages and abilities. As such, these are key pieces of legislation and they will both significantly influence the development and eventual delivery of this PAMP.

2.2 Local plans and policies

Byron Shire Council Local Environment Plan

The Byron LEP is a legal document prepared by Council and approved by the State Government to regulate and guide Council's planning decisions regarding land use and development within Byron Shire. Through land zoning and development controls, the LEP is the main planning tool to shape the future of communities and to ensure local development is done appropriately and in an environmentally sensitive manner.

Byron Shire Council Development Control Plan

The Byron DCP is a document that provides planning and building design guidelines for new development or alterations to existing development. The purpose of the DCP is to specify Council's requirements for quality development and sustainable environmental outcomes on land in the Shire.

The Byron DCP also outlines a range of controls that apply generally to developments. These controls include, but are not limited to, Access and Mobility; Traffic Planning, vehicle Parking, Circulation and Access; and Providing for Cyclists.

Our Byron Our Future - Our Community Strategic Plan 2028

This document outlines the collective long-term vision for Byron Shire and its residents for the next ten years. The Plan identifies a range of community objectives and supporting strategies that will help achieve this vision and also inform longer-term decision making.

Of relevance to the PAMP, the Plan provides an objective to have infrastructure, transport and services that meet community expectations. In support of this particularly objective, three strategies were identified. These are to provide a road network which is safe, accessible and maintained to an acceptable level of service; to provide essential services and reliable infrastructure which meet an



acceptable community standard; and to support, through partnership, a network of integrated sustainable transport options.

Byron Bay Town Centre Masterplan

The Byron Bay Town Centre Masterplan, which was released in 2016, presents a vision and strategy to guide the future form of Byron's Town Centre and to set out realistic actions and projects to achieve that vision. Of the six core strategies outlined in the masterplan, the Access and Movement Strategy is of most relevance to the PAMP. This strategy is comprised of four sub-strategies, each of which relate to a different aspect of access and mobility in Byron Bay's town centre. Sub-Strategy 4: A People Prioritised Centre outlines a number of key actions and initiatives to guide pedestrian movement in the town centre. These are:

- Improve pedestrian priority at intersections
- Establish a pedestrian prioritised core, with a comprehensive cycle network to create an active, safe and memorable town centre. This could be achieved by increasing footpath widths and crossings and introducing shared and pedestrianised streets where pedestrians and cyclists have priority
- Strengthen Byron Street's role as the town centre's main east to west link, connecting the Arakwal National Park through to Belongil Creek
- Incorporate a pedestrian and cycle link along the rail corridor encouraging both pedestrian and cycle movement to neighbouring areas
- Establish a continuous foreshore pedestrian walk that links seamlessly to the pedestrian and cycle links along the rail corridor.

Bangalow Village Plan

The Bangalow Village Plan was endorsed by Council in March 2019 as the plan to guide the improvement and development of Bangalow over the next 15 years. The plan outlines residents' aspirations for their village and aims to ensure that Bangalow's heritage, natural environment, village feel and sense of community are preserved and enhanced.

The 'Access and movement' theme, which is one of six in the plan, establishes a vision for Bangalow in which the different parts of the village are connected by a network of off-road walk/cycle paths through the open space network. These provide walking and riding opportunities for people of all ages and abilities.

Pedestrian safety is prioritised. In practical terms, this includes the provision of new pedestrian and cycle path infrastructure to create a connected network, new recreational paths along Byron Creek and the showgrounds, a new pedestrian and cycle bridge to connect the showgrounds with the sports fields, multi use of the rail corridor, various intersection upgrades to improve safety and convenience, and the provision of a consolidated bus stop on Byron Street close to the public school.

Our Mullumbimby Masterplan

The Our Mullumbimby Masterplan is currently being developed by Council, in conjunction with the community. This plan will guide the development of Mullumbimby, including the walk and roll network, in the future and will also outline residents' aspirations for the town. The plan is expected to be released for public exhibition in mid-2019.

Multi Use Byron Shire Rail Corridor

A study investigating the benefits, costs and impacts of different transport uses in the currently disused rail corridor within Byron Shire is currently underway. This study includes an assessment of the current state of infrastructure along the rail corridor within Byron Shire, the development of an economic feasibility study to determine the costs and benefits of each option, and a social impact assessment to determine the social impacts. The study includes investigations into the activation and integration of the corridor for a range of uses, including walking and cycling. This is of particular importance for the Pedestrian Access & Mobility Plan as effective integration between active transport and rail transport has the ability to extend the range of pedestrians, provide new destinations and overcome the limitations of providing such facilities over long distances between urban centres and rural areas. The study is expected to be completed in May 2019.

2.3 Walking and rolling in Byron Shire

Byron Shire is a unique and picturesque part of the Northern Rivers region. It is located 800 kilometres north of Sydney, 200 kilometres south of Brisbane and is bounded by the Tweed, Lismore and Ballina LGAs. The Shire is currently home to approximately 34,000 people, spread across a number of distinctive towns, villages and rural environments. Despite a comparatively small population, Byron Shire has gained an international reputation with more than two million visitors

each year enjoying the beautiful and respected natural environment, the creative and relaxed lifestyle and the friendly and diverse community.

In recognition of this diversity, a number of towns and villages in the Shire with comparatively high levels of pedestrian activity have been specifically included in this PAMP. This includes:

- Mullumbimby
- Byron Bay
- Suffolk Park
- Bangalow
- Ocean Shores, South Golden Beach, New Brighton and Billinudgel
- Brunswick Heads
- Main Arm and Federal.

The characteristics of each of these localities are discussed in the respective sections below. Although there are also a number of rural locations that contribute positively to the Shire, for the practical purpose of this PAMP these areas have not been specifically addressed as they are typically areas with less concentrated pedestrian activity.

2.4 Walking and rolling in Mullumbimby

Mullumbimby is a unique, inclusive and relaxed town that is bisected by the Brunswick River and set against a picturesque mountain backdrop. It is a key centre servicing the needs of both town residents and the surrounding rural areas. The heart of Mullumbimby is its community and its strength, optimism and ability to foster local enterprise and achieve practical solutions to pressing issues.

The PAMP study area for Mullumbimby is shown in Figure 6 and a snapshot of key community profile statistics is provided below.

Population 3,596 +274 (8.2%) since 2011 11% of Byron Shire population	Median age 46 Regional NSW 43 NSW 38 Australia 38	Largest age category45 to 49years (8.7%)Regional NSW6.6%NSW6.6%Australia6.8%
Proportion of employed local residents who walk to work5.2%(73 people)Regional NSW3.5%NSW3.9%Australia3.5%	Proportion of residents needing assistance with core activities6.7%Regional NSW6.3% NSWS.4% Australia5.1%	Most popular industry of employmentHealth Care andSocial Assistance(16.8%)Regional NSW14.4%NSW12.5%Australia12.6%

Source: Australian Bureau of Statistics; ProfileID

Mullumbimby is generally compact and walkable with an active town centre and a variety of employment opportunities available. This provides fertile conditions for walking and this is reflected in the high proportion of residents currently walking to work.

2.4.1 Existing walk and roll network

Mullumbimby's town centre currently has a generally well-connected walk and roll network which provides access to the majority of the core commercial area as well as to surrounding residential areas and key attractors (refer to Figure 6). The existing network extends north to the Brunswick River, east to Mullumbimby Public School and surrounding residential areas across the currently disused Casino to Murwillumbah rail line, and south and west to residential areas and schools. Despite this extent, there are a number of areas in Mullumbimby with limited footpath infrastructure and connectivity to the existing network. This is particularly evident to the east and north-west of the town.

PSA CONSULTING AUSTRALIA

Byron Shire Pedestrian Access & Mobility Plan Draft for Consultation

The existing walk and roll network is largely located adjacent to existing roads and as such there are currently limited opportunities for dedicated recreational walks on more formalised and connected paths. Two separate paths located on the eastern banks of Mullumbimby Creek and Brunswick River currently provide access to these key natural assets and could form the basis for a future and more connected recreational walk.

2.4.2 Network quality and accessibility

There is currently room for improvement in the quality of the existing walk and roll network in Mullumbimby. In particular, there are issues including narrow paths; poor quality surfaces; dirt and other debris; short gaps in the established network; lack of kerb ramps and other supporting infrastructure (for example, tactile ground surface indicators for visually impaired users); unsuitable or missing crossing facilities; mixing of cyclists and pedestrians in inappropriate locations without suitable infrastructure (for example, wide paths, signs); and parked cars restricting pedestrian movements. Overall, this results in a low level of service for pedestrians and, importantly for children, the elderly and those with visual/mobility impairments, has direct implications for the accessibility of the network.

The severity of these issues is compounded further in light of the demand for accessible infrastructure due to the ageing population and the comparatively high proportion of residents needing assistance with core activities.

Addressing these existing accessibility issues will be a key driver for this PAMP.

2.4.3 Pedestrian crash history

A total of five crashes involving pedestrians were recorded between 2012 and 2017 in Mullumbimby. As shown in Figure 6, four crashes occurred in the town centre within close proximity to roadways and existing footpaths. The intersection of Burringbar Street and Stuart Street is of particular interest as three of the five recorded crashes occurred at this location. Outside of the town centre, one pedestrian crash occurred on Jubilee Avenue outside of Mullumbimby High School.

An analysis of all recorded pedestrian crashes in Mullumbimby over the last five years suggests that no more than two crashes were recorded in a given year and that none of the crashes resulted in a fatality (refer to Figure 4 and Figure 5). The analysis did not suggest any consistent reason or issue behind the crashes; however, pedestrian error was cited as the reason for two of the five crashes.

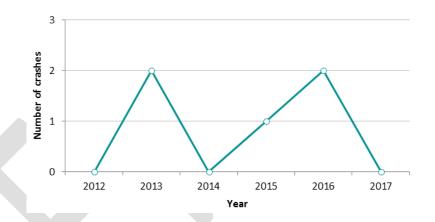


Figure 4: Annual pedestrian crashes in Mullumbimby (2012-2017)

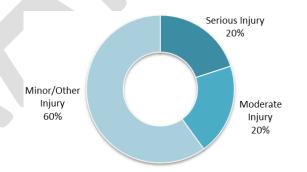


Figure 5: Pedestrian crashes by severity in Mullumbimby (2012-2017)

2.4.4 Passenger transport

There are currently four public bus routes which service Mullumbimby and surrounds. These are:

- 610: Byron Bay to Lismore
- 635: Lismore to Mullumbimby and Brunswick Heads

- **640:** Mullumbimby to Ballina via Byron Bay, Suffolk Park and Lennox Head (alignment varies for northbound and southbound)
- 645: Ocean Shores to Byron Bay.

These services stop at different locations across Mullumbimby, though the amount and type of infrastructure available to support boarding and alighting bus passengers varies. Providing appropriate pedestrian facilities to enable residents and visitors to access the bus network is important as it improves safety, practicality and the integration of different transport modes. This has the potential to improve the overall attractiveness of public transport use to, from and within Mullumbimby and to provide further transport alternatives in order to reduce reliance on private vehicle use.

In addition to these local services, longer distance regional coach services extend along the east coast from Brisbane to Grafton and inland from Byron Bay and Ballina West to Casino, servicing Mullumbimby.

The passenger transport network is also comprised of one taxi operator which services the Mullumbimby area. Contrary to buses which have fixed stops, taxis pick-up and drop-off where required. The primary challenge, therefore, is largely around the provision of pedestrian facilities (e.g. paths) in locations that enable users to access taxis safely and conveniently.

2.4.5 Issues and opportunities

MULLUMBIMBY – SUMMARY OF EXISTING ISSUES AND OPPORTUNITIES

Issues	Opportunities
 High volume of vehicles proximity to provide and areas of high period activity 	edestrians town centre with residential
 High number of tou unfamiliar with loca Limited walk and ro 	l area activity concentrated in the town centre
in some locations of the town centre	• Existing wide streets and paths

- Generally poor network quality with low level of accessibility for vulnerable users
- Large number of residential streets currently lack footpaths and kerb and channel
- Large residential lots to the west affect walkability

- Topography generally conducive to pedestrian movements for all ages and abilities
- Proximity to key attractors and natural assets (for example, rivers and parks) to support recreational walks
- Established culture of walking with above average proportion of residents who walk to work



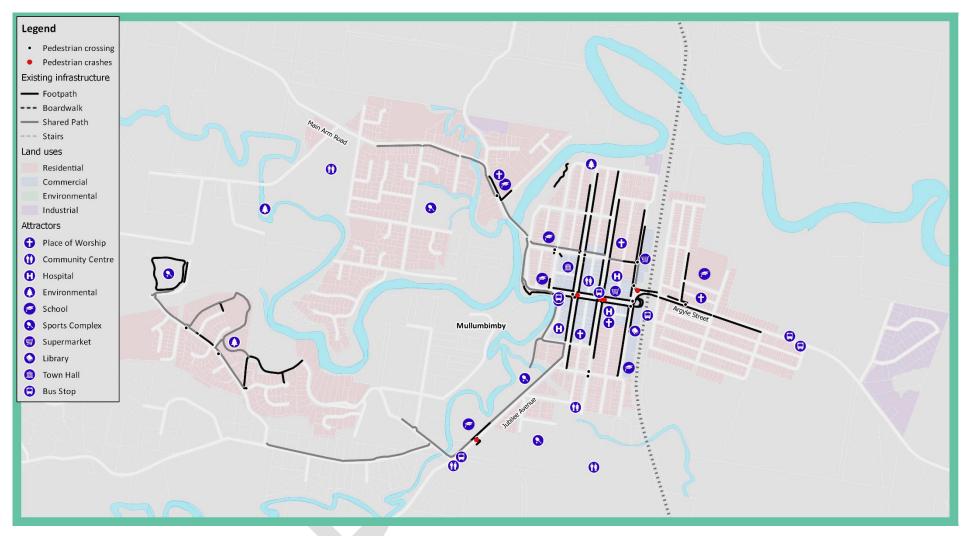


Figure 6: Existing walk and roll network and pedestrian crash locations – Mullumbimby



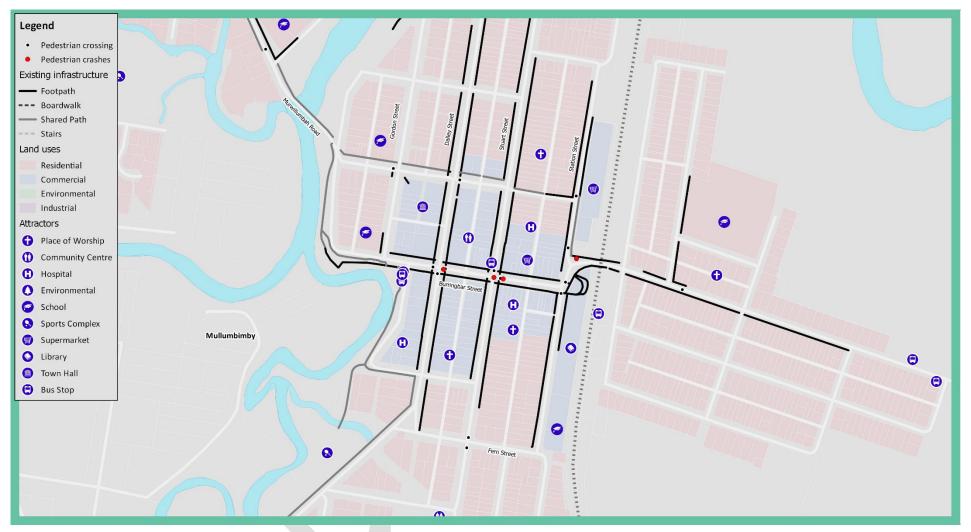


Figure 7: Existing walk and roll network and pedestrian crash locations – Mullumbimby Town Centre

2.5 Walking and rolling in Byron Bay

Byron Bay is an iconic coastal town with a relatively low density urban environment and a compact, walkable commercial centre. Despite being a key destination for both domestic and international visitors, Byron Bay has maintained an engaged and active local community and a respectful relationship with its natural environment.

The PAMP study area for Byron Bay includes the town's western, central and southern areas as shown in Figure 10, Figure 11 and Figure 13 respectively. A snapshot of key community profile statistics for Byron Bay, including these three areas, is provided below.

Population 5,521 +401 (7.8%) since 2011 17% of Byron Shire population	Median age 42 Regional NSW 43 NSW 38 Australia 38	Largest age category25 to 29year (9.6%)Regional NSW5.5%NSW7.0%Australia7.1%
Proportion of employed local residents who walk to work8.2%(194 people)Regional NSW3.5%NSW3.9%Australia3.5%	Proportion of residents needing assistance with core activities 4.2% Regional NSW 6.3% NSW 5.4% Australia 5.1%	Most popular industry of employment Accommodation and Food Services (19.7%) Regional NSW 7.9% NSW 7.1% Australia 6.9%

Source: Australian Bureau of Statistics; ProfileID



The compact and walkable nature of Byron Bay, particularly in the more densely populated central area, and the variety of employment opportunities are key reasons that the proportion of residents walking to work is roughly double the regional, state and national average. This already high preference for walking is a key opportunity as it helps provide a more comprehensive understanding of the different needs of a range of users and provides an excellent basis for further increasing use of the footpath network.

2.5.1 Existing walk and roll network

The existing walk and roll network in the western, central and southern areas of Byron Bay is presented in Figure 10, Figure 11 and Figure 13 respectively. These maps provide an indication as to the current extent of the network, the level of connectivity linking typical trip origins (for example, residential areas) and destinations (for example, commercial areas and major attractors), and the suitability of the path type in the context of the surrounding area. These maps also show the location of crashes involving pedestrians, but this is discussed in greater detail in Section 2.5.3.

The dominant path to the west of Byron Bay is the existing shared cycle/pedestrian path that connects Myocum Road near the Pacific Motorway in the west to the township of Byron Bay in the east. Although the dominant connection, this path currently has two missing sections that affect the overall connectivity of the network and the safety of users. The location of this path also alternates between the northern and southern side of Ewingsdale Road which increases the need for users to cross the busy two lane, two way road to continue on a dedicated footpath and/or to access nearby developments and attractors. Beyond this dominant connection, the majority of the existing development to the west of Byron Bay, particularly in the areas zoned industrial, currently has limited access to a connected walk and roll network.

As can be seen in Figure 11, Byron Bay's town centre generally has a wellconnected walk and roll network which provides access to the core commercial areas and to a number of key attractors such as local beaches, schools and sporting facilities. Outside of the town centre, the network provides access to a selection of surrounding residential areas and to longer distance and typically more recreational routes such as the Cape Byron Walking Track and the Bangalow Road/Broken Head Road connection to Suffolk Park. The remainder of

central Byron Bay, which includes a significant proportion of the town's residential population, has only limited access to a dedicated and connected walk and roll network.

The shared cycle/pedestrian path that partially connects Byron Bay's town centre in the north with Suffolk Park in the south is the dominant path in the southern portion of Byron Bay. This forms the main north-south spine of the network from which there are currently only limited intersecting paths to surrounding residential areas. Despite a lack of full connectivity between Byron Bay and Suffolk Park, this path provides pedestrian access between residential areas in Byron Bay and Suffolk Park to St Finbarr's Catholic Primary School and Byron Bay High School.

2.5.2 Network quality and accessibility

Perhaps somewhat reflective of the current level of connectivity in Byron Bay, the quality and accessibility of the walk and roll network could be improved. Some of the key issues affecting the quality and accessibility of the existing network include poor quality surfaces; tree roots, dirt and other debris; lack of pedestrian access between residential, industrial, commercial and recreational areas; lack of kerb ramps and other supporting infrastructure; unsuitable or missing crossing facilities; mixing of cyclists and pedestrians in inappropriate locations without suitable infrastructure (for example, wide paths, signs); and parked cars restricting pedestrian movements. As with Mullumbimby, this results in a low level of service for pedestrians and negatively affects the experience and use of the network for vulnerable users. Addressing these existing accessibility issues will be a key driver for this PAMP.

2.5.3 Pedestrian crash history

There have been a total of 30 recorded crashes involving pedestrians in Byron Bay over the five years between 2012 and 2017. As shown in Figure 10, Figure 11 and Figure 13, these crashes have tended to occur in areas of higher pedestrian activity within close proximity to roadways and existing footpaths. In particular, a cluster of pedestrian crashes were recorded at the intersection of Ewingsdale Road and Sunrise Boulevard in West Byron Bay and along Jonson Street in central Byron Bay.

- Poor visibility between motorists and pedestrians
- Motorists' limited awareness of pedestrians during vehicle parking manoeuvres
- Jaywalking and lack of adherence to defined road crossing points
- Pedestrians walking alongside and within close proximity to roadways
- General motorist and pedestrian error.

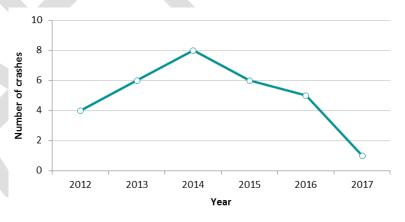


Figure 8: Annual pedestrian crashes in Byron Bay (2012-2017)

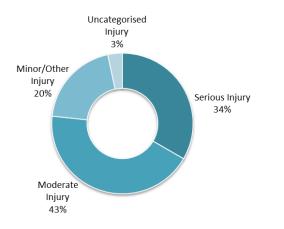


Figure 9: Pedestrian crashes by severity in Byron Bay (2012-2017)

2.5.4 Passenger transport

There are currently six public bus routes which service Byron Bay and surrounds. These are:

- 610: Byron Bay to Lismore
- 637B: Byron Bay to Byron Hills via Suffolk Park and Baywood Chase.
- **637S:** Byron Bay to Sunrise Beach via Arts and Industry Estate (loop service)
- **640:** Mullumbimby to Ballina via Byron Bay, Suffolk Park and Lennox Head (alignment varies for northbound and southbound)
- **641:** Byron Bay to Ballina via Bangalow (alignment varies for northbound and southbound)
- 645: Ocean Shores to Byron Bay.

Although these services provide access to different parts of Byron Bay, each service stops at the existing bus interchange located on the western side of the Jonson Street/Marvell Street intersection. This area currently serves as both a

hub for bus movements to/from Byron Bay and a main pedestrian meeting point and thoroughfare. Providing appropriate pedestrian facilities to enable residents and visitors to access the bus network at this location and at other stops across Byron Bay is critical. This is particularly relevant given the large number of visitors to Byron Shire every year and the current role of Byron Bay specifically as the main point of arrival and departure for visitors. This will be an important consideration when planning pedestrian facilities to service new bus infrastructure, such as the new bus interchange which is currently proposed between Butler Street and the rail line, south of Somerset Street.

In addition to these local services, longer distance regional coach services extend along the east coast from Brisbane to Grafton and inland from Byron Bay and Ballina West to Casino, servicing Byron Bay.

The passenger transport network is also comprised of one transport operator which provides community transport services between Byron Bay, Ballina and Tweed, one taxi operator which services the Byron Bay area, one car hire provider within Byron Bay and an airport bus service which operates shuttles between Byron Bay and Gold Coast and Ballina airports.

Opportunities

2.5.5 Issues and opportunities

BYRON BAY – SUMMARY OF EXISTING ISSUES AND OPPORTUNITIES

High volume of vehicles in

- close proximity to pedestrians and areas of high pedestrian activity
- High number of tourists unfamiliar with local area
- Gaps in existing walk and roll network, especially along key routes and to, from and
- Existing compact and walkable town centre with residential areas within close proximity
- Existing high rates of pedestrian activity and established culture of walking with above average



within residential and industrial areas

 Generally poor network quality with low level of accessibility for vulnerable users proportion of residents who walk to work

- Topography generally conducive to pedestrian movements for all ages and abilities
- Proximity to key attractors and natural assets (for example, beaches) to support recreational walks



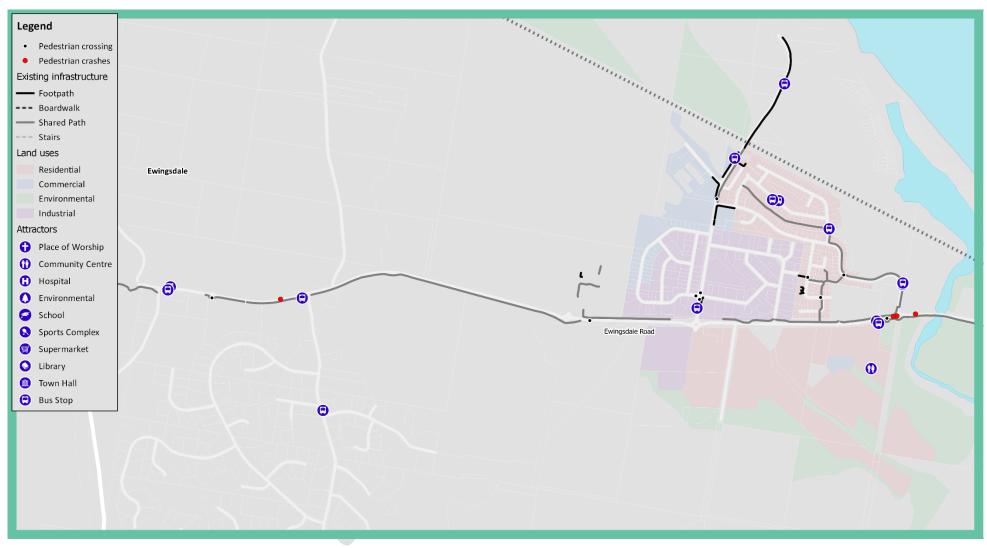


Figure 10: Existing walk and roll network and pedestrian crash locations – Byron Bay (West)

0804 - 7 June 2019 - V9

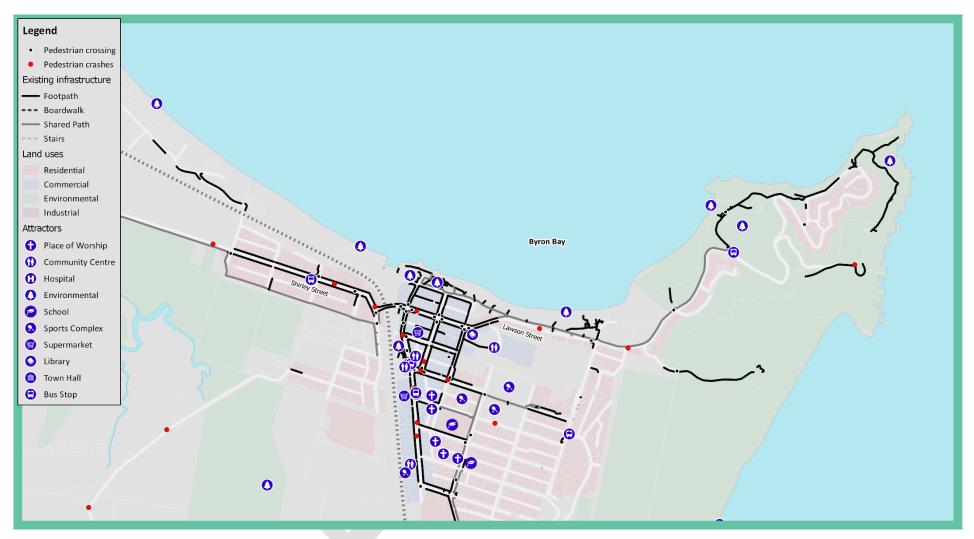


Figure 11: Existing walk and roll network and pedestrian crash locations – Byron Bay (Central)

0804 – 7 June 2019 – V9





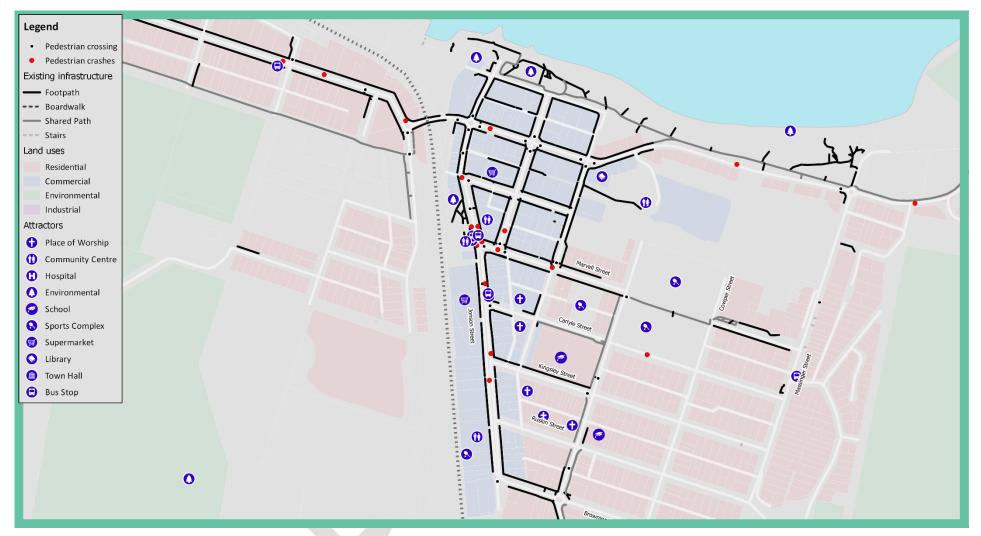


Figure 12: Existing walk and roll network and pedestrian crash locations – Byron Bay (Central) Town Centre



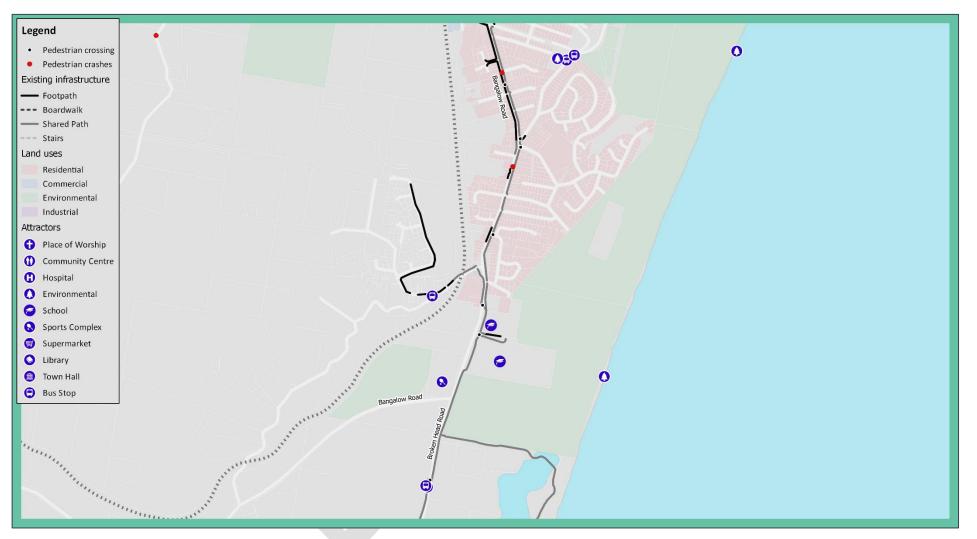


Figure 13: Existing walk and roll network and pedestrian crash locations – Byron Bay (South)

0804 – 7 June 2019 – V9

2.6 Walking and rolling in Suffolk Park

Suffolk Park, located roughly five kilometres south of Byron Bay, is a peaceful and distinct residential area popular with a broad spectrum of residents and holidaymakers. Situated on both sides of Broken Head Road, Suffolk Park provides access to key assets such as Tallow Beach, Tallow Creek and surrounding environmental area, Ti-Tree Lake Aboriginal Area, the Byron Bay Golf Course and a number of sporting facilities.

The PAMP study area for Suffolk Park is shown in Figure 14 and a snapshot of key community profile statistics is provided below.

Population 3,750 +214 (6.1%) since 2011 11% of Byron Shire population	Median age 40 Regional NSW 43 NSW 38 Australia 38	Largest age category40 to 44years (8.8%)Regional NSW6.1%NSW6.7%Australia6.8%
Proportion of employed local residents who walk to work2.1%(40 people)Regional NSW3.5%NSW3.9%Australia3.5%	Proportion of residents needing assistance with core activities 3.7% Regional NSW6.3% NSWNSW5.4% AustraliaAustralia5.1%	Most popular industry of employment Accommodation and Food Services (15.3%) Regional NSW 7.9% NSW 7.1% Australia 6.9%

Source: Australian Bureau of Statistics; ProfileID



A low proportion of Suffolk Park residents currently walk to work when compared against the regional, state and national average. This is likely a result of the limited employment opportunities available within Suffolk Park and the location of opportunities in other parts of the Shire beyond reasonable walking distance. As a result of this and in light of the close proximity to natural assets, pedestrian trips in Suffolk Park are expected to be largely for recreational purposes.

2.6.1 Existing walk and roll network

As can be seen in Figure 14, the existing walk and roll network in Suffolk Park provides generally uninterrupted pedestrian access between Tallow Beach at the eastern end of Clifford Street and the residential area west of Broken Head Road. This connection also provides access to the commercial heart of Suffolk Park on the corner of Clifford Street and Broken Head Road.

The network in the residential area to the east of Broken Head Road is currently very limited with access north to Tallow Creek and the surrounding environmental area currently only available via the existing road network and adjacent grassed verges. The walk and roll network in the residential area to the west of Broken Head Road is comparatively more extensive with pedestrian connections along a number of residential streets, particularly partially along and within the Beech Drive loop. Despite these existing connections, less than 50% of the residential area in Suffolk Park currently has access to a connected network of footpaths and, critically, Suffolk Park is currently not connected to the existing north-south shared cycle/footpath that provides a generally uninterrupted connection to Byron Bay.

Between 2012 and 2017, no pedestrian related crashes were recorded in Suffolk Park. This is despite gaps in the existing walk and roll network and largely residential areas.

2.6.2 Network quality and accessibility

As a comparatively newer development area, particularly west of Broken Head Road, the existing walk and roll network in Suffolk Park is generally of a higher standard in terms of both path surface quality and accessibility for more vulnerable users. This is undermined, however, by the lack of paths forming a connected network, as discussed in Section 2.6.1 and shown in Figure 14. Overall, this results in a fair level of service for pedestrians and provides some accessibility for the more vulnerable users. Building upon the existing network and enhancing the level of service and accessibility for all users (for example, by providing new or upgraded crossings and paths) is a key consideration for the future walk and roll network in Suffolk Park.

2.6.3 Passenger transport

There are currently three public bus routes which service Suffolk Park and surrounds. These are:

- 637B: Byron Bay to Byron Hills via Suffolk Park and Baywood Chase
- **640:** Mullumbimby to Ballina via Byron Bay, Suffolk Park and Lennox Head (alignment varies for northbound and southbound)
- **640X:** Byron Bay to Lismore via Lennox Head and Ballina (alignment varies for northbound and southbound).

Longer distance regional coach services extend along the east coast from Brisbane to Grafton and inland at Byron Bay and Ballina West to Casino, servicing Suffolk Park.

Due to its proximity, the passenger transport network in Suffolk Park is comprised of the same providers and services as Byron Bay (refer to Section 2.5.4).



2.6.4 Issues and opportunities

SUFFOLK PARK – SUMMARY OF EXISTING ISSUES AND OPPORTUNITIES

Opportunities

• No formal connectivity to key footpaths to the north

Issues

- Limited walk and roll network in existing residential areas, negatively affecting accessibility
- Broken Head Road forms a barrier for access between eastern and western parts of Suffolk Park. Pedestrians required to cross road
- Topography generally conducive to pedestrian movements for all ages and abilities
- Proximity to natural assets (for example, Tallow Beach, Ti-Tree Aboriginal Area) to support recreational walks
- Footpaths currently provided to/from existing sport facilities and the commercial area along Clifford Street
- Existing paths generally of higher quality and more accessible
- Existing residential population to enable increase in walking



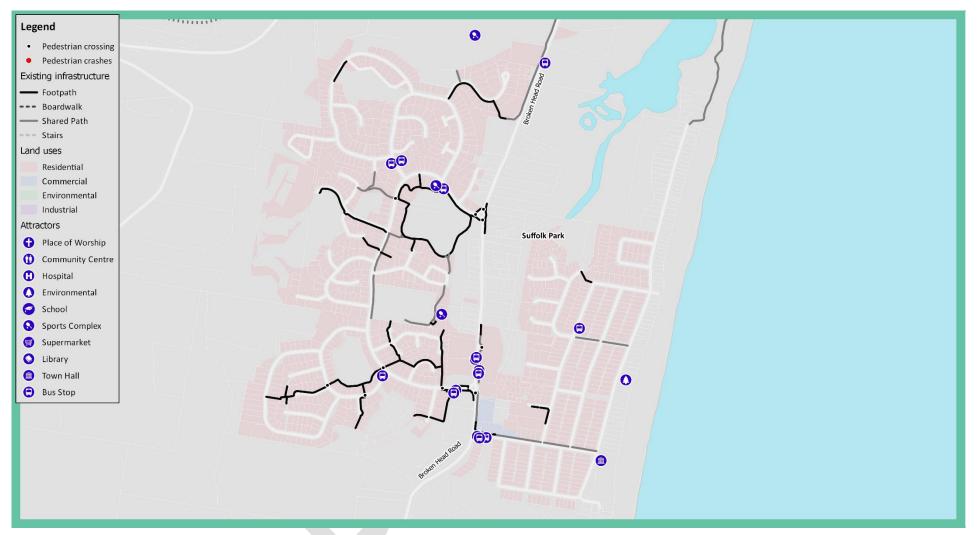


Figure 14: Existing walk and roll network – Suffolk Park

0804 – 7 June 2019 – V9

2.7 Walking and rolling in Bangalow

Bangalow is a scenic and vibrant rural community located in the south of the Shire. It is positioned close to the Pacific Motorway and Byron Creek and is bisected by Bangalow Road and the currently disused Casino to Murwillumbah rail line. As an environmentally, culturally and architecturally significant town with a thriving arts and crafts scene, it is a magnet for visitors.

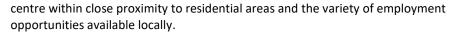
The PAMP study area for Bangalow is shown in Figure 15 and a snapshot of key community profile statistics is provided below.

Population 2,021 +197 (11%) since 2011 6.1% of Byron Shire population	Median age 43 Regional NSW 43 NSW 38 Australia 38	Largest age category40 to 44years (9.5%)Regional NSW6.1%NSW6.7%Australia6.8%
Proportion of employed local residents who walk to work5.7%(56 people)Regional NSW3.5%NSW3.9%Australia3.5%	Proportion of residents needing assistance with core activities 4.4.4% Regional NSW 6.3% NSW 5.4% Australia 5.1%	Most popular industry of employment Health Care and Social Assistance (16.1%) Regional NSW 14.4% NSW 12.5% Australia 12.6%

Source: Australian Bureau of Statistics; ProfileID

A high proportion of Bangalow residents currently walk to work when compared against the regional, state and national average. Similar to Byron Bay and Mullumbimby, this is likely to be a result of Bangalow's active and walkable town

0804 - 7 June 2019 - V9



2.7.1 Existing walk and roll network

The existing walk and roll network in Bangalow (refer to Figure 15) is currently concentrated around areas of high pedestrian activity such as the town centre along Bangalow Road. From the centre, a network of connected paths currently extends immediately north, east and south to service primarily existing residential areas.

The connection to the north, across the rail line and on both sides of Granuaille Road, currently forms a pedestrian spine providing uninterrupted access to the town centre. However, as only a limited number of paths currently intersect with this spine, formal access to nearby residential areas is limited. The connection to the east provides important access to existing sports facilities and the connection to the south provides access to residential areas on the southern side of Bangalow Road. Although there is currently infrastructure provision within some residential areas in the west of Bangalow, these areas are currently not connected to the remainder of the walk and roll network.

Between 2012 and 2017, no pedestrian related crashes were recorded in Bangalow. This is despite gaps in the existing walk and roll network, particularly those connecting the town centre with residential areas further west.

2.7.2 Network quality and accessibility

One of Bangalow's strengths – its varied topography which offers sweeping views over the surrounding countryside – is also one of its key constraints for accessibility. This places a greater emphasis on providing a network of paths that enable pedestrian route choice and that help those with mobility impairments avoid large variances in elevation, as well as on enhancing the quality of existing paths that are already appropriate for use by more vulnerable users.

Bangalow includes a mix of both newer and more established residential areas and the path quality and level of accessibility generally reflects this dichotomy. Paths in the newer areas are generally wider and have a higher quality surface while paths in the more established residential areas are typically narrower with worn and, in some places, uneven surfaces. This is particularly evident and critical along Granuaille Road, Byron Street between Station Lane and Byron Creek, and along Market Street adjacent Bangalow Public School. Despite the variation in path quality across Bangalow, the presence of kerb ramps on most paths as they intersect with roads significantly improves the level of service and accessibility. This could be improved further with the provision of new and/or upgraded crossings appropriate to the needs of more vulnerable users.

As with Suffolk Park and elsewhere across the Shire, the level of service and accessibility in Bangalow is undermined by the current gaps in the walk and roll network. This will be an important consideration for the future walk and roll network in Bangalow.

2.7.3 Passenger transport

There are currently four public bus routes which service Bangalow and surrounds. These are:

- 610: Byron Bay to Lismore
- 635: Lismore to Mullumbimby and Brunswick Head
- **641:** Byron Bay to Ballina via Bangalow (alignment varies for northbound and southbound)
- 641X: Byron Bay to Lismore via Bangalow, Clunes and Bexhill.

Each of these services stop at the existing on-road bus stop on Station Street, south of Byron Street. This is a central location close to shops, restaurants and other facilities along Byron Street, which is directly serviced by existing pedestrian paths and crossings. It is important that any future bus stops, such as those proposed along Byron Street close to the public school (refer to the Bangalow Village Plan in Section 2.2), are integrated with the path network, supported by other pedestrian facilities (e.g. crossings), and of sufficient width to allow safe and efficient movement of pedestrians and boarding/alighting bus passengers.

In addition to these local services, longer distance regional coach services extend along the east coast from Brisbane to Grafton and inland from Byron Bay and Ballina West to Casino, servicing Bangalow.

The passenger transport network is also comprised of one transport operator which provides a shuttle between Bangalow, Brisbane Airport and Casino.

PSA CONSULTINI AUSTRALI

2.7.4 Issues and opportunities

BANGALOW – SUMMARY OF EXISTING ISSUES AND OPPORTUNITIES

Issues

- Bangalow Road forms a barrier for access between residential areas to the north and south. Pedestrians required to cross road
- High volume of vehicles in close proximity to pedestrians and areas of high pedestrian activity, particularly on Bangalow Road
- High number of tourists unfamiliar with local area
- Some gaps in existing walk and roll network, particularly to the west
- Undulating topography across the town may impact on mobility
- Paths in more established areas generally poorer quality and less accessible
- Visibility of pedestrians restricted by parallel parked cars in the town centre (along Bangalow Road)

Opportunities

- Established town centre with high pedestrian activity and connected walk and roll network
- A number of existing attractors are located within walking distance of the town centre
- Proximity to disused rail corridor and potential reuse as walking route
- Established culture of walking with above average proportion of residents who walk to work
- Newer residential areas generally have higher quality and more accessible paths
- Kerb ramps located on most crossings and intersections



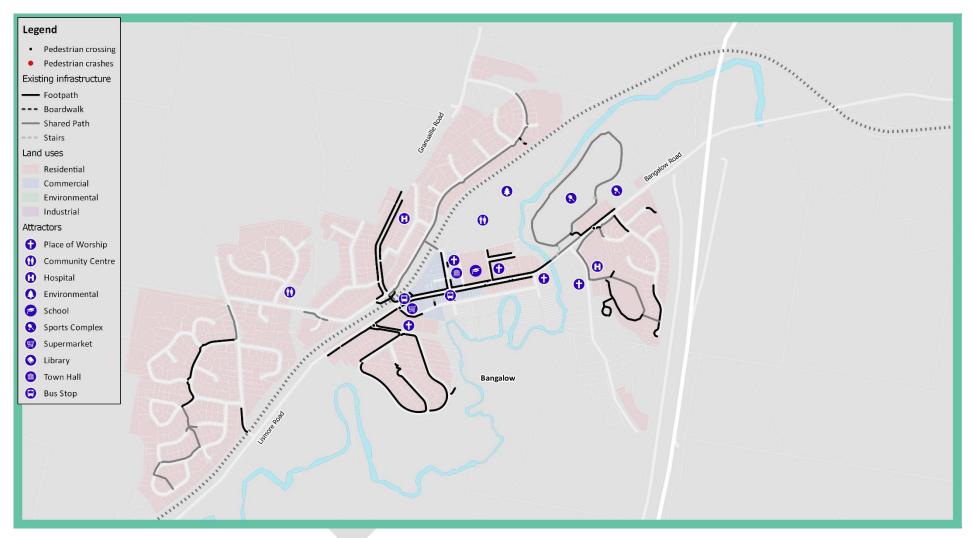


Figure 15: Existing walk and roll network - Bangalow

0804 - 7 June 2019 - V9



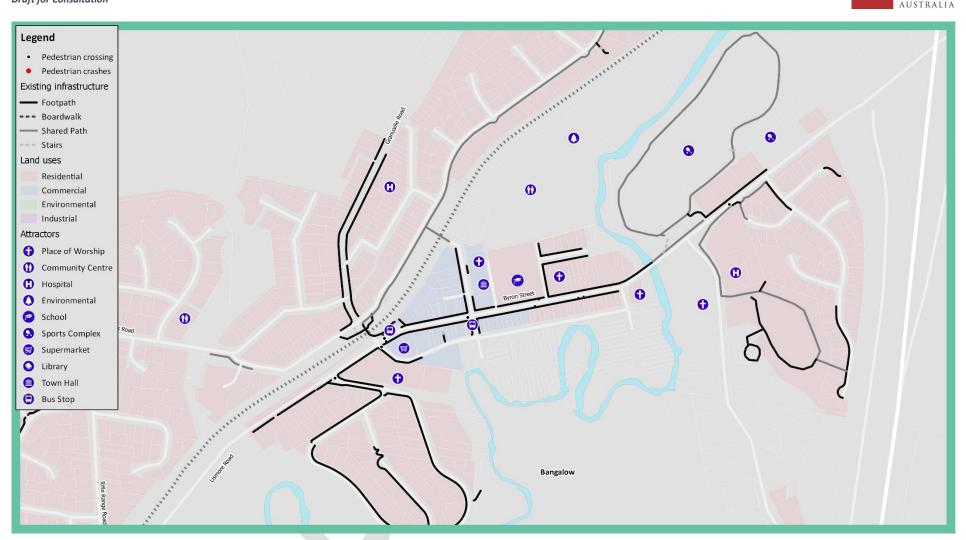


Figure 16: Existing walk and roll network – Bangalow Town Centre

0804 - 7 June 2019 - V9



2.8 Walking and rolling in Ocean Shores, South Golden Beach, New Brighton and Billinudgel

Ocean Shores, South Golden Beach, New Brighton and Billinudgel are coastal suburbs located to the north of Byron Shire. New Brighton and South Golden Beach are both beachside suburbs while Ocean Shores and Billinudgel are located further inland on either side of the Pacific Motorway.

With the exception of Billinudgel which has a small town centre comprised of a classic Australian country pub and a number of industrial trade outlets, these localities are generally residential in nature with only a limited number of key attractors. The largest concentration of attractors, which includes Ocean Village Shopping Centre, Ocean Shores Medical Centre and Ocean Shores Community Centre, is located along Rajah Road in Ocean Shores. Outside of this area, attractors primarily cater to local needs and include schools and community centres.

The PAMP study areas for Ocean Shores, South Golden Beach, New Brighton and Billinudgel are shown in Figure 17 and snapshots of key community profile statistics are shown below.

Ocean Shores, South Golden Beach & New Brighton	Ocean Shores	, South	Golden	Beach	&	New	Brighton	
---	---------------------	---------	--------	-------	---	-----	----------	--

Population	Median age	Largest age category
6 202	43	60 to 64
6,302	45	years (8.5%)
+487 (8.4%) since 2011	Regional NSW 43	Regional NSW 6.7%
19% of Byron Shire	NSW 38	NSW 5.6%
population	Australia 38	Australia 5.6%
Proportion of employed local	Proportion of residents needing	Most popular industry of employment
employed local residents who walk to	residents needing assistance with core	
employed local residents who walk to work	residents needing	of employment
employed local residents who walk to	residents needing assistance with core activities	of employment Health Care and
employed local residents who walk to work	residents needing assistance with core	of employment Health Care and Social Assistance (16.8%) Regional NSW 14.4%
employed local residents who walk to work 1.2%	residents needing assistance with core activities	of employment Health Care and Social Assistance (16.8%)
employed local residents who walk to work 1.2% (33 people)	residents needing assistance with core activities 4.6%	of employment Health Care and Social Assistance (16.8%) Regional NSW 14.4%

Source: Australian Bureau of Statistics; ProfileID

The percentage of walk to work is lower than the regional, state and national average. It is possible that this is due to the older age category, the inclusion of a number of rural areas in the data and the limited local employment opportunities.

Billinudgel

Population 317 +35 (11%) since 2011 1% of Byron Shire population	Median age 47 Regional NSW 43 NSW 38 Australia 38	Largest age category50 to 54years (11%)Regional NSW6.8%NSW6.5%Australia6.5%
Proportion of employed local residents who walk to work3.2%(3 people)Regional NSW3.5%NSW3.9%Australia3.5%	Proportion of residents needing assistance with core activities Regional NSW 6.3% NSW 5.4% Australia 5.1%	Most popular industry of employmentHigher Education (6.6%)NSW1.4% AustraliaAustralia1.5%

Source: Australian Bureau of Statistics; ProfileID

2.8.1 Existing walk and roll network

The existing walk and roll network in Ocean Shores, South Golden Beach, New Brighton and Billinudgel is presented in Figure 17. The network in this study area consists of a number of key pedestrian links, some of which provide access between different suburbs.

As can be seen in Figure 17, the walk and roll network in Ocean Shores is currently limited with a footpath connecting existing attractors along Rajah Road to Brunswick Valley Way and a shared cycle/footpath providing a connection south to Brunswick Heads.



In South Golden Beach, there are currently three key routes comprised of a number of pedestrian paths and shared cycle paths. The first of these routes connects the north-east of South Golden Beach to Brunswick Valley Way in the west via a school. The second route connects the south of South Golden Beach to Brunswick Valley Way. This route, however, is currently not connected to the remainder of the network in South Golden Beach. These routes continue on to Billinudgel and Ocean Shores though with some existing gaps in the network. The third route connects the south-east of South Golden Beach to New Brighton in the south.

The majority of the existing walk and roll network in Billinudgel is located along Wilfred Street which is the main east-west connection in the town. However, there are currently a number of gaps in path provision along this street as well as in the remainder of the town.

2.8.2 Network quality and accessibility

Ocean Shores is a comparatively new development area though the walk and roll network is currently limited and, for the most part, narrow. Despite this, the paths that do exist have good quality surfaces with kerb ramps located along each road intersection to improve the level of service for mobility impaired users. Providing a more extensive and higher quality walk and roll network in Ocean Shores will go some way towards improving the overall level of service and accessibility. However, the undulating topography that provides such spectacular views may undermine broader network accessibility for mobility impaired users.

Although limited, the existing walk and roll network in South Golden Beach is currently of a high quality with wide paths, smooth and even surfaces and kerb ramps. Expanding this network to complete missing links and better connect residential areas (for example, along Beach Avenue, Helen Street, Kolora Way and New Brighton Road) will significantly help to improve the level of service and accessibility in the future.

The existing shared cycle/footpath that currently bisects New Brighton (refer to Figure 17) provides a fair level of service for more vulnerable users as the path is generally wide and the surface quality is good. Path quality is reduced in select locations, however, due to the presence of leaf litter and sand. This is particularly evident along New Brighton Road between Redgate Road and Byron Street (leaf

litter) and along The Esplanade, north of Strand Avenue (sand). Undertaking regular maintenance will help to ensure the path is suitable for all users.

Accessibility in Billinudgel is currently poor despite the presence of a wide shared path along one part of Wilfred Street. This low level of service is largely due to the discontinuity of the network and general lack of paths. Addressing these existing accessibility issues will be a key driver for this PAMP.

2.8.3 Pedestrian crash history

Only one crash involving a pedestrian was recorded across these four locations between 2012 and 2017. As shown in Figure 17, this crash occurred at the Rajah Road and Brunswick Valley Road roundabout. The crash, which resulted in serious injury, occurred in 2015 when a pedestrian was attempting to cross Brunswick Valley Way.

2.8.4 Passenger transport

There is currently one public bus route which services Ocean Shores, South Golden Beach, New Brighton and Billinudgel, namely:

• 645: Ocean Shores to Byron Bay.

This bus service stops at multiple locations across Ocean Shores, South Golden Beach, New Brighton and Billinudgel, often with limited infrastructure available (bus stops, waiting areas, paths, crossings, etc.) to support boarding and alighting bus passengers. As mentioned earlier, providing appropriate pedestrian facilities to enable residents and visitors to access the bus network is important as it improves safety, practicality and the integration of different transport modes. This has the potential to improve the overall attractiveness of public transport use and to provide further transport alternatives in order to reduce reliance on private vehicle use. This is particularly relevant in Ocean Shores where the hilly topography could affect rates of walking and rolling.

In addition to these local services, longer distance regional coach services extend along the east coast from Brisbane to Grafton and inland from Byron Bay and Ballina West to Casino, servicing Ocean Shores and Billinudgel.

The passenger transport network is also comprised of one transport operator which provides a shuttle between Brisbane Airport and Casino.

2.8.5 Issues and opportunities

OCEAN SHORES, SOUTH GOLDEN BEACH, NEW BRIGHTON & BILLINUDGEL – SUMMARY OF EXISTING ISSUES AND OPPORTUNITIES

Opportunities

Many gaps in existing walk and roll network

- Low proportion of residents who walk to work
- Undulating topography, particularly in Ocean Shores, may impact on mobility
- Paths in Billinudgel generally poorer quality and less accessible
- The Pacific Motorway forms a barrier for pedestrian access between beachside and inland localities

- Some existing key pedestrian routes that link different suburbs. Provides spines from which the walk and roll network could be expanded
- Newer residential areas generally have higher quality and more accessible paths
- Existing co-location of major attractors (shopping centre, medical centre and community centre) in Ocean Shores

0804 - 7 June 2019 - V9







Figure 17: Existing walk and roll network and pedestrian crash locations – Ocean Shores, South Golden Beach, New Brighton and Billinudgel



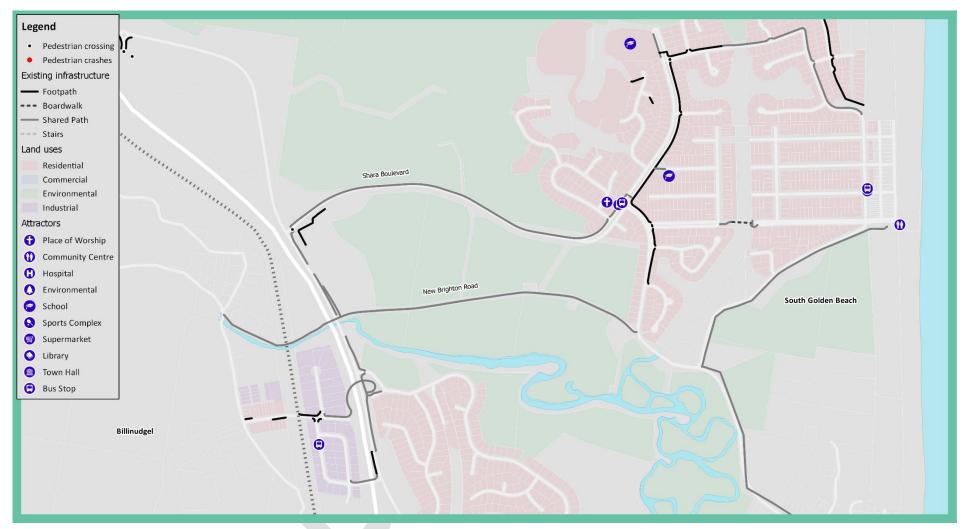


Figure 18: Existing walk and roll network and pedestrian crash locations – South Golden Beach and Billinudgel



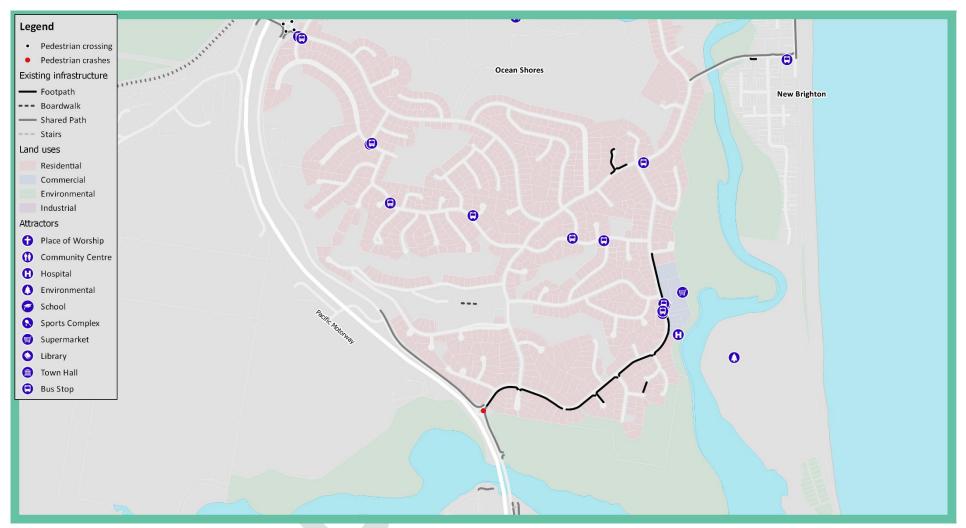


Figure 19: Existing walk and roll network and pedestrian crash locations – Ocean Shores and New Brighton

2.9 Walking and rolling in Brunswick Heads

Located at the mouth of the Brunswick River, Brunswick Heads – or *Brunz* as it is more affectionately known – is an idyllic town that provides direct access to pristine beaches, waterways and nature reserves. Brunswick Heads exudes a traditional seaside village atmosphere coupled with a town centre that continues to increase in vibrancy and activity at any number of the popular cafes, restaurants, specialty shops and accommodation options.

The PAMP study area for Brunswick Heads is shown in Figure 20 and a snapshot of key community profile statistics is provided below.

Population 1,737 +90 (5.5%) since 2011 5.2% of Byron Shire population	Median age 49 Regional NSW 43 NSW 38 Australia 38	Largest age category55 to 59years (9.8%)Regional NSW7.1%NSW6.3%Australia6.2%
Proportion of employed local residents who walk to work6.9%(47 people)Regional NSW3.5%NSW3.9%Australia3.5%	Proportion of residents needing assistance with core activities6.3%6.3%NSW5.4%Australia5.1%	Most popular industry of employmentHealth Care and Social Assistance(14.8%)Regional NSW14.4% NSWNSW12.5% AustraliaAustralia12.6%

Source: Australian Bureau of Statistics; ProfileID

As with a number of towns and villages in Byron Shire, a high proportion of Brunswick Heads residents currently walk to work when compared against the regional, state and national average. This is likely to be a result of the town's active and walkable town centre within close proximity to residential areas, the variety of employment opportunities available locally and the extent of the existing footpath network.

2.9.1 Existing walk and roll network

As can be seen in Figure 20, the existing walk and roll network in Brunswick Heads is extensive with the majority of the gridded road network currently lined with some form of path infrastructure. This enables dedicated pedestrian connections to almost all commercial areas and key attractors as well as to the majority of the residential areas in Brunswick Heads. The quality and width of existing footpaths varies across the town, however, existing paths in residential areas are generally narrow (1m approx.) and showing signs of age.

Two pedestrian connections are currently available to the beach and residential areas on the eastern side of Brunswick Heads. The first of these paths, located on the South Beach Road vehicle bridge, is narrow and pedestrian paths are currently not provided on the eastern terminus to ensure continuous and more formalised pedestrian access to the beach. The second is a dedicated pedestrian bridge located at the eastern end of Fingal Street adjacent to Terrace Park which intersects with South Beach Road and provides access to the beach.

2.9.2 Network quality and accessibility

Despite an extensive walk and roll network, the quality of existing paths and the level of service and accessibility for more vulnerable users could be improved. Some of the key issues include narrow or variable path widths; poor quality surfaces; gaps in the network; lack of kerb ramps and other supporting infrastructure; and unsuitable or missing crossing facilities.

Considering the ageing population, the comparatively high proportion of residents needing assistance with core activities and the large number of tourists that visit Brunswick Heads every year, addressing these existing accessibility issues will be a key driver for this PAMP.

2.9.3 Pedestrian crash history

Only one crash involving a pedestrian was recorded in Brunswick Heads between 2012 and 2017. As shown in Figure 20, this crash occurred on Tweed Street, west

of Newberry Parade. The crash, which resulted in minor injury, occurred in 2016 when a pedestrian was attempting to cross Tweed Street.

2.9.4 Passenger transport

There are currently three public bus routes which service Brunswick Heads and surrounds. These are:

- 610: Byron Bay to Lismore
- 635: Lismore to Mullumbimby and Brunswick Heads
- 645: Ocean Shores to Byron Bay.

Longer distance regional coach services extend along the east coast from Brisbane to Grafton and inland from Byron Bay and Ballina West to Casino, servicing Brunswick Heads.

Each of these services stop in the centre of Brunswick Heads at an existing onroad bus stop on Park Street, north of Fingal Street. This is located close to shops, restaurants and other facilities and is directly serviced by a network of existing pedestrian paths. In addition, one bus service (Route 645) also stops on Old Pacific Highway, south of the town centre. Dedicated pedestrian facilities to support boarding and lighting bus passengers in this location are currently limited. It is important that existing and planned bus stops in Brunswick Heads are integrated with and supported by the path network and any other pedestrian facilities (e.g. crossings).

Outside of the public bus service, passenger transport options in Brunswick Heads are currently limited.



2.9.5 Issues and opportunities

BRUNSWICK HEADS – SUMMARY OF EXISTING ISSUES AND OPPORTUNITIES

Issues

- Some gaps in existing walk and roll network, particularly to provide access to beach
- Variable path width, poor surface quality and lack of kerb ramps negatively affects accessibility
- Tweed Street forms a barrier for access between residential areas to the west and the town centre in the east. Pedestrians required to cross road at limited formal locations to access the two areas

Opportunities

- Existing compact and walkable town centre with residential areas within close proximity
- Easy navigation and legibility due to street grid design
- Existing high rates of pedestrian activity and established culture of walking with above average proportion of residents who walk to work
- Topography generally conducive to pedestrian movements for all ages and abilities
- Proximity to key attractors and natural assets (for example, beaches) to support recreational walks
- Several existing attractors are located within walking distance of the town centre



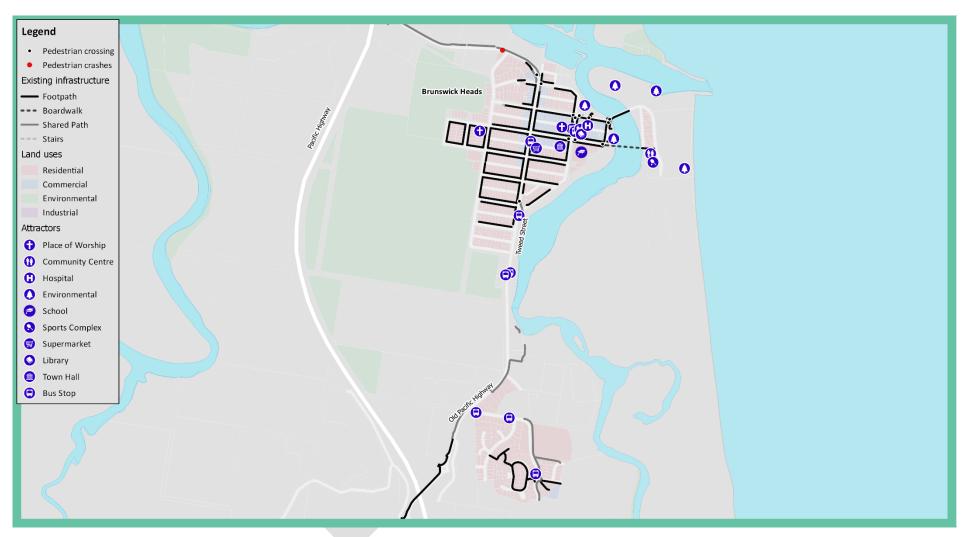


Figure 20: Existing walk and roll network and pedestrian crash locations – Brunswick Heads



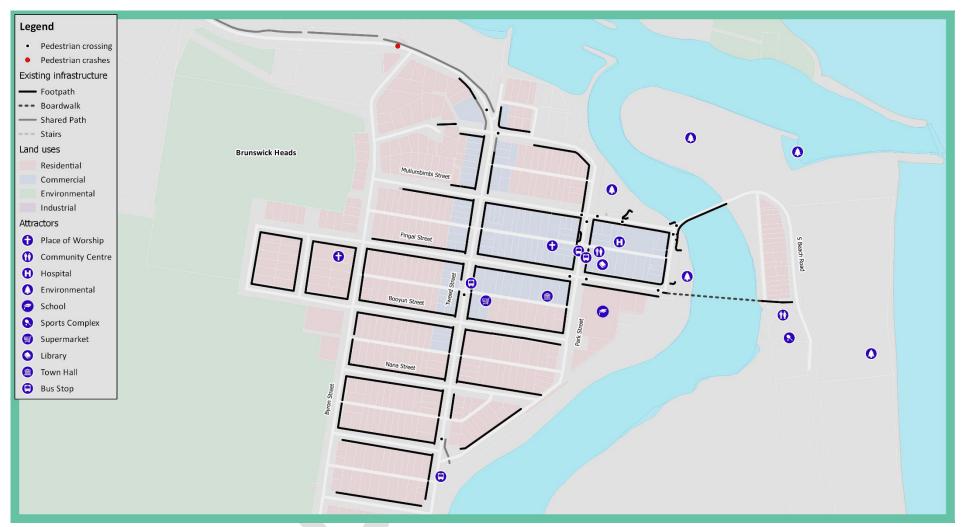


Figure 21: Existing walk and roll network and pedestrian crash locations – Brunswick Heads Town Centre



2.10 Walking and rolling in Main Arm and Federal

Main Arm and Federal are all small inland villages located in the west of the Shire. The villages provide basic facilities for locals and visitors including general stores, community halls and some dining and accommodation.

As can be seen in Figure 22 and Figure 23, the existing walk and roll network in Main Arm and Federal is limited. This negatively affects the ability of pedestrians, particularly those with mobility impairments, to safely and effectively walk and roll in each of these villages.





Figure 22: Existing walk and roll network – Main Arm



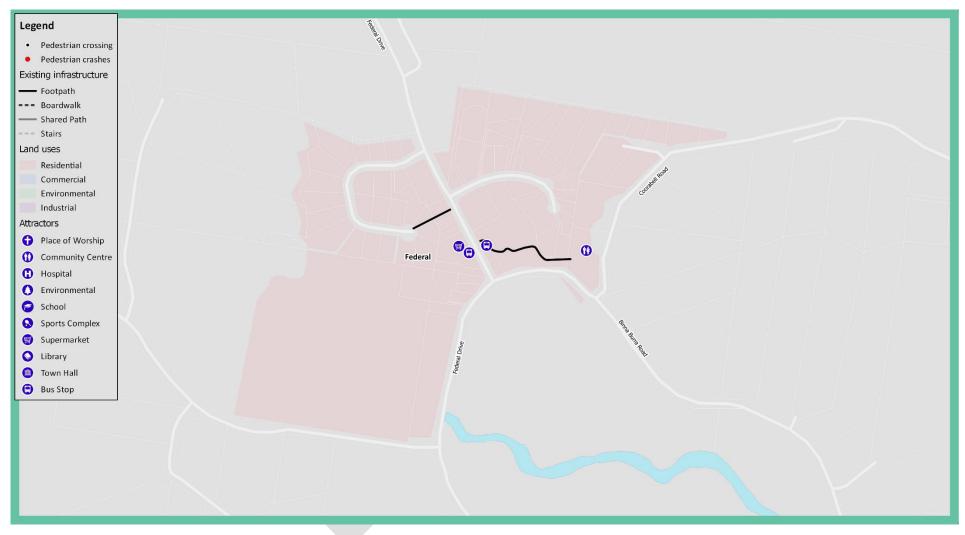


Figure 23: Existing walk and roll network – Federal



3 Community consultation

The strength of any plan is determined, to no small degree, by how well it reflects the needs and aspirations of those that it affects. In light of this, an extensive three-stage community consultation process was adopted to inform the development of the PAMP. These stages included:

- Stage 1 Online survey
- Stage 2 Local design workshops
- Stage 3 Consultation on the Draft PAMP.

The first two stages have been undertaken to develop this Draft PAMP with the third and final stage now being undertaken to determine the alignment of the plan with community expectations.

At the same time that this PAMP was being prepared, Council were also preparing the Byron Shire Bike Plan. In order to align and integrate these plans as much as possible, the content presented and discussed at each consultation stage was integrated across both plans.

Different consultation methods and mediums were adopted in order to provide the greatest opportunity for meaningful community contribution. Similarly, the timing of each consultation stage was strategically sequenced so that community input directly shaped the development of each of the plans.

The specific methods that were adopted and some of the key findings that were discovered in the two consultation stages that occurred as part of the development of this Draft PAMP are summarised below.

3.1 Stage 1 consultation – online survey

In October 2018, an online survey questionnaire was launched on Council's website with the aim of gathering important quantitative and qualitative information from the community on the current use of the existing footpath and cycle networks, the motivations and reasons for their use, the community's experiences walking, cycling and rolling (including the use of wheelchairs,

mobility scooters and walking frames), and existing challenges and barriers to increased participation. Recognising the need to ensure future networks reflect the needs and aspirations of all residents, parents and carers of dependent children were specifically asked to comment on their children's use and experience of the existing network.

The survey was widely promoted by Council through a range of available channels including eNewsletters, email databases, social media and video interviews. Roughly 700 survey responses were received, providing an excellent sample for analysis and for understanding the current community experience using the existing walk and cycle networks.

Some of the key recurring themes for the Shire that specifically related to walking and the use of the footpath network included:

- New footpaths are needed
- Connectivity improvements are needed between footpaths within towns and also between towns
- Increased maintenance is needed for footpaths and roads
- Safety improvements are needed (for example, separation of pedestrians, cyclists and motorists, provision of safe crossing points, improved lighting)
- Support for the reuse of the currently disused Casino-Murwillumbah rail line, potentially to include opportunities for walking and rolling.

As the foundation for the PAMP, the online survey was also used as a means of identifying those in the community who wished to contribute further to the development of the plan. Approximately 54% – or 380 of the 700 survey respondents – expressed an interest in further engagement, including through ensuing local design workshops.



3.2 Stage 2 consultation – local design workshops

Following on from the online survey, hands-on local design workshops open to the entire community were held in October and November 2018 at four locations across the Shire. These workshops were held at Mullumbimby, Byron Bay, Bangalow and Ocean Shores to encompass major population areas as well as surrounding villages and towns. A further workshop was also held with Byron

Shire's community-led Access Consultative Working Group (ACWG) to better understand the specific needs and aspirations of those in the community with temporary or permanent mobility impairments. The purpose of these workshops was to identify specific issues and opportunities at the town, regional and shire level and to reach consensus as to which initiatives should be prioritised for implementation.



To achieve this purpose, the following simple three-step process was developed:

- Step 1 Group identification of issues and opportunities
- Step 2 Group prioritisation of issues and opportunities
- Step 3 Individual prioritisation of issues and opportunities.

In the first step, each group was provided with a series of maps and red, yellow and green stickers which were to be used to identify critical issues (for example, infrastructure deficiency, serious safety concern), moderate issues (for example, a narrow or worn footpath) and opportunities (for example, a new footpath connection to a school) respectively. Each group was also provided with post-it notes of corresponding colours to provide a commentary and justification of each issue and opportunity.

Using these marked-up maps for the second step, each group was then provided with a limited number of gold stickers to identify the group consensus on which of the issues or opportunities should be prioritised for further investigation. As a limited number of priorities were available, this exercise required a degree of critical thinking to be applied to each of the issues and opportunities and consideration of not only the needs and aspirations of the group but also the benefits and implications of each priority for the broader community.



Following the group prioritisation step, the maps were displayed and each participant was provided with two silver stickers. Each participant was asked to review the issues, opportunities and priorities of other groups and use their stickers to identify the initiatives which they personally believed should be prioritised for further investigation. This allowed for

independent peer review and confirmation of issues, opportunities and priorities and, through the adoption of what is in effect a system of 'voting', provided further indication of not only the initiatives to be investigated but also of their importance and required timeframes for implementation.

Some of the key statistics from the local design workshops include:

- Approximately 150 participants across the five design workshops
- 568 comments provided across both plans (202 critical issues, 128 moderate issues and 238 opportunities)



- The greatest number of comments relating to the development of the PAMP were provided at the Byron Bay consultation session followed by the Ocean Shores, Mullumbimby, Bangalow and ACWG sessions
- 277 comments relating to the development of the PAMP (99 critical issues, 63 moderate issues and 115 opportunities)
- Roughly 70% of comments relating to the development of the PAMP had direct spatial implications that were able to be mapped.

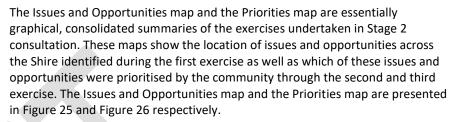
Following the workshops, all of the recorded comments and feedback were reviewed and analysed. Some of the key themes and findings that emerged from the local design workshops are listed below.

- Repurpose the discussed rail corridor to support pedestrian and cycle movements across the Shire
- Connectivity needs to be improved both within and between towns
- New footpaths are needed, particularly around schools
- More footpath maintenance is needed
- Install tactile ground surface indicators, kerb ramps and other accessibility infrastructure
- Develop Shire-wide mobility maps that show accessible paths and the location of accessibility infrastructure
- Consider beach wheelchair access
- Provide safe crossings, particularly near bus stops.

The review of feedback also helped identify the most commonly mentioned words and phrases as documented by the community. These are shown graphically in a 'word cloud' in Figure 24. The larger the word in Figure 24, the more frequently it was mentioned. In addition to this, community comments with direct spatial implications were mapped using GIS software. This provided the following two key outputs for the development of this PAMP:

- Issues and Opportunities map / Priorities map
- Community Consultation Network maps.

0804 - 7 June 2019 - V9



The Community Consultation Network maps take this feedback one step further by identifying and then mapping the extent of those issues and opportunities that had spatial implications. As an example, this could include an identified opportunity to reuse the Casino to Murwillumbah rail line to provide a walk and roll connection between Mullumbimby and Byron Bay. These maps are provided in Appendix 1.

The contribution from the community was particularly important at this juncture as the timing of the local design workshops marked the turning point in the development of the plans; transitioning from a review of the existing situation to consideration of the desired future for walking and cycling in the Shire. The contributions directly informed the development of the PAMP and provided the basis for initiatives (for example, infrastructure, programs) to be delivered as part of this plan.







Figure 24: Key words and phrases mentioned by the community during Stage 2 consultation



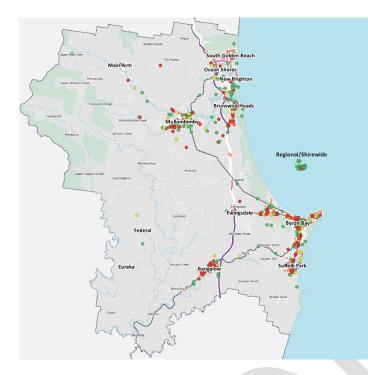


Figure 25: Issues and opportunities identified by the community during Stage 2 consultation

Legend

Issue (Critical)

Opportunity

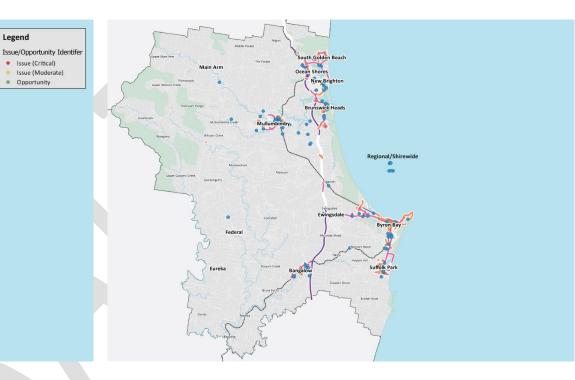


Figure 26: Prioritised issues and opportunities as nominated by the community during Stage 2 consultation



4 The future walk and roll network

The community consultation provided insight into not only on-the-ground experiences and possible initiatives for the walk and roll network but also the variety of users and the unique characteristics and needs of each. Understanding this is a pre-requisite for developing a future network with routes that are appropriately prioritised and with initiatives that suit user needs.

4.1 Designing for users

In developing the future walk and roll network, a concerted effort was made to understand and design for the actual users of the network. An overarching design philosophy with more detailed design principles was adopted to ensure consistency not only in the approach to planning the future network but also to inform finer details around the type of infrastructure which could be implemented. The design principles and some of the physical implications for the network are discussed in the relevant sections below.

4.1.1 Design philosophy and principles

The guiding philosophy for developing the future walk and roll network was to design a walk and roll environment for the most vulnerable user so that it is suitable for all. A set of design principles were adopted to support this philosophy and to help apply it spatially across the Shire. These principles are:

- Provide a convenient, safe and connected network that offers route choice; that links residential areas, key attractors and public transport facilities; that considers the needs of users; that formalises existing pedestrian paths; that addresses existing hazards; and that reduces the need to cross roads.
- Provide pedestrian crossings where the walk and roll network intersects with the road network that recognise that these locations are the most vulnerable parts of the pedestrian network.

• Promote pedestrian priority where possible, where contextually appropriate and where the strategic intent of the pedestrian link is advanced.

4.1.2 Design typologies

The design philosophy and principles have direct implications for the type of infrastructure (paths and crossings) which could be implemented to complete the proposed future walk and roll network.

Path typologies

For the path network, the following different path types will be implemented across the Shire:

- Footpaths for the exclusive use of pedestrians
- Shared paths for the shared use of both pedestrians and cyclists (and other appropriate mobility devices of similar scale and operating characteristics)
- Mixed traffic street for the shared use of pedestrians, cyclists and motorists with priority given to pedestrians. Suitable for application on low speed, low traffic, high pedestrian environments. Street redesign is required in addition to a reduction in posted speed limits. Examples of a mixed traffic street could include shared zones and pedestrian malls.

Footpaths and shared paths are considered to be 'off-road' as they are not contained within existing roadways and are therefore separate from vehicle traffic. Although the style and dimensions of these two path types will vary across the Shire depending on the local context, the intent is to provide paths that satisfy, as a minimum, the dimensions provided in Table 1. The path dimensions presented in Table 1 were developed based on a review and synthesis of relevant national, state, regional and local standards.

PSA CONSULTING AUSTRALIA

Table 1: Path width guide

PATH TYPE SITUATION DESIRABLE MINIMUM WIDTH
Low pedestrian volumes (for example, a 1.2m
FootpathHigh pedestrian volumes (for example, a commercial area or town centre)2.4m
Wheelchair users passing one another1.8m
Two-way local access path 2.5m
Shared pathTwo-way regional path3.0m
Two-way recreational path 3.5m

Note: the path widths presented in Table 1 are provided as a guide only. The exact dimensions to be applied will depend on the local context and will consider user type, volumes and major travel directions, environmental features, and existing constraints.

Example cross-sections of each of these path typologies are provided in Figure 27 and Figure 28.



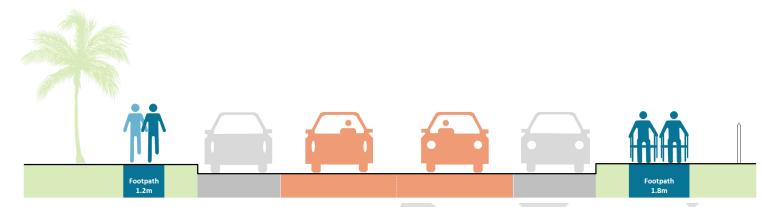


Figure 27: Example cross-sections of a 1.2m and a 1.8m pedestrian footpath

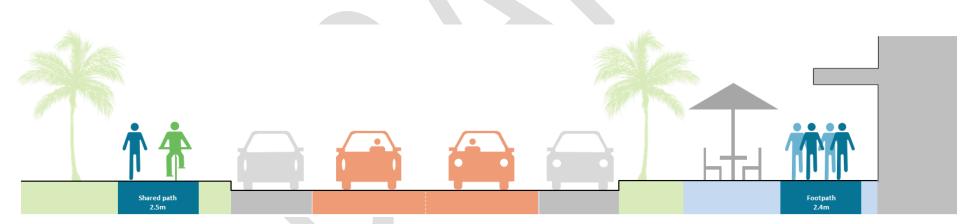


Figure 28: Example cross-sections of a 2.5m shared path and a 2.4m pedestrian footpath

Crossing typologies

The suitability and safety of any walk and roll network is determined as much, or arguably more, by the treatment applied to pedestrian crossing points as to the type and quality of its paths. These points are the most vulnerable parts of the network as this is where pedestrians and vehicles intersect.

As outlined in Section 4.1.1, a key design principle was to develop the network so as to reduce the need for road crossings (as far as possible) from the outset. In practical terms, this could mean providing a consistent path on both rather than one side of a road or identifying pedestrian desire lines and formalising this with appropriate infrastructure. As it is unrealistic and impractical to fully design-out the need for pedestrian crossing points, providing contextually-appropriate crossing treatments at locations that are convenient and safe for pedestrians is critical to providing a convenient, connected and safe walk and roll network that is suitable for all.

Crossing types suitable for implementation in the Shire are listed below with examples presented in Figure 29.

- Pedestrian refuges
- Zebra crossings
- Raised ('wombat') crossings
- Separated pedestrian crossing.



Pedestrian refuge





Raised crossing

Separated pedestrian crossing (Source: Austroads, 2017)

Zebra crossing

Figure 29: Crossing typology examples

When selecting which crossing treatment to apply, consideration will be given to the different types of pedestrians and their specific needs and characteristics (especially children and those with mobility impairments), the volume of pedestrians and vehicles, the local context, the strategic intent of the path, and the nature of the intersecting road.

4.2 Supporting facilities

Regardless of the path or crossing selected, the provision of appropriate supporting facilities is important to ensuring the walk and roll network is accessible, safe and suitable for use by all and is pleasant, inviting and interesting. Some of these facilities include:

- Kerb build-outs
- Kerb ramps
- Lighting
- Path maintenance schedules
- Seating
- Shade





- Signage, wayfinding and maps
- Water fountains.

It is expected that the above listed facilities would be combined as required as part of the future network. As an example, this could include the provision of kerb ramps, signage and appropriate lighting at a pedestrian crossing to ensure safe and accessible movement for all users. This could be further combined with a path maintenance schedule to ensure the path is regularly cleared of debris. Implementation of these supporting facilities is likely to differ across the Shire and as the local context requires.

4.3 Proposed walk and roll network

The proposed walk and roll network is the synthesis of the review of the existing network, the findings from two rounds of community consultation and the application of current, best practice transport planning. The proposed network embodies the stated design philosophy and principles and includes reference to the path and crossing design typologies.

The proposed walk and roll network has been prepared for the entire Shire, with a specific focus on the following towns and villages due to their comparatively high levels of pedestrian activity:

- Mullumbimby
- Byron Bay
- Suffolk Park
- Bangalow
- Ocean Shores, South Golden Beach, New Brighton and Billinudgel
- Brunswick Heads
- Main Arm
- Federal.

The future walk and roll network maps, which have been provided for each of these localities, are provided in Figure 30 to Figure 45 below. These maps show

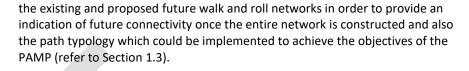








Figure 30: Future walk and roll network – Mullumbimby



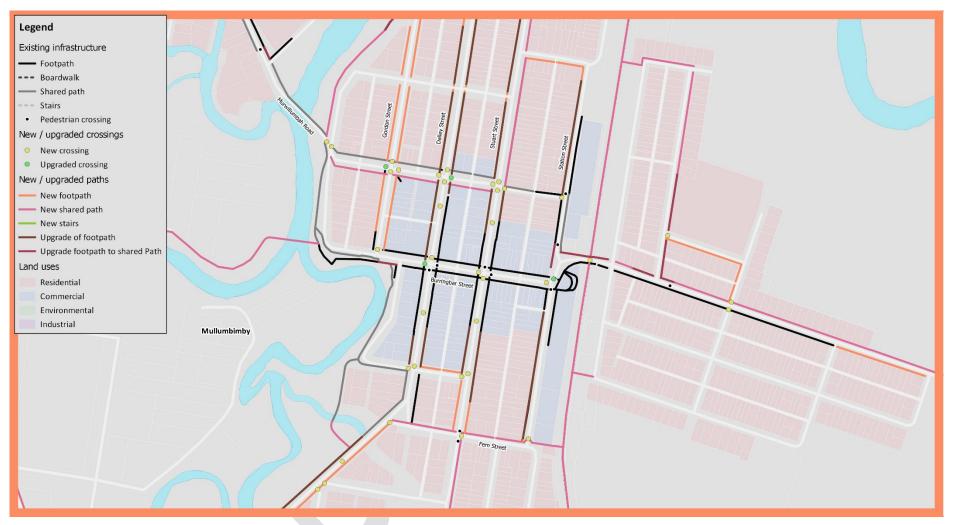


Figure 31: Future walk and roll network – Mullumbimby Town Centre



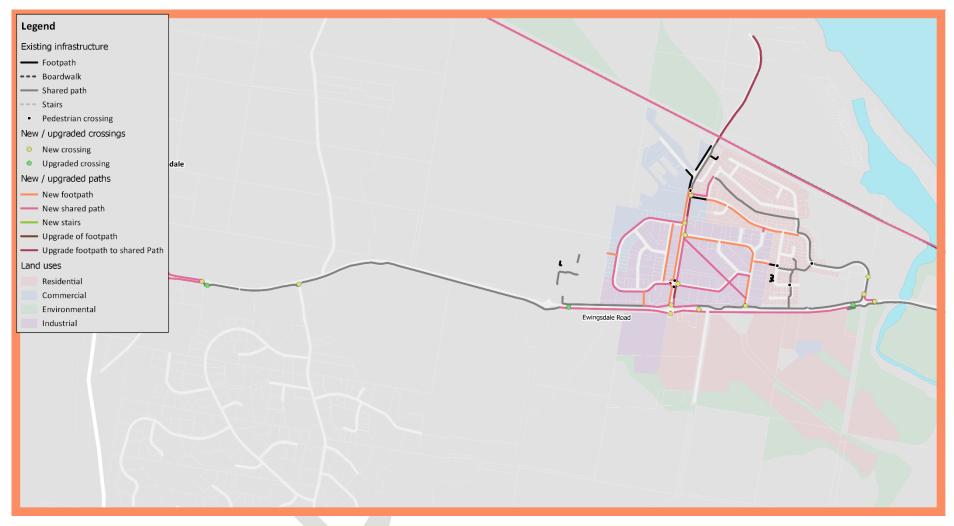


Figure 32: Future walk and roll network – Byron Bay (West)





Figure 33: Future walk and roll network – Byron Bay (Central)





Figure 34: Future walk and roll network – Byron Bay (Central) Town Centre



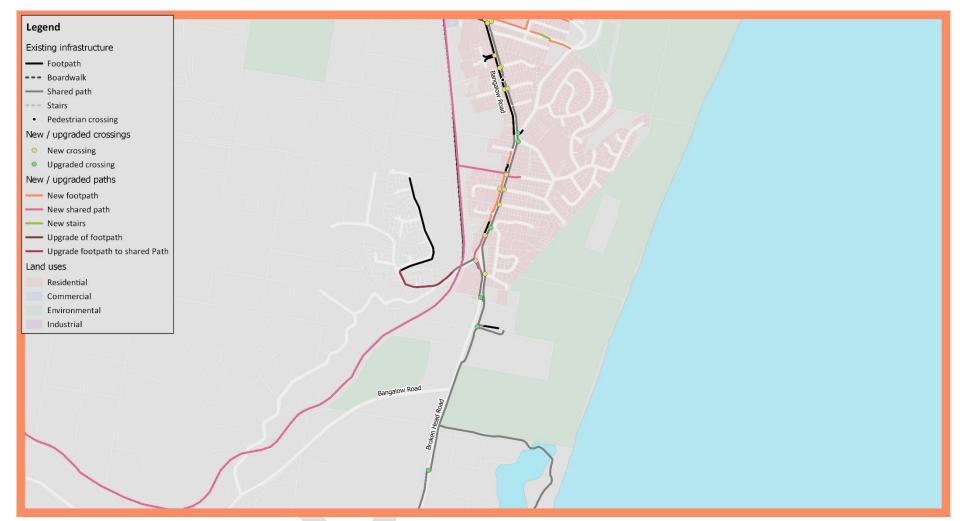


Figure 35: Future walk and roll network – Byron Bay (South)



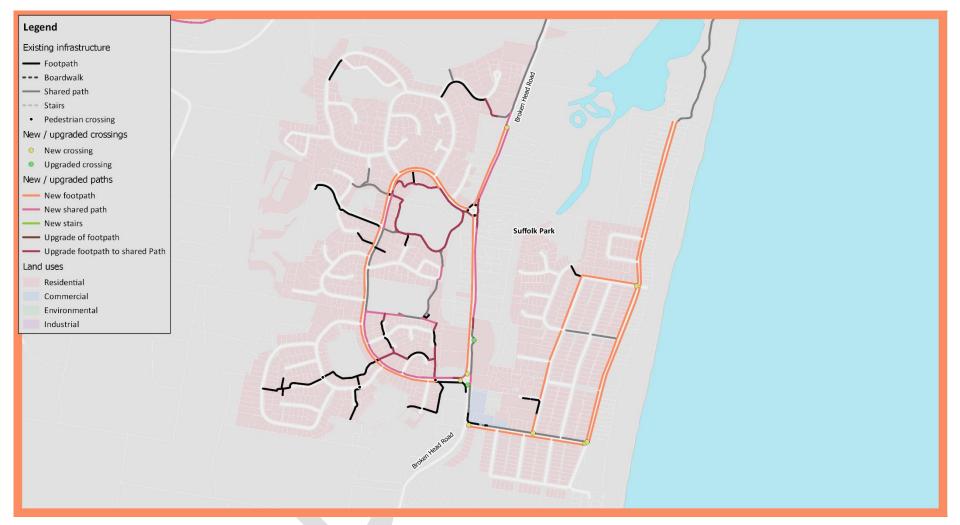


Figure 36: Future walk and roll network – Suffolk Park





Figure 37: Future walk and roll network – Bangalow





Figure 38: Future walk and roll network – Bangalow Town Centre



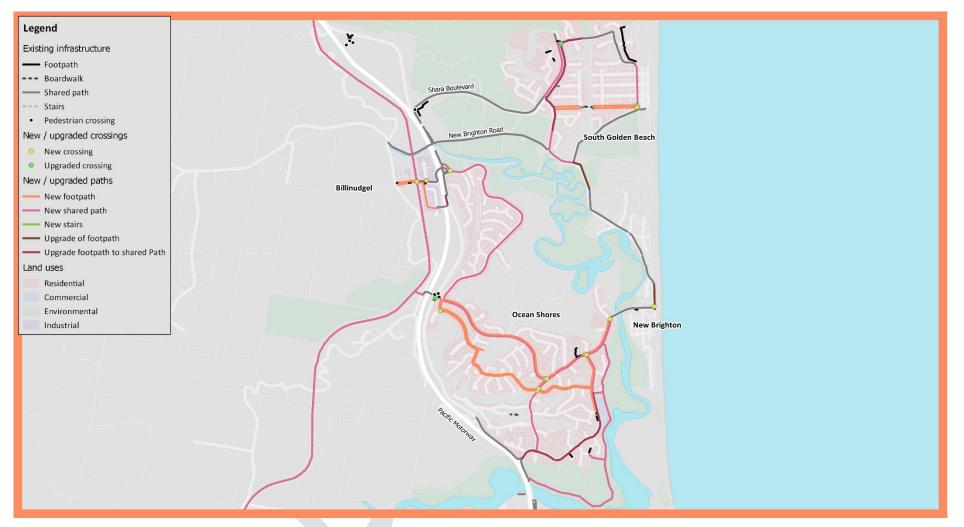


Figure 39: Future walk and roll network – Ocean Shores, South Golden Beach, New Brighton and Billinudgel



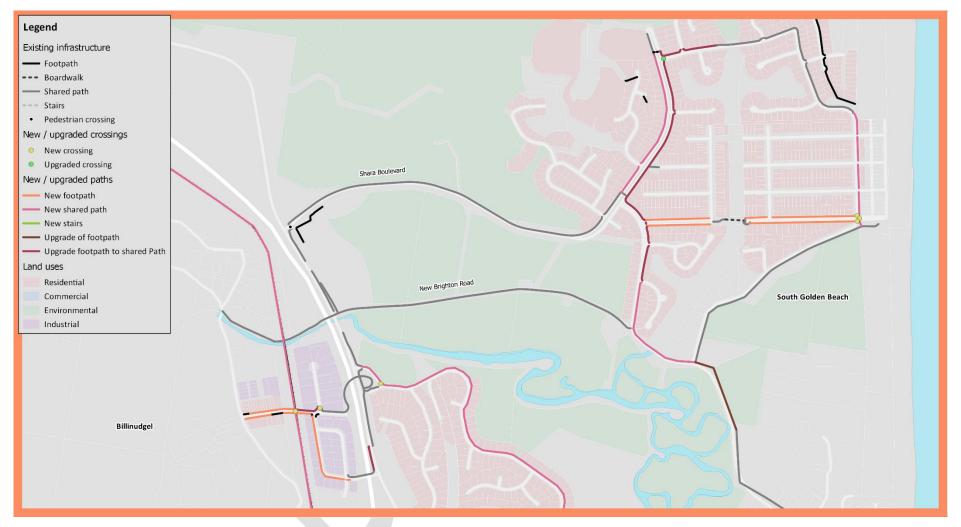


Figure 40: Future walk and roll network – South Golden Beach and Billinudgel





Figure 41: Future walk and roll network – Ocean Shores and New Brighton





Figure 42: Future walk and roll network – Brunswick Heads





Figure 43: Future walk and roll network – Brunswick Heads Town Centre



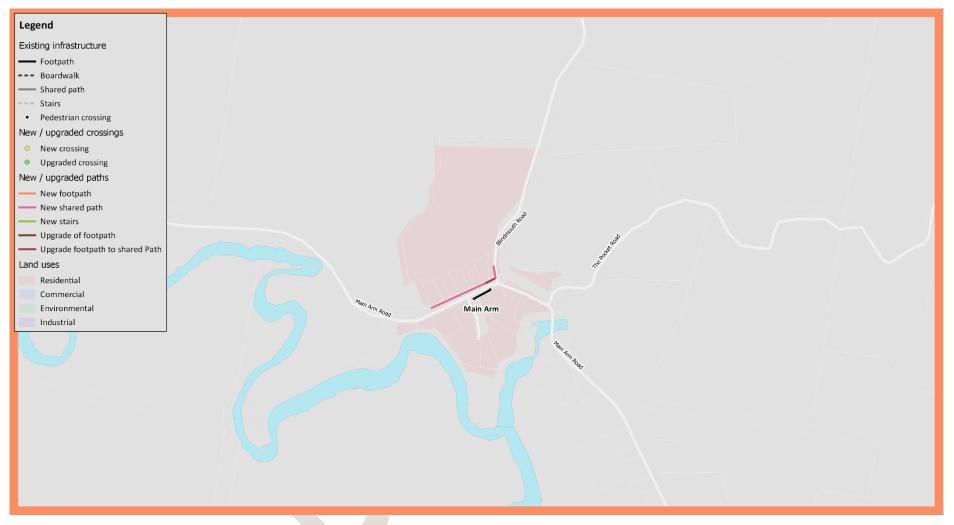


Figure 44: Future walk and roll network – Main Arm





Figure 45: Future walk and roll network – Federal



5 Action Plan

This section outlines how the future network will be translated into practical, implementable action. This includes the provision of a detailed schedule of future works, a discussion on potential funding sources to aid delivery, and the preparation of a monitoring and evaluation framework.

5.1 Action Plan methodology

The following methodology was adopted to develop this Action Plan:

- Review the proposed future walk and roll network as presented in Section 4.3
- Identify pedestrian infrastructure (paths and crossings) that could be packaged and delivered as one project. As outlined in Section 4.3, by providing 'complete links' this will help to provide convenient, connected and safe connections that benefit users even if delivered in stages
- Estimate the cost to deliver each piece of infrastructure, consolidated into appropriate works packages
- Prepare a schedule of future works to outline the extent, description, cost and priority of works to be undertaken over the life of this PAMP and beyond
- Identify potential funding sources to deliver the PAMP
- Develop a monitoring and evaluation framework to ensure the findings and strategic direction of the PAMP remains current and to track the Plan's rate of progress.

5.2 Works prioritisation and packaging

Consideration has been provided to the respective priority of implementing each of the identified paths and crossings as presented in Section 4.3. A description of

each priority category is provided in Table 2 while Table 3 demonstrates the different components that make up the priority categories.

Table 2: Implementation priority

PRIORITY CATEGORY	PRIORITY DESCRIPTION
Priority A	Highest priority for implementation.
	Key criteria for consideration include whether the proposed facility:
	 addresses an identified and significant safety issue;
	 significantly improves pedestrian access and mobility or is part of a broader connection that significantly improves pedestrian access and mobility;
	 connects a diverse number of residential areas, key attractors and/or public transport facilities;
	 responds to existing/demonstrated high pedestrian demand;
	 facilitates significant growth in pedestrian volumes in the future;
	reduces the need to cross roads.
Priority B	Medium priority for implementation
	Key criteria for consideration include whether the proposed facility:
	• addresses an identified and moderate safety issue;
	 moderately improves pedestrian access and mobility or is part of a broader connection that moderately improves pedestrian access and mobility;
	 connects a variety of residential areas, key attractors and/or public transport facilities;

•

•

•

PRIORITY DESCRIPTION

Low priority for implementation

PRIORITY

Priority C

CATEGORY



Table 3:	Priority Components	by Category
	i nonty components	Sy cutcher,

responds to existing/demonstrated moderate pedestrian demand;	PRIORITY CATEGORY	A	В	C
facilitates moderate growth in pedestrian volumes in the future.		 addresses an identified and 	 addresses an identified and 	addresses an
iority for implementation		significant	moderate safety	identified safety concern
Key criteria for consideration include whether the proposed facility	Safety	safety issuereduces the	issue	
addresses an identified safety concern;		need to cross roads		
improves pedestrian access and mobility;		 significantly 	 moderately 	
connects residential areas, attractors and/or public transport facilities;		improves pedestrian access and	improves pedestrian access and	
responds to existing/demonstrated minor pedestrian demand.		mobility or is a component of a	mobility or is a component of a	improves nodestrian
igned priority for implementation	Accessibility	broader connection that	broader connection that	pedestrian access and
bes not mean that the pedestrian facility is insignificant overall walk and roll network. Rather it recognises that are significant constraints to its implementation. This nclude: existing land tenure arrangements;		significantly improves pedestrian access and mobility	significantly improves pedestrian access and mobility	mobility
environmental concerns; and / or		connects a	 connects a 	 connects
the availability of funding (for example, a large piece of infrastructure such as a bridge that is heavily- dependent on State or Federal Government funding). agnitude of applicable constraints could result in some	Connectivity	diverse number of residential areas, key attractors and / or public transport	variety of residential areas, key attractors and / or public transport	residential areas, key attractors and / or public transport
e unprioritised facilities being implemented outside of		facilities	facilities	facilities

proposed facility addresses an identified safety concern; ٠

- improves pedestrian access and mobility; •
- connects residential areas, attractors and/or public • transport facilities;

Unprioritised No assigned priority for implementation

> This does not mean that the pedestrian facility is insignificar in the overall walk and roll network. Rather it recognises that there are significant constraints to its implementation. This could include:

- existing land tenure arrangements; •
- environmental concerns; and / or ٠
- the availability of funding (for example, a large piec ٠ of infrastructure such as a bridge that is heavilydependent on State or Federal Government funding

The magnitude of applicable constraints could result in some of these unprioritised facilities being implemented outside of the 10 year timeframe of the PAMP



PRIORITY CATEGORY	А	В	С
Demand	 responds to existing / demonstrated high pedestrian demand facilitates significant growth in pedestrian volumes in the future 	 responds to existing / demonstrated moderate pedestrian demand facilitates moderate growth in pedestrian volumes in the future 	 responds to existing / demonstrated minor pedestrian demand

Each of the proposed paths and crossings that make up the future walk and roll network have been assigned a priority categorisation based on the criteria presented in Table 2. The prioritized infrastructure was then grouped into appropriate works packages in order to provide 'complete links' as far as possible, even if the full extent of the connection is not able to be delivered all at once. This will help to maximise the return on any infrastructure investment and, importantly, to ensure that routes that are provided are convenient, connected and safe, even if provided in stages.

While the works packages have been prioritised into four categories, with category A being considered the highest priority, it is important to note that there is opportunity for lower priority works packages to be delivered prior to the delivery of all of the Priority A infrastructure. These priorities are based purely from the perspective of the pedestrian access and mobility plan. As a wholistic local government, Byron Shire Council will implement dynamic prioritisation that is influenced by several other funding, policy and infrastructure considerations. These priority considerations are outlined in Figure 46.

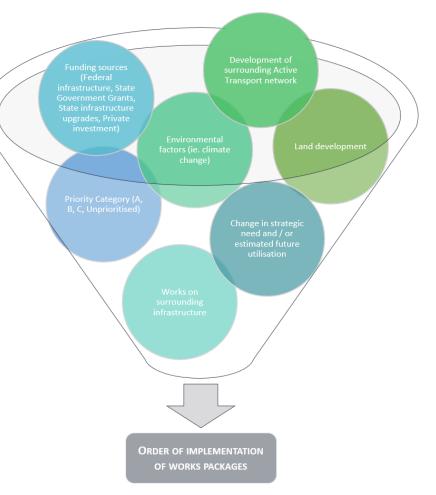


Figure 46: Factors influencing priority implementation

Maps showing the prioritised infrastructure and grouping into appropriate works packages have been prepared for each of the previously identified towns and villages and are included as Appendix 2. These maps are a useful reference when reviewing the schedule of future works (refer to Section 5.3).

5.3 Schedule of future works

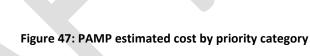
A schedule of future works has been prepared which includes all prioritised works packages. These packages, in turn, are comprised of every pedestrian facility and treatment across the entire Shire as proposed in this PAMP. This schedule, which is best viewed in conjunction with the prioritised infrastructure maps in Appendix 2, provides a description, cost estimate and priority for each of the 211 proposed works packages.

Proposed works were costed using approximate unit rates for various pedestrian facilities and treatments. The majority of these works included the installation of footpaths; shared paths; kerb ramps; zebra, raised and separated path crossings; and pedestrian refuges.

Based on the approximate unit rates, the total cost to deliver all 211 proposed works packages is estimated to cost approximately \$99.97m. A breakdown of this cost estimate by priority category is shown in Figure 47. An additional graph (Figure 48) has been provided to help provide greater understanding and context around the cost and quantity of works by location across the Shire. Specifically, this graph compares *estimated cost by priority category* against *quantity of proposed works by priority category* at each location.

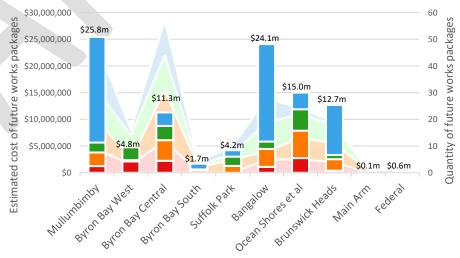
It should be noted that a significant proportion of the works proposed in this PAMP, primarily the construction of shared paths and crossings, are also proposed in the Bike Plan. In fact, roughly half of the total cost to deliver the \$207m of combined pedestrian and cyclist infrastructure in Byron Shire is shared between the PAMP and the Bike Plan. Despite this, Council recognises that at \$99.97m, the estimated cost to deliver all of the identified works in this PAMP is significant. In light of this, Council will be seeking opportunities to partner with the State Government, private enterprise and the community to help deliver this infrastructure over the life of this PAMP and beyond. This is discussed in greater detail in Section 5.4.

The estimates of cost presented in this section and in Table 4 to Table 13 below are high-level only and have been presented in order to provide an indication of the potential scale of the works proposed. These costs will be revisited when undertaking more detailed planning for the implementation of any future work.



Unprioritised \$56,955,040

57%



Priority A \$8,675,800 9%

Priority B

\$18,522,280

19%

Priority C

\$15.097.560

15%

Figure 48: PAMP estimated cost and quantity of works packages by priority category and location

PSA CONSULTING AUSTRALIA



Table 4: Schedule of future works – Mullumbimby

WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST
MUA01	Map A	Mullumbimby	Upgrade 105m of existing footpath to shared path on northern side of Argyle Street between Prince Street and Station Street, 50m on western side of Station Street north of Burringbar Street and 40m on Burringbar Street between River Terrace and Gordon Street. Construct new zebra crossing on western leg and upgrade existing refuge on eastern leg of Burringbar Street/Station Street intersection. Construct new zebra crossing on western and southern leg of Burringbar Street/Stuart Street intersection. Construct new zebra crossing on northern leg and upgrade existing refuge on western leg of Burringbar Street/Dalley Street intersection. Construct new raised crossing on northern leg of Burringbar Street/Gordon Street intersection	A	Yes	\$215,500
MUA02	Map A	Mullumbimby	Construct 120m of new footpath on western side of Gordon Street south of Murwillumbah Road and 160m on eastern side of Gordon Street between Murwillumbah Road and Burringbar Street	A	No	\$100,800
MUA03	Map A	Mullumbimby	Construct new zebra crossing across Dalley Street outside Mullumbimby Ex-Services Club	А	Yes	\$15,000
MUA04	Map A	Mullumbimby	Construct new zebra crossing across Stuart Street	А	Yes	\$15,000
MUA05	Map A	Mullumbimby	Construct new refuge on western leg of Tincogan Street/Station Street	А	Yes	\$15,000
MUA06	Map A	Mullumbimby	Construct 315m of new shared path on southern side of Tincogan Street between Brunswick Terrace and Stuart Street. Construct new raised crossing on northern leg and new refuge on eastern, southern and western leg of Tincogan Street/Stuart Street intersection. Construct new raised crossing on northern and southern leg, new refuge on western leg and upgrade existing refuge on eastern leg of Tincogan Street/Dalley Street intersection. Construct new raised crossing on northern and southern leg, new refuge on eastern leg and upgrade existing refuge on western leg of Tincogan Street/Cordon Street intersection. Construct new raised crossing on northern and southern leg, new refuge on eastern leg and upgrade existing refuge on western leg of Tincogan Street/Gordon Street intersection. Construct new raised crossing on northern leg and new refuge on western leg of Tincogan Street/Brunswick Terrace intersection	A	Yes	\$503,400
MUA07	Map A	Mullumbimby	Construct 85m of new footpath on northern side of Whian Street between Dalley Street and Stuart Street. Construct new zebra crossing across Dalley Street and Stuart Street. Construct new refuge on northern leg of Stuart Street/Whian Street intersection and eastern leg of Stuart Street/Fern Street intersection	A	No	\$90,600
MUA08	Map A	Mullumbimby	Amend 700m of existing shared path on Azalea Street/Jubilee Avenue to separated footpath. Construct new zebra crossing on northern leg and new raised crossing on western leg of Dalley Street/Whian Street intersection. Construct new refuge on western leg of Left Bank Road/Azalea Street intersection	A	No	\$280,300



WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST
MUA09	Map A	Mullumbimby	Construct 20m of new footpath on approach to the Dalley Street/Tyagarah Street intersection	А	No	\$7,560
MULLUMBIME	BY SUB-TOTAL	(PRIORITY A)				\$1,243,160
MUB01	Мар А	Mullumbimby	Construct 610m of new footpath on southern side of Jubilee Avenue between Fern Street and Azalea Street. Construct new refuge on southern side of Jubilee Avenue at Fern Street, Myokum Street and Byron Street. Construct new zebra crossing across Jubilee Avenue outside swimming pool	В	No	\$274,560
MUB02	Map A	Mullumbimby	Construct 185m of new shared path on eastern side of Stuart Street between Fern Street and end of Stuart Street (south)	В	Yes	\$110,400
MUB03	Map A	Mullumbimby	Construct 545m of new shared path (multi use corridor) north of Argyle Street. Construct 400m of new shared path (multi use corridor) south of Argyle Street. Construct 35m of new shared path on northern side of Mill Street between multi use corridor and Station Street. Construct 45m of new shared path east between multi use corridor and Prince Street. Construct 45m of new shared path east between multi use corridor and Ann Street. Construct 75m of new shared path west between multi use corridor and Station Street (near Fern Street intersection). Construct new refuge on northern leg of Station Street/Fern Street intersection. Construct new raised crossing across Argyle Street along multi use corridor	В	Yes	\$718,800
MUB04	Мар А	Mullumbimby	Construct 250m of new footpath on southern and western sides of Crown Street and Queen Street between Morrison Avenue and Argyle Street. Upgrade 85m of existing footpath to shared path on eastern side of Morrison Avenue between Crown Street and Argyle Street. Construct new refuge on eastern leg of Morrison Avenue/Crown Street	В	Yes*	\$147,140
MUB05	Map A	Mullumbimby	Construct 35m of new shared path on northern side of Argyle Street east of Prince Street. Upgrade 50m of existing footpath to shared path on northern side of Argyle Street west of Morrison Avenue. Upgrade 30m of existing footpath to shared path on northern side of Argyle Street east of Morrison Avenue. Construct 125m of new shared path on northern side of Argyle Street west of Queen Street. Construct 310m of new shared path on northern side of Argyle Street east of Queen Street. Construct new raised crossing on northern leg and new refuge on southern leg of Queen Street/Argyle Street intersection	В	Yes	\$367,800
MUB06	Мар А	Mullumbimby	Construct 110m of new footpath on western side of Stuart Street between Fern Street and Whian Street. Upgrade 100m of existing footpath on western side of Stuart Street north of Whian Street. Construct 70m of new footpath on eastern side of Stuart Street north of Fern Street. Upgrade 150m of existing footpath on eastern side of Stuart Street between existing	В	No	\$154,740



WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST
			footpath south of Burringbar Street and new footpath north of Fern Street. Construct new refuge on western leg of Stuart Street/Whian Street intersection			
MUB07	Мар А	Mullumbimby	Upgrade 95m of existing footpath on western side of Stuart Street south of Tincogan Street. Upgrade 165m of existing footpath on western side of Stuart Street north of Tincogan Street. Construct 10m of new footpath on western side of Stuart Street south of Tyagarah Street. Upgrade 65m of existing footpath on eastern side of Stuart Street south of Tincogan Street. Construct 280m of new shared path on eastern side of Stuart Street between Tincogan Street and Train Street	В	Yes*	\$267,480
MUB08	Map A	Mullumbimby	Construct 5m of new footpath on western side of Stuart Street north of Tyagarah Street. Upgrade 210m of existing footpath on western side of Stuart Street south of Mill Street. Construct 115m of new shared path on eastern side of Stuart Street between Mill Street and Train Street	В	Yes*	\$132,060
MUB09	Map A	Mullumbimby	Construct 125m of new footpath on eastern side of Murwillumbah Road/Coolamon Scenic Drive south of Laurel Avenue	В	No	\$45,000
MUB10	Map A	Mullumbimby	Upgrade 40m of existing shared path on southern side of Main Arm Road east of Palm Avenue. Construct 85m of new shared path on southern side of Main Arm Road east of Chinbible Avenue. Construct new raised crossing on southern side of Main Arm Road at Palm Avenue and Pine Avenue and new refuge at Chinbible Avenue	В	Yes	\$148,200
MUB11	Map A	Mullumbimby	Construct 290m of new shared path on eastern side of Tuckeroo Avenue between Left Bank Road and Hottentot Crescent. Construct new refuge on eastern leg of Tuckeroo Avenue/Hottentot Crescent intersection	В	Yes	\$192,840
MULLUMBIMI	BY SUB-TOTAL	(PRIORITY B)				\$2,559,020
MUC01	Map A	Mullumbimby	Upgrade 465m of existing footpath to shared path between Tuckeroo Avenue and Azalea Street. Upgrade 50m of existing footpath to shared path between Hottentot Crescent and upgraded path	С	Yes	\$257,500
MUC02	Map A	Mullumbimby	Construct 575m of new shared path on southern side of Main Arm Road between Chinbible Avenue and Hinterland Christian College. Construct new refuge across Main Arm Road outside Hinterland Christian College and on southern leg of Main Arm Road/Coral Avenue intersection	С	Yes	\$375,600
MUC03	Map A	Mullumbimby	Construct 530m of new footpath on western side of Pine Avenue between Main Arm Road and Riverside Drive	С	No	\$191,160
MUC04	Map A	Mullumbimby	Upgrade 30m of existing footpath to shared path on northern side of Murwillumbah Road west of Casuarina Street	С	Yes	\$14,000



WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST
MUC05	Map A	Mullumbimby	Construct 165m of new footpath on both sides of Gordon Street between Murwillumbah Road and Tyagarah Street	С	No	\$118,080
MUC06	Мар А	Mullumbimby	Construct 105m of new footpath on western side and 175m on eastern side of Gordon Street north of Tyagarah Street. Construct 15m of new shared path between Gordon Street and existing path	С	Yes*	\$109,200
MUC07	Map A	Mullumbimby	Construct 60m of new footpath on southern side of Train Street between Stuart Street and McGoughans Lane	С	No	\$22,320
MUC08	Мар А	Mullumbimby	Construct 130m of new shared path on northern side of Poinciana Street and 220m on eastern side of Morrison Avenue. Upgrade 120m of existing footpath to shared path on eastern side of Morrison Avenue	С	Yes	\$269,900
MUC09	Map A	Mullumbimby	Construct 445m of new shared path on northern side of Argyle Street west from Manns Road	С	Yes	\$267,600
MUC10	Map A	Mullumbimby	Construct 200m of new footpath on southern side of Argyle Street between King Street and James Street	С	No	\$72,000
MUC11	Map A	Mullumbimby	Construct 280m of new shared path on northern side of Fern Street. Construct 5m of new footpath on southern side of Station Street north from Fern Street	С	Yes*	\$168,240
MULLUMBIME	BY SUB-TOTAL	(PRIORITY C)				\$1,865,600
MUU01	Map A	Mullumbimby	Construct 400m of new shared path on western side of Manns Road between Mullumbimby Road and end of Manns Road (north)	U	Yes	\$240,000
MUU02	Мар А	Mullumbimby	Construct 2,695m of new shared path on northern side of Mullumbimby Road between Manns Road and Gulgan Road. Construct 65m of new shared path on the southern side of Gulgan Road north of Mullumbimby Road. Construct new raised crossing on northern leg of Manns Road/Mullumbimby Road and new refuge on eastern leg of Mullumbimby Road/Gulgan Road	U	Yes	\$1,662,600
MUU03	Map A	Mullumbimby	Construct 795m of new shared path through community garden between Jubilee Avenue and Stuart Street	U	Yes	\$475,800
MUU04	Map A	Mullumbimby	Construct 180m of new shared path on northern side of Azalea Street south of Coolamon Avenue. Construct 210m of new shared path (including bridge) across river north of Coolamon Avenue	U	Yes	\$1,234,600
MUU05	Map A	Mullumbimby	Construct 555m of new shared path on northern side of Azalea Street between Coolamon Avenue and end of Azalea Street (west)	U	Yes	\$332,400
MUU06	Мар А	Mullumbimby	Construct 2,785m of new shared path on southern side of Left Bank Road between Tuckeroo Avenue and Mullumbimby Steiner School. Construct new refuge on eastern leg of Tuckeroo Avenue/Left Bank Road intersection	U	Yes	\$1,685,400



WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST	
MUU07	Map A	Mullumbimby	Construct 110m of new shared path between south of Kamala Court and river. Construct 1240m of new shared path on southern side of Riverside Drive between Kamala Court proposed river crossing and Burringbar Street across river (including bridge)	U	Yes	\$2,811,200	
MUU08	Map A	Mullumbimby	Construct 580m of new shared path along river between Murwillumbah Road and Stuart Street. Upgrade 135m of existing footpath along river between proposed new shared paths	U	Yes	\$416,700	
MUU09	Map A	Mullumbimby	Construct 175m of new shared path on northern side of Mill Street between Stuart Street and multi use corridor (east)	U	Yes	\$103,800	
MUU10	Map A	Mullumbimby	Construct 80m of new footpath on western side of Dalley Street south of Mill Street. Upgrade 125m of existing footpath on western side of Dalley Street north of Tyagarah Street. Construct 25m of new footpath on eastern side of Dalley Street south of Mill Street. Upgrade 180m of existing footpath on eastern side of Dalley Street north of Tyagarah Street	U	No	\$128,040	
MUU11	Map A	Mullumbimby	Upgrade 175m of existing footpath on western side of Dalley Street between Tyagarah Street and Tincogan Street. Upgrade 175m of existing footpath on eastern side of Dalley Street between Tyagarah Street and Tincogan Street. Upgrade 165m of existing footpath on western side of Dalley Street between Tincogan Street and Burringbar Street. Upgrade 25m of existing footpath on eastern side of Dally Street south of Tincogan Street	U	No	\$162,300	
MUU12	Map A	Mullumbimby	Construct 90m of new footpath on western and southern sides of Train Street and Station Street east of McGoughans Lane. Upgrade 250m of existing footpath on western side of Station Street north of Tincogan Street	U	No	\$106,740	
MUU13	Map A	Mullumbimby	Upgrade 280m of existing footpath on western side of Station Street north of Fern Street	U	No	\$83,700	
MUU14	Map A	Mullumbimby	Upgrade 60m of existing footpath on western side of Dalley Street north of Whian Street. Upgrade 85m of existing footpath on eastern side of Dalley Street north of Whian Street	U	No	\$42,900	
MUU15	Map A	Mullumbimby	Construct 70m of new shared path along northern boundary of tennis courts on Jubilee Avenue to connect to existing shared path to the north	U	Yes	\$43,200	
MUU16	Map A	Mullumbimby	Construct 12,032m of new shared path (multi use corridor) between Fern Street and Bayshore Drive (Byron Bay West)	U	Yes	\$7,219,200	
MUU17	Map A	Mullumbimby	Construct 5,005m of new shared path (multi use corridor) between Mill Street and Coolamon Scenic Drive (Ocean Shores)	U	Yes	\$3,002,400	
MULLUMBIME	MULLUMBIMBY SUB-TOTAL (UNPRIORITISED)						
MULLUMBIME	BY TOTAL					\$25,418,760	

* Works are partially contained within Byron Shire Bike Plan



Table 5: Schedule of future works – Byron Bay (West)

WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST
BBA01	Мар В	Byron Bay West	Construct 1,540m of new shared path on southern side of Ewingsdale Road between Cavanbah Centre and Sunrise Boulevard. Construct 310m of new shared path on the northern side of Ewingsdale Road on both approaches to Bayshore Drive. Construct 85m of new shared path at the Ewingsdale Road/Sunrise Boulevard intersection. Upgrade existing refuge across Ewingsdale Road near Cavanbah Centre. Construct new raised crossing on northern and southern leg of Ewingsdale Road/Bayshore Drive intersection, across Banksia Drive and Sunrise Boulevard. Construct new refuge across Ewingsdale Road east of Bayshore Drive and on western and eastern leg of Ewingsdale Road/Sunrise Boulevard intersection. Construct new refuge along Sunrise Boulevard across holiday park entrance	A	Yes	\$1,417,200
BBA02	Мар В	Byron Bay West	Construct 365m of new shared path on the eastern side of Bayshore Drive between Grevillea Street and Centennial Circuit. Upgrade 185m of existing footpath to shared path along eastern side of Bayshore Drive between Ewingsdale Road and Grevillea Street and between Centennial Circuit and Sunrise Boulevard. Construct new raised crossing on eastern side of Bayshore Drive at Sunrise Boulevard, Banksia Drive and Grevillea Street	А	No	\$399,800
BBA15	Map B	Byron Bay West	Construct 499m of new shared path through the diagonal easement between Banksia Drive and the intersection of Bayshore Drive and Banksia Drive.	А	Yes	\$299,400
BYRON BAY (V	VEST) SUB-TOT	TAL (PRIORITY A)				\$2,116,400
BBB01	Мар В	Byron Bay West	Construct 250m of new shared path on southern side of Ewingsdale Road between Byron Central Hospital and William Flick Lane. Construct new raised crossing on southern side of Ewingsdale Road/William Flick Lane and Ewingsdale Road/Byron Central Hospital entry road intersection	В	No	\$211,200
BBB02	Map B	Byron Bay West	Construct new raised crossing on southern leg of Ewingsdale Road/McGettigans Lane intersection	В	Yes*	\$30,000
BYRON BAY (V	VEST) SUB-TOT	TAL (PRIORITY B)				\$241,200
BBC01	Мар В	Byron Bay West	Construct 445m of new shared path on northern side of Ewingsdale Road between Ewingsdale Road and Woodford Lane. Construct new raised crossing on western side of Ewingsdale Road/Byron Central Hospital entry road intersection	С	Yes	\$296,400
BBC02	Мар В	Byron Bay West	Construct 625m of new footpath on the western side of Bayshore Drive between Ewingsdale Road and Penny Lane	С	Yes	\$225,720
BBC03	Map B	Byron Bay West	Construct 995m of new shared path on western side of Centennial Circuit. Construct new refuge on northern leg of Bayshore Drive/Centennial Circuit intersection	С	No	\$612,000



WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST
BBC04	Мар В	Byron Bay West	Construct 320m of new footpath on eastern side of Brigantine Street and 55m on southern and 55m on northern side of Centennial Court between Brigantine Street and Bayshore Drive	С	No	\$114,840
BBC05	Мар В	Byron Bay West	Upgrade 640m of existing footpath to shared path on western side of Bayshore Drive north from rail line	С	Yes	\$320,500
BBC06	Map B	Byron Bay West	Construct 205m of new shared path on western side of Julian Rocks Drive/northern side of Sunrise Boulevard	С	No	\$123,600
BBC07	Мар В	Byron Bay West	Construct 520m of new footpath on southern side of Sunrise Boulevard between Julian Rocks Drive and Belongil Crescent. Construct 20m of new shared path from Sunrise Boulevard to Ti-Tree Place	С	No	\$198,840
BBC08	Мар В	Byron Bay West	Construct 660m of new footpath on western side of Banksia Drive between Bayshore Drive and Ewingsdale Road. Construct 80m of new footpath on southern side of Fern Place	С	No	\$266,400
BBC09	Мар В	Byron Bay West	Construct 445m of new shared path on southern side of Grevillea Street between Bayshore Drive and Banksia Drive	С	Yes	\$267,600
BYRON BAY (W	VEST) SUB-TOT	AL (PRIORITY C)				\$2,425,900
BBU14	Map B	Byron Bay West	Construct 51m of new footpath from Centennial Circuit across private land towards the Cavanbah Centre.	U	No	\$18,360
BBU15	Мар В	Byron Bay West	Construct 80m of new footpath from Centennial Circuit across private land to Ewingsdale Road.	U	No	\$28,800
BYRON BAY (WEST) SUB-TOTAL (UNPRIORITISED)						
BYRON BAY (W	VEST) TOTAL					\$4,830,660



Table 6: Schedule of future works – Byron Bay (Central)

WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST
BBA03	Мар С	Byron Bay Central	Construct 880m of new shared path east from Kendall Street and 15m along beach foreshore. Upgrade 145m of existing footpath to shared path along beach foreshore	А	Yes	\$606,700
BBA04	Мар С	Byron Bay Central	Construct 120m of mixed traffic (shared zone) on Jonson Street between Lawson Street and Bay Street. Construct new zebra crossings on each leg of Jonson Street/Bay Street intersection (subject to Jonson Street mixed traffic treatment)	A	Yes*	\$96,300
BBA05	Map C	Byron Bay Central	Construct new zebra crossing on each leg of Fletcher Street/Bay Street intersection	А	No	\$45,000
BBA06	Map C	Byron Bay Central	Construct 135m of new shared path on eastern side of Middleton Street from beach foreshore to Lawson Street	А	No	\$80,400
BBA07	Map C	Byron Bay Central	Construct new raised crossing on northern and southern leg of Middleton Street/Lawson Street intersection	А	No	\$60,000
BBA08	Map C	Byron Bay Central	Construct new raised crossing on each leg of Fletcher Street/Byron Street intersection	А	No	\$120,000
BBA09	Мар С	Byron Bay Central	Construct new raised crossing on northern leg and new refuge on eastern leg of Fletcher Street/Marvell Street intersection. Construct new raised crossing on eastern leg of Jonson Street/Marvell Street intersection	A	No	\$60,000
BBA10	Map C	Byron Bay Central	Construct 105m of new footpath on eastern side of Middleton Street between Marvell Street and Carlyle Street. Construct 55m of new footpath on western side of Middleton Street between Marvell Street and Marvell Lane. Construct new raised crossing on western and eastern leg of Middleton Street/Marvell Street intersection	A	No	\$117,600
BBA11	Map C	Byron Bay Central	Construct new refuge on eastern leg of Jonson Street/Carlyle Street intersection	А	No	\$15,000
BBA12	Мар С	Byron Bay Central	Construct 110m of new footpath on eastern side and 115m on western side of Middleton Street between Carlyle Street and Kingsley Street. Construct new raised crossing on southern leg of Middleton Street/Carlyle Street intersection	А	No	\$111,000
BBA13	Мар С	Byron Bay Central	Upgrade 240m of existing footpath on western side and 245m on eastern side of Jonson Street between Kingsley Street and Browning Street. Upgrade 115m of existing footpath on southern side and 140m on northern side of Browning Street between Jonson Street and Bangalow Road. Construct new refuge on eastern leg of Jonson Street/Kingsley Street intersection and Jonson Street/Ruskin Street intersection. Construct new zebra crossing on southern leg of Jonson Street/Kingsley Street intersection	A	No	\$270,000



WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST
BBA14	Map C	Byron Bay Central	Upgrade 15m of existing footpath to shared path at the Browning Street/Bangalow Road intersection. Upgrade 65m of existing footpath to shared path on western side of Tennyson Street from Browning Street to Ruskin Lane and 40m from Ruskin Street to Kingsley Lane. Construct 325m of new shared path from Kingsley Lane to Marvell Street. Upgrade 65m of existing footpath on northern side of Marvell Street. Construct new raised crossing on each leg of Tennyson Street/Browning Street intersection and Tennyson Street/Ruskin Street intersection. Construct new raised crossing on western and eastern leg of Tennyson Street/Kingsley Street intersection and eastern leg of Tennyson Street/Carlyle Street intersection. Construct new refuge on each leg of Tennyson Street/Marvell Street intersection	A	Yes*	\$652,780
BYRON BAY (C	ENTRAL) SUB-	TOTAL (PRIORITY A)				\$2,234,780
BBB03	Map C	Byron Bay Central	Construct 820m of new shared path (multi use corridor) between Bayshore Drive and Shirley Street. Construct 15m of new shared path on eastern side of Kendall Street. Upgrade 15m of existing footpath to shared path on eastern side of Kendall Street. Construct 70m of new shared path from multi use corridor to proposed new shared path (BBA03)	В	Yes	\$1,857,800
BBB04	Мар С	Byron Bay Central	Upgrade 195m of existing footpath to shared path near Byron Bay Surf Life Saving Club west	В	Yes	\$96,500
BBB05	Мар С	Byron Bay Central	Construct 85m of new shared path across multi use corridor from Butler Street to laneway west of Jonson Street/Byron Street intersection. Construct new zebra crossing on northern leg of Jonson Street/Byron Street intersection	В	Yes	\$75,000
BBB06	Map C	Byron Bay Central	Construct new raised crossing on northern, eastern and southern leg of Lawson Street/Massinger Street intersection	В	No	\$90,000
BBB07	Мар С	Byron Bay Central	Construct 290m of new shared path on western side of Massinger Street between Lawson Street and Marvell Street. Construct 50m of new footpath on northern side of Marvell Street west of Massinger Street	В	Yes*	\$250,200
BBB08	Map C	Byron Bay Central	Construct 250m of new footpath on eastern side of Massinger Street south of Lawson Street	В	Yes	\$90,720
BBB09	Мар С	Byron Bay Central	Construct 95m of new footpath on western side of Massinger Street between Marvell Street and end of existing footpath north of Carlyle Street. Construct 110m of new footpath on western side of Massinger Street between Carlyle Street and Kingsley Street. Construct new refuge on western leg of Massinger Street/Carlyle Street intersection	В	Yes	\$87,720
BBB10	Map C	Byron Bay Central	Construct 115m of new footpath on western side of Cowper Street between Marvell Street and Carlyle Street	В	No	\$41,040



WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST
BBB11	Map C	Byron Bay Central	Construct 120m of new footpath on western side of Cowper Street between Carlyle Street and Kingsley Street	В	Yes	\$43,200
BBB12	Map C	Byron Bay Central	Construct 115m of new footpath on western side of Cowper Street between Kingsley Street and Ruskin Street	В	No	\$40,680
BBB13	Мар С	Byron Bay Central	Construct 105m of new footpath on western side of Cowper Street between Ruskin Street and Browning Street	В	Yes	\$37,800
BBB14	Мар С	Byron Bay Central	Construct 195m of new footpath on northern side of Browning Street between Cowper Street and end of existing footpath east of Tennyson Street	В	Yes	\$70,200
BBB15	Мар С	Byron Bay Central	Construct 205m of new footpath on northern side of Ruskin Street between Tennyson Street and Cowper Street. Construct 205m of new footpath on southern side of Ruskin Street between Tennyson Street and Cowper Street. Construct new refuge on western side of Cowper Street/Ruskin Street intersection	В	Yes*	\$162,960
BBB16	Мар С	Byron Bay Central	Construct 210m of new footpath on northern side of Ruskin Street between Cowper Street and Massinger Street. Construct 190m of new footpath on southern side of Ruskin Street between Cowper Street and Massinger Street. Construct new refuge on northern, eastern and southern side of Cowper Street/Ruskin Street intersection	В	Yes*	\$189,360
BBB17	Мар С	Byron Bay Central	Construct 215m of new footpath on northern side of Kingsley Street between Tennyson Street and Cowper Street. Construct 210m of new footpath on southern side of Kingsley Street between Tennyson Street and Cowper Street. Construct new refuge on western side of Cowper Street/Kingsley Street intersection	В	Yes	\$168,000
BBB18	Мар С	Byron Bay Central	Construct 215m of new footpath on northern side of Kingsley Street between Cowper Street and Massinger Street. Construct 215m of new footpath on southern side of Kingsley Street between Cowper Street and Massinger Street. Construct new refuge on northern, eastern and southern side of Cowper Street/Kingsley Street intersection	В	No	\$200,880
BBB19	Мар С	Byron Bay Central	Construct 215m of new footpath on northern side of Carlyle Street between Tennyson Street and Cowper Street. Construct 215m of new footpath on southern side of Carlyle Street between Tennyson Street and Cowper Street. Construct new refuge on western side of Cowper Street/Carlyle Street intersection	В	Yes	\$168,360
BBB20	Мар С	Byron Bay Central	Construct 210m of new footpath on northern side of Carlyle Street between Cowper Street and Massinger Street. Construct 220m of new footpath on southern side of Carlyle Street between Cowper Street and Massinger Street. Construct new refuge on northern, eastern and southern side of Cowper Street/Carlyle Street intersection	В	No	\$198,720
BBB21	Мар С	Byron Bay Central	Construct new refuge across Massinger Street between Daniels Street and Marvell Street	В	No	\$15,000



WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST
BYRON BAY (C	ENTRAL) SUB-	TOTAL (PRIORITY B)				\$3,884,140
BBC10	Map C	Byron Bay Central	Construct 100m of new footpath on southern side of Border Street between existing footpaths	С	Yes*	\$36,720
BBC11	Мар С	Byron Bay Central	Construct 175m of new shared path on eastern side of Kendall Street between rail line and Shirley Street. Construct new refuge on eastern leg of Ewingsdale Road/Kendall Street intersection	С	No	\$120,000
BBC12	Map C	Byron Bay Central	Upgrade 330m of existing footpath on northern side of Shirley Street west from Milton Street	С	No	\$99,600
BBC13	Map C	Byron Bay Central	Upgrade 765m of existing footpath on southern side of Shirley Street between Kendall Street and Shirley Street/Butler Street intersection. Construct 40m of new footpath on western side of Butler Street south from Shirley Street/Butler Street intersection. Construct 55m of new footpath on eastern side of Dryden Street between Shirley Street and Shirley Lane. Construct 60m of new footpath and upgrade 55m of existing footpath on western side of Wordsworth Street. Construct 120m of new footpath on eastern side of Wordsworth Street	С	No	\$344,520
BBC14	Мар С	Byron Bay Central	Construct 965m of new shared path (multi use corridor) between Shirley Street and Browning Street. Construct 125m of new footpath across rail line between Jonson Street and Butler Street. Construct 80m of new footpath on northern side of Somerset Street west from Butler Street. Construct 50m of new shared path between Butler Street and multi use corridor, north of Burns Street. Construct new raised crossing across Shirley Street along multi use corridor and on western and southern leg of Butler Street/Somerset Street intersection. Construct new refuge on northern leg of proposed Jonson Street/Byron Bypass intersection	С	Yes	\$788,040
BBC15	Map C	Byron Bay Central	Construct 490m of new footpath on southern side of Lawson Street between Lawson Street/Massinger Street intersection and existing path near Gilmore Crescent	С	No	\$175,680
BBC16	Map C	Byron Bay Central	Construct 450m of new footpath on southern side of Lawson Street/Lighthouse Road between Lawson Street/Massinger Street intersection and Lee Lane. Construct new refuge on southern leg of Lawson Street/Tallow Beach Road and Lawson Street/Paterson Street intersection	С	No	\$191,280
BBC17	Мар С	Byron Bay Central	Construct 160m of new footpath on western side of Tallow Beach Road between Lawson Street and existing path	С	No	\$57,240
BBC18	Мар С	Byron Bay Central	Construct 235m of new shared path on northern side of Lighthouse Road between Brooke Drive and a new pedestrian crossing. Construct new pedestrian crossing across Lighthouse Road. Construct 590m of new shared path on southern side of south	С	Yes	\$540,000



WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST
			Lighthouse Drive between new pedestrian crossing and existing footpath. Construct new refuge across Palm Valley Drive			
BBC19	Мар С	Byron Bay Central	Construct 380m of new footpath on northern side of Lighthouse Road between Palm Valley Drive and lighthouse car park. Construct new zebra crossing across Lighthouse Road between existing car park and footpath	С	Yes	\$152,520
BBC20	Map C	Byron Bay Central	Construct 125m of new footpath on western side of Marine Parade between Palm Valley Drive and beach access	С	Yes	\$44,280
BBC21	Мар С	Byron Bay Central	Construct 70m of new footpath on northern side of Marine Parade between existing paths	С	Yes	\$25,920
BBC22	Map C	Byron Bay Central	Construct new refuge on eastern side of Bangalow Road at Paterson Street, Cooper Street, Scott Street, Mackay Street, Mahogany Street and Ironbark Avenue	С	Yes	\$90,000
BYRON BAY (C	ENTRAL) SUB-	TOTAL (PRIORITY C)				\$2,665,800
BBU01	Map C	Byron Bay Central	Construct 730m of new shared path along Skinners Shoot Road/Gordon Street/Wordsworth Street/Burns Street/Butler Street. Upgrade 60m of existing footpath to shared path along Gordon Street	U	Yes	\$468,200
BBU02	Map C	Byron Bay Central	Construct 820m of new shared path adjacent proposed Byron Bypass between Byron Street and Browning Street	U	Yes*	\$492,600
BBU03	Мар С	Byron Bay Central	Upgrade 160m of existing footpath to shared path through Sandhills to east opposite Lateen Lane	U	Yes	\$79,500
BBU04	Мар С	Byron Bay Central	Construct 195m of new shared path through Sandhills to east opposite Byron Street. Construct new raised crossing on northern, southern and western leg of Middleton Street/Byron Street intersection	U	Yes	\$206,400
BBU05	Map C	Byron Bay Central	Construct 120m of new footpath on western side of Tennyson Street north of Marvell Street. Construct 120m of new shared path on eastern side of Tennyson Street north of Marvell Street. Construct 250m new shared path on western side of Gilmore Crescent south of Lawson Street. Construct new refuge on western leg of Lawson Street/Gilmore Crescent intersection	U	Yes	\$280,920
BBU06	Мар С	Byron Bay Central	Construct 215m of new shared path on northern boundary of Byron Bay Recreational Grounds between Tennyson Street and Cowper Street	U	No	\$130,200
BBU07	Мар С	Byron Bay Central	Construct 385m of new shared path on western boundary of Cowper Street road reserve between Marvell Street and Lawson Street. Construct new refuge across Lawson Street	U	No	\$247,200
BBU08	Map C	Byron Bay Central	Construct 275m of new shared path through Sandhills to west opposite Kipling Street. Construct new refuge on northern leg of Massinger Street/Kipling Street intersection	U	No	\$180,600



WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST
BBU09	Мар С	Byron Bay Central	Construct 15m of new footpath on eastern and southern sides of Palm Valley Drive and Marine Parade on intersection. Construct 125m of new footpath on western side of Palm Valley Drive south of Marine Parade. Construct 125m of new stairs through park between Palm Valley Drive and Lighthouse Road. Construct new refuge on eastern and southern leg of Palm Valley Drive/Marine Parade intersection	U	No	\$105,000
BBU10	Map C	Byron Bay Central	Construct 225m of new footpath on southern side of Kingsley Street between Jonson Street and Tennyson Street	U	Yes	\$81,360
BBU11	Мар С	Byron Bay Central	Construct 190m of new footpath on northern side of Ruskin Street between Jonson Street and Tennyson Street. Construct 190m of new footpath on southern side of Ruskin Street between Jonson Street and Tennyson Street	U	No	\$137,520
BBU12	Мар С	Byron Bay Central	Construct 65m of new footpath on the northern side of Browning Street east of Cowper Street. Construct 135m of new footpath on the southern side of Browning Street west of Paterson Street. Construct 50m of new stairs links footpaths on Browning Street between Cowper Street and Paterson Street	U	No	\$86,640
BBU16	Map C	Byron Bay Central	Construct new pedestrian crossing on Johnson Street to connect into Mercato Shopping Centre	U	No	\$15,000
BYRON BAY (CENTRAL) SUB-TOTAL (UNPRIORITISED)						\$2,511,140
BYRON BAY (C	ENTRAL) TOT	AL .				\$11,295860



Table 7: Schedule of future works – Byron Bay (South)

WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST
BBB22	Map D	Byron Bay South	Construct 65m of new footpath on western side of Bangalow Road south of Cumbebin Park. Construct 265m of new footpath on western side of Bangalow Road between existing footpath 95m north of Oakland Court and existing footpath 35m south of Blackbutt Place. Construct 155m of new shared path on western side of Bangalow Road north of Old Bangalow Road. Construct 50m of new shared path on western side of Bangalow Road south of Old Bangalow Road. Construct new refuge on western side of Bangalow Road at Constellation Close, Keats Street, Oakland Court and Old Bangalow Road. Construct new refuge on eastern side of Bangalow Road at Wollumbin Street and Keats Street. Construct new raised crossing on southern leg of Bangalow Road/Wollumbin Street intersection. Construct new refuge across Bangalow Road south of Mahogany Drive	В	No	\$391,680
BBB23	Map D	Byron Bay South	Upgrade existing refuge across Bangalow Road south of Old Bangalow Road, across Broken Head Road and on eastern leg of Bangalow Road/Arakwal Court	В	No	\$45,000
BYRON BAY (S	OUTH) SUB-TO	OTAL (PRIORI	ТҮ В)			\$436,680
BBC23	Map D	Byron Bay South	Upgrade 375m of existing footpath to shared path on northern side of Old Bangalow Road/Cemetery Road from Lilli Pilli Drive to existing path	С	No	\$187,500
BYRON BAY (S	OUTH) SUB-TO	OTAL (PRIORI	TY C)			\$187,500
BBU13	Map D	Byron Bay South	Construct 1,455m of new shared path (multi use corridor) between Byron Bypass and Old Bangalow Road. Construct 340m of new shared path between multi use corridor and Wright Place. Construct new refuge across Bangalow Road near Wright Place	U	No	\$1,091,400
BYRON BAY (S	SOUTH) SUB-TO	OTAL (UNPRIC	DRITISED)			\$1,091,400
BYRON BAY (S	SOUTH) TOTAL					\$1,715,580

Note: cost estimates are high level and based on assumed unit rates. Actual costs will vary depending on site conditions and construction methodology



Table 8: Schedule of future works – Suffolk Park

WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST
SPB01	Map E	Suffolk Park	Construct 60m of new shared path on western side of Broken Head Road south of existing shared path which connects to Redgum Place. Construct 325m of new footpath on western side of Broken Head Road north of Beech Drive (north) intersection. Construct 300m of new shared path on eastern side of Broken Head Road between Beech Drive (north) intersection and new crossing. Upgrade 115m of existing footpath to shared footpath on eastern side of Broken Head Road/Beech Drive (north) intersection. Construct new refuge across Broken Head Road outside The Byron at Byron resort	В	Yes*	\$405,540
SPB02	Map E	Suffolk Park	Construct 40m of new shared path on eastern side of Broken Head Road/Beech Drive (south) intersection connecting to existing shared path. Upgrade 35m of existing footpath to shared path on eastern side of Broken Head Road north of existing shared path. Construct 350m of new shared path on eastern side of Broken Head Road between footpath upgrade at Broken Head Road/Beech Drive (north) intersection and footpath upgrade north of existing shared path. Upgrade existing shared path to reastern to raised crossing	В	Yes	\$281,900
SPB03	Map E	Suffolk Park	Construct 615m of new footpath on western side of Broken Head Road between Beech Drive (north) intersection and Beech Drive (south) intersection. Construct new raised crossing on northern leg of Broken Head Road/Beech Drive (south) intersection	В	No	\$251,040
SPB04	Map E	Suffolk Park	Construct 30m of new shared path on northern side of Broken Head Road/Beech Drive intersection (south) east of existing footpath. Upgrade 40m of existing footpath to shared path on northern side of Beech Drive each of Broken Head Road/Beech Drive intersection (south). Construct 70m of new shared path on northern side of Beech Drive west of shared path upgrade. Construct new raised crossing on southern and western leg of Broken Head Road/Beech Drive (south) intersection	В	Yes	\$136,600
SPB05	Map E	Suffolk Park	Construct 415m of new footpath on southern side of Clifford Street between Broken Head Road and Alcorn Street. Construct new refuge on eastern leg of Broken Head Road/Clifford Street intersection, northern leg of Clifford Street/Armstrong Street intersection and northern and western leg of Clifford Street/Alcorn Street intersection	В	No	\$209,760
SUFFOLK PAR	SUFFOLK PARK SUB-TOTAL (PRIORITY B)					
SPC01	Map E	Suffolk Park	Construct 550m of new shared path on eastern side of Beech Drive. Upgrade 980m of existing footpath to shared path surrounding lake	С	Yes	\$819,500
SPC02	Map E	Suffolk Park	Construct 1,285m of new footpath on eastern side and 1,230m on western side of Alcorn Street. Construct new refuge on western leg of Alcorn Street/Wareham Street intersection	С	No	\$920,760



WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST
SUFFOLK PAR	K SUB-TOTAL (PRIORITY C)				\$1,740,260
SPU01	Map E	Suffolk Park	Upgrade 90m of existing footpath between Broken Head Road and Redgum Place. Construct 1250m of new footpath on outer side of Beech Drive between roundabouts with Broken Head Road. Construct 245m of new footpath on inner side of Beech Drive (northern section) between existing paths. Construct 150m of new shared path east of Beech Drive to existing paths parallel to Pepperbush Street. Construct 65m of new shared path east of existing paths parallel to Pepperbush Street. Upgrade 30m of existing footpath to shared path from Lasiandra Close north to proposed shared path. Upgrade 30m of existing footpath to shared path from Pepperbush Street north to proposed shared path. Upgrade 140m of existing footpath to shared path between Beech Drive, Silky Oak Court and Tamarind Court. Upgrade 150m of existing footpath to shared path between Pepperbush Street, Tamarind Court and Beech Drive	U	Yes*	\$881,200
SPU02	Map E	Suffolk Park	Construct 55m of new shared path on eastern side of Dehnga Place between existing shared paths	U	Yes	\$31,800
SPU03	Map E	Suffolk Park	Construct 550m of new footpath on western side of Armstrong Street between Clifford Street and Wareham Street. Construct 220m of new footpath on northern side of Wareham Street between Armstrong Street and Alcorn Street	U	No	\$276,120
SUFFOLK PARK SUB-TOTAL (UNPRIORITISED)						\$1,189,120
SUFFOLK PAR	K TOTAL					\$4,214,220



Table 9: Schedule of future works – Bangalow

WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST
BAA01	Map F	Bangalow	Upgrade 380m of existing footpath to shared path on northern side of Byron Street between Byron Creek and Station Street. Construct 100m of mixed traffic (shared zone) on Station Lane. Construct new raised crossing at the Byron Street/Market Street intersection and the Byron Street/Station Street intersection	A	Yes	\$278,400
BAA02	Map F	Bangalow	Upgrade 95m of existing footpath on eastern side of Market Street	А	No	\$29,100
BAA03	Map F	Bangalow	Construct 145m of new footpath on eastern side of Station Street. Upgrade 95m of existing footpath on western side of Station Street. Construct new zebra crossing with kerb build outs on northern, eastern and southern legs and upgrade existing on the western leg of the Byron Street/Station Street intersection. Construct new zebra crossing and kerb build outs across Byron Street outside Post Office	A	No	\$156,420
BAA04	Map F	Bangalow	Construct new raised crossing across car park entry near Bangalow Hotel. Upgrade existing crossing on eastern leg of Lismore Road/Granuaille Road intersection to raised crossing	А	No	\$60,000
BAA05	Map F	Bangalow	Construct 760m of new shared path on northern side of Lismore Road between Rifle Range Road and Deacon Street. Upgrade 100m of existing footpath to shared path on southern side of Lismore Road between Deacon Street and Robinson Street. Construct new raised crossing on the western leg of the Lismore Road/Granuaille Road intersection and the southern leg of the Lismore Road/Robinson Street intersection. Construct new refuge on the western leg of the Lismore Road/Rifle Range Road intersection	A	Yes	\$581,500
BANGALOW S	UB-TOTAL (PR	IORITY A)				\$1,105,420
BAB01	Map F	Bangalow	Construct 3,930m of new shared path (multi use corridor) between Bangalow Road and Dudgeons Lane. Construct 30m of new shared path on southern side of Corlis Crescent between multi use corridor and Rankin Drive. Construct 70m of new shared path from Bangalow Showgrounds to Rankin Drive. Construct 25m of new shared path from multi use corridor to Bangalow Road. Construct 30m of new shared path from multi use corridor to Raftons Road/Leslie Street. Construct new refuge across Lismore Road	В	Yes	\$2,510,400
BAB02	Map F	Bangalow	Upgrade 350m of existing footpath on western side of Granuaille Road north from Keith Street. Upgrade 355m of existing footpath on eastern side of Granuaille Road north from Leslie Street. Construct 380m of new footpath on eastern side of Granuaille Road between Granuaille Crescent and end of existing footpath. Construct 10m of new shared path between Granuaille Road and Campbell Street. Construct new refuge at the Granuaille Road/Leslie Street intersection and new zebra crossing across Granuaille Road	В	Yes*	\$384,540



WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST
BAB03	Map F	Bangalow	Construct 120m of new footpath on southern side of Deacon Street west of Station Street. Construct 320m of new shared path on southern side of Deacon Street between Station Street and Ashton Street. Construct 90m of new shared path on eastern and southern sides of Ashton Street and Bangalow Road north of Deacon Street. Construct 35m of new shared path on southern side of Bangalow Road as underpass of Bangalow Road. Construct 35m of new shared path on northern side of Bangalow Road as underpass of Bangalow Road. Upgrade 200m of footpath on southern side of Byron Street west of Ashton Street. Construct new zebra crossing on the northern leg of the Station Street/Deacon Street intersection, new raised crossing on the southern leg of the Byron Street/Ashton Street intersection and new refuge on the eastern leg of the Byron Bay Road/Ballina Road intersection	В	Yes*	\$448,980
BANGALOW S	UB-TOTAL (PR			\$3,343,920		
BAC01	Map F	Bangalow	Construct new refuge on western leg of Byron Bay Road/Blackwood Crescent	С	Yes	\$15,000
BAC02	Map F	Bangalow	Construct 200m of new shared path on northern side of Byron Street from Blackwood Crescent to existing recreational path at Bangalow sports fields. Upgrade 165m of existing footpath to shared path on northern side of Byron Street from Blackwood Crescent to existing vehicle entrance to Bangalow sports fields	C	Yes	\$201,400
BAC03	Map F	Bangalow	Upgrade 50m of existing footpath to shared path on eastern side of existing vehicle entrance to Bangalow sports fields	С	Yes	\$23,000
BAC04	Map F	Bangalow	Construct 235m of new footpath on western side of Blackwood Crescent south from Wattle Place	С	No	\$84,600
BAC05	Map F	Bangalow	Construct 190m of new footpath on eastern side of Campbell Street from Granuaille Road to Leslie Street	С	No	\$67,680
BAC06	Map F	Bangalow	Construct 425m of new footpath on northern side of Keith Street/Raftons Road from Granuaille Road to Palm Tree Crescent	С	No	\$153,000
BAC07	Map F	Bangalow	Construct 370m of new shared path on southern side of Raftons Road from multi use corridor access to Rifle Range Road. Construct new refuge on eastern and southern legs of Raftons Road/Keith Street intersection and across Rifle Range Road	С	Yes	\$265,800
BAC08	Map F	Bangalow	Upgrade 380m of existing footpath to shared path on northern/western side of Sansom Street from Rifle Range Road to Tristania Street	С	Yes	\$189,000
BAC09	Map F	Bangalow	Construct 240m of new shared path on southern side of Tristania Street from intersection with existing path to Rifle Range Road	С	Yes	\$144,000



WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST	
BAC10	Map F	Bangalow	Construct 225m of new shared path on western side of Rifle Range Road between Sansom Street and Tristania Street. Upgrade 95m of existing footpath to shared path on western side of Rifle Range Road between Tristania Street and Lismore Road	С	Yes	\$183,000	
BAC11	Map F	Bangalow	Construct 150m of new footpath on northern/eastern side of Thomas Street between Charlotte Street and Meadows Close	С	No	\$54,360	
BANGALOW SUB-TOTAL (PRIORITY C)							
BAU01	Map F	Bangalow	Construct 145m of new shared path on southern side of Leslie Street north of Raftons Road/Leslie Street. Upgrade 95m of existing footpath north of new shared path	U	Yes	\$135,600	
BAU02	Map F	Bangalow	Construct 360m of new shared path along river between Deacon Street (Station Street access) and existing path from Charlotte Street	U	Yes	\$216,000	
BAU03	Map F	Bangalow	Construct 215m of new shared path (including bridge) across river between Deacon Street and new shared path	U	Yes	\$1,129,600	
BAU04	Map F	Bangalow	Construct 580m of new shared path along river between Deacon Street and west of Byron Creek bridge	U	Yes	\$1,347,400	
BAU05	Map F	Bangalow	Construct 685m of new shared path along river between west of Byron Creek bridge and multi use corridor	U	Yes	\$1,411,000	
BAU06	Map F	Bangalow	Construct 45m of new shared path (including bridge) across river between Bangalow Showgrounds and sports fields	U	Yes	\$2,025,800	
BAU07	Map F	Bangalow	Construct 125m of new shared path on southern side of Bangalow Road west of Ballina Road. Construct new raised crossing on the southern leg of the Byron Bay Road/Ballina Road intersection	U	Yes	\$103,800	
BAU08	Map F	Bangalow	Construct 8,910m of new shared path (multi use corridor) between Bangalow Road and Old Bangalow Road (Brunswick Heads)	U	Yes	\$5,345,400	
BAU09	Map F	Bangalow	Construct 10,890m of new shared path (multi use corridor) south of Dudgeons Lane	U	Yes	\$6,534,000	
BANGALOW SUB-TOTAL (UNPRIORITISED)							
BANGALOW T	OTAL					\$24,078,780	



Table 10: Schedule of future works – Ocean Shores, South Golden Beach, New Brighton and Billinudgel

WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST
OSA01	Map G	Ocean Shores et al	Construct 620m of new shared path between housing, park and Bindaree Way between Orana Road and Rajah Road	А	Yes	\$371,400
OSA02	Map G	Ocean Shores et al	Construct 2,010m of new shared path along river between Bindaree Way and Brunswick Valley Way. Construct 165m of new shared path from river path to Gara Court	А	Yes	\$1,306,800
OSA03	Map G	Ocean Shores et al	Construct 475m of new shared path on eastern side of Kolora Way/northern side of New Brighton Road between Larelar Court and Redgate Road. Upgrade 320m of existing footpath to shared path on eastern side of Kolora Way between Shara Boulevard and Larelar Court. Upgrade 330m of existing shared path on northern side of New Brighton Road west from Redgate Road	A	Yes	\$579,600
OSA04	Map G	Ocean Shores et al	Construct 380m of new shared path on eastern side of Rangal Road/Beach Avenue between Rangal Road and Redgate Road. Construct new refuge on northern and southern leg and new raised crossing on eastern leg of Beach Avenue/Helen Street intersection	А	Yes	\$289,200
OSA05	Map G	Ocean Shores et al	Construct 205m of new footpath on southern side of Wilfred Street between Bonanza Drive and Brunswick Street and 175m on northern side between rail line and Brunswick Street. Construct 10m of new shared path on northern side of Wilfred Street east from rail line. Upgrade 90m of existing footpath to shared path on northern side of Wilfred Street west from Mogo Place. Construct new refuge on northern leg of Wilfred Street/Mogo Place intersection	A	Yes*	\$201,840
OCEAN SHORE	S, SOUTH GOL	DEN BEACH, NE	W BRIGHTON AND BILLINUDGEL SUB-TOTAL (PRIORITY A)			\$1,881,840
OSB01	Map G	Ocean Shores et al	Upgrade 805m of existing footpath to shared path on southern side of Rajah Road between Brunswick Valley Way and Miram Place. Upgrade 255m of existing footpath to shared path on eastern side of Rajah Road north of Miram Place	В	Yes	\$528,000
OSB02	Map G	Ocean Shores et al	Construct 1,355m of new footpath on northern side of Orana Road between Warrambool Road and Balemo Drive. Construct 1,395m of new shared path on southern side of Orana Road between Warrambool Road and existing shared path north of Kuringai Way. Upgrade existing refuge on southern leg of Orana Road/Brunswick Valley Way intersection	В	Yes*	\$1,339,680
OSB03	Map G	Ocean Shores et al	Construct 740m of new footpath on northern side of Orana Road between Warrambool Road and Wirree Drive. Construct 425m of new shared path on southern side of Orana Road between Warrambool Road and Yengarie Way. Construct new raised crossing on southern leg and new refuge on eastern and western leg of Orana Road/Warrambool Road intersection. Construct new raised crossing on southern leg and new refuge on western leg of Orana Road/Yengarie Way intersection	В	Yes*	\$625,800



WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST
OSB04	Map G	Ocean Shores et al	Construct 2,350m of new shared path on eastern side of Balemo Drive between Orana Road and Brunswick Valley Way (north). Construct new refuge on northern leg of Balemo Drive intersection near pedestrian/cycle bridge to Billinudgel	В	Yes	\$1,425,600
OSB05	Map G	Ocean Shores et al	Upgrade 95m of existing footpath to shared path on western side of Brunswick Valley Way north of Bonanza Drive.	В	Yes	\$46,500
OSB06	Map G	Ocean Shores et al	Construct 450m of new shared path on western side of Shara Boulevard north of Palmer Avenue. Construct 120m of new shared path on western side of Shara Boulevard south of Palmer Avenue	В	Yes	\$340,800
OSB07	Map G	Ocean Shores et al	Construct 565m of new footpath on western side of Rajah Road/Yengarie Way between Yella Kool Drive and Orana Road	В	Yes	\$371,400
OSB08	Map G	Ocean Shores et al	Construct 820m of new shared path on southern side of Orana Road/eastern side of Yengarie Way from Wirree Drive to Bindaree Way. Upgrade 205m of existing footpath to shared path on eastern side of Rajah Road south from Bindaree Way. Construct new refuge on eastern leg of Orana Road/Wiree Drive intersection	В	Yes	\$1,306,800
OCEAN SHORES, SOUTH GOLDEN BEACH, NEW BRIGHTON AND BILLINUDGEL SUB-TOTAL (PRIORITY B)						\$4,306,380
OSC01	Map G	Ocean Shores et al	Upgrade 230m of existing footpath to shared path on northern side of Kallaroo Circuit west from Shara Boulevard	С	Yes	\$116,000
OSC02	Map G	Ocean Shores et al	Upgrade 585m of existing footpath to shared path on eastern side of Shara Boulevard between Kallaroo Circuit and Kolora Way. Upgrade existing refuge on eastern leg of Shara Boulevard/Kallaroo Circuit intersection to a raised crossing	C	Yes	\$321,500
OSC03	Map G	Ocean Shores et al	Construct 655m of new footpath on both sides of Helen Street between Kolora Way and Beach Avenue	С	No	\$470,880
OSC04	Map G	Ocean Shores et al	Upgrade 240m of existing footpath to shared path on eastern side of New Brighton Road north from Strand Avenue. Construct 10m of new shared path on northern side of New Brighton Road from Strand Avenue. Construct new refuge on northern leg of The Esplanade/Strand Avenue intersection	С	Yes	\$116,200
OSC05	Map G	Ocean Shores et al	Construct 515m of new footpath on northern side and 520m on southern side of Goondooloo Drive between Orana Road and Warrambool Road. Construct new refuge on northern and southern leg of Warrambool Road/Goondooloo Drive intersection	С	No	\$402,600
OSC06	Map G	Ocean Shores et al	Construct 690m of new shared path on eastern side of Warrambool Road between Orana Road and Rajah Road	С	Yes	\$414,600
OSC07	Map G	Ocean Shores et al	Construct 1,435m of new footpath on western/southern side of Kuringai Way/Yamble Way/Coomburra Crescent between Orana Road and Warrambool Road. Construct 1,505m of new footpath on eastern/northern side of Kuringai Way/Yamble Way/Coomburra	С	No	\$1,119,840



WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST
			Crescent between Orana Road and Warrambool Road. Construct 125m of new footpath on			
			western side of Warrambool Crescent between Coomburra Crescent and Orana Road.			
			Construct new refuge on western leg of Yamble Drive/Kuringai Way intersection			
OSC08	Map G	Ocean Shores et al	Construct 325m of new footpath on western/southern side of Bonanza Drive between Lucky Lane and Wilfred Street	С	No	\$117,000
		Ocean	Construct 1,510m of new shared path (multi use corridor) between Marshalls Creek and			
OSC09	Map G	Map G Shores et al	Stock Route Road. Construct new raised crossing across Wilfred Street along multi use corridor	С	Yes	\$937,200
OCEAN SHORE	OCEAN SHORES, SOUTH GOLDEN BEACH, NEW BRIGHTON AND BILLINUDGEL SUB-TOTAL (PRIORITY C)					\$4,015,820
OSU03	Map G		Ocean Construct 165m of new shared path on southern side of Tweed Valley Way and northern	U	Yes	6207 200
03003		Shores et al side of Yelgun Road between North Byron Parkland	side of Yelgun Road between North Byron Parklands and multi use corridor	0		\$307,200
OSU04	Map G	Ocean	Construct 4,670m of new shared path (multi use corridor) north of New Brighton Road	U	Yes	\$2,802,600
03004		Shores et al (Billinudgel)	(Billinudgel)	0		\$2,802,000
OCEAN SHORES, SOUTH GOLDEN BEACH, NEW BRIGHTON AND BILLINUDGEL SUB-TOTAL (UNPRIORITISED)					\$4,788,000	
OCEAN SHORES, SOUTH GOLDEN BEACH, NEW BRIGHTON AND BILLINUDGEL TOTAL					\$14,992,040	



Table 11: Schedule of future works – Brunswick Heads

WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST
BHA01	Мар Н	Brunswick Heads	Construct 205m of new footpath on eastern side of Mullumbimbi Street between Tweed Street and Park Street. Upgrade 200m of existing footpath on southern side of Mullumbimbi Street between Tweed Street and Park Street. Construct new zebra crossing on northern leg of Park Street/Mullumbimbi Street intersection	A	Yes	\$149,100
BHA02	Мар Н	Brunswick Heads	Upgrade 205m of existing footpath on northern side and 205m on southern side of Fingal Street between Tweed Street and Park Street. Construct new zebra crossing on northern and southern leg and upgrade existing on western leg of Park Street/Fingal Street intersection	A	Yes	\$168,300
BHA03	Мар Н	Brunswick Heads	Upgrade 165m of existing footpath on southern side of Fingal Street between Park Street and Brunswick Terrace	А	Yes	\$49,200
BHA04	Мар Н	Brunswick Heads	Construct 75m of new footpath on eastern side of Brunswick Terrace	А	No	\$27,000
BRUNSWICK HEADS SUB-TOTAL (PRIORITY A)						\$393,600
BHB01	Мар Н	Brunswick Heads	Construct 274m of new footpath on northern side of Park Street/Fawcett Street between Mona Lane and Mullumbimbi Street. Construct 82m of new footpath on southern side of Fawcett Street east of Tweed Street	В	Yes	\$128,160
BHB02	Мар Н	Brunswick Heads	Upgrade 315m of existing footpath on western side of Tweed Street between Fawcett Street and Booyun Street. Upgrade 300m of existing footpath on eastern side of Tweed Street between end of existing footpath 30m south of Fawcett Street and Booyun Street. Construct new refuge on each leg of the Tweed Street/Nana Street, Tweed Street/Booyun Street, Tweed Street/Fingal Street and Tweed Street/Mullumbimbi Street intersections. Upgrade existing refuge on eastern leg of Tweed Street/Fawcett Street intersection	В	Yes	\$438,900
BHB03	Мар Н	Brunswick Heads	Construct 490m of new shared path on northern and eastern side of South Beach Road between east side of bridge and end of South Beach Road (south)	В	Yes	\$309,600
BHB04	Мар Н	Brunswick Heads	Construct 405m of new footpath on southern and western side of South Beach Road east of bridge	В	Yes	\$145,080
BHB05	Мар Н	Brunswick Heads	Construct 140m of new mixed traffic (shared zone) on Brunswick Terrace between Mullumbimbi Street and Fingal Street	В	Yes	\$41,400
BHB06	Мар Н	Brunswick Heads	Construct 1,245m of new shared path on eastern and southern side of Park Street/The Terrace/Tweed Street/Old Pacific Highway south of Fingal Street. Construct 240m of new footpath on eastern side of Old Pacific Highway north of existing shared path	В	No	\$834,360



WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST
BHB07	Мар Н	Brunswick Heads	Construct 150m of new shared path on southern side of Old Pacific Highway north of Bayside Way. Construct 295m of new shared path on northern side of Bayside Way east of Old Pacific Highway	В	Yes	\$265,200
BRUNSWICK H	IEADS SUB-TO	TAL (PRIORITY B)			\$2,162,700
BHC01	Мар Н	Brunswick Heads	Upgrade 40m of existing footpath to shared path between Fawcett Street and Pandanus Court	С	No	\$20,000
BHC02	Мар Н	Brunswick Heads	Construct 150m of new footpath on northern side of Mullumbimbi Street and 160m on eastern side of Byron Street linking to existing paths on Fingal Street and Mullumbimbi Street	С	No	\$111,960
BHC03	Мар Н	Brunswick Heads	Construct 60m of new footpath on eastern side of Tweed Street between Mona Lane and proposed new shared path (BHC04)	С	No	\$21,240
BHC04	Мар Н	Brunswick Heads	Construct 650m of new shared path along Simpsons Creek between Tweed Street and Fingal Street pedestrian bridge	С	Yes	\$388,800
BHC05	Мар Н	Brunswick Heads	Construct 110m of new footpath on western side of Park Street between Booyun Street and Nana Street. Upgrade 260m of existing footpath on northern side of Booyun Street and linking to existing path on Park Street	С	Yes	\$117,000
BHC06	Мар Н	Brunswick Heads	Construct 40m of new footpath on eastern side of Tweed Street south of Whittall Lane. Upgrade existing refuge on northern leg of Tweed Street/Short Street intersection	С	Yes	\$28,680
BHC07	Мар Н	Brunswick Heads	Construct 140m of new footpath on western side of Tweed Street south of Teven Street. Upgrade existing refuge across Tweed Street south of Minyon Street	С	Yes	\$65,760
BRUNSWICK H	BRUNSWICK HEADS SUB-TOTAL (PRIORITY C)					
BHU01	Мар Н	Brunswick Heads	Construct 180m of new shared path on eastern side of Old Pacific Highway between Bayside Way and Eucalyptus Lane. Construct 2,025m of new shared path along southern side of Gulgan Road between Eucalyptus Lane and Mullumbimby Road. Construct new raised crossing on eastern leg of Old Pacific Highway/Bayside Way	U	Yes	\$9,390,800
BRUNSWICK HEADS SUB-TOTAL (UNPRIORITISED)						\$9,390,800
					\$12,700,540	



Table 12: Schedule of future works - Main Arm

WORKS PACKAGE ID	MAP REFERENCE	LOCATION	DESCRIPTION	PRIORITY	WORKS IN BIKE PLAN	ESTIMATED COST
MAB01	Map I	Main Arm	Construct 130m of new shared path on northern side of Main Arm Road west of existing footpath west of Blindmouth Road. Upgrade 20m of existing footpath to shared path on northern side of Main Arm Road west of Blindmouth Road. Construct 30m of new shared path on western side of Blindmouth Road north of Main Arm Road	В	Yes	\$104,200
MAIN ARM SUB-TOTAL (PRIORITY B)					\$104,200	
MAIN ARM TOTAL					\$104,200	

Note: cost estimates are high level and based on assumed unit rates. Actual costs will vary depending on site conditions and construction methodology

Table 13: Schedule of future works – Federal

* Works are partially contained within Byron Shire Bike Plan								
Table 13: Schedule of future works – Federal								
WORKS MAP LOCATION DESCRIPTION	PRIORI	TY WORKS IN BIKE PLAN	ESTIMATED COST					
FEB01Map JFederalConstruct 190m of new footpath on eastern side of Federal Drive between Bi and Roses Road. Construct 20m of new footpath on eastern side of Federal Drive Pederal Drive existing footpath which connects to Coachwood Court. Construct new refuge of Binna Burra Road/Federal Drive and new zebra crossing across Federal Drive	Drive north of ve south of B e on northern leg	No	\$199,200					
FEDERAL SUB-TOTAL (PRIORITY B)								
FEC01 Map J Federal Construct 205m of new footpath between Roses Road and Wean Way	C	No	\$73,440					
FEC02 Map J Federal Construct 347m of new footpath on Coorabell Road between Binna Burra Ro- Way.	oad and Wean C	No	\$124,920					
FEDERAL SUB-TOTAL (PRIORITY C)								
FEU01 Map J Federal Construct 377m of new shared path around the hill on Federal Drive.	U	Yes	\$226,200					
FEDERAL SUB-TOTAL (PRIORITY U)								
FEDERAL TOTAL								

Note: cost estimates are high level and based on assumed unit rates. Actual costs will vary depending on site conditions and construction methodology

* Works are partially contained within Byron Shire Bike Plan

5.4 Funding

5.4.1 Byron Shire Council

Funding from Byron Shire Council may contribute towards the walk and roll network packages through internal sources including:

- Footpath construction program
- Open space programs
- Major local road projects
- Council road maintenance and upgrade programs
- Streetscaping and masterplanning programs
- Section 94 and/or 94A contributions.

5.4.2 State and Federal Governments

Grant funding is available for a variety of community-based and pedestrian/safety programs or projects from key government sources including:

- Building Better Regions Fund (Federal)
- Active Transport (Walking and Cycling) Program (NSW)
- Local Government Road Safety Program (NSW)
- Regional Growth Fund (NSW).

Grant funding for non-infrastructure solutions may also be available through:

- Department of Education
- Department of Health.

5.4.3 Other sources

Outside of the typical government funding sources the following opportunities may present themselves to better the walk and roll network or to implement non-infrastructure solutions for the Shire:

- Opportunities for partnerships with private investment in public infrastructure either through development or community groups
- Department of Communities Sport and Recreation Participation Program which provides funding to not-for-profit organisations and local councils for projects designed to increase regular and ongoing participation in sport, recreation or structured physical activity.

5.5 Monitoring and evaluation

Monitoring and evaluation is important to ensure that the proposed future network and the PAMP document more broadly continues to reflect the needs, aspirations and vision of the community. Maintaining a current document (i.e. five years or less) also provides a better foundation for securing grant funding from RMS for applicable projects. This eases the financial burden on Byron Shire and means that key projects can be implemented sooner for the benefit of the community.

5.5.1 Network monitoring and evaluation

One or more of the following items could be adopted to effectively monitor and evaluate the proposed network over the life of this PAMP:

- Work with the local community to undertake regular on-the-ground audits/inspections of the walk and roll network with a view to covering the entire Byron Shire every three years. Record and collate all findings in a central database with supporting GIS mapping. This could build on Council's current electronic approach to recording defects and issues with community assets. An opportunity may also exist to leverage and/or integrate with Council's existing transport asset management records and plan to reduce overlap. Developing an accurate and comprehensive database will help to:
 - Provide an accurate understanding of the network, including the types, lengths and qualities of existing paths
 - \circ $\;$ Determine the rate of progress towards implementation of the PAMP





- Measure important aspects such as the percentage of the network that is suitable for all ages and abilities. These 'all ages and abilities' routes could be integrated into Mobility Maps and included as part of information available to visitors to the Shire
- Undertake other measurements such as determining the percentage of bus stops serviced by connected and accessible pedestrian infrastructure
- o Inform future planning.
- Consult with ACWG on progress and relevance of the PAMP.
- Undertake surveys (for example, online, intercept) to gain first-hand insights into the suitability and use of the network. Surveys could seek information relating to:
 - o The types of pedestrians using the network
 - Rates of pedestrian activity
 - The frequency, days/times and reasons for network use
 - Average journey length and time
 - $\circ \quad \text{Origins and destinations}$
 - Levels of pedestrian comfort, safety and satisfaction while using the network and supporting facilities.
- Undertake regular pedestrian counts in key locations to determine the volume and behaviour of pedestrians and the change over time. This information could then be used to measure the success of any amendment to the pedestrian environment and to help to identify areas where interventions (for example, new crossings, kerb build outs) may be required.

5.5.2 PAMP monitoring and evaluation

This PAMP will be updated every four years to ensure it remains accurate and reflective of the needs and aspirations of the community. Aside from aligning with the review timeframe for the Bike Plan document which will help ensure planning is integrated, this timeframe will ensure that any future PAMP is current

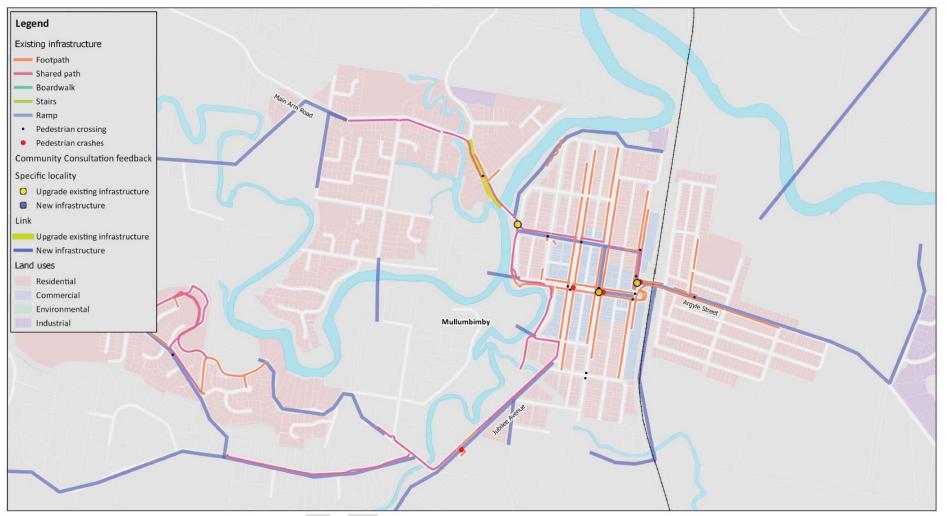
0804 - 7 June 2019 - V9

so that the Shire is in the best possible position to receive grant funding from RMS. This will help ease the financial burden on Byron Shire while expediting the development of the proposed network for the benefit of the community.



APPENDIX 1 – COMMUNITY CONSULTATION NETWORK MAPS





Community consultation network map – Mullumbimby

0804 - 7 June 2019 - V9

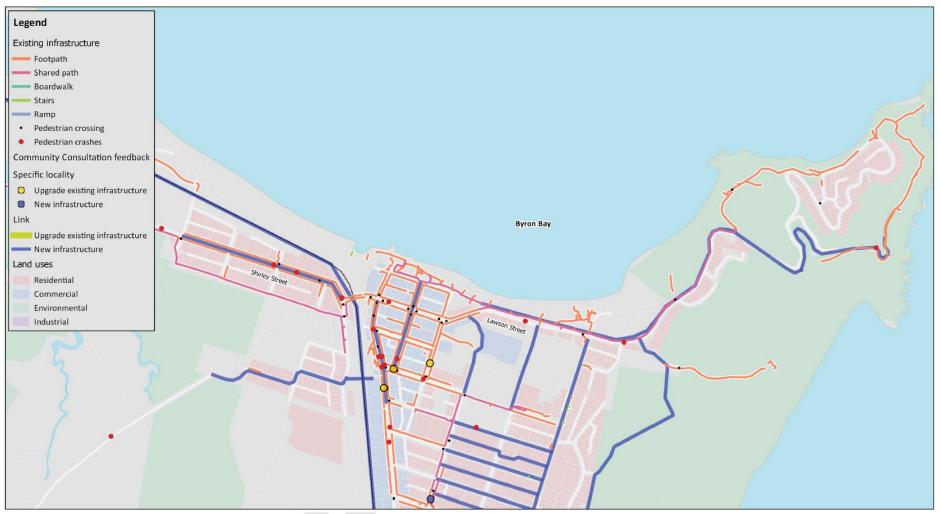




Community consultation network map – Byron Bay (West)

0804 - 7 June 2019 - V9

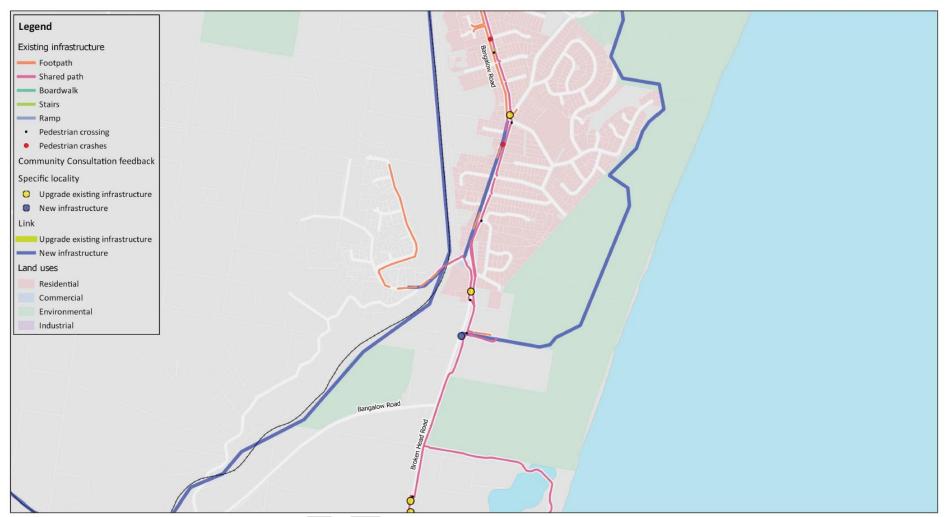




Community consultation network map – Byron Bay (Central)

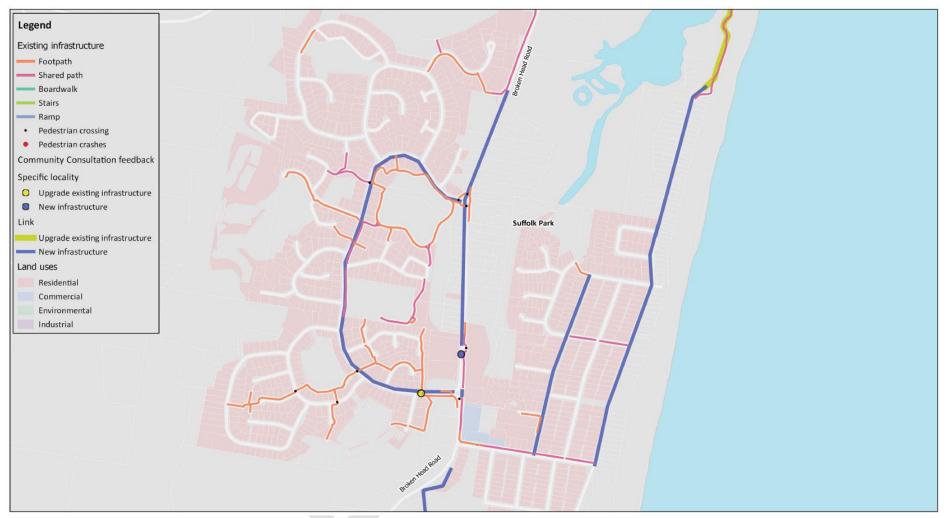
0804 - 7 June 2019 - V9





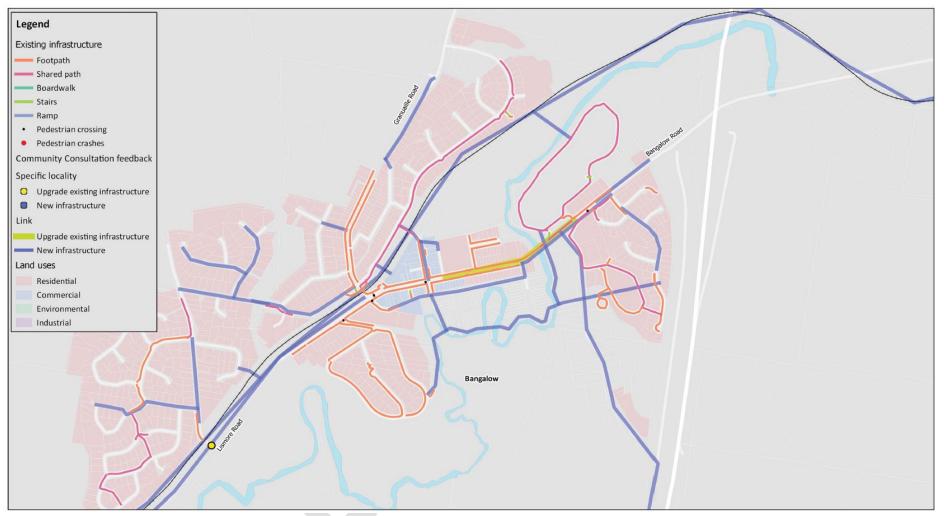
Community consultation network map – Byron Bay (South)





Community consultation network map – Suffolk Park

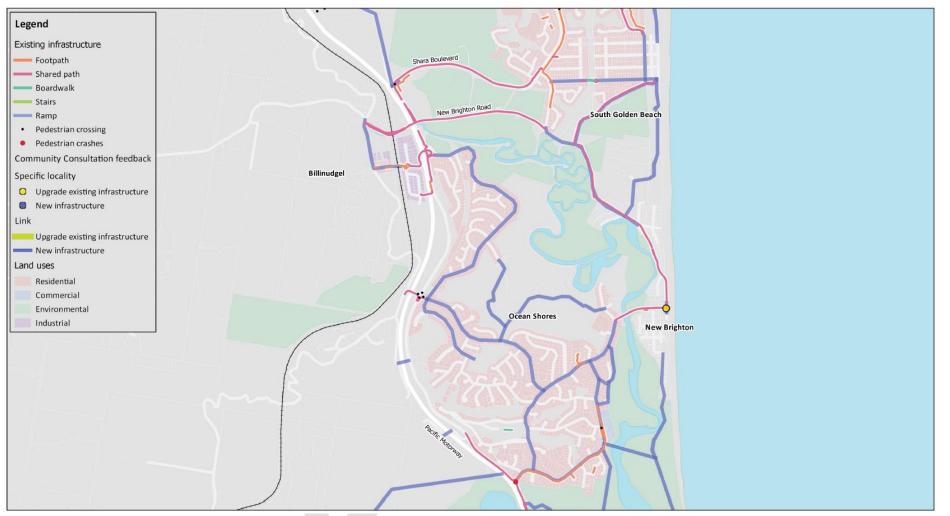




Community consultation network map – Bangalow

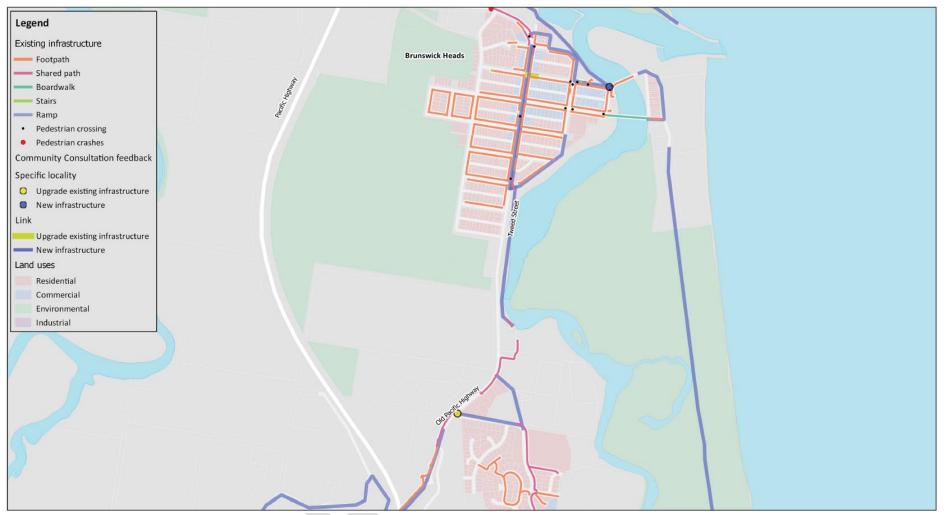
0804 - 7 June 2019 - V9





Community consultation network map – Ocean Shores, South Golden Beach, New Brighton and Billinudgel





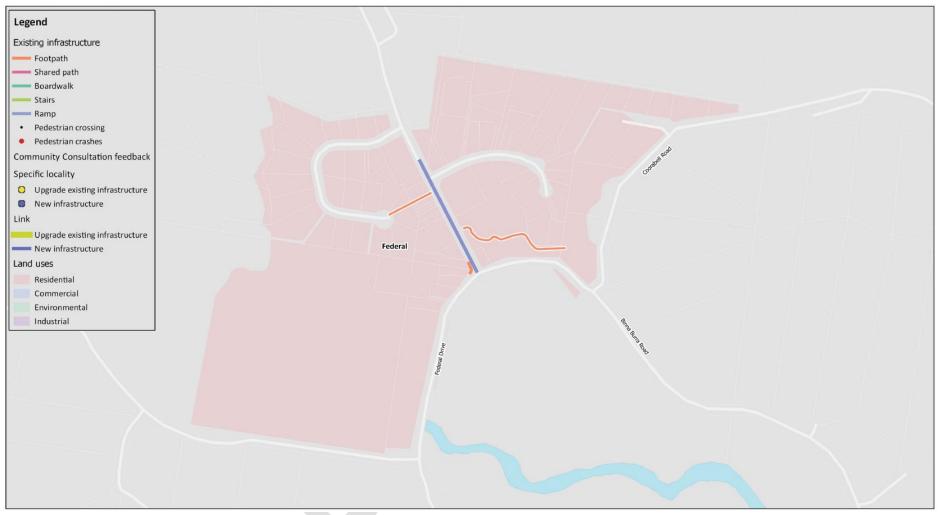
Community consultation network map – Brunswick Heads





Community consultation network map – Main Arm





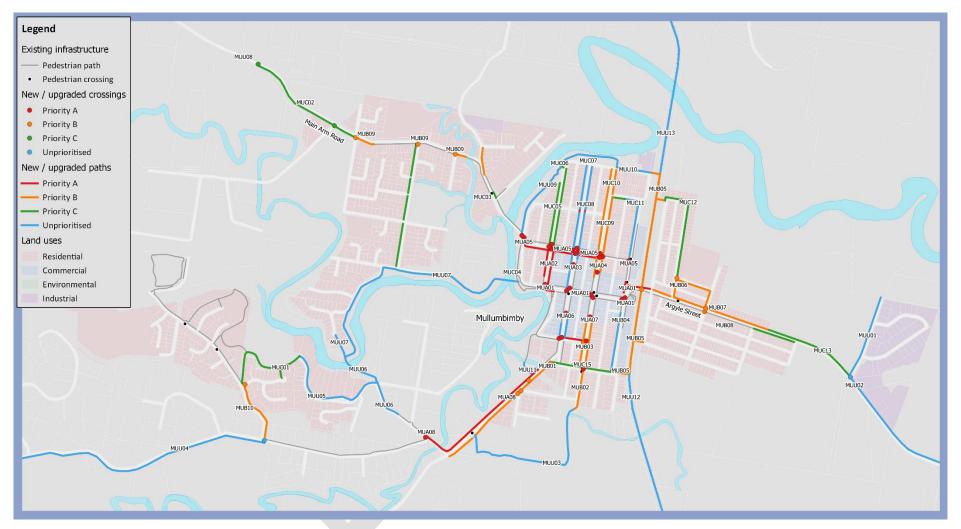
Community consultation network map – Federal

0804 - 7 June 2019 - V9



APPENDIX 2 – PRIORITISED INFRASTRUCTURE MAPS





Prioritised infrastructure map – Mullumbimby

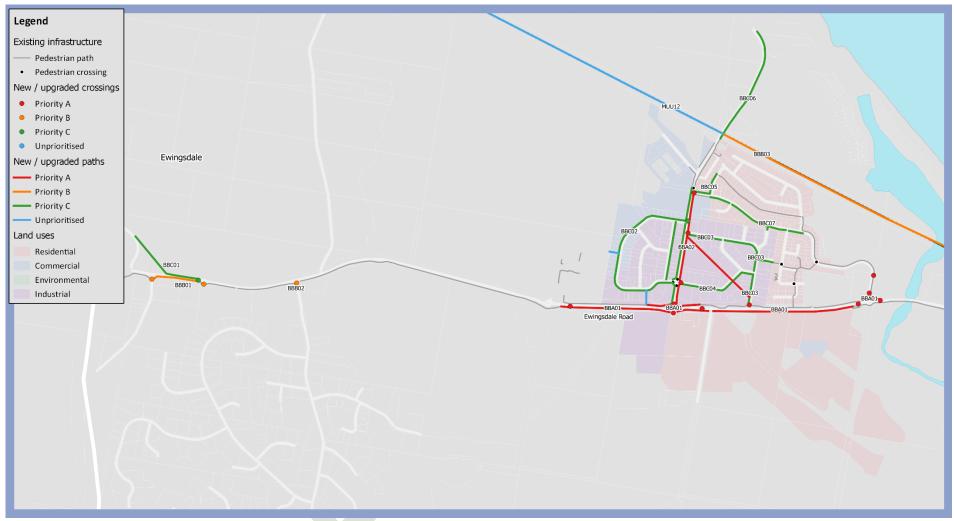
0804 - 7 June 2019 - V9





Prioritised infrastructure map – Mullumbimby Town Centre





Prioritised infrastructure map – Byron Bay (West)

Legend

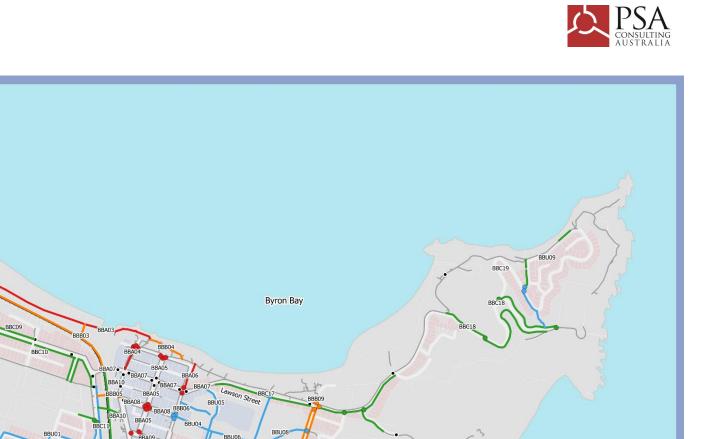
Existing infrastructure — Pedestrian path • Pedestrian crossing New / upgraded crossings

Priority A
 Priority B
 Priority C
 Unprioritised
 New / upgraded paths
 Priority A

- Priority B

Priority C Unprioritised

Land uses Residential Commercial Environmental Industrial



BBU05

BBC26

BBU07

BC30 BBC21

BBC22

BBC23

BBC25 BBC24

BBC12

BBB08

BBC1

BBC16

BBB10

BBC20

Prioritised infrastructure map – Byron Bay (Central)

BBCO

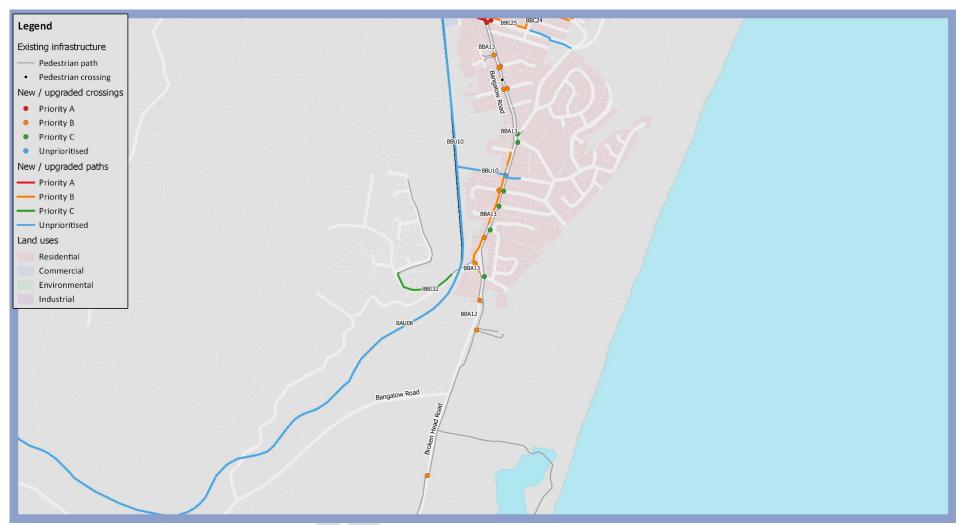
0804 - 7 June 2019 - V9





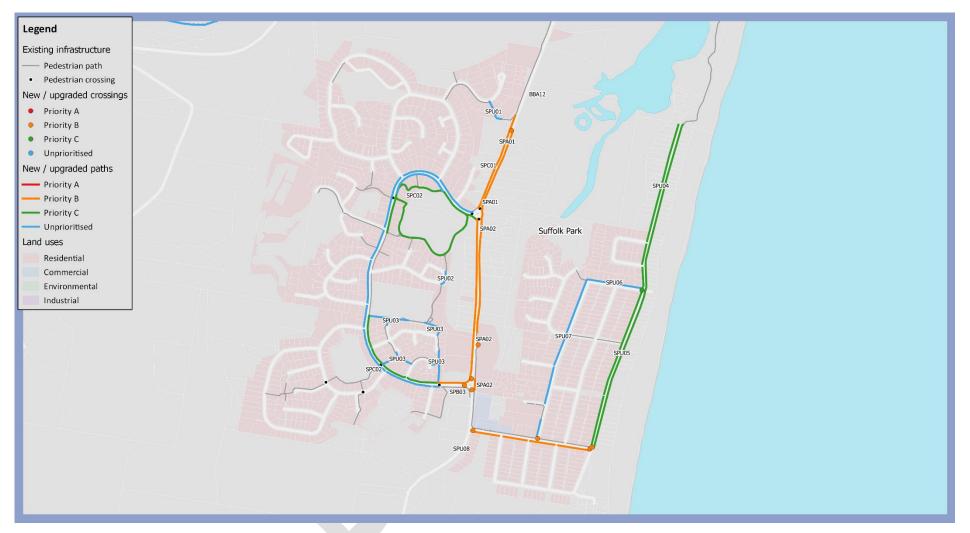
Prioritised infrastructure map – Byron Bay (Central) Town Centre





Prioritised infrastructure map – Byron Bay (South)





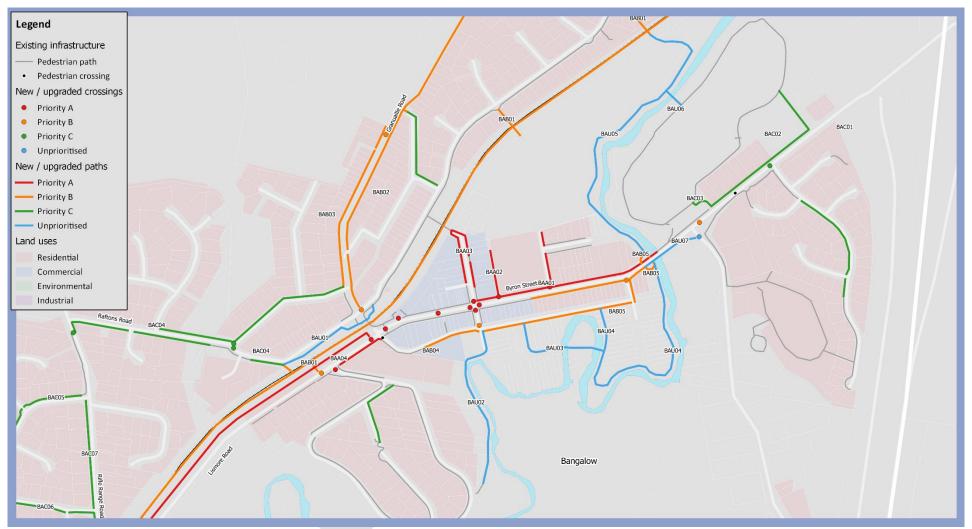
Prioritised infrastructure map – Suffolk Park





Prioritised infrastructure map – Bangalow





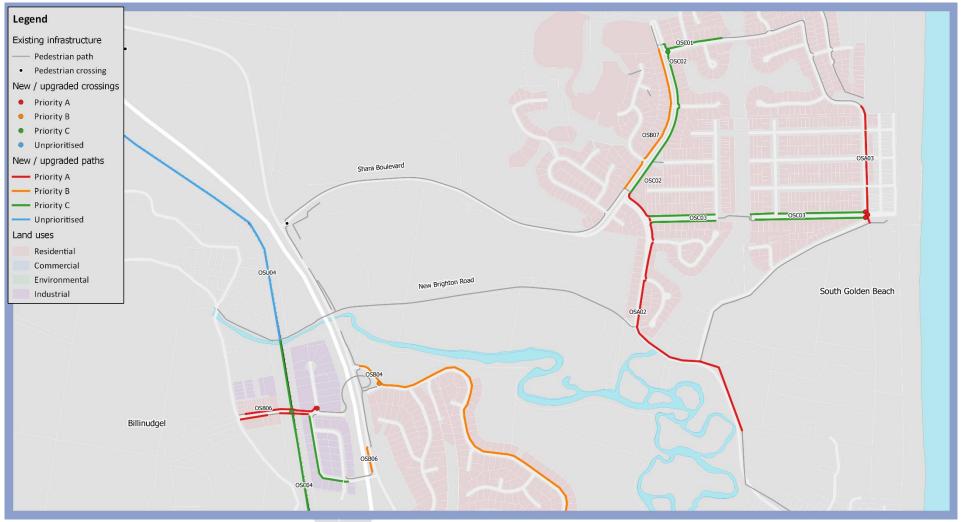
Prioritised infrastructure map – Bangalow Town Centre





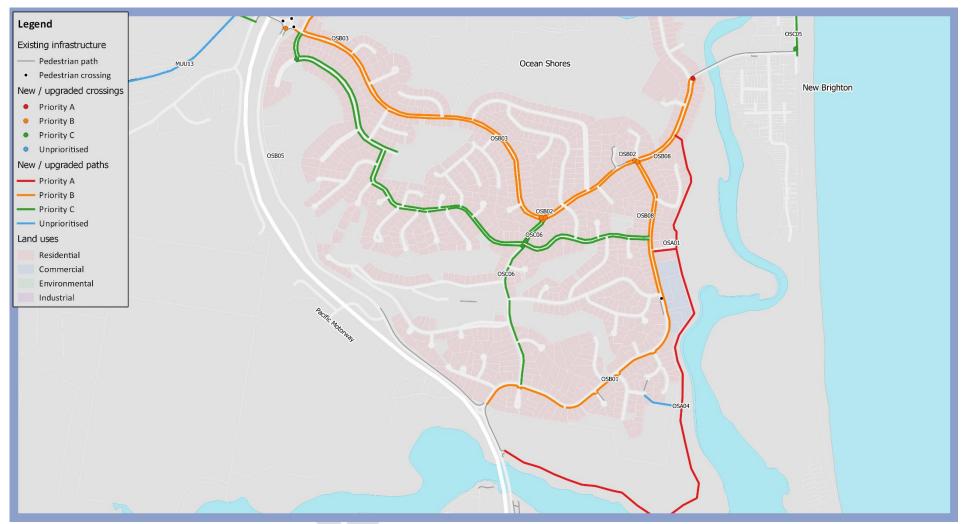
Prioritised infrastructure map - Ocean Shores, South Golden Beach, New Brighton and Billinudgel





Prioritised infrastructure map – South Golden Beach and Billinudgel





Prioritised infrastructure map – Ocean Shores and New Brighton





Prioritised infrastructure map – Brunswick Heads





Prioritised infrastructure map – Brunswick Heads Town Centre





Prioritised infrastructure map – Main Arm





Prioritised infrastructure map – Federal