

Warrumbungle Shire Bike Plan

Bike Plan for Baradine, Binnaway,
Coolah, Coonabarabran, Dunedoo &
Mendooran

89916076

Prepared for
Warrumbungle Shire Council

16 August 2016



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Mayor's Message

Warrumbungle Shire Council is dedicated to improving the safety of key cycling routes within the six major towns of the Shire through improvements to path infrastructure as well as support for community adoption of active transport to key land use areas.

The six major towns in Warrumbungle Shire that are identified in this Bike Plan are Baradine, Binnaway, Coolah, Coonabarabran, Dunedoo and Mendooran.

Feedback was received from the community on key cycling routes and reasons as to why community members may not actively commute in the Shire. This information, along with other Bike Plans and the Warrumbungle Pedestrian Access and Mobility Plan assisted in the development of the Warrumbungle Bike Plan.

By developing a Bike Plan, Council can now apply for necessary funding to improve the main cycling routes in the towns of the Shire and acknowledges that as a living document it will continue to evolve with amendments being made to keep up with changes.

Thank you to the Warrumbungle Shire community for providing such valuable input into the development of the Plan and I am pleased to introduce it and am looking forward to its contribution to active transport within the Shire.

Peter Shinton

Mayor

Executive Summary

The Warrumbungle Shire is a regional area of NSW whose residents have a high dependence on motor vehicles. The lack of integrated transport infrastructure in the six towns of Baradine, Binnaway, Coolah, Coonabarabran, Dunedoo, and Mendooran prevents residents from considering cycling as a safe, efficient and viable mode of transport. A number of issues that limit the use of cycling in the Warrumbungle Shire exist including lack of infrastructure, cyclist-vehicle interactions, the movement through intersections and general bicycle safety. As a result, the region's dependence on private vehicles has averted residents from enjoying the associated health, economic and social benefits that arise from incorporating active travel into everyday activities.

The objective of this Bike Plan is to identify and prepare a suitable bike network for six towns within the Warrumbungle Shire (Baradine, Binnaway, Coolah, Coonabarabran, Dunedoo, and Mendooran). Stakeholder organisations were contacted to contribute to the development of the Bike Plan. These stakeholders included:

- > Warrumbungle Shire Council;
- > Progress associations and Chambers of Commerce;
- > State government agencies:
 - Roads and Maritime Services (RMS);
- > Schools;
- > Aged care facilities and retirement villages;
- > Cycle clubs; and
- > Sport groups.

Additionally, all residents of Baradine, Binnaway, Coolah, Coonabarabran, Dunedoo, and Mendooran were encouraged to participate in the consultation activities. A number of key issues were identified by the community as well as recommendations for the Bike Plan. These included:

- > The need for increased vehicle driver education and understanding of the relevant laws;
- > Provision of signage identifying cycle routes;
- > Cycle routes linking adjacent towns; and
- > Rail Trails.

In addition, a number of recreational routes were identified by the community at meetings and via the surveys as having great beneficial advantage to the community in the future. Whilst these routes are not proposed as part of this Bike Plan (due to the boundary of the scope covered by the Bike Plan), the Bike Plan recommends that these routes be investigated in the future for development.

The bicycle networks for the six towns were subsequently developed with consideration of:

- > **Building on the existing bicycle network:** Existing bicycle networks were analysed and new routes were identified to enhance these networks. This retains the coherence of the existing routes and aids in network legibility;
- > **Identifying missing links:** The draft network was overlaid with the existing network to identify missing links;
- > **Connections to key land uses:** The location of key cycling trip generating land uses were identified including residential, education, retail and employment, parks and recreation land uses; and
- > **Community comments:** Community comments on bicycle links throughout the towns were considered and incorporated into the network development.

Following the development of the bike networks, a site audit was undertaken with the following items being recorded:

1. **Identification and recording of bicycle infrastructure:** Every existing bicycle facility was recorded by the site auditor, whether it had any associated issues or not. These facilities included footpaths (in locations where shared paths are proposed on the network), shared paths, kerb ramps, refuges, and on-road bicycle facilities.
2. **Assessment of existing bicycle infrastructure for issues and non-compliance:** Every issue associated with existing bicycle facilities was recorded by the site auditor.
3. **Facility width measurements:** The width of all existing bicycle facilities were measured by the site auditor.

The existing footpath network was audited where the path aligned with a future shared path. Approximately 20 kilometres of the existing footpath network was audited across the six towns. The site audit found that of this, approximately 18 kilometres of proposed shared path was missing, approximately one kilometre was assessed as a compliant width for a shared path (minimum 2.5 metres wide), and one kilometre was assessed as not a compliant width.

The existing shared path networks within the six towns, approximately four kilometres long in total, was audited to identify their condition and width compliance. Of the four kilometres of existing shared path network audited, approximately two kilometres was assessed as compliant shared path (2.5 metres in width) and approximately two kilometres of the existing network was assessed to be non-compliant.

As no existing bicycle facilities are currently provided throughout the six towns, approximately 38 kilometres of the existing road network was audited on roads where the future on-road facilities are proposed. The audit verified that no formal facilities are provided on those roads.

The site audit assessed 217 locations for kerb ramps on the future shared path network. Out of these locations, there were 130 missing kerb ramps, 36 which were found to have non-compliant dimensions, and eight which were misaligned. Three kerb ramps were found to be compliant. One location was identified as having road surface issues and 39 locations were identified as have no kerb ramp however the path was level with the road.

Three refuge islands, all located in Coonabarabran, were audited. Of the three locations, which align with the future shared path, two were deemed compliant, whilst the third (located on Dalgarno Street) was considered non-compliant given its short width and depth.

There are 67 locations across the six towns that were identified as lacking bicycle crossing facilities, at intersections, across desire lines or at dangerous crossing locations.

A number of hazardous locations were identified as part of the site audit. The crossing of the Castlereagh River on Namoi Street and Horseley Street, Coonabarabran was identified as a flood prone zone. The flood zones are located on a proposed mixed traffic route and can lead to slips and falls for riders on the route. Extensive flooding of the road may lead to the road being inaccessible by cyclists. This location was also identified as steep in grade. It was recommended that an investigation be undertaken at these locations to identify improvement measures.

The crossing of train track lines were identified as hazardous as:

- > The train lines are currently in use and trains operate at high speeds (such as in Dunedoo);
- > The surface conditions of the crossings are poor and may result in trips and falls; and
- > No facilities are currently provided at the crossings to support the movement of pedestrians and bicycles.

Cardno recommend that with the construction/installation of all future bike routes, all routes (especially at the crossings of train lines) are investigated to ensure the safety of all cyclists.

The site audit identified that a large number of intersections through all six towns have a dip in the road on a number of approaches (not mapped). Whilst only a small number of the intersections are signage posted with the W5-9 "DIP" sign, such as the intersection of Renshaw Street and Warrumbungles Way, the presence of the dip is very uncomfortable for cyclists and may result in falls to cyclists. Cardno recommend that the surface of all roads, is regularly maintained and significant dips are assessed for safety implications and addressed through road maintenance works.

For the issues identified across the bicycle network, improvements were recommended to eliminate or mitigate the issues (where possible), as shown in Section 8 of this report.

Following the identification of the bike routes and the site audit, end of bike trips were discussed with the community. The location and the number of end-of-trip parking spaces recommended is shown in Section 8 of this report.

The infrastructure improvements proposed in this report are supplemented with a behavioural change and educational programs and actions. These recommendations will help raise public awareness of their active travel options for shorter trips as well as increase safety and confidence of the cyclists.

A cost estimate was prepared for the recommended improvement works based on estimated unit costs. The total cost was estimated as \$8,417,000, and the costs for each town are summarise below:

- > Baradine: \$1,202,400;
- > Binnaway: \$207,400;
- > Coolah: \$1,550,000;
- > Coonabarabran: \$2,854,800;
- > Dunedoo: \$1,624,600; and
- > Mendooran: \$977,800.

The bike network was subsequently prioritised based on a number of key factors, including:

- > The connection of the route to key land uses;
- > The use of the route by school children and by younger users;
- > The safety of the cyclist on the route;
- > Connection to existing bike routes;
- > The likely usage of the route; and
- > Impact on the local community (including needs of the community).

The prioritisation maps of each town as well as the breakdown of cost per town per priority is shown in Section 9 of this report.

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1 Introduction

Warrumbungle Shire Council has commissioned Cardno to prepare a Bike Plan for the six towns in the Local Government Area (LGA) to improve the community's health, liveability and sustainability.

The current cycling network in the Warrumbungle Shire is limited and the opportunity exists to provide safe, convenient and connected cycling routes. An improved cycling network needs to consider the movements between land uses and address these desire lines. Residents need to be encouraged to use the network through provision of high quality infrastructure, promotion of facilities and benefits and improvements in perceptions of safety.

1.1 Bike Plan purpose

The purpose of this Bike Plan is to provide Council with an understanding of the required cycling infrastructure to accommodate the needs of the community in the Warrumbungle Shire LGA. The Bike Plan identifies gaps in the cycling network, issues with current and missing facilities, recommended improvements and cost estimates for the proposed infrastructure. The implementation of the Bike Plan will support active travel across the region to:

- > Increase transport choices for travel within towns;
- > Reduce environmental impacts;
- > Improve public health and reduce healthcare costs; and
- > Improve community wellbeing and social cohesion.

1.2 Bike plan objectives

The objectives of the Warrumbungle Shire Bike Plan are to:

- > Review and enhance a safe and streamlined network for cycling in all six towns;
- > Ensure the use and safe operation of bicycles are incorporated into the plan, particularly at the origin/destination of trips;
- > Ensure the use and safe operation of bicycles are incorporated into the plan for all classes of bike users;
- > Identify opportunities for infrastructure synergies between all classes of bicycle users, including recreational paths;
- > Identify cycle crash clusters and improve safety at these locations;
- > Provide links with other transport services to achieve an integrated land use and transport network of facilities that comply with the best technical standards;
- > Guide the development and continued increase in community participation for cycling through behavioural change and education campaigns for all trip purposes;
- > Incorporate research findings from previous strategies;
- > Provide equitable access to all users; and
- > Align with the community expectations and budgetary constraints.

1.3 Benefits of active transport

Towns with good active transport networks provide a wide range of economic, social and environmental advantages for the town and the people who access it. Benefits associated with cycling are presented in **Table 1-1**.

Table 1-1 Benefits of active (cycle) transport

| Economic | |
|---|--|
| Local business opportunities | Providing cycle routes along shop fronts may increase the number of people passing shop fronts and businesses and therefore activity at the local businesses. |
| Lower cost of travel | Cycling is free. There are no travel cost associated with cycling to and from destinations unlike private vehicle usage. |
| Reduced demand for parking | More cycling trips will lead to a reduced demand of parking in the town centre. This may reduce the road carriageway widths required along the roads and a possible reconfiguration of existing parking space to alternative uses. |
| Environmental | |
| Reduced noise pollution | With more vehicles driving comes more noise, therefore a reduction in vehicles in the city centre will lower noise pollution. |
| Reduced emissions pollution | Less vehicles on the road means less gases are being released into the atmosphere. |
| Improved street environment | Cycling environments support parks, landscaping and street furniture for cyclists; this can create a pleasant atmosphere within a town. |
| Social | |
| Supports equitability and accessibility | Cycling is a mode of transport that can be available to everyone. |
| More social inclusion | Cycling facilitates more social interactions between people in towns than use of private motor vehicles where people often travel alone. |
| Improved safety | The more people who cycle, the safer it is for cyclists. Increased volume of cyclists will raise awareness for drivers of the presence of cyclists in the towns. |
| Better personal security | More people choosing to cycle means increased on-street activity and people on the street will provide surveillance of the street which discourages anti-social behaviour and crime. |
| Improves physical and mental health | Cycle is good for people's health. The Heart Foundation notes that regular physical activity reduces the risk of heart disease and stroke, manages weight, blood pressure and cholesterol, prevents and controls diabetes, reduces risk of some cancers, maintains bone density and improves balance and coordination. It also helps to manage anxiety and stress and contributes to feelings of strength, energy and happiness. |
| Less stressful | Active transport modes are a less stressful way to travel than public transport and private vehicles. |
| Sense of community | Seeing more on foot, on bike and spending time on city streets enhances social connections, creates a vibrant atmosphere and contributes to a sense of community. |

1.4 Study area

The study area includes the six main town centres in the Warrumbungle Shire Council LGA; Baradine, Binnaway, Coolah, Mendooran, Dunedoo and the largest town, Coonabarabran. The Warrumbungle Shire forms a significant regional entity in central NSW, and encompasses a number of national parks, schools and health services.

1.4.1 Baradine

Baradine is a small village in the north of the Warrumbungle Shire, in close proximity to the Pilliga Forest. The Baradine Central School along with the public swimming pool is situated on Narren Street to the east of the town. The Baradine Multi-Purpose Service (public hospital) is located on Macquarie Street and it is anticipated that an aged care facility will be constructed opposite the hospital in the future. The local retail stores are located on Wellington Street. Recreational fields are located on Queen Street and Camp Cyprus is located on Lachlan Street.

1.4.2 Binnaway

Binnaway is a small community with easy access to the Warrumbungle National Park and Binnaway Nature Reserve. The Binnaway Central School is located to the south-west of the town on Yarren Street and the swimming pool is located to the north of the school on Renshaw Street, along with shops and services. The Binnaway Town Hall and child care are located on the corner of Davis Street and Bullinda Street. Recreational ovals are located on Park Street and Warrumbungle Way.

1.4.3 Coolah

Coolah lies in the south east of the Warrumbungle Shire, close to the Coolah Tops National Park. The Coolah Central School and recreational oval are located in the north-east of the town on Binnia Street, along with retail stores. The Sacred Heart School is located on Church Street and the Coolah Hospital is in the north-west of the town.

1.4.4 Coonabarabran

Coonabarabran is Warrumbungle's largest town and service centre for the LGA. The Coonabarabran Public School Coonabarabran High School, child care, accommodation, local retail stores and swimming pool are all located along the Newell Highway/John Street. The schools, child care, accommodation and pool are all to the south of the town, whilst the retail hub is in the heart of the town on Newell Highway/John Street. Recreational fields are located to the north of the town. The Coonabarabran District Hospital is located to the east of the town on Edwards Street. St Lawrence's Catholic School is on the corner of Dalgarno Street and Namoi Street with the former also catering to recreational fields and shops. The Family Support Services Centre is on Robertson Street.

1.4.5 Dunedoo

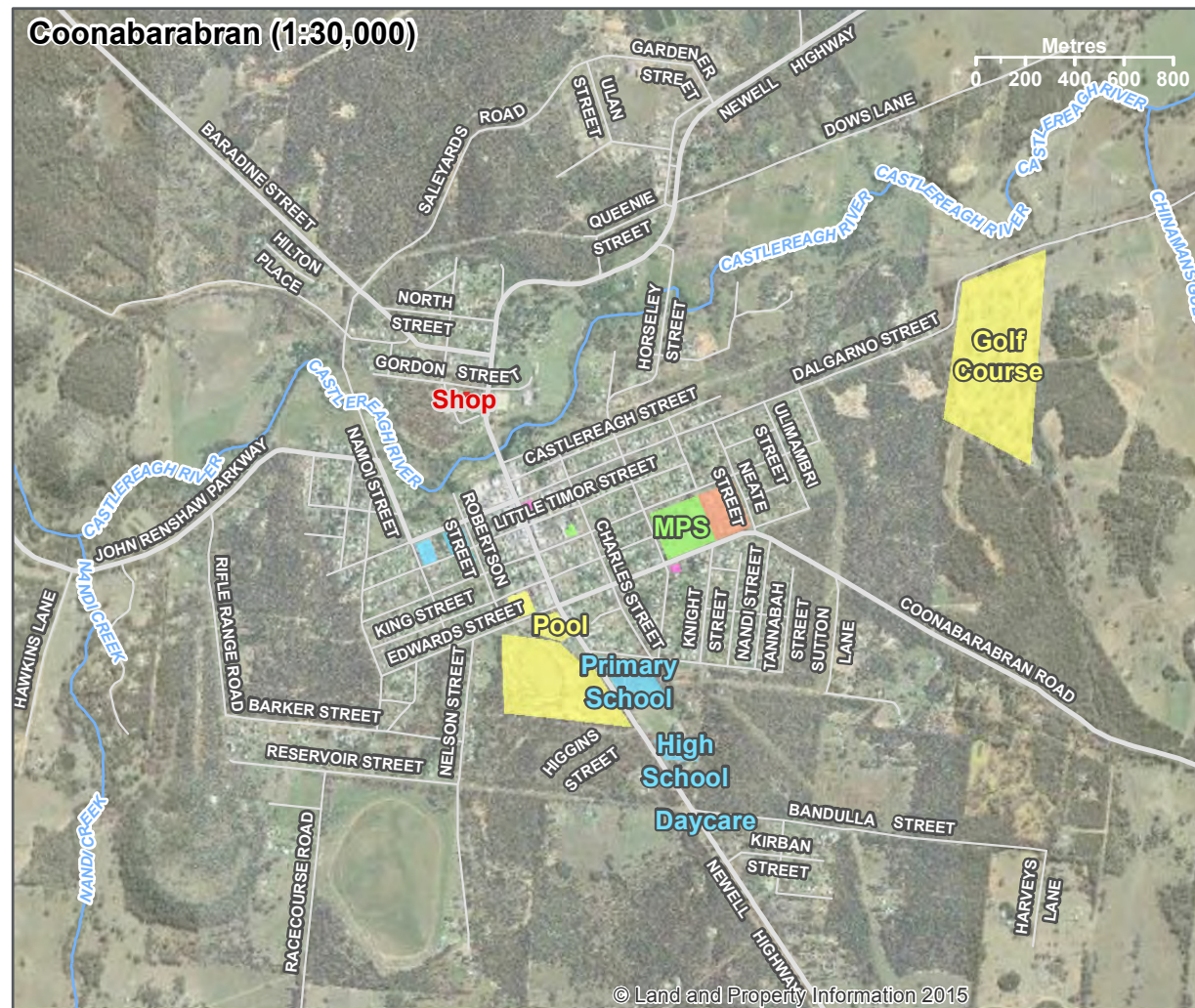
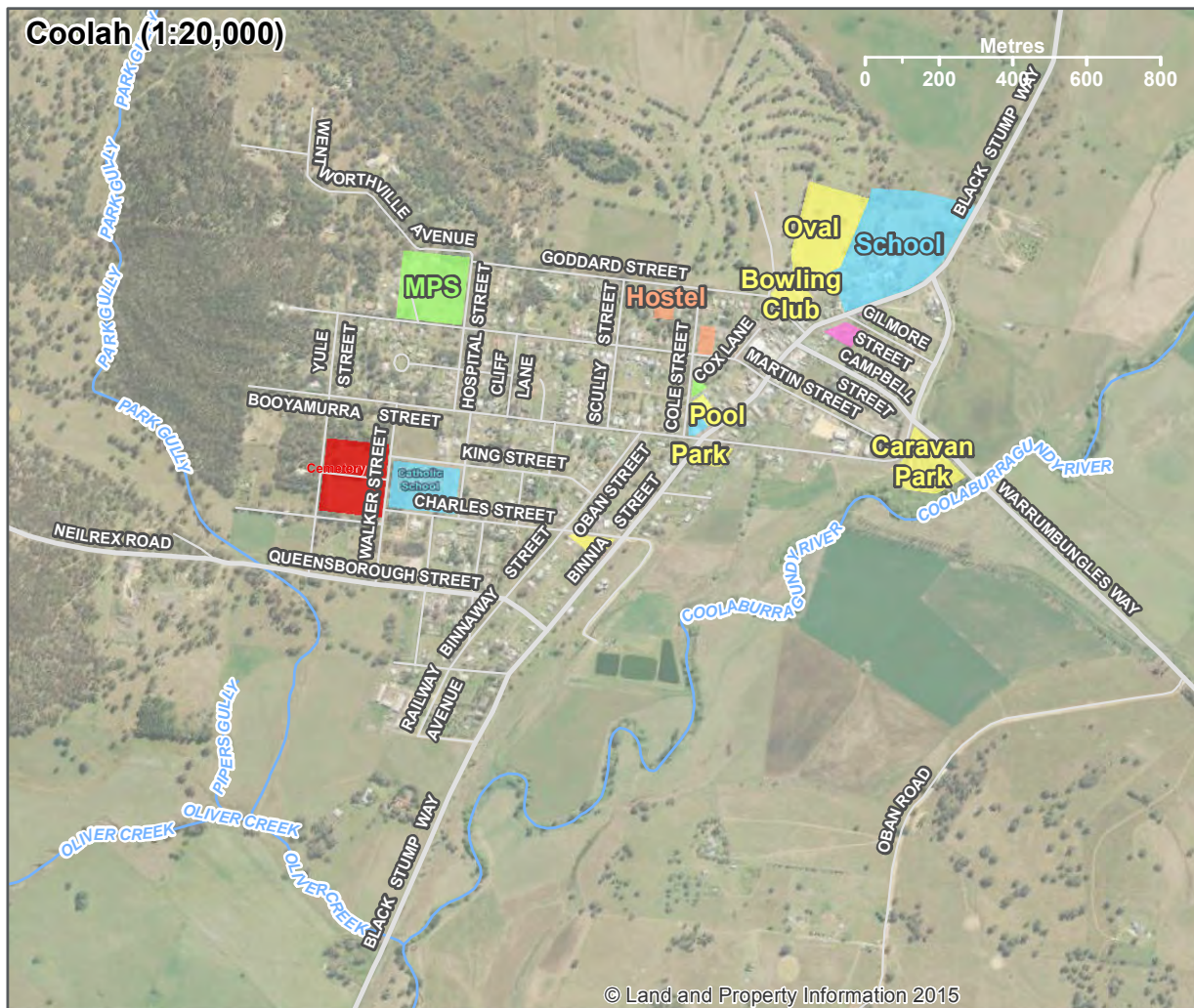
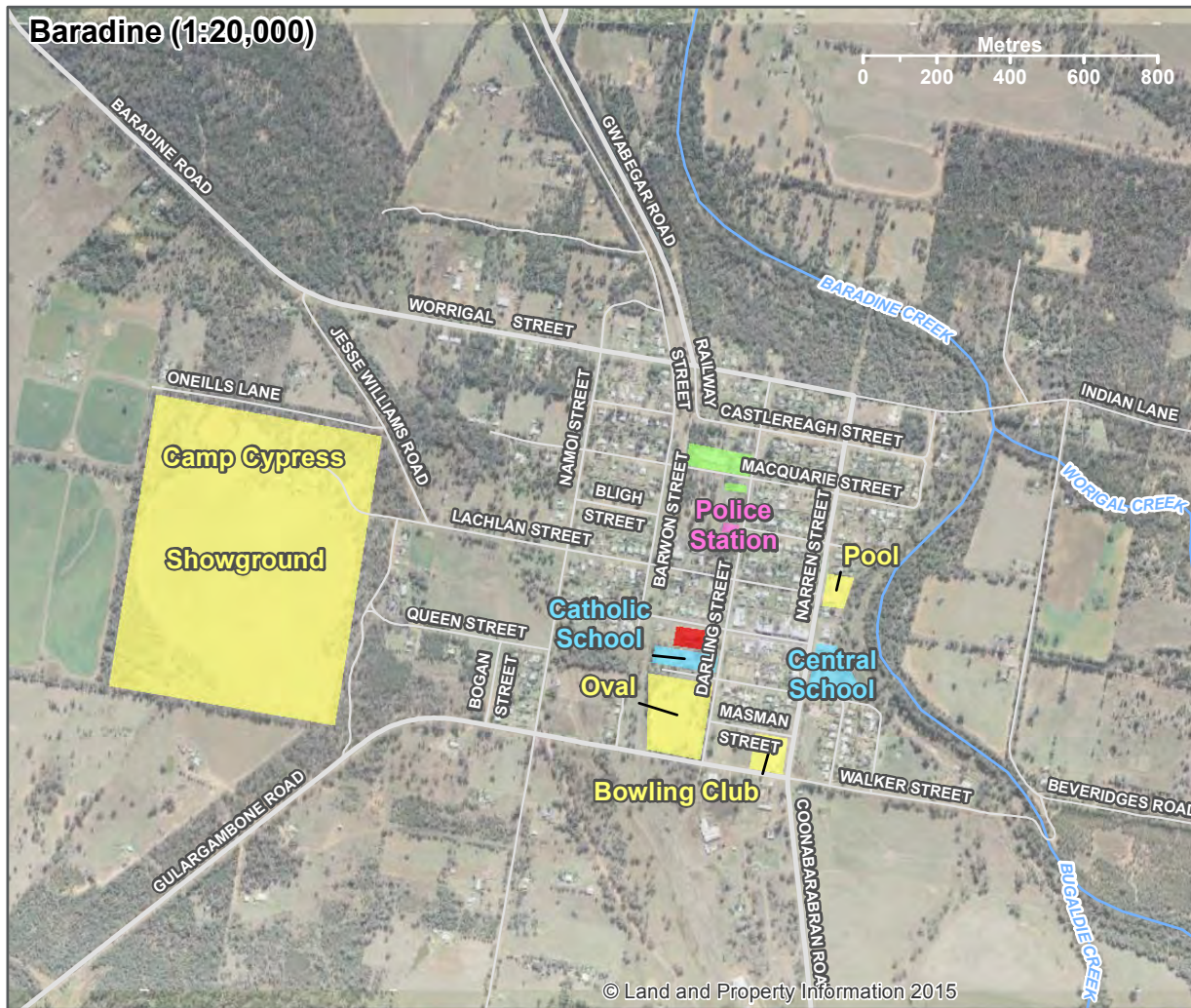
Dunedoo is in the southern part of Warrumbungle Shire and lies adjacent to the Talbragar River. The local shops within Dunedoo are located on Castlereagh Highway/Bolaro Street and the Dunedoo Central School and child care are on Merrygoen Street. The St Michael's Catholic Primary School is situated at the south of the town on Tucklan Street and the swimming pool is in the centre of the town on Cobbarah Street with the recreational fields located to the east on Wargundy Street. An additional recreational field is to the north-west on Whiteley Street. A future aged care facility is to be built the north-east of the town on Castlereagh Highway.

1.4.6 Mendooran

Mendooran is located in the southwest of the Warrumbungle Shire and is adjacent to the Castlereagh River. Mendooran Central School is located to the north of the town on Brambil Street, and the majority of local retail stores are located on Castlereagh Highway and are nearby to the recreational fields that are also on the same road.

The study area and the key land uses are illustrated in **Figure 1-1** to **Figure 1-2**.

Figure 1-1 Bike Plan study area (1/2)



Study Area Map 1

WARRUMBUNGLE SHIRE COUNCIL BIKE PLAN

Legend

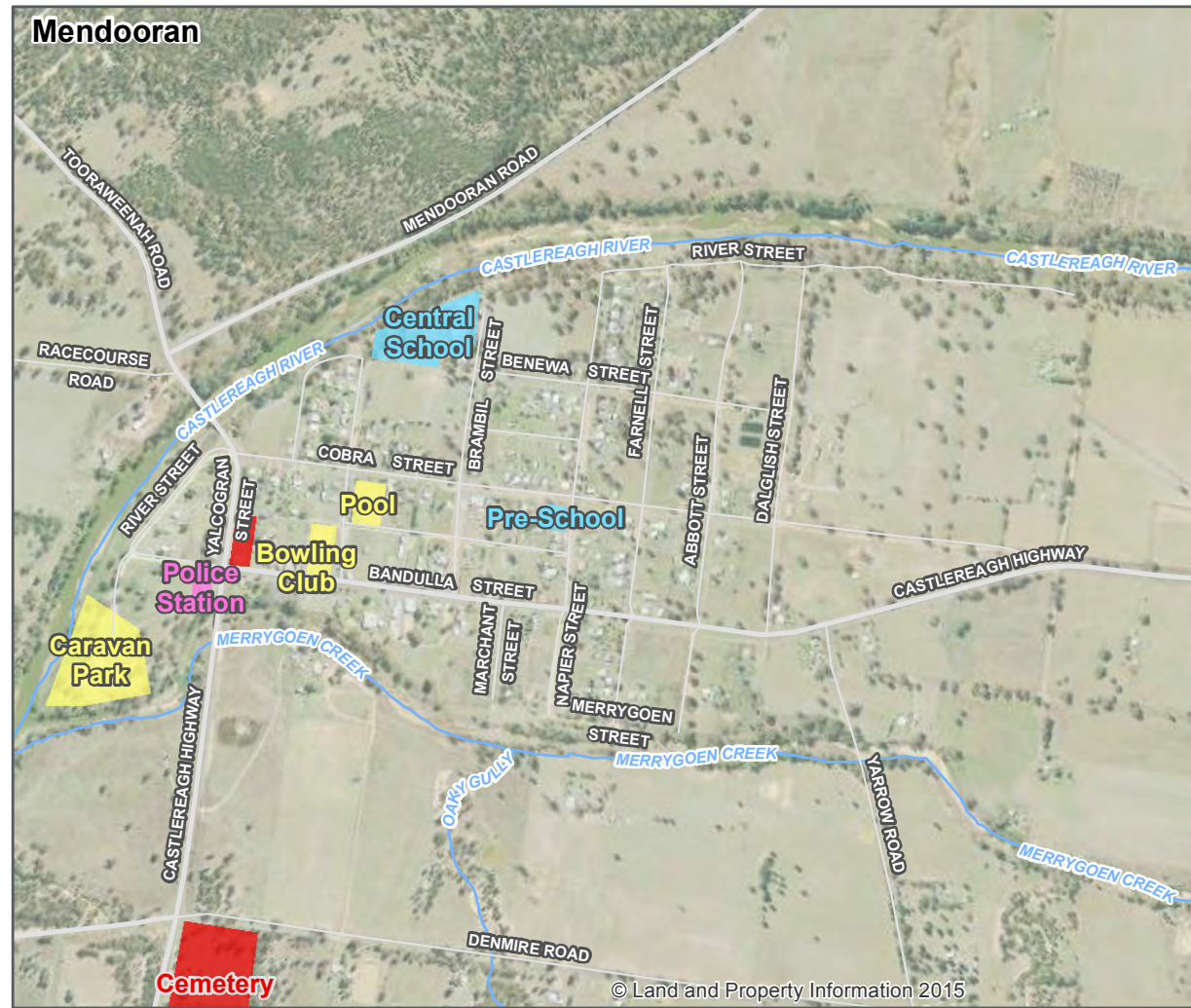
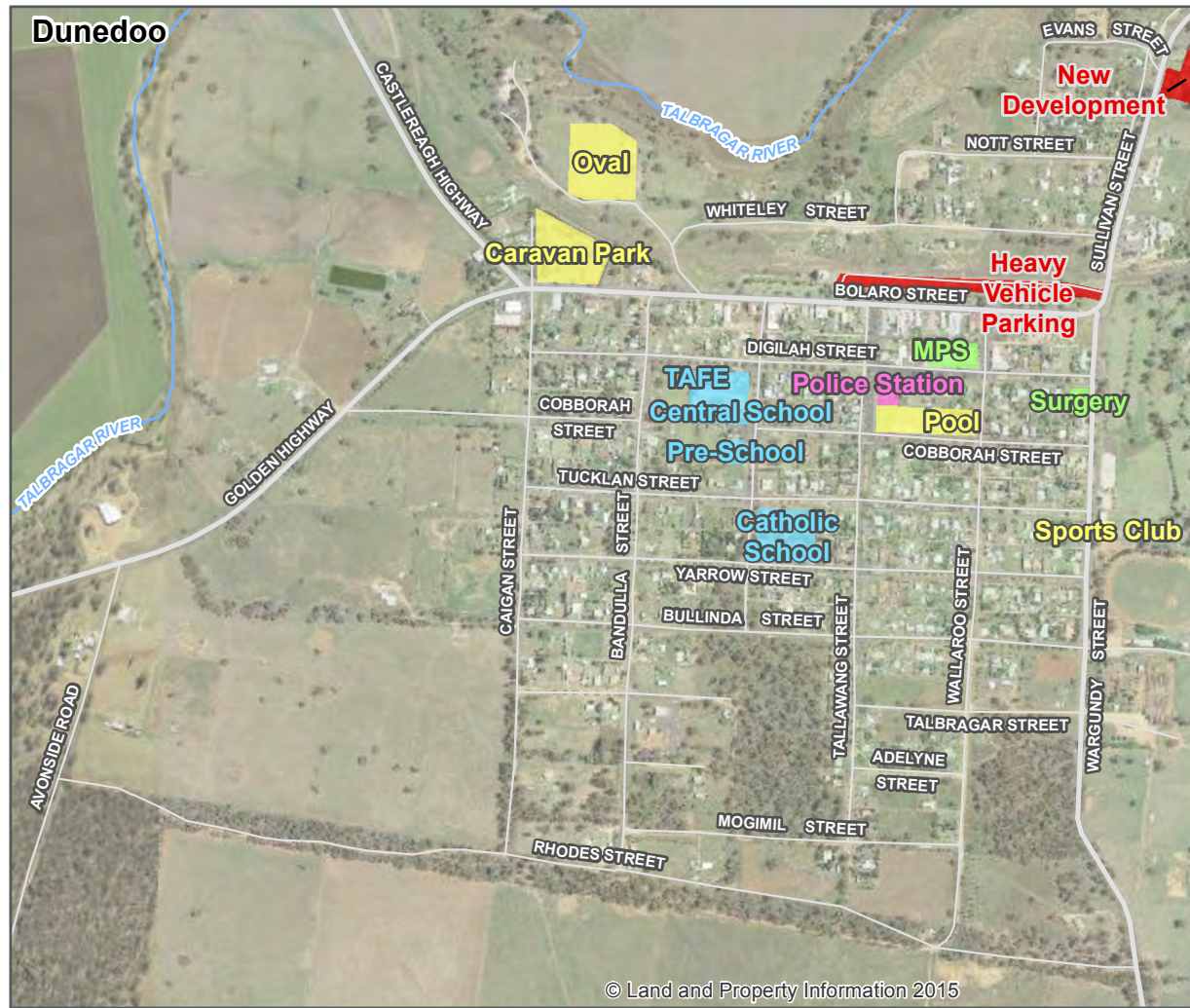
- Major Road (LPI)
- Minor Road (LPI)
- Major Watercourses (LPI)

Places of Interest by Facility Type (WSC, 2016)

- Aged Care
- Community
- Education
- Medical
- Recreation
- Other

Scale at A3

Map Produced by Cardno NSWACT Pty Ltd (SYD)
Date: 2016-08-05
Coordinate System: GDA 1994 MGA Zone 56
Project: 80016076
Map: 80016076-GS-014-LandUse1_Tiles.mxd 02



Study Area Map 2

WARRUMBUNGLE SHIRE
COUNCIL BIKE PLAN

Legend

- Major Road (LPI)
- Minor Road (LPI)
- Major Watercourses (LPI)

Places of Interest by Facility Type (WSC, 2016)

- Aged Care
- Community
- Education
- Medical
- Recreation
- Other

1:15,000 Scale at A3



Map Produced by Cardno NSW/ACT Pty Ltd (SYD)
Date: 2016-08-05
Coordinate System: GDA 1994 MGA Zone 56
Project: 80016076
Map: 80016076-GS-015-LandUse2_Tiles.mxd 02

2 Policy and planning framework

2.1 State Government policies and plans

The State Government strategies and plans, specifically relevant for the development of the Warrumbungle Shire Bike Plan are summarised in the following sections.

2.1.1 Long Term Transport Master Plan, Transport for NSW

In regional NSW, transport plays a vital social function as it connects people with other communities, services, education, jobs and opportunities. The Long Term Transport Master Plan acknowledges the specific challenges in rural areas including:

- > Rural towns with aging populations have specific needs that require equitable, convenient and safe access to transport;
- > Reduction in transport inequality for rural NSW towns and remote areas which rely mainly on motor vehicle travel, through innovative and targeted solutions;
- > Making cycling safer, as cyclists are some of the most vulnerable roads users, especially on rural roads.

The State Government aims to support cycling in regional areas by providing a connected cycle network within 5 km of town centres. Some of the measures undertaken by TfNSW to support cycling include:

- > Improving access to user friendly bicycle information;
- > A long term cycling investment plan which includes co-funding projects with local councils in order to improve infrastructure, enforce behavioural change programs and promote safer cars and technology; and
- > Providing programs to increase and improve facilities for bicycle parking.

The Plan notes that regular physical activity, including active travel, is also important to our health, wellbeing and mental state.

2.1.2 Central West NSW Transport Action Plan, Transport for NSW

The Central West NSW Transport Action Plan recognises that regional towns in NSW are ideal for cycling as a prominent transport mode. Almost 90% of people live within easy bike riding distance of a local centre with access to shops, schools and workplaces. The Plan identifies several actions to support active travel within the major towns and cities of the Central West region, these include:

- > Connecting Centres Cycling Program which identifies and completes gaps within the five kilometre catchments surrounding regional towns;
- > Cycling Towns Program which focuses on bicycle infrastructure provisions and encouragement, and;
- > Improving information about cycling routes and facilities.

The Plan specifically identifies the need for the Warrumbungle Shire LGA to implement facilities for cycling, including the provision of cycle parking facilities at town centres, schools and hospitals.

2.1.3 Disability Action Plan 2012 – 2017, Transport for NSW

This Plan aims to ensure that the needs of all customers are placed at the centre of planning and decision-making for the transport system. This requires improvements to the design of transport infrastructure, customer service and customer information systems.

The relevant aims of the Disability Action Plan include;

- > Eliminating, as far as practical, direct and indirect discrimination in the provision of transport services to NSW residents and visitors; and
- > Reducing transport disadvantage experienced by people with a disability.

To achieve these objectives, the Disability Action Plan has a couple actions specifically relating to cycling:

- > Ensuring that all new cycling infrastructure is accessible and DDA compliant; and
- > Explore the needs of people with a disability and older people who cycle in NSW.

Relevance for the Warrumbungle Shire Bike Plan

- > State Government policies support efforts to increase integrated transport including active transport.
- > The Long Term Transport Master Plan indicates the need to build a connected cycle network within a five kilometre catchment of major centres and provide end of trip facilities.
- > The Western NSW transport Action Plan supports active travel initiatives including cycling programs which focus on improving the network and infrastructure facilities.
- > The Warrumbungle Shire Bike Plan must adhere to DDA standards and objectives which are outlines in the Transport Disability Action Plan.

2.2 Warrumbungle Shire Council policies and plans

2.2.1 Coonabarabran Bicycle Plan (2005 - 2010)

This Plan sets out the five year goals of the Warrumbungle Shire Council around supporting and encouraging residents to choose to cycle instead of drive. It was prepared by the Coonabarabran Local Traffic Committee in cooperation with the wishes of the community and the Roads and Traffic Authority (RTA – now Roads and Maritime Services), and complies with key RTA documents regarding Bike Plans.

The community benefits of the previous Bike Plan for Coonabarabran are:

- > Healthier lifestyles;
- > Promotion of a more social community;
- > Cleaner natural environments;
- > Safety; and
- > Increased opportunity for recreation and tourism.

Coonabarabran is regarded as an excellent place for cycling because of its topography, climate, wide streets, low speed limits, close proximity of public spaces and landscapes.

The barriers preventing a safe and easily implemented bicycle network are also identified in the document, informed by a community survey during the development of the Plan. Issues included the intersection of Newell Highway in the town and the resulting traffic problems, the cycling connections for school children to and from schools, and the inaccessibility along the Castlereagh River.

The Plan presents maps and descriptions for each proposed section of cycle path, and in some cases offers alternative options and recommendations.

2.2.2 Warrumbungle Shire Council Pedestrian Access and Mobility Plan, (2015)

The 2015 Warrumbungle Shire Pedestrian Access and Mobility Plan (PAMP), focuses on providing safe and convenient pedestrian facilities, including accessibility for people with disabilities.

The PAMP sets out a transparent and streamlined framework for the investment in pedestrian infrastructure, as identified through community and stakeholder consultation. With a focus on safety and equality of access for all of the community, the PAMP aims to meet the requirements of the growing LGA in a sustainable and economic way.

A community consultation survey as part of the PAMP development showed that most respondents walk daily for exercise or to go to the shops, and that footpath maintenance and new facilities was a major requirement.

2.2.3 Warrumbungle Local Environmental Plan 2013

Local Environmental Plans (LEP) must be prepared by each Local Council in accordance with the NSW Standard Instrument. LEP's guide local development and growth through development standards and land use zoning, and also identify local items of heritage and conservation.

The land zoning of the six towns focused on in the Bike Plan are described below:

- > Coonabarabran CBD is classed as Local Centre (B2) mainly surrounded by General Residential (R1) with Private Recreation (RE2) and some Enterprise Corridor (B6);
- > Binnaway is classed as having both Large Lot Residential (R5) and Village (RU5) surrounded by Primary Production (RU1);
- > Mendooran is classed as Large Lot Residential (R5) in the south, and Village (RU5) in the north;
- > Coolah is classed as predominantly General Residential (R1) with General Industrial (IN1), Local Centre (B2), Private Recreation (RE1) and Large Lot Residential (R5);
- > Baradine is classed as Village (RU5) surrounded mainly by Primary Production (RU1), with some Large Lot Residential (R5) and Forestry (RU3); and
- > Dunedoo is classed as mainly General Residential (R1) with areas of General Industrial (IN1), Infrastructure (SP2), Local Centre (B2), Private Recreation (RE2) and Public recreation (RE1).

All highways and major roads in the six towns are classified as Infrastructure (SP2).

2.2.4 Warrumbungle Shire Council Development Control Plan 2015

The Warrumbungle Shire Council Development Control Plan (DCP) 2015, was prepared by Council in accordance with the Environmental Planning and Assessment Act 1979 section 74C and the Environmental Planning and Assessment Regulation 2000 (EP & A Regulations).

The Plan also runs in conjunction with the Warrumbungle LEP 2013, and supports its broad objectives for the LGA, such as:

Providing clear development guidelines for various forms of development;

Encouraging a high standard of development that respects and maintains the Warrumbungle Shire's existing urban, rural and natural environment;

Outlining Council's development application submissions and notification requirements;

Advising members of the public with development processes;

Expediting development approvals by giving precise insight on Council's intent and criteria in the development process; and

Providing information on development outcomes for stakeholders.

The DCP outlines the need for a structure plan to be prepared before an application is made for development of the land, including the identification of bicycle path links between land and other urban developments in Residential Release Area Zones R1 and RU5.

2.2.5 Warrumbungle Community Strategic Plan

The Warrumbungle Shire Community Strategic Plan (CSP) sets out the goals and strategies to address the social, environmental and economic issues and opportunities identified for the community. Various goals are described in the Plan:

- > Managing the impacts of climate change;
- > Increasing tourism opportunities;
- > Attracting young people and families to the LGA;
- > Appreciating the rural character of the area; and
- > Acknowledging the benefits of sporting and recreational activities.

The implementation of a new Bike Plan can aid in the achievement of these goals, through contribution to the revitalisation of the Warrumbungle Shire. Several key directions are proposed in the CSP that support cycling's role as an increasingly popular form of transport:

- > Improving cyclist accessibility and amenity;
- > Increasing cyclist safety through improved infrastructure;
- > Providing opportunities for the community to participate in enhancing the health of the natural environment;
- > Integrating and synergising land use and the transport system; and
- > Initiating promotion of cycling as a prominent mode of transport.

Relevance for the Warrumbungle Shire Bike Plan

- > The Bike Plan must consider the findings, issues and recommendations proposed in the Coonabarabran Bicycle Plan;
- > The Bike Plan must integrate with the solutions proposed in the 2015 PAMP; and
- > The proposed infrastructure must comply with the LEP's land use zoning, and with the DCP's development standards.

3 People and movement

The study area's population characteristics are established in the following sections based on the Australian Bureau of Statistics (ABS) 2011 Census data and other sources.

3.1 Population

The Warrumbungle Shire is a regional hub in NSW with a current population of more than 9,000 people (Warrumbungle Shire Council website).

Coonabarabran is the largest town in Warrumbungle with a population of 3,177 people. A breakdown of the age groups per town is provided in **Table 3-1**. The table also compared to the NSW state average. The review identified that Mendooran has the most residents over the age of 60 (~33%), followed by Baradine and Dunedoo (~32%). Collectively in Warrumbungle Shire, more people are aged 60-69 years than any other age bracket. The Census data also shows that there is a significant proportion of 10-19 year olds living in the LGA.

Table 3-1 Age census - Source: ABS, 2011

| Age group | Baradine | Binnaway | Coolah | Coonabarabran | Dunedoo | Mendooran | NSW |
|------------------------|----------------|----------------|----------------|----------------|----------------|---------------|-------|
| 0 – 4 years | 59 (7.7%) | 38 (4.9%) | 100 (7.8%) | 198 (6.2%) | 77 (6.1%) | 26 (5.8%) | 6.6% |
| 5 – 9 years | 57 (7.5%) | 44 (5.7%) | 113 (8.8%) | 209 (6.6%) | 85 (6.8%) | 36 (8.0%) | 6.3% |
| 10 – 19 years | 93 (12.2%) | 119 (15.3%) | 162 (12.7%) | 418 (13.1%) | 180 (14.3%) | 50 (11.1%) | 12.7% |
| 20 – 29 years | 67 (8.8%) | 35 (4.5%) | 94 (7.3%) | 305 (9.6%) | 77 (6.1%) | 31 (6.8%) | 13.3% |
| 30 – 39 years | 82 (10.8%) | 73 (9.4%) | 133 (10.4%) | 292 (9.2%) | 108 (8.6%) | 43 (9.6%) | 13.9% |
| 40 – 49 years | 80 (10.5%) | 88 (11.4%) | 176 (13.8%) | 357 (11.3%) | 163 (13.0%) | 50 (11.1%) | 14.0% |
| 50 – 59 years | 84 (11.0%) | 139 (17.9%) | 166 (13.0%) | 428 (13.5%) | 169 (13.4%) | 66 (14.6%) | 12.9% |
| 60 – 69 years | 104 (13.7%) | 133 (17.1%) | 144 (11.3%) | 424 (13.4%) | 190 (15.2%) | 71 (15.8%) | 10.0% |
| 70 – 79 years | 85 (11.2%) | 70 (9.0%) | 137 (10.7%) | 307 (9.6%) | 138 (11.0%) | 50 (11.1%) | 6.1% |
| 80 – 84 years | 28 (3.7%) | 24 (3.1%) | 26 (2.0%) | 109 (3.4%) | 32 (2.6%) | 16 (3.5%) | 2.2% |
| 85 years and over | 23 (3.0%) | 13 (1.7%) | 27 (2.1%) | 130 (4.1%) | 34 (2.7%) | 13 (2.9%) | 2.0% |
| Total residents | 762 | 776 | 1278 | 3177 | 1253 | 452 | |

3.1.2 Car ownership

The majority of households in Warrumbungle Shire have only one motor vehicle, as shown in **Table 3-2**.

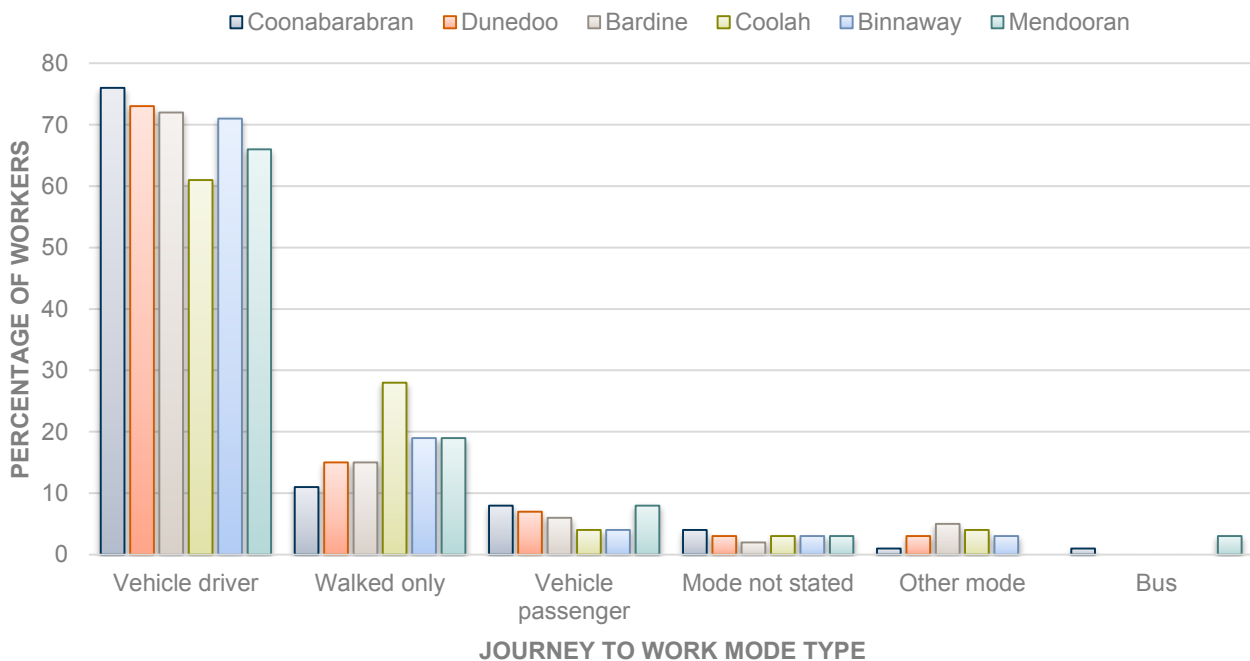
Table 3-2 Car ownership – Source: ABS, 2011

| Number of motor vehicles | Coonabarabran | Coolah | Dunedoo | Binnaway | Baradine | Mendooran |
|--------------------------|----------------|----------------|----------------|----------------|----------------|---------------|
| No motor vehicles | 113 (9.5%) | 37 (7.9%) | 19 (4.2%) | 27 (8.4%) | 26 (8.5%) | 8 (4.2%) |
| 1 motor vehicle | 505 (42.4%) | 156 (33.3%) | 149 (32.7%) | 128 (39.6%) | 112 (36.5%) | 80 (41.7%) |
| 2 motor vehicles | 360 (30.2%) | 178 (38%) | 165 (36.2%) | 108 (33.4%) | 106 (34.5%) | 63 (32.8%) |
| 3 + motor vehicles | 150 (12.6%) | 91 (19.4%) | 104 (22.8%) | 47 (14.6%) | 41 (13.4%) | 33 (17.2%) |
| Number not stated | 63 (5.3%) | 7 (1.5%) | 19 (4.2%) | 13 (4%) | 22 (7.2%) | 8 (4.2%) |

3.1.3 Journey to work

The Bureau of Transport Statistics (BTS) provides information on the Journey to Work (JTW) travel patterns for residents and workers across NSW. It is clear from **Figure 3-1** that the majority of people in the Warrumbungle Shire travel to work via private vehicles. Given the small size of the towns, almost 30% of people in Coolah and almost 20% of people in Binnaway and Mendooran walk to work.

Figure 3-1 Travel patterns



Considerations for the Warrumbungle Shire Bike Plan

- > Children and teenagers are more likely to use bike paths on their way to school and would require more safe crossings and facilities as they are less familiar with the road rules; and
- > The high proportion of vehicle drivers presents an opportunity to encourage people to cycle for work trips within towns.

3.2 Public and private transport

3.2.1 Private motor vehicles

3.2.1.1 *Road network*

The extensive road network in the Warrumbungle Shire spreads across state highways, regional and local roads. There are over 2,200 kilometres of local roads which are maintained under Council's road maintenance program.

The major highways in the LGA include the Newell Highway between Coonabarabran, Dubbo and Narrabri, the Oxley Highway between Coonabarabran and Gunnedah, and the Castlereagh Highway connecting Mendooran and Dunedoo.

Other major connecting roads include Warrumbungle Way, which connects Coonabarabran, Binnaway and Coolah, and Coonabarabran Road which connects Baradine to Coonabarabran.

3.2.1.2 *Parking*

There is plenty of unrestricted parking in the Warrumbungle Shire LGA.

3.2.2 Train network

There is no public train service direct to the Warrumbungle region, however there is a bus link from Lithgow Train Station.

There are freight services running between Merrygoen and Binnaway. This section forms part of the cross country line from Dubbo to Werris Creek.

3.2.3 Bus network

There are no public transport buses within the towns of the Warrumbungle Shire, however there are regular services connecting the towns and Lithgow train station.

The Lithgow to Mudgee, Coonabarabran and Baradine bus service is operated by NSW Trainlink. The 573 service runs from Lithgow to Baradine, stopping at Dunedoo, Coolah, Mendooran, Binnaway and Coonabarabran along the way, and the 546 bus service runs in the opposite direction.

Other bus hire companies operating in the region include Mc Whirter's Bus Service, Prugger's Bus and Coach Service and David Baker Clipper Bus.

A number of the schools in the towns provide school buses that drop-off and pick-up students to and from the schools. There is an after school care program for students at Coonabarabran Public School, held at Saint Lawrence's School, which the students can catch an organised bus to.

3.2.4 Taxi network

There is one taxi service in the Warrumbungle Shire, based in Coonabarabran, located at 32 John Street.

3.3 Crash analysis

There was only one crash involving bicycle riders reported in the Warrumbungle Shire LGA between 2010 and 2014. The crash was a Road User Movement (RUM) code 88, (out of control on bend) crash, occurring in daylight on a 2-way undivided road on the Newell Highway, north east of Coonabarabran. This crash occurred in 2014, and an injury was sustained by the cyclist.

Figure 3-2 Bicycle crash map (Coonabarabran)

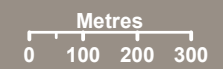


Crashes by Type: Coonabarabran

WARRUMBUNGLE SHIRE
COUNCIL BIKE PLAN

- Legend**
- Major Road (LPI)
 - Minor Road (LPI)
 - Major Watercourses (LPI)
- Crash by Type (TfNSW, 2016)**
- Injury

1:14,000 Scale at A3



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Date: 2016-08-05
Coordinate System: GDA 1994 MGA Zone 55
Project: 80016076
Map: 80016076-GS-005-Crashes_DDP.mxd 02

4 Community and stakeholder consultation

Community feedback is an important element in the development of a Bike Plan that addresses the resident concerns and ideas. This section summarises the community consultation activities undertaken and comments received, more detail is provided in the Community Consultation Outcomes Summary Report, attached in **Appendix A**.

4.1 Previous consultation

Two previous Bike Plan studies which included community consultations were undertaken in the Warrumbungle Shire.

A community consultation survey was completed in 2002 for the construction of the cycleway crossing the Mary Jane Cain Bridge to the industrial area. The survey results indicated that residents and their children would use this cycleway, and additional cycleways in the Shire were suggested.

The Coonabarabran Bicycle Plan (2005-2010) included a two page survey which was sent by mail to every household in Coonabarabran in September 2004.

Further details of these reports are provided in **Appendix A**.

4.2 Stakeholders

The following stakeholder organisations were contacted to contribute to the development of the Bike Plan:

- > Warrumbungle Shire Council;
- > Progress associations and Chambers of Commerce;
- > State government agencies:
 - Roads and Maritime Services (RMS);
- > Schools;
- > Aged care facilities and retirement villages;
- > Cycle clubs; and
- > Sport groups;

Additionally, all residents of Coonabarabran, Coolah, Binnaway, Mendooran, Baradine, and Dunedoo were encouraged to participate in the project consultation activities.

4.3 Consultation activities

The consultation activities for the Warrumbungle Bike Plan included an online SurveyMonkey and a hard copy survey left at public places like libraries in the six towns.

The community consultation activities were promoted to community members via announcements on Council's website, Facebook and through the provision of surveys in public places.

These activities are described in more detail in **Appendix A**.

The hard copy community survey and the online SurveyMonkey was open to the public during March and April of 2016, and yielded 84 responses in total.

4.4 Common and key issues

There were several hazardous locations in the LGA for cyclists that were raised by many of the surveyed residents:

- > Main roads in all six towns;
- > Timor Road, Coonabarabran;

- > Highways; and
- > Town connecting roads;

Recommendations and observations made by the respondents included:

- > The need for increased vehicle driver education and understanding of the relevant laws;
- > Provision of signage identifying cycle routes;
- > Cycle routes linking adjacent towns; and
- > Rail Trails.

Further details of the common and key issues are given in **Appendix A**.

5 Network development

5.1 Network development

The bicycle networks for the six towns were developed to align with the network principles listed in the RMS 'How to Prepare a Bike Plan' (coherence, directness, safety, attractiveness and comfort). The bicycle networks were developed with consideration of:

- > **Building on the existing bicycle network:** Existing bicycle networks were analysed and new routes were identified to enhance these networks. This retains the coherence of the existing routes and aids in network legibility;
- > **Identifying missing links:** The draft network was overlaid with the existing network to identify missing links;
- > **Connections to key land uses:** The location of key cycling trip generating land uses were identified including residential, education, retail and employment, parks and recreation land uses; and
- > **Community comments:** Community comments on bicycle links throughout the towns were considered and incorporated into the network development.

The bicycle networks for each of the six towns are shown in **Figure 5-1** to **Figure 5-6**.

Depending on the traffic levels, road space and safety issues, different types of bicycle facility are proposed along routes across the network. These include shared paths and mixed traffic routes.

Shared paths are off-road paths that are designated for use by both pedestrians and cyclists. Shared paths are wider (minimum width of 2.5 metres) than normal footpaths and are sign posted with 'Shared Path' signs and bicycle, and pedestrian pavement markings. Whilst the path is to be used by both pedestrians and cyclists, pedestrians maintain priority.

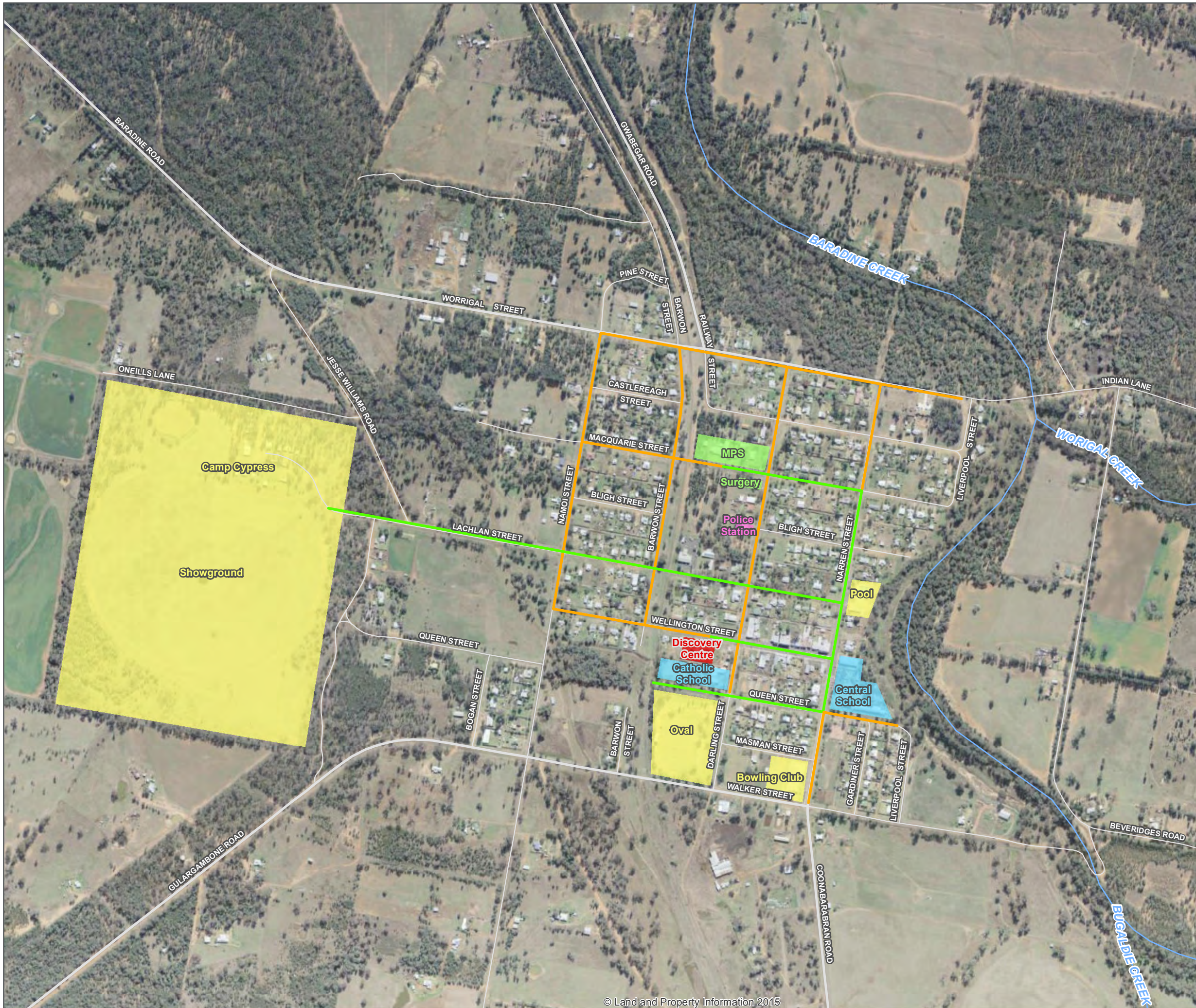
Mixed traffic routes are roads where cyclists share the road lane with motor vehicles. Mixed traffic cycling routes are generally recommended on lower traffic volume roads and shared paths are recommended along higher traffic volume roads and where vulnerable cyclists are expected, for example often between schools and recreational facilities.

5.1.1 Routes outside of the Bike Plan

Certain routes were identified by the community at meetings and via the surveys as having great beneficial advantage to the community in the future. Whilst these routes are not proposed as part of this Bike Plan (due to the boundary of the scope covered by the Bike Plan), the Bike Plan recommends that these routes be investigated in the future for development. These routes include:

- > Recreational routes such Rail Trails and other local recreational routes;
- > A route to the Woodland Learning Centre (2 kilometres west of Dunedoo);
- > A route to and for recreational users in Coonabarabran's south-west. A route seems to be currently used by recreational cyclists;
- > the current path being used by cyclists, including streets along John Renshaw Parkway, Rifle Range Road, Barker Street and Reservoir Street;
- > A route to the recreational mountain bike tracks approximately 2.5 kilometres from Coolah.

Figure 5-1 Baradine bicycle network



Proposed Bike Network: Baradine

WARRUMBUNGLE SHIRE COUNCIL BIKE PLAN

Legend

- Major Road (LPI)
- Minor Road (LPI)
- Major Watercourses (LPI)

Proposed Bike Network

- Shared Path
- On Road (Mixed Traffic)

Places of Interest by Facility Type (WSC, 2016)

- Community
- Education
- Medical
- Recreation
- Other

1:9,000 Scale at A3



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Map: 80016076-GS-006-PropBikeNetwork_DDP.mxd 04

Figure 5-2 Binnaway bicycle network



Proposed Bike Network: Binnaway

WARRUMBUNGLE SHIRE COUNCIL BIKE PLAN

Legend

- Major Road (LPI)
- Minor Road (LPI)
- Major Watercourses (LPI)

Proposed Bike Network

- Shared Path
- On Road (Mixed Traffic)

Places of Interest by Facility Type (WSC, 2016)

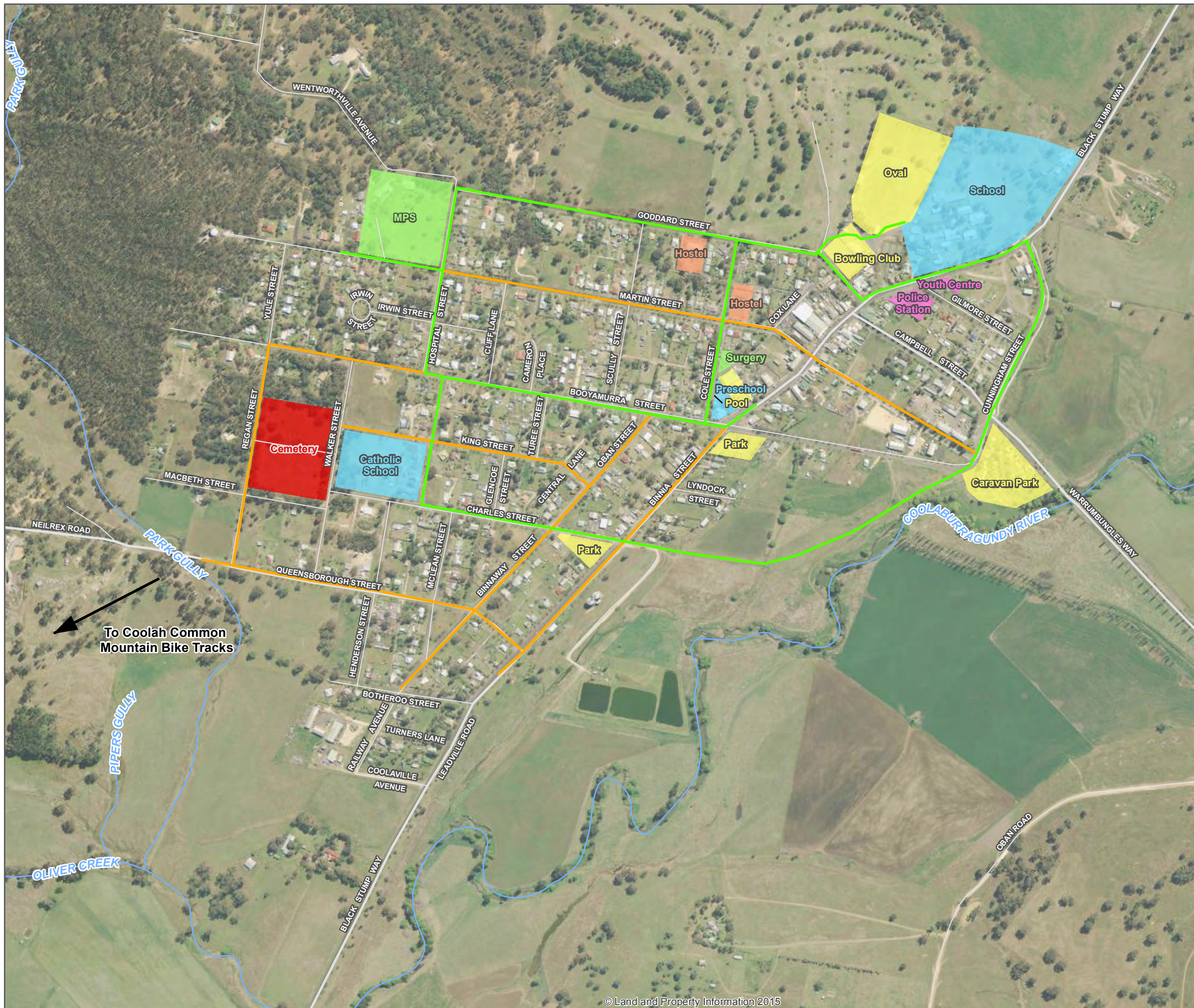
- Community
- Education
- Recreation
- Other

1:6,000 Scale at A3



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Date: 2016-08-05
Coordinate System: GDA 1994 MGA Zone 55
Project: 80016076
Map: 80016076-GS-006-PropBikeNetwork_DDP.mxd 04

Figure 5-3 Coolah bicycle network



Proposed Bike Network: Coolah

WARRUMBUNGLE SHIRE
COUNCIL BIKE PLAN

Legend

- Major Road (LPI)
- Minor Road (LPI)
- Major Watercourses (LPI)

Proposed Bike Network

- Shared Path
- On Road (Mixed Traffic)

Places of Interest by Facility Type (WSC, 2016)

- Aged Care
- Community
- Education
- Medical
- Recreation
- Other

1:8,000 Scale at A3



Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2016-08-05
Coordinate System: GDA 1994 MGA Zone 55
Project: 80016076
Map: 80016076-GS-006-PropBikeNetwork_DDP.mxd 04

Figure 5-4 Coonabarabran bicycle network



Proposed Bike Network: Coonabarabran

WARRUMBUNGLE SHIRE
COUNCIL BIKE PLAN

Legend

- Major Road (LPI)
- Minor Road (LPI)
- Major Watercourses (LPI)

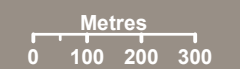
Proposed Bike Network

- Shared Path
- On Road (Mixed Traffic)

Places of Interest by Facility Type (WSC, 2016)

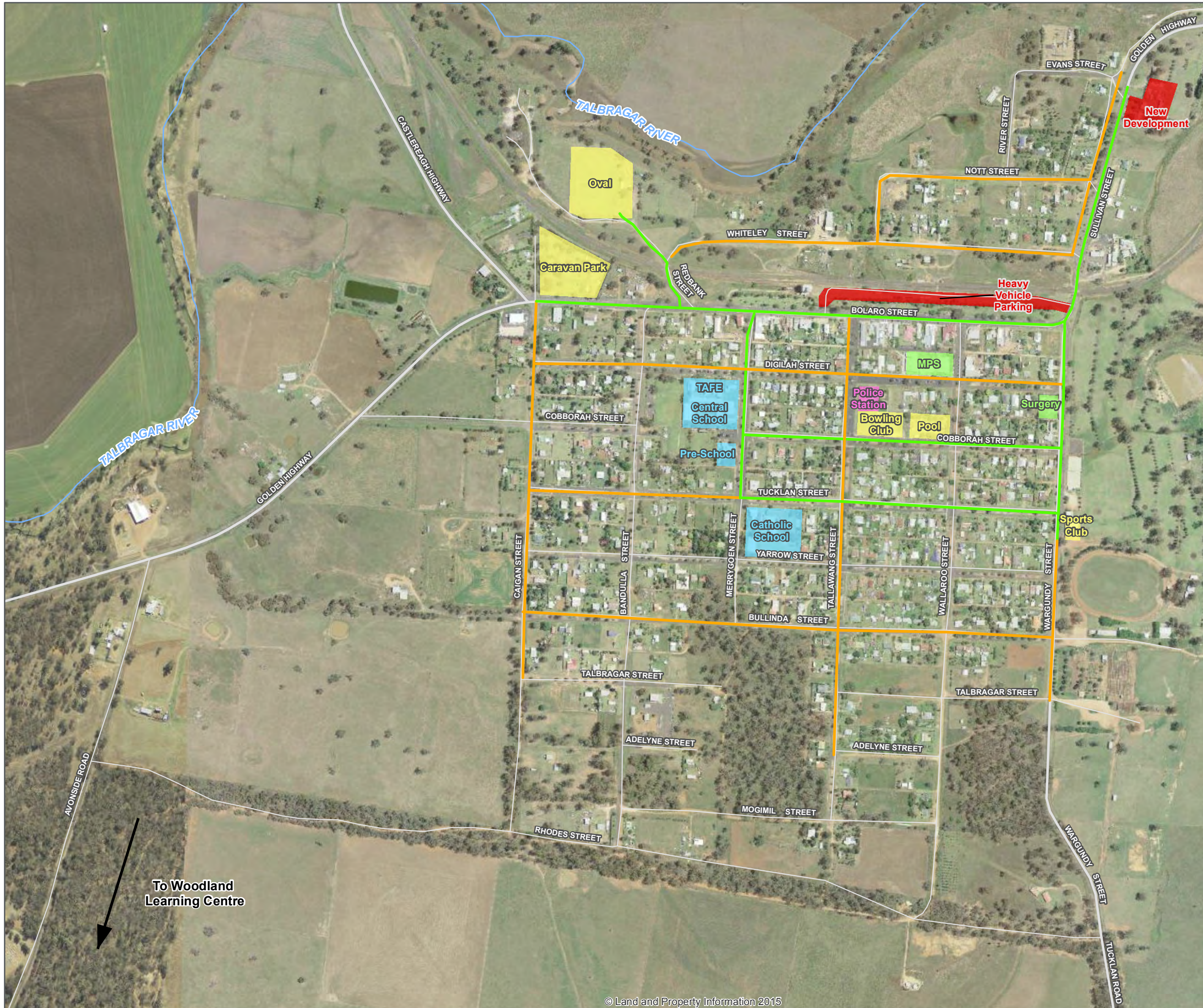
- Aged Care
- Community
- Education
- Medical
- Recreation
- Other

1:14,000 Scale at A3



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Date: 2016-08-05
Coordinate System: GDA 1994 MGA Zone 55
Project: 80016076
Map: 80016076-GS-006-PropBikeNetwork_DDP.mxd 04

Figure 5-5 Dunedoo bicycle network



**Proposed Bike Network:
Dunedoo**

WARRUMBUNGLE SHIRE
COUNCIL BIKE PLAN

Legend

- Major Road (LPI)
- Minor Road (LPI)
- Major Watercourses (LPI)

Proposed Bike Network

- Shared Path
- On Road (Mixed Traffic)

Places of Interest by Facility Type (WSC, 2016)

- Community
- Education
- Medical
- Recreation
- Other

1:8,000 Scale at A3



Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2016-08-05
Coordinate System: GDA 1994 MGA Zone 55
Project: 80016076
Map: 80016076-GS-006-PropBikeNetwork_DDP.mxd 04

Figure 5-6 Mendooran bicycle network



**Proposed Bike Network:
Mendooran**

WARRUMBUNGLE SHIRE
COUNCIL BIKE PLAN

Legend

- Major Road (LPI)
- Minor Road (LPI)
- Major Watercourses (LPI)

Proposed Bike Network

- Shared Path
- On Road (Mixed Traffic)

Places of Interest by Facility Type (WSC, 2016)

- Community
- Education
- Recreation
- Other

1:7,000 Scale at A3



Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2016-08-05
Coordinate System: GDA 1994 MGA Zone 55
Project: 80016076
Map: 80016076-GS-006-PropBikeNetwork_DDP.mxd 04

6 Network assessment

6.1 Bicycle infrastructure assessment

The bicycle audits consisted of three key data collection functions:

4. Identification and recording of bicycle infrastructure.
 - > Every existing bicycle facility was recorded by the site auditor, whether it had any associated issues or not. These facilities included footpaths (in locations where shared paths are proposed on the network), shared paths, kerb ramps, refuges, and on-road bicycle facilities.
5. Assessment of existing bicycle infrastructure for issues and non-compliance.
 - > Every issue associated with existing bicycle facilities was recorded by the site auditor. The following sections are a summary of the facilities that were assessed, the issues that were recorded, the standards against which they were audited and the recommended improvement for each issue.
6. Facility width measurements.
 - > The width of all existing bicycle facilities were measured by the site auditor.

The following sections describe the infrastructure assessment in more detail.

6.1.1 Audit of crossings

Crossings include all facilities bicycle riders use to cross roads or inaccessible property (e.g. the rail corridor). This includes:

- > Refuges islands; and
- > Kerb ramps.

Zebra crossings were not audited as part of the Bike Plan as cyclists should be encouraged to dismount on approach to the crossing.

Refuge islands

Refuge islands allow cyclists to cross one direction of vehicle traffic at a time, providing a safe place in the middle of the lanes to wait before completing the second leg of the road crossing. Specific issues assessed for pedestrian refuges are summarised in **Table 6-1** along with the standards against which they were assessed and the recommended improvements.

Table 6-1 Refuge islands assessment and improvements

| Refuge island | | | |
|--|-------------------|----------------------|---------------------------|
| Issue | Standard | Requirement | Recommended improvement |
| Width too narrow | Width too narrow | 2.0 metres (minimum) | Replace pedestrian refuge |
| Length too narrow (parallel with road) | Length too narrow | 3.0 metres (minimum) | Replace pedestrian refuge |

Kerb ramps

Kerb ramps are used to assist bicycles on shared paths to enter and exit the roadway safely to cross the street at a designated point. Specific issues assessed for kerb ramps are summarised in **Table 6-2** along with the standards against which they were assessed and the recommended improvements.

Table 6-2 Kerb ramp assessment and improvements

| Kerb ramps | | | |
|-------------------------------------|---|---|-------------------------|
| Issue | Standard | Requirement | Recommended improvement |
| Missing | AS 1742.10-2009 Pedestrian control and protection with reference to RMS supplement and TDT 2001/04b Traffic calming devices as pedestrian crossings | Kerb ramps should be provided where possible. | Provide kerb ramp |
| Misaligned with opposite kerb ramp | | Kerb ramps must be directly facing each other, and aligned with the adjacent property boundary or wall. | Reconstruct kerb ramp |
| DDA compliant dimensions and grades | | Kerb ramps should be 2.0 metres wide and have clear space at the top. | Reconstruct kerb ramp |
| Surface condition | | Kerb ramps should be in a good condition to avoid trip hazards. | Replace kerb ramp |

Lack of crossing infrastructure

Regular road crossings allow pedestrians to access their destinations safely. This is particularly important in areas of high vehicle volumes and speeds or where the crossing distance is large. Issues associated with a lack of crossing opportunities were assessed as part of the site audits. The criteria used to audit these is summarised in **Table 6-3**.

Table 6-3 Lack of crossing infrastructure assessment and improvements

| Lack of crossing infrastructure | | |
|--|--|---|
| Issue | Requirement | Recommended improvement |
| No crossing facility at desire line/intersection | Crossing facilities along desire lines. | Construct kerb ramps and pedestrian refuge. |
| Dangerous crossing location - high traffic volumes and/or speeds | Appropriate facilities to reduce traffic speeds, traffic volumes or crossing distance for safe pedestrian crossings. | Construct kerb ramps and pedestrian refuge. Or Investigate Local Area Traffic Management measures |

6.1.2 Paths and lanes

All existing footpaths, shared paths and bike lanes along the bicycle network were assessed for their existence, width, condition and other issues. The footpaths were only assessed when the path was proposed to be upgraded to a shared path as part of the bicycle network development identified in **Section 5.1**.

Specific issues assessed for footpath presence and width are summarised in **Table 6-4** and for shared paths in **Table 6-5**.

Specific issues assessed for bicycle facility presence and width are summarised in **Table 6-6**.

Table 6-4 Footpath assessment and improvements

| Footpaths* | | | |
|-----------------|------------------------------------|--|---|
| Facility | Standard | Assessment | Recommended improvement |
| Footpath width* | Austroads GTRD Part 6a Figure 6.1. | 1. No shared path | Provide with a concrete shared path 2.5 metres wide |
| | | Non-compliant shared path (<=2.39m) | Replace with shared path 2.5 metres wide |
| | | Minor non-compliant shared path (>=2.4m - 2.5m wide) | None |
| | | Compliant (>= 2.5m wide) | None |

* The existing footpath network was only assessed when the path was proposed to be upgraded to a shared path as part of the bicycle network development. As such, the footpaths have been audited against the assessments and improvements of a shared path.

Table 6-5 Shared path assessment and improvements

| Shared paths | | | |
|-----------------------|------------------------------------|--|---|
| Facility | Standard | Assessment | Recommended improvement |
| Shared footpath width | Austroads GTRD Part 6a Figure 6.1. | No shared path | Provide with a concrete shared path 2.5 metres wide |
| | | Non-compliant shared path (<=2.39m) | Replace with shared path 2.5 metres wide |
| | | Minor non-compliant shared path (>=2.4m - 2.5m wide) | None |
| | | Compliant (>= 2.5m wide) | None |

Table 6-6 On-road bike facility assessment and improvements

| On-road bike facility | | | |
|--|---|--|--|
| Facility | Standard | Assessment | Recommended improvement |
| On-road bike facility width (mid-block length) | RMS NSW bicycle guidelines | No formal facility | Provide/adjust bike lane and car parking line marking. Provide bike logos every 200 metres max. |
| | | Compliant mixed traffic lane use (bike logos present). | None |
| | AS 1742.9-200 Figure 2.4 | Non-compliant mixed lane use (no bike logos present) | Provide bike logos every 200 metres max |
| | RMS NSW Bicycle Guidelines - Figure 5.1 | Non-compliant bike lane adjacent to parking <1.0m buffer zone | Provide/adjust bike lane and car parking line marking |
| | RMS NSW bicycle figures 5.1 | Compliant bike lane 1.0m buffer zone if adjacent to car parking, lane minimum 1.4m | None |

A general path condition and situation assessment was undertaken for bicycle facilities using the criteria in **Table 6-7**.

Table 6-7 Path observation assessment and improvements

| Path observations | | | |
|--|---|---|--|
| Issue | Standard | Assessment | Recommended improvement |
| Poor path condition | AS 1428.1-2009 Design for Access and Mobility | The shared path is assessed for cracked and uneven surfaces. | Replace shared path with 2.5m wide concrete shared path. |
| | | The road is assessed for safe and comfortable manoeuvrability for cyclists. | Resurfacing if required. |
| Steep grade/ cross fall | | Maximum cross fall gradient 1:40. | Regrade where possible and provide 2.5m wide concrete shared path. |
| Potential pedestrian cyclist conflict on shared path | | Signage and line markings should be clearly visible by both pedestrians and cyclists. | Situation dependent. |
| Lack of active/ passive surveillance | | Consider active surveillance along path. | Situation dependent. |

6.2 Site audits and software

6.2.1 Site audits

The site audit phase of the Bike Plan was undertaken from the 4th - 7^h of April 2016. The audit assessed all bicycle facilities located on the existing and proposed bicycle networks. Audits were conducted by walking and driving along the proposed bicycle routes.

Data was collected on the site audits using iPads installed with the ArcGIS “Collector” application. The data was recorded and uploaded to the main GIS server over a mobile 4G connection available on the iPads.

Bike facilities that were observed along the auditor’s path of travel were recorded and assessed according to the predetermined set of standards outlined in **Section 7.2**, and entered into the Collector for ArcGIS application by completing a form. This process is described in more detail in **Section 7.3.2**.

6.2.2 Bike plan software: Collector for ArcGIS

A custom-made form was created in the Collector for ArcGIS iPad application for collection of the bike audit data. Bike data was recorded by placing a point or line within the Collector for ArcGIS iPad application to indicate the presence of a facility, issue and to recommend an improvement.

Each feature that was assessed and recorded was represented on the GIS map interface, either as a point symbol or line, carrying GPS coordinates and information inputted by the auditor on the iPad through a series of drop-down and text entry boxes.

The drop-down boxes comprised of a list of bicycle facilities, and within each facility common issues and issues pertaining to that specific facility were listed for choosing. The non-compliance of the issue (where applicable) and recommended improvement could also be entered. On occasions where further explanation was required to complement an observed issue, or where a different concern was observed by the auditor, free text-entry boxes were also available for providing comments. For most of the facilities observed and audited, a photograph was taken and attached to the GIS point or line identifying the feature.

7 Identified issues

The comprehensive site audits identified a range of issues associated with the bicycle networks in each town. Issues for bicycles range from a lack of safe crossing opportunities and missing cycling facilities to kerb ramps that are not wide enough to support shared paths.

These issues are described in the following sections. The outcomes of the audit are presented on maps in **Appendix B** and **Appendix C** and listed in the Schedule of Works in **Appendix D**.

All identified issues are also provided as a layer in the GIS database for the Bike Plan.

7.1 Path issues

7.1.1 Footpath

The existing footpath network was audited where the path aligned with a future shared path. Approximately 20 kilometres of the existing footpath network was audited across the six towns. The site audit found that of this, approximately 18 kilometres of proposed shared path was missing, approximately one kilometre was assessed as a compliant width for a shared path (minimum 2.5 metres wide), and one kilometre was assessed as not a compliant width.

The outcomes of the footpath audit are shown in **Appendix B**.

7.1.2 Shared path

The existing shared path network within the six towns, approximately four kilometres long in total, was audited to identify their condition and width compliance. Of the four kilometres of existing shared path network audited, approximately two kilometres was assessed as compliant shared path (2.5 metres in width) and approximately two kilometres of the existing network was assessed to be non-compliant.

The outcomes of the shared path audit are also shown in **Appendix B**.

7.1.3 On-road bicycle facilities

As no existing bicycle facilities are currently provided throughout the six towns, approximately 38 kilometres of the existing road network was audited on roads where the future on-road facilities are proposed. The audit identified that no formal facilities are provided on those roads.

The outcomes of the on-road bicycle audit are shown in **Appendix B**.

7.2 Path and lane condition issues

In addition to auditing the presence and width of path and on-road facilities, the site audit also assessed bicycle routes for a number of specific path issues, as noted in **Table 6-7**, which affect amenity and safety. The issues identified include:

- > Hazards or obstructions; and
- > Poor path or lane condition.

7.2.1 Hazard / obstruction

The site audit identified that generally the paths were generally free from obstruction. Shared paths which are proposed along shop fronts were the only instances where potential riders were faced with any obstructions (i.e. building columns, poles, rubbish bins and shop signs) however in these instances, the existing width of the path exceeded the 2.5 metre width required.

A number of hazardous locations were identified as part of the site audit.

This crossing of the Castlereagh River on Namoi Street and Horsley Street, Coonabarabran was identified as a flood prone zone. The flood zones are located on a proposed mixed traffic route and can lead to slips and falls for riders on the route. Extensive flooding of the road may lead to the road being inaccessible by cyclists. This location was also identified as steep in grade.

The crossing of train track lines were identified as hazardous as:

- > The train lines are currently in use and trains operate at high speeds (such as in Dunedoo);
- > The surface conditions of the crossings are poor and may result in trips and falls; and
- > No facilities are currently provided at the crossings to support the movement of pedestrians and bicycles.

Cardno recommend that with the construction/installation of all future bike routes, all routes (especially at the crossings of train lines) are investigated to ensure the safety of all cyclists.

7.2.2 Poor path or lane condition

The site audit identified that a large number of intersections through all six towns have a dip in the road on a number of approaches. Whilst only a short number of the intersections are sign posted with the W5-9 "DIP" sign, such as the intersection of Renshaw Street and Warrumbungles Way, the presence of the dip is very uncomfortable for cyclists and may result in falls to cyclists.

As this issues affects motor vehicles as much if not more than bicycles, these locations were not mapped. Rather, Cardno recommend that the surface of all roads, is regularly maintained and significant dips are assessed for safety implications and addressed through road maintenance works.

Some of these locations, where the road condition was identified as poor by the site auditor, include:

- > Worrigal Street, Baradine: at the intersections and former train track lines near Barwon Street and Kenebri Road;
- > Lachlan Street, Baradine: west of Namoi Street; and
- > Lachlan Street, Baradine: at the intersection of Barwon Street.

7.3 Crossing issues

The following sections describe the issues bicycles face when crossings roads. They summarise the types of issues by facility type:

- > Kerb ramps;
- > Refuge islands; and
- > Lack of crossing.

Crossing issues associated with shared paths are shown in **Appendix C**.

7.3.1 Kerb ramps

The site audit assessed 217 locations for kerb ramps on the future shared path network. Out of these locations, there were 130 missing kerb ramps, 36 which were found to have non-compliant dimensions, and eight which were misaligned. Three kerb ramps were found to be compliant. One location was identified as having road surface issues and 39 locations were identified as have no kerb ramp however the path was level with the road. Examples of the issues associated with kerb ramps through the towns are shown in the following images.

Missing Kerb Ramp: KR_00005

Path Type: Future shared path

Location: Narren Street, Baradine



Non-compliant: KR_00066

Path Type: Future shared path

Location: Chappell Avenue, Coonabarabran



Path level with the road: KR_00073

Path Type: Future shared path

Location: Crane Street, Coonabarabran



Misaligned: KR_00137

Path Type: Future shared path

Location: Digilah Street, Dunedoo



7.3.2 Refuge islands

Three refuge islands, located in Coonabarabran, were audited. Of the three locations, which align with the future shared path, two were deemed compliant, whilst the third (located on Dalgarno Street) was considered non-compliant given its short width and depth.

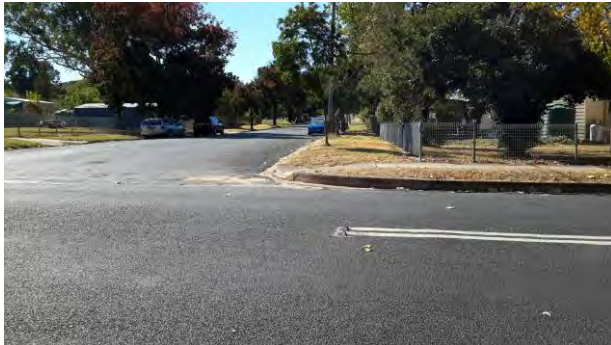
7.3.3 Lack of crossings

There are 67 locations across the six towns that were identified as lacking bicycle crossing facilities, at intersections, across desire lines or at dangerous crossing locations. Examples of these locations are shown in the following images.

**Lack of crossing facility at desire line/intersection:
OC_00042**

Path Type: Future shared path

Location: Booyamurra Street, Coolah



Dangerous crossing location: OC_00001

Path Type: Future shared path

Location: Narren Street, Baradine



8 Improvements

To develop safe, direct and attractive bicycle network throughout the six towns, the following infrastructure, policy and behaviour change improvements are recommended.

8.1 Infrastructure Improvements

8.1.1 Site audit recommendations

For the issues identified across the bicycle network, improvements were recommended to eliminate or mitigate the issues.

The complete list of improvements (and the issues they relate to) are provided in the Schedule of Works spreadsheet (**Appendix D**). The locations of the recommended infrastructure works align with the locations of identified issues on the maps presented in **Section 8**.

In a small number of instances no improvement or investigation was recommended for particular issues. This was due to constraints such as existing infrastructure or the property not being owned by Council.

A summary of the general recommendations for the bicycle networks is provided in **Table 8-1**.

Table 8-1 Improvement recommendations

| Feature | Issue | Improvement |
|--------------------------|---|---|
| Kerb Ramp | Misaligned kerb ramp | Reconstruct kerb ramp |
| | Non-compliant dimensions/ grades | Reconstruct kerb ramp |
| | Surface condition issue | Reconstruct kerb ramp |
| | Missing | Provide kerb ramp |
| Crossing Observation | Lack of crossing facility at desire line/ intersection | Construct refuge |
| | Dangerous crossing location | Construct 2m x 3m refuge Investigate LATM measures |
| Refuge | Crossing storage length less than 2 metres or crossing width less than 3 metres | Adjust refuge to provide compliant waiting space |
| Shared path width | Missing shared path | Provide shared path 2.5 metres wide |
| | Shared path width too narrow | Replace with shared path 2.5 metres wide |
| | Non-compliant shared path | Replace with shared path 2.5 metres wide |
| On-road bicycle facility | No formal on-road facility | Provide bicycle logos on road / bicycle lane |
| | Non-compliant bicycle lane | Re-linemark bicycle lane |
| | Lack of facility at intersection | Provide linemarking for bicycle storage |

As the issue of poor conditions at intersections affects motor vehicles, as much if not more than bicycles, these locations were not mapped. Rather, Cardno recommend that the surface of all roads, is regularly maintained and significant dips are assessed for safety implications and addressed through road maintenance works.

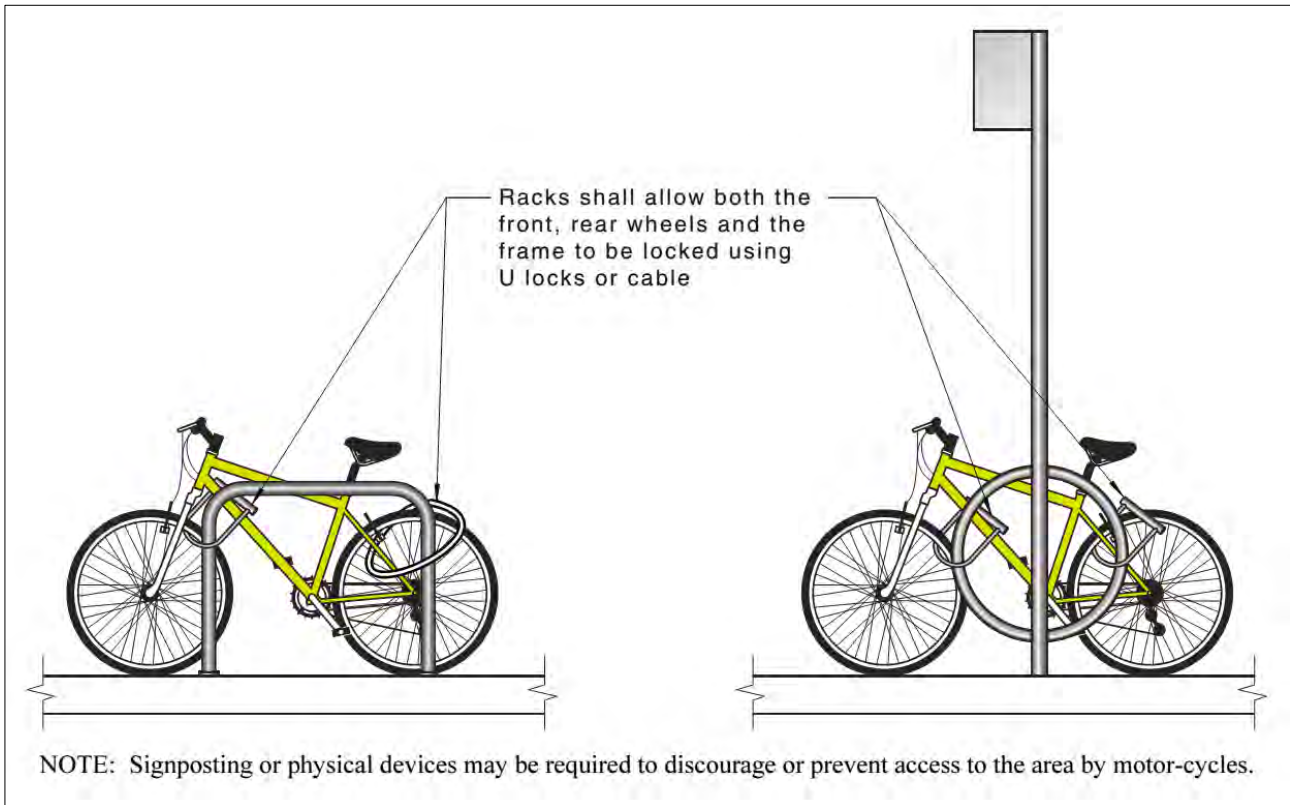
This approach is similar to that for hazardous locations, where investigation of improvement to the pavement condition is recommended.

Bicycle parking and alternative end-of-trip facilities

On-street hoops are recommended to be scattered around each of the towns in conspicuous locations. Hoops are recommended that allow users to lock the front and rear wheels and the frame. To avoid additional street clutter, these can be integrated with sign poles where appropriate.

The Australian Standard, AS 2890.3:2015 was recently updated to reflect the changes in bicycle parking infrastructure. Appendix B of the standard provides general guidance on Bicycle Parking Devices (BPD's). Standard examples of rails used as parking devices are reproduced in **Figure 8-1**.

Figure 8-1 Bicycle parking rails



Source: AS 2890.3:2005

Locations recommended for bicycle parking include the most active business frontage sections observed. These are outlined in **Table 8-2** to **Table 8-7**.

Table 8-2 Recommended on-street bicycle parking locations in Baradine

| Location description | Number of on-street hoops recommended |
|---|---------------------------------------|
| Central School, Narren Street | 15 |
| Public Pool, Narren Street | 10 |
| St Johns Baradine Catholic School, Darling Street | 10 |
| Wellington Street shops | 3 |
| Baradine Multi-Purpose Service, Macquarie Street | 2 |

Table 8-3 Recommended on-street bicycle parking locations in Binnaway

| Location description | Number of on-street hoops recommended |
|---|---------------------------------------|
| Binnaway Central School, Bulinda Street | 10 |
| Binnaway Town Hall | 3 |
| Public Pool, Renshaw Street | 10 |
| Renshaw Street shops | 3 |

Table 8-4 Recommended on-street bicycle parking locations in Coolah

| Location description | Number of on-street hoops recommended |
|---|---------------------------------------|
| Coolah Multi-Purpose Service, Hospital Street | 2 |
| Coolah Central School | 20 |
| Public Pool, Binnia Street | 10 |
| Sporting ovals | 10 |
| Catholic School, Nielrex Road | 10 |
| Binnia Street shops (near Goddard Street) | 4 |

Table 8-5 Recommended on-street bicycle parking locations in Coonabarabran

| Location description | Number of on-street hoops recommended |
|---|---------------------------------------|
| Coonabarabran District Hospital, Edwards Street | 2 |
| Coonabarabran High School, Newell Highway | 20 |
| Coonabarabran Public School, Newell Highway | 15 |
| Cooinda Nursing Home Hostel, Neate Street | 6 |
| Saint Lawrence's Catholic School, Timor Street | 10 |
| Public Pool, John Street | 10 |
| John Street shops | 15 |
| Dalgarno Street shops | 8 |
| Tourist visitor centre | 4 |
| Woolworths (Dargarno Street / nearby) | 4 |
| TAFE New England Coonabarabran | 4 |

Table 8-6 Recommended on-street bicycle parking locations in Dunedoo

| Location description | Number of on-street hoops recommended |
|---|---------------------------------------|
| Dunedoo Central School and TAFE, Merrygoen Street | 15 |
| Catholic School, Merrygoen Street | 10 |
| Public Pool, Cobborah Street | 10 |
| Dunedoo Sports Club, Wargundy Street | 10 |
| Bolaro Street shops | 6 |
| Multi-Purpose Service, Digilah Street | 2 |

Table 8-7 Recommended on-street bicycle parking locations in Mendooran

| Location description | Number of on-street hoops recommended |
|--|---------------------------------------|
| Mendooran Central School, Brambil Street | 15 |
| Mendooran Bowling Club, Bandulla Street | 2 |
| Public Pool, Cobra Street | 10 |
| Bandulla Street shops | 3 |
| Mendooran RSL Club | 3 |

The bike racks are expected to provide excellent coverage throughout the towns and satellite activity centres and can be rolled out further to accommodate demands and requests in other locations.

Additional end-of-trip facilities including water fountains, lockers, seats, changing rooms can be provided to increase attractiveness of cycling as a form of transport. These end-of-trip facilities should be provided at key destinations and land uses within predominately spread around in the town centres. It is recommended that the demand for these end-of-trip facilities be investigated in the future.

8.2 Signage

It is recommended that appropriate signage be installed to support the bicycle networks in each of the towns; these signs include:

- > Regulatory signs: required by law to be obeyed by all users.
- > Warning signs: yellow diamond signs warning of potential hazards and to raise awareness.
- > Guidance signs: these include wayfinding signs and behavioural signs including path stencils.
- > Information signs: maps and feature signs of unique features with historic descriptions.

It is recommended that these signs be located in strategic locations taking into consideration the following principles:

- > **Clutter-reduction**, rationalise signage as much as possible.
- > **Clear sight lines**, positions signs where the growth of vegetation will not block the view of the sign, both upon installation and in the future.
- > **Consistent information**, after the introduction of a destination, it should be repeated until it is reached. Given the size of the route, it would seem appropriate to outline distances to the nearest 10 metres.
- > **Destinations and decision points**, a network focal point map assists to plan the signage scheme.
















8.2.1 Regulatory signs

Regulatory signage and line-marking formally define cycling facilities. Regulatory signage is used to define the start of a facility, end signs are generally only required when facilities end at mid-block locations.

Give Way and Stop signs may be used at intersection locations. These would predominately be used at mid-block road crossings where bicycles do not have priority and where the crossing is not utilised by a significant number of school children.

Key regulatory signs that could be used on bicycle facilities are shown in **Figure 8-2**.

Figure 8-2 Key bicycle related regulatory signs











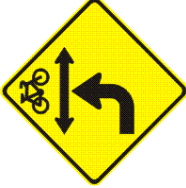



| | | | | | |
|-----------------|---|---|---|---|---|
| Name | Give Way | Stop | Bicycle Lane | Bicycle Path | Shared Path |
| Sign |  |  |  |  |  |
| Sign No. | R1-2 | R1-1 | R7-1-4 | R8-1 | R8-2 |
| Name | Separated Footway (Layout 1) | Separated Footway (Layout 2) | Bicycles Prohibited | Right Turn From Left Only (with Bicycles Only supplementary sign) | Parking (Bicycle User Limitation) |
| Sign |  |  |  |  |  |
| Sign No. | R8-3 | R8-3 | R6-10-3 | R2-21 | R5-1-5 |
| Name | Bicycles Only (Supplementary) | Bicycles Excepted (Supplementary Layout 2) | Bicycles Excepted (Supplementary Layout 1) | End (Supplementary) | Ahead (Supplementary) |
| Sign |  |  |  |  |  |
| Sign No. | R9-306 | R9-3 | R9-3 | R7-4 | R7-2 |

Source: RMS traffic signs

8.2.2 Warning signs

Warning signage is used to inform road and path users of potentially hazardous locations. The NSW Bicycle Guidelines identify a range of commonly used warning signs in relationship to bicycle networks. A review of the available warning signage outlined in both the NSW Bicycle Guidelines and the RMS catalogue of warning signs identifies potentially useful bicycle related signage in **Table 8-8**.

Table 8-8 RMS warning signs

| | | | | | |
|-----------------|--|--|--|--|---|
| Name | Slow Point | Pedestrian | Steep Descent | Steep Climb | Slippery |
| Sign |  |  |  |  |  |
| Sign No. | W5-33 | W6-1 | W6-210 | W6-211 | W6-212 |
| Name | Share the Road | Bicycle Hazard | Bicycle | Road Ahead | Bicycle / Pedestrian |
| Sign |  |  |  |  |  |
| Sign No. | W6-214 | W6-217 | W6-7 | W6-8 | W6-9 |
| Name | Bike crossing on side street | Watch For Bicycles | Both Ways (Supplementary) | Ahead (Supplementary) | |
| Sign |  |  |  |  | |
| Sign No. | W8-200 | W8-243 | W8-23 | W8-244 | |

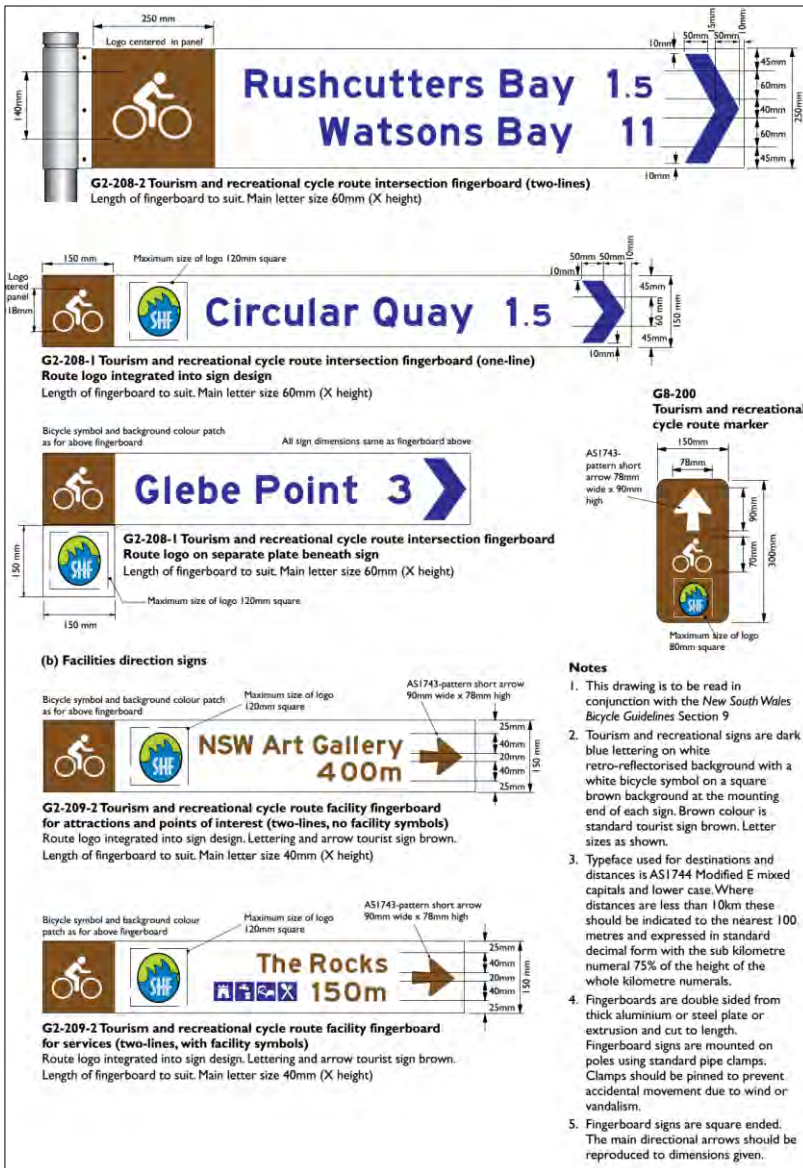
Source: RMS traffic signs

8.2.2.2 Wayfinding signage layout

Examples of tourist/recreation signage layouts consistent with Australian Standards are reproduced in **Figure 8-3** and **Figure 8-4**. A key difference of tourist/recreation signage to standard bicycle route signage is to include a brown background for the bicycle indicator.

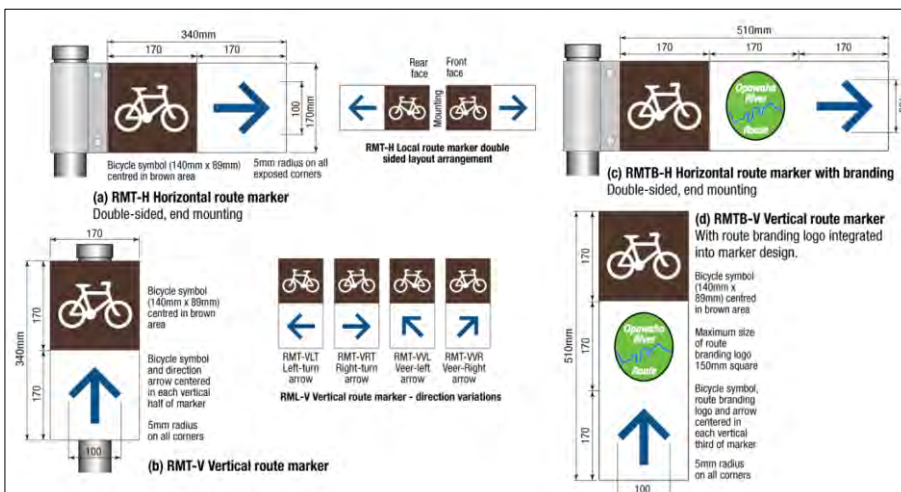
Where more than two destinations are located in a given direction, the signs can be stacked in lieu of providing a large single sign, however to reduce information overload it is recommended to restrict directional information to four locations in any one direction.

Figure 8-3 Tourist and recreational sign convention



Source: City of Sydney Cycle Network Directional Signage Guidelines

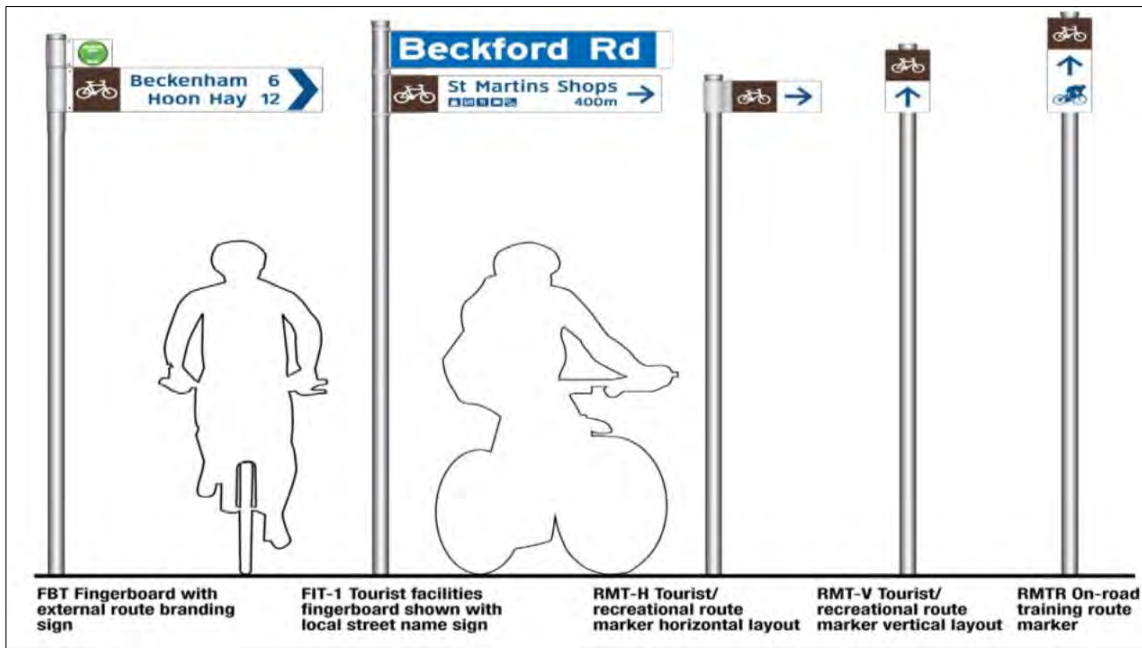
Figure 8-4 Tourist/recreational route markers design layouts



Source: Austroads Research Report AP-R492-15, Bicycle Wayfinding, 2015

Examples of how signage could be installed (noting the layout variation in the route marker) is shown in **Figure 8-5**.

Figure 8-5 Signage installation

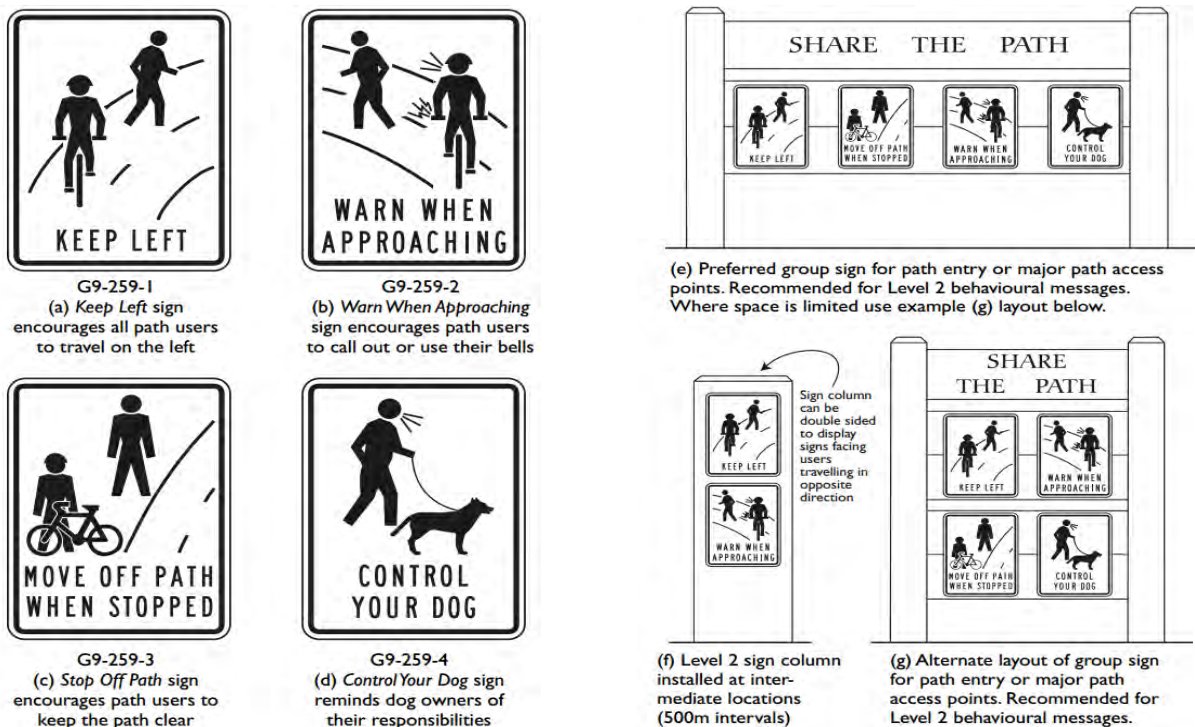


Source: Austroads Research Report AP-R492-15, *Bicycle Wayfinding*, 2015

8.2.2.3 Behavioural

Standard shared path behavioural signs are shown in **Figure 8-6**. Behavioural signs can be important to ensure that usability of the facility is uniform; this will support the safety of all users along the path.

Figure 8-6 Behavioural signs and installation examples



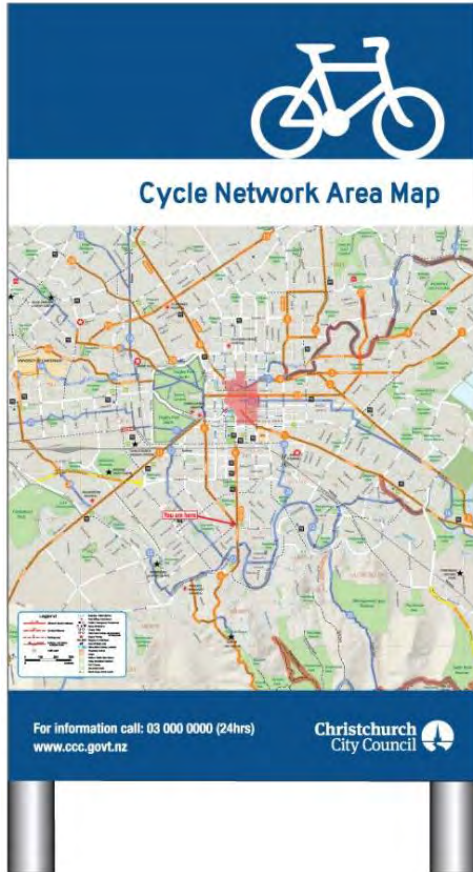
Source: NSW Bicycle Guidelines, RTA/RMS, 2005

8.2.3 Information signs

Information map signs are used on all route types to provide more detailed wayfinding to path users than what can be provided on signage. They are intended for people to stop and view for a period of time and therefore they should be placed so readers must position themselves off the cycle path to review the information.

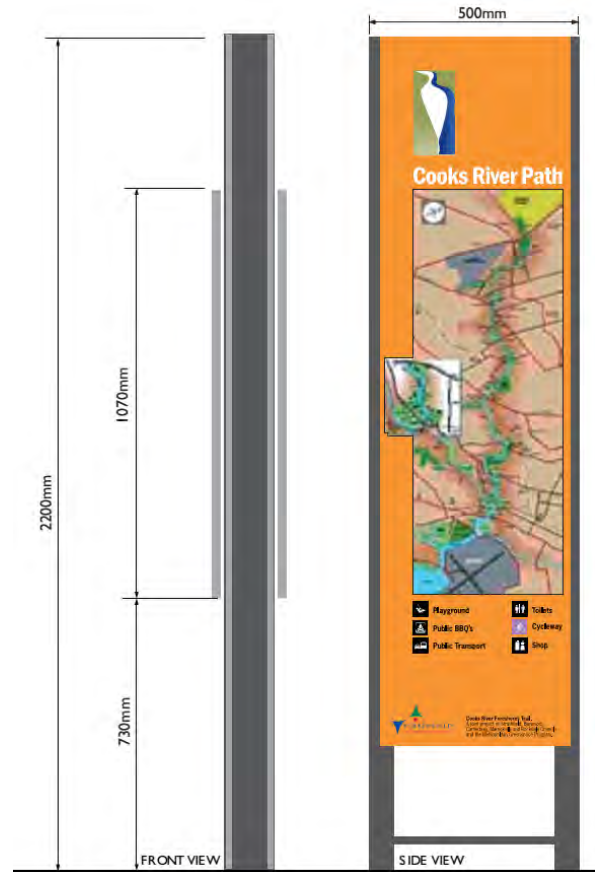
Examples of map signs are provided in **Figure 8-7** and **Figure 8-8**.

Figure 8-7 Map display board example



Source: Austroads Research Report AP-R492-15, *Bicycle Wayfinding, 2015*

Figure 8-8 Map display board example

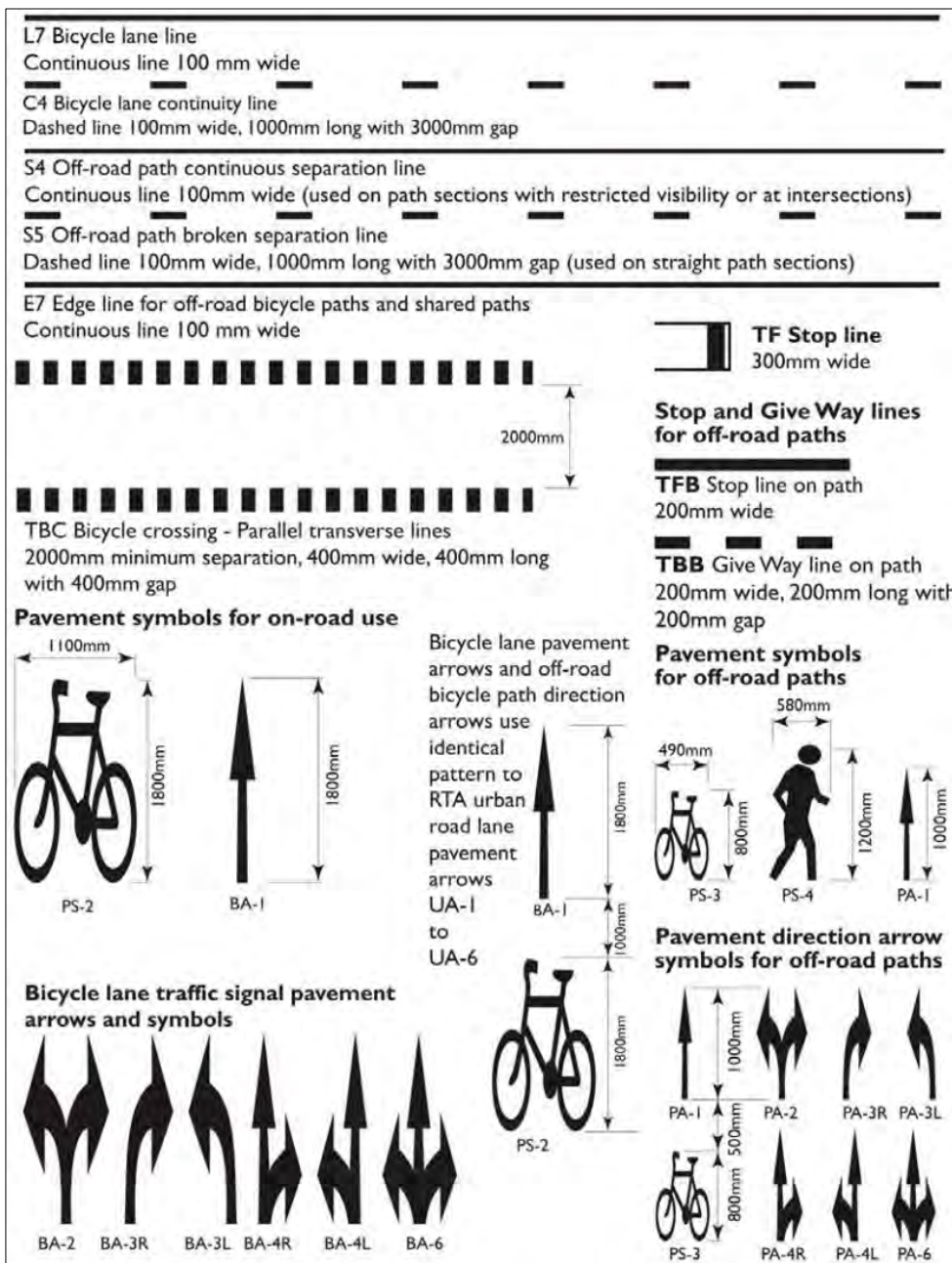


Source: *City of Sydney Cycle Network Directional Signage Guidelines*

8.3 Linemarking

Linemarking of bicycle facilities is outlined in Section 12 of the Delineation Guidelines prepared by RMS. The standard bicycle path markings specified are provided in **Figure 8-9**.

Figure 8-9 RMS pavement marking specifications



Source: *Delineation, Section 12 – Pavement markings for bicycle facilities, RMS, 2010*

8.4 Behavioural change and education

Implementation of the proposed bike infrastructure for the six towns will help to develop a coherent, direct, safe, attractive and comfortable network. While these improvements will be an important factor to encourage more residents, students and tourists cycle instead of drive, their effect can be enhanced through implementation of appropriate support initiatives such as education, promotion and incentives that will assist the decision to break existing travel habits and try sustainable transport modes.

Education, promotion and incentives can help to increase knowledge and understanding of the active travel choices available, develop skills and confidence, and provide motivation and encouragement to make travel behaviour changes towards sustainable transport modes.

Initiatives which can help to stimulate the mode share shift from private vehicle to active travel for short trips around Baradine, Binnaway, Coolah, Coonabarabran, Dunedoo and Mendooran are provided in **Table 8-9**.

Table 8-9 Summary of behavioural change initiatives

| # | Initiative | Rationale |
|---|--|--|
| 1 | <p>Cycling trains</p> <p>Parent volunteers or staff ride with the children within a certain radius of schools.</p> | Inexpensive way to encourage both adults and children to ride to school safely and healthily. |
| 2 | <p>Cycling courses</p> <p>Courses that provide residents with safe riding skills and ensures proper equipment is used.</p> | Addressing the safety and knowledge barriers, real and perceived, through information and training in a safe environment will help novice bicycle riders feel more confident and make cycling a more viable choice. This initiative could also be undertaken at schools where children can invite their parents to ensure the right communication. |
| 3 | <p>Schools focus on road safety</p> <p>Work with schools to educate parents and children on road safety.</p> | A joint communications focus on both parents and children will help to alleviate safety concerns and address questions that parents may have. |
| 4 | <p>Promote special events</p> <p>Hold promotional activities and special events and align with national initiatives such as 'car-free-day' and cycle-to-work-day'.</p> <p>On event days organise a breakfast for participants, and work with the organising group to provide promotion for the event.</p> <p>Involve schools in the events.</p> | These activities and events will increase awareness amongst residents and workers about cycling for typical daily trips. Cycling events are easy to organise and are a great way to leverage off nationally promoted events. |
| 5 | <p>Promote fundraisers</p> <p>Promote fundraisers where residents within the towns are rewarded for the distance they travel on bike.</p> <p>This initiative (titled Ride for Gold) was raised by a community member and proposed to Council during the community consultation meetings as part of the Bike Plane. See Figure 8-10 for the proposal provided to Council.</p> | Providing residents within the towns an incentive to ride their bike (i.e. financial/gift reward) will promote the bicycle network and may encourage residents to utilise the bicycle network and cycle to their destinations upon completion of the fundraiser. |
| 5 | <p>Promotion of new shared paths</p> <p>Whenever a shared path is constructed, it can be promoted by Council through Council's website, local media and schools. A launch event or cycle could be held.</p> | Promoting the new infrastructure will raise awareness of the new opportunity to cycle safely and encourage residents to trial the facility. |
| 6 | <p>Weekend morning cycles</p> <p>Support and promote leisurely social weekend cycle groups.</p> | By encouraging residents to cycle in a relaxed and social group, they will become familiar with the active transport facilities and this will increase the likelihood that they will consider cycling more often. |
| 7 | <p>RMS brochures</p> <p>Provide cycling safety brochures (produced by the RMS) at key locations in towns such as libraries and schools.</p> | These brochures will help to educate residents who are interested in bike riding, and improve safety awareness. |
| 8 | <p>Council's website</p> <p>Use Council's websites to provide updates and information on cycling.</p> | This is an inexpensive way to promote cycling in the LGA. |
| 9 | <p>Encourage other road users to recognise cyclists as legitimate users</p> <p>Advertise and promote the importance of sharing the road.</p> | This would break down the barrier of parents, teachers and other adults of the safety of using cycling as a mode of transport. |

| # | Initiative | Rationale |
|----|--|---|
| 10 | <p>Bike hire</p> <p>Provide bicycle hire for residents and visitors in each of the towns. This could be developed in conjunction with surrounding developments to include pods at key sites like the hospital, major attractions, and the transport interchange or to include bike hire as an option via the Council.</p> <p>Bicycle hire schemes could be public or private where a number of bicycles are made available at the organisation level.</p> | <p>Bike hire provides incentive to trial cycling and incorporate it into daily trips, with minimal expense to the user.</p> <p>This can allow tourists and residents who don't own a bike to utilise the bicycle network.</p> |
| 11 | <p>Cycle maps</p> <p>Cycle maps that promote the bike network within the towns.</p> | <p>Cycle maps inform the community and tourists of the bike network within the towns and provide incentive for all to use and cycle on the bike routes.</p> |
| 12 | <p>Safety and rules signs around the towns</p> <p>Provide safety signs around the towns re-enforcing cycle rules and raising awareness to drivers of the presence of the cycle route and cyclists.</p> <p>In addition, it is recommended that Council investigate the provision of safety signs outside of towns for cyclists riding outside of the scope of works of this Bike Plan, for example surrounding the Denmire Road bridge (10kms outside of Mendooran). These signs can include the possibility of electronic signs where cyclists press a designated button that lights up and raises awareness to upcoming vehicle that a cyclists is on the road as the sign has been manually lit up by the cyclist. Whilst this is outside the scope of works, the provision of cyclists on these roads and the appropriate safety signs should be investigated.</p> | <p>Raises awareness of the bike routes and cyclists within the towns which will encourage residents/tourists to cycle knowing their safety has been considered.</p> |

Figure 8-10 Ride for Gold

Riding for Gold

Overview

A concept to promote within the community, individual, family and group bicycle riding, at times of their own choosing, with a view to qualifying for tangible rewards.

Each participating community within the WBP area to designate a series of bicycle riding courses or circuits, including shared paths and MTB tracks, of varying distances such as: 5km, 10km, 15km, 20km, with each km offering a points value. Considering the diverse ages involved, a 3 tier points system could be used. Over 20yrs, 1pt. Between 12 yrs and 20 yrs 2pts. Under 12 yrs 3 pts.

Registered participating riders to be issued with a memory card or USB that will be used to record their starting, intermediate, and finishing times using fixed location electronic time clock devices. This information to be downloaded by the participant to a link on the WSC website.

Points earned from each ride to accumulate towards Bronze, Silver and Gold certificates.
200 for Bronze, 300 for Silver and 500 for Gold.

A monthly newsletter to be E-mailed to all participants updating the level of points earned and certificates achieved with perhaps selfies, family and group photos. Highlights of each newsletter to be issued as Press releases to local community publications and newspapers.

All participants who achieve Gold certificates within a given 12 month period to go into a draw for a Major Prize such as a trip for two to the Gold Coast.

9 Cost estimates and prioritisation

9.1 Cost estimates

A cost estimate was prepared for the recommended improvement works based on estimated unit costs. The collated costs for each recommended improvement are included in the Schedule of Works Spreadsheet, provided in **Appendix D**. An individual breakdown by town is included in **Section 9.1.3**.

9.1.1 Total cost estimate

The total cost estimate for the Bike Plan improvement works is \$8,417,000. The breakdown of the estimated cost per town is provided in **Table 9-1**.

Table 9-1 Cost estimate per town

| Town | Shared path | On road (mixed traffic) | Kerb ramps | Operation and comfort | Estimated cost |
|---------------|--------------------|-------------------------|------------------|-----------------------|--------------------|
| Baradine | \$970,700 | \$6,200 | \$90,500 | \$135,000 | \$1,202,400 |
| Binnaway | \$128,400 | \$9,800 | \$24,000 | \$45,200 | \$207,400 |
| Coolah | \$1,278,100 | \$6,600 | \$144,500 | \$120,800 | \$1,550,000 |
| Coonabarabran | \$2,284,300 | \$16,000 | \$242,700 | \$311,800 | \$2,854,800 |
| Dunedoo | \$1,270,500 | \$8,600 | \$135,500 | \$210,000 | \$1,624,600 |
| Mendooran | \$826,800 | \$3,000 | \$58,000 | \$90,000 | \$977,800 |
| Total | \$6,558,400 | \$51,000 | \$677,700 | \$867,800 | \$8,417,000 |

9.1.2 Exclusions and assumptions

Some of the recommendations do not have associated cost estimates. This is due to the requirement for a further investigation or an improvement that is not easily costed due to the need for further site investigations. These instances include examples such as a feasibility study and widening of the Mary Jane Cain Bridge and improvements to the road condition at intersections (as previously noted).

In addition, the costs relating to relocations of utilities, property acquisition and end-of-bike-trip facilities was not included.

It should be noted that in some instances, a shared path route has been identified on routes where funding for construction has already been approved. In these instances, the construction of the shared path itself has not been costed, however the construction of a 2.5 metre wide kerb ramp has. As the width of the kerb ramps along the funding approved shared path routes are unknown at this stage, the cost of the construction of a 2.5 metre wide kerb ramp has been included.

In addition, the cost associated with warning signs around the towns and additional safety measures, including investigating local area traffic management (LATM) measures or investigations of train crossings have not been accounted for and should be considered in the future by Council prior to construction of the routes.

The cost of kerb extensions may vary depending on the size of the kerb extension required.

9.1.3 Schedule of works

The schedule of works by town are shown below in **Table 9-2** to **Table 9-7**.

Table 9-2 Baradine schedule of works

| ID_Label | FeatureType | Defect Type | Defect Improvement | RoadName | Latitude | Longitude | Costing | Priority | Length |
|----------|----------------------------|---|---|-------------------|-------------|------------|-----------|----------|------------|
| OB_00001 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Worrigal Street | - 30.943364 | 149.067656 | 1000 | Long | 899.977114 |
| OB_00002 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Barwon Street | - 30.946081 | 149.064843 | 800 | Long | 686.055616 |
| OB_00003 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Namoi Street | - 30.945769 | 149.062477 | \$800 | Long | 685.085773 |
| OB_00005 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Wellington Street | - 30.949098 | 149.06399 | \$600 | Short | 394.678296 |
| OB_00006 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Narren Street | - 30.951967 | 149.068726 | \$400 | Medium | 235.252802 |
| OB_00007 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Narren Street | - 30.944974 | 149.070001 | \$400 | Long | 279.26809 |
| OB_00008 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Queen Street | - 30.951127 | 149.069864 | \$400 | Medium | 184.454742 |
| OB_00010 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Darling Street | - 30.943993 | 149.067718 | \$400 | Medium | 133.746888 |
| OB_00011 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Darling Street | - 30.947625 | 149.067043 | \$800 | Medium | 683.338539 |
| OB_00012 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Macquarie Street | - 30.945385 | 149.064407 | \$600 | Medium | 351.858009 |
| PD_00001 | Path Defect / Issue | Poor path condition (advised in comments) | Investigate improvement of pavement condition | Worrigal Street | - 30.943007 | 149.065268 | | Long | 157.824241 |
| SP_00001 | Shared Path (Block Length) | No shared path | Replace with concrete shared path 2.5m wide | Narren Street | - 30.949742 | 149.069269 | \$110,113 | Short | 267.914286 |
| SP_00002 | Shared Path (Block Length) | No shared path | Provide concrete shared path 2.5m wide | Queen Street | - 30.950755 | 149.067705 | \$80,399 | Short | 214.396156 |
| SP_00003 | Shared Path (Block Length) | No shared path | Provide concrete shared path 2.5m wide | Narren Street | - 30.948198 | 149.069534 | \$30,110 | Short | 80.291999 |
| SP_00004 | Shared Path (Block Length) | No shared path | Provide concrete shared path 2.5m wide | Narren Street | - 30.946728 | 149.06956 | \$44,600 | Short | 118.934361 |
| SP_00005 | Shared Path (Block Length) | No shared path | Provide concrete shared path 2.5m wide | Macquarie Street | - 30.946054 | 149.068569 | \$78,721 | Short | 209.923189 |
| SP_00007 | Shared Path (Block Length) | No shared path | Replace with concrete shared path 2.5m wide | Wellington Street | - 30.949298 | 149.066352 | \$23,590 | Short | 56.98004 |
| SP_00008 | Shared Path (Block Length) | Compliant (>= 2.5m wide) | Other (advised in comments) | Wellington Street | - 30.949525 | 149.067932 | \$800 | Short | 206.639292 |
| SP_00110 | Shared Path (Block Length) | No shared path | Provide concrete shared path 2.5m wide | Queen Street | - 30.950461 | 149.065504 | \$66,648 | Short | 177.728047 |
| SP_00126 | Shared Path (Block Length) | No shared path | Provide concrete shared path 2.5m wide | Narren Street | -30.94792 | 149.069332 | \$45,968 | Short | 122.580647 |
| SP_00127 | Shared Path (Block Length) | No shared path | Provide concrete shared path 2.5m wide | Macquarie Street | - 30.945801 | 149.066743 | \$38,429 | Short | 102.476956 |
| SP_00199 | Shared Path (Block Length) | No shared path | Provide concrete shared path 2.5m wide | Lachlan Street | - 30.948524 | 149.068124 | \$77,155 | Short | 205.747607 |
| SP_00200 | Shared Path (Block Length) | No shared path | Provide concrete shared path 2.5m wide | Lachlan Street | - 30.948191 | 149.065685 | \$81,847 | Short | 218.258909 |
| SP_00201 | Shared Path (Block Length) | No shared path | Provide concrete shared path 2.5m wide | Lachlan Street | - 30.947856 | 149.063303 | \$81,986 | Short | 218.630618 |
| SP_00202 | Shared Path (Block Length) | No shared path | Provide concrete shared path 2.5m wide | Lachlan Street | - 30.947351 | 149.059748 | \$170,135 | Short | 453.694555 |
| SP_00203 | Shared Path (Block Length) | No shared path | Provide concrete shared path 2.5m wide | | - 30.946897 | 149.056673 | \$40,167 | Short | 107.11207 |
| KR_00001 | Kerb Ramp | Missing | Construct kerb ramp 2.0m wide | Narren Street | - 30.948709 | 149.069406 | \$3,500 | Short | n/a |

| ID_Label | FeatureType | Defect Type | Defect Improvement | RoadName | Latitude | Longitude | Costing | Priority | Length |
|----------|-------------|------------------------------------|---------------------------------|-------------------|------------|------------|---------|----------|--------|
| KR_00004 | Kerb Ramp | Missing | Construct kerb ramp 2.0m wide | Narren Street | -30.949725 | 149.069247 | \$3,500 | Short | n/a |
| KR_00005 | Kerb Ramp | Missing | Construct kerb ramp 2.0m wide | Narren Street | -30.950908 | 149.068812 | \$3,500 | Short | n/a |
| KR_00006 | Kerb Ramp | Missing | Construct kerb ramp 2.0m wide | Narren Street | -30.950935 | 149.069047 | \$3,500 | Short | n/a |
| KR_00007 | Kerb Ramp | None (path level with road) | None | Bligh Street | -30.947369 | 149.069422 | \$1,500 | Short | n/a |
| KR_00008 | Kerb Ramp | Missing | Construct kerb ramp 2.0m wide | Bligh Street | -30.94725 | 149.069459 | \$3,500 | Short | n/a |
| KR_00009 | Kerb Ramp | None (path level with road) | None | Narren Street | -30.946207 | 149.069661 | \$1,500 | Short | n/a |
| KR_00013 | Kerb Ramp | Missing | Construct kerb ramp 2.0m wide | Darling Street | -30.945909 | 149.067475 | \$3,500 | Short | n/a |
| KR_00014 | Kerb Ramp | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Darling Street | -30.945878 | 149.067281 | \$4,000 | Short | n/a |
| KR_00015 | Kerb Ramp | Missing | Construct kerb ramp 2.0m wide | Wellington Street | -30.949276 | 149.066057 | \$3,500 | Short | n/a |
| KR_00016 | Kerb Ramp | Misaligned with opposite kerb ramp | Reconstruct kerb ramp 2.0m wide | Darling Street | -30.949339 | 149.066649 | \$4,000 | Short | n/a |
| KR_00017 | Kerb Ramp | Misaligned with opposite kerb ramp | Reconstruct kerb ramp 2.0m wide | Darling Street | -30.949364 | 149.06686 | \$4,000 | Short | n/a |
| KR_00018 | Kerb Ramp | Misaligned with opposite kerb ramp | Reconstruct kerb ramp 2.0m wide | Narren Street | -30.949686 | 149.069005 | \$4,000 | Short | n/a |
| KR_00163 | Kerb Ramp | Missing | Construct kerb ramp 2.0m wide | Queen Street | -30.950956 | 149.069069 | \$3,500 | Short | n/a |
| KR_00164 | Kerb Ramp | Missing | Construct kerb ramp 2.0m wide | Darling Street | -30.950603 | 149.066595 | \$3,500 | Short | n/a |
| KR_00165 | Kerb Ramp | Missing | Construct kerb ramp 2.0m wide | Darling Street | -30.950578 | 149.066429 | \$3,500 | Short | n/a |
| KR_00166 | Kerb Ramp | None (path level with road) | None | Queen Street | -30.95076 | 149.066332 | \$1,500 | Short | n/a |
| KR_00168 | Kerb Ramp | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Queen Street | -30.950602 | 149.066371 | \$4,000 | Short | n/a |
| KR_00169 | Kerb Ramp | Missing | Construct kerb ramp 2.0m wide | Macquarie Street | -30.945557 | 149.066241 | \$3,500 | Short | n/a |
| KR_00187 | Kerb Ramp | Missing | Construct kerb ramp 2.0m wide | Narren Street | -30.947844 | 149.069579 | \$3,500 | Short | n/a |
| KR_00188 | Kerb Ramp | None (path level with road) | None | Narren Street | -30.9478 | 149.069354 | \$1,500 | Short | n/a |
| KR_00191 | Kerb Ramp | None (path level with road) | None | Macquarie Street | -30.94572 | 149.066216 | \$1,500 | Short | n/a |
| KR_00242 | Kerb Ramp | None (path level with road) | None | Lachlan Street | -30.948467 | 149.069239 | \$1,500 | Short | n/a |
| KR_00243 | Kerb Ramp | Missing | Construct kerb ramp 2.0m wide | Lachlan Street | -30.94866 | 149.06919 | \$3,500 | Short | n/a |
| KR_00246 | Kerb Ramp | Missing | Construct kerb ramp 2.0m wide | Darling Street | -30.948379 | 149.06705 | \$3,500 | Short | n/a |
| KR_00247 | Kerb Ramp | Non-compliant dimensions / grades | Reconstruct kerb ramp 2.0m wide | Darling Street | -30.948347 | 149.066811 | \$3,500 | Short | n/a |
| KR_00249 | Kerb Ramp | None (path level with road) | None | Barwon Street | -30.948036 | 149.06455 | \$1,500 | Short | n/a |
| KR_00250 | Kerb Ramp | None (path level with road) | None | Barwon Street | -30.94802 | 149.064435 | \$1,500 | Short | n/a |
| KR_00251 | Kerb Ramp | None (path level with road) | None | Namoi Street | -30.947689 | 149.062178 | \$1,500 | Short | n/a |
| KR_00252 | Kerb Ramp | None (path level with road) | None | Namoi Street | -30.94768 | 149.062095 | \$1,500 | Short | n/a |
| KR_00254 | Kerb Ramp | None (path level with road) | None | | -30.947015 | 149.057385 | \$1,500 | Short | n/a |

| ID_Label | FeatureType | Defect Type | Defect Improvement | RoadName | Latitude | Longitude | Costing | Priority | Length |
|----------|-----------------------|---|---|------------------|-------------|------------|----------|----------|--------|
| KR_00255 | Kerb Ramp | None (path level with road) | None | | - 30.946987 | 149.057234 | \$1,500 | Short | n/a |
| OC_00001 | Operation and Comfort | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Narren Street | - 30.950919 | 149.068919 | \$15,000 | Short | n/a |
| OC_00002 | Operation and Comfort | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Narren Street | - 30.946217 | 149.069768 | \$15,000 | Short | n/a |
| OC_00003 | Operation and Comfort | Dangerous crossing location | Construct 2m x 3m refuge with kerb extensions / investigate LATM measures | Narren Street | - 30.949707 | 149.069132 | \$15,000 | Short | n/a |
| OC_00062 | Operation and Comfort | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Darling Street | - 30.950587 | 149.066512 | \$15,000 | Short | n/a |
| OC_00063 | Operation and Comfort | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Queen Street | - 30.950669 | 149.066356 | \$15,000 | Short | n/a |
| OC_00075 | Operation and Comfort | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Macquarie Street | - 30.945622 | 149.066224 | \$15,000 | Short | n/a |
| OC_00076 | Operation and Comfort | Dangerous crossing location | Construct 2m x 3m refuge with kerb extensions / investigate LATM measures | Narren Street | - 30.947828 | 149.069475 | \$15,000 | Short | n/a |
| OC_00244 | Operation and Comfort | Dangerous crossing location | Construct 2m x 3m refuge with kerb extensions / investigate LATM measures | Lachlan Street | - 30.948552 | 149.069214 | \$15,000 | Short | n/a |
| OC_00245 | Operation and Comfort | Dangerous crossing location | Construct 2m x 3m refuge with kerb extensions / investigate LATM measures | Narren Street | - 30.948681 | 149.069303 | \$15,000 | Short | n/a |
| OC_00248 | Operation and Comfort | Other (advised in comments) | Crossing of train line to be investigated to ensure safety | Lachlan Street | - 30.948076 | 149.064846 | | Short | n/a |

Table 9-3 Binnaway schedule of works

| ID_Label | FeatureType | Defect Type | Defect Improvement | RoadName | Latitude | Longitude | Costing | Priority | Length |
|----------|----------------------------|------------------------------------|---|--------------------|------------|------------|----------------------|----------|------------|
| OB_00041 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Bullinda Street | -31.548005 | 149.379439 | \$400 | Short | 201.083799 |
| OB_00042 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Bullinda Street | -31.552261 | 149.378703 | \$1,000 | Short | 757.427854 |
| OB_00043 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Yarran Street | -31.553385 | 149.37632 | \$200 | Medium | 86.926248 |
| OB_00044 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Myall Street | -31.55348 | 149.374812 | \$400 | Medium | 228.472914 |
| OB_00045 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Castlereagh Avenue | -31.550205 | 149.376636 | \$1,200 | Medium | 905.097051 |
| OB_00046 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Renshaw Street | -31.552772 | 149.381607 | \$1,200 | Medium | 987.224432 |
| OB_00047 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Railway Street | -31.549245 | 149.38095 | \$1,000 | Long | 757.575105 |
| OB_00048 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Weetaliba Street | -31.547181 | 149.380141 | \$400 | Medium | 123.678168 |
| OB_00049 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Ulinda Street | -31.548918 | 149.379501 | \$400 | Long | 276.174509 |
| OB_00050 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Napier Street | -31.550614 | 149.378709 | \$600 | Long | 419.956911 |
| OB_00051 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Andy's Lane | -31.55132 | 149.377263 | \$400 | Medium | 299.183893 |
| OB_00053 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Park Street | -31.551065 | 149.383669 | \$600 | Long | 433.518116 |
| OB_00054 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | George Street | -31.549487 | 149.382718 | \$1,000 | Long | 753.225266 |
| OB_00055 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Watt Street | -31.546004 | 149.381659 | \$400 | Long | 207.453398 |
| OB_00056 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Kurrajong Street | -31.547641 | 149.383516 | \$200 | Long | 93.443749 |
| OB_00057 | On-Road Bike Facility | No formal facility | Provide bike logos every 200m (max) | Park Street | -31.548478 | 149.383846 | \$400 | Long | 171.42325 |
| SP_00060 | Shared Path (Block Length) | Compliant (>= 2.5m wide) | Other (advised in comments) | David Street | -31.553492 | 149.378324 | \$400 | Short | 8.226969 |
| SP_00061 | Shared Path (Block Length) | Compliant (>= 2.5m wide) | Other (advised in comments) | David Street | -31.553489 | 149.37822 | \$400 | Short | 11.399309 |
| SP_00062 | Shared Path (Block Length) | No shared path | Provide concrete shared path 2.5m wide | David Street | -31.553395 | 149.377295 | \$62,073 | Short | 165.527605 |
| SP_00063 | Shared Path (Block Length) | No shared path | Replace with concrete shared path 2.5m wide | Yarran Street | -31.553133 | 149.376439 | \$13,293 | Short | 32.10764 |
| SP_00064 | Shared Path (Block Length) | No shared path | Provide concrete shared path 2.5m wide | Yarran Street | -31.552748 | 149.37634 | \$44,025 | Short | 117.400068 |
| SP_00065 | Shared Path (Block Length) | No shared path | Provide concrete shared path 2.5m wide | Renshaw Street | -31.551906 | 149.375833 | Funding not required | Short | 126.144274 |
| SP_00128 | Shared Path (Block Length) | No shared path | Provide concrete shared path 2.5m wide | Castlereagh Avenue | -31.551491 | 149.375171 | \$8,159 | Short | 21.75769 |
| KR_00087 | Kerb Ramp | Misaligned with opposite kerb ramp | Reconstruct kerb ramp 2.0m wide | David Street | -31.553493 | 149.378369 | \$4,000 | Short | n/a |
| KR_00088 | Kerb Ramp | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Yarran Street | -31.552988 | 149.376453 | \$4,000 | Short | n/a |
| KR_00089 | Kerb Ramp | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Yarran Street | -31.552969 | 149.376319 | \$4,000 | Short | n/a |
| KR_00090 | Kerb Ramp | Missing | Construct kerb ramp 2.0m wide | Renshaw Street | -31.552214 | 149.37643 | \$3,500 | Short | n/a |

| ID_Label | FeatureType | Defect Type | Defect Improvement | RoadName | Latitude | Longitude | Costing | Priority | Length |
|----------|-----------------------|---|---|--------------------|------------|------------|----------|----------|--------|
| KR_00091 | Kerb Ramp | Missing | Construct kerb ramp 2.0m wide | Renshaw Street | -31.551992 | 149.376477 | \$3,500 | Short | n/a |
| KR_00173 | Kerb Ramp | Missing | Construct kerb ramp 2.0m wide | Castlereagh Avenue | -31.551675 | 149.375261 | \$3,500 | Short | n/a |
| KR_00192 | Kerb Ramp | None (path level with road) | None | Castlereagh Avenue | -31.551594 | 149.375168 | \$1,500 | Short | n/a |
| OC_00035 | Operation and Comfort | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Yarran Street | -31.55298 | 149.376393 | \$15,000 | Short | n/a |
| OC_00036 | Operation and Comfort | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Renshaw Street | -31.552108 | 149.376464 | \$15,000 | Short | n/a |
| OC_00039 | Operation and Comfort | Other (advised in comments) | Provide warning sign | Bullinda Street | -31.552282 | 149.378701 | \$200 | Short | n/a |
| OC_00077 | Operation and Comfort | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Castlereagh Avenue | -31.551633 | 149.375213 | \$15,000 | Short | n/a |

Table 9-4 Coolah schedule of works

| ID_Label | FeatureType | Path Type | Defect Type | Defect Improvement | RoadName | Latitude | Longitude | Costing | Priority | Length |
|----------|----------------------------|-------------|--|---|---------------------|------------|------------|----------------------|----------|------------|
| OB_00060 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Martin Street | -31.825129 | 149.721674 | \$600 | Medium | 415.977897 |
| OB_00061 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Binnia Street | -31.828088 | 149.715325 | \$1,000 | Long | 730.40778 |
| OB_00065 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Martin Street | -31.823225 | 149.715563 | \$1,000 | Medium | 839.973699 |
| OB_00066 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Binnaway Street | -31.828141 | 149.713348 | \$1,000 | Long | 793.937306 |
| OB_00067 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Regan Street | -31.826353 | 149.706957 | \$600 | Long | 487.449899 |
| OB_00068 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Queenborough Street | -31.828925 | 149.709689 | \$1,000 | Long | 738.52114 |
| OB_00069 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | King Street | -31.826109 | 149.71193 | \$800 | Medium | 566.472624 |
| OB_00070 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Booyamurra Street | -31.824405 | 149.709059 | \$600 | Long | 332.010236 |
| SP_00066 | Shared Path (Block Length) | | No shared path | Replace with concrete shared path 2.5m wide | Church Street | -31.826625 | 149.710895 | \$52,231 | Short | 130.903756 |
| SP_00067 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Church Street | -31.82534 | 149.711141 | \$47,612 | Short | 126.964453 |
| SP_00069 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Booyamurra Street | -31.824957 | 149.712542 | \$81,008 | Short | 216.022528 |
| SP_00070 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Booyamurra Street | -31.825257 | 149.714889 | \$76,328 | Short | 203.540726 |
| SP_00071 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Booyamurra Street | -31.825517 | 149.71692 | \$53,027 | Short | 141.405182 |
| SP_00072 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Cole Street | -31.825046 | 149.717536 | \$35,140 | Short | 93.706212 |
| SP_00075 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | | -31.821773 | 149.720283 | \$39,812 | Short | 106.164074 |
| SP_00076 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | | -31.821577 | 149.721494 | \$27,549 | Short | 73.463073 |
| SP_00077 | Shared Path (Block Length) | Shared path | Minor non-compliant (>= 2.4m and <2.5m wide) | Other (advised in comments) | Binnia Street | -31.821849 | 149.724349 | \$400 | Short | 72.808311 |
| SP_00078 | Shared Path (Block Length) | Shared path | Minor non-compliant (>= 2.4m and <2.5m wide) | None | Cunningham Street | -31.823585 | 149.724918 | \$169,810 | Short | 413.163242 |
| SP_00079 | Shared Path (Block Length) | Shared path | Compliant (>= 2.5m wide) | None | Cunningham Street | -31.826331 | 149.723453 | Funding not required | Short | 229.8705 |
| SP_00080 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Goddard Street | -31.821528 | 149.715719 | Funding not required | Short | 782.170377 |
| SP_00081 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Hospital Street | -31.821764 | 149.711312 | \$68,089 | Short | 181.569668 |
| SP_00082 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Martin Street | -31.822439 | 149.710036 | \$80,680 | Short | 215.146418 |
| SP_00083 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Hospital Street | -31.823136 | 149.711065 | \$37,464 | Short | 99.903726 |
| SP_00084 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Hospital Street | -31.82414 | 149.710887 | \$36,404 | Short | 97.077621 |
| SP_00085 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Booyamurra Street | -31.82473 | 149.711019 | \$16,396 | Short | 43.721937 |
| SP_00086 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Charles Street | -31.827373 | 149.711127 | \$25,745 | Short | 68.652382 |
| SP_00087 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Charles Street | -31.827575 | 149.712681 | \$73,013 | Short | 194.700681 |
| SP_00088 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Charles Street | -31.827827 | 149.714606 | \$51,315 | Short | 136.84051 |

| ID_Label | FeatureType | Path Type | Defect Type | Defect Improvement | RoadName | Latitude | Longitude | Costing | Priority | Length |
|----------|----------------------------|-------------|-------------------------------|---|-------------------|------------|------------|----------------------|----------|------------|
| SP_00089 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Cole Street | -31.824032 | 149.717713 | \$38,208 | Short | 101.887146 |
| SP_00090 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Cole Street | -31.823087 | 149.717877 | \$27,756 | Short | 74.016023 |
| SP_00091 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Cole Street | -31.822337 | 149.718008 | \$29,862 | Short | 79.630796 |
| SP_00204 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Goddard Street | -31.822428 | 149.720247 | \$36,627 | Short | 97.671396 |
| SP_00205 | Shared Path (Block Length) | | Compliant (>= 2.5m wide) | Other (advised in comments) | Goddard Street | -31.822853 | 149.720733 | \$470 | Short | 34.764967 |
| SP_00206 | Shared Path (Block Length) | | Non-compliant (<= 2.39m wide) | Replace with concrete shared path 2.5m wide | Binna Street | -31.822811 | 149.721099 | \$22,544 | Short | 54.852568 |
| SP_00207 | Shared Path (Block Length) | | Non-compliant (<= 2.39m wide) | Replace with concrete shared path 2.5m wide | Binna Street | -31.822395 | 149.722752 | \$105,508 | Short | 256.710794 |
| SP_00208 | Shared Path (Block Length) | | Non-compliant (<= 2.39m wide) | Replace with concrete shared path 2.5m wide | Binna Street | -31.825313 | 149.717942 | \$45,097 | Short | 100.215069 |
| SP_00209 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | | -31.828199 | 149.719132 | Funding not required | Short | 692.082692 |
| KR_00092 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | King Street | -31.826042 | 149.710997 | \$3,500 | Short | n/a |
| KR_00093 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | King Street | -31.825913 | 149.711031 | \$3,500 | Short | n/a |
| KR_00094 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Church Street | -31.824772 | 149.711124 | \$3,500 | Short | n/a |
| KR_00095 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Church Street | -31.824805 | 149.711407 | \$3,500 | Short | n/a |
| KR_00096 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Turee Street | -31.82511 | 149.713668 | \$3,500 | Short | n/a |
| KR_00097 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Turee Street | -31.825124 | 149.713825 | \$3,500 | Short | n/a |
| KR_00098 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Oban Street | -31.825395 | 149.715958 | \$3,500 | Short | n/a |
| KR_00099 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Oban Street | -31.825424 | 149.716178 | \$3,500 | Short | n/a |
| KR_00100 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Booyamurra Street | -31.825578 | 149.717447 | \$3,500 | Short | n/a |
| KR_00101 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Booyamurra Street | -31.825448 | 149.717466 | \$3,500 | Short | n/a |
| KR_00105 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Goddard Street | -31.822091 | 149.719804 | \$3,500 | Short | n/a |
| KR_00108 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Goddard Street | -31.822114 | 149.719883 | \$3,500 | Short | n/a |
| KR_00109 | Kerb Ramp | | None (path level with road) | None | | -31.82185 | 149.720797 | \$1,500 | Short | n/a |
| KR_00110 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | | -31.821765 | 149.721171 | \$3,500 | Short | n/a |
| KR_00111 | Kerb Ramp | Shared path | Other (advised in comments) | Other (advised in comments) | Binnia Street | -31.821702 | 149.724626 | | Short | n/a |
| KR_00112 | Kerb Ramp | Shared path | Missing | Construct kerb ramp 2.0m wide | Binnia Street | -31.821809 | 149.724761 | \$3,500 | Short | n/a |
| KR_00113 | Kerb Ramp | Shared path | None (path level with road) | None | Cunningham Street | -31.825244 | 149.724048 | \$1,500 | Short | n/a |
| KR_00114 | Kerb Ramp | Shared path | None (path level with road) | None | Cunningham Street | -31.825378 | 149.723979 | \$1,500 | Short | n/a |
| KR_00115 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Wentworth Avenue | -31.820968 | 149.711643 | \$3,500 | Short | n/a |
| KR_00116 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Wentworth Avenue | -31.82095 | 149.711467 | \$3,500 | Short | n/a |

| ID_Label | FeatureType | Path Type | Defect Type | Defect Improvement | RoadName | Latitude | Longitude | Costing | Priority | Length |
|----------|-----------------------|-------------|---|---|-------------------|------------|------------|----------|----------|--------|
| KR_00117 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Martin Street | -31.822577 | 149.711161 | \$3,500 | Short | n/a |
| KR_00118 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Martin Street | -31.822691 | 149.711141 | \$3,500 | Short | n/a |
| KR_00119 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Irwin Street | -31.823583 | 149.710986 | \$3,500 | Short | n/a |
| KR_00120 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Irwin Street | -31.823702 | 149.71096 | \$3,500 | Short | n/a |
| KR_00121 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Booyamurra Street | -31.824574 | 149.710814 | \$3,500 | Short | n/a |
| KR_00122 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Booyamurra Street | -31.824693 | 149.710798 | \$3,500 | Short | n/a |
| KR_00123 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Charles Street | -31.827211 | 149.710788 | \$3,500 | Short | n/a |
| KR_00124 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Charles Street | -31.827319 | 149.710773 | \$3,500 | Short | n/a |
| KR_00125 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | McClellan Street | -31.827428 | 149.71149 | \$3,500 | Short | n/a |
| KR_00126 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | McClellan Street | -31.827453 | 149.711663 | \$3,500 | Short | n/a |
| KR_00127 | Kerb Ramp | | None (path level with road) | None | Oban Street | -31.827697 | 149.713684 | \$1,500 | Short | n/a |
| KR_00128 | Kerb Ramp | | None (path level with road) | None | Oban Street | -31.827735 | 149.713889 | \$1,500 | Short | n/a |
| KR_00129 | Kerb Ramp | | None (path level with road) | None | Central Lane | -31.82462 | 149.717611 | \$1,500 | Short | n/a |
| KR_00130 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Central Lane | -31.824492 | 149.717642 | \$3,500 | Short | n/a |
| KR_00131 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Martin Street | -31.823574 | 149.717791 | \$3,500 | Short | n/a |
| KR_00132 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Martin Street | -31.823411 | 149.717826 | \$3,500 | Short | n/a |
| KR_00133 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Central Lane?? | -31.822747 | 149.717932 | \$3,500 | Short | n/a |
| KR_00134 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Central Lane?? | -31.822691 | 149.717946 | \$3,500 | Short | n/a |
| KR_00135 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Goddard Street | -31.821977 | 149.718066 | \$3,500 | Short | n/a |
| KR_00136 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Goddard Street | -31.821861 | 149.718086 | \$3,500 | Short | n/a |
| KR_00174 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Binnia Street | -31.827924 | 149.715319 | \$3,500 | Short | n/a |
| KR_00257 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | Goddard Street | -31.822966 | 149.720871 | \$3,500 | Short | n/a |
| KR_00258 | Kerb Ramp | | Non-compliant dimensions / grades | Reconstruct kerb ramp 2.0m wide | | -31.822749 | 149.721373 | \$4,000 | Short | n/a |
| KR_00259 | Kerb Ramp | | Non-compliant dimensions / grades | Reconstruct kerb ramp 2.0m wide | | -31.822733 | 149.721448 | \$4,000 | Short | n/a |
| KR_00260 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | Binnia Street | -31.825616 | 149.717658 | \$3,500 | Short | n/a |
| KR_00261 | Kerb Ramp | | None (path level with road) | None | Binnia Street | -31.827971 | 149.715571 | \$1,500 | Short | n/a |
| OC_00040 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Church Street | -31.824791 | 149.711323 | \$15,000 | Short | n/a |
| OC_00041 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Oban Street | -31.825414 | 149.716058 | \$15,000 | Short | n/a |
| OC_00042 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Booyamurra Street | -31.825518 | 149.717456 | \$15,000 | Short | n/a |
| OC_00046 | Operation and Comfort | Shared path | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Binnia Street | -31.821756 | 149.724696 | \$15,000 | Short | n/a |

| ID_Label | FeatureType | Path Type | Defect Type | Defect Improvement | RoadName | Latitude | Longitude | Costing | Priority | Length |
|----------|-----------------------|-----------|---|---|-------------------|------------|------------|----------|----------|--------|
| OC_00047 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Booyamurra Street | -31.824629 | 149.710804 | \$15,000 | Short | n/a |
| OC_00048 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Martin Street | -31.823504 | 149.717806 | \$15,000 | Short | n/a |
| OC_00049 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Goddard Street | -31.821928 | 149.71807 | \$15,000 | Short | n/a |
| OC_00064 | Operation and Comfort | | Dangerous crossing location | Construct 2m x 3m refuge with kerb extensions / investigate LATM measures | Binnia Street | -31.827947 | 149.715461 | \$15,000 | Short | n/a |
| OC_00065 | Operation and Comfort | | Dangerous crossing location | Investigate LATM measures | | -31.821802 | 149.721003 | | Short | n/a |
| OC_00256 | Operation and Comfort | | Other (advised in comments) | Other (advised in comments) | Goddard Street | -31.82282 | 149.720718 | \$800 | Short | n/a |

Table 9-5 Coonabarabran schedule of works

| ID_Label | FeatureType | Path Type | Defect Type | Defect Improvement | RoadName | Latitude | Longitude | Costing | Priority | Length |
|----------|----------------------------|-------------|--|---|---------------------|------------|------------|-----------|----------|-------------|
| OB_00019 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Baradine Street | -31.267684 | 149.273285 | \$800 | Medium | 646.367304 |
| OB_00020 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Namoi Street | -31.270201 | 149.270732 | \$1,200 | Medium | 1068.961669 |
| OB_00021 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Camp Street | -31.276997 | 149.270526 | \$1,200 | Long | 1084.178864 |
| OB_00022 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | King Street | -31.277931 | 149.273532 | \$800 | Long | 543.596062 |
| OB_00023 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Robertson Street | -31.275628 | 149.275553 | \$800 | Medium | 578.539679 |
| OB_00028 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Little Timor Street | -31.276211 | 149.271806 | \$400 | Short | 255.691898 |
| OB_00029 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Cassilis Street | -31.276573 | 149.274276 | \$1,000 | Short | 765.676735 |
| OB_00030 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | King Street | -31.27598 | 149.279845 | \$800 | Medium | 650.276294 |
| OB_00031 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Edward Street | -31.279213 | 149.272836 | \$600 | Long | 321.289556 |
| OB_00033 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Cassilis Street | -31.273767 | 149.28343 | \$1,200 | Short | 1085.601304 |
| OB_00034 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Little Timor Street | -31.27434 | 149.277949 | \$200 | Medium | 39.190938 |
| OB_00035 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Little Timor Street | -31.272729 | 149.283258 | \$1,200 | Medium | 1032.761101 |
| OB_00036 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Dalgarno Street | -31.270992 | 149.285319 | \$1,800 | Medium | 1673.842865 |
| OB_00037 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Cowper Street | -31.26947 | 149.281348 | \$400 | Long | 281.327623 |
| OB_00038 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Charles Street | -31.276366 | 149.28103 | \$1,000 | Medium | 842.018795 |
| OB_00039 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Knight Street | -31.277523 | 149.285201 | \$600 | Medium | 486.34444 |
| OB_00040 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | George Street | -31.279898 | 149.286524 | \$600 | Long | 326.449811 |
| OB_00083 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Edward Street | -31.274472 | 149.28848 | \$400 | Medium | 221.979071 |
| OB_00217 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Horseley Street | -31.26786 | 149.283635 | \$1,000 | Long | 758.595329 |
| PD_00004 | Path Defect / Issue | | Steep grade / crossfall | Investigate improvement of pavement condition | Namoi Street | -31.269691 | 149.27053 | | Short | 64.406427 |
| SP_00009 | Shared Path (Block Length) | Shared path | Compliant (≥ 2.5 m wide) | Other (advised in comments) | John Street | -31.28889 | 149.287161 | \$1,589 | Short | 494.438009 |
| SP_00010 | Shared Path (Block Length) | Shared path | Minor non-compliant (≥ 2.4 m and < 2.5 m wide) | None | John Street | -31.286028 | 149.285119 | \$91,765 | Short | 223.272101 |
| SP_00011 | Shared Path (Block Length) | Shared path | Compliant (≥ 2.5 m wide) | Other (advised in comments) | John Street | -31.28412 | 149.283755 | \$800 | Short | 245.289507 |
| SP_00013 | Shared Path (Block Length) | Shared path | Non-compliant (≤ 2.39 m wide) | Replace with concrete shared path 2.5m wide | | -31.281396 | 149.284816 | \$151,589 | Short | 368.830742 |
| SP_00014 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | John Street | -31.282584 | 149.282676 | \$49,668 | Short | 132.44697 |
| SP_00015 | Shared Path (Block Length) | | No shared path | Replace with concrete shared path 2.5m wide | John Street | -31.280574 | 149.281271 | \$148,151 | Short | 355.278006 |
| SP_00016 | Shared Path (Block Length) | | No shared path | Replace with concrete shared path 2.5m wide | George Street | -31.279481 | 149.282575 | \$179,844 | Short | 437.576354 |
| SP_00017 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Cowper Street | -31.277727 | 149.283429 | \$144,749 | Short | 385.996021 |

| ID_Label | FeatureType | Path Type | Defect Type | Defect Improvement | RoadName | Latitude | Longitude | Costing | Priority | Length |
|----------|----------------------------|-------------|-------------------------------|---|-----------------|------------|------------|----------------------|----------|------------|
| SP_00018 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | John Street | -31.278341 | 149.279686 | \$63,476 | Short | 169.268189 |
| SP_00019 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | John Street | -31.277612 | 149.278742 | \$9,064 | Short | 24.171908 |
| SP_00020 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Cowper Street | -31.274961 | 149.283181 | \$79,924 | Short | 213.129487 |
| SP_00021 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Cowper Street | -31.273658 | 149.282636 | \$19,746 | Short | 52.657294 |
| SP_00022 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Cowper Street | -31.273303 | 149.282223 | \$18,109 | Short | 48.291042 |
| SP_00023 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Cowper Street | -31.272617 | 149.281935 | \$36,458 | Short | 97.222085 |
| SP_00024 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Cowper Street | -31.271703 | 149.281552 | \$24,887 | Short | 66.364979 |
| SP_00025 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Cowper Street | -31.271113 | 149.281319 | \$19,684 | Short | 52.490631 |
| SP_00026 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Essex Street | -31.270949 | 149.280798 | \$33,578 | Short | 89.542495 |
| SP_00027 | Shared Path (Block Length) | | No shared path | Replace with concrete shared path 2.5m wide | Essex Street | -31.271726 | 149.277722 | \$77,717 | Short | 189.093214 |
| SP_00028 | Shared Path (Block Length) | | Non-compliant (<= 2.39m wide) | Replace with concrete shared path 2.5m wide | | -31.272134 | 149.276502 | \$13,051 | Short | 31.754088 |
| SP_00029 | Shared Path (Block Length) | Shared path | Compliant (>= 2.5m wide) | Other (advised in comments) | | -31.272099 | 149.276157 | \$400 | Short | 40.281373 |
| SP_00030 | Shared Path (Block Length) | Shared path | Non-compliant (<= 2.39m wide) | Replace with concrete shared path 2.5m wide | | -31.272283 | 149.27499 | \$92,810 | Short | 225.81585 |
| SP_00031 | Shared Path (Block Length) | | Compliant (>= 2.5m wide) | Other (advised in comments) | John Street | -31.272847 | 149.276849 | \$684 | Short | 142.06287 |
| SP_00033 | Shared Path (Block Length) | | Compliant (>= 2.5m wide) | Other (advised in comments) | John Street | -31.274469 | 149.277531 | \$800 | Short | 206.627512 |
| SP_00034 | Shared Path (Block Length) | | No shared path | Replace with concrete shared path 2.5m wide | John Street | -31.275963 | 149.278132 | \$42,428 | Short | 103.232232 |
| SP_00035 | Shared Path (Block Length) | | No shared path | Replace with concrete shared path 2.5m wide | John Street | -31.276943 | 149.278536 | \$45,305 | Short | 110.232359 |
| SP_00036 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Dalgarno Street | -31.275008 | 149.271704 | \$63,325 | Short | 168.866097 |
| SP_00037 | Shared Path (Block Length) | | No shared path | Replace with concrete shared path 2.5m wide | Dalgarno Street | -31.2739 | 149.276166 | \$90,071 | Short | 219.150969 |
| SP_00038 | Shared Path (Block Length) | | No shared path | Replace with concrete shared path 2.5m wide | Dalgarno Street | -31.274593 | 149.273872 | \$86,613 | Short | 210.738085 |
| SP_00039 | Shared Path (Block Length) | | No shared path | Replace with concrete shared path 2.5m wide | John Street | -31.271986 | 149.276722 | \$6,495 | Short | 15.464745 |
| SP_00040 | Shared Path (Block Length) | Shared path | Non-compliant (<= 2.39m wide) | Replace with concrete shared path 2.5m wide | John Street | -31.271637 | 149.276563 | Funding not required | Short | 66.87147 |
| SP_00041 | Shared Path (Block Length) | Shared path | Non-compliant (<= 2.39m wide) | Replace with concrete shared path 2.5m wide | John Street | -31.271043 | 149.276315 | Funding not required | Short | 72.7013 |
| SP_00042 | Shared Path (Block Length) | Shared path | Non-compliant (<= 2.39m wide) | Replace with concrete shared path 2.5m wide | Chappell Avenue | -31.270566 | 149.276169 | Funding not required | Short | 36.858271 |
| SP_00043 | Shared Path (Block Length) | Shared path | Non-compliant (<= 2.39m wide) | Replace with concrete shared path 2.5m wide | Chappell Avenue | -31.269851 | 149.276253 | Funding not required | Short | 109.347853 |
| SP_00044 | Shared Path (Block Length) | Shared path | Non-compliant (<= 2.39m wide) | Replace with concrete shared path 2.5m wide | Chappell Avenue | -31.268794 | 149.276428 | Funding not required | Short | 113.96965 |
| SP_00045 | Shared Path (Block Length) | Shared path | Compliant (>= 2.5m wide) | None | Chappell Avenue | -31.268111 | 149.276546 | \$480 | Short | 39.014676 |

| ID_Label | FeatureType | Path Type | Defect Type | Defect Improvement | RoadName | Latitude | Longitude | Costing | Priority | Length |
|----------|----------------------------|-------------|-----------------------------------|---|---------------------|------------|------------|----------------------|----------|------------|
| SP_00046 | Shared Path (Block Length) | Shared path | Non-compliant (<= 2.39m wide) | Replace with concrete shared path 2.5m wide | Chappell Avenue | -31.267753 | 149.27661 | Funding not required | Short | 42.493338 |
| SP_00047 | Shared Path (Block Length) | Shared path | Compliant (>= 2.5m wide) | Other (advised in comments) | | -31.266024 | 149.280136 | \$2,000 | Short | 863.586082 |
| SP_00048 | Shared Path (Block Length) | Shared path | Compliant (>= 2.5m wide) | None | | -31.263624 | 149.283989 | \$900 | Short | 153.483527 |
| SP_00113 | Shared Path (Block Length) | | Compliant (>= 2.5m wide) | None | John Street | -31.277771 | 149.278921 | | Short | 25.78546 |
| SP_00114 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Essex Street | -31.271081 | 149.279578 | \$74,736 | Short | 199.295061 |
| SP_00115 | Shared Path (Block Length) | | Compliant (>= 2.5m wide) | Other (advised in comments) | | -31.271861 | 149.276621 | \$537 | Short | 68.362507 |
| SP_00116 | Shared Path (Block Length) | Shared path | Non-compliant (<= 2.39m wide) | Replace with concrete shared path 2.5m wide | Horsley Street East | -31.264316 | 149.283946 | \$16,673 | Short | 39.697315 |
| SP_00117 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Little Timor Street | -31.275448 | 149.274212 | \$76,892 | Short | 205.046248 |
| SP_00121 | Shared Path (Block Length) | | No shared path | Replace with concrete shared path 2.5m wide | Little Timor Street | -31.274818 | 149.276504 | \$87,826 | Short | 209.108756 |
| SP_00122 | Shared Path (Block Length) | | No shared path | Replace with concrete shared path 2.5m wide | Robertson Street | -31.275385 | 149.275322 | \$22,295 | Short | 53.084009 |
| SP_00123 | Shared Path (Block Length) | | No shared path | Replace with concrete shared path 2.5m wide | Namoi Street | -31.275323 | 149.273011 | \$41,476 | Short | 98.753152 |
| SP_00124 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Edward Street | -31.275008 | 149.286396 | Funding not required | Short | 600.770102 |
| SP_00125 | Shared Path (Block Length) | Shared path | Non-compliant (<= 2.39m wide) | None | | -31.284084 | 149.285891 | \$1,292 | Short | 346.194638 |
| SP_00210 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Edwards Street | -31.276229 | 149.282276 | Funding not required | Short | 211.015702 |
| SP_00211 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Edwards Street | -31.27691 | 149.280001 | Funding not required | Short | 208.435915 |
| SP_00212 | Shared Path (Block Length) | | Non-compliant (<= 2.39m wide) | Replace with concrete shared path 2.5m wide | Edwards Street | -31.277677 | 149.277639 | \$80,510 | Short | 195.888482 |
| SP_00213 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Edwards Street | -31.278332 | 149.275459 | \$84,032 | Short | 224.084284 |
| SP_00214 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Namoi Street | -31.278228 | 149.274178 | \$38,606 | Short | 102.948365 |
| SP_00215 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Namoi Street | -31.27727 | 149.273809 | \$38,757 | Short | 103.352658 |
| SP_00216 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Namoi Street | -31.276256 | 149.273418 | \$38,973 | Short | 103.926698 |
| SP_00218 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Bandulla Street | -31.285185 | 149.285633 | \$85,493 | Short | 227.982638 |
| SP_00224 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Cassilis Street | -31.273069 | 149.285997 | Funding not required | Short | 93.366707 |
| KR_00020 | Kerb Ramp | Shared path | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Kirban Street | -31.286876 | 149.285743 | \$4,000 | Short | n/a |
| KR_00021 | Kerb Ramp | Shared path | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Kirban Street | -31.286978 | 149.285822 | \$4,000 | Short | n/a |
| KR_00022 | Kerb Ramp | Shared path | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Bandulla Street | -31.285157 | 149.284525 | \$4,000 | Short | n/a |
| KR_00023 | Kerb Ramp | Shared path | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Bandulla Street | -31.285057 | 149.284446 | \$4,000 | Short | n/a |
| KR_00024 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | John Street | -31.282077 | 149.282309 | \$3,500 | Short | n/a |
| KR_00025 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | John Street | -31.281952 | 149.282231 | \$3,500 | Short | n/a |

| ID_Label | FeatureType | Path Type | Defect Type | Defect Improvement | RoadName | Latitude | Longitude | Costing | Priority | Length |
|----------|-------------|-----------|------------------------------------|---------------------------------|---------------------|------------|------------|---------|----------|--------|
| KR_00026 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | George Street | -31.279534 | 149.283179 | \$3,500 | Short | n/a |
| KR_00027 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | George Street | -31.279421 | 149.283202 | \$3,500 | Short | n/a |
| KR_00029 | Kerb Ramp | | Other (advised in comments) | None | George Street | -31.279207 | 149.280296 | \$1,800 | Short | n/a |
| KR_00030 | Kerb Ramp | | Other (advised in comments) | None | John Street | -31.27776 | 149.279222 | \$2,925 | Short | n/a |
| KR_00031 | Kerb Ramp | | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | John Street | -31.27783 | 149.279002 | \$4,000 | Short | n/a |
| KR_00032 | Kerb Ramp | | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Edward Street | -31.277527 | 149.278662 | \$4,000 | Short | n/a |
| KR_00033 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Edward Street | -31.277391 | 149.27861 | \$3,500 | Short | n/a |
| KR_00034 | Kerb Ramp | | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | George Street | -31.278999 | 149.280142 | \$4,000 | Short | n/a |
| KR_00035 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Edward Street | -31.276003 | 149.283607 | \$3,500 | Short | n/a |
| KR_00036 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Edward Street | -31.275868 | 149.283572 | \$3,500 | Short | n/a |
| KR_00037 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Cassilis Street | -31.274054 | 149.282803 | \$3,500 | Short | n/a |
| KR_00038 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Cassilis Street | -31.273878 | 149.28273 | \$3,500 | Short | n/a |
| KR_00039 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Cowper Street | -31.2735 | 149.282331 | \$3,500 | Short | n/a |
| KR_00041 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Little Timor Street | -31.273097 | 149.282132 | \$3,500 | Short | n/a |
| KR_00042 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Little Timor Street | -31.273028 | 149.282104 | \$3,500 | Short | n/a |
| KR_00043 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Dalgarno Street | -31.2722 | 149.281762 | \$3,500 | Short | n/a |
| KR_00044 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Dalgarno Street | -31.271987 | 149.281664 | \$3,500 | Short | n/a |
| KR_00045 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Castlereagh Lane | -31.271422 | 149.281441 | \$3,500 | Short | n/a |
| KR_00046 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Castlereagh Lane | -31.271337 | 149.281408 | \$3,500 | Short | n/a |
| KR_00050 | Kerb Ramp | | Misaligned with opposite kerb ramp | Reconstruct kerb ramp 2.0m wide | Essex Street | -31.272035 | 149.276798 | \$4,000 | Short | n/a |
| KR_00051 | Kerb Ramp | | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Dalgarno Street | -31.273437 | 149.277014 | \$4,000 | Short | n/a |
| KR_00052 | Kerb Ramp | | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Dalgarno Street | -31.273572 | 149.277066 | \$4,000 | Short | n/a |
| KR_00053 | Kerb Ramp | | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Cassilis Street | -31.275352 | 149.277882 | \$4,000 | Short | n/a |
| KR_00054 | Kerb Ramp | | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Cassilis Street | -31.275527 | 149.277941 | \$4,000 | Short | n/a |
| KR_00055 | Kerb Ramp | | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | King Street | -31.276406 | 149.278308 | \$4,000 | Short | n/a |
| KR_00056 | Kerb Ramp | | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | King Street | -31.27647 | 149.278338 | \$4,000 | Short | n/a |
| KR_00057 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Camp Street | -31.275274 | 149.270855 | \$3,500 | Short | n/a |
| KR_00058 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Namoi Street | -31.274743 | 149.272538 | \$3,500 | Short | n/a |
| KR_00059 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Namoi Street | -31.274684 | 149.272741 | \$3,500 | Short | n/a |
| KR_00060 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Dalgarno Street | -31.274687 | 149.272816 | \$3,500 | Short | n/a |

| ID_Label | FeatureType | Path Type | Defect Type | Defect Improvement | RoadName | Latitude | Longitude | Costing | Priority | Length |
|----------|-------------|-------------|------------------------------------|---------------------------------|---------------------|------------|------------|---------|----------|--------|
| KR_00061 | Kerb Ramp | | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Dalgarno Street | -31.274871 | 149.272895 | \$4,000 | Short | n/a |
| KR_00063 | Kerb Ramp | | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Robertson Street | -31.274275 | 149.274918 | \$4,000 | Short | n/a |
| KR_00064 | Kerb Ramp | | Misaligned with opposite kerb ramp | Reconstruct kerb ramp 2.0m wide | Robertson Street | -31.274236 | 149.275085 | \$4,000 | Short | n/a |
| KR_00065 | Kerb Ramp | Shared path | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Chappell Avenue | -31.2704 | 149.276158 | \$4,000 | Short | n/a |
| KR_00066 | Kerb Ramp | Shared path | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Chappell Avenue | -31.270338 | 149.276173 | \$4,000 | Short | n/a |
| KR_00067 | Kerb Ramp | Shared path | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Oval Entry | -31.269362 | 149.276333 | \$4,000 | Short | n/a |
| KR_00068 | Kerb Ramp | Shared path | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Oval Entry | -31.269298 | 149.27634 | \$4,000 | Short | n/a |
| KR_00069 | Kerb Ramp | Shared path | Missing | Construct kerb ramp 2.0m wide | Chappell Avenue | -31.267568 | 149.276628 | \$3,500 | Short | n/a |
| KR_00070 | Kerb Ramp | Shared path | None (path level with road) | None | Chappell Avenue | -31.267408 | 149.276669 | \$1,500 | Short | n/a |
| KR_00071 | Kerb Ramp | Shared path | None (path level with road) | None | Horsley Street East | -31.264474 | 149.284051 | \$1,500 | Short | n/a |
| KR_00072 | Kerb Ramp | Shared path | None (path level with road) | None | Horsley Street East | -31.264191 | 149.283629 | \$1,500 | Short | n/a |
| KR_00073 | Kerb Ramp | Shared path | None (path level with road) | None | Crane Street | -31.262942 | 149.284191 | \$1,500 | Short | n/a |
| KR_00084 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Robertson Street | -31.275203 | 149.275296 | \$3,500 | Short | n/a |
| KR_00085 | Kerb Ramp | Shared path | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | George Street | -31.279729 | 149.284853 | \$4,000 | Short | n/a |
| KR_00175 | Kerb Ramp | | None (path level with road) | None | John Street | -31.283091 | 149.283039 | \$1,500 | Short | n/a |
| KR_00176 | Kerb Ramp | Shared path | Other (advised in comments) | None | John Street | -31.283166 | 149.283098 | \$1,500 | Short | n/a |
| KR_00177 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Cowper Street | -31.273444 | 149.282533 | \$3,500 | Short | n/a |
| KR_00178 | Kerb Ramp | Shared path | None (path level with road) | None | Horsley Street East | -31.264422 | 149.284116 | \$1,500 | Short | n/a |
| KR_00179 | Kerb Ramp | Shared path | None (path level with road) | None | Horsley Street East | -31.264227 | 149.283762 | \$1,500 | Short | n/a |
| KR_00184 | Kerb Ramp | | Misaligned with opposite kerb ramp | Reconstruct kerb ramp 2.0m wide | Robertson Street | -31.275142 | 149.275472 | \$4,000 | Short | n/a |
| KR_00185 | Kerb Ramp | | None (path level with road) | None | Little Timor Street | -31.275748 | 149.273204 | \$1,500 | Short | n/a |
| KR_00186 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Dalgarno Street | -31.275285 | 149.270898 | \$3,500 | Short | n/a |
| KR_00262 | Kerb Ramp | | Missing | Provide kerb ramp 2.5m wide | Cassilis Street | -31.272918 | 149.286479 | \$3,500 | Short | n/a |
| KR_00263 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | Cowper Street | -31.275858 | 149.283546 | \$3,500 | Short | n/a |
| KR_00264 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | Cowper Street | -31.27591 | 149.283323 | \$3,500 | Short | n/a |
| KR_00265 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | Charles Street | -31.276545 | 149.281234 | \$3,500 | Short | n/a |
| KR_00266 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | Charles Street | -31.2766 | 149.281038 | \$3,500 | Short | n/a |
| KR_00268 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | John Street | -31.277226 | 149.278962 | \$3,500 | Short | n/a |
| KR_00270 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | John Street | -31.277306 | 149.278688 | \$3,500 | Short | n/a |
| KR_00271 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | Robertson Street | -31.277961 | 149.276671 | \$3,500 | Short | n/a |

| ID_Label | FeatureType | Path Type | Defect Type | Defect Improvement | RoadName | Latitude | Longitude | Costing | Priority | Length |
|----------|-----------------------|-------------|---|---|---------------------|------------|------------|----------|----------|--------|
| KR_00272 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | Robertson Street | -31.277993 | 149.276564 | \$3,500 | Short | n/a |
| KR_00273 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | Namoi Street | -31.278672 | 149.274356 | \$3,500 | Short | n/a |
| KR_00274 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | King Street | -31.27778 | 149.274008 | \$3,500 | Short | n/a |
| KR_00275 | Kerb Ramp | | None (path level with road) | None | King Street | -31.277714 | 149.273986 | \$1,500 | Short | n/a |
| KR_00276 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | Cassilis Street | -31.276831 | 149.27364 | \$3,500 | Short | n/a |
| KR_00277 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | Cassilis Street | -31.276701 | 149.273608 | \$3,500 | Short | n/a |
| KR_00279 | Kerb Ramp | | None (path level with road) | None | Little Timor Street | -31.275813 | 149.273232 | \$1,500 | Short | n/a |
| OC_00004 | Operation and Comfort | Shared path | Other (advised in comments) | Concrete driveway | John Street | -31.28941 | 149.287483 | \$4,875 | Short | n/a |
| OC_00005 | Operation and Comfort | Shared path | Other (advised in comments) | Concrete driveway | John Street | -31.288842 | 149.287126 | \$6,375 | Short | n/a |
| OC_00007 | Operation and Comfort | Shared path | Other (advised in comments) | Concrete driveway | John Street | -31.288382 | 149.28678 | \$5,625 | Short | n/a |
| OC_00008 | Operation and Comfort | Shared path | Other (advised in comments) | Concrete driveway | John Street | -31.288132 | 149.286601 | \$2,250 | Short | n/a |
| OC_00009 | Operation and Comfort | Shared path | Other (advised in comments) | Concrete driveway | John Street | -31.287889 | 149.286428 | \$1,875 | Short | n/a |
| OC_00010 | Operation and Comfort | Shared path | Other (advised in comments) | Concrete driveway | Kirban Street | -31.287149 | 149.285931 | \$5,625 | Short | n/a |
| OC_00011 | Operation and Comfort | Shared path | Other (advised in comments) | Other (advised in comments) | John Street | -31.286273 | 149.285276 | | Short | n/a |
| OC_00012 | Operation and Comfort | Shared path | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Bandulla Street | -31.285112 | 149.284493 | \$15,000 | Short | n/a |
| OC_00013 | Operation and Comfort | Shared path | Other (advised in comments) | Other (advised in comments) | | -31.284616 | 149.286583 | | Short | n/a |
| OC_00014 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | George Street | -31.279476 | 149.283191 | \$15,000 | Short | n/a |
| OC_00015 | Operation and Comfort | | None | None | George Street | -31.279107 | 149.280232 | | Short | n/a |
| OC_00016 | Operation and Comfort | | None | None | John Street | -31.277787 | 149.279105 | | Short | n/a |
| OC_00017 | Operation and Comfort | | Dangerous crossing location | Construct 2m x 3m refuge with kerb extensions / investigate LATM measures | Edward Street | -31.27746 | 149.278638 | \$15,000 | Short | n/a |
| OC_00018 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Edward Street | -31.27593 | 149.28358 | \$15,000 | Short | n/a |
| OC_00019 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Cassilis Street | -31.273974 | 149.282762 | \$15,000 | Short | n/a |
| OC_00020 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Cowper Street | -31.273475 | 149.282426 | \$15,000 | Short | n/a |
| OC_00021 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Dalgarno Street | -31.27208 | 149.281713 | \$15,000 | Short | n/a |
| OC_00022 | Operation and Comfort | Shared path | Other (advised in comments) | Investigate widening of bridge | | -31.272332 | 149.275205 | | Short | n/a |
| OC_00023 | Operation and Comfort | | Dangerous crossing location | Construct 2m x 3m refuge with kerb extensions / investigate LATM measures | John Street | -31.272221 | 149.276743 | \$15,000 | Short | n/a |
| OC_00024 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Dalgarno Street | -31.273503 | 149.27704 | \$15,000 | Short | n/a |
| OC_00025 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Namoi Street | -31.27471 | 149.272642 | \$15,000 | Short | n/a |
| OC_00026 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Dalgarno Street | -31.274778 | 149.272856 | \$15,000 | Short | n/a |
| OC_00027 | Operation and Comfort | Shared path | Dangerous crossing location | Construct 2m x 3m refuge with kerb extensions / investigate LATM measures | Horsley Street East | -31.264208 | 149.283693 | \$15,000 | Short | n/a |

| ID_Label | FeatureType | Path Type | Defect Type | Defect Improvement | RoadName | Latitude | Longitude | Costing | Priority | Length |
|----------|-----------------------|-----------|---|---|---------------------|------------|------------|----------|----------|--------|
| OC_00033 | Operation and Comfort | | Other (advised in comments) | Provide warning sign | Little Timor Street | -31.274527 | 149.277339 | \$200 | Short | n/a |
| OC_00066 | Operation and Comfort | | Dangerous crossing location | Investigate LATM measures | John Street | -31.28201 | 149.282268 | | Short | n/a |
| OC_00067 | Operation and Comfort | | Dangerous crossing location | Investigate LATM measures | John Street | -31.283124 | 149.28307 | | Short | n/a |
| OC_00068 | Operation and Comfort | On road | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | John Street | -31.274436 | 149.277654 | \$15,000 | Short | n/a |
| OC_00069 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | John Street | -31.274436 | 149.277656 | \$15,000 | Short | n/a |
| OC_00073 | Operation and Comfort | | Dangerous crossing location | Construct 2m x 3m refuge with kerb extensions / investigate LATM measures | Dalgarno Street | -31.275383 | 149.270901 | \$15,000 | Short | n/a |
| OC_00074 | Operation and Comfort | | Dangerous crossing location | Construct 2m x 3m refuge with kerb extensions / investigate LATM measures | Camp Street | -31.275289 | 149.27074 | \$15,000 | Short | n/a |
| OC_00267 | Operation and Comfort | | Dangerous crossing location | Construct 2m x 3m refuge with kerb extensions / investigate LATM measures | Charles Street | -31.276568 | 149.281135 | \$15,000 | Short | n/a |
| OC_00269 | Operation and Comfort | | Dangerous crossing location | Construct 2m x 3m refuge with kerb extensions / investigate LATM measures | John Street | -31.277255 | 149.278817 | \$15,000 | Short | n/a |
| OC_00278 | Operation and Comfort | | Dangerous crossing location | Construct 2m x 3m refuge with kerb extensions / investigate LATM measures | Cassilis Street | -31.27676 | 149.273616 | \$15,000 | Short | n/a |
| OC_00280 | Operation and Comfort | | Dangerous crossing location | Other (advised in comments) | Horseley Street | -31.266759 | 149.283867 | | Short | n/a |

Table 9-6 Dunedoo schedule of works

| ID_Label | FeatureType | Path Type | Defect Type | Defect Improvement | RoadName | Latitude | Longitude | Costing | Priority | Length |
|----------|----------------------------|-----------|--------------------------|---|------------------|------------|------------|----------------------|----------|-------------|
| OB_00072 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Whitely Street | -32.014727 | 149.396097 | \$1,000 | Long | 879.430536 |
| OB_00073 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Sullivan Street | -32.013011 | 149.401265 | \$600 | Long | 410.391344 |
| OB_00074 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Nott Street | -32.013363 | 149.398088 | \$800 | Long | 599.227529 |
| OB_00075 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Tucklan Street | -32.019722 | 149.390914 | \$600 | Long | 480.580612 |
| OB_00076 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Wargundy Street | -32.021805 | 149.400521 | \$600 | Medium | 392.198215 |
| OB_00077 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Bullinda Street | -32.022265 | 149.394423 | \$1,400 | Long | 1150.962358 |
| OB_00078 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Caigan Street | -32.019724 | 149.388376 | \$1,000 | Long | 811.245333 |
| OB_00079 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Digilah Street | -32.017325 | 149.394533 | \$1,400 | Medium | 1155.659495 |
| OB_00080 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Tallawang Street | -32.020436 | 149.395665 | \$1,200 | Medium | 952.269739 |
| SP_00092 | Shared Path (Block Length) | | Compliant (>= 2.5m wide) | Other (advised in comments) | Merrygoen Street | -32.016249 | 149.39321 | \$400 | Short | 37.177867 |
| SP_00093 | Shared Path (Block Length) | | No shared path | Replace with concrete shared path 2.5m wide | Merrygoen Street | -32.016801 | 149.39319 | \$35,056 | Short | 85.294835 |
| SP_00094 | Shared Path (Block Length) | | No shared path | Replace with concrete shared path 2.5m wide | Merrygoen Street | -32.017902 | 149.393152 | \$45,626 | Short | 111.013318 |
| SP_00095 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Merrygoen Street | -32.018981 | 149.393116 | \$26,774 | Short | 71.398548 |
| SP_00096 | Shared Path (Block Length) | | No shared path | Replace with concrete shared path 2.5m wide | Cobborah Street | -32.018443 | 149.394498 | \$85,151 | Short | 207.178965 |
| SP_00097 | Shared Path (Block Length) | | No shared path | Replace with concrete shared path 2.5m wide | Cobborah Street | -32.018496 | 149.396948 | \$85,863 | Short | 208.912781 |
| SP_00098 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Cobborah Street | -32.018542 | 149.399404 | \$78,184 | Short | 208.490314 |
| SP_00099 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Wargundy Street | -32.018248 | 149.400745 | \$147,766 | Short | 394.04273 |
| SP_00100 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Whitely Street | -32.01552 | 149.391573 | \$37,468 | Short | 99.915035 |
| SP_00101 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Whiteley Street | -32.014755 | 149.391074 | \$35,729 | Short | 95.278228 |
| SP_00102 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Bolaro Street | -32.015903 | 149.392283 | \$34,200 | Short | 91.199326 |
| SP_00103 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Bolaro Street | -32.015967 | 149.394168 | \$78,159 | Short | 208.423556 |
| SP_00104 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Bolaro Street | -32.016028 | 149.397357 | \$164,984 | Short | 439.957551 |
| SP_00105 | Shared Path (Block Length) | | Compliant (>= 2.5m wide) | None | Bolaro Street | -32.016326 | 149.39967 | | Short | 8.872941 |
| SP_00106 | Shared Path (Block Length) | | No shared path | Replace with concrete shared path 2.5m wide | Bolaro Street | -32.016336 | 149.400201 | \$38,213 | Short | 92.975158 |
| SP_00107 | Shared Path (Block Length) | | No shared path | Replace with concrete shared path 2.5m wide | Merrygoen Street | -32.019479 | 149.393386 | \$15,339 | Short | 37.596557 |
| SP_00108 | Shared Path (Block Length) | | No shared path | Replace with concrete shared path 2.5m wide | Tucklan Street | -32.019646 | 149.393421 | \$2,697 | Short | 6.60918 |
| SP_00109 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Tucklan Street | -32.019911 | 149.39448 | \$73,792 | Short | 196.779514 |
| SP_00118 | Shared Path (Block Length) | | | | Golden Highway | -32.013513 | 149.401435 | Funding not required | Short | 456.016185 |

| ID_Label | FeatureType | Path Type | Defect Type | Defect Improvement | RoadName | Latitude | Longitude | Costing | Priority | Length |
|----------|----------------------------|-----------|------------------------------------|--|------------------|------------|------------|----------------------|----------|------------|
| SP_00119 | Shared Path (Block Length) | | | | Golden Highway | -32.01603 | 149.400911 | Funding not required | Short | 102.207984 |
| SP_00219 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Whiteley Street | -32.014263 | 149.39048 | \$11,618 | Short | 30.98066 |
| SP_00220 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Bolaro Street | -32.0159 | 149.390629 | \$74,786 | Short | 199.429547 |
| SP_00225 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Bolaro Street | -32.016104 | 149.389153 | \$41,846 | Short | 111.588211 |
| SP_00226 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Tucklan Street | -32.020013 | 149.399354 | \$78,935 | Short | 210.493475 |
| SP_00227 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Tucklan Street | -32.019971 | 149.396877 | \$77,937 | Short | 207.831828 |
| KR_00137 | Kerb Ramp | | Misaligned with opposite kerb ramp | Reconstruct kerb ramp 2.0m wide | Digilah Street | -32.017188 | 149.393172 | \$4,000 | Short | n/a |
| KR_00138 | Kerb Ramp | | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Digilah Street | -32.017399 | 149.39316 | \$4,000 | Short | n/a |
| KR_00139 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Cobborah Street | -32.018652 | 149.393118 | \$3,500 | Short | n/a |
| KR_00140 | Kerb Ramp | | None (path level with road) | None | Cobborah Street | -32.018414 | 149.393123 | \$1,500 | Short | n/a |
| KR_00141 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Merrygoen Street | -32.018404 | 149.39315 | \$3,500 | Short | n/a |
| KR_00142 | Kerb Ramp | | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Merrygoen Street | -32.018414 | 149.393403 | \$4,000 | Short | n/a |
| KR_00143 | Kerb Ramp | | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Tallawang Street | -32.018468 | 149.395593 | \$4,000 | Short | n/a |
| KR_00144 | Kerb Ramp | | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Tallawang Street | -32.01847 | 149.395832 | \$4,000 | Short | n/a |
| KR_00145 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Walleroo Street | -32.018515 | 149.398294 | \$3,500 | Short | n/a |
| KR_00146 | Kerb Ramp | | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Walleroo Street | -32.018515 | 149.398056 | \$4,000 | Short | n/a |
| KR_00147 | Kerb Ramp | | None (path level with road) | None | Wargundy Street | -32.018564 | 149.400711 | \$1,500 | Short | n/a |
| KR_00148 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Wargundy Street | -32.018562 | 149.400508 | \$3,500 | Short | n/a |
| KR_00149 | Kerb Ramp | | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Bolaro Street | -32.016005 | 149.393141 | \$4,000 | Short | n/a |
| KR_00150 | Kerb Ramp | | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Bolaro Street | -32.016101 | 149.393144 | \$4,000 | Short | n/a |
| KR_00151 | Kerb Ramp | | None (path level with road) | None | Whitely Street | -32.015084 | 149.391556 | \$1,500 | Short | n/a |
| KR_00152 | Kerb Ramp | | None (path level with road) | None | Whitely Street | -32.014981 | 149.391475 | \$1,500 | Short | n/a |
| KR_00153 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Bolaro Street | -32.015925 | 149.392763 | \$3,500 | Short | n/a |
| KR_00154 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Bolaro Street | -32.015927 | 149.392869 | \$3,500 | Short | n/a |
| KR_00155 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Bolaro Street | -32.015927 | 149.394963 | \$3,500 | Short | n/a |
| KR_00156 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Bolaro Street | -32.015953 | 149.395086 | \$3,500 | Short | n/a |
| KR_00157 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Bolaro Street | -32.01612 | 149.399666 | \$3,500 | Short | n/a |
| KR_00158 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Bolaro Street | -32.016279 | 149.399662 | \$3,500 | Short | n/a |
| KR_00159 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Merrygoen Street | -32.0193 | 149.393122 | \$3,500 | Short | n/a |
| KR_00160 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Merrygoen Street | -32.01931 | 149.393377 | \$3,500 | Short | n/a |

| ID_Label | FeatureType | Path Type | Defect Type | Defect Improvement | RoadName | Latitude | Longitude | Costing | Priority | Length |
|----------|-----------------------|-----------|---|---|-------------------|------------|------------|----------|----------|--------|
| KR_00161 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Tucklan Street | -32.019884 | 149.39344 | \$3,500 | Short | n/a |
| KR_00162 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Tucklan Street | -32.019662 | 149.393454 | \$3,500 | Short | n/a |
| KR_00181 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Wargundy Street | -32.016473 | 149.400553 | \$3,500 | Short | n/a |
| KR_00182 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Wargundy Street | -32.016474 | 149.400744 | \$3,500 | Short | n/a |
| KR_00282 | Kerb Ramp | | None (path level with road) | None | Whiteley Street | -32.014426 | 149.39074 | \$1,500 | Short | n/a |
| KR_00283 | Kerb Ramp | | None (path level with road) | None | Whiteley Street | -32.014337 | 149.390622 | \$1,500 | Short | n/a |
| KR_00284 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | Redbank Street | -32.015898 | 149.391799 | \$3,500 | Short | n/a |
| KR_00285 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | Redbank Street | -32.015898 | 149.391679 | \$3,500 | Short | n/a |
| KR_00291 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | Wargundy Street | -32.020023 | 149.400693 | \$3,500 | Short | n/a |
| KR_00292 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | Bolaro Street | -32.016092 | 149.38856 | \$3,500 | Short | n/a |
| KR_00293 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | Bolaro Street | -32.016108 | 149.389735 | \$3,500 | Short | n/a |
| KR_00294 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | Bolaro Street | -32.015896 | 149.389746 | \$3,500 | Short | n/a |
| KR_00295 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Tallawang Street | -32.019939 | 149.395521 | \$3,500 | Short | n/a |
| KR_00296 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Tallawang Street | -32.019946 | 149.395778 | \$3,500 | Short | n/a |
| KR_00297 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | Walleraroo Street | -32.019996 | 149.397976 | \$3,500 | Short | n/a |
| KR_00298 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | Walleraroo Street | -32.019996 | 149.398241 | \$3,500 | Short | n/a |
| KR_00299 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | Wargundy Street | -32.020031 | 149.400468 | \$3,500 | Short | n/a |
| OC_00050 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Digilah Street | -32.017294 | 149.393161 | \$15,000 | Short | n/a |
| OC_00051 | Operation and Comfort | | Dangerous crossing location | Investigate LATM measures | Cobborah Street | -32.018533 | 149.393116 | | Short | n/a |
| OC_00052 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Merrygoen Street | -32.018412 | 149.393271 | \$15,000 | Short | n/a |
| OC_00053 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Tallawang Street | -32.018468 | 149.395715 | \$15,000 | Short | n/a |
| OC_00054 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Walleraroo Street | -32.018514 | 149.398177 | \$15,000 | Short | n/a |
| OC_00055 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Wargundy Street | -32.018563 | 149.400613 | \$15,000 | Short | n/a |
| OC_00056 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Bolaro Street | -32.016053 | 149.393142 | \$15,000 | Short | n/a |
| OC_00057 | Operation and Comfort | | Dangerous crossing location | Crossing of train line to be investigated to ensure safety | Whitely Street | -32.015299 | 149.391533 | | Short | n/a |
| OC_00058 | Operation and Comfort | | Dangerous crossing location | Construct 2m x 3m refuge with kerb extensions / investigate LATM measures | Bolaro Street | -32.016206 | 149.399663 | \$15,000 | Short | n/a |
| OC_00059 | Operation and Comfort | | Dangerous crossing location | Construct 2m x 3m refuge with kerb extensions / investigate LATM measures | Wargundy Street | -32.016476 | 149.400661 | \$15,000 | Short | n/a |
| OC_00060 | Operation and Comfort | | Dangerous crossing location | Construct 2m x 3m refuge with kerb extensions / investigate LATM measures | Merrygoen Street | -32.019307 | 149.393241 | \$15,000 | Short | n/a |
| OC_00061 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Tucklan Street | -32.01977 | 149.393457 | \$15,000 | Short | n/a |
| OC_00071 | Operation and Comfort | | Dangerous crossing location | Investigate LATM measures. Crossing of train line to be investigated to ensure safety | Golden Highway | -32.01555 | 149.400934 | | Short | n/a |

| ID_Label | FeatureType | Path Type | Defect Type | Defect Improvement | RoadName | Latitude | Longitude | Costing | Priority | Length |
|----------|-----------------------|-----------|---|---|------------------|------------|------------|----------|----------|--------|
| OC_00281 | Operation and Comfort | | Dangerous crossing location | Investigate LATM measures | Bolaro Street | -32.01594 | 149.395025 | | Short | n/a |
| OC_00295 | Operation and Comfort | | Dangerous crossing location | Construct 2m x 3m refuge with kerb extensions / investigate LATM measures | Bolaro Street | -32.015996 | 149.389735 | \$15,000 | Short | n/a |
| OC_00297 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Tallawang Street | -32.019946 | 149.395681 | \$15,000 | Short | n/a |
| OC_00298 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Walleroo Street | -32.019988 | 149.398105 | \$15,000 | Short | n/a |
| OC_00299 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Wargundy Street | -32.020037 | 149.400566 | \$15,000 | Short | n/a |

Table 9-7 Mendooran schedule of works

| ID_Label | FeatureType | Path Type | Defect Type | Defect Improvement | RoadName | Latitude | Longitude | Costing | Priority | Length |
|----------|----------------------------|-----------|-----------------------------------|---|-----------------|------------|------------|-----------|----------|------------|
| OB_00015 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Bandulla Street | -31.823928 | 149.127922 | \$800 | Long | 541.135952 |
| OB_00016 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Napier Street | -31.819525 | 149.125909 | \$600 | Medium | 454.884947 |
| OB_00017 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Farnell Street | -31.820633 | 149.127167 | \$1,000 | Long | 701.561414 |
| OB_00018 | On-Road Bike Facility | | No formal facility | Provide bike logos every 200m (max) | Cobra Street | -31.821769 | 149.127644 | \$600 | Medium | 409.698412 |
| SP_00049 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Pampoo Street | -31.821849 | 149.120626 | \$77,657 | Short | 207.084141 |
| SP_00050 | Shared Path (Block Length) | | No shared path | Replace with concrete shared path 2.5m wide | Brambil Street | -31.819283 | 149.123316 | \$160,724 | Short | 393.931727 |
| SP_00051 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Cobra Street | -31.820902 | 149.121887 | \$76,783 | Short | 204.754698 |
| SP_00052 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Cobra Street | -31.821386 | 149.124327 | \$76,159 | Short | 203.090034 |
| SP_00053 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Napier Street | -31.822478 | 149.125199 | \$80,272 | Short | 214.058981 |
| SP_00054 | Shared Path (Block Length) | | No shared path | Replace with concrete shared path 2.5m wide | Bandulla Street | -31.823044 | 149.122402 | \$14,492 | Short | 32.204041 |
| SP_00055 | Shared Path (Block Length) | | Compliant (>= 2.5m wide) | Other (advised in comments) | Bandulla Street | -31.822948 | 149.121715 | \$400 | Short | 99.238739 |
| SP_00056 | Shared Path (Block Length) | | No shared path | Replace with concrete shared path 2.5m wide | Bandulla Street | -31.822825 | 149.120834 | \$28,936 | Short | 70.405134 |
| SP_00057 | Shared Path (Block Length) | | No shared path | Replace with concrete shared path 2.5m wide | Bandulla Street | -31.822601 | 149.119257 | \$73,540 | Short | 178.930173 |
| SP_00058 | Shared Path (Block Length) | | Compliant (>= 2.5m wide) | Other (advised in comments) | Bandulla Street | -31.822457 | 149.118183 | \$400 | Short | 29.046347 |
| SP_00120 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Cobra Street | -31.821067 | 149.12331 | \$4,844 | Short | 12.917698 |
| SP_00129 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Bandulla Street | -31.82326 | 149.123915 | \$78,901 | Short | 210.402917 |
| SP_00221 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | Bandulla Street | -31.822333 | 149.117046 | \$57,189 | Short | 152.50496 |
| SP_00222 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | | -31.82229 | 149.11607 | \$12,105 | Short | 32.28103 |
| SP_00223 | Shared Path (Block Length) | | No shared path | Provide concrete shared path 2.5m wide | River Street | -31.823221 | 149.115587 | \$84,379 | Short | 225.011585 |
| KR_00074 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Cobra Street | -31.820923 | 149.120787 | \$3,500 | Short | n/a |
| KR_00075 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Cobra Street | -31.820763 | 149.120815 | \$3,500 | Short | n/a |
| KR_00076 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Bandulla Street | -31.822801 | 149.120475 | \$3,500 | Short | n/a |
| KR_00077 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Bandulla Street | -31.82297 | 149.120441 | \$3,500 | Short | n/a |
| KR_00078 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Cobra Street | -31.821248 | 149.123274 | \$3,500 | Short | n/a |
| KR_00079 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Cobra Street | -31.821125 | 149.123299 | \$3,500 | Short | n/a |
| KR_00080 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Brambil Street | -31.821056 | 149.123243 | \$3,500 | Short | n/a |
| KR_00081 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Brambil Street | -31.821027 | 149.122957 | \$3,500 | Short | n/a |
| KR_00082 | Kerb Ramp | | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Pampoo Street | -31.822759 | 149.120449 | \$4,000 | Short | n/a |

| ID_Label | FeatureType | Path Type | Defect Type | Defect Improvement | RoadName | Latitude | Longitude | Costing | Priority | Length |
|----------|-----------------------|-----------|---|---|------------------|------------|------------|----------|----------|--------|
| KR_00083 | Kerb Ramp | | Non-compliant dimensions / grades | Reconstruct 2.0m wide kerb ramp | Pampoo Street | -31.822725 | 149.120204 | \$4,000 | Short | n/a |
| KR_00183 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Brambil Street | -31.823066 | 149.122554 | \$3,500 | Short | n/a |
| KR_00193 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Brambil Street | -31.823087 | 149.122826 | \$3,500 | Short | n/a |
| KR_00194 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Cobra Street | -31.821526 | 149.12539 | \$3,500 | Short | n/a |
| KR_00195 | Kerb Ramp | | Missing | Construct kerb ramp 2.0m wide | Bandulla Street | -31.823422 | 149.125004 | \$3,500 | Short | n/a |
| KR_00286 | Kerb Ramp | | Missing | Provide kerb ramp 2.0m wide | Yalcogran Street | -31.822431 | 149.118018 | \$3,500 | Short | n/a |
| KR_00288 | Kerb Ramp | | None (path level with road) | None | Yalcogran Street | -31.822413 | 149.117844 | \$1,500 | Short | n/a |
| KR_00289 | Kerb Ramp | | None (path level with road) | None | Bandulla Street | -31.822235 | 149.116253 | \$1,500 | Short | n/a |
| KR_00290 | Kerb Ramp | | None (path level with road) | None | Bandulla Street | -31.82231 | 149.116234 | \$1,500 | Short | n/a |
| OC_00028 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Cobra Street | -31.820834 | 149.1208 | \$15,000 | Short | n/a |
| OC_00029 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Bandulla Street | -31.822872 | 149.120467 | \$15,000 | Short | n/a |
| OC_00030 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Cobra Street | -31.821186 | 149.123286 | \$15,000 | Short | n/a |
| OC_00031 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Brambil Street | -31.821042 | 149.123109 | \$15,000 | Short | n/a |
| OC_00032 | Operation and Comfort | | Lack of crossing facility at desire line / intersection | Construct 2m x 3m refuge with kerb extensions | Pampoo Street | -31.82275 | 149.120333 | \$15,000 | Short | n/a |
| OC_00287 | Operation and Comfort | | Dangerous crossing location | Construct 2m x 3m refuge with kerb extensions / investigate LATM measures | Yalcogran Street | -31.822422 | 149.117921 | \$15,000 | Short | n/a |

9.2 Prioritisation

The bike plan has been prioritised on a number of key considerations. These include:

- > The connection of the route to key land uses;
- > The use of the route by school children and by younger users;
- > The safety of the cyclist on the route;
- > Connection to existing bike routes;
- > The likely usage of the route; and
- > Impact on the local community (including needs of the community).

The bike networks were reviewed and classified with a short, medium and long term priority depending on the number of considerations above the routes addressed.

The prioritisation of the bike network for the six towns is shown in **Figure 9-1** to **Figure 9-6**.

The short term priority routes were identified as the shared paths that provided a safe passage of travel for users (especially for school children and younger users) to key land uses or where Council has deemed appropriate. A number of these routes aligned with improvements identified as part of Warrumbungle Council's Pedestrian Access and Mobility Plan (PAMP). Medium term priorities were identified as routes that also connected to key land uses but were identified as on-road routes. Long term priorities were identified as on-road routes that would generate cycling usage but did not connect to any key land uses.

The breakdown of the estimated cost per town and per priority is shown below in **Table 9-8**.

Table 9-8 Estimated cost per town per priority

| Town | Short term | Medium term | Long term | Estimated cost |
|---------------|--------------------|-----------------|-----------------|--------------------|
| Baradine | \$1,196,800 | \$2,600 | \$3,000 | \$1,202,400 |
| Binnaway | \$199,000 | \$3,800 | \$4,600 | \$207,400 |
| Coolah | \$1,543,400 | \$2,400 | \$4,200 | \$1,550,000 |
| Coonabarabran | \$2,841,400 | \$8,800 | \$4,600 | \$2,854,800 |
| Dunedoo | \$1,616,000 | \$3,200 | \$5,400 | \$1,624,600 |
| Mendooran | \$974,800 | \$1,200 | \$1,800 | \$977,800 |
| Total | \$8,371,400 | \$22,000 | \$23,600 | \$8,417,000 |

9.2.2 Top projects for funding

Council has identified the top projects recommended for future funding. These projects have been ranked by Council for each town and have been broken down in **Table 9-3** below. The project sheets for these projects identified below are provided in **Appendix E**.

Table 9-9 Ranking of priority projects

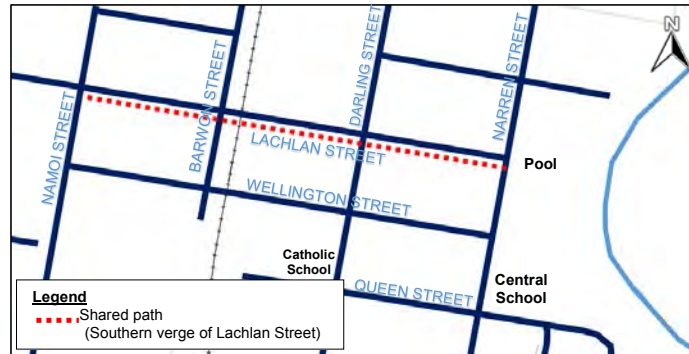
| Rank | Location | Cost |
|-----------------|---|-----------|
| Baradine | | |
| 1 | Shared path along Lachlan Street between Namoi Street and Narren Street. This route connects the centre of town with the pool, the showground and the camp. | \$274,640 |
| 2 | Shared path along Queen Street between the railway line and Narren Street. The shared path provides a link between St Johns Baradine Catholic School and the sports oval in the southern part of the town. | \$211,550 |
| Baradine | | |
| 1 | On road bike path along Warrumbungles Way, between David Street and Weetabilla Street. This cycle path will allow tourists to gain access to the Caravan Park and the centre of town, where popular land uses such as the pool are located. | \$1,400 |

| Rank | Location | Cost |
|----------------------|--|-----------|
| 2 | Shared path connecting Castlereagh Avenue with Warrumbungle Way, through Renshaw Street, Yarran Street and David Street. This route will connect the Pool, Central School and Town Hall with the Bowling Club and the western side of town. | \$197,350 |
| Coolah | | |
| 1 | Shared path along Booyamurra Street and Church Street. The path will connect the Catholic School at the intersection of Church Street and Charles Street, with the Pool, Preschool and other key land uses in northern Coolah. | \$398,950 |
| 2 | Shared path along Charles Street, between Church Street and Cunningham Caravan Park. This route will connect the Catholic School and two nearby parks in the east. | \$183,570 |
| 3 | Shared path along the non-compliant Binnia Street shared path between Black Stump Way and Goddard Street in the northwest of town. | \$158,450 |
| Coonabarabran | | |
| 1 | Shared path along Dalgarno Street between John Street and Namoi Street, Namoi Street between Dalgarno Street and Edwards Street, Edwards Street between Namoi Street and John Street and southwest along John Street to the High School. This route will connect the TAFE, the Pre-school, the Pool, the Showground, the Primary School and the High School. | \$863,120 |
| 2 | On-road bike path along Casilis Street, between Namoi Street and Ulimambri Street. This bike path will link the eastern side of town with the MPS, Hostel, Pre-school and TAFE. | \$2,200 |
| Dunedoo | | |
| 1 | Shared path along Cobbora Street between Merrygoen Street and Wargundy Street. This path will connect the residential area and sports club in the east side of town with the Pool, Bowling Club, TAFE and schools in the west. | \$337,200 |
| 2 | Shared path along Merrygoen Street, between Bolaro Street and Tucklan Street. This path will connect the caravan park and oval in the north with the centre of the town, which includes active land uses such as the TAFE, the Central and Catholic Schools and Pre-school. | \$220,890 |
| Mendooran | | |
| 1 | Shared path along Brambil Street between the Central School and Cobra Street. This path will connect the Central School with the centre of town. | \$164,200 |
| 2 | Shared path along Pampoo Street between Bandulla Street and Cobra Street, and on Cobra Street between Pampoo Street and Napier Street. This path will connect the Bowling Club and pool with the centre of town and the pre-school. | \$330,940 |

The project plans for these projects to be recommended for future funding are presented below.

Baradine - Shared Path along Lachlan Street between Namoi Street and Narren Street

Figure 1. Shared path segment



Project Description:

Shared path along Lachlan Street between Namoi Street and Narren Street. This route connects the centre of town with the pool, the showground and the camp.

Estimated Cost of Pathway Materials:

The proposed shared path is 640m long with an estimated cost of \$274,640.

This cost includes kerb ramps, kerb extensions and pedestrian refuges however excludes the cost of a potential pedestrian railway crossing, cost of earthworks, signage, relocation of utilities, property acquisition and end-of-trip facilities that may be required. Estimated costs may vary based on the size of future infrastructure required.

Project Scope:

- Providing 640 metres of new 2.5metre wide concrete shared path.
- Construct eight 2.0m wide kerb ramps which accommodate crossing Narren Street, Barwon Street, Darling Street and Namoi Street.
- Construct one 2.0m x 3.0m refuge with kerb extensions which accommodate crossing Narren Street.

Project Action List:

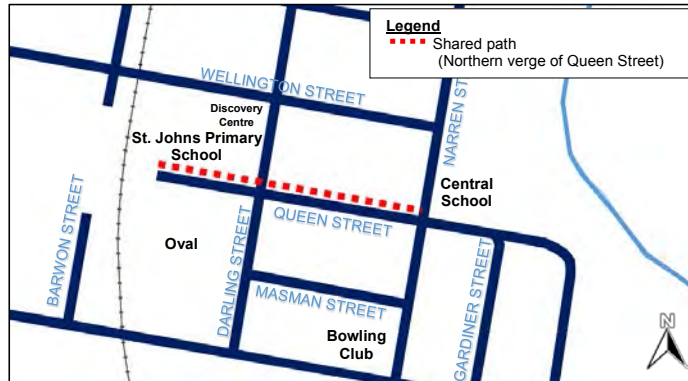
- Undertake site inspection.
- Confirm scope of works.
- Confirm funding stream and availability
- Plan works
- Undertake construction
- Undertaken an awareness campaign to promote its use

Figure 2. Existing conditions. Left image: Eastern side of Lachlan Street near the Pool. Right image: Western end of Lachlan Street, close to the showground.



Baradine - Shared Path along Queen Street between the railway line and Narren Street

Figure 1. Shared path segment



Project Description:

Shared path along Queen Street between the railway line and Narren Street. The shared path provides a link between St Johns Baradine Catholic School and the sports oval in the southern part of the town.

Estimated Cost of Pathway Materials:

The proposed shared path is 430m which has an estimated cost of \$211,550.

This cost includes the kerb ramps, kerb extensions and pedestrian refuges however excludes cost of earthworks, signage, relocation of utilities, property acquisition and end-of-trip facilities that may be required. Estimated costs may vary based on the size of future infrastructure required.

Project Scope:

- Providing 430m of new 2.5m wide concrete shared path.
- Construct six 2.0m wide kerb ramps which accommodate crossing Narren Street, Queen Street and Darling Street.
- Construct three 2.0m x 3.0m refuges with kerb extensions which accommodate crossing Narren Street, Queen Street and Darling Street.

Project Action List:

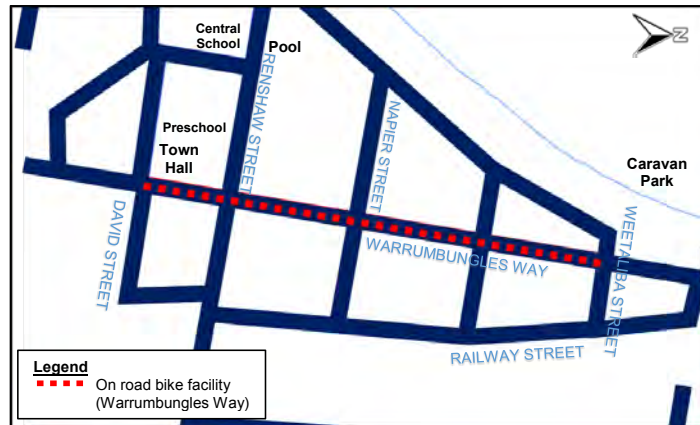
- Undertake site inspection.
- Confirm scope of works.
- Confirm funding stream and availability
- Plan works
- Undertake construction
- Undertaken an awareness campaign to promote its use

Figure 2. Existing conditions: Left image: Western end of Queen Street near Baradine Central School. Right image: Eastern end of Queen Street near St Johns Primary School.



Binnaway – On-road bike path along Bullinda Street between David Street and Weetaliba Street

Figure 1. Shared path segment



Project Description:

On road bike path along Warrumbungles Way, between David Street and Weetaliba Street. This cycle path will allow tourists to gain access to the Caravan Park and the centre of town, where popular land uses such as the pool are located.

Estimated Cost of Pathway Materials:

The suggested bike path is 580m in length and the cost is estimated to be \$1,400.

This cost includes bike path logos however excludes warning signs at a dip in the road at the Renshaw Street intersection, cost of road conditioning, signage and end-of-trip facilities that may be required.

Project Scope:

- Providing 580m of separated bike path
- Providing bike path logos at 200m intervals
- Installing one warning sign for dip in road at Renshaw Street

Project Action List:

- Undertake site inspection.
- Confirm scope of works.
- Confirm funding stream and availability
- Plan works
- Undertake construction
- Undertaken an awareness campaign to promote its use

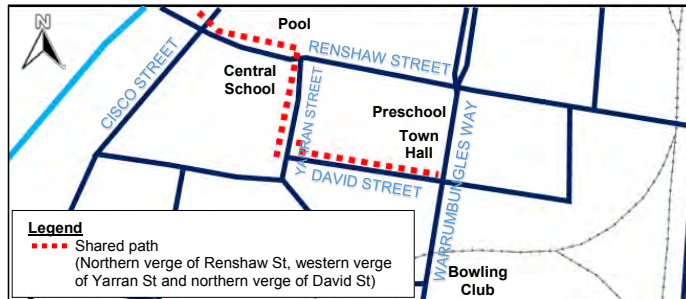
Figure 2. Existing conditions. Left image: Southern end of Bullinda Street. Right image: Northern end of Bullinda Street





Binnaway - Shared Path along Renshaw St, Yarran St and David St, between Cisco St and Warrumbungles Way

Figure 1. Shared path segment



Project Description:

Shared path connecting Castlereagh Avenue with Warrumbungle Way, through Renshaw Street, Yarran Street and David Street. This route will connect the Pool, Central School and Town Hall with the Bowling Club and the western side of town.

Estimated Cost of Pathway Materials:

The proposed shared path is 440m long and the construction is estimated to cost \$197,350.

This cost includes kerb ramps, kerb extensions and pedestrian refuges however excludes cost of earthworks, signage, relocation of utilities, property acquisition and end-of-trip facilities that may be required. The cost of a shared path between the pool and Cisco Street along Renshaw Street has not been provided as funding has been approved for this section. Estimated costs may vary based on the size of future infrastructure required.

Project Scope:

- Providing 440 metres of new 2.5metre wide concrete shared path.
- Construct seven 2.0m wide kerb ramps which accommodate crossing Renshaw Street, Yarran Street, Castlereagh Avenue and Warrumbungle Way.
- Construct three 2.0m x 3.0m refuges with kerb extensions to accommodate crossing Renshaw Street, Castlereagh Avenue and Yarran Street.

Project Action List:

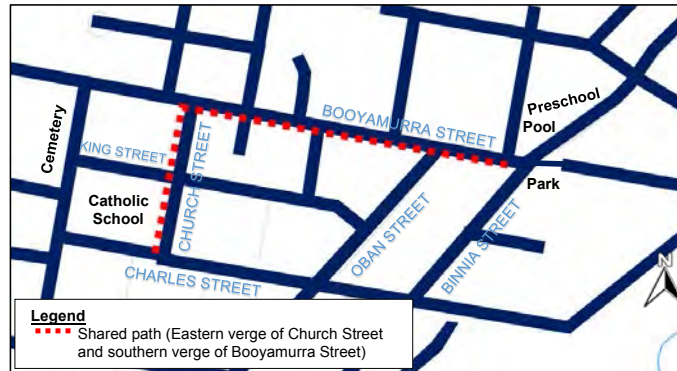
- Undertake site inspection.
- Confirm scope of works.
- Confirm funding stream and availability
- Plan works
- Undertake construction
- Undertaken an awareness campaign to promote its use

Figure 2. Existing conditions. Top left: Western end of Renshaw Street. Top right: northern end of Yarran Street, opposite the Pool. Bottom left: Eastern end of David Street, beside the Town Hall. Bottom right: Western end of David Street, beside the Binnaway Central School.



Coolah – Share path on Church Street and Booyamurra Street, between Charles Street and Binnia Street

Figure 1. Shared path segment



Project Description:

Shared path along Booyamurra Street and Church Street. The path will connect the Catholic School at the intersection of Church Street and Charles Street, with the Pool, Preschool and other key land uses in northern Coolah.

Estimated Cost of Pathway Materials:

The proposed shared path is 820m in length, and the estimated cost is \$398,950.

This cost includes kerb ramps and refuges, however excludes cost of earthworks, signage, relocation of utilities, property acquisition and end-of-trip facilities that may be required. Estimated costs may vary based on the size of future infrastructure required.

Project Scope:

- Providing 820m of new 2.5m wide concrete shared path.
- Construct ten 2.0m wide kerb ramps which accommodate crossing Charles Street, King Street, Booyamurra Street, Turee Street and Oban Street.
- Constructing two 2.0m x 3.0m refuge with kerb extension which accommodates crossing Church Street and Oban Street.

Project Action List:

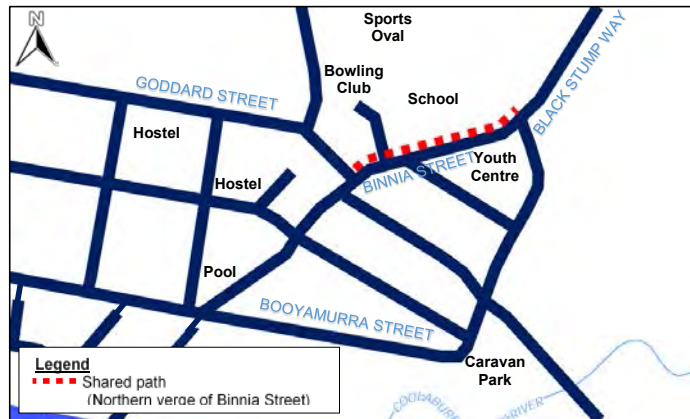
- Undertake site inspection.
- Confirm scope of works.
- Confirm funding stream and availability
- Plan works
- Undertake construction
- Undertaken an awareness campaign to promote its use

Figure 2. Existing conditions. Left image: Southern end of Church Street, near the Catholic School. Middle image: Northern end of Church Street. Right image: Western end of Booyamurra Street, looking east.



Coolah – Shared path on Binnia Street between Black Stump Way and Goddard Street

Figure 1. Shared path segment



Project Description:

Shared path along the non-compliant Binnia Street shared path between Black Stump Way and Goddard Street in the northwest of town.

Estimated Cost of Pathway Materials:

The shared path will measure 385m in length and the approximate cost of construction is \$158,450.

This cost includes kerb ramps however excludes cost of earthworks, signage, relocation of utilities, property acquisition and end-of-trip facilities that may be required. Estimated costs may vary based on the size of future infrastructure required.

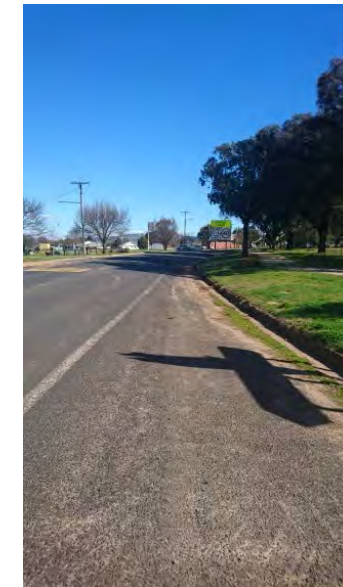
Project Scope:

- Providing 385m of new 2.5m wide concrete shared path.
- Construct five 2.0m wide kerb ramps which accommodate crossing Black Stump Way, Goddard Street and a small laneway.
- Constructing one 2.0m x 3.0m refuge with kerb extension which accommodates crossing Black Stump Way.

Project Action List:

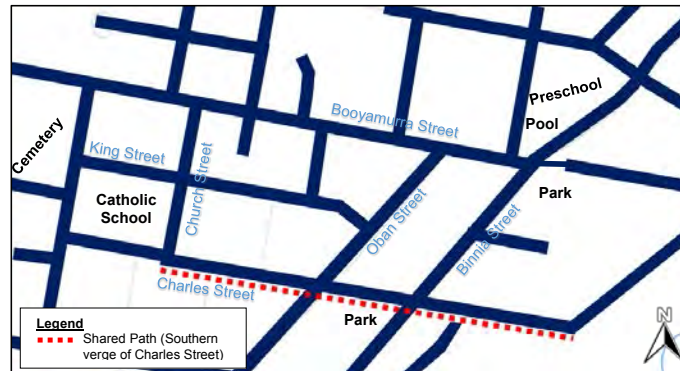
- Undertake site inspection.
- Confirm scope of works.
- Confirm funding stream and availability
- Plan works
- Undertake construction
- Undertaken an awareness campaign to promote its use

Figure 2. Existing conditions. Left image: Southwest end of Binnia Street, near the Bowling Club. Right image: Northeast end of Binnia Street, near Coolah Central School.



Coolah – Shared Path on Charles Street, between Church Street and Cunningham Park

Figure 1. Shared path segment



Project Description:

Shared path along Charles Street, between Church Street and Cunningham Caravan Park. This route will connect the Catholic School and two nearby parks in the east.

Estimated Cost of Pathway Materials:

The length of the proposed shared path is 766m, and the estimated cost is \$183,570.

This cost includes kerb ramps and refuges, however excludes cost of earthworks, signage, relocation of utilities, property acquisition and end-of-trip facilities that may be required. In addition the cost of the shared path east of Binnia Street has been excluded as funding has already been approved. Estimated costs may vary based on the size of future infrastructure required.

Project Scope:

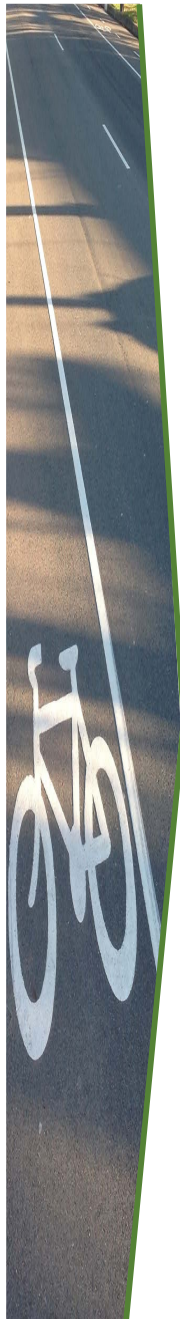
- Providing 766m of new 2.5m wide concrete shared path.
- Construct six 2.0m wide kerb ramps which accommodate crossing McLean Street, Binnia Street and Binnaway Street.
- Constructing one 2.0m x 3.0m refuge with kerb extension which accommodates crossing Binnia Street.

Project Action List:

- Undertake site inspection.
- Confirm scope of works.
- Confirm funding stream and availability
- Plan works
- Undertake construction
- Undertaken an awareness campaign to promote its use

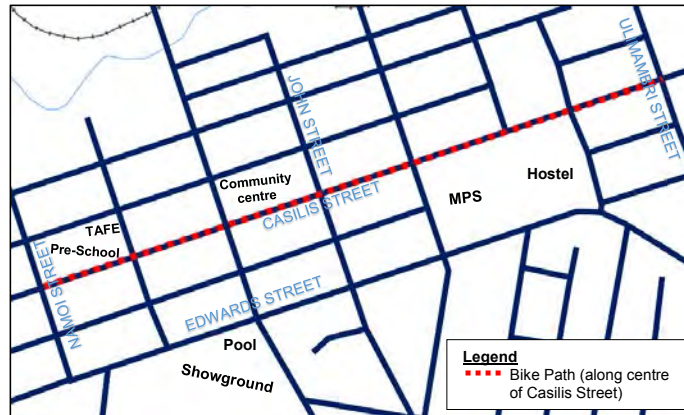
Figure 2. Existing conditions. Left photo: Eastern end of Charles Street, where shared path ends. Right photo: Western end of Charles Street, near the catholic school.





Coonabarabran – On-road bike path on Casilis Street, between Namoi Street and Ulimambri Street

Figure 1. Bike path segment



Project Description:

On-road bike path along Casilis Street, between Namoi Street and Ulimambri Street. This bike path will link the eastern side of town with the MPS, Hostel, Pre-school and TAFE.

Estimated Cost of Pathway Materials:

The proposed bike path is 1520m in length and the estimated cost is \$2,200.

This cost includes bike path logos however excludes cost of road conditioning, signage and end-of-trip facilities that may be required.

Project Scope:

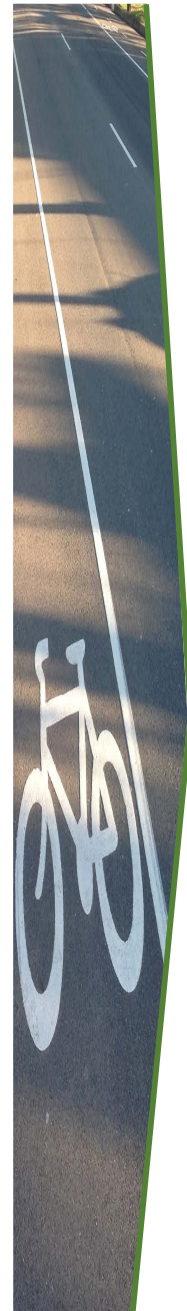
- Constructing 1,520m of designated bike path

Project Action List:

- Undertake site inspection.
- Confirm scope of works.
- Confirm funding stream and availability
- Plan works
- Undertake construction
- Undertaken an awareness campaign to promote its use

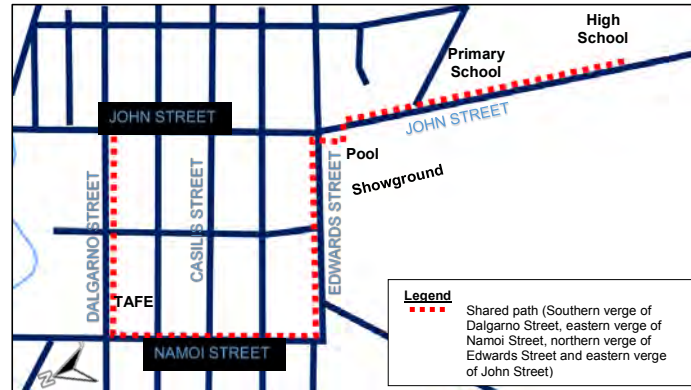
Figure 2. Existing conditions. Left image: Northeast end of Cassilis Street near Ulimambri Street. Right image: Southwestern side of Cassilis Street near the Tafe.





Coonabarabran – Shared Path on Dalgarno Street, Namoi Street, Edwards Street and Newell Highway

Figure 1. Shared path segment



Project Description:

Shared path along Dalgarno Street between John Street and Namoi Street, Namoi Street between Dalgarno Street and Edwards Street, Edwards Street between Namoi Street and John Street and southwest along John Street to the High School. This route will connect the TAFE, the Pre-school, the Pool, the Showground, the Primary School and the High School.

Estimated Cost of Pathway Materials:

The shared path is 2,100m in length and is estimated to cost \$863,120.

This cost includes kerb ramps and refuges, however excludes cost of earthworks, signage, relocation of utilities, property acquisition and end-of-trip facilities that may be required. The cost also excludes any local area traffic management measures required and discounts section of the path with compliant facilities. Estimated costs may vary based on the size of future infrastructure required.

Project Scope:

- Construction of 2,100 m of 2.5m wide shared path.
- Construction of twenty one kerb ramps which accommodate crossing Dalgarno Street, Timor Street, Cassilis Street, King Street, Robertson Street, Edwards Street, John Street, George Street, and give access to the high school.
- Construction of six 2m x 3m refuges with kerb extensions which accommodate crossing Cassilis Street, Edwards Street, John Street, George Street and give access to the high school.

Project Action List:

- Undertake site inspection.
- Confirm scope of works.
- Confirm funding stream and availability
- Plan works
- Undertake construction
- Undertaken an awareness campaign to promote its use

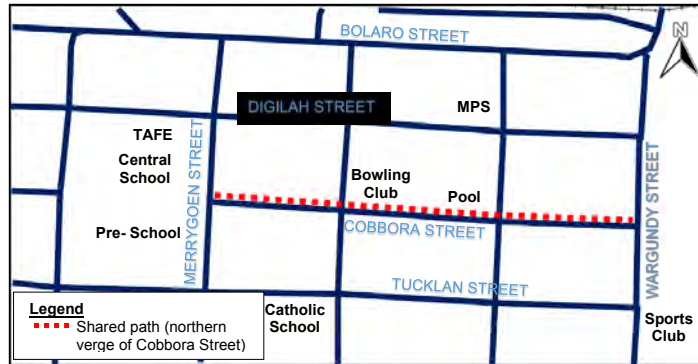
Figure 2. Existing conditions. Top left image: Dalgarno Street, near the roundabout and clock tower. Top right: Namoi Street, near St Lawrences primary School. Bottom left: Edwards Street, near the Girl Guides hall. Bottom right: John Street, near the Pool.





Dunedoo – Shared path on Cobbora Street, between Merrygoen Street and Wargundy Street

Figure 1. Shared path segment



Project Description:

Shared path along Cobbora Street between Merrygoen Street and Wargundy Street. This path will connect the residential area and sports club in the east side of town with the Pool, Bowling Club, TAFE and schools in the west.

Estimated Cost of Pathway Materials:

The shared path is 720m in length and the estimated cost of construction is \$337,200.

This cost includes kerb ramps, kerb extensions and pedestrian refuges, however excludes cost of earthworks, signage, relocation of utilities, property acquisition and end-of-trip facilities that may be required. Estimated costs may vary based on the size of future infrastructure required.

Project Scope:

- Construction of 720m of 2.5m wide shared path
- Construct 8 kerb ramps that facilitate crossing Merrygoen Street, Tallawang Street, Wallaroo Street and Wargundy Street
- Construct four refuges with kerb extensions that facilitate crossing Merrygoen Street, Tallawang Street, Wallaroo Street and Wargundy Street.

Project Action List:

- Undertake site inspection.
- Confirm scope of works.
- Confirm funding stream and availability
- Plan works
- Undertake construction
- Undertaken an awareness campaign to promote its use

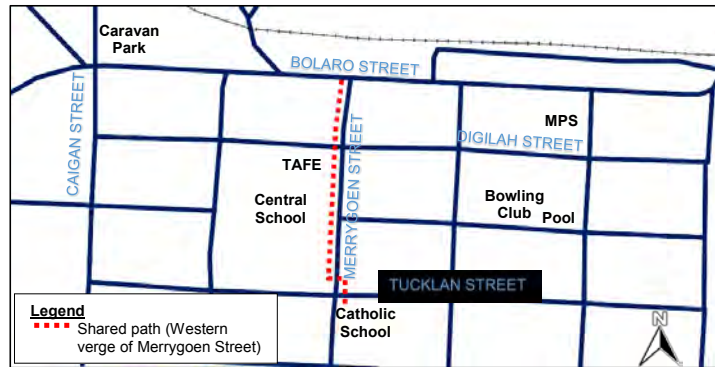
Figure 2. Existing conditions. Left image: Western end of Cobbora Street, near the Pre-School. Right image: Eastern end of Cobbora Street, near the Sports Club.





Dunedoo – Shared path on Merrygoen Street, between Bolaro Street and Tucklan Street

Figure 1. Shared path segment



Project Description:

Shared path along Merrygoen Street, between Bolaro Street and Tucklan Street. This path will connect the caravan park and oval in the north with the centre of the town, which includes active land uses such as the TAFE, the Central and Catholic Schools and Pre-school.

Estimated Cost of Pathway Materials:

The shared path is 430m in length and is estimated to cost \$220,890. This cost includes the kerb ramps, kerb extensions and pedestrian refuges, however excludes cost of earthworks, signage, relocation of utilities, property acquisition and end-of-trip facilities that may be required. The cost also excludes any local area traffic management measures required. Estimated costs may vary based on the size of future infrastructure required.

Project Scope:

- Providing 430m of 2.5m wide shared path
- Constructing ten 2.0m wide kerb ramps to accommodate crossing Bolaro Street, Digilah Street, Cobborah Street and Tucklan Street.
- Construct five refuges with kerb extensions to accommodate crossing Bolaro Street, Digilah Street, Cobbora Street, Merrygoen Street and Tucklan Street.

Project Action List:

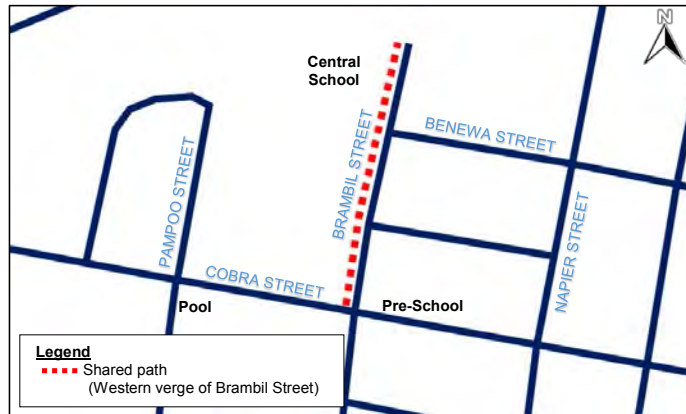
- Undertake site inspection.
- Confirm scope of works.
- Confirm funding stream and availability
- Plan works
- Undertake construction
- Undertaken an awareness campaign to promote its use

Figure 2. Existing conditions. Left image: northern end of Merrygoen Street. Right image: Southern end of Merrygoen Street, near the Catholic School.



Mendooran – Shared path on Brambil Street between the Central School and Cobra Street

Figure 1. Shared path segment



Project Description:

A shared path is recommended on Brambil Street between the Central School and Cobra Street. This path will connect the Central School with the centre of town.

Estimated Cost of Pathway Materials:

The length of the shared path is 400m and the estimated cost is \$164,200.

This cost includes a kerb ramp however excludes cost of earthworks, signage, relocation of utilities, property acquisition and end-of-trip facilities that may be required. Estimated costs may vary based on the size of future infrastructure required.

Project Scope:

- Constructing 400m of 2.5m wide shared path
- Constructing one kerb ramp which facilitates the crossing of Cobra street

Project Action List:

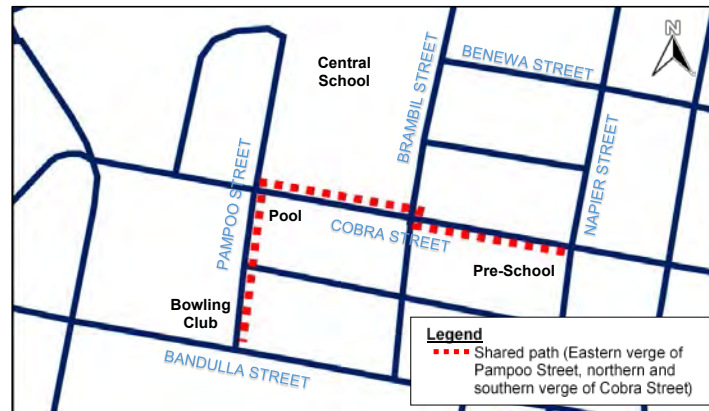
- Undertake site inspection.
- Confirm scope of works.
- Confirm funding stream and availability
- Plan works
- Undertake construction
- Undertaken an awareness campaign to promote its use

Figure 2. Existing conditions. Left image: Northern end of Brambil Street, near the Mendooran Central School. Right image: Southern end of Brambil Street.



Mendooran – Shared path on Pampoo Street and Cobra Street

Figure 1. Shared path segment



Project Description:

Shared path along Pampoo Street between Bandulla Street and Cobra Street, and on Cobra Street between Pampoo Street and Napier Street. This path will connect the Bowling Club and pool with the centre of town and the pre-school.

Estimated Cost of Pathway Materials:

The shared path is 1,000m long and the estimated cost is \$330,940. This cost includes kerb ramps, kerb extensions and pedestrian refuges, however excludes cost of earthworks, signage, relocation of utilities, property acquisition and end-of-trip facilities that may be required. Estimated costs may vary based on the size of future infrastructure required.

Project Scope:

- Construct 1000m of 2.5m wide shared path
- Construct eight 2.0m wide kerb ramps to facilitate crossing Cobra Street, Brambil Street, Pampoo Street and Bandulla Street.
- Construct four refuges with kerb extensions to facilitate crossing Cobra Street, Brambil Street and Bandulla Street.

Project Action List:

- Undertake site inspection.
- Confirm scope of works.
- Confirm funding stream and availability
- Plan works
- Undertake construction
- Undertaken an awareness campaign to promote its use

Figure 2. Existing conditions. Top left: Pampoo Street, near the Pool. Top right: Pampoo Street, near the Bowling Club on the south western end of town. Bottom left: Cobra Street, near the Pool. Bottom right: Cobra Street, near the Pre-school.



Figure 9-1 Baradine prioritised bike network



Proposed Bike Network Priority: Baradine

WARRUMBUNGLE SHIRE COUNCIL BIKE PLAN

Legend

- Major Road (LPI)
- Minor Road (LPI)
- Major Watercourses (LPI)

Proposed Bike Network Priority

- Short Term
- Medium Term
- Long Term

Places of Interest by Facility Type (WSC, 2016)

- Community
- Education
- Medical
- Recreation
- Other

1:9,000 Scale at A3



Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2016-08-05
Coordinate System: GDA 1994 MGA Zone 55
Project: 80016076
Map: 80016076-GS-016-NetworkPriorities_DDP.mxd 02

Figure 9-2 Binnaway prioritised bike network



Proposed Bike Network Priority: Binnaway

WARRUMBUNGLE SHIRE COUNCIL BIKE PLAN

Legend

- Major Road (LPI)
- Minor Road (LPI)
- Major Watercourses (LPI)

Proposed Bike Network Priority

- Short Term
- Medium Term
- Long Term

Places of Interest by Facility Type (WSC, 2016)

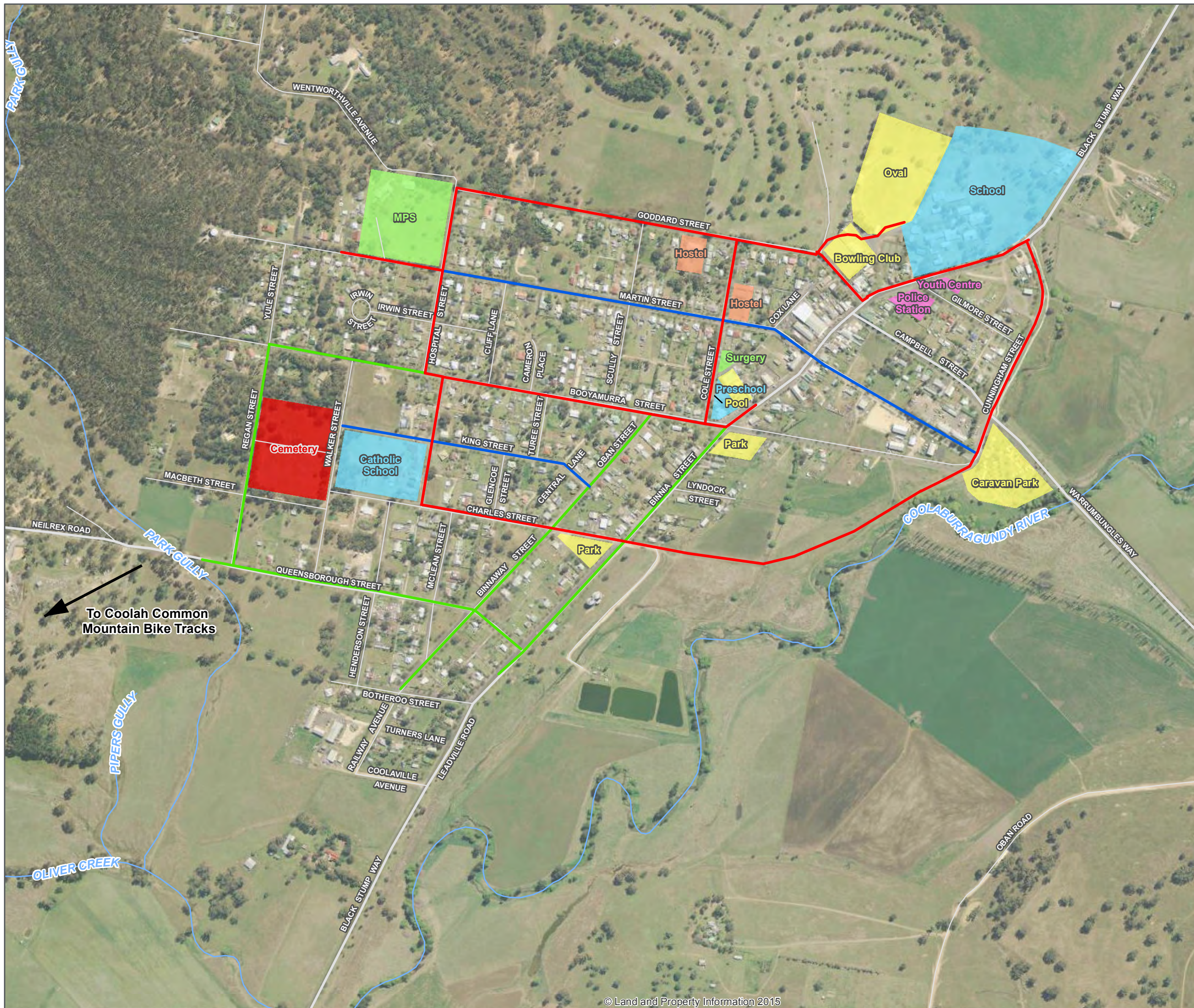
- Community
- Education
- Recreation
- Other

1:6,000 Scale at A3



Map Produced by Cardno NSW/ACT Pty Ltd (SYD)
Date: 2016-08-05
Coordinate System: GDA 1994 MGA Zone 55
Project: 80016076
Map: 80016076-GS-016-NetworkPriorities_DDP.mxd 02

Figure 9-3 Coolah prioritised bike network



Proposed Bike Network Priority: Coolah

WARRUMBUNGLE SHIRE COUNCIL BIKE PLAN

Legend

- Major Road (LPI)
- Minor Road (LPI)
- Major Watercourses (LPI)

Proposed Bike Network Priority

- Short Term
- Medium Term
- Long Term

Places of Interest by Facility Type (WSC, 2016)

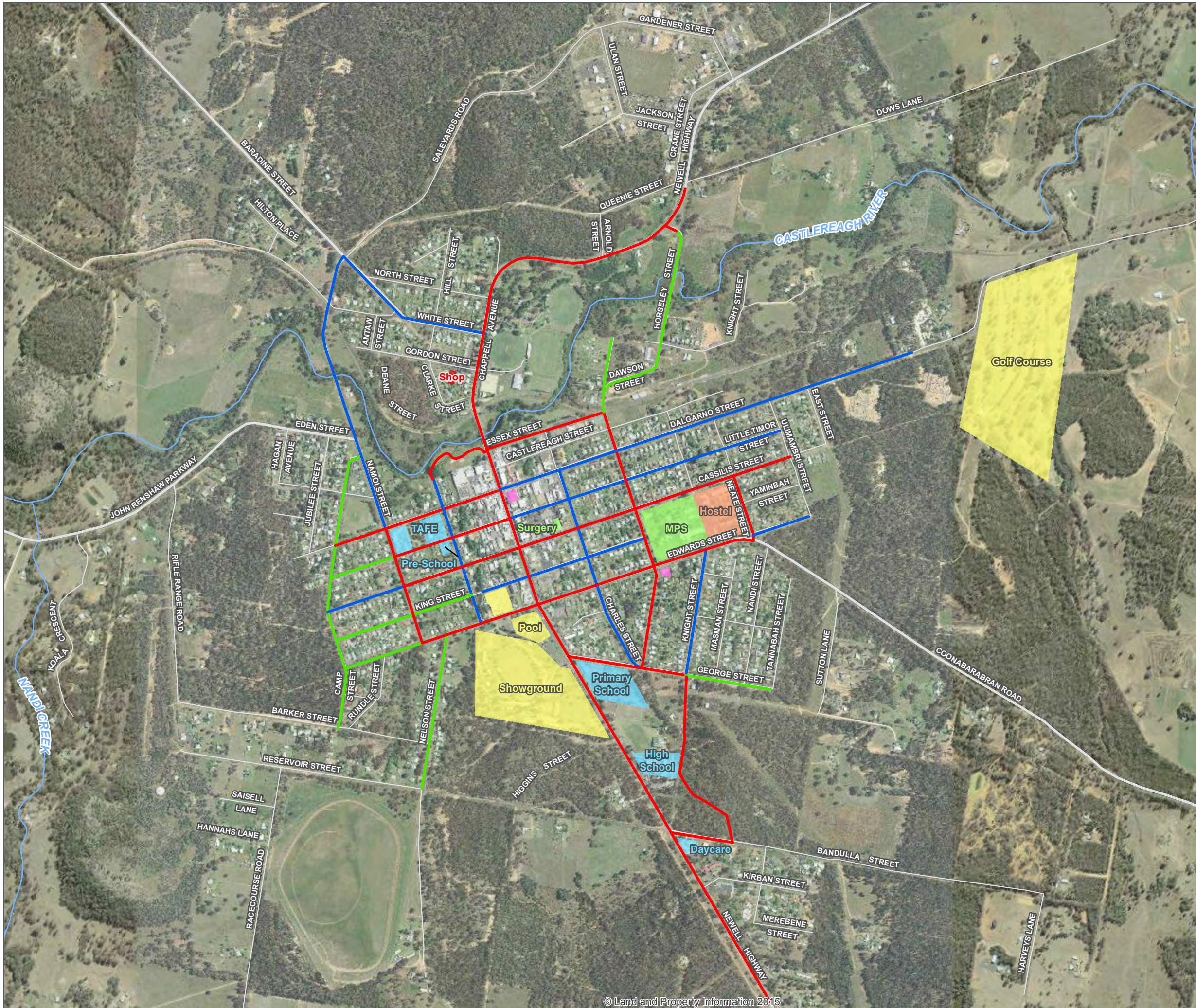
- Aged Care
- Community
- Education
- Medical
- Recreation
- Other

1:8,000 Scale at A3



Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2016-08-05
Coordinate System: GDA 1994 MGA Zone 55
Project: 80016076
Map: 80016076-GS-016-NetworkPriorities_DDP.mxd 02

Figure 9-4 Coonabarabran prioritised bike network



Proposed Bike Network Priority: Coonabarabran

WARRUMBUNGLE SHIRE COUNCIL BIKE PLAN

Legend

- Major Road (LPI)
- Minor Road (LPI)
- Major Watercourses (LPI)

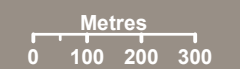
Proposed Bike Network Priority

- Short Term
- Medium Term
- Long Term

Places of Interest by Facility Type (WSC, 2016)

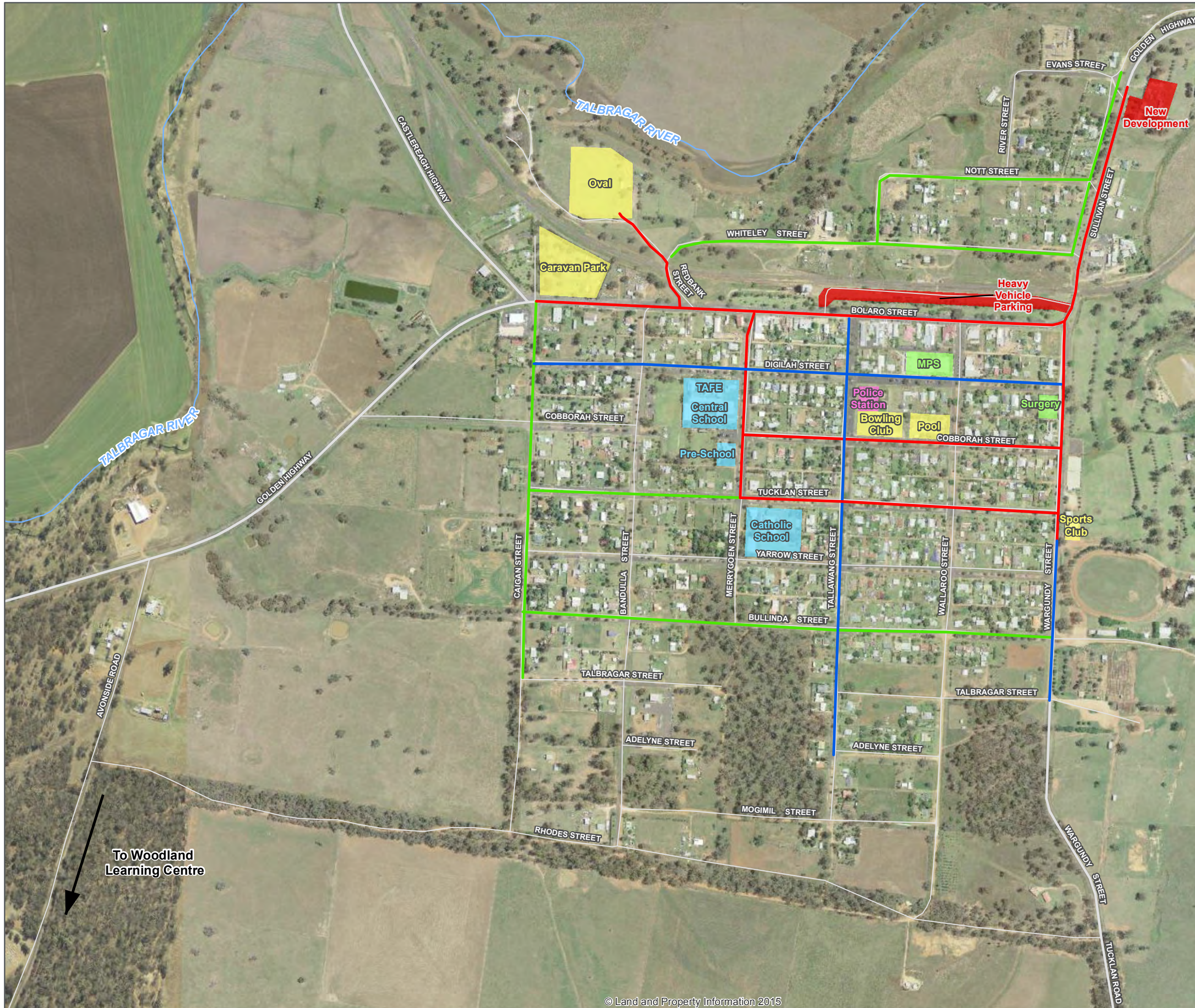
- Aged Care
- Community
- Education
- Medical
- Recreation
- Other

1:14,000 Scale at A3



Map Produced by Cardno NSW/ACT Pty Ltd (SYD)
Date: 2016-08-05
Coordinate System: GDA 1994 MGA Zone 55
Project: 80016076
Map: 80016076-GS-016-NetworkPriorities_DDP.mxd 02

Figure 9-5 Dunedoo prioritised bike network



Proposed Bike Network Priority: Dunedoo

WARRUMBUNGLE SHIRE COUNCIL BIKE PLAN

Legend

- Major Road (LPI)
- Minor Road (LPI)
- Major Watercourses (LPI)

Proposed Bike Network Priority

- Short Term
- Medium Term
- Long Term

Places of Interest by Facility Type (WSC, 2016)

- Community
- Education
- Medical
- Recreation
- Other

1:8,000 Scale at A3



Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2016-08-05
Coordinate System: GDA 1994 MGA Zone 55
Project: 80016076
Map: 80016076-GS-016-NetworkPriorities_DDP.mxd 02

Figure 9-6 Mendooran prioritised bike network



Proposed Bike Network Priority: Mendooran

WARRUMBUNGLE SHIRE COUNCIL BIKE PLAN

Legend

- Major Road (LPI)
- Minor Road (LPI)
- Major Watercourses (LPI)

Proposed Bike Network Priority

- Short Term
- Medium Term
- Long Term

Places of Interest by Facility Type (WSC, 2016)

- Community
- Education
- Recreation
- Other

1:7,000 Scale at A3



Map Produced by Cardno NSW/ACT Pty Ltd (SYD)
Date: 2016-08-05
Coordinate System: GDA 1994 MGA Zone 55
Project: 80016076
Map: 80016076-GS-016-NetworkPriorities_DDP.mxd 02

10 Conclusion

Cardno was commissioned to prepare a Bike Plan for the six towns in the Warrumbungle Local Government Area (LGA) being Baradine, Binnaway, Coolah, Coonabarabran, Dunedoo and Mendooran which will aim at improving the community's health, liveability and sustainability.

As part of the Bike Plan, community consultation was undertaken to identify the common bicycle restraints within the six towns. Members of the community identified that key issues relating to the safety of cyclists was a key constraint that limited the number of the cyclists within the towns. These key issues include the number of heavy vehicles on the road, the lack of awareness of cyclists and the need for increased driver education of relevant laws, and the hazards associated to the key crossing points within the towns (i.e. intersections and train tracks).

Upon consulting with the community, the bicycle network for the six towns was finalised, taking into consideration key land uses within the towns. Shared paths (where cyclists share a 2.5 metre footpath with pedestrians) were provided along the key roads within the towns to limit cyclists on roads with heavy vehicles, as well as on routes where key land uses connect to one another (i.e. schools to the town centre or to the public pool). On-road (mixed traffic) bicycle routes were provided along other key roads where the roads were identified as having low daily traffic volumes and spacious road carriageways.

A site audit was undertaken assessing the condition of the existing infrastructure and the improvements required to complete the bike network within the six towns. The cost of works required to provide the bike network in each of the towns were subsequently costed to provide an indicative cost of works. The total cost estimate for the Bike Plan improvement works is \$8,417,000. The cost per town is as follows:

| Town | Estimated cost |
|---------------|--------------------|
| Baradine | \$1,202,400 |
| Binnaway | \$207,400 |
| Coolah | \$1,550,000 |
| Coonabarabran | \$2,854,800 |
| Dunedoo | \$1,624,600 |
| Mendooran | \$977,800 |
| Total | \$8,417,000 |

The bike network of each of the towns was prioritised by per route to identify the future schedule of works. The routes were categorised into short, medium and long term based on a number of key factors including: whether the road was on/off the road, the connectivity of the route with key land use, the potential for use by school children and whether the route connected to an existing bicycle facility. The breakdown of short term, medium term and long term costs for the six towns are provided below:

| Town | Short term | Medium term | Long term | Estimated cost |
|---------------|--------------------|-----------------|-----------------|--------------------|
| Baradine | \$1,196,800 | \$2,600 | \$3,000 | \$1,202,400 |
| Binnaway | \$199,000 | \$3,800 | \$4,600 | \$207,400 |
| Coolah | \$1,543,400 | \$2,400 | \$4,200 | \$1,550,000 |
| Coonabarabran | \$2,841,400 | \$8,800 | \$4,600 | \$2,854,800 |
| Dunedoo | \$1,616,000 | \$3,200 | \$5,400 | \$1,624,600 |
| Mendooran | \$974,800 | \$1,200 | \$1,800 | \$977,800 |
| Total | \$8,371,400 | \$22,000 | \$23,600 | \$8,417,000 |

Education and behavioural change recommendations were also provided to help raise awareness of the bike network and promote increased knowledge and understanding of the active travel choices available within the towns. The initiatives were recommended to encourage mode share shift from private vehicle to active

travel for short trips. In addition to the behavioural change initiatives recommended in this Bike Plan, it is suggested that the safety of the cyclists along each routes are assessed prior to construction and that the community are well informed and aware of the increased presence of cyclists to ensure the safety of the cyclists.

10.1 Next steps

The next steps are important to ensure the successful implementation of the proposed bicycle network for the towns. Upon selection of the prioritised projects for funding, the following tasks should be undertaken:

- > **Development and design of the project:** includes discussion with community, design testing and design analysis, evaluation of cost based on selected design;
- > **Promotion of the selected project:** includes informing the community through various education and behavioural methods to promote the project;
- > **Evaluation of the project:** includes monitoring and evaluation of the project to assess the utilisation of the newly developed infrastructure;
- > **Set up of maintenance measures:** includes establishing asset management systems and development of asset maintenance program;
- > **Overall review:** includes the review of the project, identification of any alterations required, determination of any lessons learnt for the implementation of the next project; and
- > **Repeat:** includes the implementation of the above steps for the next identified project.

It is also recommended that the suggestion in the Warrumbungle DCP (2015) for all footpaths for future developments to be a 2.5m concrete pavement path remains. It is further suggested that, where possible, the 2.5m concrete footpaths to be constructed as part of future developments seek to tie in with the town's bicycle network as set out in this Bike Plan.