Weddin Active Transport Plan

Document Number: 16.6.1

WEDDIN SHIRE - 2018

PREPARED BY ACTIVE PLANNING CONSULTANTS & GHD FOR WEDDIN SHIRE COUNCIL | MAY 2018

Executive summary

The Weddin Shire is located in the Central West Region of NSW and is home to around 3,750 people, spread over a relatively large area of 3,410 square kilometres. The Weddin Shire includes the townships and localities of Bimbi, Bumbaldry, Caragabal, Greenethorpe, Grenfell, Marsden and Quandialla.

Travel patterns are dispersed across the shire and the road network can become quite busy, particularly in summer harvest, peak shopping times, school zones times and around weekend sporting and community events.

The Weddin Shire community is considered to have high car dependency for both work and leisure. Despite this car dependency, many people in the Weddin Shire choose to walk or ride to work or school and to other local destinations such as their local shops, cafes, club, post office and town swimming pool. Using human power is a cheap and easy form of transport and brings other benefits such as improved fitness and personal health, positive environmental and road safety outcomes as well as social and economic benefits.

The Weddin Shire has a large network of constructed footpaths (particularly in the main centre of Grenfell) as well as a smaller cycling network. Public amenities, directional signage, water points, seating, bicycle racks, street trees and other facilities all support this network. Council is ideally positioned to enhance the pedestrian and cycling network throughout the shire, particularly around the areas of highest pedestrian and cycling activity.

The Weddin Active Transport Plan identifies a range of infrastructure improvements and social initiatives, aimed at enhancing pedestrian and cycling opportunities. Given there are limited funds available to undertake this work, the Plan proposes targeted improvements that are assessed to have the greatest benefits and user support.

Stakeholder engagement has already commenced through surveys, workshops and meetings with various agencies, interest groups and residents. Feedback received so far provides valuable insight on pedestrian and cycling behaviour, attitudes and aspirations. It suggests the community is supportive of a more comprehensive and safer active transport network throughout the Weddin Shire.

Public exhibition of the Weddin Active Transport Plan aims to highlight the issues and projects being recommended for action by Council and other stakeholder groups to improve opportunities for pedestrians and cyclists throughout the shire.

Table of contents

1. Introduction

The focus of the Weddin Active Transport Plan is on the use of active travel to access jobs, education, recreational areas, services and social opportunities.

Pedestrians and cyclists are far more attuned to the environment in which they are moving than faster moving motorists. Planning for pedestrians and cyclists therefore does not follow the same logic as motor traffic planning, which normally involves a 'car' - 'trips' - 'routes' - 'traffic network'. It places more emphasis on the environment and the conditions along routes and at attractors.

There is international recognition that in order to significantly boost walking and cycling levels, a much higher standard of active transport facilities is required, particularly paths that provide greater separation from motor vehicle traffic. An important aspect of the Active Transport Plan is to enhance our understanding of the elements that will make a good active transport network in the Weddin Shire context. These include an understanding of the following:

- The types of existing / potential pedestrians and cyclists and their needs.
- The condition of the existing active travel network (including paths, gaps and barriers).
- Where pedestrians and cyclists are going and why.
- The traffic environment (speed and volume) that pedestrians and cyclists must deal with.
- The key planning and engineering principles that underpin an effective and usable active transport network.
- The most appropriate design options that meet active transport needs.
- The views and aspirations of stakeholders.
- Mechanisms to program / fund improvements to the active transport network.

While it is critical for transport planners to continue to focus on providing for the needs of motorists, it is important that the road network and built environment also caters to the needs of pedestrians and cyclists.

The Weddin Active Transport Plan represents the findings of Council's review of the latest trends and initiatives for pedestrians and cyclists, as well as the findings of community engagement and audits of local conditions.

2. Vision & Opportunity

2.1 Community Vision

Grenfell is at the centre of a strong agricultural region that makes up the Weddin Shire. In recent community engagement processes, the Weddin Shire Council and community members have come together to determine the vision for the shire. The Weddin Shire Community Strategic Plan establishes that in 2023 the shire will be:

> 'A progressive rural locality with a vibrant and welcoming community, rich in both heritage and the natural environment, with a diverse and resilient economy that supports local employment and business.'

The strategic plan continues to inform Council's Delivery Program, and should go a long way to implementing new projects and programs aimed at growing the shire into a welcoming and supportive community in NSW.

2.2 Community Objectives

The Weddin Shire Community Strategic Plan 2023 identifies the following key objectives to secure the vision for the shire and grow the population base:

- Strong, diverse and resilient local economy Economic.
- Healthy, safe, and educated community Social.
- Democratic and engaged community Civic Leadership.
- Culturally rich, vibrant and inclusive community Social.
- Cared for natural, agricultural and built environments Environment.
- Well maintained and improving Shire assets and services.

2.3 Active Transport Aims & Objectives

The Weddin Active Transport Plan aims to make pedestrian and cycling activities a safe, healthy and attractive travel option. The specific objectives of the Plan are to:

- Review the existing situation.
- Identify needs of all types of pedestrians and cyclists.
- Identify infrastructure improvements to deliver a connected network and achieve an appropriate level of pedestrian and cyclist access and priority.
- Prioritise improvements so they can be realistically implemented.
- Ensure prioritised improvements are employed in a consistent and appropriate manner.
- Ensure facilities are managed / maintained to high quality standards.
- Partner with government authorities, advocacy agencies and local communities to identify potential sources of funding to enhance / maintain active travel facilities.
- Include walking and riding in all planning decisions.

2.4 Added Benefits

The Weddin Active Transport Plan is also aimed at encouraging residents to become more active for their personal health and wellbeing. An additional objective of the Plan is to identify strategies that raise awareness of the merits / benefits of a more active lifestyle, for health, wellbeing and social interaction.

It is intended that the finalised Weddin Active Transport Plan will be the primary guiding documents to programme Council's own work to upgrade the pedestrian and cycling network throughout the shire over the next 10 years.

3. Why a new plan?

Weddin Shire already has strategies for pedestrian and cycling. These plans are largely focused on Grenfell and not the other towns, villages and non-urban areas that makes-up the balance of the shire.

There is a need to widen the focus of active movement planning to other areas of the Weddin Shire.

Greater focus on strategies that increase usage of footpaths and cycleways in the main towns of Caragabal, Grenfell, Greenethorpe and Quandialla will bring new benefits and opportunities for shire residents.

3.1 Creating a comprehensive movement network

Council and State government transport planners are focussing efforts towards achieving comprehensive movement networks that allow people to navigate between land-uses or destinations via roads, pedestrian footpaths, cycle paths and shared paths routes, as well as using public transport routes where available.

The movement network in the Weddin Shire is largely based around private motor vehicles on roads. There is little available public transport (other than the School Bus Network, limited town bus runs and taxis) and the footpath and cycleway networks are not complete.

Continued lack of public transport options in the Weddin Shire are key reasons for improving the active movement network in the urban areas of the shire. As the centre of the most activity and growth in the shire, Grenfell needs a comprehensive movement strategy in order to plan for the growing needs of residents and visitors. The other towns of Caragabal, Greenethorpe and Quandialla also need closer study to ensure safe and connected communities.

There is strong evidence that comprehensive road environments are ones that incorporate efficient transport options (roads, public transport, footpaths and cycleways) as well as aesthetic presentation and general walkability and are particularly influential in encouraging people across all ages to lead more active lifestyles.

3.2 Maximise health and lifestyle benefits

Leading an active lifestyle can bring many benefits for the general health and wellbeing of Weddin Shire residents. Using footpaths, bicycle lanes and shared paths provide a cheap means of incorporating exercise into our daily routine. As regular activity, walking, running and cycling can aid the prevention of:

- Heart disease.
- Stroke.
- Type 2 diabetes.
- Falls, fractures and injuries (through improved strength and coordination).
- Hypertension.

Pedestrian and cycling activity can also improve psychological wellbeing, metabolism, muscle strength and flexibility, endurance, respiratory function, energy levels and weight management. In the event of illness or recovery from trauma / surgery, all this aids in a speedy return to good health.

Children's health should include regular physical activity. Health professionals recommend at least 60 minutes of moderate to vigorous physical activity for children 5 to 18 years of age to keep healthy. Outdoor activity, such as walking, running and cycling can contribute to children's health, as well as their development of physical, practical, emotional and social skills.

There is consistent evidence that the presence of footpaths and cycleways are associated with active travel across all age groups. There is strong evidence of an association with the presence of footpaths and shared paths and adults undertaking more exercise.

3.3 Achieving safer conditions

Pedestrians and cyclists are considered 'at risk road users' due to their lack of protection against motor vehicles in the event of a crash. It is important for road safety reasons that facilities are available for pedestrians and cyclists that minimise their exposure to potential conflict with motor vehicles.

Evidence indicates that connected street networks that are perceived as safe by users facilitate active walking for transport for all age groups. Real and perceived traffic-related safety has been associated with walking for transport in children and older adults. Connected active movement networks have been shown to be associated with more walking in older adults and children, but only when traffic-related issues are managed and the local streets are perceived to be safe.

Increasing the visibility of pedestrian and cycling paths throughout the Weddin Shire will help to encourage the use of these facilities and improve the quality of life of the local community. Older adults, particularly women, are more fearful and more vulnerable to crime thus the design and location of active movement facilities to achieve good levels of perceived / actual safety is important to avoid people constraining their behaviour.

Evidence indicates that Crime Prevention Through Design (CPTED) elements such as good street lighting, neighbourhood upkeep, and less physical incivilities (e.g. litter, graffiti and vandalism) and street features that promote safety from crime (e.g. front verandas and neighbourhood maintenance) can encourage walking.

The design of commercial buildings and their relation to the street has the potential to increase natural surveillance which improves safety and feelings of safety. Providing safe, well-lit building entrances that face the

street and are directly accessible from the street and footpath and car parks and public transport stops has been shown to encourage active modes of transport to and from the building.

3.4 Social Benefits

Active travel, particularly walking is one of the most socially inclusive modes of transport. It provides opportunities to socialise with friends and neighbours and creates a safer, friendlier and more connected community. Benefits includes:

- Encouraging family and community connectedness.
- Improving social skills and networks.
- Reducing isolation and loneliness.
- Enhancing self-esteem and confidence.
- Prolonging independent living for older people in the community.

Evidence suggests that the active travel infrastructure, particularly footpaths around local shops and community facilities, are important for encouraging social interaction and social capital. Such facilities provide casual and chance interactions with other members of the community as well as providing places for people to meet friends and family and engage in social activities.

3.5 Economic Benefits

Walking and cycling provides a convenient and cost-effective form of transport, physical activity and entertainment.

Local businesses can experience economic improvement when people use local shops as part of their active travel routine.

Good pedestrian and cycling facilities that create safe, attractive and interesting experiences have been shown to attract visitors, lengthen visitor stays and therefore increase tourism.

Businesses or workplaces that encourage staff to walk or cycle to work can benefit from a workforce that is less stressed and more productive as a result of improved fitness and mental resilience.

Town centres are important in creating local community focal points that helps build social interaction and social capital. Main-streets that are attractive and active places have been shown to have increased retail rental values; increased sale prices of nearby homes, increased business generation and stimulation of the local economy.

3.6 Land-use Planning

A growing body of evidence suggests that the way we design and build our neighbourhoods and communities' affects resident's social connections, sense of community and social capital and thus their use of active movement facilities.

Land-use decisions affect social connection by determining the places available for people to interact and spend time and how far people have to travel to get to places where they can interact with others.

A connected street network that is legible and permeable enables more movement choices around town. This encourages more walking and cycling, allowing for more interactions between neighbours and residents, which in turn increases the sense of community in residents.

Neighbourhood 'walkability' (a combination of residential density, mixed-use planning and street connectivity) is consistently associated with walking for transport and general walking.

Shorter travel distances between land-uses can enable easy access to facilities and services for all people, including the very young, older persons and people with a disability, which can reduce social isolation for these groups. For example, living within close proximity (400-800m) of a mix of destinations is associated with higher levels of active travel across all age groups.

In terms of active travel behaviours, increased connectivity reduces the distances between origins and destinations and provides a range of routes to choose from, increasing the likelihood of walking and cycling between locations.

Traditionally designed neighbourhoods tend to have a grid-style layout with few barriers to direct travel, resulting in high levels of connectivity and a choice of routes. In contrast, more modern / conventional neighbourhoods are developed around a network of hierarchical roads, which often result in creating low levels of connectivity. Residents have little or no choice of route, as often there is only one road in and out of the development, and the indirect curvilinear streets increase walking distances between destinations thereby discouraging active movement.

A review of the walking and cycling conditions in urban areas is therefore important and may provide opportunities for the review of other land-use / transport policies, particularly the over use of cul-de-sacs that can result in a disconnected street system and general lack of active travel facilities in new residential estates.

4. Approach and Methodology

The focus of the Weddin Active Transport Plan is on the use of active travel to access jobs, education, recreational areas, services and social opportunities in the Weddin Shire. The approach is to develop new Active Transport Plans for Caragabal, Grenfell, Greenethorpe, Quandialla and a shire wide plan that builds upon existing infrastructure and addresses the key issues and aspirations identified by the community consultation and audits. To achieve this approach, the Plan is being undertaken in the following stages:

4.1 Preliminary Stakeholder Engagement

Throughout December 2017 and January 2018, preliminary consultation was undertaken to gain insight about walking and cycling conditions and opportunities in the Weddin Shire.

4.2 Active Transport Plans

A draft Weddin Active Transport Plan has been prepared to explain the approach to improving the active transport network, review best practice, and analyse the existing pedestrian and cycling network. It also showcases new Active Transport Plans for Caragabal, Grenfell, Greenethorpe and Quandialla, as well as a shire wide plan. These plans visualise the additional facilities required to achieve a more connected network.

A programme of the infrastructure projects to be undertaken by Council and a Matrix Table will provide full visibility on how priorities and actions were decided. Concept Designs and cost estimates for each priority project have been included in the plan.

Public exhibition of the draft Weddin Active Transport Plan is the next step in the process. Feedback on the plan will then be used to finalise the strategy approach and to develop an action plan.

5. Regional and Local Profile

This section examines the main urban settlements, attractors and transport related issues in the Weddin Shire and the wider region.

5.1 Central NSW Region

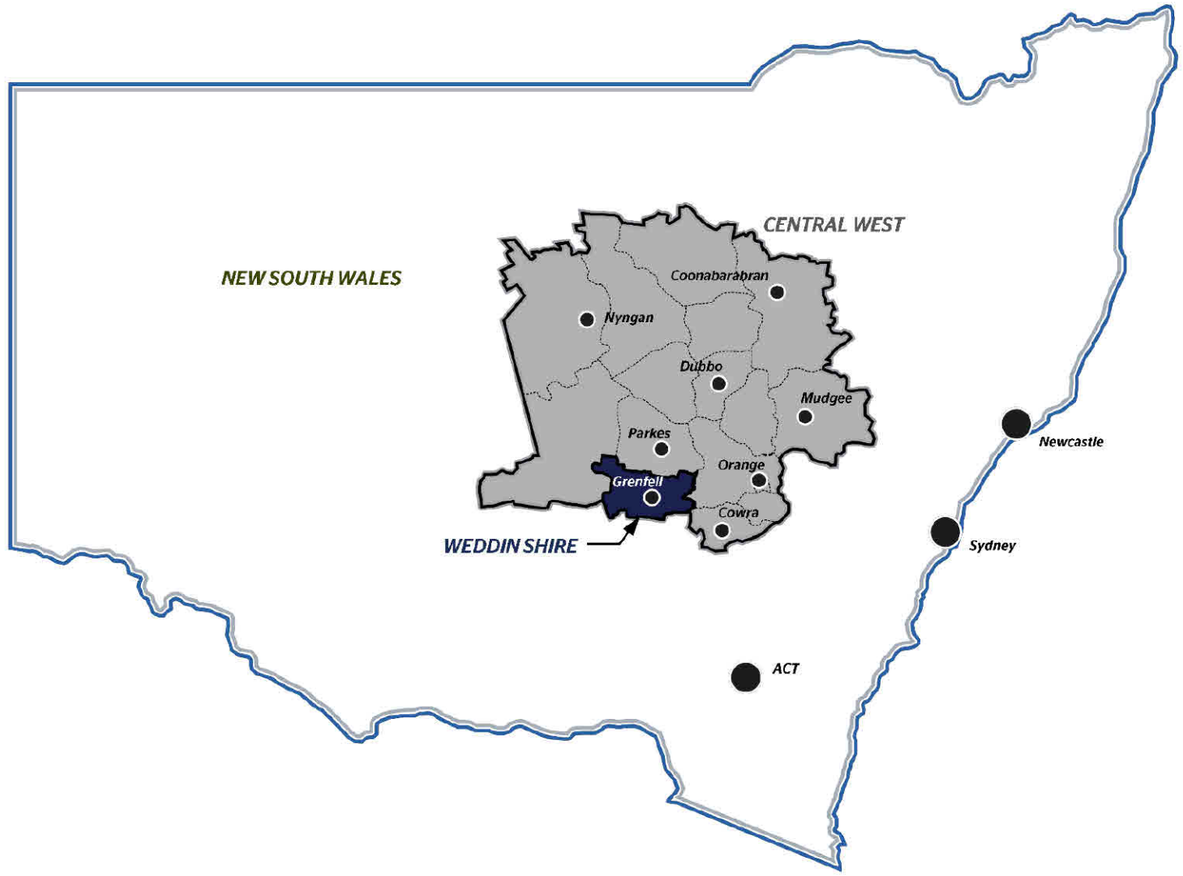
The Weddin Shire is located in the Central West Region of NSW, which has a regional population of approximately 273,000 people. The Central West is a major agricultural, industrial and commercial region, rich in natural resources. The region has strong road and rail connections across the Blue Mountains to Sydney, through the Lower Hunter Valley to Newcastle, the Riverina to the south and the Western region through Dubbo. There are also strong north-south links to Melbourne and Brisbane via the Newell Highway.

The region has a number of larger regional centres including Orange (41,500), Dubbo (41,600), Bathurst (41,700) and Lithgow (21,000). Other towns in the region are Condobolin, Cowra, Forbes, Grenfell, Mudgee, Parkes and Wellington. The rest of the population is dispersed across many smaller towns and settlements. This lends itself to travel patterns that are dispersed across the region.

Approximately 93% of all trips in the region, including work travel, are by private vehicle. Walking and cycling comprises approximately 6% of all trips, while public transport use is less than one percent. Poor access to public transport contributes to social disadvantage and accessibility issues in some sections of the community.

Much of the region's economic activity occurs within the larger regional centres of Bathurst, Dubbo and Orange. As well as having the highest proportion of population, these centres are hubs for higher order shopping and trade services, health and education. These centres also tend to have higher levels of active movement participation, evidenced by strong walking, running, cycling and triathlon clubs, activities and events.

The population of the Central West region is expected to experience slower growth over the next 20 years than regions closer to Sydney. The region's population is ageing, with the only age group forecast to increase in proportion being the 65 and over group.



5.2 Weddin Shire

The Weddin Shire is located in the Central West Region of NSW and is home to around 3,750 people, spread over a relatively large area of 3,410 square kilometres. The Weddin Shire includes the townships and localities of Bimbi, Bumbaldry, Caragabal, Greenethorpe, Grenfell, Marsden and Quandialla.

The Weddin Shire is centred around the majestic Weddin Mountains. The name Weddin has its origins in the Wiradjuri word 'weedin' which means a place to sit, stay or remain, relating to the mountains' status as a place where indigenous youths underwent a period of ceremonial isolation during the course of their initiation. The mountain range rises some 400 metres above the surrounding landscape and is of great significance both to the Wiradjuri people and residents of the local Shire. The Weddin Mountains National Park is the biggest tourist attraction in the shire with in-excess of 25,000 visitors annually.

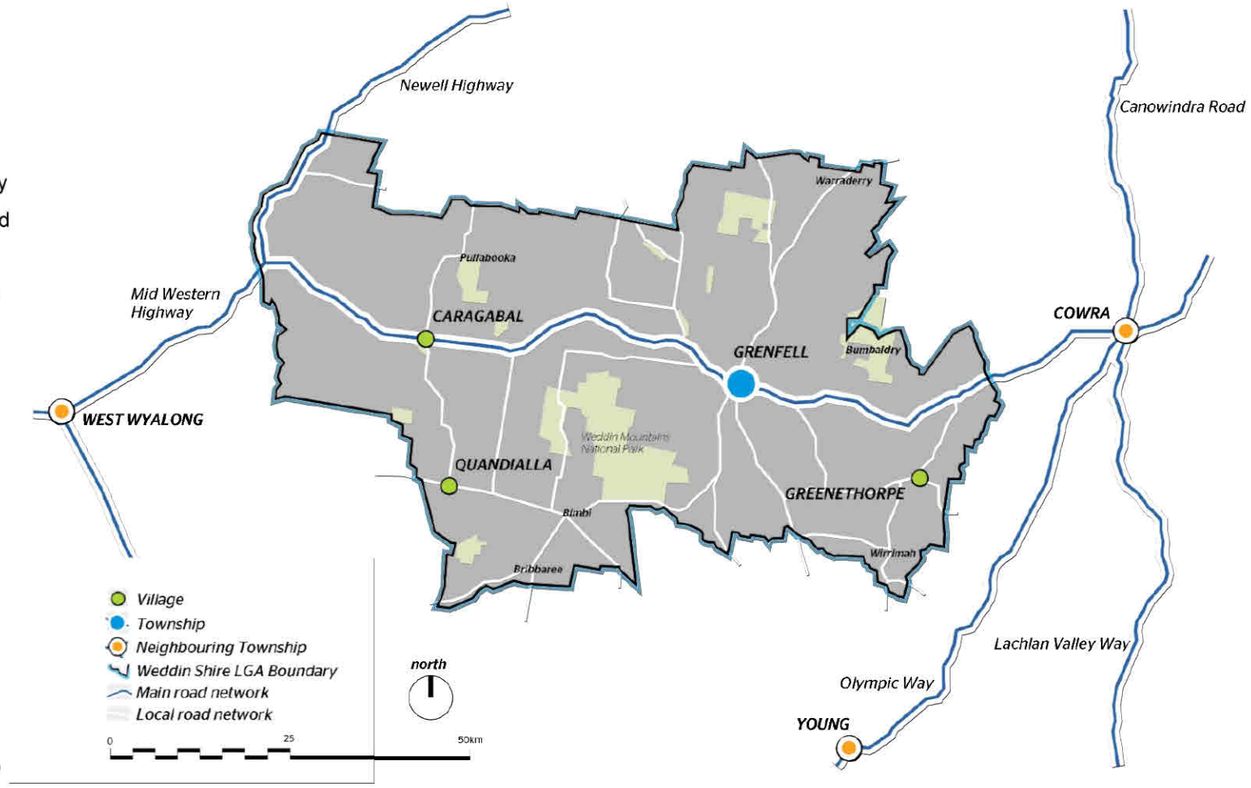
The mainstay of the shire economy continues to be agriculture, with more people employed in this sector than any other industry type. Almost 40 % of the local workforce are managers, reflecting the high number of self employed both on farms and in local rural businesses. Other significant employment categories are labourers 12.6 %, professionals 11.3 %, technicians and trade workers 9.3 %, clerical and administrative workers 7.6 %, community and personal services 7.4 %, machinery operators and drivers 6.5 % and sales workers 4.5 %. Vocations are heavily skewed directly and indirectly to agriculture.

Travel patterns are dispersed across the shire with the majority of activity tending to interact with the Grenfell Township. The local community is considered to have high car dependency for both work and leisure. The dominance of vehicle dependency is reflected in the method of travel to work with 70% of people in shire using a vehicle to travel to work compared to 63% across NSW generally. Only a small proportion of the community use alternative methods to travel to work, with walking being the most preferred with almost 5% of people walking to work. This dependency on motor vehicles is largely the result of limited public transport coverage and the large distances between origins and destinations.

There are a large number of State and local road routes in Weddin Shire that support the freight industry sector.

Similar to many other areas in the Central West region, the demographic structure of Weddin Shire is expected to become significantly older. Over 35 % of residents are aged 55 years and over. The number of people in the Weddin Shire over the age of 65 is expected to increase by another by 2031.The projected ageing of the population in the shire means that, over time, disability access and safety issues related to older road users will have a greater impact.

Access to support services and a long-term focus on improving active travel and mobility options are important issues to cater to the needs of existing and future residents.



5.3 Grenfell

The town of Grenfell is the largest urban centre in the Weddin Shire. Grenfell is approximately 2 hours drive from Bathurst, Canberra, Orange and Wagga. Grenfell's economy is based predominantly on agriculture and tourism.

The Grenfell Central Business District (CBD) is the main shopping precinct for the Weddin Shire. It is an historic main street, lined with beautiful old building facades which provides a wonderful shopping experience. The CBD supports a healthy mix of business activity, motor vehicles, pedestrians and parking areas.

The industrial estate and trade centres of Grenfell are dominated by manufacturing and service industries, with the majority of employees currently choosing to drive to work.

The pedestrian and cycleway network in Grenfell is relatively good, however the links to the industrial areas and more isolated employment generators and attractors is patchy.

Tourism is a growing market for Grenfell, with visitors attracted to town events such as the Henry Lawson Festival and the Grenfell Gold Fest, as well as the Weddin National Park, recreational activities (mainly structured sports) and to catch up with friends and family.

Conditions at Grenfell are ideal for walking and cycling. Over 90% of the town population lives within 1 kilometre of the Grenfell CBD, schools and workplaces. Many of the streets in Grenfell are quite wide and have lower traffic volumes than in larger regional centres. The parklands in town offer ideal conditions for residents and tourists to enjoy these spaces.

Railway Hotel, Grenfell. Source: Visit NSW

5.4 Greenethorpe

Greenethorpe is a small historic village with a General Store / Post Office, the Shamrock Hotel, Public School, the Blue Sky art gallery and a Police residence. The village is located near the eastern boundary of the the Weddin Shire. The township is 42 kilometres west of Cowra, 37 kilometres north of Young and 42 kilometres east of Grenfell.

Greenethorpe was purpose-built in 1908 to house the share-farmers who worked at Iandra Station, the property of George Henry Greene, located 10 kilometres away on the road to Young. This property, with its 'Iandra Castle' is open for inspection several times a year (usually on long weekends). Greenethorpe is also known for its rich agricultural land, especially its sheep and wheat farming.

Greenethorpe is ideal for touring cyclists, and can be visited as part of a longer tour of the region or as a weekend / day trip. Plan it as part of an Open Day at Iandra Castle.

Residents in Greenethorpe lead active lifestyles with many people keen for fitness and country connections to the rural roads for riding.

The town is very busy in the summer harvest, with the Main-street a hive of car and truck activity - all day and into the early evenings.

Iandra Castle, Greenethorpe. Source: www.travelin.com.au

5.5 Caragabal

Caragabal is located on the north-western edge of the Weddin Shire, next to Barbingal / Carragabal Creek and the Mid-Western Highway. The village of Caragabal is 22 kilometres to the south and the towns of Grenfell, Forbes and West Wyalong are within 45 minutes' drive. The population is approximately 200 people, who have a strong sense of community and connection to the area.

Caragabal retains some higher order commercial facilities, such as a Hotel, General Store and Post Office. The Memorial Hall and Park are the centre piece for the village and other attractions include the showground, playground facilities, school and country club.

The economy is agriculture-based, with livestock grazing and crop production being the main agricultural pursuits.

The Caragabal community is active and there are a number of young families keen to inject activity and interest in the district. The annual sheep race is an important event on the social calendar and the Caragabal Country Club is a focus of golf, lawn bowls, tennis and social events.

Caragabal Pub. Source: gdaypubs.com.au

5.6 Quandialla

Quandialla is situated on the plains of The Bland country at the western edge of the Weddin Shire. It is located 46 kilometres west of Grenfell, 65 kilometres north-west of Young and 57 kilometres east of West Wyalong. The Weddin Mountains are within sight from town. At the 2011 census, Quandialla and the surrounding area had a population of 349. The region's economy is agriculture-based, with livestock grazing and crop production being the main agricultural pursuits. Quandialla has higher order commercial facilities, such as the Bland Hotel, which offers, meals, Caravan and ATM facilities, Weddin Store which has a wide range of fresh, frozen and other food and household goods, Quandialla Post office, which offers many services, Blamey Park with its excellent playground equipment, Quandialla Public School, Agricultural outlet Delta Ag, CWA rooms with an active group still operating, Quandialla Bowling Club. The Memorial Hall and town pool are the bookends to a characteristic Mainstreet. Other attractions include the showground, playground facilities and school.

5.7 Village and Rural Areas

The villages in the Weddin Shire have smaller and more dispersed populations than Caragabal, Grenfell, Greenethorpe and Quandialla. They also have limited facilities and employment opportunities, and operate as dispersed residential satellite areas. This accounts for less pedestrian and cycling activity to access work, shops and other facilities.

Many of the local roads within the villages and surrounding rural areas are sealed, with few formed footpaths and no formal bicycle paths in villages. Due to the relatively wide roads and low traffic volumes, many residents walk or cycle on the actual road carriageway or along the grassed verge. There are no formal pedestrian or cycle routes connecting towns and villages in the Weddin Shire. Cycling along rural roads is becoming popular via a number of well-established routes known to local cyclists. The most popular rides are the loop rides around Grenfell and Greenethorpe.

5.8 Tourist Areas

There are a number of areas in the Weddin Shire that are visited by tourists and locals seeking recreational, sporting and other outdoor activities. The most popular destinations for recreational users and tourists are listed below:

- The Weddin Mountains.
- Grenfell Mainstreet.
- Iandra Castle.
- Grenfell Visitor Centre.

Bland Hotel, Quandialla. Source: Active Planning Consultants.

6. Implementing the Active Transport Network

This section provides background on the various strategies, guidelines, policies and terms that are considered relevant to the preparation of the Weddin Active Transport Plan. The review of supportive documents serves the following purposes:

- To ensure the strategy aligns with regional, state and national policy directions, and the wider context of transport and land-use planning policy directions.
- To understand the projects, links and network connections being planned in adjoining local government areas that might benefit the strategy.
- To help understand the correct methodology and approach when preparing the strategy.
- To help identify any deficiencies within the current network and existing policies that may hinder ongoing success.

References for various documents are provided in Appendix 2.

6.1 International Policies

Interest in active movement is World-wide and a review of mainstream reports, strategies and policies has been undertaken to support the development of an Active Transport Plan for Weddin Shire.

The World Health Organisation (WHO) is a leader in road safety, particular relating to pedestrians. The WHO advise that globally, pedestrians constitute 22% of all road traffic fatalities, and in some countries this proportion is as high as two thirds of all road traffic deaths. Millions of pedestrians are non-fatally injured – some of whom are left with permanent disabilities. In response to this global problem, the WHO have published two major policies:

- Pedestrian safety: a road safety manual for decision-makers and practitioners 2013
- Make Walking Safe: a brief overview of pedestrian safety around the world 2015

The Union Cyclist Internationale (UCI) is the world governing body for the sport of cycling. The UCI is committed to leading the development of cycling as a competitive sport and activity in all its forms across the world. There are many other international organisations and events that promote pedestrian and cycling throughout the world. Across these organisations and governments, there is consistent understanding that the lack of safety in traffic is the main reason given by most people in developed countries for not wanting to participate in pedestrian and cycling activity.

6.2 National and State Policies

The Australian Federal government continues to work with stakeholders to develop / refine policy relating to road safety and efficiency, pedestrian and cycling safety awareness and road design standards. The following policies are particularly important:

- National Road Safety Strategy 2011-2020
- National Cycling Strategy 2011-2016
- Australian Pedestrian Charter 1999

The NSW Government has a State Plan 2021 and the following policies influence State and local government policy on active travel:

- NSW Road Safety Strategy 2012-21
- It's a two-way street campaign
- Central West Regional Transport Plan 2013
- Technical Guidelines.

The State and Federal governments have also helped produce a number of technical guidelines:

- Austroads, Cycling Aspects of Austroads Guides 2014
- Austroads, The Guide to Traffic Engineering Practice Part 13: Pedestrians, Part 14: Bicycles.
- Australian Standards 1428 – Design for Access and Mobility
- Planning Guidelines for Walking and Cycling 2004
- Planning and design guidelines on designing places for active living
- Healthy Spaces and Places: A National Guide
- Planning for Healthy Urban Environments
- Promoting Active Transport: An Intervention Portfolio to Increase Physical Activity as a means of Transport
- Bicycle Guidelines - How to Prepare A Bikeplan
- How to Prepare a Pedestrian Access & Mobility Plan
- Producing and Using Transport and Access Guides.

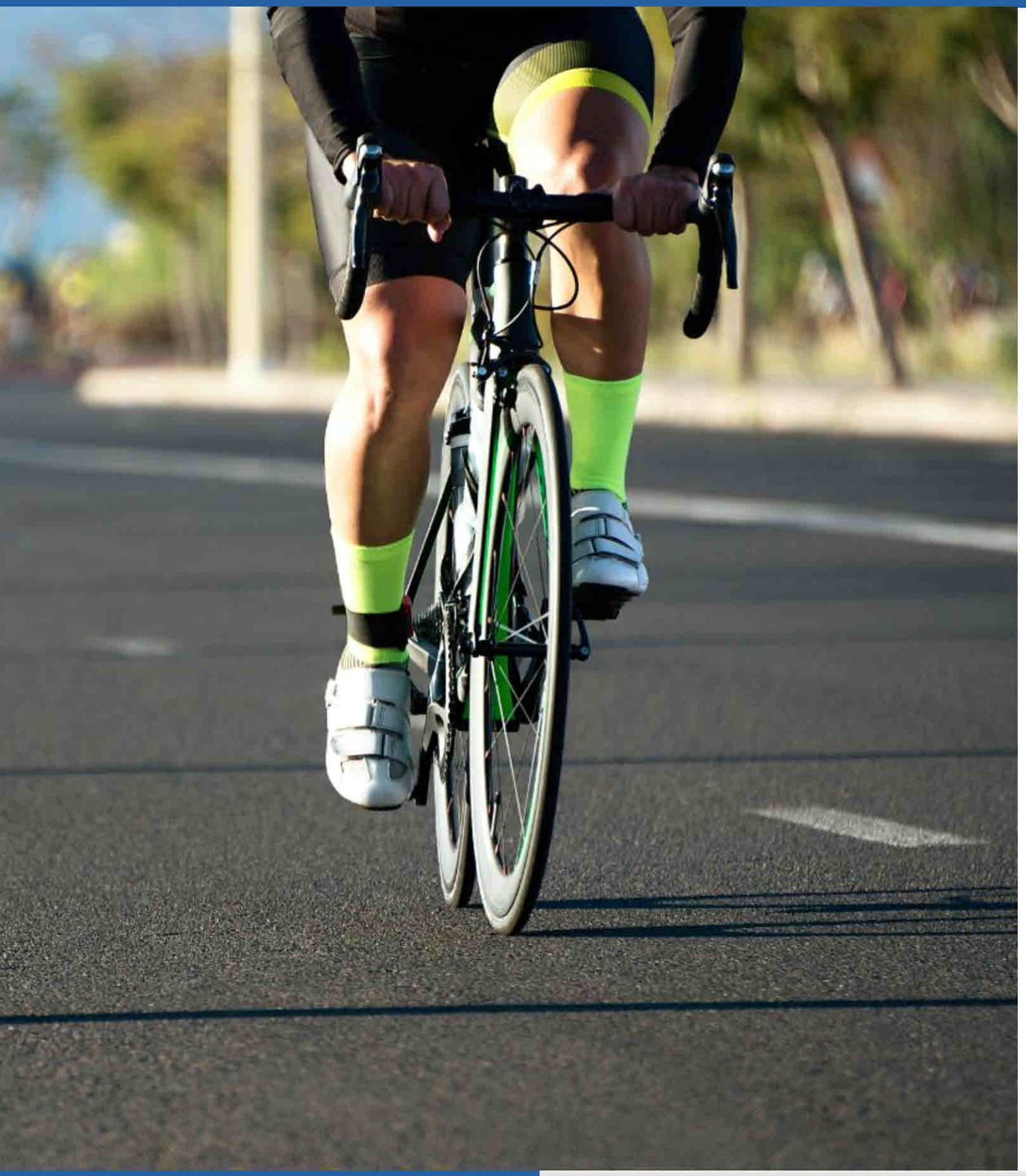
7. Identifying pedestrian and cyclist needs.

The needs of pedestrians and cyclists are not all the same. The following provides some insights into the different needs of pedestrians and cyclists, which must be considered when preparing a new Active Transport Plan for the Weddin Shire.

7.1 Pedestrian Needs

Everyone is a pedestrian, be it walking 30 metres from the car to a place of work, walking to school or the shops, using wheeled devices on footpaths or walking and running for fitness. In the Weddin Shire context the main pedestrian groups are as follows:

- **Commuters** – this group comprises adults and secondary age students who use the footpath network mainly as a mode of transport for journeys to and from a workplace, school or TAFE. They prefer the fastest safe route between their origin and destination and are generally more skilled and experienced. On-road lanes and footpaths are suitable for commuters.
- **Utility / shopping** – trips are generated for specific purposes, such as running errands, shopping, visiting friends, local destinations and points of interest. Local trips are often short length trips and can be unpredictable. Users may be constrained by time and vary widely in skill and experience. They prefer footpaths, shared paths, low volume roads, minimal gradients and a high degree of safety and personal security.
- **Secondary / tertiary school students** – older students have similar characteristics as commuters and utility / shopping users. Footpaths, on-road lanes and shared paths are suitable for older students.
- **Infants / primary school students** – infant and primary school aged pedestrians have undeveloped cognitive skills, lack good peripheral vision, and have little knowledge of road traffic rules. They require adult supervision and / or off-road paths and facilities. Road crossing points must be carefully designed to give greater visibility / priority to children.
- **Fitness** – sports people use the road environment for fitness and training purposes and to access sporting events. They often travel alone or in small groups - seeking long distances for training purposes which can take them onto busier roads. Fitness pedestrians prefer footpaths and shared paths but will use any path or the road / road shoulder if necessary.



7.2 Cyclist Needs

There are a range of cyclists who need to access different parts of the Weddin Shire on their bicycles for recreational, educational, shopping, commuting and other purposes.

Cyclists are considered 'at risk road users' due to the severe outcomes that can occur when a rider crashes their bike or when they come into conflict with motor vehicles. Most cyclists are very aware of their vulnerability on the road network and use safety lights, helmets and high visibility gear when riding.

In the Weddin Shire context there are different cyclist groups as follows:

- **Commuters** – this group comprises predominantly adults who use the road to cycle to work. They prefer the fastest safe route between their origin and destination and are generally more skilled and experienced. On-road lanes and shared paths are suitable for commuter cyclists.
- **Utility / shopping** – a small percentage of people use a bicycle to run errands, shopping, visiting friends, local destinations and points of interest. Local trips may be 'spare-of-the-moment' decisions, where a bicycle is used to visit the shops for last minute supplies. Users may be constrained by time and vary widely in skill and experience. They may use footpaths, shared paths and roads to access their destination, and sometimes may forget to take appropriate safety precautions.
- **Secondary / tertiary school students** – older students in the local context are tending to avoid using bicycles, other than to access sports, recreational facilities such as parks and pools, and to visit friends.
- **Infants / primary school students** – infant and primary school aged pedestrians have undeveloped cognitive skills, lack good peripheral vision, and have little knowledge of road traffic rules. They require adult supervision and / or off-road paths and facilities.
- **Fitness** – a number of adults use road bikes, touring bikes and MTB bikes for fitness and recreation. Road and touring cyclists often travel in small groups or larger bunch rides seeking long distances for training / exploring purposes which can take them onto busier roads. MTB and other off-road riders travel individually or in small groups and seek quieter roads and off-road trails.

State and local governments are committed to increasing the level of bicycle riding and safety. To achieve this, infrastructure must be appropriate to allow for the safety of bicycle riders, together with respect from other road users. A combination of infrastructure and behavioural education campaigns is needed to support safe cycling. A key focus of the Active Transport Plan should be to progressively upgrade popular cycling routes and facilities.

7.3 Access Impaired Needs

Disability is an issue that affects a significant proportion of the population. In 2012, the ABS Survey of Disability, Ageing and Carers reported that 18.5% of Australians had a long-term disability that restricted their everyday activities.

Planning for the transport needs of disabled persons presents its own unique challenges, with a person in a wheelchair requiring different assistance to negotiate the movement network than a person who is sight impaired.

Motorized scooter usage is a growth industry and there is a need to review current and future innovations in these mobility devices to ensure infrastructure improvements are aligned with technology. Access impaired persons also appreciate end of trip facilities, such as parking facilities, water points and toilets.

A key focus of the Weddin Active Transport Plan should be to provide mobility and access facilities for disabled and older persons in our community, particularly in high activity areas such as the central business districts of main towns.

7.4 Aged Access Needs

With the incidence of disability increasing with age, the rate of disability is expected to increase substantially in the Weddin Shire over the next two decades. An aging demographic means that many people in our community will require greater assistance to move about in the future. Age is related to a variety of characteristics and skills that influence the risk of traffic injury. These age-related characteristics can also affect the way in which people of different ages interact with the movement network.

Older people are over represented in pedestrian crashes. People aged 70 years and older represent around 10% of residents in NSW, however they account for around one third of pedestrian fatalities (Central West Regional Transport Plan 2013).

In the 2010 NSW Health Falls Prevention Baseline Survey, 26.7% of people aged 65 and older, reported limiting their walking because of fear of falling whilst walking over rough or uneven surfaces, steps or stairs. The main needs of aged persons are for level walking surfaces that are free of hazards. Aged persons also appreciate end of trip facilities, such as seating, water points and toilets.

Pedestrians at Traffic Light Controlled Intersections: Crossing Behaviour in the Elderly and Non-elderly, several factors work together to increase the risk of older people:

- Deterioration in visual acuity may have a negative impact on an older person's ability to cross the road safely.
- Reduced mobility can render older people unable to react quickly in imminent danger to avoid a crash.
- Underlying health conditions or frailty can result in greater injury severity when a crash occurs.
- Reduced speed when crossing the road can be an issue at automated signals that do not allow sufficient time for slower pedestrians to cross safely.

A key focus of the Active Transport Plan should be to provide mobility and access facilities for disabled and older persons in our community, particularly in high activity areas such as central business districts.

The following measures have been adapted from the *WHO Pedestrian Safety Manual 2013* and can be implemented to improve the safety, comfort and amenity of elderly pedestrians:

- Increase the time allocated to pedestrians at signalized pedestrian crossings.
- Install high-visibility crossings and advance stop bars.
- Repair broken kerbs and pedestrian ramps.
- Replace missing and / or upgrade existing signs.
- Install pedestrian refuge islands or, preferably, raised medians.
- Narrow roadways with traffic-calming techniques.
- Raise public awareness about the safety needs of elderly pedestrians.
- Reduce legal speed limits to where necessary.
- Strengthen enforcement of laws on speed limits, and drink–driving.

7.5 Needs of Young Children

Children are highly vulnerable road users. Infant and primary school aged children need their parents or other adult supervision when they travel on the road network, but they also need our confidence to explore their environment and learn how to do things independently.

Children can use the same facilities as adults however they are at risk from traffic for many reasons. Infant and primary school aged pedestrians and cyclists have undeveloped cognitive skills, lack good peripheral vision, and have little knowledge of road traffic rules. Although children may think they can handle the road network, Kidsafe NSW advises they are:

- Easily distracted and focus only on one aspect of what is happening.
- They are smaller and harder for drivers to see, and less predictable than other pedestrians.
- Cannot accurately judge the speed and distance of moving vehicles.
- Cannot accurately predict the direction that sounds are coming from.
- Unable to cope with sudden changes in traffic conditions.
- Do not understand abstract ideas, such as road safety.
- They may lack the ability to distinguish between safe and unsafe crossing gaps and sites, putting them at risk as they cross the road.
- They may lack understanding of the dangers presented under different conditions, such as wet weather or darkness.

An extensive network of structured sporting activities is available to children in Weddin Shire that helps to keep them active and engaged. There are also a number of areas where children can go 'off-road' and explore the environment and practice skills on their own or with friends. Some of these areas have become obscured and there are inadequate ques to invite children and their parents / guardians to use these spaces as part of the active movement network.

Key objectives of the Active Transport Plan should be to highlight areas that provide opportunities for off-road play and to link these areas to residential neighbourhoods and the wider network.

8. Planning the new active travel network

The planning focus of the new active transport network is to make pedestrian and cycling activities a safe, healthy and attractive travel option throughout the Weddin Shire. To achieve this over such a vast area requires a targeted and systematic approach, based on the following principles:

- **Focusing efforts in areas of highest importance** - effective and useful planning relies on focusing effort and resources in areas that it is most needed. Weddin Shire Council has limited funds for improvements and these funds need to be carefully directed towards achieving optimal outcomes. The Active Transport Plan should focus efforts on areas with high levels of pedestrian and cyclist activity as well as the desire lines of high potential and demand. Consideration should also be given to locations which may merit a review of road conditions based on a poor safety record.
- **Focusing on Potential Pedestrian and Cyclists** - it is important to consider existing pedestrians and cyclists, however, the biggest advantage in terms of increasing patronage is to target people who currently are not active pedestrians or cyclists, but who are likely to become so if conditions improve. The Active Transport Plan needs to consider ways to promote behaviour-changes that encourages new users.
- **Developing Effective Infrastructure to Improve Conditions** - the Active Transport Plan aims to develop innovative infrastructure interventions, based on the NSW guidelines and other applicable guidelines and standards. Capital delivery and ongoing maintenance to be undertaken to best possible standards to ensure sound financial asset management is achieved.
- **Setting achievable targets** - Funds are limited and there is a need to focus on specific actions that are achievable by Council. There is no sense in developing an Action Plan that proposes excessive expenditure beyond the means of the community. It is better to set targets that can be realistically achieved over the intended 10 year implementation period. Should extra funding become available and targets are met earlier, it is a relatively simple task of reviewing the Action Plan to set more goals and targets.

The following section explains the main principles that were considered in planning the new active transport network in Weddin Shire.

8.1 Adopting Network Provision Principles

There are key elements underpinning an efficient and useable active travel network, which can be best summed up in principles:

8.1.1 Coherence

Coherence refers to the extent of coverage and completeness of the facilities. Coherence can be characterised by the completeness of the network or the completeness of connecting routes. A cohesive network should be continuous and it should be clear to the user where the path leads. Clear, well-placed sign-posting and line-marking should indicate major destinations as well as the 'serious transport intent' of sections of road routes. The quality of network facilities should be consistent throughout the length of the route regardless of whether the facility uses a separate or shared road profile. End of trip facilities, such as seating, watering stations, toilets, change room facilities, bicycle racks and storage facilities should also be integrated into the cohesive network.

8.1.2 Safety

Perceived and actual safety is very important to pedestrians and cyclists.

Pedestrians of all ages and genders need to feel that it is safe to walk, whenever they choose to do so. Route safety and security is important to pedestrians, who desire well-lit pathways and open-to-viewer routes. Road crossings present the greatest danger to pedestrians. Therefore, safe crossing locations need to be provided at regular intervals along major streets or at the location where key desire lines cross major streets. Pedestrians will rarely walk along an indirect route to access safe crossing points, so frequent crossing points must be provided.

Cyclists travel faster than pedestrians and therefore are less concerned about personal security. Cyclists are slower and smaller than cars and trucks, making them less likely to be seen. When they do come into conflict, cyclists have little protection in a collision. On-road paths and off-road paths reduce the risk of collision with motor vehicles, but still endanger cyclists at squeeze points and intersections with roads. They can also involve potential conflict with pedestrians where the off-road facility is a shared path. The general principles of predictability and clear priority remain important for off-road paths, including directional segregation and high visibility for all users.

8.1.3 Directness

Pedestrians and cyclists do not like to travel out of their way to reach a destination. This is a natural response to avoid the extra effort involved in walking or riding extra distances. Paths serving desire lines between activity areas need to be direct and legible in order to provide for and encourage walking and riding trips. Wherever possible, barriers should be overcome, with slight deviations or additional safe crossing points. A careful balance must be found between providing a direct route and also one free of delays, excessive energy expenditure, or safety concerns.

8.1.4 Amenity

People are more likely to walk or cycle in an attractive environment because it is enjoyable. Areas with high volumes of vehicular traffic, excessive noise and poor pavements may discourage walking and cycling. Urban areas should be maintained at a human scale that provides an attractive and safe environment. Pedestrian and cycling facilities should be designed to fit into the surrounding environment so that the enjoyment of the experience is enhanced. The route should be scenic, quiet, and free of heavy traffic and traffic travelling at high speeds. The best walking and cycling environments are often found along quiet rural roads, in urban parklands or residential areas that have been traffic calmed.

8.1.5 Suitability for all users

Quality environments must be available to all who choose to use them. Paths and facilities must have appropriate gradients (including ramps) and be continuous and free of obstructions such as signage, street furniture and overhanging tree branches. The needs of hearing and vision-impaired users must be considered and provided for, especially where user safety is an issue.

8.2 Identifying Activity Generators

There are certain areas of the Weddin Shire that generate significantly more pedestrian and cycling activity than other areas. Identifying activity generators is particularly important to consider in the preparation of new active travel plans. The different activity generators have been divided into four main groups and are presented in this section. A series of maps showing the generators in the Weddin Shire are also presented in this section.

8.2.1 Primary Activity Area

The primary activity areas are the central business districts of the main towns. Due to the high levels of activity occurring within these areas, safety, amenity and suitability for all users are important design goals. End of trip facilities, particularly toilets, water points, seating and bicycle parking facilities should also be provided in primary activity areas.

8.2.2 Secondary Activity Generators

These include neighbourhood shops, schools, popular sporting and recreational facilities, clubs, hospitals and community facilities such as the larger congregation churches that are not centrally located within primary activity areas. These land-uses are busy places at certain times of the day or week. Safety, connected footpath networks and end of trip facilities are important design goals for secondary activity generators.

8.2.3 Primary Routes

These are routes from residential areas to the primary activity areas and secondary activity generators. They are collector level routes, which do not reach every property but instead form a network of routes that are accessible to a significant catchment of population.

8.2.4 Hazard Areas

Through the analysis of crash data and consultation undertaken, there are a number of areas / routes that have been noted from accident reports or from road users as being potentially dangerous or particularly stressful places for pedestrian and cyclists.

8.3 Achieving a Connected Network

The Weddin Active Transport Plan aims to create new strategies and projects that support activity generators throughout Weddin Shire. In the main towns, the aim is to connect primary activity areas and secondary attractors and residential areas through general enhancement of primary routes. Key elements of the enhanced network are:

- The network proposed for the main towns builds upon the existing infrastructure and where practical, utilises the existing road and footpath network.
- Primary activity areas and secondary activity generators will be serviced by footpaths and potentially shared paths / cycle paths.
- Active movement routes will follow primary routes wherever practical.
- Targeted interventions to address hazard areas will be considered.
- Links to primary routes may also be considered to provide an indirect means of travelling to the key attractors and generators.

In the smaller villages the aim is to address hazard areas and any safety concerns.

A number of rural roads may be promoted as potential cycling connection routes between communities.

8.4 Identifying Appropriate Paths

The selection of the appropriate path type treatment depends on a combination of factors, including the level of demand for the path, the conditions present in the surrounding environment (traffic speed and volume), the availability of space in which to provide the path, and whether path usage is for exclusive pedestrian or cycle use or shared use. The overall goal is to install facilities that are safe, practical and that respond to local conditions. A number of different path treatments can be applied, including:

8.4.1 Footpaths

Footpaths are suitable for a wide range of pedestrian situations. Footpaths are required to be designed and built to meet minimum dimension requirements. Design elements of footpaths include width, gradient, pavement materials that are slip resistant, type of kerb and adequate setback distance of the footpath from the roadway. The Austroads Guide to Traffic Engineering Practice Part 13 – Pedestrians states that:

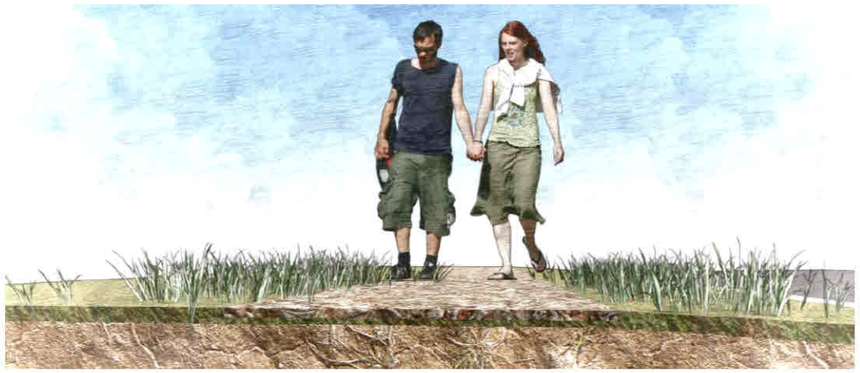
> 'The general minimum footpath width of 1.2m is adequate for most road and street situations except in commercial and shopping environments. A footpath wider than the minimum may also be necessary at locations where pedestrians gather such as at the entrance to schools and associated crossings, at recreation facilities and at important bus stops etc. In these cases a width of up to 5m may be appropriate.'

Pavement materials commonly used include:

- **Concrete and Asphalt -** This provides a hard surface and is generally functionally appropriate. This material is ideal where footpaths are on a gradient and exposed to water, as the texture of these surface materials are slip resistant. Most footpaths in Weddin Shire are of these construction types. Some main street beautification works use a combination of asphalt, concrete and brick pver to provide variety and interest.

- **Pavers and Bricks -** For aesthetic reasons and to add interest and variety, pavers and brick paving are often used. Pavers have been used extensively in main streets and at some other commercial and tourism destinations. When used for pedestrian paths, glazed surfaces should be avoided as they are slippery when wet. Stone path surfaces should also be avoided as they can fail flatness tests. Pavers are ideal for sight impaired pedestrians as a guidance using different pavement colours, however overuse of colours can also be confusing.

- **Loose surface material** - These materials such as exposed aggregate, gravel, soil, sand, grass and tanbark should be avoided along heavily used routes. They can be very difficult to walk on and make it difficult for people in wheelchairs. However, gravel surfaces may be suitable for fitness walkers and runners and MTB cyclists.



Ideally footpaths should be free of obstructions and therefore should not include steps, stairways or obstacles that affect the safety of pedestrians. Grades of footpaths are important as they affect the usability and safety of pedestrian facilities. For example, long sections of high grade footpath can be extremely difficult for mobility impaired users to negotiate. Technical advice on footpath design is provided in:

- Austroads Guide to Road Design Part 6A: Pedestrians and Cyclists Paths, 2009.
- The Austroads Guide to Traffic Engineering Practice Part 13 – Pedestrians.
- AS 1428.1 – Design for Access and Mobility.

8.4.2 Shared Paths

Shared use paths are a type of off-road facility that allows common use of the facility by both cyclists and pedestrians. According to the *AUSTROADS Guide*, a shared use path may be appropriate where demand exists for both a pedestrian path and a bicycle path but where the intensity of use is not expected to be sufficiently great to provide separate facilities. Shared paths are a popular response to connecting attractors and as paths in large parklands. In some situations shared paths may cause friction between pedestrians and cyclists. Displaying highly visible signs and rules applying to the proper use of share paths are important considerations when planning these paths.

8.4.3 Exclusive Off-Road Cycle Paths

According to the *AUSTROADS Guide*, exclusive bicycle paths are most appropriate when there is a significant cycling demand and very few pedestrians desire to use the path or a separate footpath is provided, and there is very limited motor vehicle access across the path. There are currently no conditions in the Weddin that warrant exclusive off-road cycle paths.

8.4.4 On-Road Cycle Paths

Paths can either be on-road, which are essentially “bicycle lanes” alongside motor vehicle traffic on a roadway within the road corridor, or off-road paths, which are separated from the road corridor. They include physically separated bicycle lanes, visually separated footpaths and bicycle lanes and wide sealed road shoulder paths. Where feasible, facilities should comply with current standards and also taking into account local conditions.

8.5 Identifying Effective Safety Interventions

Improvement to pedestrian and cyclist safety requires a balanced approach that includes both engineering measures and behaviour-change measures. A summary of the key safety measures is presented in the Table below, with each broad category of measures being associated with a number of specific interventions. The table has been developed from a number of sources, including the *WHO Pedestrian Safety Manual 2013*, *Cycling Aspects of Austroads Guidelines 2014* and the *Handbook of Road Safety Measures 2009*.

Key Measures	Intervention	Merits of Intervention	Relevance in Weddin Context
Reduce Pedestrian and Cyclist Exposure to Vehicular Traffic	Provide footpaths	Dedicated footpaths separate pedestrians from motorised vehicles as well as bicycles. They provide space for different types of pedestrians to walk, run, play, meet and talk. Walking increases where tracks for walking are constructed.	Grenfell township has a comprehensive network of footpaths, with relatively few gaps in the network. The other towns and villages have less complete footpath networks.
	Provide on-road bicycle lanes	Bicycle lanes aim to improve cyclist safety by providing separation from other motor vehicles whilst maintaining directness of travel and priority at intersections. The provision of a painted line between the motor vehicle lane and bicycle lane together with bicycle pavement symbols at frequent intervals has a number of advantages, including: ▪ Clearly defining the road space provided for use by each mode. ▪ Motor vehicles not blocking the progress of cyclists where traffic queues exist. ▪ Providing lateral separation and improved safety when motor vehicles in the adjacent lane are moving. ▪ Greater awareness in the minds of motorists that a cyclist may be present. On-road bicycle lanes also improve accessibility and connectivity of the bicycle network and promote the use of alternative modes of transport.	Many urban roads in Weddin Shire are relatively wide, providing adequate width for bicycle lanes, in addition to the motor vehicle carriageway and footpaths. In local streets it is usually not necessary to make special provision for cyclists as the lower speed of motor traffic should enable cyclists to safely share the road with other users. However, along the main roads and collector roads in Grenfell township, the volume and speed of traffic makes it necessary to ensure that adequate space exists for cyclists to share the road safely and comfortably. The consultation undertaken suggests that road safety and fear of traffic is the biggest issue for existing cyclists and a major deterrent to potential cyclists. A cohesive network of on-road bicycle lanes on collector roads in Grenfell township, particularly those roads that form part of the regional road network, would assist in separating cyclists from other road users. The delineation of on-road bicycle lanes by line-marking and signage is a relatively inexpensive intervention that would help to address road safety issues, and may encourage more people to ride bicycles in Weddin Shire. On-road bicycle lanes should be provided on both sides of the road where possible so that use is in the same direction as motor vehicle traffic.

Key Measures	Intervention	Merits of Intervention	Relevance in Weddin Context
	Provide shared paths	Share paths are appropriate where demand exists for both a pedestrian path and a bicycle path, but where the intensity of use is not expected to be sufficiently great to provide separate facilities.	Many urban footpaths in township have sufficient width and have relatively low pedestrian use to allow their modification to also provide for cyclists. Conversion of footpaths to shared paths has merit nearer to central business districts. New shared paths should be used for important links where footpaths don't exist and there is adequate width on the footpath and no major amenity impacts on adjoining residential premises.
	Provide sealed shoulders	Where a road is un-kerbed and provision for cyclists is required a smooth sealed shoulder is the preferred treatment. There are many instances in semi-urban and rural roads where the sealing of shoulders is justified specifically to make roads safer for cycling.	The consultation undertaken showed strong support from road cyclists for road safety improvements on roads regularly ridden by cyclists. However, the number of and frequency of cyclists does not justify road widenings for training cyclist needs only.
	Provide Bus/Bicycle Lane	Examples exist in larger cities where bicycles have successfully shared in the use of bus lanes.	The number of and frequency of buses in Weddin Shire does not justify separate bus lanes that could be used by commuting cyclists.
	Install marked crossings (zebra crossing)	The purpose of a marked crossing is to indicate the optimal or preferred location for pedestrians to cross and indicate pedestrian right-of-way at these points. There are several important issues to consider when installing crossings: ▪ Crossing markings are unlikely to increase pedestrian safety, without related enhancements such as raised crossing islands and traffic signals. ▪ Marked crossings are not appropriate where traffic speed is high. Marked crossings on roads with more than two lanes may increase the risk of pedestrian / vehicle crashes. ▪ Crossing locations should be convenient for pedestrians and accessible for pedestrians in wheelchairs. ▪ Zebra crossings should only be used in very limited applications, such as high activity areas and routes, subject to site specific assessment. Where a safe point for pedestrians to cross wide / busy roads is required it is preferred to use road narrowing initiatives. Where the crossing is located in a school zone, it may be more appropriate to provide a schools safety supervisor.	Consideration should be given to replacement of the zebra crossings with alternative initiatives.

Key Measures	Intervention	Merits of Intervention	Relevance in Weddin Context
	Provide pedestrian refuge islands	Pedestrian islands allow a safe point for pedestrians to negotiate wide or busy roads. Refuges are of benefit to pedestrians as they allow for a staged crossing of a road. They also provide a visual cue for motorists that pedestrians can be expected in the vicinity of a refuge. Provision for the standing of pedestrians, prams, wheelchairs, mobility scooters and bicycles at the crossing mid-point is important. Pedestrian islands should only be used in limited applications, such as high activity areas and routes, subject to site specific assessment. Where a safe point for pedestrians to cross wide/busy roads is required it is preferred to use road narrowing initiatives.	There are opportunities for new pedestrian refuges in Grenfell. The existing pedestrian refuge at Caragabal has been asked to be removed from some residents in the area.
	Construct raised pedestrian crossings	Raised pedestrian crossings force vehicles to slow to speeds low enough that a pedestrian would survive a collision. Reductions in pedestrian crashes of around 40% could be expected from the installation of a raised crossing.	For inclusion in Main street Master Plans.
	Install signalised Crossings	Signalised crossings separate pedestrians from vehicular traffic for a brief time period while they cross the street. It is important to ensure that the time allowed for crossings is adequate to cater for all users.	For inclusion in Main street Master Plans.
	Provide road narrowing (kerb extensions, widening footpaths)	Road narrowing has a double benefit of reducing vehicular traffic speeds and allowing a safe point for pedestrians to negotiate wide or busy roads. Treatments that include widening footpaths have the additional benefit of providing higher quality facilities for pedestrians. Provision for the standing of bicycles at crossings is important. Where road narrowing is proposed to cross roads that form part of an on-road bicycle lane, consideration should be given to potential squeeze points which can be addressed by providing cycle bypass through the road narrowing device.	The consultation undertaken showed strong support from road narrowing initiatives as a means to cross busy roads. For inclusion in Main street Master Plans. and around high activity areas and busy road routes.
	Provide vehicle restriction / diversion measures	Road diversions are in order where high volumes of traffic, including heavy vehicle traffic, comes into conflict with primary activity areas.	While there is widespread community and government stakeholder support for separated pedestrian and cycling facilities away from busy roads, the projects are expensive and may take some years to progress.

Key Measures	Intervention	Merits of Intervention	Relevance in Weddin Context
	Install overpasses / underpasses	Pedestrian overpasses and underpasses are bridges and tunnels that allow for uninterrupted flow that is separate from vehicular traffic. This measure is used primarily in areas with high pedestrian volumes. Installation is expensive and they can be obtrusive and not suitable for all users.	No overpass projects were identified.
	Reduce traffic volumes	A reduction in traffic volumes generally involves their replacement with other transport modes such as public transport, walking or cycling.	The low level of available public transport and current pedestrian / cycling behaviour does not allow for significant reductions in vehicular traffic in the short to medium term.
Reduce Vehicle Speed	Reduce speed limit	One of the most effective ways to improve pedestrian and cyclist safety is to reduce the speed of motor vehicles. Speed management is much more than setting and enforcing appropriate speed limits. It employs a range of measures in engineering, enforcement and education with the aim of balancing safety and efficient vehicle speeds on the road network.	There are opportunities to address vehicle speed in main towns by introducing traffic calming and pedestrian management interventions in these areas.
	Implement road-narrowing measures	Road narrowing initiatives such as kerb extensions and half road closures assist in reducing vehicular traffic speeds. They also provide a visual cue for motorists that pedestrians can be expected in the vicinity of a road narrowing initiative.	Introduce narrower road standards in Council subdivision standards.
	Install speed management measures at road sections	Traffic calming measures such as speed bumps, pedestrian humps, road narrowing, blisters and tree plantings assist in reducing vehicle traffic speeds. They also provide a visual cue for motorists that they are travelling through more urbanised environments where pedestrians and cyclists can be expected.	For inclusion in Main street Master Plans.
	Install speed management measures at Intersections	Traffic calming at intersections can reduce the speed of motor vehicles travelling through and exiting from intersections. This measure is used primarily in areas with high pedestrian volumes. Installation of additional traffic management initiatives can be expensive and they can be obtrusive.	For inclusion in Main street Master Plans.

Key Measures	Intervention	Merits of Intervention	Relevance in Weddin Context
	Provide school route improvements	Reduced speed limits in school zones and dedicated school crossings provide effective measures to control vehicle speed and increase pedestrian and cyclist safety if properly enforced. Additional initiatives may be required at school crossings. Zebra crossings should only be used in very limited applications, subject to site specific assessment. Where a safe point for student pedestrians to cross is required it is preferred to use road narrowing initiatives, raised pedestrian crossings or provide a school safety supervisor. Where road narrowing is proposed to cross roads that form part of a bicycle route, consideration should be given to potential squeeze points which can be addressed by providing cycle bypass through the road narrowing device.	Additional footpaths are required to service some schools.
Improve Pedestrian and Cyclist Visibility	Provide crossing enhancements	Road crossing enhancements such as raised pedestrian crossings, pedestrian humps, blisters and kerb extensions reduce vehicular traffic speeds and provide a visual cue for motorists that pedestrians can be expected in the vicinity of a road narrowing initiative. Pedestrian and cyclists at these points are therefore more visible to motorists.	Introduce traffic calming standards in Council subdivision standards.
	Reduce or eliminate obstruction by physical objects including parked vehicles	Action to remove physical obstructions on pedestrian and cycling routes can help to reduce accidental falls as well as collisions with other users of the road environment. Parked vehicles can be a hazard for cyclists travelling along on-road cycling lanes, particularly people opening car doors.	The consultation undertaken suggests footpath obstructions such as low overhanging tree branches and uneven footpath surfaces is an issue. The existing footpath network in Grenfell should be reviewed to ensure that obstructions are minimised. Council subdivision standards and footpath maintenance repair and problem reporting systems should be reviewed to eliminate obstructions and hazards as quickly as possible. Consultation and research also reveals that road safety and fear of traffic is the biggest issue for existing cyclists and a major deterrent to potential cyclists. Cyclists become nervous when passing too closely to parked cars, particularly in areas of high parking and pedestrian activity – as every cyclist is concerned they will collide with an opening car door. Adequate separation between parking lanes and on-road bicycle lanes is necessary to eliminate obstructions and hazards around parked cars.Where existing footpaths are converted to shared paths, consideration should be given to both ground and overhead obstructions such as streetlight and power poles, footpath signage, street furniture, tree branches and footpath surfaces to ensure the routes are suitable for higher speed cyclists traffic. Obstructions on shared paths should be reviewed or clearly delineated by ‘hazard ahead’ type signage.

Key Measures	Intervention	Merits of Intervention	Relevance in Weddin Context
Improve Pedestrian and Cyclist Visibility	Implement lighting / crossing illumination measures	Lighting at crossings is used primarily in areas with high pedestrian and cyclist volumes at night. Installation is expensive and they can be obtrusive and should be limited to high activity areas that are used at night.	For inclusion in Main street Master Plans. Introduce traffic calming standards in Council subdivision standards.
	Install signals to alert motorists of crossings	Signals to alert motorists of crossings are used primarily in school zone situations or areas with high pedestrian and motor vehicle traffic. Installation is expensive and they can be obtrusive.	Signals are currently not considered necessary at any other school zone. Other timely intervention measures such as a shared path network west and south-west of the High School may alleviate any need for signals
	Install signage to alert motorists of pedestrian and cyclist routes	Signage can be used to alert motorists of high activity pedestrians and cyclist routes. It provides a visual cue for motorists that pedestrians and/or cyclists can be expected along the route.	School zone signs are currently provided at all school zones. It is not considered necessary to provide additional signage at schools at this stage. All on-road bicycle lanes and shared paths should be provided with signage in accordance with relevant Australian Standards.
	Encourage cyclists to wear high visibility clothing and lights	One of the most effective ways to improve cyclist safety is to make them more visible to motor vehicles. If riding at night, a bicycle must also have: ▪ A steady or flashing white light that is clearly visible for at least 200 metres. ▪ A flashing or steady red light that is clearly visible for at least 200 metres from the rear of the bike. ▪ A red rear reflector that is clearly visible for 50 metres when light is projected onto it by a vehicle's headlight on low beam.	Consultation and observations confirm that most road cyclists travelling in the dark are using effective lighting and high visibility gear to illuminate their way and make them more visible to other road users. The use of lights, reflectors and high visibility gear by commuting and student cyclists is patchy. Programs should be developed at encouraging greater use of lights and high visibility gear.
	Encourage pedestrians to wear high visibility clothing when getting about	Increased visibility of pedestrians at night can significantly improve road safety outcomes. The use of higher visibility clothing is recommended for all pedestrians travelling at night. The use of higher visibility gear, reflective clothing and flashing lights is recommended for people walking or running at night for fitness.	The use of lights, reflectors and high visibility by pedestrians is patchy. Programs should be developed at encouraging greater use of lights and high visibility gear.

Key Measures	Intervention	Merits of Intervention	Relevance in Weddin Context
Improve Safety Awareness Behaviour	Provide educational information in local media and schools	A number of programs are available to support road safety education and awareness in schools and local media, including funding for road safety officers and for Bike Week. A great deal of road safety information is available to assist with road safety education and awareness, including the RMS website.	Programs should be developed to increase greater participation at Bike Week.
	Provide a training facility for pedestrians and cyclists	There are a number of purpose built pedestrian and cyclist training facilities operating in Australia that provide important skills for new users and are a great family activity. For example, Campbelltown's Bicycle Education and Road Safety Centre provides education for cycling and pedestrian safety in a fun and safe environment. With real working traffic lights, round-a-bouts, stop signs and pedestrian crossings, it really is a purpose-built circuit that simulates real road conditions. There is a junior track for toddlers, under cover climbing equipment, a picnic area and lots of trees to put the picnic blanket down and make a great day of it.	A training facility could be achieved in a park in Grenfell and Greenethorpe with extra community support.
	Enforce traffic laws	Rules have been established for the safety of all road users. Unfortunately not everyone follows the rules, or some people choose to follow only some of the rules. Common problems include: ▪ Motorists speeding, drink driving, not wearing seatbelts and using mobile phones. ▪ Motorists not obeying school zone, parking, school bus zones and drop-off rules. ▪ Cyclists riding without helmets, lighting and a bell. ▪ Cyclists riding through red traffic lights and on footpaths. Erratic and dangerous behaviour of younger cyclists, skate boarders and kick scooter users seeking fun / challenges over road safety considerations. Random ad hoc pedestrian movements and jay walking.	Adhering to the Australian Road Rules is important for road safety reasons. Consultation and extended research reveals that not all road users are aware of the rules, especially relating to pedestrians and cyclists. Education and awareness of the rules can assist in developing better understanding and tolerance between different road users. A strong policing presence is required to enforce the Australian Road Rules. Educational information in local media, at work sites and in schools could assist more people in understanding the rules as well as the different characteristics and behaviours of different road users. A training facility at Grenfell would assist in providing a wide cross section of the community with the opportunity to learn more about the road rules and the different road users.

8.6 Providing End of Trip Facilities

Public amenities can be important mid-way or end of trip resources for pedestrians and cyclists. They include a range of supporting infrastructure such as bicycle parking, seating / rest stops, water points, toilets, shade and signage.

9. Designing the new active transport network

This section examines the main design elements that are particularly important to master to ensure a robust active transport network in the Weddin Shire.

9.1 Kerb Ramps

With all pedestrian facilities, access must be provided to the road providing a continuous accessible path of travel allowing access to wheelchairs, prams and trolleys, and pedestrians with impaired mobility.

Constructed properly, kerb ramps provide a smooth change in the level between the footpath and the roadway. The difference in the level between the footpath and the roadway is a common situation that poses difficulties for disabled and older pedestrians, particularly with mobility and vision impairments. The Austroads Guide to Traffic Engineering Practice Part 13 – Pedestrians states that:

> *"A minimum footway width of 1200mm should be provided beyond the top of the ramp, to ensure that users of the footway along the street are not inconvenienced by the ramp."*

The general configuration of a kerb ramp are illustrated in the diagram.

High grade drop kerbs can cause safety issues for mobility impaired users. Users can become vulnerable to general traffic as they attempt to enter / leave the carriageway and proceed up / down steep ramps. When crossing a road, people who have impaired vision often use the kerb ramp to align themselves and then walk in a straight line to the other side. If the ramp does not align squarely with the kerb, it can lead people on an angle into the roadway, rather than directly across the street.

A blended kerb is one in which there is no significant drop from the footpath to street level; the path simply flows onto the road. While blended kerbs provide easy transition for sighted people with mobility difficulties, they can be an issue for people who are blind or have impaired vision, as these people rely on traditional kerbs and kerb ramps to indicate where the footpath ends and the road begins. With a blended kerb, they can find themselves in the middle of the road without knowing that they have left the footpath. One way to improve safety in this scenario is to install tactile ground surface indicators (TGSI) between where the footpath ends and the road begins. This will alert people who have impaired vision that they are about to step onto a road.

It is important that kerb ramps:

- Comply with standard grades
- Incorporate tactile surfaces for all primary activity areas
- Align squarely with the direction of road traffic
- Directly align with the kerb ramp on the other side of the road
- Align with pedestrian refuge islands

9.2 Signalised Pedestrian Crossings

Audio-tactile push-button signals (ATS) are located at signalised crossings and are used to indicate when traffic lights have changed to a walk phase. These signals are particularly useful for people who are blind or have impaired vision.

The tactile signal is detected through the plate immediately above the push button. When the pedestrian walk signal is red or in the "Don't Walk" phase, it emits slow beeps and the tactile plate pulses slowly. When the pedestrian walk signal is green or in the "Walk" phase, the control emits faster beeps and the tactile plate pulses rapidly.

The tactile information is useful when ambient noise levels are high, or when the person using the signal does not have good hearing.

When installing the push button control on a pole, the pole should be placed within easy reach of the kerb ramp or crossing point wherever possible. The directional arrow on the push plate provides information to the person who is unable to see the direction of the crossing and therefore should be positioned within easy reach. If the push button is located away from the crossing, the audio signal may not be able to be heard.

9.3 Pedestrian Crossings

A pedestrian crossing is a designated point on a road at which some means are employed to assist pedestrians wishing to cross. They are designed to keep pedestrians together where they can be seen by motorists, and where they can cross under the most optimal traffic conditions.

9.4 Stairs

Unexpected ‘drop-offs’ are among the biggest fears of older people and people who have impaired vision. The drop can be a step, stair or platform edge at a railway station. Effective design and construction will assist people to negotiate stairs and other drop-offs safely and independently. When designing and maintaining stairs, important considerations include:

- Regularity of stair construction
- All steps and stairs should have their nosing (the front edge of the tread) marked with an appropriate contrasting strip, as per Australian Standard 1428.1
- Correct placement of TGSI to indicate the beginning of stairs
- Sufficient lighting or illumination

- Appropriately positioned handrails, as per Australian Standard 1428.2. It should also extend horizontally beyond the end of the stairs and curve under on the ends to avoid collision
- Stairs should not be positioned immediately inside or outside doorways, as people who have vision impairment may not have enough time to detect them when walking through the doorway
- Stairs should not be open. Australian Standard 1428.1 says that stairs require an opaque riser
- The underneath of stair cases should be enclosed to prevent a head-height hazard for people who have impaired vision

For more detailed information on stair and step construction, refer to *Australian Standard 1428.1*.

9.5 Pedestrian Refuges

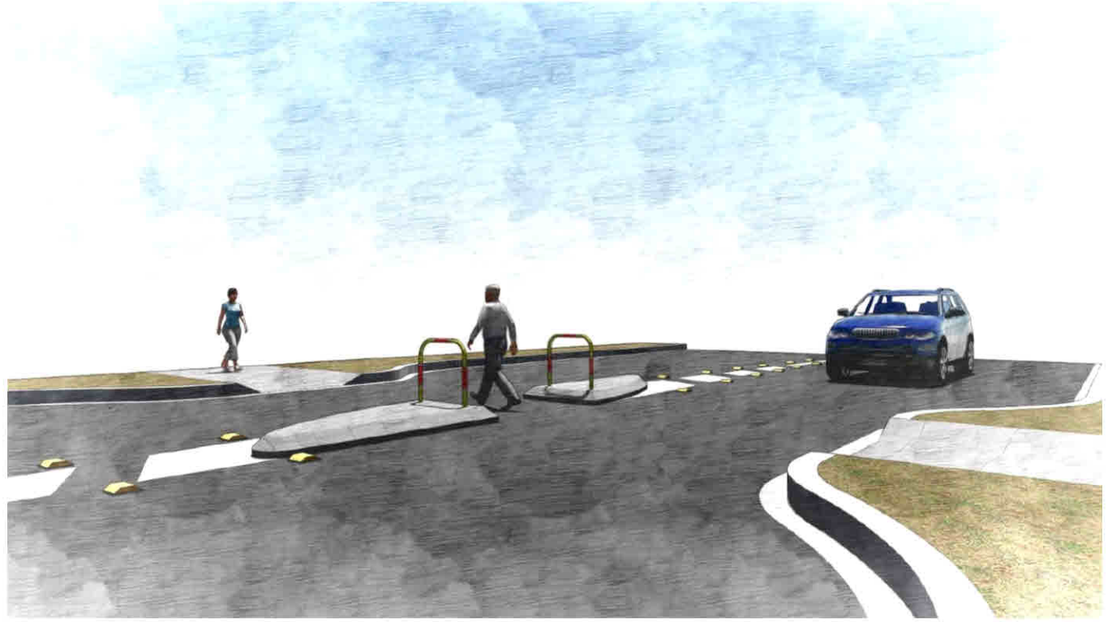
A pedestrian refuge island is a small concrete or paved island in the middle of a road that allows people to cross in stages. They allow a safe point for pedestrians to 'store' mid-way across a wide or busy road. The general dimensions of a pedestrian refuge are illustrated in the Figure below.

Austroads Guide to Traffic Engineering Practice Part 13 – Pedestrians states in relation to pedestrian refuges:

> *"Street lighting in accordance with AS 1158.1 should also be provided."*

The guide also recommends a refuge width of at least 2 metres to allow storage for a person with a pram, bicycle or wheelchair.

If the pedestrian island is the same level and surface as the road, people who have impaired vision may be unable to identify where the refuge ends and the road starts. Tactile ground surface indicators (TGSI) provide information that enables people who have impaired vision to locate a refuge island either tactually or using their residual vision.



9.6 Bicycle Facilities

In some cases a bike lane located on the road may be the most feasible option to provide a cycling facility. Where this is the case, an assessment needs to be undertaken and all practicable measures taken to ensure safety of users. The Tables over page provide guidance on the criteria to assess the suitability of on-road bicycle lanes.

The safe passage of cyclists on the approach and through road intersections is essential in delivering a usable on-road bicycle network, which can be achieved by line marking. Bicycle lanes should not abruptly end prior to an intersection. A clear path which is identifiable to both motorists and cyclists is required. The use of line-marking and green surface treatments is recommended to mark the preferred path through complicated intersections. Advanced bicycle waiting areas which allow cyclists to position themselves ahead of traffic vehicles at signalised intersections is recommended.

Technical advice and design solutions are provided in:

- NSW RTA Bicycle Guidelines 2005 (Section 7 - Bicycle facilities at intersections and Section 8: Intersection of paths with roads)
- Vic Roads Cycle notes – Head start storage areas at intersections, 2000
- Vic Roads Cycle notes No. 8 – Providing for cyclists at signalised intersections, 2001
- Vic Roads Cycle notes No. 16 – Safe road crossings for off-road paths, 2005
- Austroads Guide to Traffic Engineering Practice Part 6: Intersections, Interchanges and Crossings; and
- Austroads Guide to Traffic Engineering Practice Part 14: Bicycles, 1999 (Section 5 – Road intersections and Section 6.7 Intersections of paths with roads).

Kerb side car parking should be line-marked to defined this operating space and reduce potential conflict with opening of car doors. The *NSW RTA Bicycle Guidelines 2005* provides line marking guidance for both on-road and off- road pathways. Additional guidance on the locations for the application of green surface paint can also be found in Section 7 and Section 8 of the *NSW RTA Bicycle Guidelines* and *Vic Roads Cycle notes No. 14 – Coloured surface treatments for bicycle lanes, 2005.*

Road Speed	60km / h	80km / h	100km / h
Lane Width (Desirable)	1.5m	2.0m	2.5m
Lane Width (Accepted Range)	1.2m – 2.5m	1.8m – 2.7m	2.0 – 3.0m

On-road bicycle surfaces should be smoother than those acceptable for motor vehicles due to road bicycles having narrow tyres inflated to high pressure, having no suspension systems and can travel at speeds over 25km/h. Hard surfaces such as asphalt and concrete are the most functionally appropriate materials to meet the different needs of the various users of formed bicycle lane. Technical advice on surface tolerances is provided in:

- Austroads 1999, Guide to Traffic Engineering Practice Part 14: Bicycles.
- Austroads Guide to Road Design Part 6A: Pedestrians and Cyclists Paths, 2009.
- NSW RTA Bicycle Guidelines, 2005.

Identifying on-road and off-road operational space in a manner which is clear to motorists, cyclists and pedestrians is essential to providing a safe network. A key technique in achieving this is via line marking.

No.	Method	Comment
1	Removal or remarking traffic and/or parking lanes	Resizing road lanes to provide visually separated bicycle lanes.
2	Upgrading service roads	Marking service roads to include visually separated bicycle lanes/operating space.
3	Bicycle lanes on one side of road only	On uphill roads with limited width a bicycle lane is provided on the uphill side only. Bicycle riders especially need separated operating space when climbing.
4	Sealing shoulders	On rural and un-kerbed roads.

		Bicycle shoulder lanes can also be fitted to kerbed urban roads with parking provisions.
5	Converting footpaths to shared paths	For off – road bicycle/pedestrian route within the road corridor.
6	Indenting car parking	Where footpath space is available. Preserve parking and permits straight through kerbside bicycle lanes at intersections.
7	Car parking on one side of the road only	By removing a parking lane from one side of road only to create bicycle operating space.
8	Road – widening at medium	Move other lanes into median space to create bicycle space.
9	Road – widening at the kerb	Increased width provides for new bicycle lane or widening of existing bicycle lanes.
10	Creating an off-road bicycle path	Two-way on one side of the road or one way both sides of the road. Beneficial where traffic speeds and volumes are high.

9.7 Supporting Infrastructure

For footpaths, on-road bicycle and shared pathways to be usable, a range of supporting infrastructure needs to be considered, including signage, lighting, seating / rest stops, water points, shade and facilities for people with a disability.

- Technical advice on the provision of supporting infrastructure is provided in:
- NSW RTA Bicycle Guidelines, 2005 (Section 10: Maintenance and provision at worksites);
- Austroads Guide to Traffic Engineering Practice Part 14: Bicycles, 1999 (Section 10: End of trip facilities); Cycling aspects of Austroads Guide Section 11.
- Bicycle Victoria The Bicycle Parking Handbook, 2004.

9.8 Signage and Line Marking

Signage and or markings should be provided throughout the entire network to guide pedestrians and cyclists use of the bicycle and shared path network.

Signage and / or markings should include both directional and informative information and be designed to be easily identifiable and consistent across both on-road and off-road networks. They will inform users of the direction and distance to key destinations, provide warning of changing conditions (e.g. intersection) and of approaching hazards and provide clear travel pattern advice, which is particularly important at intersections.

Signage and / or markings should be provided as new on-road bicycle and shared pathways are constructed and should be progressively retro-fitted across the existing network.

The use of a green surface for bicycle lanes which draws motorists' attention to the presence of bicycles is recommended at busy or higher-speed locations and areas where the road layout is complex. Technical advice on signage and marking treatments is provided in:

- Austroads Guide to Road Design Part 6A: Pedestrians and Cyclists Paths, 2009.
- NSW RTA bicycle Guideline (Section 9 – Signage and network information).
- Vic Roads Cycle notes No. 10 – Shared path behavioural signs, 2005.

Many people who have impaired vision have some residual vision and some are able to read print signage. It is necessary, therefore, to provide alternatives to ensure effective communication. These may include tactile symbols, verbal announcements or one-on-one assistance for locating a specific location.

Tactile and Braille Signage - Tactile signs consist of raised shapes, for example the raised shape of a woman on a toilet door. As not all people with vision impairment read Braille, it is important to provide both Braille and tactile signage. Braille uses raised writing in the form of a cell of dots which is read by touch. Different combinations of raised dots within a cell signify different letters, abbreviations and words.

Font / Writing Style - A sign's readability is highly affected by its font and print case. Though there are currently no standards for print type, Blind Citizens Australia currently recommends the use of Sans Serif font types.

Symbols - Simple lettering, distinctive logos and symbols can help convey information effectively where print may be difficult to use e.g. male and female symbols for toilets are instantly recognisable. Many symbols are internationally recognised, such as the wheelchair sign to indicate facilities for people with a disability.

Colour - Low contrast signage can be difficult to locate and read clearly. Printed information should contrast with the sign's background surface.

Positioning Signs - Signs should be positioned so that they are clearly visible from both seated and standing positions. When positioning signage, important considerations include:

- Distance at which a person with vision impairment must stand to see the sign.
- Length of time required to read the sign by a person with vision impairment.
- Consistent placement of signs.

Placement of overhead signs should be at least 2000mm above the ground level but preferably 2400mm above the ground level.

Signage is best placed on the wall beside the door in a position where a person with vision impairment can read it without blocking the path of other pedestrians. Within a building, all signs should be placed in the same position and at the same height beside each door where information is required.

Lighting of signs - When positioning and lighting signage, important considerations include:

- Direct and indirect lighting levels throughout the day e.g. afternoon sun may cause glare, making signage unreadable.
- Readability in both natural and artificial light.
- Use of non-reflective materials for signage and viewing background.

9.9 Lighting

Nighttime outdoor lighting has most often been designed for the vehicle driver, rather than for pedestrians and cyclists.

Where footpaths, bicycle lanes and shared pathways carry a substantial number of pedestrians and cyclists during periods of darkness, consideration should be given to the provision of path lighting. Lighting will increase both actual and perceived safety along the network and should be targeted along key pedestrian routes and activity zones *(Austroads, 2009).*

The main objectives of pedestrian lighting are to ensure adequate lighting is provided to identify pedestrian routes and signage, illuminate pedestrians to other road users and to achieve facial recognition of another pedestrian at a reasonable distance.

The main objective of cycleways lighting is to ensure adequate lighting is provided so that cyclists, travelling at reasonable speed are able to avoid potholes and any other traffic hazards *(AUSTROADS "Bicycles" part 14 p.104)*. Generally provision for public lighting for bicycles may occur where:

- Paths for cycling associated with promenades or a centre for night-time activity.
- Paths for cycling used for commuting by workers or students.

Lighting should be placed along key routes, key crossing points, intersections and places where people congregate. Direction and height of illumination, background land illumination levels are key considerations that should be addressed within the design.

9.10 Landscape Design

Landscape works which are poorly planned and designed can have negative impact on pathway use. It is important that landscaping is designed, constructed and managed to:

- Provide clear sightlines.
- Promote good visibility.
- Provide safe side clearances.
- Prevents intrusion into pedestrian / cycling operating space.
- Manages tree root damage to pathways.
- Provide passive surveillance and promotes an open easy – supervised environment.
- Manage weeds, especially catheads.

Austroads Guide to Road Design Part 6A: Pedestrians and Cyclists Paths, 2009 and the NSW RTA Bicycle Guidelines, 2005 provides guidance on the key considerations for landscape design.

Austroads Guide to Road Design Part 6A: Pedestrians and Cyclists Paths, 2009 (Section 6.5 and 7) provides further guidance on the key considerations for the lighting of pathways. All path lighting should be designed in accordance with AS/NZS 1158.3.1:2005, Pedestrian area (category P) lighting – performance and design requirements and the design principles identified in *Crime Prevention through Environmental Design Safer by Design (*CPTED*)*.

10. Community engagement & audit findings

10.1 Community Engagement

During December 2017 and January 2018, Weddin Shire Council conducted preliminary community engagement in the form of workshops, questionnaires and media promotion. This section summarises the main findings of consultation, and is supported by a detailed consultation report in Appendix 1.

10.1.1 Stakeholder Workshops

Community workshops were held in Caragabal, Grenfell, Greenethorpe and Quandialla in December 2017, to which over 30 participants attended. The workshops were structured around a series of local area maps. Questions were then asked about the pedestrian and cycling network and local conditions that led the conversation to allow for problems, solutions, suggested routes and feedback to be covered within the allocated workshop.

Throughout the workshops, the responses given had common themes which reiterated the desire for additional paths to popular destinations and routes within the community.

10.1.2 Online Surveys

Council conducted an online survey which was distributed via Council's website and through workshop participants.

10.1.3 Promotion

A number of promotional activities were undertaken to encourage participation in the preliminary consultation phase for the Weddin Active Transport Plan. Media releases were made available to local newspapers about the launch of the project, surveys and workshops. Council's website featured details about the project, surveys and workshops.

10.2 General Consultation Findings

A large number of respondents indicated that they would prefer more dedicated footpaths and shared paths.

Frequent cyclists stated that the maintenance of existing cycling routes would help to improve current safety conditions. Similarly, the installation of more signs that warn of cyclists in the area would also improve conditions.

10.3 General Audit Findings

An audit of existing pedestrian and cycling conditions across the Weddin Shire was undertaken by means of a desktop review of local data and discussions with government stakeholders, including Council and RMS staff, as well as a drive-through, walk-through and saddle surveys of the study area, with particular focus on settlement areas, primary routes and attractors.

On-site meetings with some community members where specific sites / issues needed to be observed / discussed.

The audits were not meant to gather a comprehensive inventory of pedestrian and cycling assets in the Weddin Shire. The emphasis of the audits was on identifying gaps in the network as well as the barriers to people using the network.

The audits revealed a variety of pedestrian and cycling facilities provided in Weddin Shire, in varying conditions. Expectedly, the audits identified a number of deficiencies and barriers in the network, which are discussed in this section.

Where minor deficiencies were observed, such as concrete footpath surface cracking or overhanging branches creating obstacles, they were reported to Council for rectification.

10.4 Specific Consultation and Audit Findings

Specific consultation / audit findings from the workshops and site visits in Caragabal, Grenfell, Greenethorpe and Quandialla are presented in the following sections.

10.5 Grenfell

Map A.1 on Page 41 illustrates the findings of community consultation and an audit of the Grenfell Township, with a summary of key issues included as follows.

The audit and consultation work in Grenfell revealed a relatively extensive footpath network in good condition and a less extensive cycling network in good condition. A number of opportunities and constraints (deficiencies, gaps and barriers) were identified in the network, which are discussed below. A map summarising the audit / consultation findings of the Grenfell investigations is also presented.

Bicycle lanes
There are several on-road cycling lanes in Grenfell, shown as green lines on the map. The on-road cycling lanes are delineated by painted white lines along the sides of roads and the painted cyclist symbol painted on the road pavement. The line marking is faded in some sections and there is little signage. Regular cyclists advise that tend to ignore the on-road cycling lanes (preferring to ride along the edge of the bitumen carriageway, road shoulder or where conditions warrant).

Footpaths
The grey lines on the map show the existing network of concrete footpaths in Grenfell. The lines marked red on the map show parts of the road network that are being readily used by pedestrians that do not have constructed footpaths.

Kerb ramps
There are a number of kerb ramps that need to be provided or need replacing due to poor alignment, grade or condition.

School zones
Schools in Grenfell are generally provided with constructed footpaths. Additional constructed footpaths or shared paths would be beneficial at schools.

Obstacles
No street furniture, signs or other structures were observed to present major obstacles or hazards to pedestrians on constructed footpaths. Low overhanging tree branches and bushes were observed as obstacles on some constructed footpaths, especially along residential streets in the more established areas of Grenfell and near the Grenfell CBD.

Trip hazards
Footpath cracking and sections of broken paving were observed on some footpaths in the Grenfell CBD. Some residential streets also showed signs of footpath deterioration or damage, such as cracks and raised concrete edges.

Road crossings
There is minimal use of kerb extensions and blisters to reduce effective road carriageway width and provide more effective road crossing points.

Lighting
No lighting issues were observed.

Tactile indicators
Not all intersections and grade changes in the Grenfell CBD are provided with tactile indicators. There are some TGSI alignment issues at some intersections and hazards such as light poles, and the colour / luminance contrast at some locations is inadequate to provide people with vision impairment sufficient warning approaching hazards and changes of direction.

Bicycle parking facilities
The blue dots show the locations where bicycle racks are provided.

Shared path line marking and signage
Shared paths are valuable assets. Some sections of the shared paths lack clear line marking and signage.

Children cycling
Not as many children ride to school or around town. More paths and skills development may encourage increased cycling.

Grenfell walking routes
There are a number of routes regularly used by recreational walkers and joggers, tourists and commuters that have gaps in the network.

Parklands
Shared path routes are required to connect parklands.

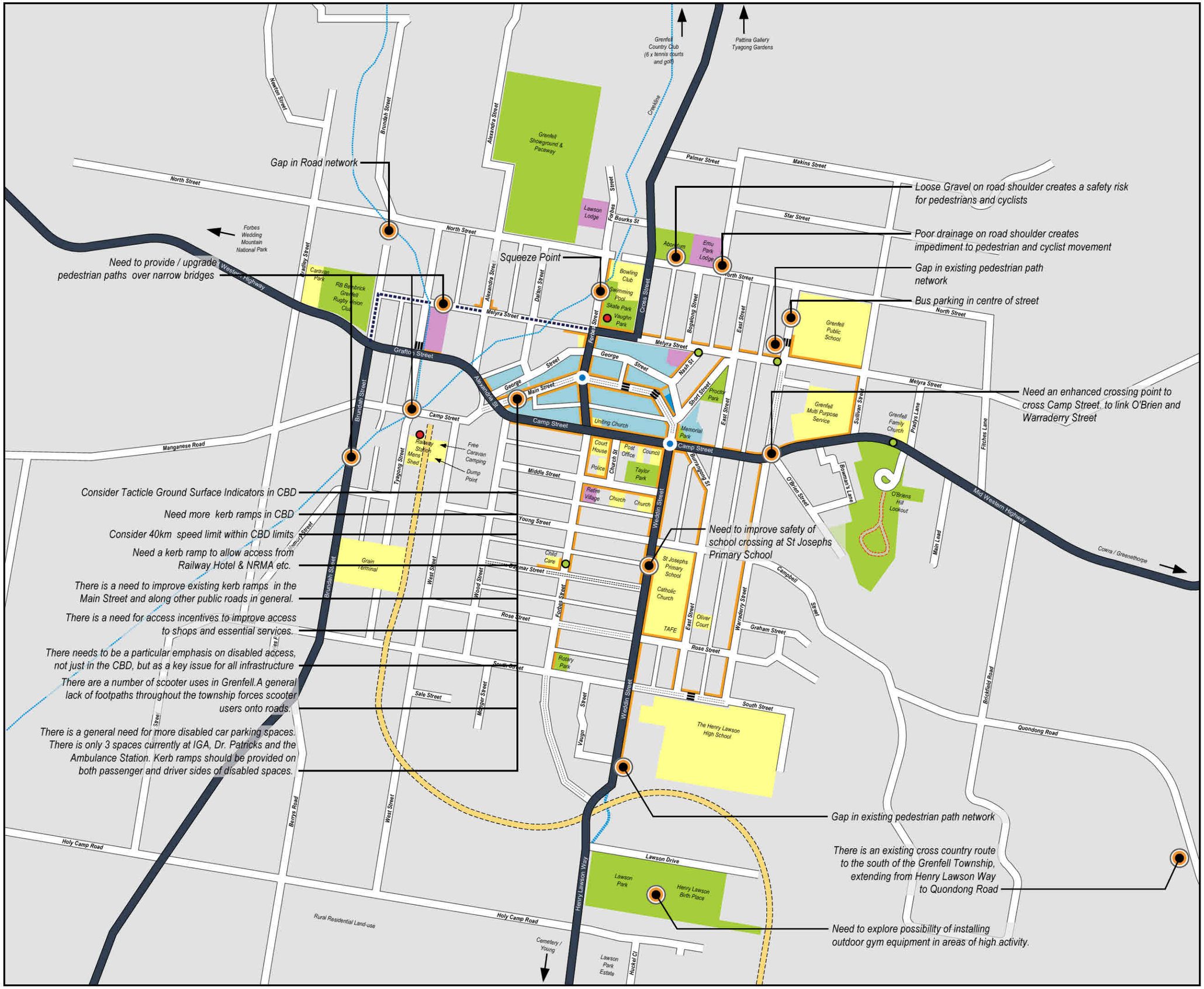
New sub-division
There are not many new footpaths linking to the existing path network.

Grenfell CBD
Limited designated crossings in the Grenfell CBD.

Obstacles
Overhanging tree branches are obstacles and there needs to be a better system to report / fix problems in the network.

Barriers
No significant barriers were identified.

Opportunities
New shared paths were identified to connect the caravan park to CBD.



A.1

SHEET DESCRIPTION
Community Consultation & Audit Map

LOCATION
Grenfell Township & Surrounds

PROJECT
Weddin Active Transport Plan

CLIENT
Weddin Shire Council

ISSUE
12 May 2018

SCALE
1:10,000 @ A3

LEGEND

Infrastructure

- Sealed / Unsealed Road
- Main Road
- Existing Footpath
- Existing gravel path
- Existing Shared Path
- Existing Centre Refuge
- Existing Roundabout
- Existing Railway
- Existing Ped. Crossing
- Existing Bike Racks
- Existing Ped. Refuge
- Consultation Finding
- Existing Kerb & Gutter
- Existing Water Point
- New B-Double Route

Uses

- Community Facility
- Open Space
- CBD
- New Medical Centre
- Aged / Medium Density Housing

GHD

Active PLANNING CONSULTANTS

N

0m 250m 500m

10.6 Greenethorpe

Map A.2 on Page 43 illustrates the findings of community consultation and an audit of the Greenethorpe Village, with a summary of key issues included as follows.

Bicycle lanes
There are no on-road cycling lanes in Greenethorpe, nor are they warranted. Regular cyclists advise they seek on-road cycling along the quieter rural roads.

Footpaths
The grey lines on the map show the existing network of concrete footpaths in Greenethorpe. The lines marked red on the map show parts of the road network that are being readily used by pedestrians that do not have constructed footpaths.

Kerb ramps
There are a number of kerb ramps that need to be provided or need replacing due to poor alignment, grade or condition. There are few kerb ramps servicing the active travel movement.

School zones
The school in Greenethorpe does not have constructed footpaths.

Obstacles
No street furniture, signs or other structures were observed to present major obstacles or hazards to pedestrians on constructed footpaths.

Trip hazards
Some concrete footpaths finish before the road pavement which creates potential trip hazard areas.

Road crossings
There is minimal use of kerb extensions and blisters to reduce effective road carriageway width and provide more effective road crossing points.

Railway crossings
The disused railway presents as an obstacle.

Lighting
No major issues were noted.

Tactile indicators
Generally absent in the central business district.

Bicycle parking facilities
Provided at the school.

Shared path line marking and signage
No formal shared paths have been constructed.

Children cycling
Not as many children ride to school or around town. More paths and skills development may encourage increased cycling.

Walking routes
There are a number of routes regularly used by recreational walkers, particularly early in morning, afternoons and early evenings.

Parklands
Formal footpaths / shared paths are absent in parklands.

Greenethorpe CBD
There are no formal footpaths linking school, Post Office and Hall.

Cycling
The main road rides are out of town.

Barriers
No major barriers noted, other than railway line crossing and lack of connection between school, Post Office and Hall.

Opportunities
Central shared path linking school, Post Office and Hall.

A.2

SHEET DESCRIPTION
Community Consultation & Audit Map

LOCATION
Greenethorpe

PROJECT
Weddin Active Transport Plan

CLIENT
Weddin Shire Council

ISSUE
30 Jan 2018

SCALE
1:5,000 @ A3

LEGEND

Infrastructure

- Sealed / Unsealed Road
- Main Road
- Existing Footpath
- Existing gravel path
- Existing Shared Path
- Existing Centre Refuge
- Existing Roundabout
- Existing Railway
- Existing Ped. Crossing
- Existing Bike Racks
- Existing Ped. Refuge
- Consultation Finding
- Existing Kerb & Gutter
- Existing Water Point

Uses

- Community Facility
- Open Space
- CBD
- Aged / Medium Density Housing

GHD · Active Planning Consultants

N

0m 125m 250m

Greenethorpe is an active community with a pre-school, many school events, an art exhibition, exercise classes (yoga), fundraisers and regular ag. meetings.

There is a general cathead problem caused by spraying of road shoulders. Suggestion is to explore the use of broadleaf weed killer mixed with roundup

This is a B-Double route and takes approximately 25% of grain movements annually.

Explore the potential merits of creating a wayfinding loop with historic interpreration

The urban streetwork is predominantly sealed through the Town.

The playground at Edward Square needs a new style water filling station with dog bowl in the bottom

There is a need for bicycle racks at the Post Office, Cafe Hall & School

Post office is generally regarded as the centre of town.

Church meets every 2nd or 3rd Sunday and hosts craft on a Saturday and Yoga on a Thursday

No pram ramps in kerb & gutter

There are no footpaths anywhere, and in particular no paths linking the School to the Community Hall

Most children arrive and leave by bus. one child sometimes rides a scooter to school.

Disabled Toilets

Fortnightly Pre-school

Secondhand Shop

Soldiers Memorial Hall

Tennis Courts (x 3) and Basketball Court

There is limited camping at the Oval when events are held, with primitive facilities only at this location

Lack of footpaths makes for muddy footway areas. If paths are provided,it may encourage more walking.

Extremely busy grain facility. This road is busiest during harvest which is generally is Feb / March and May / June each year

The community has aspirations to reopen the railway. It is no longer in use.

This road is a B-Double route and takes approx. 60% of grain movement annually.

This road is a B-Double route and takes approx. 5% of grain movement annually.

This road is a B-Double route and takes approx. 10% of grain movement annually.

Greenethorpe is central to a number of popular cycling routes / loops and is regularly visited by cyclists from Cowra and Young. Some key issues for cyclists include lack of signage and phone coverage

Tyagong Creek
Redbank Street
Rawson Street
Main Road
Louth Street
Square
Edward
Griffith Street
Northcote Street
Post Office / Cafe
Uniting Church
Bluesky Gallery
Anglican Church
RFS
Greenethorpe Sports Oval and off-leash area
York Street
James Street
Police
Gas Distribution Centre
Gate
Grain Facility 50,000 tonnes capacity.
Tyagong Creek Road
Collon Street
Shamrock Pub
Recycling Centre
Fitzroy Street
Chapel Street
Greenethorpe Wirega Road
Greenethorpe Public School (12 students & 1.5 teachers)
Koorawatha Grenfell Railway
Graincorp
Greenethorpe -Koorawatha Road

10.7 Quandialla

Map A.3 on Page 44 illustrates the findings of community consultation and an audit of the Quandialla Village, with a summary of key issues included as follows.

Bicycle lanes
There are no on-road cycling lanes, nor are they warranted. There weren't a lot of regular cyclists in the area.

Footpaths
The existing footpath network is patchy and does not service all attractors. The lines marked red on the map show parts of the road network that are being readily used by pedestrians that do not have constructed footpaths.

Kerb ramps
There are a number of kerb ramps that need to be provided or need replacing due to poor alignment, grade or condition.

School zones
The school does not have constructed footpaths.

Road crossings
No major issues were noted.

Railway crossings
No major issues were noted.

Lighting
No major issues were noted.

Tactile indicators
Generally absent in the central business district.

Bicycle parking facilities
Provided at all school and pool. Generally absent in other locations.

Shared path line marking and signage
No formal shared paths have been constructed.

Children cycling
Not as many children ride to school or around town. More paths and skills development may encourage increased cycling.

Walking routes
There are a number of routes regularly used by recreational walkers, particularly early in morning, afternoons and early evenings.

Parklands
Formal footpaths / shared paths are absent in parklands.

Quandialla CBD
Steps to shops noted as access barriers. Footpath cracking and sections of broken bitumen were observed on some footpaths in the central business district.

A.3

SHEET DESCRIPTION
Community Consultation & Audit Map

LOCATION
Quandialla

PROJECT
Weddin Active Transport Plan

CLIENT
Weddin Shire Council

ISSUE
30 Jan 2018

SCALE
1:5,000 @ A3

LEGEND

Infrastructure

- Sealed / Unsealed Road
- Main Road
- Existing Footpath
- Existing gravel path
- Existing Shared Path
- Existing Centre Refuge
- Existing Roundabout
- Existing Railway
- Existing Ped. Crossing
- Existing Bike Racks
- Existing Ped. Refuge
- Consultation Finding
- Existing Kerb & Gutter
- Existing Water Point

Uses

- Community Facility
- Open Space
- CBD
- Aged / Medium Density Housing

GHD

Active Planning Consultants

N

0m 125m 250m

Government Dam

Quandialla Showground

(Cricket and primitive camping)

Stockinbingal Parkes Railway

The link between the Bowling Club on Bland Road and the Memorial Hall on Second Street is generally the area of highest pedestrian and cycling activity.

There is a need to promote safe cycling at the Quandialla Primary School, which has 23 students, 2 teachers and support staff.

There is a need for bicycle racks to be installed in front of the Swimming Pool, General Store and School.

Blamey Park (toilets, bbq & playground)

There is a rise in the road at this location which presents a safety hazard to pedestrians and cyclists.

The road shoulder along Bimbi Quandialla Road has edge break issues that present a safety hazard to cyclists

There is a need to review speed sign placements and new installations

The Village generally needs a way finding map

There is no bus service linking Quandialla to other nearby Towns and Centres.

The fuel area in front of the General Store has been made uneven by trucks and currently presents a traffic hazard to pedestrians and cyclists.

A wide footpath is needed along Second Street as it is generally the focus of community and civic activity

Water ponding is an issue for many footway areas within the Village. Drainage improvements have been committed to by Council in partnership with the Progress Association.

The progress association is looking at developing a unisex disabled toilet in the Memorial Hall.

Street light maintenance needs improving generally accross the Village.

Doctors visit every fortnight between 9am and 12.30pm

Bland Road

Bimbi Quandialla Road

Talbot Street

Margaret Street

Euroka Street

Quandialla Bowling Club

School Oval

Quandialla Primary School

RFS Recycling Depot

Town Pool

General Store

Old Church

Bland Hotel

Fuel

Police Station

Post Office

Memorial Hall & Open Space

St Marks Church

CWA Lodge

Delta Ag.

Teachers Housing

Old St Brigids Church

Quandialla Grainscorp Silos

Old Kevin Moran Sportsgrounds

Quandialla Community Health Centre

First Street

Second Street

Third Street

Fourth Street

Glasson Street

Joppa Lane

Morangarell Road

10.8 Caragabal

Map A.4 on Page 47 illustrates the findings of community consultation and an audit of the Caragabal Village, with a summary of key issues included as follows

Bicycle lanes
There are no on-road cycling lanes, nor are they warranted. There are not a lot of regular cyclists identified in the area.

Footpaths
The existing footpath network is patchy and does not service all attractors. The lines marked red on the map show parts of the road network that are being readily used by pedestrians that do not have constructed footpaths.

Kerb ramps
There are a number of kerb ramps that need to be provided or need replacing due to poor alignment, grade or condition.

School zones
Schools lack constructed footpaths linking to the CBD.

Road crossings
No major issues noted.

Railway crossings
No major issues were noted.

Lighting
No major issues were noted.

Tactile indicators
Generally absent in the central business district.

Bicycle parking facilities
Provided at all schools. Generally absent in other locations.

Shared path line marking and signage
No formal shared paths have been constructed.

Children cycling
Not as many children ride to school or around town. More paths and skills development may encourage increased cycling.

Walking routes
There are a number of routes regularly used by recreational walkers, particularly early in morning, afternoons and early evenings.

Parklands
Formal footpaths / shared paths are absent in parklands.

Caragabal CBD
No major crossings required. Steps to shops noted as access barriers.

Barriers
No major barriers noted other than lack of footpaths

Obstacles
No street furniture, signs or other structures were observed to present major obstacles or hazards to pedestrians on constructed footpaths.

Trip hazards
Footpath cracking and sections of broken bitumen were observed on some footpaths in the central business district and along some residential streets. Some concrete footpaths finish before the road pavement which creates potential trip hazard areas.

Opportunities
School path improvements.

A.4

SHEET DESCRIPTION
Community Consultation & Audit Map

LOCATION
Caragabal

PROJECT
Weddin Active Transport Plan

CLIENT
Weddin Shire Council

ISSUE
30 Jan 2018

SCALE
1:6,000 @ A3

LEGEND

Infrastructure

- Sealed / Unsealed Road
- Main Road
- Existing Footpath
- Existing gravel path
- Existing Shared Path
- Existing Centre Refuge
- Existing Roundabout
- Existing Railway
- Existing Ped. Crossing
- Existing Bike Racks
- Existing Ped. Refuge
- Consultation Finding
- Existing Kerb & Gutter
- Existing Water Point

Uses

- Community Facility
- Open Space
- CBD
- Aged / Medium Density Housing
- State Forest

The Country Golf Club (The Club) is the most active community group run by "Caragabal Colunteers Inc". The Club is utilised for many purposes, including Active Farmers Meetings, tennis lessons, bowling, events & functions (including birthdays and wakes), special events such as the sheep races, and 18 hole golf during winter and early spring (the course is not maintained during harvest). The Club also has a childrens playground

There is a history of trips and falls along this section of footpath

Weddin Shire Council (in consultation with CPG) has applied for two grants for park and bbq improvements to Caragabal Park

The Park is maintained by Council and local volunteers. Driver revivier has not operated for a number years now.

Toilet

Primitive Camp Ground

Caragabal Public School has 30 students, 2.5 teachers and assistants. The school is going well with an active P&C.

The CPG wish to promote the town through improvements to the Club, campground and public art.

The P&C and CPG want to remove traffic island in front of school as it is a problem for bus movements and farmers with wide vehicles and is no longer a flagged crossing or used as a school crossing.

There are about 8 kids within 1 block of school but still take the bus because of the fear of traffic and no off-road paths.

The school uses the hall for performances.`

100% of students enter and leave the school by bus.

Caragabal Country Golf Club
Cemetery
Wyalong Street
Gibson Street
Railway Street
Stockinbingal Parkes Railway
Caragabal Street
Royal Hotel
Caragabal Memorial Hall
Park / Playground
Park
Old Church
Police Station
Delta Ag
Marsden Street
Caragabal Sports Oval
Anglican Church
Caragabal Public School
50
Mid Western Highway
100
Caragabal - Quandialla Road
Marsden Street
Caragabal Creek
Caragabal Creek
Caragabal Creek
Caragabal Creek

Description of Barriers

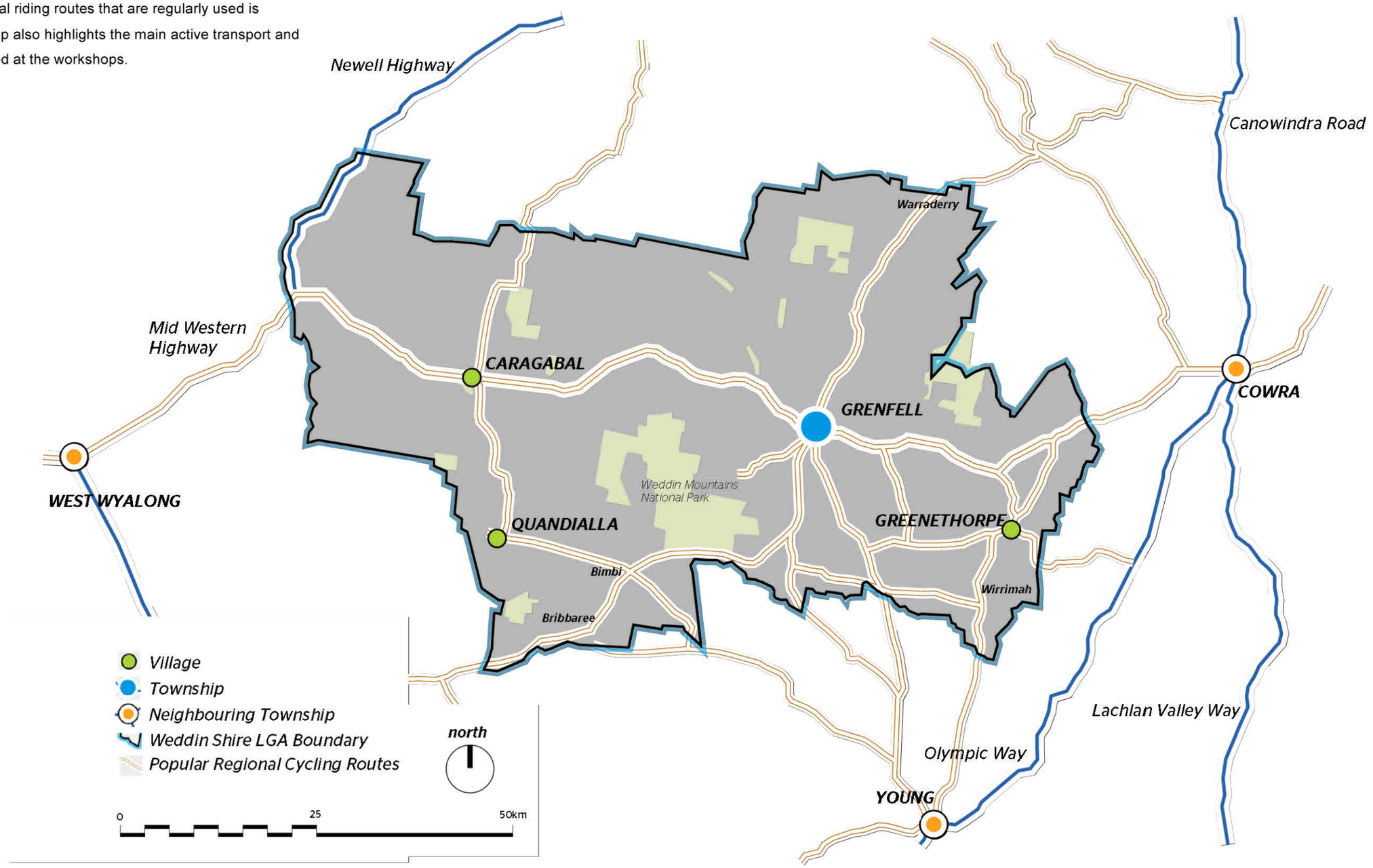
1. *Footpath has history of trips and falls*

GHD
Active Planning Consultants
N

0m 150m 300m

10.9 Regional Cycling Routes and Opportunities

A map showing the regional riding routes that are regularly used is presented below. This map also highlights the main active transport and tourism opportunities raised at the workshops.



11. Proposed Active Transport Plans

The Active Transport Plans are the result of the consideration of a number of variables that have been examined in previous sections. A series of questions were asked and given a ranking score to reflect their importance in pedestrian and bicycle planning outcomes. These questions include:

- Does it fill a gap in the network?
- Was it identified in consultation, surveys, audits or inspections?
- Will it benefit more than one user type? (recreation, commuter, fitness, shopping / short trips, student)
- Will it be suitable for all users? (safe, direct, comfortable, coherent)
- Is it located in a high activity area? (primary activity area, secondary activity generator, primary routes)
- Is it located in a hazard area? (In a black spot, or near miss area, arterial or collector road, school zone, a place visited at night, or place where alcohol is available)
- Will it lead to an appropriate reduction in vehicle speed?
- Does it improve pedestrian / cyclist visibility?
- Does it improve motorist, pedestrian, cyclist safety awareness behaviour?
- Is it the right type of facility / path?
- Would it be supported by experts / professionals in other areas of the country considering similar issues, problems, ideas and innovations?
- Is it practical in the Weddin Shire context?
- Is it cost effective?

B.1

SHEET DESCRIPTION
Active Transport Plan

LOCATION
Grenfell Township & Surrounds

PROJECT
Weddin Active Transport Plan

CLIENT
Weddin Shire Council

ISSUE
12 May 2018

SCALE
1:10,000 @ A3

Description of Projects

1. Proposed South Street footpath extension
2. Proposed Weddin Street footpath extension
3. Proposed Forbes Street pedestrian Refuge installation
4. Proposed Camp Street / Railway Station shared path installation
5. Proposed shared path linking Caravan Park and Rugby Club to Main Street
6. Proposed Lawson Park shared path installation
7. Proposed bike rack installations
8. Proposed crossing blister improvements at St Josephs Primary School
9. Proposed footpath extension at Grenfell Public School
10. Proposed footpath installation from Sullivan Street to Pradys Lane
11. Proposed shoulder widening on Cross Street
12. Proposed Forbes Street shared path
13. Bogalong Street proposed shared path
14. Grenfell Public School proposed footpath link
15. O'Brien Street / Camp Street footpath extension
16. Main Street crossing improvements
17. Bridge widening and footpath installations (multiple locations)

Existing
- Sealed / Unsealed Road
- Main Road
- Existing Footpath
- Existing gravel path
- Existing Shared Path
- Existing Centre Refuge
- Existing Roundabout
- Existing Railway
- Existing Ped. Crossing
- Existing Bike Racks
- Existing Pedestrian Refuge

Proposed
- Proposed Footpath
- Proposed Gravel Path
- Proposed Shared Path
- Proposed Project

Uses
- Community Facility
- Open Space
- CBD
- New Medical Centre
- Aged / Medium Density Housing

GHD · Active Planning Consultants

N

0m 250m 500m

Description of Projects

1. Proposed shared path linking Greenethorpe Public School, Post Office & Greenethorpe Sports Oval
2. Proposed line-marking of Main Road with centreline edgeline and cycling symbols within 50km/hr area.
3. Proposed bicycle racks and regional cycling map guide.
4. Proposed footpath linking Uniting Church to Main Street.
5. Proposed footpath linking Shamrock Pub to Main Street.
6. Proposed health loop / road rules educational shared path
7. Proposed regional cycling guide.

B.2

SHEET DESCRIPTION
Active Transport Plan

LOCATION
Greenethorpe

PROJECT
Weddin Active Transport Plan

CLIENT
Weddin Shire Council

ISSUE
13 Feb 2018

SCALE
1:5,000 @ A3

Existing
- Sealed / Unsealed Road
- Main Road
- Existing Footpath
- Existing gravel path
- Existing Shared Path
- Existing Centre Refuge
- Existing Roundabout
- Existing Railway
- Existing Ped. Crossing
- Existing Bike Racks
- Existing Pedestrian Refuge

Proposed
- Proposed Footpath
- Proposed Gravel Path
- Proposed Shared Path
- Proposed Project

Uses
- Community Facility
- Open Space
- CBD
- Aged / Medium Density Housing

GHD
Active Planning Consultants

N

0m 125m 250m

B.3

SHEET DESCRIPTION
Active Transport Plan

LOCATION
Quandialla

PROJECT
Weddin Active Transport Plan

CLIENT
Weddin Shire Council

ISSUE
30 Jan 2018

SCALE
1:5,000 @ A3

LEGEND

Existing
- Sealed / Unsealed Road
- Main Road
- Existing Footpath
- Existing gravel path
- Existing Shared Path
- Existing Centre Refuge
- Existing Roundabout
- Existing Railway
- Existing Ped. Crossing
- Existing Bike Racks
- Existing Pedestrian Refuge

Proposed
- Proposed Footpath
- Proposed Gravel Path
- Proposed Shared Path
- Proposed Project

Uses
- Community Facility
- Open Space
- CBD
- Aged / Medium Density Housing

Government Dam
Stockinbingal Parkes Railway
Quandialla Showground
(Cricket and primitive camping)
Quandialla Bowling Club
Bland Road
Bimbi Quandialla Road
School Oval
Quandialla Primary School
RFS Recycling Depot
Town Pool
Blamey Park
General Store
Bland Hotel
Fuel
Old Church
Police Station
Post Office
Memorial Hall & Open Space
Delta Ag.
CWA Lodge
St Marks Church
Third Street
Second Street
First Street
Joppa Lane
Margaret Street
Talbot Street
Glasson Street
Teachers Housing
Old St Brigids Church
Quandialla Graincorp Silos
Old Kevin Moran Sportsgrounds
Fourth Street
Euroka Street
Quandialla Community Health Centre
Morangarell Road

Description of Projects

1. *Quandialla Primary School shared path installation - Third Street West*
2. *Quandialla Primary School shared path installation - Third Street East*
3. *Second Street shared path installation - West side*
4. *Second Street shared path installation - East side*
5. *Bimbi Quandilla Road shared path layback improvements*
6. *Blamey Park outdoor exercise equipment installations*

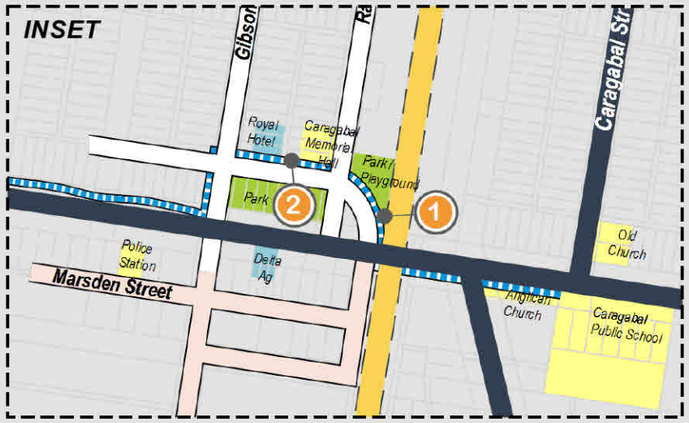
GHD
Active Planning Consultants

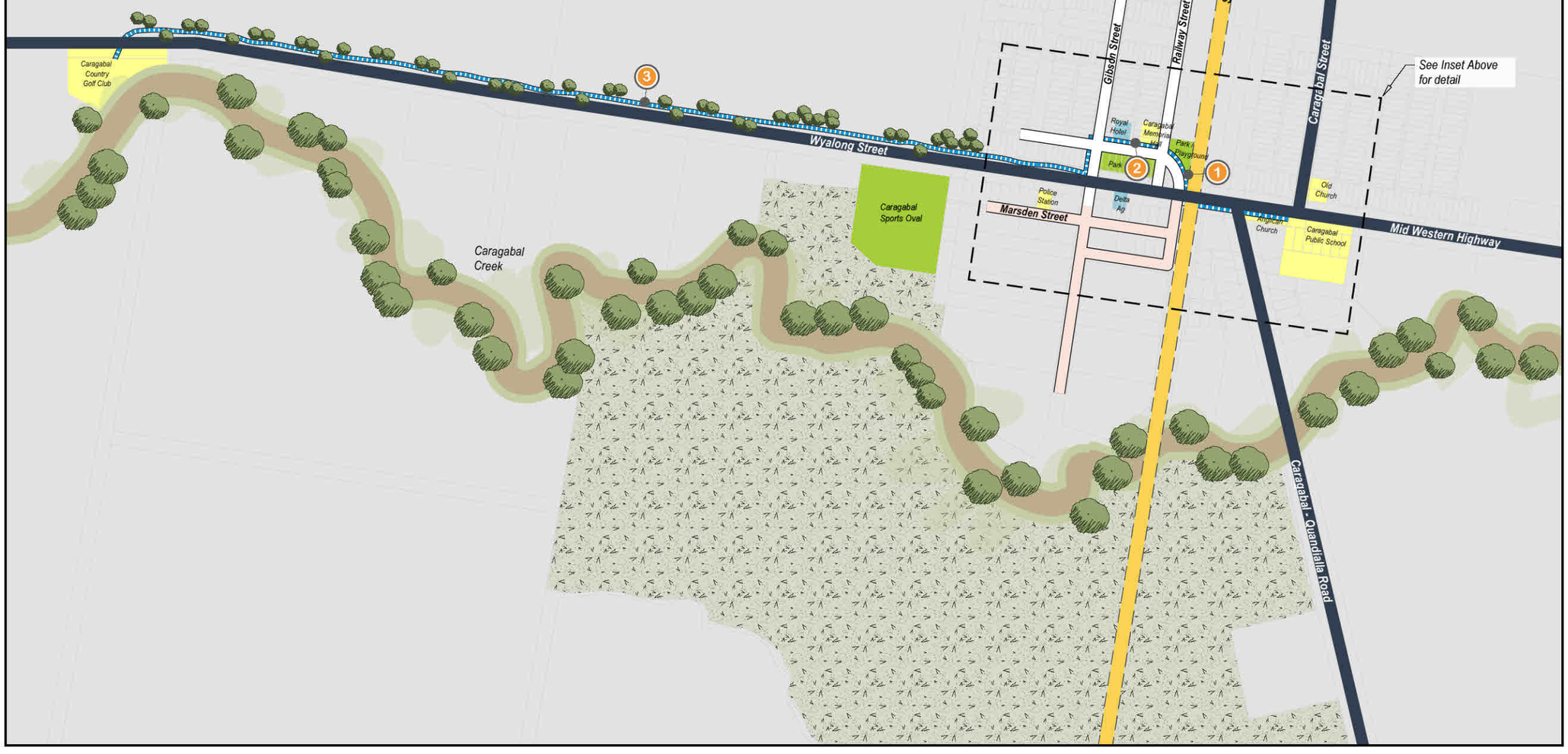
N

0m 125m 250m

Description of Projects

1. *Proposed shared path linking Caragabal Public School to Carabagal Memorial Hall*
2. *Proposed shared path upgrade linking Gibson and Railway Streets.*
3. *Proposed Caragabal Country Club shared path installation*





B.4

SHEET DESCRIPTION
Active Transport Plan

LOCATION
Caragabal

PROJECT
Weddin Active Transport Plan

CLIENT
Weddin Shire Council

ISSUE
30 Jan 2018

SCALE
1:8,000 @ A3

LEGEND

Existing
- Sealed / Unsealed Road
- Main Road
- Existing Footpath
- Existing gravel path
- Existing Shared Path
- Existing Centre Refuge
- Existing Roundabout
- Existing Railway
- Existing Ped. Crossing
- Existing Bike Racks
- Existing Pedestrian Refuge

Proposed
- Proposed Footpath
- Proposed Gravel Path
- Proposed Shared Path
- Proposed Project

Uses
- Community Facility
- Open Space
- CBD
- Aged / Medium Density Housing
- State Forest

GHD

Active PLANNING CONSULTANTS

N

0m 150m 300m

12. Maintaining the active transport network

The development of a comprehensive maintenance program which identifies key tasks and frequency of works is an important part of a quality network.

Technical advice on a hazard reporting system templates and pathway safety checklists is provided in:

- Austroads Guide to Road Design Part 6A: Pedestrians and Cyclists Paths, 2009.
- The NSW RTA Bicycle Guidelines, 2005.

13. Supporting a culture of active travel

Even a locally tailored evidence-based plan of action is not a guarantee of lasting results once completed and implemented. According to the WHO Pedestrian Safety Manual 2013, safe road-user behaviour and increasing user support depends on a number of factors, including:

- Knowledge and skills
- Leaders
- Community support
- Perception of vulnerability and risk
- Social acceptance to norms and change models
- Engineering measures
- Law enforcement

As this is a strategic document, detailed behaviour-change interventions and road safety programs have not been considered comprehensively. These issues need to be addressed over a longer period and with greater community input.

The following community awareness, education and activation strategies are suggested for further consideration by Weddin Shire Council and the wider local community over the life of the Active Transport Plan.

13.1 Road safety, education and training

Road safety education is an adjunct to other measures, rather than a stand-alone intervention. For example, road safety educational programmes may include:

Raising awareness -This can include informing drivers about care, prudence, kindness, consideration, speed, pedestrian and cycling right-of-the way and traffic rules.

13.2 School-based education

Such programmes help children acquire knowledge and skills for pedestrian safety. While these are important life skills and all children should be taught the rules of the road, school-based traffic education will only result in reduced pedestrian collisions when combined with other interventions *(WHO Pedestrian Safety Manual, 2013)*.

The RMS Road Safety Officer Program is one of the chief instruments of pedestrian policy and programs at a local level. The staff in these positions are the link between local governments and the RMS.

13.3 Media campaigns

These can be used to inform the public about pedestrian and cyclist safety legislation, risk factors, impact of collisions and solutions available.

Targeted and planned media and social marketing campaigns that inform the public about pedestrian and bike safety laws and risk factors are necessary to improve driver, pedestrian and cyclist behaviour and enhance understanding of traffic issues such as traffic signs, road rules and right-of-way for all road users. Information alone is rarely sufficient to bring about changes in road user behavior.

Raising the profile of issues by an RSO and community leaders is also suggested.

13.4 Traffic law enforcement

Traffic laws affecting pedestrian and cyclist safety are largely aimed at controlling behaviour at intersections, crossings and other locations. Driver, pedestrian and cyclist compliance with other laws relating to speed, drink driving, jay walking, riding on footpaths, illegal parking in disabled parking spaces and bus zones, and aggressive behaviour are also important.

The Amy Gillett Foundation advocates a 1 metre clearance between motor vehicles and cyclists. This program is supported by the NSW Government under the ‘it’s a two way street’ safety awareness program.

In addition to enforcement of speed limits by the police, there are also physical measures, such as traffic calming that can be implemented to assist with law enforcement.

14. Proposed Improvements Analysis

The facilities and treatments required to create a cohesive, safe, direct, attractive network forms the basis of the proposed infrastructure improvements.

The identified locations for pedestrian and cycle improvements are presented in this section. These projects have been development through an interactive process between Weddin Shire Council and all other stakeholders.

The recommended interventions are the result of the consideration of a number of variables that have been examined in previous sections. A series of questions were asked and given a ranking score to reflect their importance in pedestrian and bicycle planning outcomes. These questions include:

- Does it fill a gap in the network?
- Was it identified in consultation, surveys, audits or inspections?
- Will it benefit more than one user type? (recreation, commuter, fitness, shopping / short trips, student)
- Will it be suitable for all users? (safe, direct, comfortable, coherent)
- Is it located in a high activity area? (primary activity area, secondary activity generator, primary routes)
- Is it located in a hazard area? (In a black spot, or near miss area, arterial or collector road, school zone, a place visited at night, or place where alcohol is available)
- Will it lead to an appropriate reduction in vehicle speed?
- Does it improve pedestrian / cyclist visibility?
- Does it improve motorist, pedestrian, cyclist safety awareness behaviour?
- Is it the right type of facility / path?
- Would it be supported by experts / professionals in other areas of the country considering similar issues, problems, ideas and innovations?
- Is it practical in the Weddin Shire context?
- Is it cost effective?

Given the limited resources available to Weddin Shire Council to undertake improvements during the life of the Weddin Shire Active Travel Plan, a score higher than 35 is a high priority, that may be able to be achieved.

The table below shows the list of projects identified for Grenfell, Greenethorpe, Caragabal and Quandialla and scores each project based on the ranking questions above.

Project No.	Project Description	Does it fill a Network Gap?	Has it been identified in Consultation?	Has it been identified in Audits?	Are there User Type Benefits?	Is it suitable for all users?	Is It In A Primary Activity Zone?	Is it in a Secondary Activity Zone?	Is it on a Primary Pedestrian or cyclists Route?	Is it in or near a Hazard Area?	Will it reduce Speed?	Will it separate pedestrian and cyclists from vehicles?	Will it increase pedestrian and cyclist Visibility?	Will it increase Safety Awareness?	Would it be peer supported?	Is it practical?	Is it cost effective?	Total
Grenfell																		
Grenfell 1	Proposed South Street footpath extension	9	9	9	9	7	8	8	9	9	6	9	7	8	9	9	9	134
Grenfell 2	Proposed Weddin Street shared path extension	9	9	9	9	8	7	8	8	8	7	9	8	7	8	9	8	131
Grenfell 3	Proposed Forbes Street pedestrian refuge installation	8	8	9	8	8	6	8	6	9	9	9	8	9	9	9	7	130
Grenfell 4	Proposed Camp Street / Railway Station shared path installation	7	8	8	7	9	6	7	7	7	7	9	8	7	7	8	8	120
Grenfell 5	Proposed shared path linking Caravan Park and Rugby Club to Main Street	8	8	9	7	8	7	7	7	8	6	8	7	8	8	7	6	119
Grenfell 6	Proposed Lawson Park shared path installation	7	8	7	7	8	6	6	7	7	6	8	7	7	7	8	7	113
Grenfell 7	Proposed bike rack installations	4	8	8	8	7	8	8	8	8	5	8	8	6	7	8	8	117
Grenfell 8	Proposed crossing blister improvements at St Josephs Primary School	9	7	7	7	8	8	7	7	8	8	8	7	8	8	8	8	123
Grenfell 9	Proposed footpath extension at Grenfell Public School	7	7	8	7	8	8	7	6	8	6	8	8	7	8	8	8	119
Grenfell 10	Proposed footpath installation from Sullivan Street to Pradys Lane	8	7	8	7	8	6	7	7	7	6	8	8	7	7	7	7	115
Grenfell 11	Proposed shoulder widening on Cross Street	8	7	7	7	7	6	7	6	6	6	7	8	7	7	7	7	110

Project No.	Project Description	Does it fill a Network Gap?	Has it been identified in Consultation?	Has it been identified in Audits?	Are there User Type Benefits?	Is it suitable for all users?	Is It In A Primary Activity Zone?	Is it in a Secondary Activity Zone?	Is it on a Primary Pedestrian or cyclists Route?	Is it in or near a Hazard Area?	Will it reduce Speed?	Will it separate pedestrian and cyclists from vehicles?	Will it increase pedestrian and cyclist Visibility?	Will it increase Safety Awareness?	Would it be peer supported?	Is it practical?	Is it cost effective?	Total
Grenfell 12	Proposed Forbes Street shared path	8	6	7	7	8	6	7	6	7	7	8	8	8	7	7	7	114
Grenfell 13	Bogalong Street proposed shared path	7	7	7	7	8	6	7	7	7	7	8	8	8	7	7	7	115
Grenfell 14	Grenfell Public School Footpath link	7	7	6	7	7	8	7	7	8	7	8	8	8	7	7	7	116
Grenfell 15	O'Brien Street / Camp Street footpath extension	7	7	7	7	8	6	6	6	7	8	8	8	8	7	7	7	114
Grenfell 16	Main Street pedestrian crossing improvements	8	8	8	7	8	8	8	8	8	8	7	7	8	8	7	7	123
Grenfell 17	Bridge Widening and Footpath Installation	7	7	6	7	7	7	7	7	8	7	8	8	8	7	7	6	114
Greenethorpe																		
Greenethorpe 1	Proposed shared path linking Greenethorpe Public School, Post Office & Greenethorpe Sports Oval	9	9	9	8	8	9	8	8	8	6	8	7	8	9	8	8	130
Greenethorpe 2	Proposed line-marking of Main Road with centreline edge line and cycling symbols within 50km/hr area.	7	8	7	7	6	9	7	8	8	8	7	7	8	8	8	8	121
Greenethorpe 3	Proposed bicycle racks and regional cycling map guide.	7	8	8	7	6	7	7	7	6	5	6	5	7	8	8	8	110
Greenethorpe 4	Proposed footpath linking Uniting Church to Main Street.	7	7	7	6	6	6	6	6	6	6	7	6	6	6	7	7	102
Greenethorpe 5	Proposed footpath linking Shamrock Pub to Main Street.	7	7	7	6	6	6	6	6	6	6	7	6	6	6	7	7	102

Project No.	Project Description	Does it fill a Network Gap?	Has it been identified in Consultation?	Has it been identified in Audits?	Are there User Type Benefits?	Is it suitable for all users?	Is It In A Primary Activity Zone?	Is it in a Secondary Activity Zone?	Is it on a Primary Pedestrian or cyclists Route?	Is it in or near a Hazard Area?	Will it reduce Speed?	Will it separate pedestrian and cyclists from vehicles?	Will it increase pedestrian and cyclist Visibility?	Will it increase Safety Awareness?	Would it be peer supported?	Is it practical?	Is it cost effective?	Total
Greenethorpe 6	Proposed health loop / road rules educational shared path	4	7	6	7	6	5	5	5	5	4	6	5	7	7	6	6	91
Greenethorpe 7	Proposed regional cycling guide.	4	8	8	8	7	5	5	5	7	5	5	7	7	7	8	8	104
Caragabal																		
Caragabal 1	Proposed shared path linking Caragabal Public School to Caragabal Memorial Hall	9	9	9	9	8	7	8	9	8	5	9	8	9	9	9	8	133
Caragabal 2	Proposed shared path upgrade linking Gibson and Railway Streets.	7	7	7	7	7	8	6	7	7	5	7	5	5	6	6	6	103
Caragabal 3	Proposed Caragabal Country Club shared path installation	6	7	7	6	7	5	6	6	5	5	8	8	7	7	7	5	102
Quandialla 1	Quandialla Primary School shared path installation - Third Street West	8	8	8	8	8	8	7	7	8	5	8	7	8	8	8	8	122
Quandialla 2	Quandialla Primary School shared path installation - Third Street East	8	8	7	8	8	8	7	7	8	5	8	7	7	7	7	6	116
Quandialla 3	Second Street shared path installation - West side	8	8	8	8	7	8	7	8	7	5	7	7	7	8	7	7	117
Quandialla 4	Second Street shared path installation - East side	8	8	8	8	7	8	7	8	7	5	7	7	7	8	7	7	117
Quandialla 5	Bimbi Quandialla Road shared path layback improvements	8	7	7	7	8	6	7	7	7	5	7	5	5	6	7	6	105

Project No.	Project Description	Does it fill a Network Gap?	Has it been identified in Consultation?	Has it been identified in Audits?	Are there User Type Benefits?	Is it suitable for all users?	Is It In A Primary Activity Zone?	Is it in a Secondary Activity Zone?	Is it on a Primary Pedestrian or cyclists Route?	Is it in or near a Hazard Area?	Will it reduce Speed?	Will it separate pedestrian and cyclists from vehicles?	Will it increase pedestrian and cyclist Visibility?	Will it increase Safety Awareness?	Would it be peer supported?	Is it practical?	Is it cost effective?	Total
Quandialla 6	Blamey Park outdoor exercise equipment installations	3	8	7	8	7	7	6	4	6	4	4	4	4	7	7	8	94

15. Project Plans

This section includes Project Plans for the top priority improvements to the Active Transport Network in Grenfell, Greenethorpe, Caragabal and Quandialla.

The project plans include the following details:

- Project description
- Specifications for each improvement.
- Estimated costs for each improvements.
- 3D concept illustration.

GRENFELL PROJECT NO. 1

Project Description

Proposed South Street footpath extension

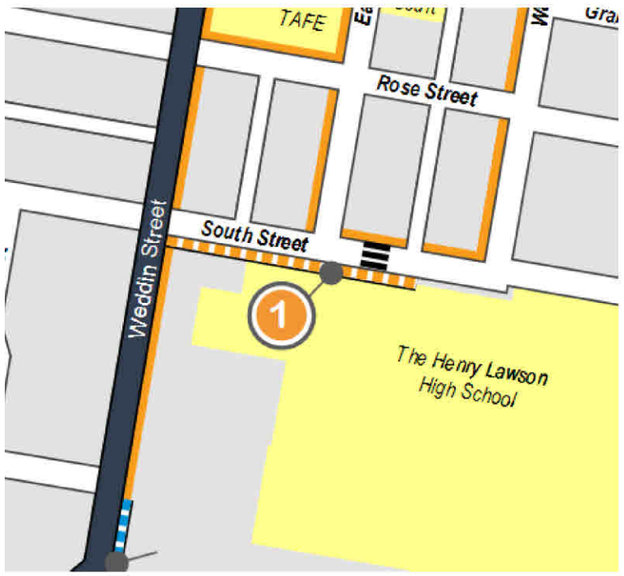
Project Specifications

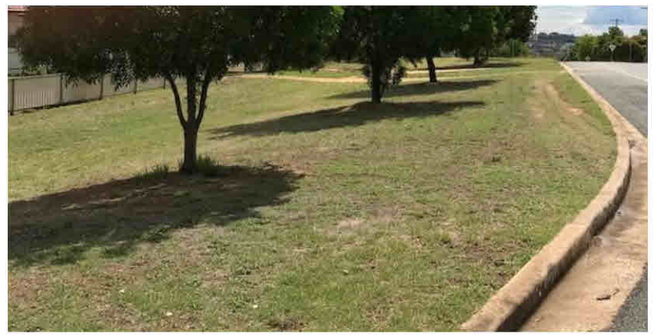
200m x 1.2m wide concrete footpath

Estimated Cost

$36,800

Active Travel Plan Map Extract





GRENFELL PROJECT NO. 2

Project Description

Proposed Weddin Street shared path extension

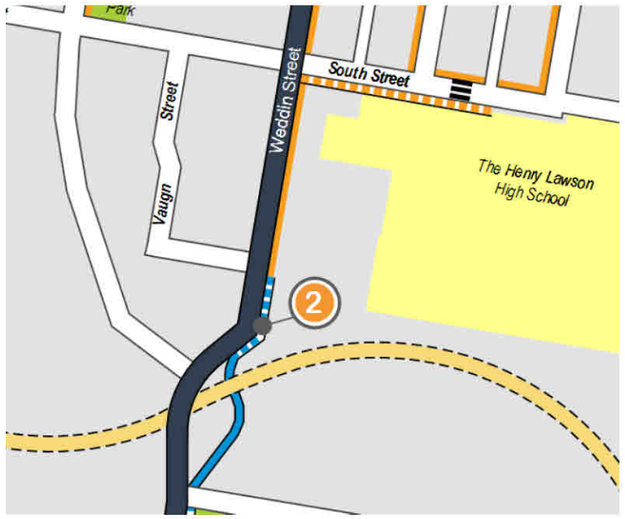
Project Specifications

80m x 2.5m concrete shared path

Estimated Cost

$30,500

Active Travel Plan Map Extract



GRENFELL PROJECT NO. 3

Project Description

Proposed Forbes Street pedestrian refuge installation

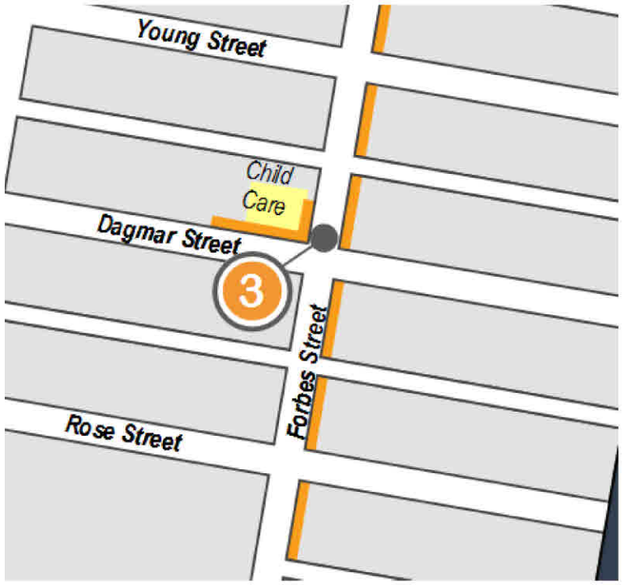
Project Specifications

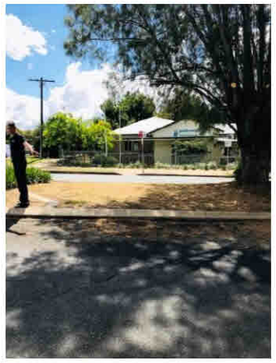
1 x pedestrian refuge island
2 x concrete blisters

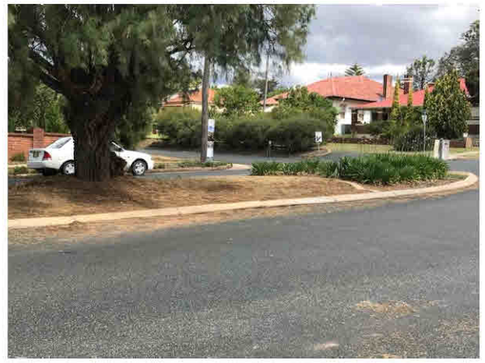
Estimated Cost

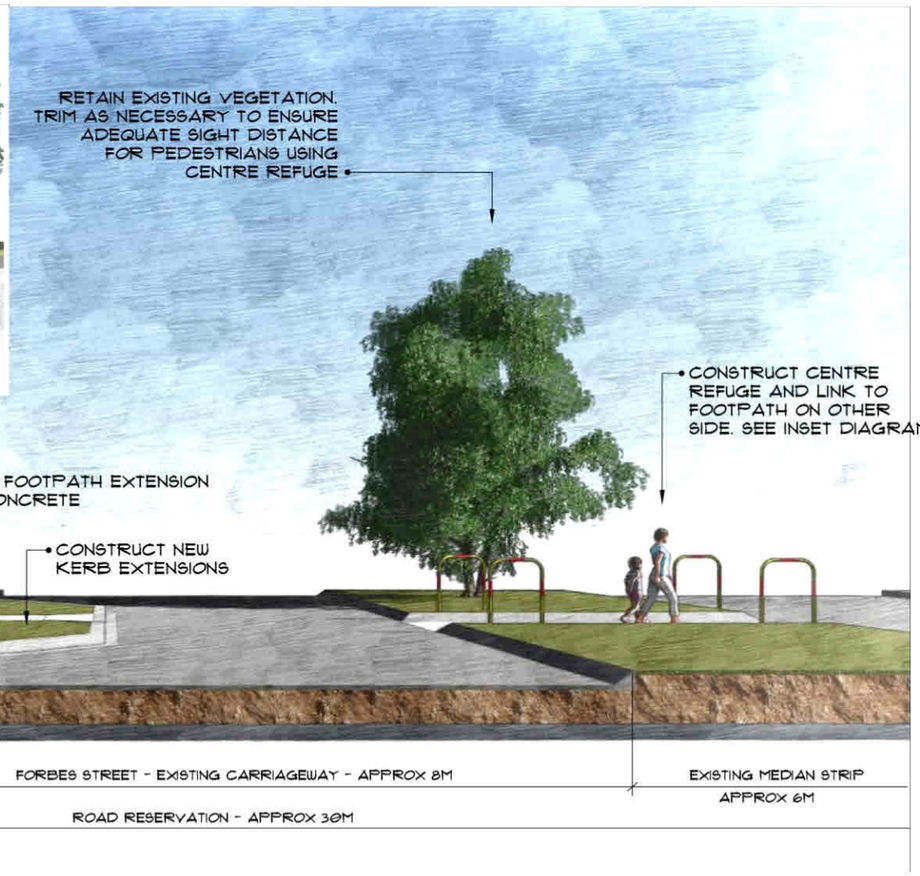
$29,900

Active Travel Plan Map Extract









GRENFELL PROJECT NO. 4

Project Description

Proposed Camp Street / Railway Station shared path installation

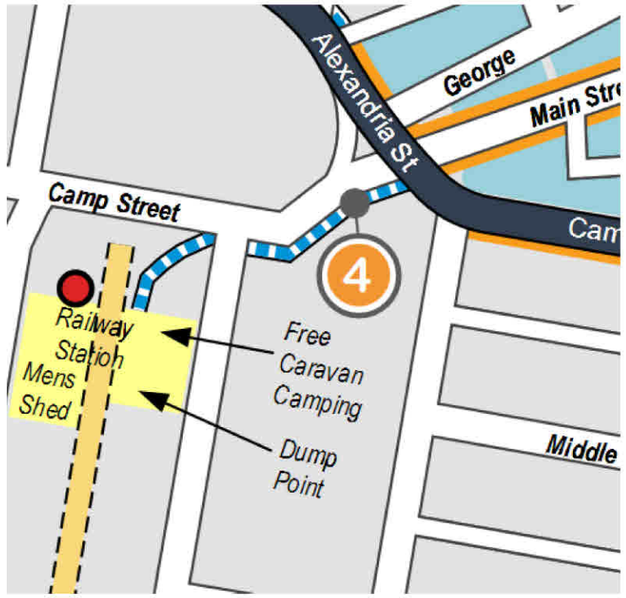
Project Specifications

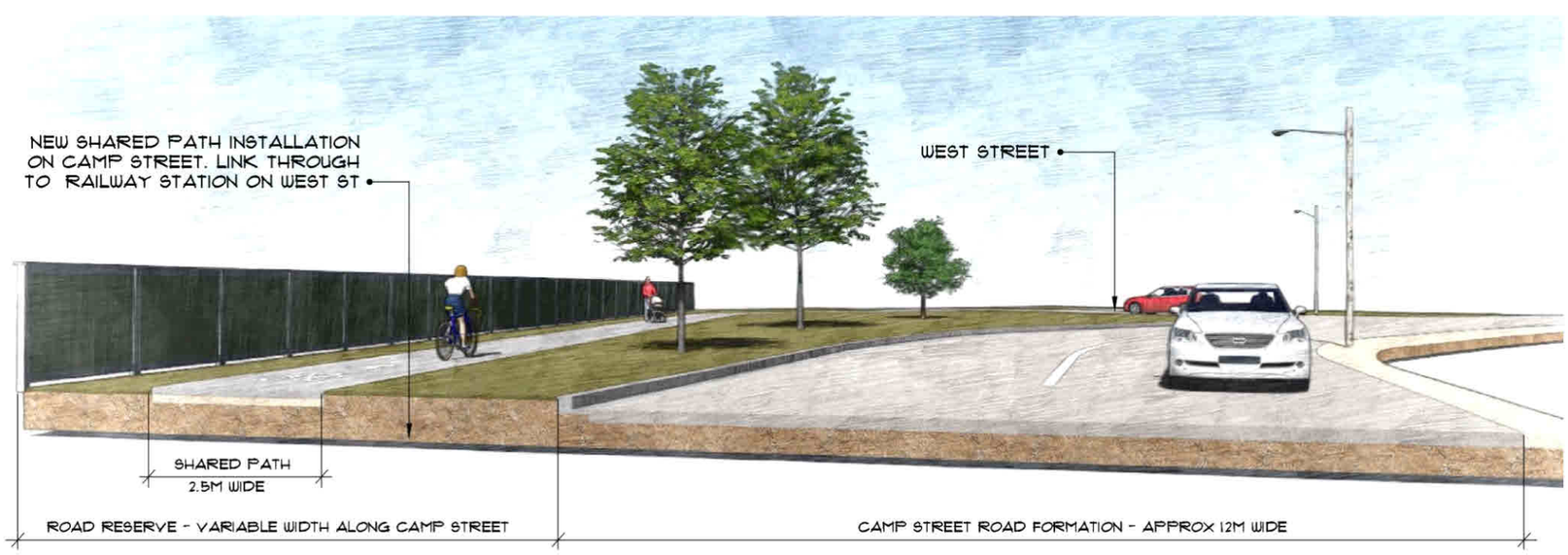
185m x 2.5m wide concrete shared path
3 x kerb ramps

Estimated Cost

$81,000

Active Travel Plan Map Extract





GRENFELL PROJECT NO. 5

Project Description

Proposed shared path linking Caravan Park and Rugby Club to Main Street

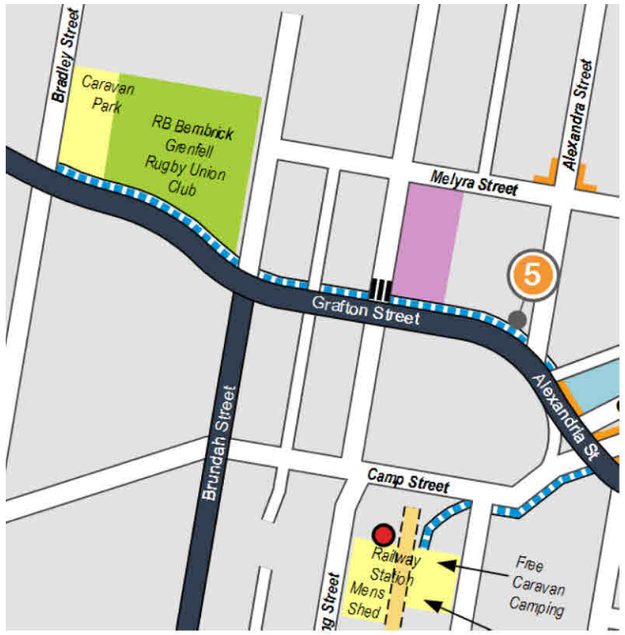
Project Specifications

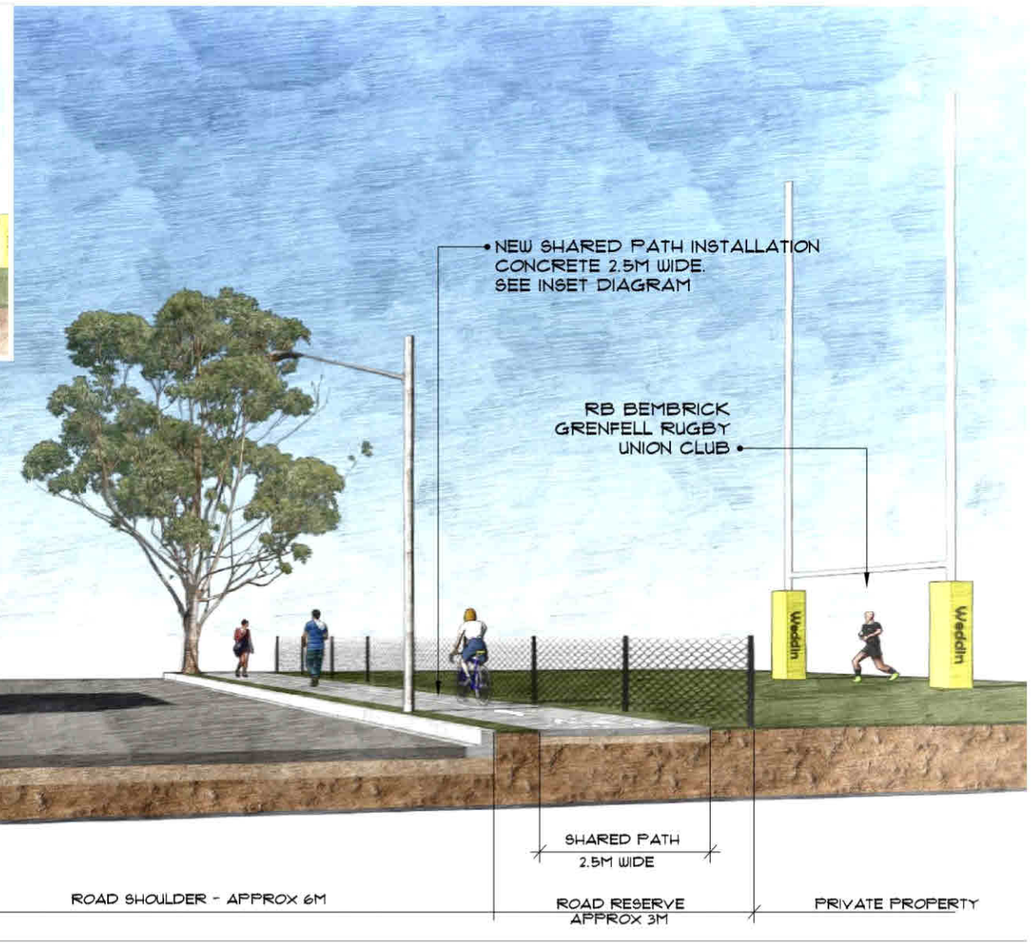
500m x 2.5m wide concrete shared path
6 x kerb ramps

Estimated Cost

$210,500

Active Travel Plan Map Extract





GRENFELL PROJECT NO. 6

Project Description

Proposed Lawson Park shared path installation

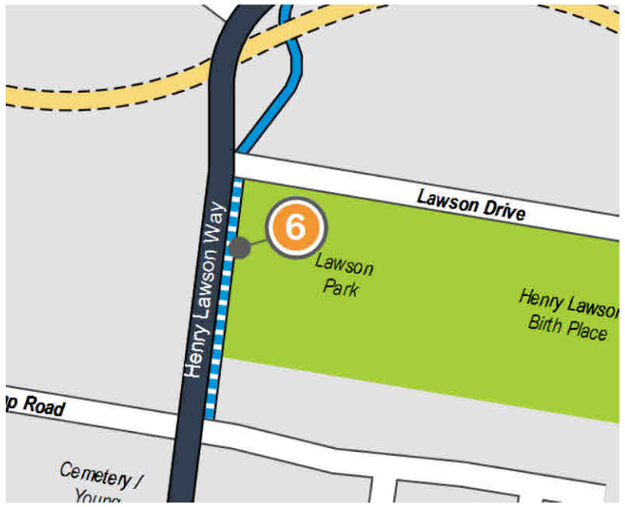
Project Specifications

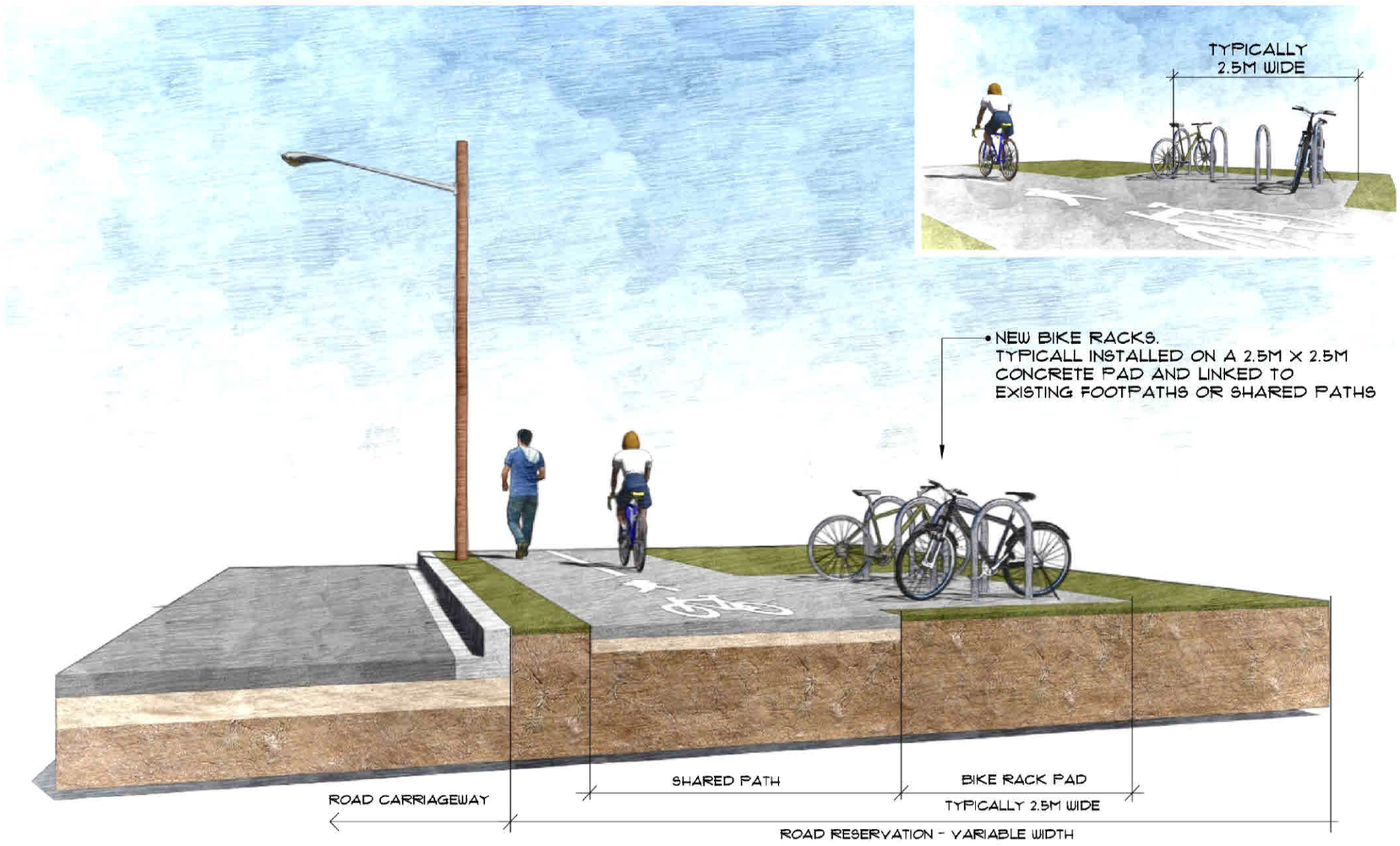
215m x 2.5m wide concrete shared path

Estimated Cost

$82,000

Active Travel Plan Map Extract





GRENFELL PROJECT NO. 7

(See project No. 15 on Active Travel Map)

Project Description

O'Brien Street / Camp Street footpath extension

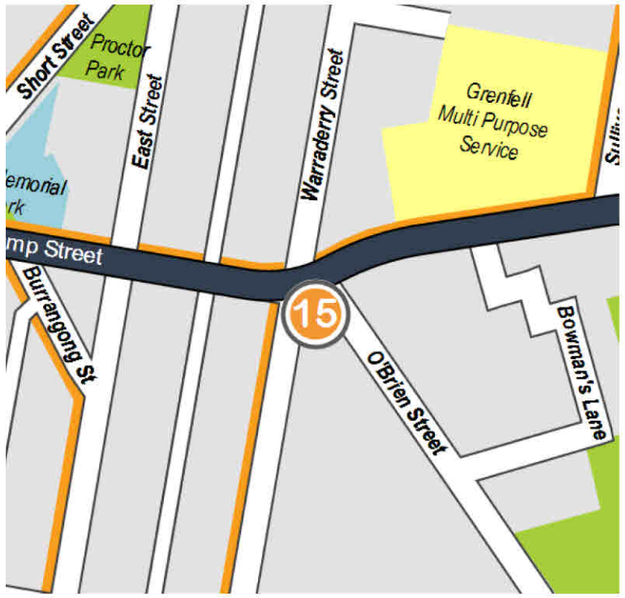
Project Specifications

30m x 1.2m concrete footpath
3 x new kerb ramp installations

Estimated Cost

$15,870

Active Travel Plan Map Extract



GRENFELL PROJECT NO. 8

(See project No. 16 on Active Travel Map)

Project Description

Main Street pedestrian crossing improvements.

Project Specifications

2 x kerb extensions
1 x raised pedestrian crossing
Landscaping installation

Estimated Cost

$33,350

Active Travel Plan Map Extract

GRENFELL PROJECT NO. 9

(See project No. 17 on Active Travel Map)

Project Description

Bridge Widening and footpath installations (multiple locations).

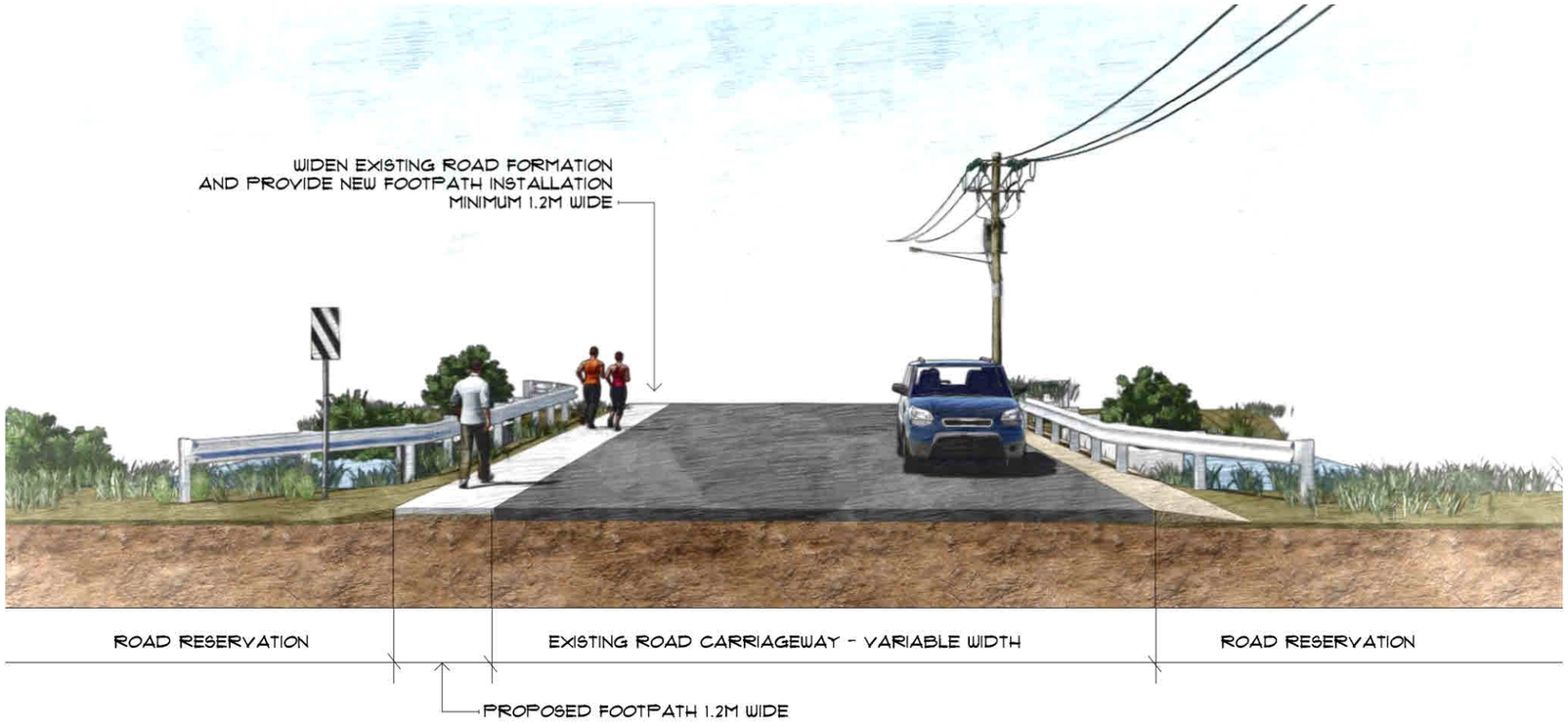
Project Specifications

1 x Pedestrian Bridge

Estimated Cost

$115,000

Active Travel Plan Map Extract



CARAGABAL PROJECT NO. 1

Project Description

Proposed shared path linking Caragabal Public School to Caragabal Memorial Hall.

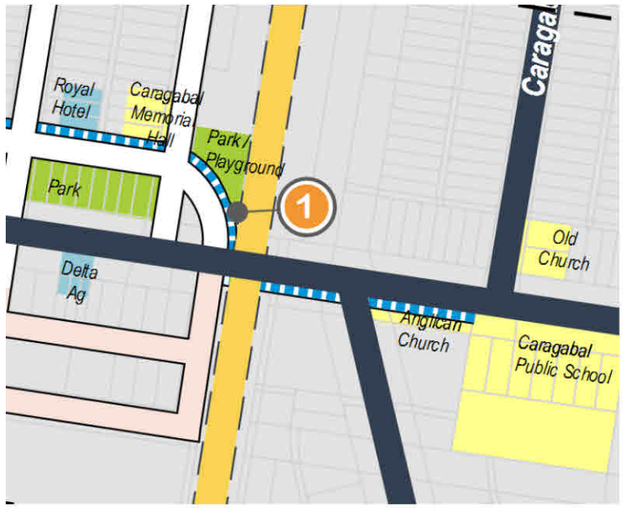
Project Specifications

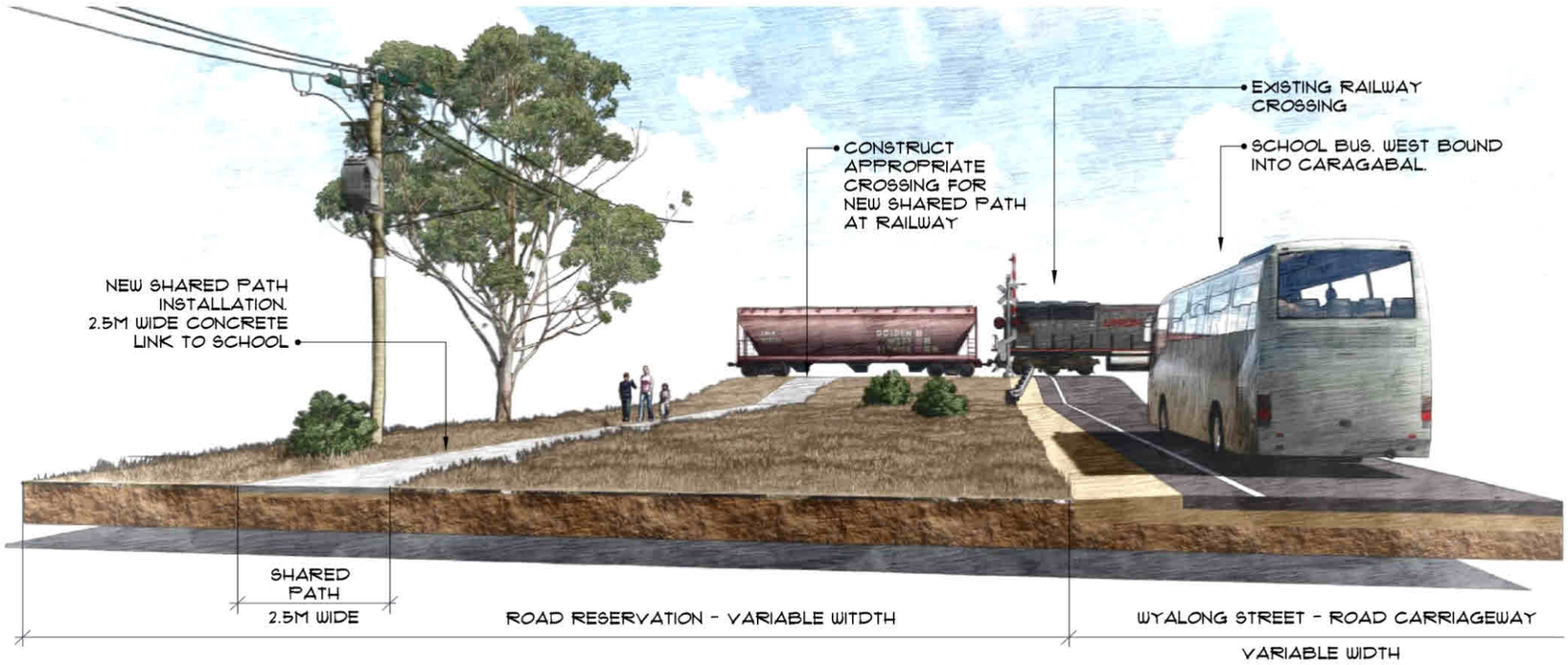
225m x 2.5m wide concrete shared path
2 x kerb ramps
1 x box culvert (600mm x 300mm)

Estimated Cost

$96,000

Active Travel Plan Map Extract





CARAGABAL PROJECT NO. 2

Project Description

Proposed shared path upgrade linking Gibson and Railway Streets.

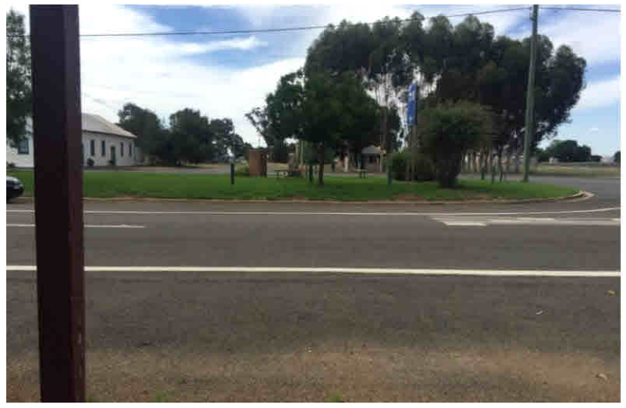
Project Specifications

115m x 2.5m wide concrete shared path

Estimated Cost

$43,643

Active Travel Plan Map Extract



CARAGABAL PROJECT NO. 3

Project Description

Proposed Caragabal Country Club shared path installation

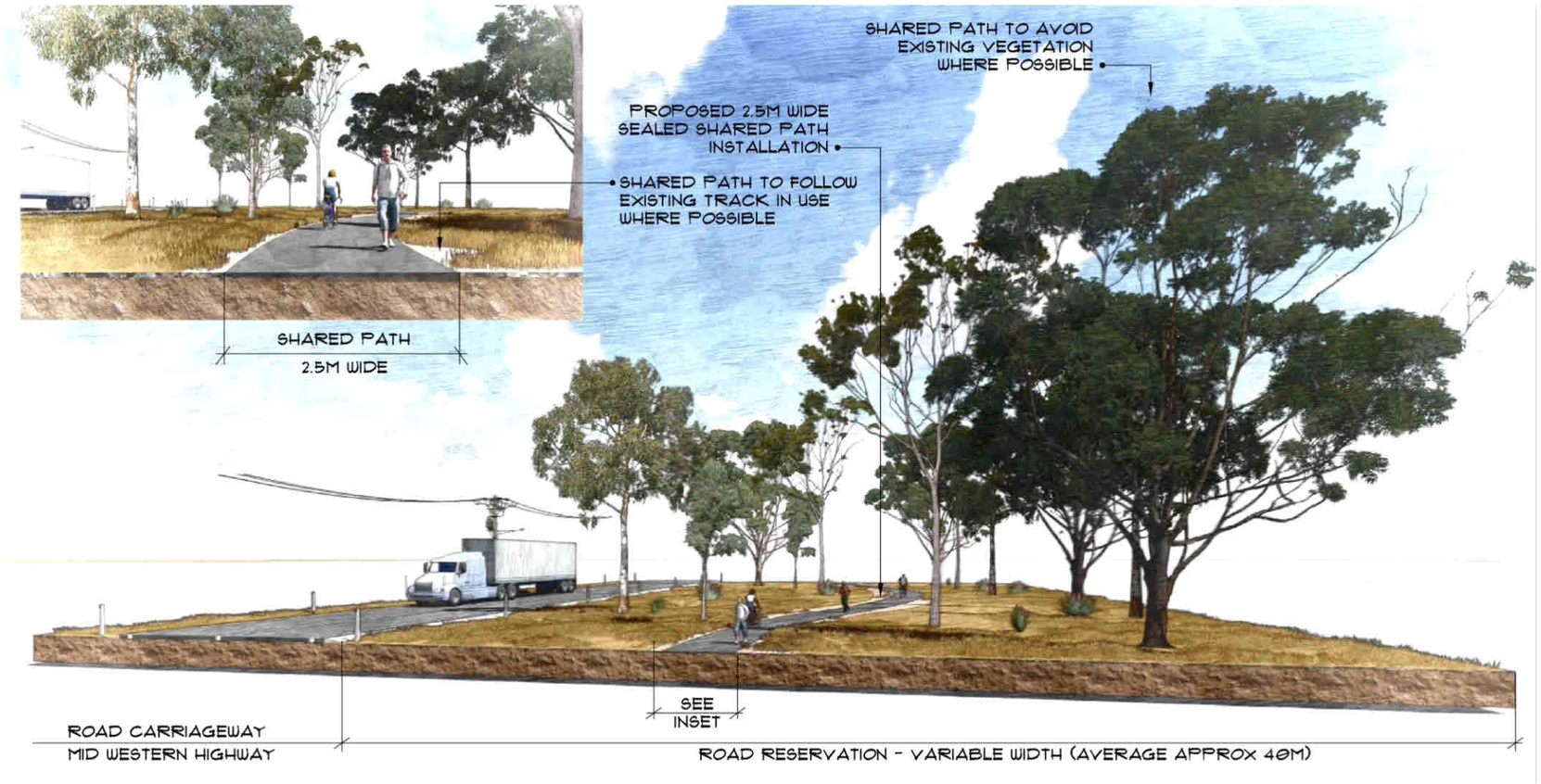
Project Specifications

2100m x 2.5m wide bitumen sealed shared path

Estimated Cost

$250,000

Active Travel Plan Map Extract



QUANDIALLA PROJECT NO. 1

Project Description

Quandialla Primary School shared path installation – Third Street West

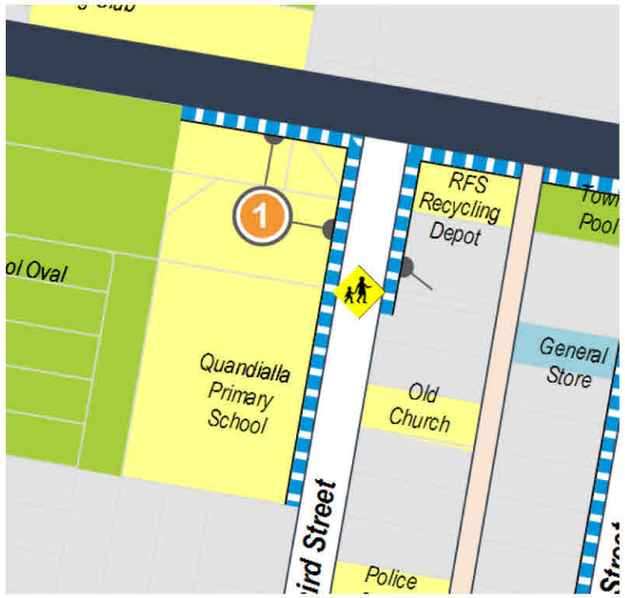
Project Specifications

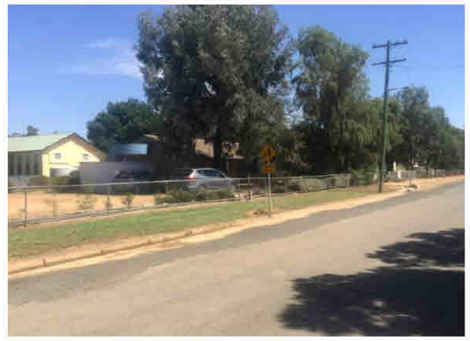
225m x 2.5m wide concrete shared path

Estimated Cost

$85,500

Active Travel Plan Map Extract





QUANDIALLA PROJECT NO. 4

Project Description

Second Street shared path installation – East side

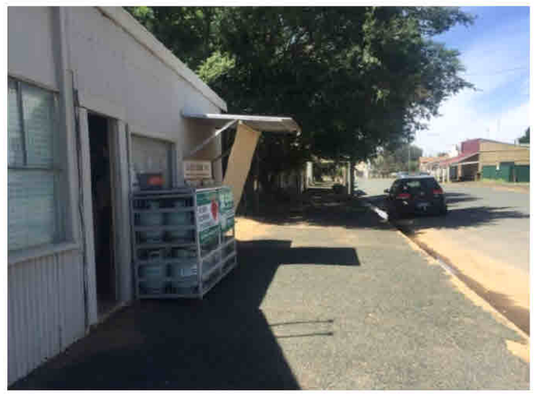
Project Specifications

245m x 2.5m wide concrete shared path

Estimated Cost

$93,000

Active Travel Plan Map Extract



QUANDIALLA PROJECT NO. 6

Project Description

Blamey Park outdoor exercise equipment installations

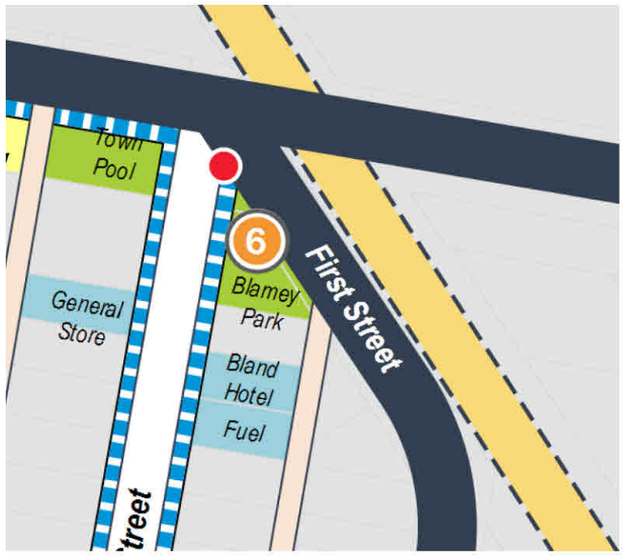
Project Specifications

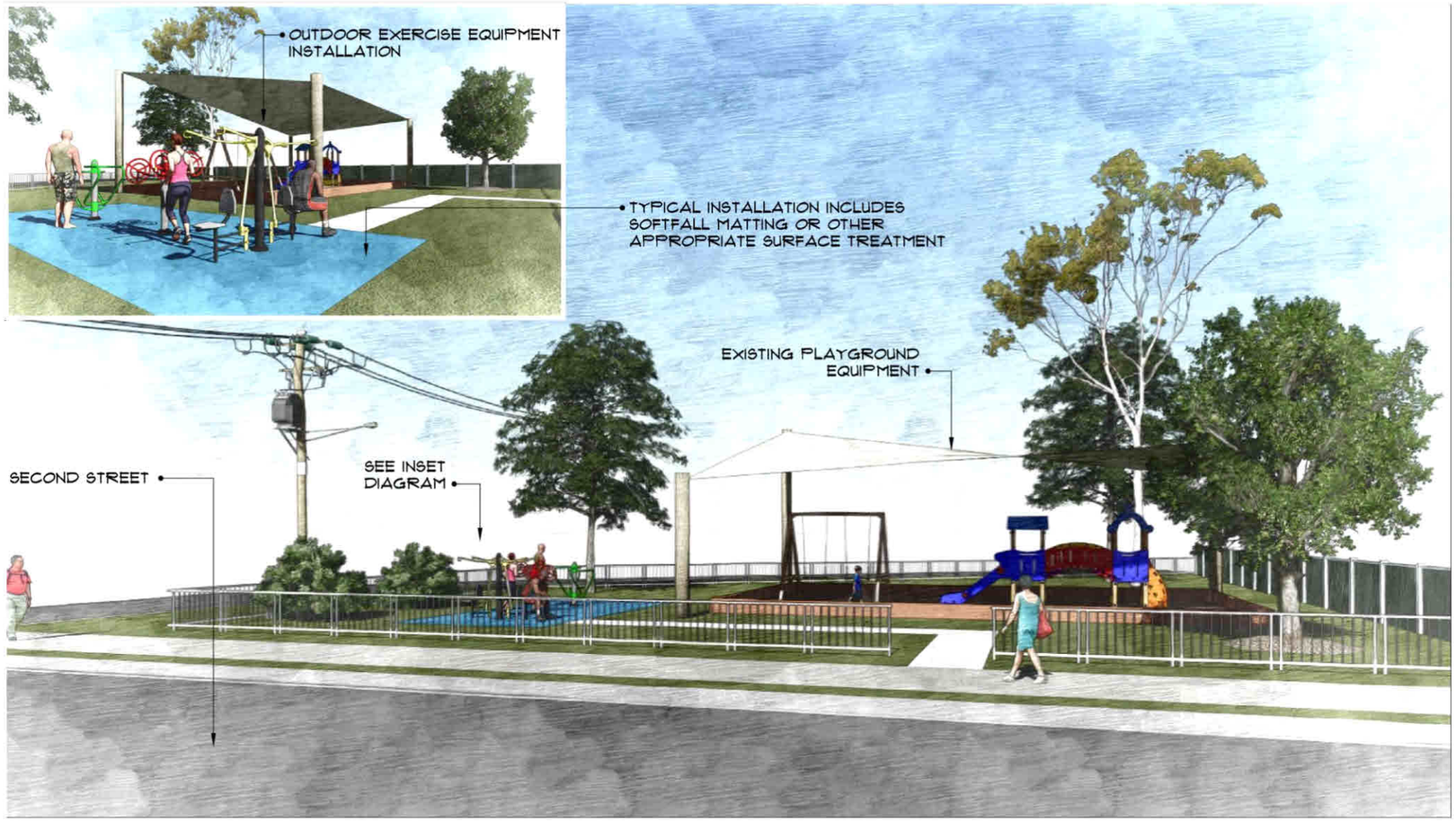
1 x outdoor exercise equipment unit

Estimated Cost

$40,250

Active Travel Plan Map Extract





GREENETHORPE PROJECT NO. 1

Project Description

Proposed shared path linking Greenethorpe Public School, Post Office and Greenethorpe Sports Oval

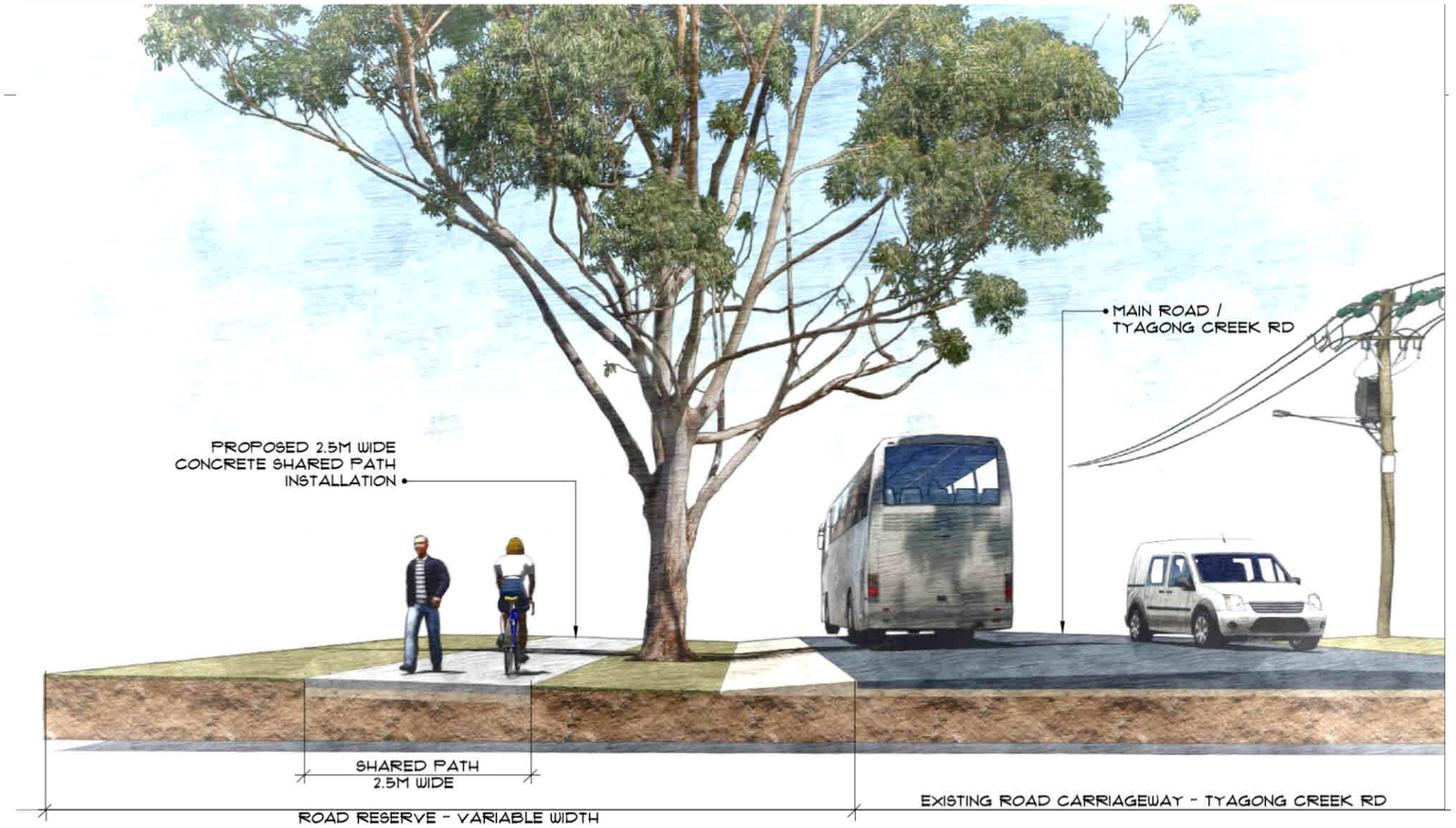
Project Specifications

450m x 2.5m wide concrete shared path
5 x kerb ramps
1 x box culvert (600mm x 300m)

Estimated Cost

$191,475

Active Travel Plan Map Extract



GREENETHORPE PROJECT NO. 2

Project Description

Proposed line-marking of Main Road with centreline, edge-line and cycling symbols within 50km/hour area.

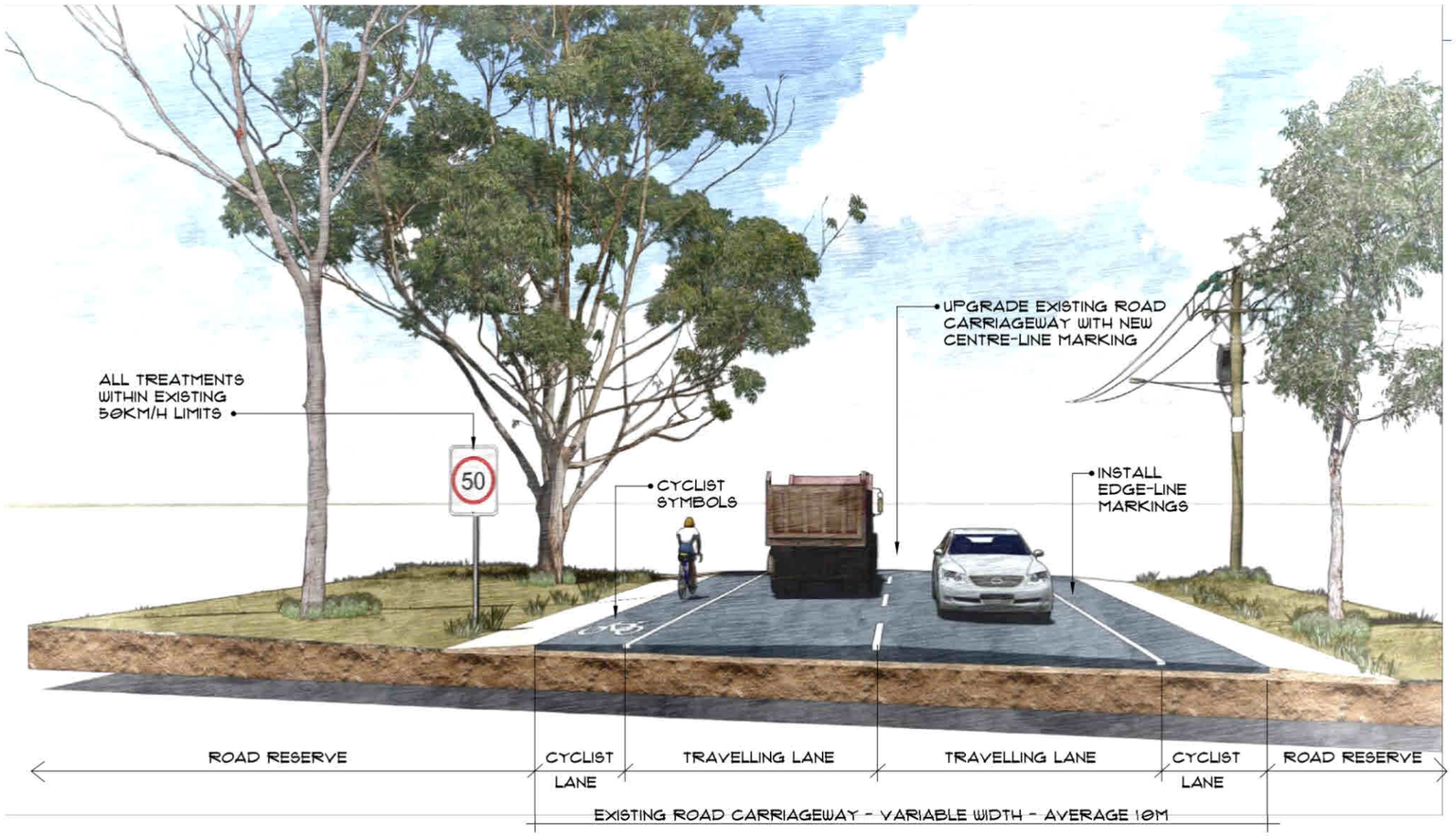
Project Specifications

3200m x line marking

Estimated Cost

$14,720

Active Travel Plan Map Extract



GREENETHORPE PROJECT NO. 3

Project Description

Proposed bicycle racks and regional cycling map guide

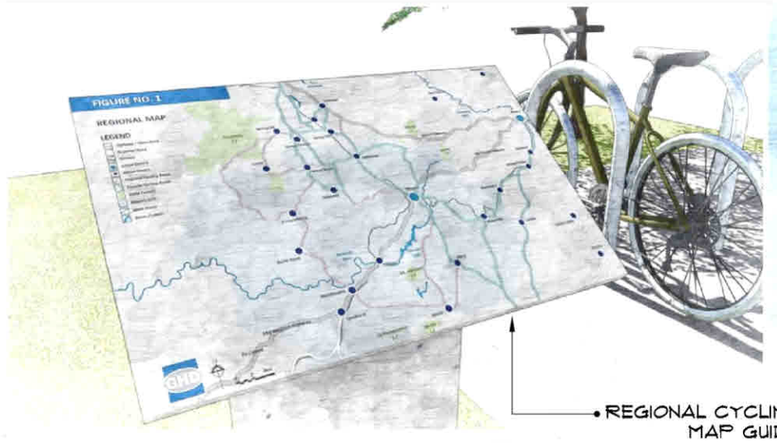
Project Specifications

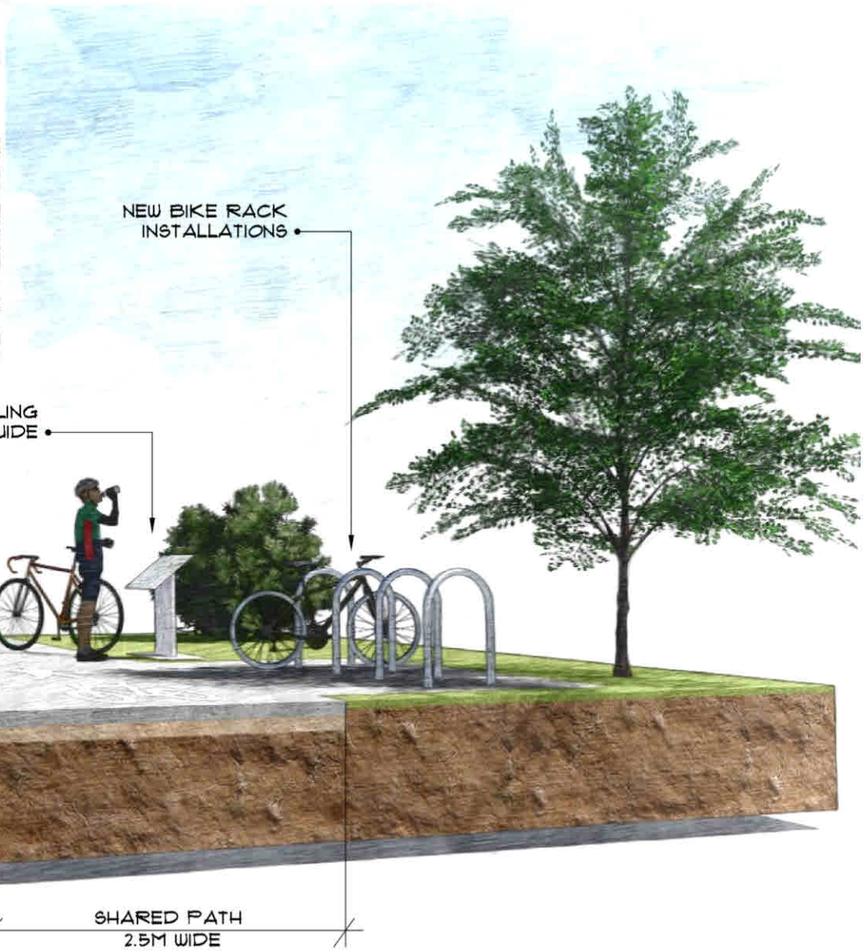
2 x bike racks
1 x map installation

Estimated Cost

$5,750

Active Travel Plan Map Extract





Appendix 1

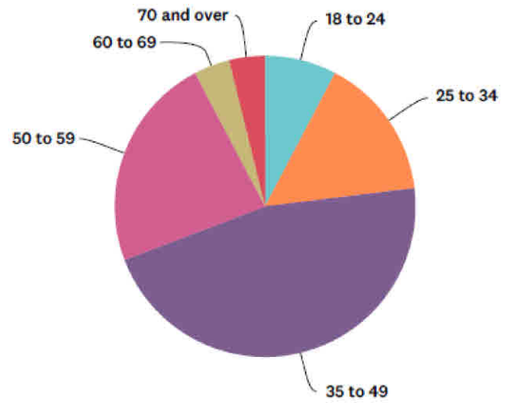
Q1 About You

Answered: 24 Skipped: 2

ANSWER CHOICES	RESPONSES	
Name	95.83%	23
Company	0.00%	0
Address	0.00%	0
Address 2	0.00%	0
Town/Village/Locality	100.00%	24
State/Province	0.00%	0
Post Code	100.00%	24
Country	0.00%	0
Email Address	79.17%	19
Phone Number	83.33%	20

Q2 Age:

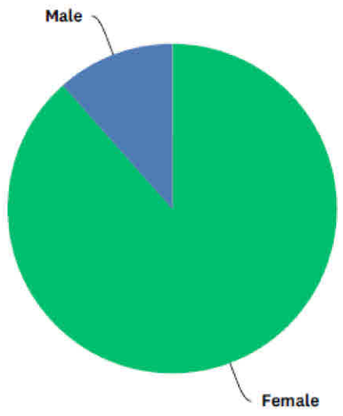
Answered: 26 Skipped: 0



ANSWER CHOICES	RESPONSES	
12 and under	0.00%	0
13 to 17	0.00%	0
17 and under	0.00%	0
18 to 24	7.69%	2
25 to 34	15.38%	4
35 to 49	46.15%	12
50 to 59	23.08%	6
60 to 69	3.85%	1
70 and over	3.85%	1
TOTAL		26

Q3 Gender:

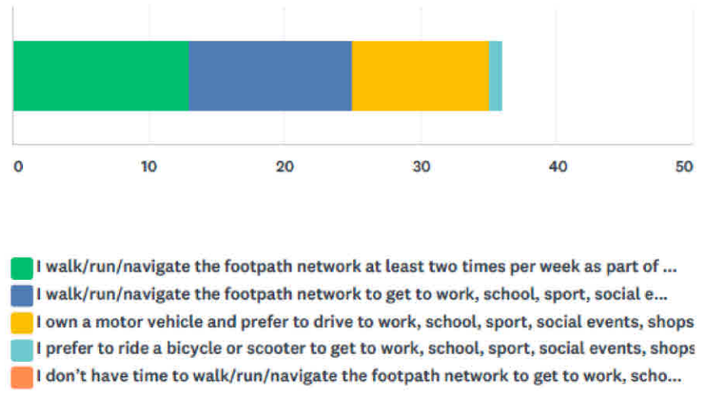
Answered: 26 Skipped: 0



ANSWER CHOICES	RESPONSES	
Female	88.46%	23
Male	11.54%	3
TOTAL		26

Q4 Which of the following statements best describes you?

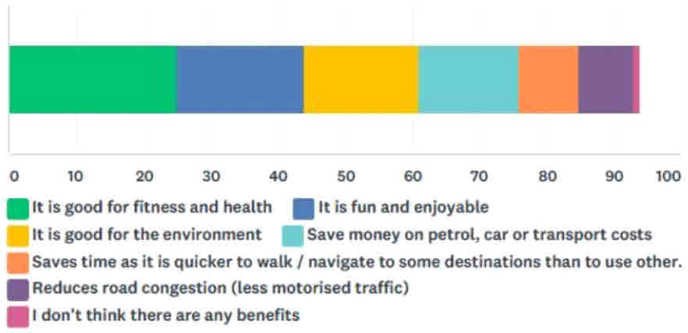
Answered: 26 Skipped: 0



ANSWER CHOICES	RESPONSES	
I walk/run/navigate the footpath network at least two times per week as part of my daily exercise	50.00%	13
I walk/run/navigate the footpath network to get to work, school, sport, social events, shops	46.15%	12
I own a motor vehicle and prefer to drive to work, school, sport, social events, shops	38.46%	10
I prefer to ride a bicycle or scooter to get to work, school, sport, social events, shops	3.85%	1
I don't have time to walk/run/navigate the footpath network to get to work, school, sport, social events, shops	0.00%	0
Total Respondents: 26		

Q5 What do you think are the benefits of walking/navigating the pedestrian/footpath network on a regular basis?

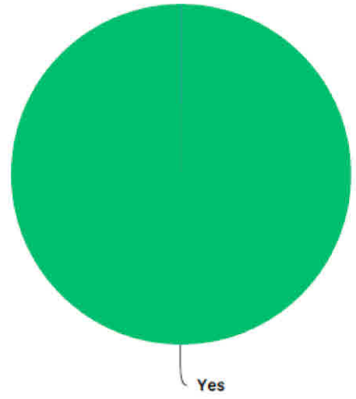
Answered: 26 Skipped: 0



ANSWER CHOICES	RESPONSES	
It is good for fitness and health	96.15%	25
It is fun and enjoyable	73.08%	19
It is good for the environment	65.38%	17
Save money on petrol, car or transport costs	57.69%	15
Saves time as it is quicker to walk / navigate to some destinations than to use other modes of transport	34.62%	9
Reduces road congestion (less motorised traffic)	30.77%	8
I don't think there are any benefits	3.85%	1
Total Respondents: 26		

Q6 Do you have access to a motor vehicle?

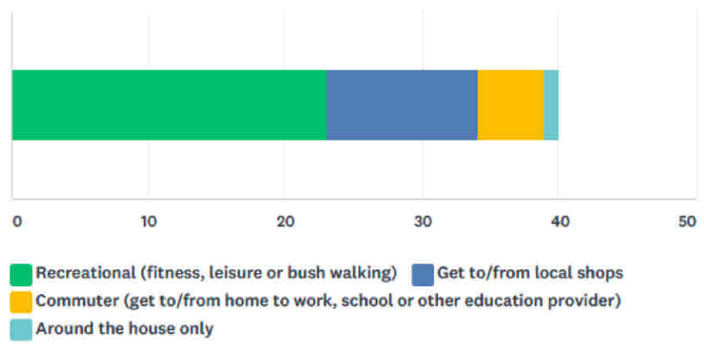
Answered: 26 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	100.00%	26
No	0.00%	0
TOTAL		26

Q7 What type of pedestrian/walking movements do you typically do?

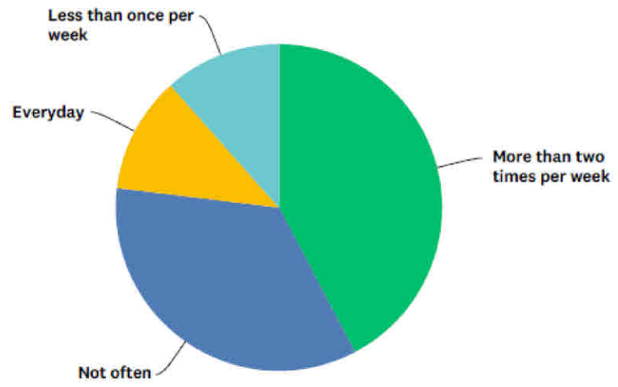
Answered: 26 Skipped: 0



ANSWER CHOICES	RESPONSES	
Recreational (fitness, leisure or bush walking)	88.46%	23
Get to/from local shops	42.31%	11
Commuter (get to/from home to work, school or other education provider)	19.23%	5
Around the house only	3.85%	1
Total Respondents: 26		

Q8 How often would you walk over one kilometre to access work, school, sport, social events, shops etc?

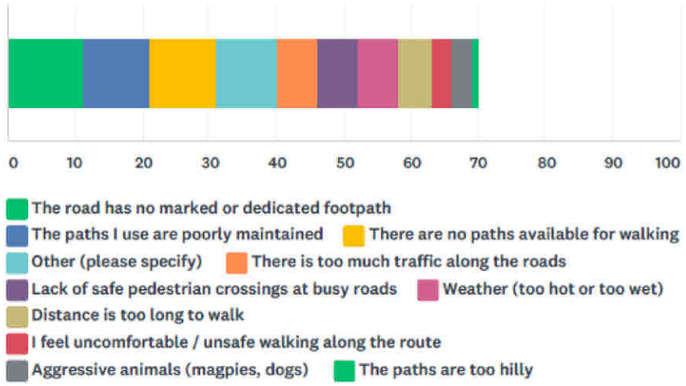
Answered: 26 Skipped: 0



ANSWER CHOICES	RESPONSES	
More than two times per week	42.31%	11
Not often	34.62%	9
Everyday	11.54%	3
Less than once per week	11.54%	3
TOTAL		26

Q9 Please select the reasons that discourage you from walking the footpaths and pedestrian networks more often. (Please select all that apply)

Answered: 26 Skipped: 0

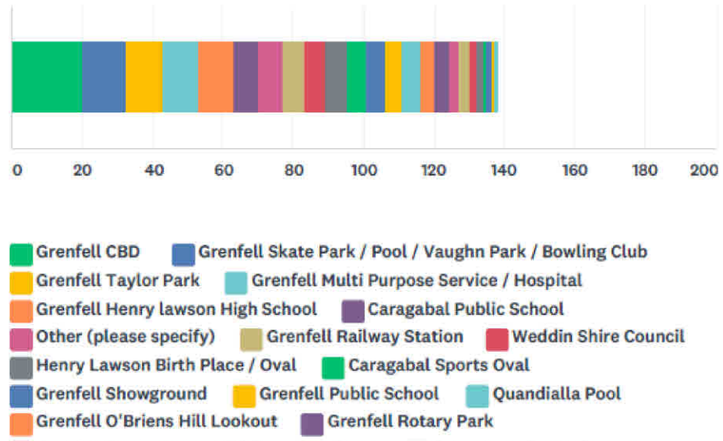


ANSWER CHOICES	RESPONSES	
The road has no marked or dedicated footpath	42.31%	11
The paths I use are poorly maintained	38.46%	10
There are no paths available for walking	38.46%	10
Other (please specify)	34.62%	9
There is too much traffic along the roads	23.08%	6
Lack of safe pedestrian crossings at busy roads	23.08%	6
Weather (too hot or too wet)	23.08%	6
Distance is too long to walk	19.23%	5
I feel uncomfortable / unsafe walking along the route	11.54%	3
Aggressive animals (magpies, dogs)	11.54%	3
The paths are too hilly	3.85%	1
Total Respondents: 26		

#	OTHER (PLEASE SPECIFY)	DATE
1	I live on a farm 15km from caragabal	12/19/2017 10:44 AM
2	I have young children so we need footpaths or bike tracks for safety reasons	12/1/2017 9:13 PM
3	These questions are all negatively geared.	12/1/2017 7:27 PM
4	Trip hazards on paths are dangerous	12/1/2017 5:42 PM
5	Live out of town	12/1/2017 5:30 PM
6	I live out of town but on occasion I do use the footpaths in town.	12/1/2017 9:40 AM
7	No footpaths available from Lawson estate past the Lawson ovals. Very limited room on the ride of the road too. I am always walking with a pram with my kids and I find this spot the hardest.	12/1/2017 9:26 AM
8	There are some footpaths that i consider to be dangerous. Out the front of the shire office is one of these spots. The large tree roots have pushed up the footpath. Saw an older man nearly fall out of his scooter the other day there!	11/30/2017 9:23 PM
9	The pathways are very untidy,can be slippery when there has been rain.	11/30/2017 1:41 PM

Q10 Which areas in the Weddin Shire Council area do you typically move to / from or within as a pedestrian? (Please select all that apply)

Answered: 26 Skipped: 0

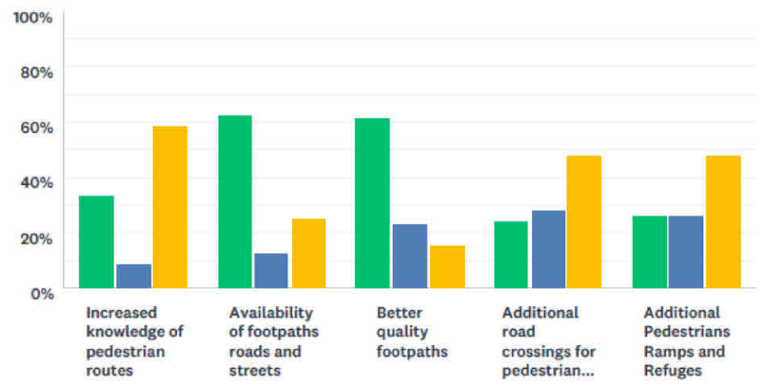


#	OTHER (PLEASE SPECIFY)	DATE
1	I drive dont walk	12/19/2017 6:29 PM
2	Caragabal school to Caragabal hall with students and it is very dangerous at harvest time.	12/19/2017 12:45 PM
3	Caragabal Golf Club	12/19/2017 10:44 AM
4	Company Dam	12/1/2017 8:19 PM
5	Lawson Oval	11/30/2017 9:23 PM
6	Anglican Church path and HACC centre path are ridiculously dangerous.	11/30/2017 6:20 PM
7	Quandialla Health Centre	11/30/2017 1:24 PM

ANSWER CHOICES	RESPONSES	
Grenfell CBD	76.92%	20
Grenfell Skate Park / Pool / Vaughn Park / Bowling Club	46.15%	12
Grenfell Taylor Park	42.31%	11
Grenfell Multi Purpose Service / Hospital	38.46%	10
Grenfell Henry lawson High School	38.46%	10
Caragabal Public School	26.92%	7
Other (please specify)	26.92%	7
Grenfell Railway Station	23.08%	6
Weddin Shire Council	23.08%	6
Henry Lawson Birth Place / Oval	23.08%	6
Caragabal Sports Oval	23.08%	6
Grenfell Showground	19.23%	5
Grenfell Public School	19.23%	5
Quandialla Pool	19.23%	5
Grenfell O'Briens Hill Lookout	15.38%	4
Grenfell Rotary Park	15.38%	4
Grenfell Rugby Union / RB Bembrick Fields	11.54%	3
Quandialla Public School	11.54%	3
Quandialla Bowling Club	7.69%	2
Quandialla Post Office	7.69%	2
Grenfell Caravan Park	3.85%	1
Grenfell St Joshephs Primary School	3.85%	1
Greenethorpe Sports Oval	3.85%	1
Greenethorpe Post Office and Cafe	3.85%	1
Henry Lawson Oval	0.00%	0
Greenethorpe Public School	0.00%	0
Greenethorpe Edwards Square	0.00%	0
Total Respondents: 26		

Q11 Please indicate whether the following changes would make you more likely to walk on a more regular basis for everyday local trips or to commute to work/study: (Please provide an answer for each option)

Answered: 26 Skipped: 0

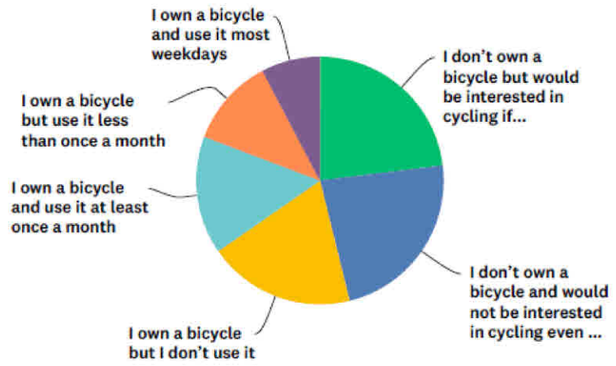


	I WOULD DEFINITELY USE THE NETWORK MORE	I MIGHT USE THE NETWORK MORE	IT WOULD MAKE NO DIFFERENCE	TOTAL
Increased knowledge of pedestrian routes	33.33% 8	8.33% 2	58.33% 14	24
Availability of footpaths roads and streets	62.50% 15	12.50% 3	25.00% 6	24
Better quality footpaths	61.54% 16	23.08% 6	15.38% 4	26
Additional road crossings for pedestrians (signals, footbridge etc.)	24.00% 6	28.00% 7	48.00% 12	25
Additional Pedestrians Ramps and Refuges	26.09% 6	26.09% 6	47.83% 11	23

#	IS THERE ANYTHING THAT WOULD ENCOURAGE YOU TO WALK MORE OR WALK ON A MORE REGULAR BASIS?	DATE
1	No greenethorpe is small i think its a waste of money for here	12/19/2017 6:29 PM
2	More lighting on the new pathways at night	12/19/2017 4:30 PM
3	We are on farm so obviously we drive to work etc. our kids attend Caragabal public school and the foot paths in front of hall and hotel need some maintenance and perhaps a path from the school to the hall would be beneficial for safety.	12/19/2017 10:47 AM
4	Walking track at caragabal that keeps us off the highway	12/19/2017 10:44 AM
5	A long, designated walking/cycle path	12/19/2017 10:39 AM
6	We have no safe paths in Caragabal, so the availability of a path would definitely allow me to use the network more!	12/19/2017 9:27 AM
7	A dedicated bike track / walking path around an oval so kids can ride around safely while I am exercising	12/1/2017 9:13 PM
8	Designated walking track incorporating exercise equipment! This has already been looked at in the past in collaboration with Grenfell Community Health	12/1/2017 8:19 PM
9	Stop pulling trees out in Wood. ....Council should pay for this not individual residents. How about an outdoor fitness center like Canowindra.	12/1/2017 7:27 PM
10	Linking paths to facilities ie toilets and rest stops and access to water.	12/1/2017 9:40 AM
11	Nice wide footpaths designed for bikes and walkers. Two laned footpaths, Canberra has them everywhere. Off point - a footpath is needed for the Lawson Ovals out to the Cemetery. I see a lot of people walking along Henry Lawson Way constantly trying to avoid the passing vehicles, myself included. Put a footpath in or at least widen the road.	12/1/2017 9:26 AM
12	Maybe better lighting for night walking	12/1/2017 7:10 AM
13	A walking track with exercise equipment along the way would be awesome. Everyday i see people of all ages in our community out getting their daily exercise that could take advantage of such equipment.	11/30/2017 9:23 PM
14	More paths that are better maintained. Shaded areas and more seating along pathways.	11/30/2017 6:20 PM
15	Just safer pathways would be more helpful !	11/30/2017 1:41 PM
16	I already walk regularly down Euroka Rd starting on Glasson St. I walk 6km most days.	11/30/2017 1:24 PM

Q12 Which of the following statements best describes you?

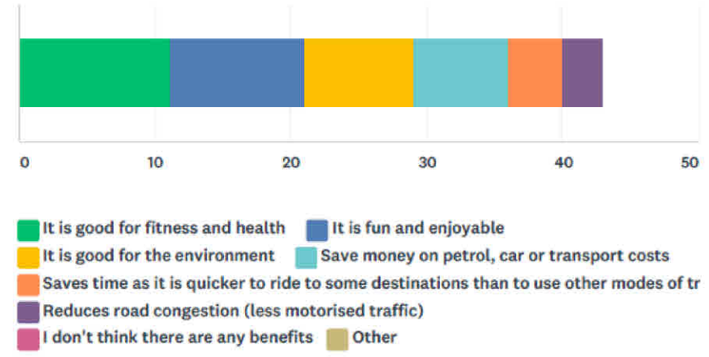
Answered: 26 Skipped: 0



ANSWER CHOICES	RESPONSES	
I don't own a bicycle but would be interested in cycling if conditions for cycling improved	23.08%	6
I don't own a bicycle and would not be interested in cycling even if conditions for cycling improved	23.08%	6
I own a bicycle but I don't use it	19.23%	5
I own a bicycle and use it at least once a month	15.38%	4
I own a bicycle but use it less than once a month	11.54%	3
I own a bicycle and use it most weekdays	7.69%	2
TOTAL		26

Q13 What do you think are the benefits of bicycle riding on a regular basis? (Please select all that apply)

Answered: 11 Skipped: 15

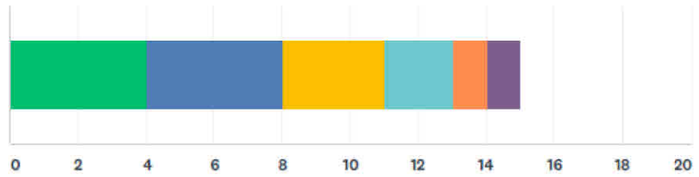


ANSWER CHOICES	RESPONSES	
It is good for fitness and health	100.00%	11
It is fun and enjoyable	90.91%	10
It is good for the environment	72.73%	8
Save money on petrol, car or transport costs	63.64%	7
Saves time as it is quicker to ride to some destinations than to use other modes of transport	36.36%	4
Reduces road congestion (less motorised traffic)	27.27%	3
I don't think there are any benefits	0.00%	0
Other	0.00%	0
Total Respondents: 11		

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	

Q14 Please indicate why you don't ride a bicycle. (Please select all that apply)

Answered: 11 Skipped: 15



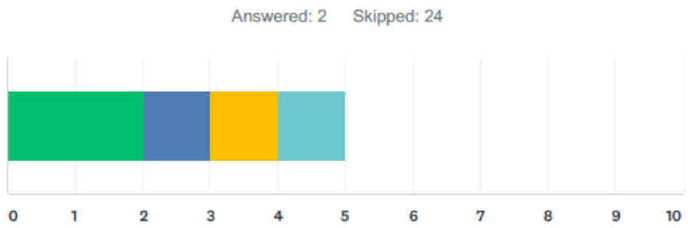
- I don't have a bicycle
- I don't think the available routes are safe or comfortable enough to ride on
- I'm not confident in my bicycle riding skills
- There's nowhere to park my bicycle when I get to my destination
- I don't want to be sweaty when I get to my destination
- I would rather drive or use another form of transport
- I don't like wearing a helmet
- My bicycle is broken and I don't know how to fix it
- I don't feel fit enough to ride a bicycle
- There is nowhere for me to take a shower or change at the end of my trip
- There is nowhere for me to take a shower or change at the end of my trip
- I am not allowed to ride a bicycle
- It's not cool to ride a bicycle
- I am worried my bike will get stolen or damaged

ANSWER CHOICES	RESPONSES	
I don't have a bicycle	36.36%	4
I don't think the available routes are safe or comfortable enough to ride on	36.36%	4
I'm not confident in my bicycle riding skills	27.27%	3
There's nowhere to park my bicycle when I get to my destination	18.18%	2
I don't want to be sweaty when I get to my destination	9.09%	1
I would rather drive or use another form of transport	9.09%	1
I don't like wearing a helmet	0.00%	0
My bicycle is broken and I don't know how to fix it	0.00%	0
I don't feel fit enough to ride a bicycle	0.00%	0
There is nowhere for me to take a shower or change at the end of my trip	0.00%	0
There is nowhere for me to take a shower or change at the end of my trip	0.00%	0
I am not allowed to ride a bicycle	0.00%	0
It's not cool to ride a bicycle	0.00%	0
I am worried my bike will get stolen or damaged	0.00%	0
Total Respondents: 11		

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	

Q15 If you think that the available routes are unsafe or are uncomfortable to ride on, please select the reasons why from the list below. (Please select all that apply)

Answered: 2 Skipped: 24

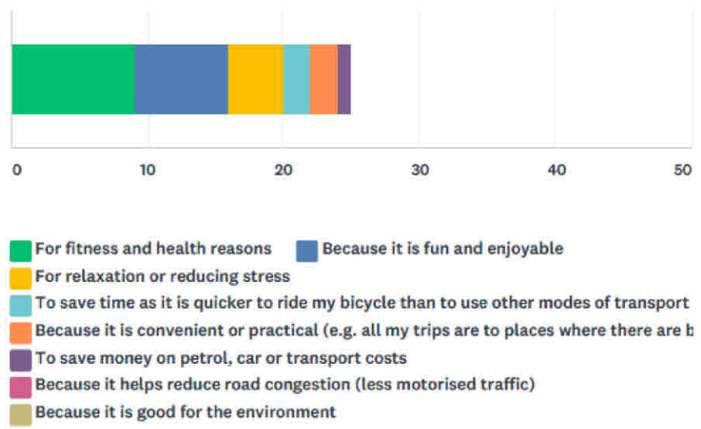


ANSWER CHOICES	RESPONSES	
The road has no marked bicycle lane	100.00%	2
There aren't enough (or any) physically separated bicycle paths	50.00%	1
There aren't enough (or any) dedicated bicycle lanes on roads and streets	50.00%	1
There is too much traffic to ride on the road	50.00%	1
The routes are too hilly	0.00%	0
The paths I use are not comfortable to ride on (e.g. poorly maintained)	0.00%	0
I do not feel comfortable sharing the available off road paths with pedestrians	0.00%	0
There are too many cyclists on the bicycle paths	0.00%	0
There is a lack of awareness of bicycle safety and road sharing amongst other road users	0.00%	0
Total Respondents: 2		

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	

Q16 Why do you ride your bicycle? (Please select all that apply)

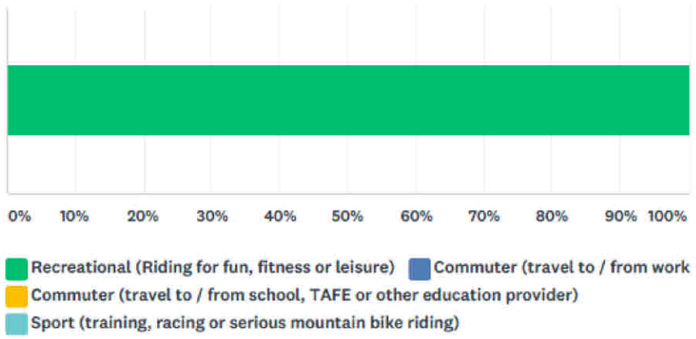
Answered: 9 Skipped: 17



ANSWER CHOICES	RESPONSES	
For fitness and health reasons	100.00%	9
Because it is fun and enjoyable	77.78%	7
For relaxation or reducing stress	44.44%	4
To save time as it is quicker to ride my bicycle than to use other modes of transport	22.22%	2
Because it is convenient or practical (e.g. all my trips are to places where there are bicycle parking facilities)	22.22%	2
To save money on petrol, car or transport costs	11.11%	1
Because it helps reduce road congestion (less motorised traffic)	0.00%	0
Because it is good for the environment	0.00%	0
Total Respondents: 9		

Q17 What type of cycling do you take part in most often?

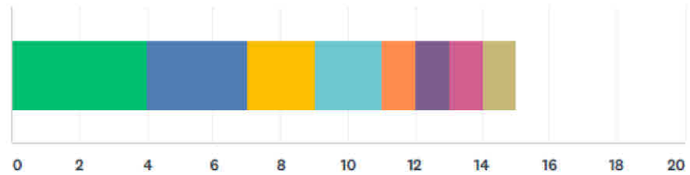
Answered: 9 Skipped: 17



ANSWER CHOICES	RESPONSES	
Recreational (Riding for fun, fitness or leisure)	100.00%	9
Commuter (travel to / from work)	0.00%	0
Commuter (travel to / from school, TAFE or other education provider)	0.00%	0
Sport (training, racing or serious mountain bike riding)	0.00%	0
TOTAL		9

Q18 Which of the following are reasons why you don't ride your bicycle more regularly for everyday local trips or for commuting to work or study? (Please select all that apply)

Answered: 9 Skipped: 17



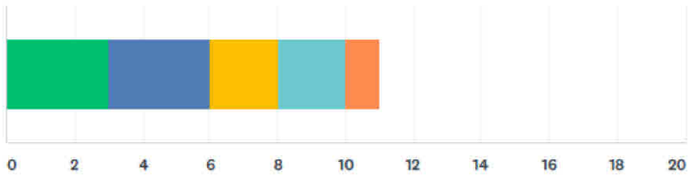
I don't think the available routes are safe or comfortable enough to ride on
There aren't any convenient routes for me to get to my destination
I don't want to be sweaty when I get to my destination
None of the above.
I only ride my bicycle for leisure or recreational purposes or as a sporting activity
I don't feel fit enough to ride more often
There is nowhere for me to take a shower or change at the end of my trip
There is nowhere to park my bicycle at my destination
I don't like wearing a helmet
I'm not confident in my bicycle riding skills
I'm not confident I know how to look after my bicycle

ANSWER CHOICES	RESPONSES	
I don't think the available routes are safe or comfortable enough to ride on	44.44%	4
There aren't any convenient routes for me to get to my destination	33.33%	3
I don't want to be sweaty when I get to my destination	22.22%	2
None of the above.	22.22%	2
I only ride my bicycle for leisure or recreational purposes or as a sporting activity	11.11%	1
I don't feel fit enough to ride more often	11.11%	1
There is nowhere for me to take a shower or change at the end of my trip	11.11%	1
There is nowhere to park my bicycle at my destination	11.11%	1
I don't like wearing a helmet	0.00%	0
I'm not confident in my bicycle riding skills	0.00%	0
I'm not confident I know how to look after my bicycle	0.00%	0
Total Respondents: 9		

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	

Q19 If you think that the available routes are unsafe or are uncomfortable to ride on, please select the reasons why from the list below. (Please select all that apply)

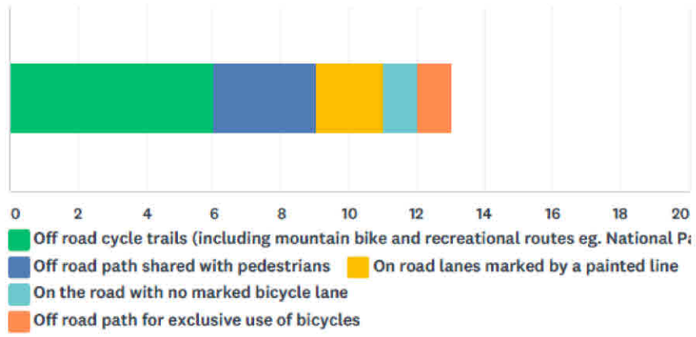
Answered: 4 Skipped: 22



ANSWER CHOICES	RESPONSES	
The road has no marked bicycle lane	75.00%	3
There aren't enough (or any) physically separated bicycle paths	75.00%	3
There aren't enough (or any) dedicated bicycle lanes on roads and streets	50.00%	2
There is too much traffic to ride on the road	50.00%	2
There is a lack of awareness of bicycle safety and road sharing amongst other road users	25.00%	1
The routes are too hilly	0.00%	0
The paths I can use are not comfortable to ride on (e.g. poorly maintained)	0.00%	0
I do not feel comfortable sharing the available offroad paths with pedestrians	0.00%	0
There are too many cyclists on the bicycle paths	0.00%	0
Total Respondents: 4		

Q20 When you are riding your bike (inside or outside of the Shire) what path/s do you prefer to ride on? (Please select all that apply)

Answered: 9 Skipped: 17

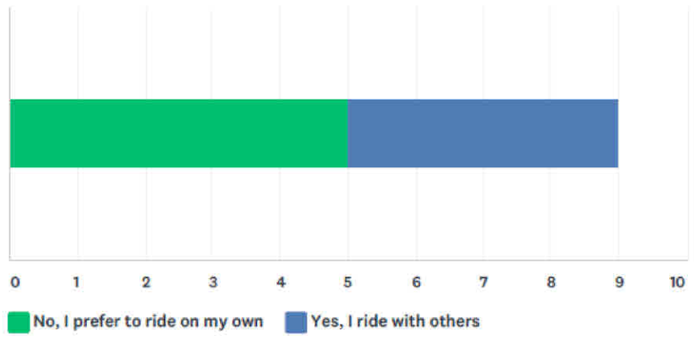


ANSWER CHOICES	RESPONSES	
Off road cycle trails (including mountain bike and recreational routes eg. National Park)	66.67%	6
Off road path shared with pedestrians	33.33%	3
On road lanes marked by a painted line	22.22%	2
On the road with no marked bicycle lane	11.11%	1
Off road path for exclusive use of bicycles	11.11%	1
Total Respondents: 9		

#	PLEASE DESCRIBE WHY THIS IS YOUR PREFERRED TYPE OF PATH TO RIDE ON.	DATE
1	We ride on the farm and have just started riding on the highway as children are now old enough or on our bikes.	12/19/2017 12:48 PM
2	Easier with kids Enjoy mountain bike riding	12/1/2017 9:16 PM
3	You feel safer and it's not affecting general traffic.	12/1/2017 9:28 AM
4	No one can see me.	11/30/2017 6:23 PM

Q21 Do you ever ride with other people?

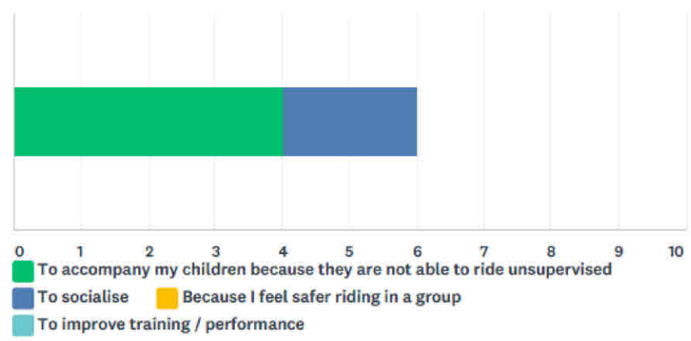
Answered: 9 Skipped: 17



ANSWER CHOICES	RESPONSES	
No, I prefer to ride on my own	55.56%	5
Yes, I ride with others	44.44%	4
Total Respondents: 9		

Q22 Why do you ride with others?

Answered: 4 Skipped: 22



ANSWER CHOICES	RESPONSES	
To accompany my children because they are not able to ride unsupervised	100.00%	4
To socialise	50.00%	2
Because I feel safer riding in a group	0.00%	0
To improve training / performance	0.00%	0
Total Respondents: 4		

Q23 What are your top three most common journeys by bicycle (Please provide start and end point)?

Answered: 8 Skipped: 18

ANSWER CHOICES	RESPONSES	
1. Start Point	100.00%	8
End Point (via what streets/paths)	100.00%	8
2. Start Point	87.50%	7
End Point (via what streets/paths)	87.50%	7
3. Start Point	25.00%	2
End Point (via what streets/paths)	25.00%	2

#	1. START POINT	DATE
1	4826 Mid Western highway	12/19/2017 12:54 PM
2	'Myall Park', Caragabal	12/19/2017 10:51 AM
3	Home	12/19/2017 10:47 AM
4	Top of melyra st	12/1/2017 9:20 PM
5	My home	12/1/2017 8:36 PM
6	My home, Lawson Estate	12/1/2017 9:33 AM
7	Home	11/30/2017 9:30 PM
8	Makins St	11/30/2017 6:27 PM
#	END POINT (VIA WHAT STREETS/PATHS)	DATE
1	Caragabal club or pub	12/19/2017 12:54 PM
2	Caragabal Country Golf Club via Mid-Western Hwy	12/19/2017 10:51 AM
3	Marsden Mid Western hwy	12/19/2017 10:47 AM
4	Pool	12/1/2017 9:20 PM
5	Bus stop	12/1/2017 8:36 PM
6	My Home, Holy Camp Rd, Abbott's Ln, Manganese Rd, Bradley St, North St, Melyra St, Warraderry St, Weddin St, Forbes St, Henry Lawson Way.	12/1/2017 9:33 AM
7	Bowling Club, Straight down East Street all the way to the bottom, then across to the Bowling Club	11/30/2017 9:30 PM
8	Gooloogong Rd- north st-Company dam	11/30/2017 6:27 PM

#	2. START POINT	DATE
1	Mid Western Hwy	12/19/2017 12:54 PM
2	'Myall Park', Caragabal	12/19/2017 10:51 AM
3	Hope	12/19/2017 10:47 AM
4	Top of melyra st	12/1/2017 9:20 PM
5	Lawson Estate	12/1/2017 9:33 AM
6	Home	11/30/2017 9:30 PM
7	Makins St	11/30/2017 6:27 PM
#	END POINT (VIA WHAT STREETS/PATHS)	DATE
1	Hunters Lane Caragabal	12/19/2017 12:54 PM
2	Death's Lane, Caragabal via Mid-Western Hwy	12/19/2017 10:51 AM
3	Caragabal - Mid Western hwy	12/19/2017 10:47 AM
4	CBD melyra st, short st, main st	12/1/2017 9:20 PM
5	Lawson Estate - Henry Lawson Way, Schneider's Lane, Mary Gilmore Way, Holy Camp Rd	12/1/2017 9:33 AM
6	Aquatic Centre, East Street, Melyra Street	11/30/2017 9:30 PM
7	Parkes St- laneways- Nash st-Main St	11/30/2017 6:27 PM
#	3. START POINT	DATE
1	Weddin Mts car park	12/19/2017 12:54 PM
2	'Myall Park', Caragabal	12/19/2017 10:51 AM
#	END POINT (VIA WHAT STREETS/PATHS)	DATE
1	Tracks on the flat including to Seatons farm	12/19/2017 12:54 PM
2	Pullabooka via Pullabooka Rd	12/19/2017 10:51 AM

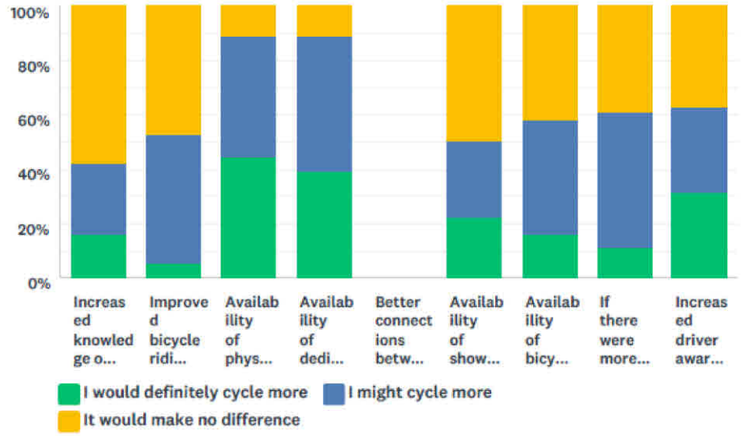
Q24 Please identify the top three bike destinations that you would like to see developed or improved in the future. Consider Greenethorpe, Grenfell, Quandialla, Caragabal (include street names, cross roads), hospital, schools, recreational facilities (parks, swimming pool, picnic areas, showground etc.) and any other regional links in the Weddin Shire area.

Answered: 6 Skipped: 20

#	RESPONSES	DATE
1	Caragabal school to Caragabal hall as it is often travelled by young students and there is no foot paths. Trucks and snakes are a reall oh&s issue.	12/19/2017 12:54 PM
2	Caragabal to Caragabal Country Golf Club Greenethorpe to Iandra Castle Grenfell to Company's Dam or Bogolong Dam	12/19/2017 10:51 AM
3	-Bike and walking path around Lawson oval -Footpath or bike path for top end of melyra st linking up to quondong road -off road tracks maybe around company dam	12/1/2017 9:20 PM
4	Pedestrian/ cycle path from Caragabal school to town centre as school uses community hall on many occasions! They have to walk along the HWY and cross a railway line! There are opportunities to create walking/ bike tracks around company dam and O'Brien's Hill! As a Community Nurse in Grenfell who specialises in Health Promotion I lead a Polewalking group around the fire trails at Company dam! There is no reason bikes could not share this area! The track used for this years Fun Run was a lovely trail , incorporating the unused railway track might also be worth considering! I feel the Weddin Mountains are under-utilised- ! A track circumnavigating the mountain and promotion of track might encourage more endurance riders!	12/1/2017 8:36 PM
5	Henry Lawson Way - bike lane or road widened	12/1/2017 9:33 AM
6	Bike track around Company dam with some facilities etc	11/30/2017 6:27 PM

Q25 Please indicate whether the following changes would make you more likely to cycle on a regular basis for everyday local trips or to commute to work/ study (Please provide an answer for each option):

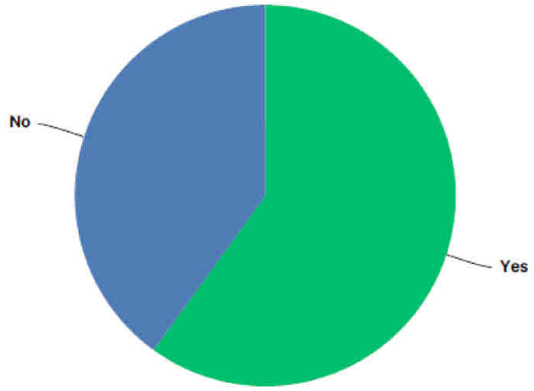
Answered: 20 Skipped: 6



	I WOULD DEFINITELY CYCLE MORE	I MIGHT CYCLE MORE	IT WOULD MAKE NO DIFFERENCE	TOTAL
Increased knowledge of bicycles and bicycle maintenance	15.79% 3	26.32% 5	57.89% 11	19
Improved bicycle riding skills	5.26% 1	47.37% 9	47.37% 9	19
Availability of physically separated bicycle paths	44.44% 8	44.44% 8	11.11% 2	18
Availability of dedicated bicycle lanes on roads and streets	38.89% 7	50.00% 9	11.11% 2	18
Better connections between bicycle paths and public transport	0.00% 0	0.00% 0	0.00% 0	0
Availability of shower and changing facilities at my destination	22.22% 4	27.78% 5	50.00% 9	18
Availability of bicycle parking at my destination	15.79% 3	42.11% 8	42.11% 8	19
If there were more bicycle riders on the road	11.11% 2	50.00% 9	38.89% 7	18
Increased driver awareness of bicycle safety and road sharing	31.58% 6	31.58% 6	36.84% 7	19

Q26 Do you have any children under the age of 15?

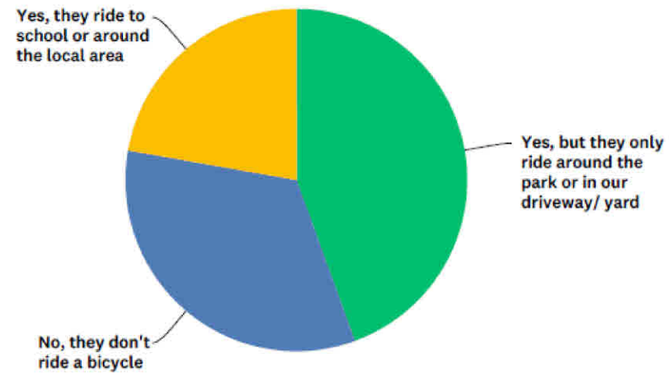
Answered: 20 Skipped: 6



ANSWER CHOICES	RESPONSES	
Yes	60.00%	12
No	40.00%	8
TOTAL		20

Q27 Do your children ride a bicycle?

Answered: 18 Skipped: 8



#	PLEASE PROVIDE DETAILS AS TO WHY (E.G. THEY DON'T KNOW HOW TO RIDE A BICYCLE YET, IT IS TOO FAR FOR THEM TO RIDE TO SCHOOL SO THEY ONLY RIDE IN THE PARK):	DATE
1	Too young	1/31/2018 5:14 PM
2	They live 15 k's out of town	12/25/2017 6:46 PM
3	My kids are adults	12/19/2017 6:30 PM
4	5 year old rides with us on the road independently. 2 little ones are still on the back when riding on the road but ride at skate park, yard and down the lane.	12/19/2017 12:57 PM
5	Too far to get to school. They would use a bike lane around the village but there is plenty of street room, highway is too dangerous, bike lane or not.	12/19/2017 10:52 AM
6	Too dangerous to ride on the highway	12/19/2017 10:51 AM
7	There are no safe areas to ride a bicycle for young children around Caragabal.	12/19/2017 9:31 AM
8	I don't have children	12/2/2017 12:33 PM
9	They are too young to ride to school on their own	12/1/2017 10:15 PM
10	They only ride on footpaths as they are preschool age and riding on the road is too dangerous	12/1/2017 9:22 PM
11	We live on a farm	12/1/2017 8:37 PM
12	They're aren't big enough to control out on the open road without a bike lane or footpath.	12/1/2017 9:35 AM
13	Too far, not to nterested when in town.	11/30/2017 6:29 PM
14	This question isn't applicable to me - my son is grown and lived away from here	11/30/2017 1:26 PM

Q28 Is there anything that would help you to encourage your children to ride their bicycles more often to get to school or around the local area?

Answered: 10 Skipped: 16

#	RESPONSES	DATE
1	Sorry but no	12/25/2017 6:46 PM
2	No	12/19/2017 6:30 PM
3	A cycle lane along the highway, better driver education, signs on the road	12/19/2017 10:51 AM
4	Safe path	12/19/2017 10:48 AM
5	A safe separate bike path (shared with pedestrians is fine) would allow us to ride safely and regularly. For example, a path from Caragabal Village out to the Golf Club would be a nice length path for riding with kids.	12/19/2017 9:31 AM
6	Shared cycle/pedestrian paths to school	12/1/2017 10:15 PM
7	Bike paths	12/1/2017 9:22 PM
8	Bike lanes/footpaths	12/1/2017 9:35 AM
9	No	12/1/2017 7:13 AM
10	Not applicable	11/30/2017 1:26 PM

Q29 Do you have any further comments about walking or cycling in Weddin Shire or about the new Active Transport Plan?

Answered: 14 Skipped: 12

#	RESPONSES	DATE
1	All i know is ifeel its a waste of money in greenethorpe. We have an aging population here. And i feel due to very little traffic money would be better spent on curb and channeling	12/19/2017 6:35 PM
2	Increased walking paths allow residents to explore and utilise facilities they have no access to at present ..	12/19/2017 4:39 PM
3	I believe the only place that probably needs a path is from caravan park to street in Grenfell. The roads are wide and traffic isn't hectic, majority of streets in Grenfell are wide with plenty of room for bikes, pedestrians and vehicles to share. A path from Caragabal school to hall would lower the safety risk of students walking to and from school to the village. The crossing and median strip in front of school is a hazard and needs to be removed !	12/19/2017 10:55 AM
4	Medium strip at caragabal public be removed. Walking track to community hall and golf club	12/19/2017 10:49 AM
5	I'm very impressed with the professional approach to this problem, and look forward to seeing improvements in the future!	12/19/2017 9:35 AM
6	Great idea. Definitely needed	12/1/2017 9:23 PM
7	Residents should not be held accountable for random paths....some cannot afford this and after all its land.	12/1/2017 7:30 PM
8	Footpaths in front of weddin shire council need repairing they are dangerous	12/1/2017 5:43 PM
9	Boorowa's cycle/walk paths are great and well patronised. A path from the pool to the Railway station and then along the disused railway (you are kidding yourself if you think they will ever reopen) to Lawson Park would be a good first stage. It has toilets, parking and play grounds. It is reasonably flat, and could pass; the Men's shed, historic George street, the silos (very rural: paint them), Vauhn's dam redevelopment, and a couple of watering holes.	12/1/2017 5:09 PM
10	I think this is a great plan and although I live out of town I would make an effort to use the facilities particularly when family are visiting.	12/1/2017 9:46 AM
11	Just inputting more footpaths around town and ensuring their wide enough to support two way pedestrian traffic. A lot of towns have them.	12/1/2017 9:37 AM
12	No	12/1/2017 7:13 AM
13	none	11/30/2017 1:43 PM
14	Walking and cycling areas away from trucks and cars are always welcoming to encourage people to safely exercise.	11/30/2017 1:28 PM

Q30 Are there any specific projects that you would like to see proposed in the Weddin Shire that would encourage pedestrians and cyclists to walk or ride regularly?

Answered: 17 Skipped: 9

#	RESPONSES	DATE
1	Liase with established walking groups, establish a bike riding group	12/25/2017 6:54 PM
2	No	12/19/2017 6:35 PM
3	Yes .. We have a disabled grand-daughter and were crossing the railway lines at Caragabal crossing .. The front wheels were stuck in the lines .. We only just got her unstuck as a train approached at speed .. Had the chair not released I would have had to remove her physically (about 60 kgs) at the time and run .. New pathways , access ramps along the paths are an essential ..	12/19/2017 4:39 PM
4	Maybe cycle lanes on busy roads in and out of Grenfell for safety of riders and drivers	12/19/2017 10:55 AM
5	Removal of the island near the Caragabal School, pathway from Caragabal School to Caragabal Hall, a kids bike path/track, a long walking/cycle path somewhere eg. from Grenfell to Company's Dam, or along old railway lines etc, a cycle path from Caragabal to the Caragabal Country Golf Club	12/19/2017 10:53 AM
6	Medium strip at caragabal public be removed. Walking track to community hall and golf club	12/19/2017 10:49 AM
7	Caragabal - remove the traffic island outside the school, create a safe path from the School to the Hall (the school is rapidly growing, and the children regularly use the hall for presentations and performances), Improved path access on the western side of the Royal hotel, A path from Caragabal Village to the Club would be great!	12/19/2017 9:35 AM
8	Dedicated dual cycle/pedestrian paths	12/1/2017 10:17 PM
9	Bike/walking paths around Lawson oval with fitness stations	12/1/2017 9:23 PM
10	I would really like to see a designated walking/ fitness track! As I mentioned in previous question planning for one has already started in collaboration with Community health! I would love to see this go ahead! I would use a facility like this in my role as Community health Nurse!	12/1/2017 9:07 PM
11	Water stations, seating and possible exercise stations could be placed along the path. Involve the students from the schools to come up with more ideas.	12/1/2017 5:09 PM
12	Same as above.	12/1/2017 9:37 AM
13	No	12/1/2017 7:13 AM
14	A designated path to walk with exercise equipment spaced out along the way would be excellent!	11/30/2017 9:33 PM
15	Walking track with outdoor exercise stops like at Canowindra.	11/30/2017 6:31 PM
16	Please improve the roads and pathways to ensure all activities	11/30/2017 1:43 PM
17	Walking tracks are always welcomed	11/30/2017 1:28 PM

Active Planning Consultants
10 Lowe Lane
Cowra NSW 2794
E: michaelpcarter@bigpond.com.au

GHD

72 McNamara St, Orange, NSW 2800
PO BOX 950, Orange, NSW 2800
T: (02) 6393 6400 F: (02) 6393 6401 E: oagmail@ghd.com

Document Status

Rev No.	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
A	M Carter	Steve Martin	S Martin*	Steve Martin	S Martin *	13/2/2018
B	M Carter	Steve Martin	S Martin*	Steve Martin	S Martin *	25/5/2018