



Parkes Pedestrian and Cycling Strategy 2016



2016

It all adds up.

PARKES

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1. EXECUTIVE SUMMARY

The Parkes Shire is located in the Central West Region of NSW and is home to around 15,250 people, spread over a relatively large area of 5,919 square kilometres. The Parkes Shire includes the townships and localities of Alectown, Bogan Gate, Bruie Plains, Cookamidgera, Cooks Myalls, Daroobalgie, Goonumbla, Gunningbland, Mandagery, Nelungaloo, Parkes, Peak Hill, Tichborne, Trewilga, Trundle, Tullamore and Yarrabandai. Parkes is the main urban centre in the shire and the hub to several State roads and the Newell Highway, which carry the majority of cars and trucks when compared to local roads.

Travel patterns are dispersed across the shire and the road network can become quite busy, particularly the Newell Highway and the State road network. Local roads also become busy in summer harvest, peak shopping times, school zone times and around weekend sporting and community events. The Parkes Shire community is considered to have high car dependency for both work and leisure. Despite a high use of motor vehicles, many people in the 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. Many residents value using 'human power' as a cheap and easy form of transport, which brings other benefits such as improved fitness and personal health, positive environmental and road safety outcomes as well as social and economic benefits.

To provide for the needs of pedestrians and cyclists, the Parkes Shire has a large network of constructed footpaths and 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 Parkes Shire Pedestrian and Cycling Strategy 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 Strategy proposes targeted improvements that are assessed to have the greatest benefits and user support.

Stakeholder engagement to prepare the Parkes Shire Pedestrian and Cycling Strategy has involved formal exhibition of the Strategy, surveys, workshops and meetings with various agencies, interest groups and residents. Feedback received so far provided valuable insight on pedestrian and cycling behaviour, attitudes and aspirations. It suggests the community is supportive of a more comprehensive and safer active movement network through the implementation of the Strategy.



1.0

Executive Summary

SNAPSHOT

The Parkes Shire Pedestrian and Cycling Strategy identifies a range of infrastructure improvements and social initiatives, aimed at enhancing pedestrian and cycling opportunities. The Strategy proposes targeted improvements that are assessed to have the greatest benefits and user support.

2.0

Introduction

SNAPSHOT

The Parkes Shire Pedestrian and Cycling Strategy 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. INTRODUCTION

Pedestrians and cyclists are far more attuned to the environment in which they are moving than faster moving motorists. Planning for pedestrians and cyclists does not follow the same logic as motor traffic planning, which normally involves a 'motor vehicle' - 'trips' - 'routes' - 'traffic network'. It places more emphasis on the environment and the conditions along routes and at attractors. An important aspect of the Parkes Shire Pedestrian and Cycling Strategy is to build an understanding of the elements that will make a good pedestrian and cycling network in the Parkes 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 pedestrian and cycling 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 network.
- The most appropriate design options that meet pedestrian and cyclists needs, including standard and innovative options.
- The views and aspirations of stakeholders.
- Mechanisms to program / fund improvements to the active movement 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 focus of the Parkes Shire Pedestrian and Cycling Strategy is therefore on the use of pedestrian and cycling facilities to access jobs, education, recreational areas, services and social opportunities.

The Parkes Shire Pedestrian and Cycling Strategy 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.

Useful definitions are included in Appendix 1.



3. VISION AND OPPORTUNITY

3.1. The Community Vision

Parkes is at the centre of a strong agricultural and mining region and is strategically located at the crossroads of national road and rail corridors. In recent community engagement processes, the Parkes Shire Council and community members have come together to determine the vision for the Parkes Shire and to map-out the framework for achieving this vision. The Parkes Shire Community Strategic Plan establishes that in 2022 Parkes Shire will be:

'A progressive regional centre, embracing a national logistics hub, with vibrant communities, diverse opportunities, learning and healthy lifestyles.'

Parkes Shire Council is undertaking a number of strategic planning projects aimed at positioning Parkes as a regional centre in Central NSW. This body of work includes the preparation of Parkes Living Well Program, Parkes CBD Vibrancy Strategy, Parkes Land-use Planning Review and the Parkes Shire Pedestrian and Cycling Strategy.

The strategic planning work will inform and enhance further community-based strategic planning to be undertaken as part of the preparation of the Parkes Shire Council 2016/17 Delivery Program. The Delivery Program is Council's four year commitment to the progression of work highlighted for action, and should go a long way to implementing new projects and programs aimed at growing Parkes into a strong and attractive regional centre in NSW.

The Parkes Shire Community Strategic Plan 2022 identifies the following key future directions that are relevant to the Parkes Shire Pedestrian and Cycling Strategy:

- Maximise public safety.
- Develop and implement pedestrian access and cycling mobility facilities.
- Develop strategies to work with and support the townships endeavours.
- Utilise an integrated planning framework to guide the development of our communities.
- Provide equitable access to community facilities.
- Develop and support the tourism industry in the Shire.
- Manage road assets.

- Remove barrier to pedestrian and activity.
- Improve connectivity between residential areas and attractors.

3.2. Vision

The vision for the Parkes Shire Pedestrian and Cycling Strategy is:

'Parkes will be recognised as a bicycle and pedestrian friendly shire, with quality paths and facilities which provide safe, convenient and enjoyable active movement experiences.'

3.3. Aims & Objectives

The Parkes Shire Pedestrian and Cycling Strategy aims to make pedestrian and cycling activities a safe, healthy and attractive travel option. The specific objectives of the Parkes Shire Pedestrian and Cycling Strategy 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 movement facilities.

The Parkes Shire Pedestrian and Cycling Strategy is also aimed at encouraging residents to become active for their personal health and wellbeing. An additional objective of the Parkes Shire Pedestrian and Cycling Strategy is to identify strategies that raise awareness of the merits / benefits of a more active lifestyle, for health, well-being and social interaction.

The Strategy is the primary guiding document to program Council's own work to upgrade the pedestrian and cycling network throughout the shire over the next 4 to 10 years.

4.0

Why a new strategy?

SNAPSHOT

Parkes Shire Council already has a Pedestrian and Cycling Plan, 2008. This plan is focused mainly on Parkes 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 Parkes Shire.

Quality footpaths and shared paths are particularly influential in encouraging people across all ages to lead more active lifestyles.

4. WHY A NEW STRATEGY?

4.1. *Creating a comprehensive movement network*

Council and State government transport planners are focussing efforts towards achieving more comprehensive movement networks that allow people to navigate between 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 Parkes 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 Parkes 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, Parkes needs a comprehensive movement strategy in order to plan for the growing needs of residents and visitors. Other towns also need closer study to ensure safe and connected communities.

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

4.2. *Maximise health and lifestyle benefits*

Leading an active lifestyle can bring many benefits for the general health and wellbeing of Parkes Shire residents. Using footpaths, bicycle lanes and shared paths provide a cheap means of incorporating exercise into our daily routine. As a 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), and 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.

Increasing the visibility of pedestrian and cycling paths throughout the Parkes Shire will help to encourage the use of these facilities and improve the quality of life of the local community.

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

4.3. *Achieving safer conditions*

There is international recognition that in order to significantly boost walking and cycling levels, a much higher standard of active movement facilities and safety is required, particularly paths that provide greater separation from motor vehicles.

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 walking for transport across all age groups. 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. 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) 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, footpaths, car parks and bus stops has been shown to encourage active modes of transport to and from buildings.

4.0

Why a new strategy?

SNAPSHOT

Greater focus on strategies that increase usage of footpaths and cycleways in main towns of Parkes, Peak Hill, Trundle and Tullamore would deliver a number of benefits for the Parkes Shire community.

4.4. Social Benefits

Active movement, 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 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.

4.5. 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 movement routine. Gyms and personal trainers benefit from a more active community and movement network.

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 increase retail rental values; sale prices of nearby homes which stimulates the local economy.

4.6. Land-use Planning

A growing body of evidence suggests that the way we design and build our streets and neighbourhoods, affects resident's social connections, sense of community and social capital, and thus their use of active movement facilities. Neighbourhood 'walkability' (a combination of residential density, mixed-use planning and street connectivity) is particularly associated with walking for transport and general walking.

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 which in turn increases the sense of community in residents.

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

In terms of active movement 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 street layout, which create 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.

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 overuse of cul-de-sacs that can result in a disconnected street system and general lack of active movement facilities in new residential estates.

5.0

Approach and Methodology

SNAPSHOT

The approach is to develop new Active Movement Plans that build upon existing infrastructure and address the key issues and aspirations identified from community consultation and audit processes.

5. APPROACH AND METHODOLOGY

The focus of this Strategy is on the use of pedestrian and cycling facilities to access jobs, education, recreational areas, services and social opportunities in the Parkes Shire. The approach is to develop new Active Movement Plans that build upon existing infrastructure and addresses the key issues and aspirations identified from community consultation and audits. To achieve this approach, the Parkes Shire Pedestrian and Cycling Strategy has been undertaken in the following stages:

Preliminary Stakeholder Engagement

Throughout August to October 2015, preliminary consultation was undertaken to gain insight about walking and cycling conditions and opportunities in the Parkes Shire.

Pedestrian and Cycling Strategy

The Parkes Shire Pedestrian and Cycling Strategy explains the approach, reviews best practice standards and innovations, and analyses the existing pedestrian and cycling network. Incorporated into the Strategy is a review of the pedestrian and cycling conditions at Parkes, Peak Hill, Trundle and Tullamore, as well as a shire wide review. Active Movement Plans have been prepared for these areas to 'visualise' the additional facilities required to achieve a connected network. Concept designs of the main elements that need to be considered in planning and implementing the proposed improvements are also shown in the Strategy.

Formal public exhibition of the Parkes Shire Pedestrian and Cycling Strategy was undertaken throughout April 2016 to gain feedback on the finalisation of the Strategy.

Finalisation of the Pedestrian and Cycling Action Plan

Finalisation of the Parkes Shire Pedestrian and Cycling Strategy is the final task and involved the programming of a number of infrastructure projects to be undertaken by Council. A Matrix Table provides full visibility on how priorities and actions were decided. Cost estimates for each priority project are shown in Section 16.

6. LOCAL AND REGIONAL PROFILE

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

6.1. Central NSW Region

The Parkes Shire is located in the Central West Region of NSW. The area 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, and to the Western region through Dubbo and Parkes. There are also strong north-south links to Melbourne and Brisbane via the Newell Highway.

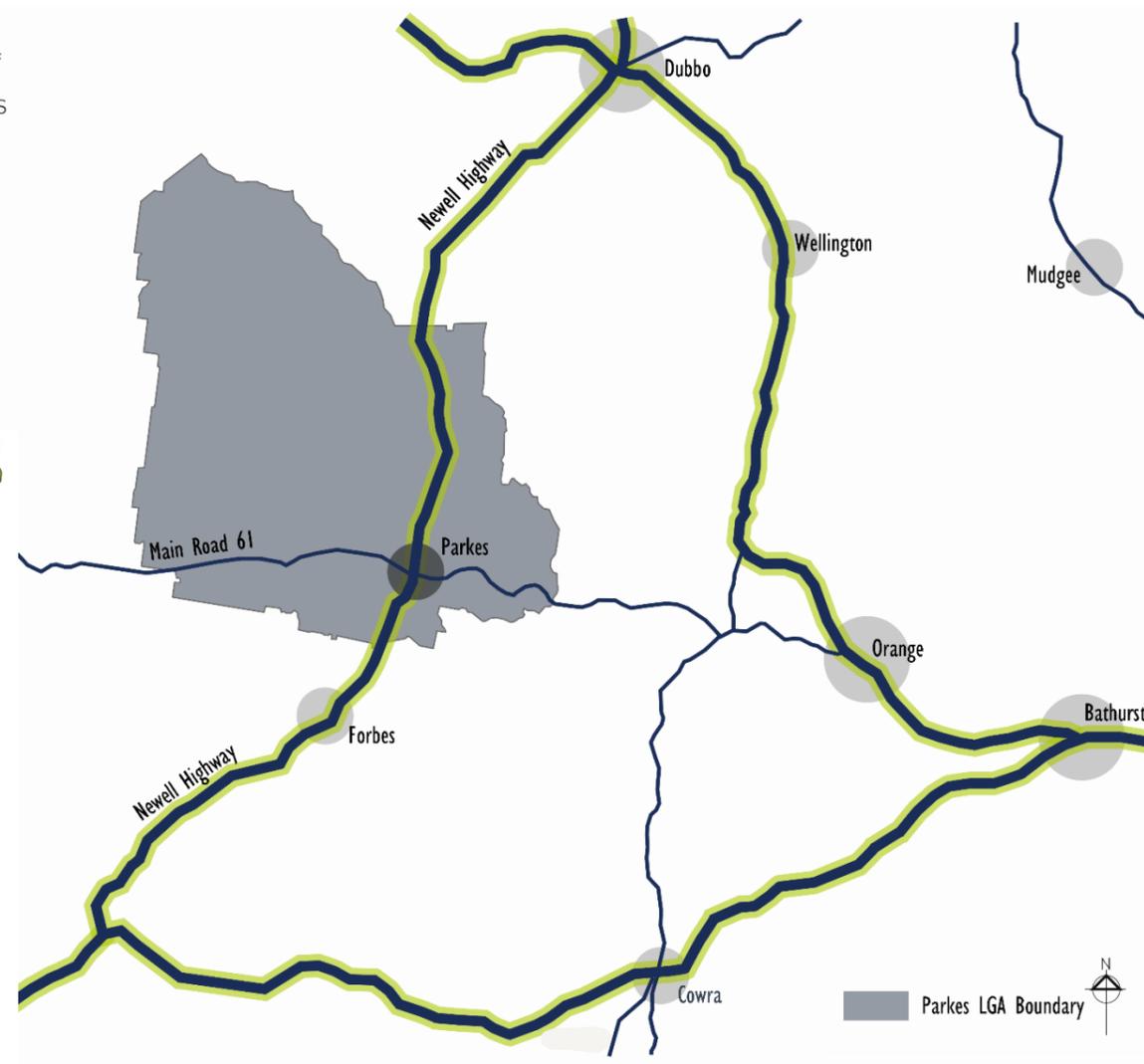
The region has a number of larger regional centres including Orange (41,500), Dubbo (41,600), Bathurst (41,700) and Lithgow (21,000). Other major towns in the region are Condobolin, Cowra, Forbes, Mudgee, Parkes and Wellington. The rest of the population is dispersed across many smaller towns and settlements. 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 1%. Poor access to public transport contributes to social disadvantage and accessibility issues in some sections of the community. For example, access to specialist health care is an issue compounded for all but the largest centres in the region.



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 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.



6.0

Regional and Local Profile

SNAPSHOT

The Parkes Shire is located in the Central West Region of NSW. The area is a major agricultural, industrial and commercial region, rich in natural resources, and has strong road and rail connections to the Sydney Region, and to the Western Region through Dubbo and Parkes. There are strong north-south links to Melbourne and Brisbane via the Newell Highway.

6.0

Regional and Local Profile

SNAPSHOT

Similar to many other areas in the Central West region, the demographic structure of Parkes Shire is expected to become significantly older. The projected ageing of the population in Parkes 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 health and wellbeing are important issues to cater to the needs of existing and future residents.

6.2. Parkes Shire

The Parkes Shire has a population of around 15,250 people, spread over a relatively large area of 5,919 square kilometres. The shire is located approximately 360 kilometres west of Sydney, 700 kilometres north of Melbourne, 970 kilometres south of Brisbane and 300 kilometres north-west of Canberra. It is renowned for its strategic connections to mainland cities and ports via roads, railways and a regional passenger airport at Parkes.

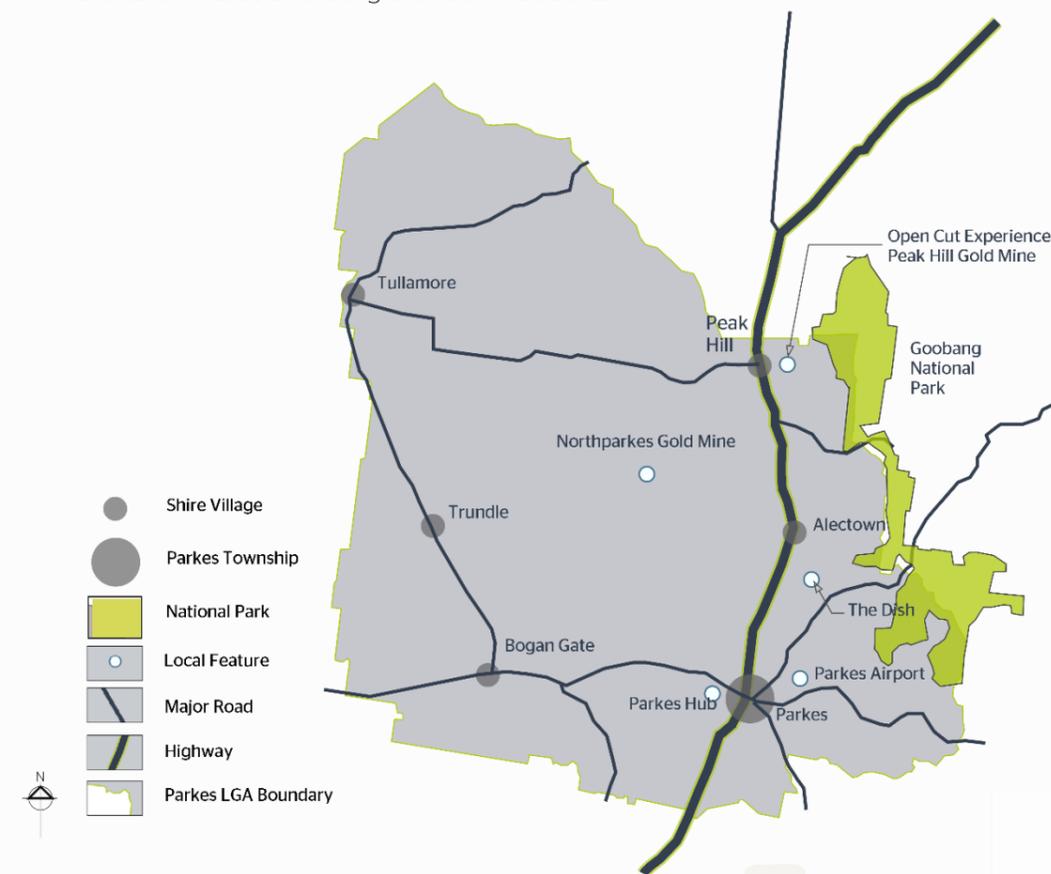
The Parkes Shire includes the townships and localities of Alectown, Bogan Gate, Bruie Plains, Cookamidgera, Cooks Myalls, Daroobalgie, Goonumbra, Gunningbland, Mandagery, Nelungaloo, Parkes, Peak Hill, Tichborne, Trewilga, Trundle, Tullamore and Yarrabandai. The iconic Parkes Radio Telescope (The Dish) is located in the shire and there are many other attractions.

The mainstay of the Parkes Shire economy continues to be agriculture, with more people employed in this sector than any other industry type. Mining is also an important industry with the nearby Northparkes Mines continuing to be a major employer in the shire. Key employment sectors include retail trade (9.7%), agriculture (16.3%) and mining (10.3%), employing around 2,167 people in total or 36.2% of the workforce. In comparison, New South Wales employs an average of 2.9% in agriculture; 1.5% in mining; and 8.9% in retail trade. The Parkes Hub is an emerging industrial precinct, with potential for expansion in line with national transport and freight initiatives such as the Inland Rail project.

Travel patterns are dispersed across the shire with the majority of activity tending to interact with the Parkes Township. The Parkes Shire community is considered to have high car dependency for both work and leisure. Every family household in the shire has around 1.7 motor cars at their disposal. The dominance of vehicle dependency is reflected in the method of travel to work with 70% of people in Parkes 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 Parkes Shire that support general transport and the freight industry sector. The Newell Highway linking Melbourne and Brisbane also runs through the shire. This accounts for large volumes of truck traffic along the Newell Highway and the state road network. According to Infrastructure Australia, demand for freight services is expected to almost treble in Australia by 2050, with a likely flow on effect on the local freight industry sector and truck traffic.

Similar to many other areas in the Central West, the demographic structure of Parkes Shire is expected to become significantly older. The projected ageing of the population in Parkes 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 health and wellbeing are important issues to cater to the needs of existing and future residents.



6.3. Parkes Township

The town of Parkes is the largest urban centre in the Parkes Shire. There are three main employment precincts within Parkes, which includes the Parkes Central Business District (CBD), the Parkes Industrial Estate and the lower Clarinda Street Business District. Outside these areas, employment is generated at isolated facilities such as the Parkes Hospital, TAFE, schools and aged care facilities. The Northparkes Mines and the Parkes Hub also play important employment roles in the town.

The Parkes CBD is the main shopping precinct for the Parkes Shire. The CBD supports a healthy mix of business activity, motor vehicles, pedestrians and parking areas. The industrial estate and trade centres of Parkes are dominated by manufacturing and service industries, with the majority of employees currently choosing to drive to work.

The pedestrian and cycleway network in the Parkes CBD is relatively good, however the links to the industrial areas and more isolated employment generators is patchy. Traffic along the Newell Highway presents a number of challenges for the Parkes community, particularly those wishing to cross Bogan Street in an east-west direction. The railway boom gate in town also presents as a major barrier.

Tourism is a growing market for Parkes, with visitors attracted to town events such as the Elvis Festival, recreational activities (mainly structured sports) and to catch up with friends and family.

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

6.0

Regional and Local Profile

SNAPSHOT

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



6.0

Regional and Local Profile

SNAPSHOT

Residents in Peak Hill lead active lifestyles with many people keen for fitness and country connections to the Bogan River, Goobang National Park, rural roads for riding and the nearby golf course.

6.4. Peak Hill

Peak Hill is located near the northern boundary of the Parkes Shire. The township is 49 kilometres north of Parkes and 71 kilometres south of Dubbo.

Peak Hill is home of the Bogan River Wiradjuri Tribe who have strong connections to the township and surrounding areas such as the Bogan River, Goobang National Park, Warge Rock and Bulgandramine.

The town of Peak Hill was established following the discovery of gold in 1889. A gold rush brought some 9,000 people to the gold field. Around 300 shafts were dug in and around Peak Hill from the 1890s through to 1917 when commercial mining operations were closed. Open cut gold mining operations were re-established to the east of Peak Hill township (1996-2005) by Alkane Resources. As part of the closure of the Peak Hill Gold Mine in 2005, Alkane and others in the community created the Open Cut Experience (OCE). The Peak Hill OCE is a network of public walking trails and viewing platforms overlooking the mine workings. The OCE complements other off-road walking trails further to the south.

Peak Hill is also known for its rich agricultural land, especially its sheep and wheat farming.

Residents in Peak Hill lead active lifestyles with many people keen for fitness and country connections to the Bogan River, Goobang National Park, rural roads for riding and the nearby golf course.

Traffic along the Newell Highway presents a number of challenges for the Peak Hill community, particularly trucks and vehicle speed along the urban sections of the highway.

A new multipurpose health service was opened at Peak Hill in May 2015 and plays an important role in providing health and aged care services for the local community.



6.5. Tullamore

The town of Tullamore is located on the north-western edge of the Parkes Shire, next to Bullock Creek. The town is at the cross roads of a number of regional roads, including the Tullamore Narromine Road, Tullamore Nyngan Road, Condobolin Tullamore Road, Trundle Tullamore Road and the Peak Hill Road.

The population is approximately 700 people, who have a strong sense of community and connection to the early white settlement of the area by predominantly Irish families in the 1900's. Tullamore is renowned for its Irish Festival held in March each year.

Tullamore retains some higher order commercial facilities, such as a bowling club, hotel, shops and a post office. The Memorial Park is a centre piece for the town and other attractions include the showground, town pool, skate park and playground facilities, public school, hospital and aged care facilities.

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

6.0

Regional and Local Profile

SNAPSHOT

Tullamore retains some higher order commercial facilities, such as a bowling club, hotel, shops and a post office. The Memorial Park is a centre piece for the town and other attractions include the showground, town pool, skate park and playground facilities, public school, hospital and aged care facilities.



6.0

Regional and Local Profile

SNAPSHOT

Community Members are very proactive in Trundle, and continue to work together to enhance the appearance and functionality of the Main-street, the appeal of the town for tourists and visitors, and the overall reputation of the town as an interesting and historic 'country style' family destination.

6.6. Trundle

Trundle is located approximately 60 kilometres north-west of Parkes. The town is renowned for its unusually wide main street (60 metres). The Trundle Hotel has one of the longest hotel balconies in NSW (86 metres). The Main-street is an attractor of motor vehicle and truck activity.

Trundle is home to a pre-school, a Catholic primary school (Saint Patricks) and a K-12 public school. Health services are provided through the Trundle Multipurpose Health Centre (formerly the Trundle Hospital).

The town also boasts a golf course with sand-oil greens, a 25-metre swimming pool, tennis courts, horse-racing facilities and a sporting oval named Berryman Park.

The Trundle Bush Tucker Day held in spring each year and the Trundle ABBA Festival in autumn are important social and tourist events for the town.

Community members are very proactive in Trundle, and continue to work together to enhance the appearance and functionality of the Main-street, the appeal of the town for tourists and visitors, and the overall reputation of the town as an interesting and historic 'country style' family destination.

6.0

Regional and Local Profile

SNAPSHOT

There are currently no formal pedestrian or cycle routes connecting towns and villages in Parkes Shire. Cycling along rural roads is becoming more popular via a number of well-established routes known to local cyclists.



6.7. Village and Rural Areas

The villages in the Parkes Shire have smaller and more dispersed populations than Parkes, Peak Hill, Trundle and Tullamore. They also have limited facilities and employment opportunities. Even the larger villages of Alectown, Bogan Gate, Cookamidgera and Gunningbland have no commercial facilities 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 wide village streets and low traffic volumes, many residents walk, cycle or use mobility scooters on the actual road carriageway or along the grassed verge.

There are no formal pedestrian or cycle routes connecting towns and villages in the Parkes 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 ride from Parkes to Cookamidgera, Parkes to Forbes via Nelungaloo, Parkes to Peak Hill via the Northparkes Mines Road Peak Hill Loop via O'Learys Lane, Peak Hill to the Bogan Weir, and rides along Renshaw McGirr Way and to The Dish.

Compared to other local government areas in the Central West, road cycling conditions in the Parkes Shire are not ideally conducive to road cycling and large bunch rides. There are few sealed loop rides on the quieter country roads and the sealed roads that are available can become quite narrow in sections (no road shoulder) and can suffer from heavy potholing and surface damage largely due to truck traffic. Road touring cyclists and events are not regular occurrences in the Parkes Shire, and perhaps this is due to more favourable road conditions and more active cycling clubs and groups in other regions. The Big Foot MTB was held in the Back Yamma State Forest (south of Parkes), but this event has not been held since 2014.

The mode of choice for cyclists appears to be all-terrain bicycles, such as flat bar touring bikes and mountain bikes. Locals tend to ride these more sturdy bikes due to the existing road conditions and the freedom they provide in accessing quieter gravel roads and rural attractions such as the Dish, Goobang National Park, Back Yamma State Forest and the Bogan River Wier near Peak Hill. Popular MTB rides include Golden Bar, Beargamil Dam / Lake Endeavour Dam, Back Yamma Forrest and the Goobang National Park.

6.0

Regional and Local Profile

SNAPSHOT

There are a number of areas in the Parkes Shire that are visited by tourists and locals seeking recreational, sporting and other outdoor activities.

6.8. Tourist Areas

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

- The Dish.
- Parkes Visitor Centre and Kellys Reserve.
- Sir Henry Parkes Museum.
- Peak Hill Open Cut Experience.
- Parkes Memorial Hill, Spicer Caravan Park and surrounding ovals.
- Goobang National Park.
- Parkes Central Business District.
- Trundle mainstreet.



SNAPSHOT

Interest in active movement is World-wide and a review of mainstream reports, strategies and policies has been undertaken to support the development of a 'Parkes Specific Plan'. This section provides background on the various strategies, guidelines and policies that are considered relevant to the preparation of the Parkes Shire Pedestrian and Cycling Strategy.

7. POLICY PROFILE

7.1. Why Review Policies that Aren't Parkes Specific

The review of supportive documents serves the following purposes:

- To ensure the Strategy aligns with regional, state and national policy directions.
- To ensure the Strategy aligns with 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.

7.2. 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 a 'Parkes specific plan'. 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 has 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 walking, running 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.

7.3. 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.

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.
- Austroads, The Guide to Traffic Engineering Practice 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.

7.0

Policy Profile

SNAPSHOT

Interest in active movement is World-wide and a review of mainstream reports, strategies and policies has been undertaken to support the development of a 'Parkes Specific Plan'. This section provides background on the various strategies, guidelines, policies and terms that are considered relevant to the preparation of the Parkes Shire Pedestrian and Cycling Strategy.

- How to Prepare a Pedestrian Access & Mobility Plan.
- Producing and Using Transport and Access Guides.
- TravelSmart Bikeability Toolkit.

7.4. Parkes Shire Policies

Parkes Shire Council has developed the Parkes Pedestrian and Cycling Plan 2008, which is the principal document currently guiding the planning and implementation of footpaths and cycling facilities. The Council is also progressing a number of strategic planning projects that will influence the Parkes Pedestrian and Cycling Strategy. These projects include:

- Parkes Living Well.
- Various Masterplans for open spaces.
- Brand Parkes.
- Parkes CBD Vibrancy Strategy.
- Parkes Heritage Trail project.
- Transport Asset Management Plans.

8. IDENTIFYING PEDESTRIAN & CYCLIST NEEDS

8.1. 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 Parkes 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. 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 school and TAFE 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.
- **Older pedestrians** – are generally less mobile than other pedestrians and prefer footpaths and shared paths with minimal gradients / steps and a high degree of safety and personal security.

8.2. Cyclist Needs

There are a range of cyclists who need to access different parts of the Parkes 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 Parkes 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 and do the shopping as well as visit 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 (particularly in Parkes), other than to access weekend sports, skate parks and friends.
- **Infants / primary school students** – infant and primary school aged cyclists have undeveloped cognitive skills, lack good peripheral vision, and have little knowledge of road traffic rules. More cycling in the infant / primary school age group has been observed in the smaller towns than in Parkes. Fear of traffic in the larger towns appears to be a factor in this age group riding their bikes regularly.
- **Fitness** – a number of adults use road bikes, touring bikes and Mountain Bikes (MTB) for fitness and recreation. Road and touring cyclists often travel in small groups or larger bunch rides seeking long distances for training and recreational 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.

8.0

Identifying Pedestrian and Cyclist Needs

SNAPSHOT

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 the planning new Active Movement Plans for the Parkes Shire.

8.0

Identifying Pedestrian and Cyclist Needs

SNAPSHOT

A key focus of the Parkes Shire Pedestrian and Cycling Strategy should be to provide mobility and access facilities for disabled and older persons in our community, particularly in high activity areas such as the Parkes CBD.

8.3. 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 Parkes Shire Pedestrian and Cycling Strategy should be to provide mobility and access facilities for disabled and older persons in our community, particularly in high activity areas such as the Parkes CBD.

8.4. Aged Access Needs

With the incidence of disability increasing with age, the rate of disability is expected to increase substantially in the Parkes 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. 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.

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). As shown by Job RFS, 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.

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.

A key focus of the Parkes Shire Pedestrian and Cycling Strategy should be to provide mobility and access facilities for disabled and older persons in our community, particularly in high activity areas such as the Parkes CBD. 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 where necessary.
- Strengthen enforcement of laws on speed limits, and drink-driving.

8.5. 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 for children in Parkes 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 cues to invite children and their parents / guardians to use these spaces as part of the active movement network.

Key objectives of the Parkes Shire Pedestrian and Cycling Strategy should be to highlight areas that provide opportunities for off-road play and to link these areas to residential neighbourhoods and the wider network.



8.0

Identifying Pedestrian and Cyclist Needs

SNAPSHOT

Key objectives of the Parkes Shire Pedestrian and Cycling Strategy should be to highlight areas that provide opportunities for off-road play and to link these areas to residential neighbourhoods and the wider network.

9.0

Planning the New Active Movement Network

SNAPSHOT

The planning focus of the new active movement network is to make pedestrian and cycling activities a safe, healthy and attractive travel option throughout the Parkes Shire.

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

9. PLANNING THE NEW ACTIVE MOVEMENT NETWORK

9.1. Adopting Network Provision Principles

The planning focus of the new active movement network is to make pedestrian and cycling activities a safe, healthy and attractive travel option throughout the Parkes 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. Parkes Shire Council has limited funds for improvements and these funds need to be carefully directed towards achieving optimal outcomes. The Parkes Shire Pedestrian and Cycling Strategy needs to 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 Parkes Shire Pedestrian and Cycling Strategy needs to consider ways to promote behaviour-changes that encourages new users.
- **Developing Effective Infrastructure to Improve Conditions** - the Parkes Shire Pedestrian and Cycling Strategy aims to develop innovative infrastructure interventions at high activity areas and potentially hazardous areas, based on the NSW guidelines and other applicable guidelines and standards.
- **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 4-10 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.

Table 1 explains the main principles that were considered in planning the new active travel network in Parkes Shire.

9.0

Planning the New Active Movement Network

SNAPSHOT

There are key elements underpinning an efficient and useable active movement network, which can be best summed up in principles reproduced in the Table 1.

Table 1 - Adopting Network Provision Principles

Coherence	Coherence refers to the extent of coverage and completeness of the active movement network or the completeness of connecting paths. 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.
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.
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.
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.
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.

9.0

Planning the New Active Movement Network

SNAPSHOT

The planning focus of the new active movement network is to make pedestrian and cycling activities a safe, healthy and attractive travel option throughout the Parkes Shire.

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

9.2. Identifying Activity Generators

There are certain areas of the Parkes 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 movement 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 Parkes Shire are also presented in this section.

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.

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 and connected footpath networks are important design goals for secondary activity generators.

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.

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 hazardous or particularly stressful places for pedestrian and cyclists, including:

- Some areas of the Parkes and Peak Hill CBD.
- Parkes Railway Level Crossings.
- School zones.
- Bogan Street (Newell Highway) crossings.



Map Sheet 1

PARKES TOWNSHIP

Attractors Map

LEGEND

-  Highway / Main Road
-  Local Road
-  Railway
-  Primary Attractors
-  Secondary Attractors
-  Occasional Attractors

Primary Attractors

- P1** Parkes Christian School
- P2** Kelly Reserve
- P3** North Parkes / Pioneer / Spicer Ovals
- P4** Holy Family Church / School
- P5** Parkes Public School
- P6** Parkes TAFE
- P7** Parkes CBD
- P8** Memorial Hill
- P9** Southern Cross Apartments
- P10** Parkes East Public School
- P11** Rosedurnate Aged Care Units
- P12** Parkes High School
- P13** Cooke Park
- P14** Cheney Park
- P15** McGlynn Park
- P16** Middleton Public School
- P17** Harrison Park
- P18** Parkes Industrial Estate
- P19** Henderson St Reserve
- P20** Parkes Hospital
- P21** Parkes Tourist Information Centre & Sir Henry Parkes Museum

Secondary Attractors

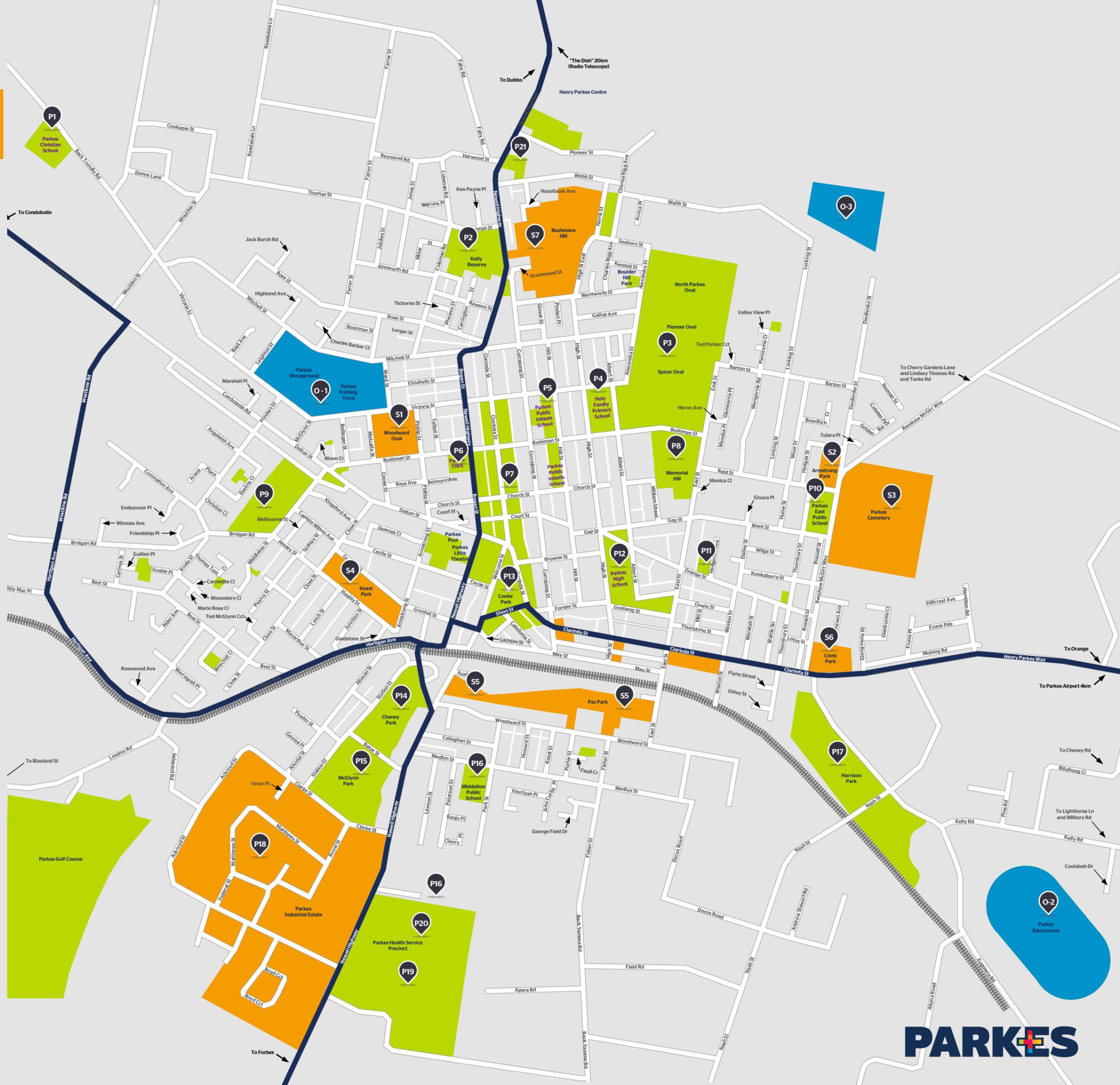
- S1** Woodward Oval
- S2** Armstrong Park
- S3** Parkes Cemetery
- S4** Keast Park
- S5** Pac Park
- S6** Lions Park
- S7** Bushmans Hill

Occasional Attractors

- O-1** Parkes Showground
- O-2** Parkes Racecourse
- O-3** Golden Bar 'MTB'



0 200 400m



9.0

Planning the New Active Movement Network

SNAPSHOT

The planning focus of the new active movement network is to make pedestrian and cycling activities a safe, healthy and attractive travel option throughout the Parkes Shire.

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

9.3. Achieving a Connected Network

The Parkes Shire Pedestrian and Cycling Strategy aims to create new active movement plans that support activity generators throughout Parkes 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 have been identified as potential cycling connection routes between communities.

9.4. 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:

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 Parkes Shire are of these construction types. Some main street beautification works use a combination of asphalt, concrete and brick paver 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 the Parkes CBD 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.

9.0

Planning the New Active Movement Network

SNAPSHOT

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 2, with each broad category of measures being associated with a number of specific interventions.

Shared Paths

Shared 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.

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 Parkes Shire that warrant exclusive off-road cycle paths.

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.

9.5. 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, 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*.



9.0

Planning the New Active Movement Network

Table 2 – Identifying Effective Safety Interventions

Key Safety Measure: Reduce Pedestrian and Cyclist Exposure to Vehicular Traffic		
Intervention	Merits of Intervention	Relevance in Parkes Context
Provide footpaths	<p>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. Active movement increases where tracks for walking are constructed.</p>	<p>Parkes township has a comprehensive network of footpaths, with relatively few gaps in the network.</p> <p>The Parkes CBD Vibrancy Strategy provides opportunities to address footpath issues, including the provision of additional traffic calming measures, wheelchair access and the wider use of tactile surfaces along all streets that comprise the CBD.</p> <p>The other towns and villages have less complete footpath networks, with additional footpaths required to include all high activity areas and routes, such as Tullamore Public School and St Josephs Primary School (Trundle), and links to the CBD.</p>
Provide on-road bicycle lanes	<p>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:</p> <ul style="list-style-type: none"> ▪ 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. <p>On-road bicycle lanes also improve accessibility and connectivity of the bicycle network and promote the use of alternative modes of transport.</p>	<p>A number of urban roads in Parkes 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 / volume of motor traffic should enable cyclists to safely share the road with other users.</p> <p>The delineation of on-road bicycle lanes by line-marking and signage is a relatively inexpensive intervention that can help to address road safety issues, and may encourage more people to ride bicycles in Parkes Shire.</p> <p>A number of streets in Parkes already have painted cyclist lanes, however the paint has faded on some of these lanes, making them hard to see. As a result, there are few cyclists observed using the cycling lanes, with most cyclists riding along the edge of the road carriageway or along the footpath network.</p> <p>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, particularly cyclists in Parkes and Peak Hill where Newell Highway traffic is a dominant factor.</p>

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Planning the New Active Movement Network

Key Safety Measure: Reduce Pedestrian and Cyclist Exposure to Vehicular Traffic

Intervention	Merits of Intervention	Relevance in Parkes 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.	<p>While a cohesive network of on-road bicycle lanes may assist in separating existing cyclists from other road users, the use of shared paths is generally considered the most appropriate response to encouraging more people to cycle on a regular basis in the Parkes area.</p> <p>Many urban footpaths in Parkes Shire 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 the Parkes CBD, schools and medical centres. An example of an existing footpath that may be eligible for conversion to a shared path is the footpath along the eastern side of Bogan Street that could potentially provide a north-south shared path link all the way through town.</p> <p>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. An example is the opportunity to provide a shared path along the southern side of Reid Street and Brogan Road, Parkes.</p> <p>On-road shared paths are also useful, where roads have sufficient width and people are already using the road for active movement. An example is the western side of East Street, Parkes.</p> <p>Shared paths are ideal for use along recreation and tourism destinations and routes, such as the Pac Park, Parkes.</p>
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 Eugowra Road, Tanks Lane, Brogan Road and the Renshaw McGirr Way near Parkes are part of regular cycling and running loops that would benefit from widened shoulders. The consultation undertaken showed strong support from road cyclists and some fitness runners for road safety improvements on these roads.

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Planning the New Active Movement Network

Key Safety Measure: Reduce Pedestrian and Cyclist Exposure to Vehicular Traffic		
Intervention	Merits of Intervention	Relevance in Parkes Context
Provide Bus/Bicycle Lane	Examples exist in larger cities where bicycles have successfully shared bus lanes.	The number / frequency of buses in Parkes Shire does not justify separate bus lanes that could be used by commuting cyclists.
Provide pedestrian refuge islands	<p>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.</p> <p>Provision for the standing of pedestrians, prams, wheelchairs, mobility scooters and bicycles at the crossing mid-point is an option, pedestrian islands should only be used in limited applications, such as high activity areas and routes, subject to site specific assessment.</p> <p>Where a safe point for pedestrians to cross wide/busy roads is required, it is preferred to use road narrowing initiatives such as kerb blisters.</p>	The use of pedestrian islands was questioned in the consultation forums, particularly the use of pedestrian islands on Bogan Street, Parkes (Newell Highway). The use of widened footpath blisters to reduce the length of road crossings was preferred.
Install marked crossings (zebra crossing)	<p>The purpose of a marked pedestrian 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:</p> <ul style="list-style-type: none"> ▪ Crossing markings are unlikely to increase pedestrian safety, without related enhancements such as raised crossing islands, traffic signals and traffic calming. ▪ Marked crossings are not appropriate where traffic speed is high. 	Consideration should be given to replacement of the zebra crossings on Caswell Street, Peak Hill, with alternative initiatives.

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Planning the New Active Movement Network

Key Safety Measure: Reduce Pedestrian and Cyclist Exposure to Vehicular Traffic

Intervention	Merits of Intervention	Relevance in Parkes Context
	<ul style="list-style-type: none"> 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. <p>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.</p>	<p>The zebra crossing on Currajong Street, Parkes (near the old Post Office) may also require increased lighting to ensure pedestrians are visible to motorists at night.</p>
Construct raised pedestrian crossings	<p>Raised pedestrian crossings force vehicles to slow to speeds low enough that a pedestrian is clearly visible to motorists and would survive a collision. Reductions in pedestrian crashes of around 40% could be expected from the installation of a raised crossing.</p>	<p>Raised pedestrian crossings have been used effectively in the Parkes CBD.</p> <p>Consideration could be given to replacing the existing zebra crossing on Caswell Street, Peak Hill with a raised pedestrian crossing and other traffic calming devices.</p>
Install signalised crossings	<p>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.</p>	<p>For consideration in the Parkes CBD Vibrancy Strategy, particularly as a means of crossing Bogan Street. Consideration could be given to installing a signalised crossing at the intersection of Bogan St and Dalton St, Parkes.</p>
Provide road narrowing (kerb extensions, widening footpaths)	<p>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.</p>	<p>The consultation undertaken showed strong support from road narrowing initiatives as a means to cross busy roads.</p> <p>For consideration in the Parkes CBD Vibrancy Strategy, and around high activity areas and busy road routes.</p>

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Planning the New Active Movement Network

Key Safety Measure: Reduce Pedestrian and Cyclist Exposure to Vehicular Traffic		
Intervention	Merits of Intervention	Relevance in Parkes Context
	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.	
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.	<p>The need for alternative routes for heavy vehicle traffic around Parkes has been highlighted in various strategic land-use and transport studies prepared by Parkes Shire Council and RMS.</p> <p>While there is widespread community and government stakeholder support for a Parkes heavy vehicle route, these types of projects are expensive and may take some years to progress.</p> <p>Whilst heavy vehicles and through traffic continue to travel along Bogan Street, Parkes and Caswell Street, Peak Hill, it is necessary to carefully manage traffic issues in these towns, particularly around the CBD areas. For example, Bogan Street is considered too busy and congested to encourage on-road cycling along this road at peak times. It would be more beneficial to provide a shared path for the full length of Bogan Street, to encourage active movement along this central spine.</p>
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 perceived as unsafe locations, not suitable for all users.	<p>Local conditions do not justify construction of new overpasses / underpasses in Parkes Shire.</p> <p>Visual enhancement of the rail overpass north of the Parkes Railway Station could be considered, including lighting of the corridor.</p>

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Planning the New Active Movement Network

Key Safety Measure: Reduce Pedestrian and Cyclist Exposure to Vehicular Traffic

Intervention	Merits of Intervention	Relevance in Parkes Context
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.

Key Measure: Reduce Vehicle Speed

Intervention	Merits of Intervention	Relevance in Parkes Context
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.	<p>The Parkes CBD Vibrancy Strategy provides opportunities to address any outstanding vehicle speed issues, by introducing traffic calming and pedestrian management interventions in this area.</p> <p>The speed of highway traffic along Caswell Street, Peak Hill is considered to be an important issue that requires a combined response from Council, RMS and Police.</p>
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.	There may be merit in introducing 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.	<p>For inclusion in the Parkes CBD Vibrancy Strategy and along Caswell Street, Peak Hill.</p> <p>Speed management measures in Trundle and Tullamore may also be necessary.</p> <p>Introduce traffic calming standards in Council subdivision standards.</p>

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Key Measure: Reduce Vehicle Speed		
Intervention	Merits of Intervention	Relevance in Parkes Context
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.	<p>The Parkes CBD Vibrancy Strategy provides opportunities to review intersection design and determine if there are any intersections requiring additional management initiatives.</p> <p>The roundabouts at the intersections of Church and Clarinda Streets and Bushman and Clarinda Streets should be reviewed to either reduce vehicle speed or improve the cycling and pedestrian conditions at these intersections.</p>
Provide school route improvements	<p>Reduced speed limits in school zones and dedicated school crossings provide effective measures to control vehicle speed and increase pedestrian and cyclist safety.</p> <p>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 crossing 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.</p> <p>Roundabouts near school zones should be avoided where possible.</p>	<p>Improvements could be made at the following schools:</p> <ul style="list-style-type: none"> ▪ Parkes High School - improved crossing conditions on High Street to link to Forster Street. ▪ Holy Family Primary School - improved shared paths around school grounds and links to main attractors. ▪ Parkes Public School - improved shared paths around school grounds and links to main attractors. ▪ Middleton Public School - new shared path link to Back Yamma Road. ▪ St Josephs Primary School, Trundle - new shared path link to the Main Street. ▪ Tullamore Public School - improved shared paths to the Main Street and main attractors.

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Key Measure: Improve Pedestrian and Cyclist Visibility		
Intervention	Merits of Intervention	Relevance in Parkes Context
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.	For inclusion in the Parkes CBD Vibrancy Strategy. Crossing enhancements at Peak Hill may also be necessary. Introduce traffic calming standards in Council subdivision standards.
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 the Parkes CBD Vibrancy Strategy. Light enhancements may also be necessary at Peak Hill. Additional lighting should also be investigated for the zebra crossing on Currajong Street (next to the old Post Office) and at the intersection of Bushman and Dalton Streets.
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 are no longer major issues, with Council taking action to grind back uneven concrete surfaces and regularly prune street trees in high activity areas. 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.

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Key Measure: Improve Pedestrian and Cyclist Visibility

Intervention	Merits of Intervention	Relevance in Parkes Context
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.	<p>There are no signalised signage provided at the schools in the Parkes Shire. Signals are currently not considered necessary at any school zone.</p> <p>Pedestrian crossing conditions at Bogan Street, Parkes are reaching a critical stage where signals may be necessary at Dalton Street and Bushman Street, if nothing else is done to improve pedestrian safety.</p> <p>Consultation with road cyclists using the Eugowra Road, Tanks Lane, Brolgan Road and Renshaw McGirr loops for early morning training purposes suggests that 'cyclist' signs would be effective.</p>
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.	<p>School zone signs are currently provided at all school zones. It is not considered necessary to provide additional signage at schools at this stage.</p> <p>Consultation with road cyclists using the Eugowra Road, Tanks Lane, Brolgan Road and Renshaw McGirr loops for early morning training purposes suggests that 'cyclist' signs would be effective.</p> <p>All on-road bicycle lanes and shared paths should be provided with signage in accordance with relevant Australian Standards.</p>
Encourage cyclists to wear high visibility clothing, lights and a bell.	<p>One of the most effective ways to improve cyclist safety is to make them more visible to motor vehicles.</p> <p>If riding at night, a bicycle must also have:</p> <ul style="list-style-type: none"> ▪ 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. 	<p>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. It is now the law that all adult cyclists must carry ID and a bell.</p> <p>The use of lights, reflectors, bells and high visibility gear by commuting and student cyclists is patchy.</p> <p>Programs should be developed at encouraging greater use of lights and high visibility gear.</p>

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Planning the New Active Movement Network

Key Measure: Improve Pedestrian and Cyclist Visibility

Intervention	Merits of Intervention	Relevance in Parkes Context
Encourage pedestrians to wear high visibility clothing when getting about	<p>Increased visibility of pedestrians at night and in the early morning can significantly improve road safety outcomes.</p> <p>The use of higher visibility clothing is recommended for all pedestrians travelling in dark conditions.</p> <p>The use of higher visibility gear, reflective clothing and flashing lights is recommended for people walking or running at night or in the early morning for fitness.</p>	<p>Many people walking and running in the early mornings and evenings in Parkes wear high visibility gear. Programs should be developed at encouraging greater use of lights and high visibility gear.</p>

Key Measure: Improve Safety Awareness Behaviour

Intervention	Merits of Intervention	Relevance in Parkes Context
Provide educational information in local media and schools	<p>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 NSW Bike Week. A great deal of road safety information is available to assist with road safety education and awareness, including the RMS website.</p>	<p>The road safety officer for Parkes Shire is an important education / information initiative.</p> <p>Programs should be developed to increase greater participation at NSW Bike Week.</p>
Provide a training facility for pedestrians and cyclists	<p>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.</p> <p>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.</p>	<p>A training facility could be achieved in a park in local towns and villages, with extra community support.</p>

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Key Measure: Improve Safety Awareness Behaviour		
Intervention	Merits of Intervention	Relevance in Parkes Context
	<p>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.</p>	
Enforce traffic laws	<p>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:</p> <ul style="list-style-type: none"> ▪ 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, ID lighting or a bell. ▪ Cyclists riding through red traffic lights and adult cyclists riding on footpaths. ▪ Erratic and dangerous behaviour of younger cyclists, skate boarders and kick scooter users seeking fun / challenges over road safety considerations. 	<p>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 cyclist. Education and awareness of the rules can assist in developing better understanding and tolerance between different road users.</p> <p>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.</p> <p>A training facility at a park in local towns and villages 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.</p>

10. DESIGNING THE NEW ACTIVE MOVEMENT NETWORK

10.1. 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.

10.2. Kerb Ramps

With most 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 design of a kerb ramp is illustrated below.



10.3. 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 (TGSIs) provide information that enables people who have impaired vision to locate a refuge island either tactually or using their residual vision.

The general design of a kerb pedestrian refuge is illustrated below.



10.0

Designing the New Active Movement Network

SNAPSHOT

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

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Designing the New Active Movement Network

SNAPSHOT

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

10.4. 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*.



10.5. 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.
- 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 define 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*.

Table 3 – Bicycle Lane Widths

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	2.0m – 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 lanes. 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.



Table 4 – Method of providing bike surfaces

No.	Method	Comments
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.

10.0

Designing the New Active Movement Network

SNAPSHOT

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

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Designing the New Active Movement Network

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10.6. 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) and Cycling aspects of Austroads Guide Section 11.
- Bicycle Victoria The Bicycle Parking Handbook, 2004.



10.7. 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 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. These facilities are recommended in high activity areas.

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.



10.0

Designing the New Active Movement Network

SNAPSHOT

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

10.8. 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.



10.9. 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.

Exercise equipment is also being used / provided in some parks to facilitate more intensive fitness training. These facilities are the 'outdoor' equivalent of a gym, and may include weights and resistance benches, step-up and pull-up devices etc.

10.10. 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)*.



11.0

Community Engagement and Audit Findings

SNAPSHOT

During August to October 2015, Parkes Shire Council conducted preliminary community engagement in the form of workshops, questionnaires and media promotion. This section summarises the main findings of consultation.

11. COMMUNITY ENGAGEMENT AND AUDIT FINDINGS

11.1. Process Overview

Community Engagement

During August to October 2015 and through May 2016, Parkes Shire Council conducted preliminary community engagement in the form of workshops, questionnaires, media promotion and public exhibition of the draft Parkes Shire Pedestrian and Cycling Strategy.

Stakeholder Workshops

Community workshops were held in Parkes, Peak Hill, Trundle and Tullamore in September 2015, to which over 80 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. Further workshops were held in Parkes during public exhibition of the draft Parkes Shire Pedestrian and Cycling Strategy.

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

Online Surveys

Council conducted an online survey which was distributed via Council's website and through workshop participants. Over 140 surveys were received by Council.

School Principals Surveys

A School Survey was developed to better understand the number of students and staff walking and cycling to and from school as well as the enablers and barriers to walking and cycling to school and the types of facilities available to and from school. The School Survey was distributed to the Principals of all schools. Schools that responded reported many students walk to and from school, with significantly fewer students riding bicycles to school. Schools in the smaller towns had the largest proportion of students cycling to school.

The Principals that responded were all supportive of increased active transport initiatives and suggested that safer pedestrian and cycling routes to school may encourage more pedestrian and cycling activity.

Promotion

A number of promotional activities were undertaken to encourage participation in the preliminary consultation phase for the Parkes Shire Pedestrian and Cycling Strategy. Media releases were made available to local newspapers about the launch of the project, surveys, workshops and public consultation. Council's website featured details about the project, surveys, workshops and exhibition venues.

General Consultation Findings

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

Safety was an issue identified by workshop participants in all town workshops. The main safety concerns were in relation to the number of trucks and speed of motor vehicles, particularly on main roads and the Newell Highway.

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

General Audit Findings

An audit of existing pedestrian and cycling conditions across the Parkes Shire was undertaken throughout September and October 2015. The audit was undertaken by means of the following:

- A desktop review of local data and discussions with government stakeholders, including Council and RMS staff.
- 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 Parkes Shire. The emphasis of the audits was on identifying gaps in the network as well as the barriers to people using the network.

11.0

Community Engagement and Audit Findings

PARKES TOWNSHIP

The audit and consultation work in Parkes revealed a relatively extensive footpath network in fair to 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 Parkes network, which are discussed below. A map summarising the audit / consultation findings of the Parkes investigations is also presented.



The audits revealed a variety of pedestrian and cycling facilities provided in Parkes 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 Parkes Shire Council for rectification.

Specific Consultation and Audit Findings

Specific consultation / audit findings from the workshops and site visits in Parkes, Peak Hill, Trundle and Tullamore are presented in the following pages.

11.2. Parkes Township Audit Findings

Bicycle lanes

There are several on-road cycling lanes in Parkes. 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 they 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 orange lines on the map show the existing network of concrete footpaths in Parkes. The pink dotted lines on the map show parts of the road network that are being readily used by pedestrians that do not have constructed footpaths. In particular, the routes along Reid Street, Bushman Street and Brogan Road were noted for their lack of continuous footpaths or shared paths.

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 Parkes are generally provided with constructed footpaths. Additional constructed footpaths or shared paths would be beneficial at Parkes Primary School and Middleton School.

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 Parkes and near the Parkes CBD.

Trip hazards

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

Road crossings

The pedestrian crossings at the intersections of Bogan Street were highlighted as difficult to safely cross by pedestrians.

Waterway crossings

The Low Level pedestrian bridge over the Billabong Creek (south of Harrison Park) is finished to a poor standard and needs upgrading.

Railway crossings

The footpath crossings over the Parkes to Broken Hill Railway are finished to poor standards and present obstacles to pedestrians and cyclists that regularly used this route.

Lighting

The pedestrian crossing of Currajong Street (near the old Post Office) is regularly used by pedestrians at night and is poorly lit. The railway crossings also need additional illumination.

Tactile indicators

Not all intersections and grade changes in the Parkes CBD are provided with tactile indicators. There are some TGS 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. TGS are generally absent from intersections in the CBD that don't interact with Clarinda Street as well as footpaths that cross laneways.

11.0

Community Engagement and Audit Findings

PARKES TOWNSHIP

The audit and consultation work in Parkes revealed a relatively extensive footpath network in fair to 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 Parkes network, which are discussed below. A map summarising the audit / consultation findings of the Parkes investigations is also presented.



Shared path line marking and signage

Shared paths along the Eugowra Road, Newell Highway and Pac Park 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.

Parkes walking routes

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

New sub-division

There are not many new footpaths linking to the existing path network.

Bogan Street crossings

Need safer crossings of Bogan Street, particularly at Dalton Street.

Road Cycling

The main road rides are along the Eugowra Road to Cookamidgera, Renshaw McGirr Way, Brolgan Road and Tanks Lane.

Parkes road cyclists don't feel overly safe on some of these roads and report near misses.

Off-road MTB cycling

Golden bar and (near) Harrison Oval are opportunities to expand the mountain bike tracks and paths.

Barriers

Bogan Street (Newell Highway) presents the main barrier to achieving a connected network in Parkes. In particular, the crossing points at Dalton Street and Bushman Street need improvements to link attractors and destinations.

Opportunities

Keast Park, Pac Park, Memorial Hill to Golden Bar and Sir Henry Parkes Museum and a circulatory shared path network connecting these attractors. The new water treatment works and new water pipeline routes was highlighted as potential opportunities to provide new paths.

Map Sheet 2

PARKES TOWNSHIP Consultation & Audit Findings Map

LEGEND

- Highway / Main Road
- Local Road
- Railway
- Park / Recreation
- School
- Parkes CBD
- Existing Footpath
- Existing Shared Paths
- Regular Walking & Cycling Routes
- Active Movement Barrier
- Active Movement Barrier - Lighting

Barrier Descriptions

- B1** East St railway crossing
- B2** East St creek crossing
- B3** Newell Highway crossing
- B4** Bushman St / Bogan St
- B5** Bushman St / Condobolin Rd
- B6** Newell Highway railway crossing
- B7** Bogan Rd Coles basement carpark entrance
- B8** Close St / Cecil St gap
- B9** Orange Rd / Renshaw McGirr Way
- B10** Orange Rd / East St
- B11** Dalton St / Bogan St
- L1** Court St / Currajong St
- L2** Bushman St / Condobolin St
- L3** Thomas St

NOTES FROM CONSULTATION

There is a need to undertake a comprehensive review of the existing system of Tactile Ground Surface Indicators throughout the Parkes Central Business District.

There are a number of kerb ramps throughout the township that need to be provided or which are in need of replacement due to poor alignment, grade or condition.

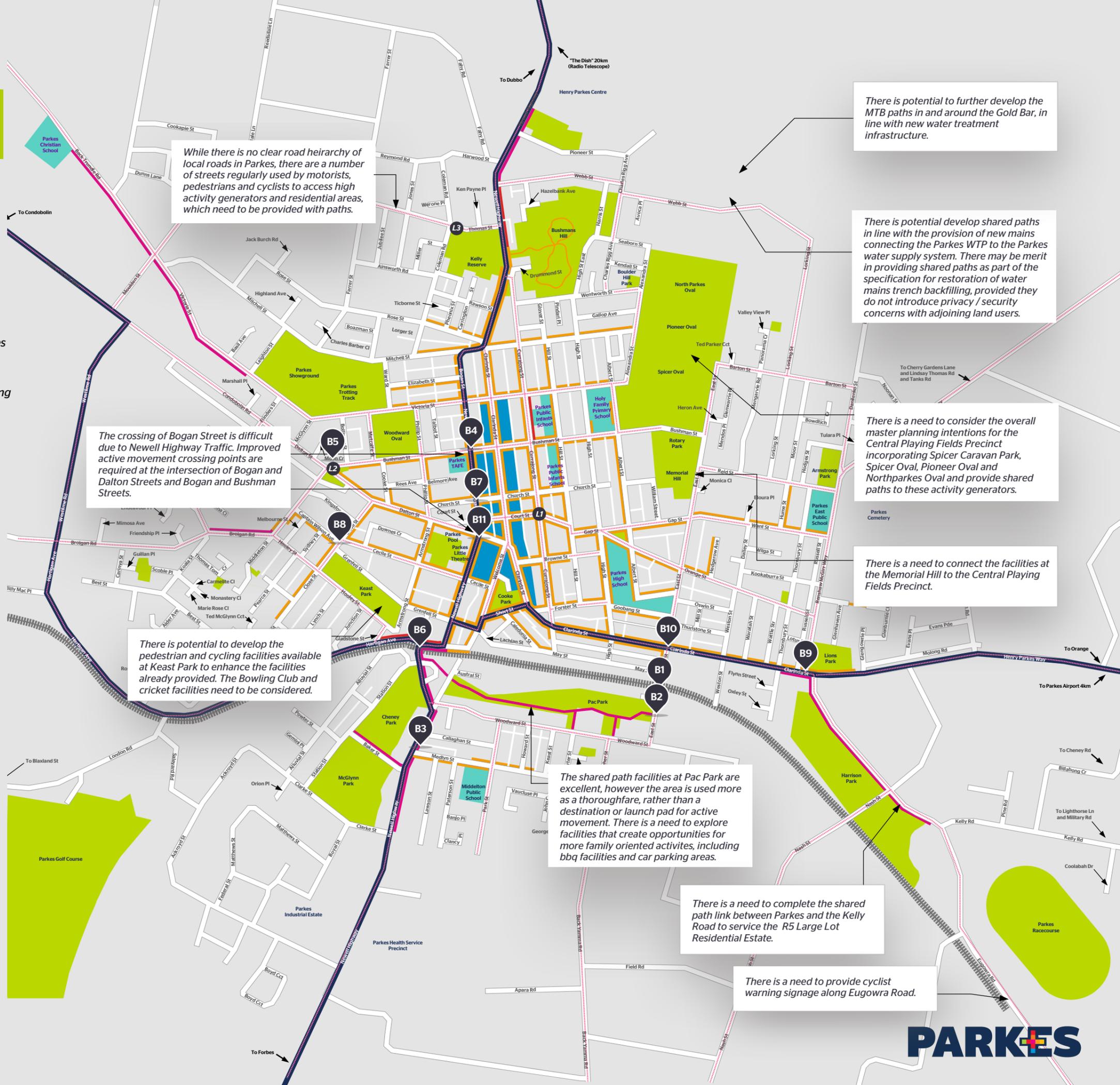
There are a number of kerb ramps throughout the township that need to be provided or which are in need of replacement due to poor alignment, grade or condition.

The footpath crossings over the Parkes to Broken Hill Railway are finished to poor standards and presents obstacles to active movement.

The main road cycling routes are along the Eugowra Road to Cookamidgera, Renshaw McGirr Way and Tanks Lane.



0 200 400m



While there is no clear road hierarchy in Parkes, there are a number of streets regularly used by motorists, pedestrians and cyclists to access high activity generators and residential areas, which need to be provided with paths.

There is potential to further develop the MTB paths in and around the Gold Bar, in line with new water treatment infrastructure.

There is potential develop shared paths in line with the provision of new mains connecting the Parkes WTP to the Parkes water supply system. There may be merit in providing shared paths as part of the specification for restoration of water mains trench backfilling, provided they do not introduce privacy / security concerns with adjoining land users.

The crossing of Bogan Street is difficult due to Newell Highway Traffic. Improved active movement crossing points are required at the intersection of Bogan and Dalton Streets and Bogan and Bushman Streets.

There is a need to consider the overall master planning intentions for the Central Playing Fields Precinct incorporating Spicer Caravan Park, Spicer Oval, Pioneer Oval and Northparkes Oval and provide shared paths to these activity generators.

There is potential to develop the pedestrian and cycling facilities available at Keast Park to enhance the facilities already provided. The Bowling Club and cricket facilities need to be considered.

There is a need to connect the facilities at the Memorial Hill to the Central Playing Fields Precinct.

The shared path facilities at Pac Park are excellent, however the area is used more as a thoroughfare, rather than a destination or launch pad for active movement. There is a need to explore facilities that create opportunities for more family oriented activities, including bbq facilities and car parking areas.

There is a need to complete the shared path link between Parkes and the Kelly Road to service the R5 Large Lot Residential Estate.

There is a need to provide cyclist warning signage along Eugowra Road.

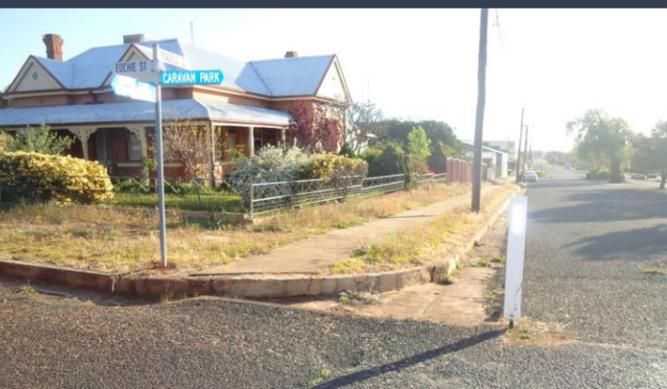


11.0

Community Engagement & Audit Findings

PEAK HILL

The audit and consultation work in Peak Hill revealed a reasonably extensive footpath network in fair to good condition and no established cycling network. A number of opportunities and constraints (deficiencies, gaps and barriers) were identified in the, which are examined below.



11.3. Peak Hill Village Audit Findings

Bicycle lanes

There are no on-road cycling lanes in Peak Hill, nor are they warranted at this stage. Regular cyclists advise they seek on-road cycling along the quieter rural roads to the east of town via O'Learys Lane. Regular riders also travel out to the Bogan River Wier, west of Peak Hill.

Footpaths

The grey lines on the map show the existing network of concrete footpaths in Parkes. 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 north-south active travel movement.

School zones

Schools in Peak Hill are generally provided with constructed footpaths.

Road crossings

The main street pedestrian crossing of Caswell Street was highlighted as difficult to safely cross by pedestrians. There is minimal use of kerb extensions and blisters to reduce effective road carriageway width and provide more effective road crossings.

Peak Hill CBD

Limited designated crossings in the CBD. Need safer crossings of Caswell Street, and at the approaches to the Main-street. Steps at some shop fronts noted as access barriers.

Railway crossings

No major issues were noted.

Tactile indicators

Generally absent in the central business district.

Bicycle parking facilities

Provided at all schools.

Shared path line marking and signage

No formal shared paths have been constructed.

Children cycling

Youth were observed walking, riding bicycles and kick-scooters throughout the town, and particularly around Caswell Street.

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.

Cycling

The main road rides are to the east of Peak Hill via O'Leary's Lane. An off-road path is required to link O'Leary's Lane and the Peak Hill township. Upgrades to the Peak Hill Road between town and the Bogan River Wier were also highlighted.

Barriers

No major barriers noted, other than lack of link to O'Leary's Lane and to the OCE.

Opportunities

OCE tourist walk and link to O'Leary's Lane.

Obstacles

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

Footpath cracking and sections of broken paving 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.

Map Sheet 3

PEAK HILL VILLAGE Consultation & Audit Findings Map

LEGEND

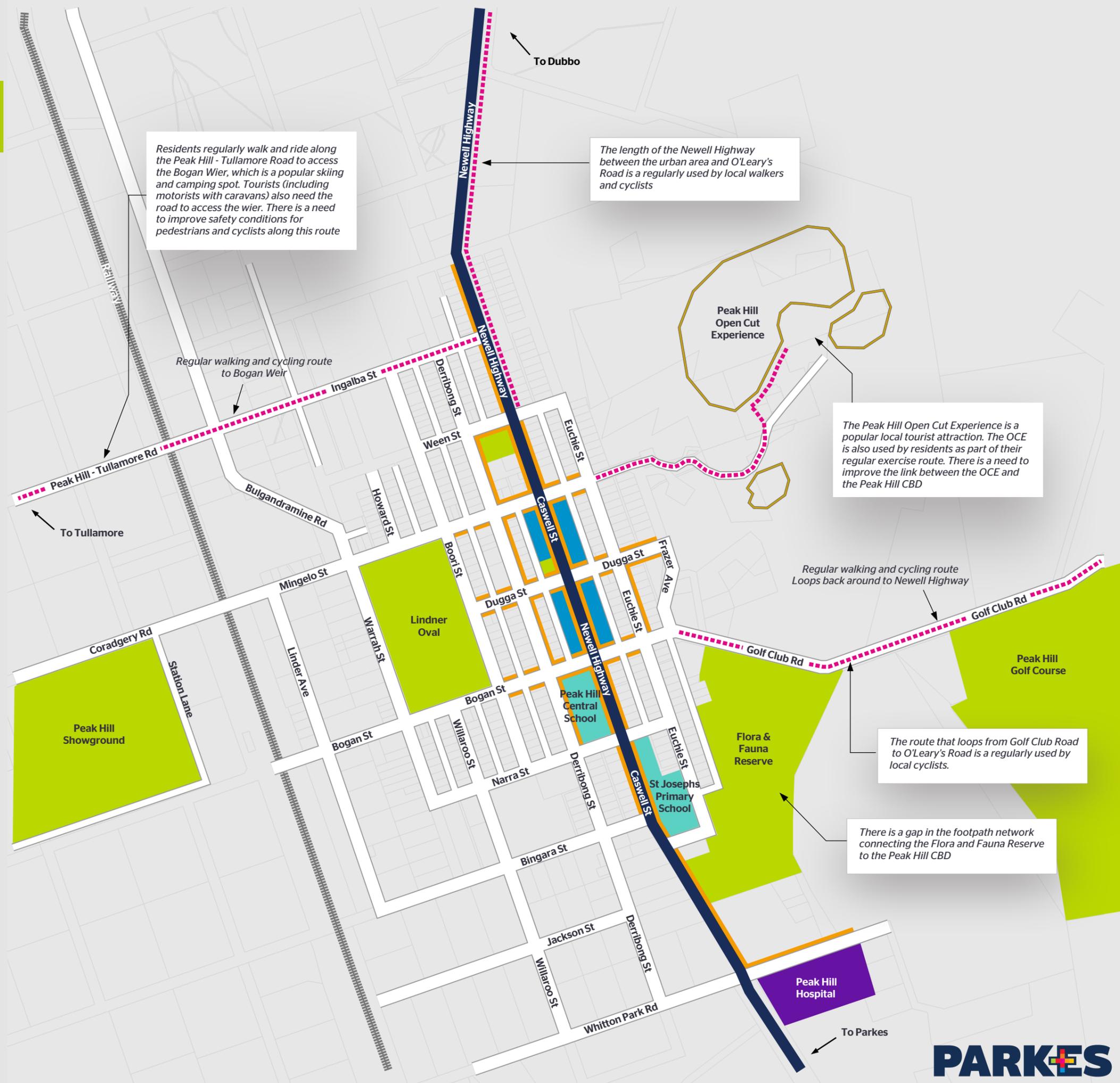
-  Highway / Main Road
-  Local Road
-  Railway
-  Park / Recreation
-  School
-  Peak Hill CBD
-  Existing Footpath
-  Regular Walking & Cycling Routes
-  Community Uses

NOTES FROM CONSULTATION

Regular cyclists advise they seek on-road cycling along the quieter rural roads to the east of the village via O'Leary's Lane.

There are a number of kerb ramps throughout the village that need to be provided or which are in need of replacement due to poor alignment, grade or condition.

There are number of gaps in the existing footpath network which are being readily used by pedestrians.



11.0

Community Engagement & Audit Findings

TRUNDLE VILLAGE

There is a need to connect Berryman Park, St Patricks Primary School and the Trundle Multi Purpose Service to the Mainstreet of Trundle.



11.4. Trundle Village Audit Findings

Bicycle lanes

There are no on-road cycling lanes in Trundle, nor are they warranted. There aren't a lot of regular cyclists in the area, other than children cyclists.

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 are generally provided with constructed footpaths, except St Josephs to Main-street heading north.

Road crossings

The width of the Main-street presents unique issues. Residents are not necessarily prepared to consider strategies that reduce width of the Main-street.

Railway crossings

No major issues were noted.

Lighting

No major issues were noted.

Tactile indicators

Generally absent in the central business district, and are not considered warranted at present.

Bicycle parking facilities

Provided at all schools and one set of bicycle racks next to hotel. Generally absent in other locations.

Shared path line marking and signage

No formal shared paths have been constructed.

Children cycling

Youth were observed walking, riding bicycles and kick-scooters throughout the town, and particularly around Caswell Street.

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.

Barriers

No major barriers noted other than width of Main-street.

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 paving 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

Main-street improvements.

Map Sheet 4

TRUNDLE VILLAGE Consultation & Audit Findings Map

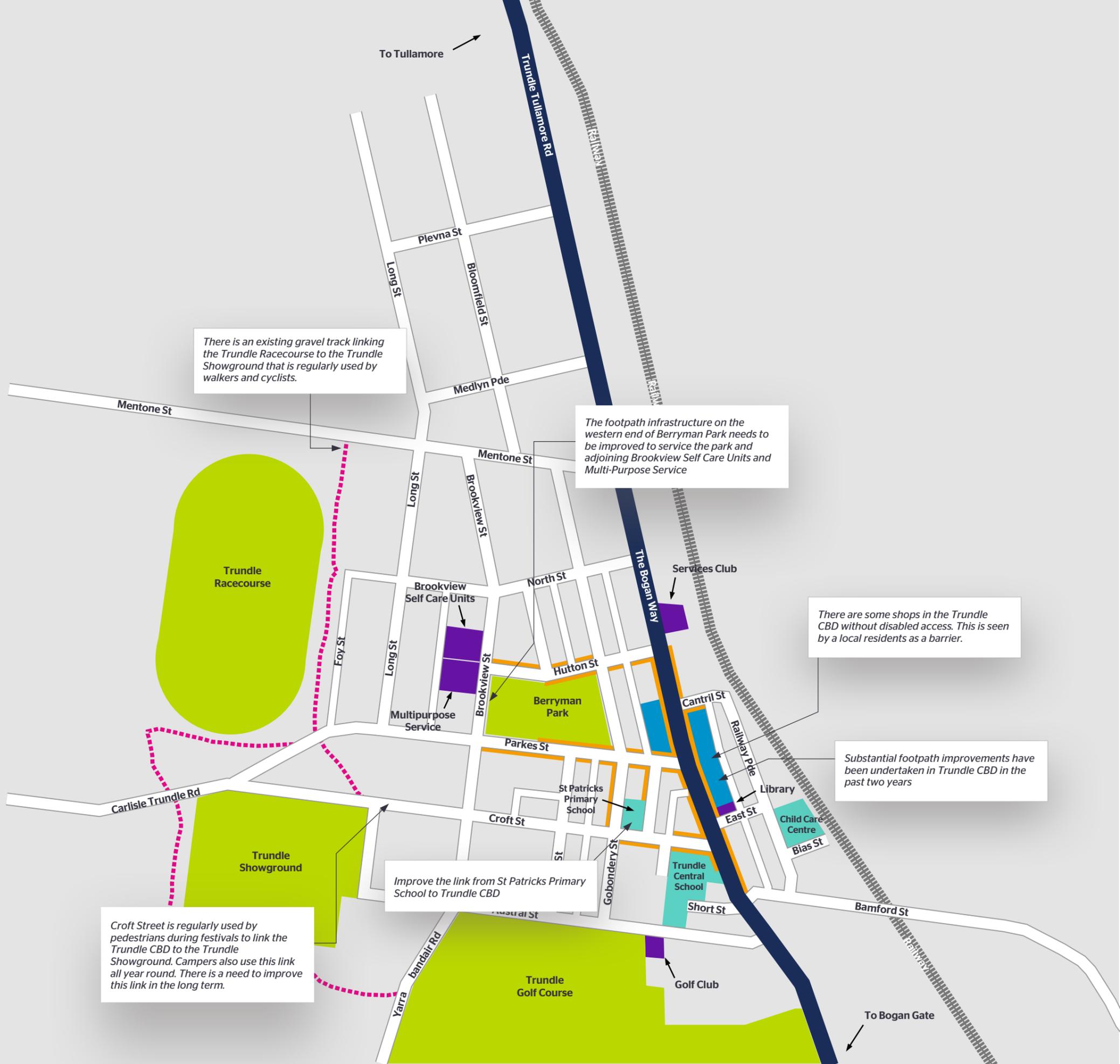
LEGEND

-  Highway / Main Road
-  Local Road
-  Railway
-  Park / Recreation
-  School
-  Trundle CBD
-  Community Uses
-  Existing Footpath
-  Regular Walking & Cycling Routes

NOTES FROM CONSULTATION

The existing footpath network is patchy and does not service all attractors. There are parts of the network that are being readily used by pedestrians that do not have constructed footpaths.

There are a number of kerb ramps throughout the village that need to be provided or which are in need of replacement due to poor alignment, grade or condition.



There is an existing gravel track linking the Trundle Racecourse to the Trundle Showground that is regularly used by walkers and cyclists.

The footpath infrastructure on the western end of Berryman Park needs to be improved to service the park and adjoining Brookview Self Care Units and Multi-Purpose Service

There are some shops in the Trundle CBD without disabled access. This is seen by a local residents as a barrier.

Substantial footpath improvements have been undertaken in Trundle CBD in the past two years

Improve the link from St Patricks Primary School to Trundle CBD

Croft Street is regularly used by pedestrians during festivals to link the Trundle CBD to the Trundle Showground. Campers also use this link all year round. There is a need to improve this link in the long term.



11.0

Community Engagement & Audit Findings

TULLAMORE VILLAGE

There is a need to connect Tullamore Central School and the facilities around the town pool to the mainstreet of Tullamore.



11.5. Tullamore Village Audit Findings

Bicycle lanes

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

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

Tullamore Central School lack constructed footpaths linking the Tullamore 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

Children were observed walking, riding bicycles and kick-scooters throughout the town, and into the early evening. Some children were not wearing helmets, did not have lights and were not following the road rules.

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.

Tullamore 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 paving 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.

Map Sheet 5

TULLAMORE VILLAGE Consultation & Audit Findings Map

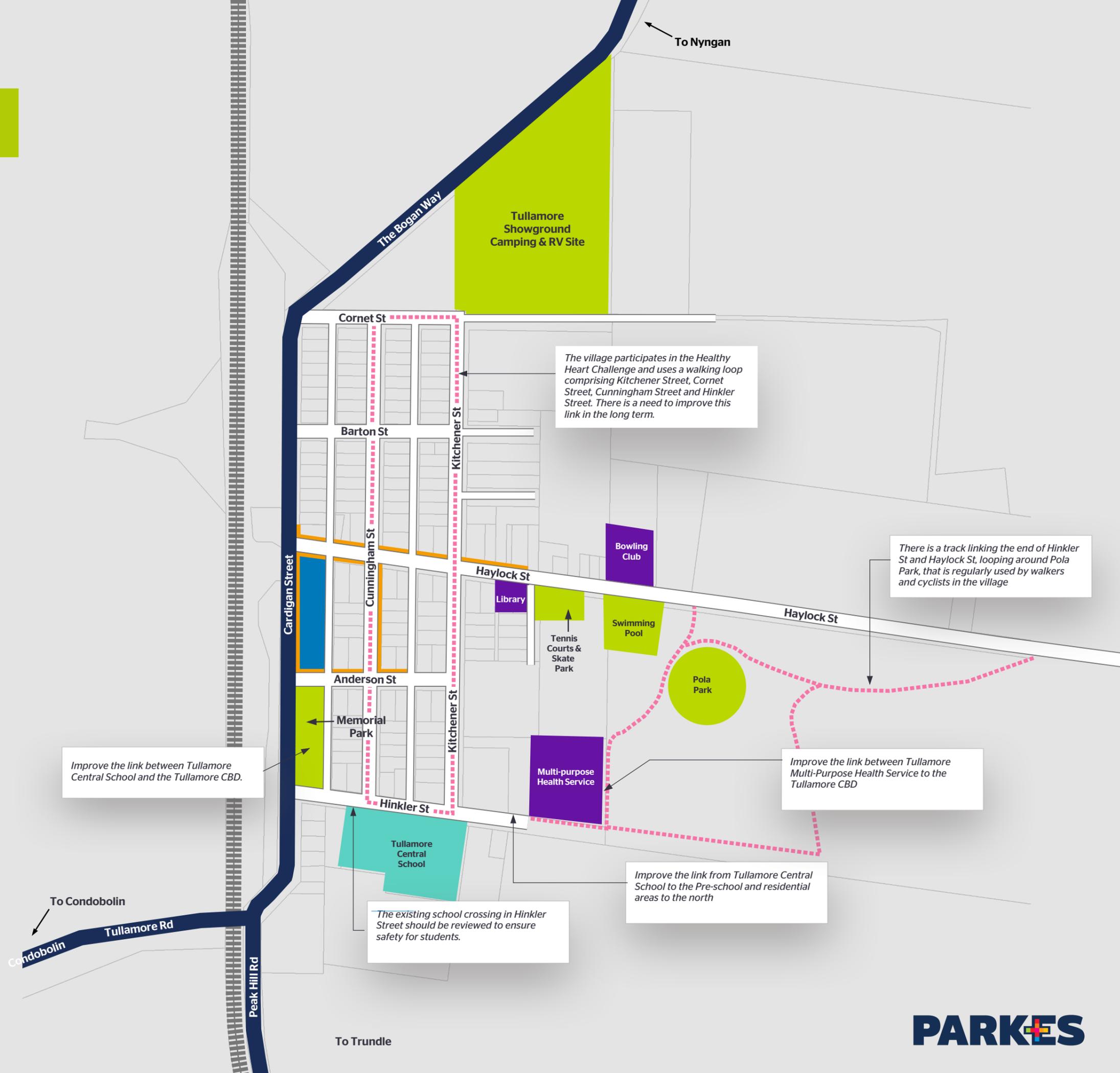
LEGEND

-  Highway / Main Road
-  Local Road
-  Railway
-  Park / Recreation
-  School
-  Tullamore CBD
-  Community Uses
-  Existing Footpath
-  Regular Walking & Cycling Routes

NOTES FROM CONSULTATION

The existing footpath network is patchy and does not service all attractors. There are parts of the network that are being readily used by pedestrians that do not have constructed footpaths.

There are a number of kerb ramps throughout the village that need to be provided or which are in need of replacement due to poor alignment, grade or condition.



The village participates in the Healthy Heart Challenge and uses a walking loop comprising Kitchener Street, Cornet Street, Cunningham Street and Hinkler Street. There is a need to improve this link in the long term.

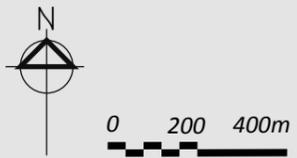
There is a track linking the end of Hinkler St and Haylock St, looping around Pola Park, that is regularly used by walkers and cyclists in the village

Improve the link between Tullamore Central School and the Tullamore CBD.

Improve the link between Tullamore Multi-Purpose Health Service to the Tullamore CBD

Improve the link from Tullamore Central School to the Pre-school and residential areas to the north

The existing school crossing in Hinkler Street should be reviewed to ensure safety for students.



11.0

Community Engagement & Audit Findings

REGIONAL CYCLING ROUTES

There are a number of regularly used cycling routes throughout the Parkes Shire. Many cyclists ride for fitness, recreation and social benefits.



11.6. Regional Cycling Routes and Opportunities

The Parkes Shire offers a wide range of cycling opportunities for all ages.

There are a number of adult cyclists in the Parkes Shire, particularly at Parkes and Peak Hill that ride for fitness, recreation and social benefits. These riders are often seen riding in pairs and small bunches throughout the shire on weekend rides and training rides.

There are particularly good Mountain Bike (MTB) trails in the shire, including the Golden Bar MTB, Back Yamma State Forrest, Lake Endeavour / Beargamil trails and the Goobang National Park.

Details of the main regional cycling routes in the Parkes Shire include:

Peak Hill / O'Learys Lane Loop - See Map Sheet 6

- Distance - 17km
- Elevation Gain - 34m
- Ride Type - Road

Cookamidgera Loop - See Map Sheet 6

- Distance - 28km
- Elevation Gain - 160m
- Ride Type - Road

Tanks Lane Parkes - See Map Sheet 6

- Distance - 13.8km
- Elevation Gain - 83m

Dog and Dish - See Map Sheet 6

- Distance - 50km
- Elevation Gain - 80m
- Ride Type - Road

Trundle 150 - See Map Sheet 6

- Distance - 150km
- Elevation Gain - 0m
- Ride Type - Road

Parkes to Forbes via Brolgan Road - See Map Sheet 6

- Distance - 46.4km
- Elevation Gain - 85m
- Ride Type - Road.

Golden Bar Trails - See map insert below.

- Distance - 5.1km
- Elevation Gain - 57m
- Ride Type - Road

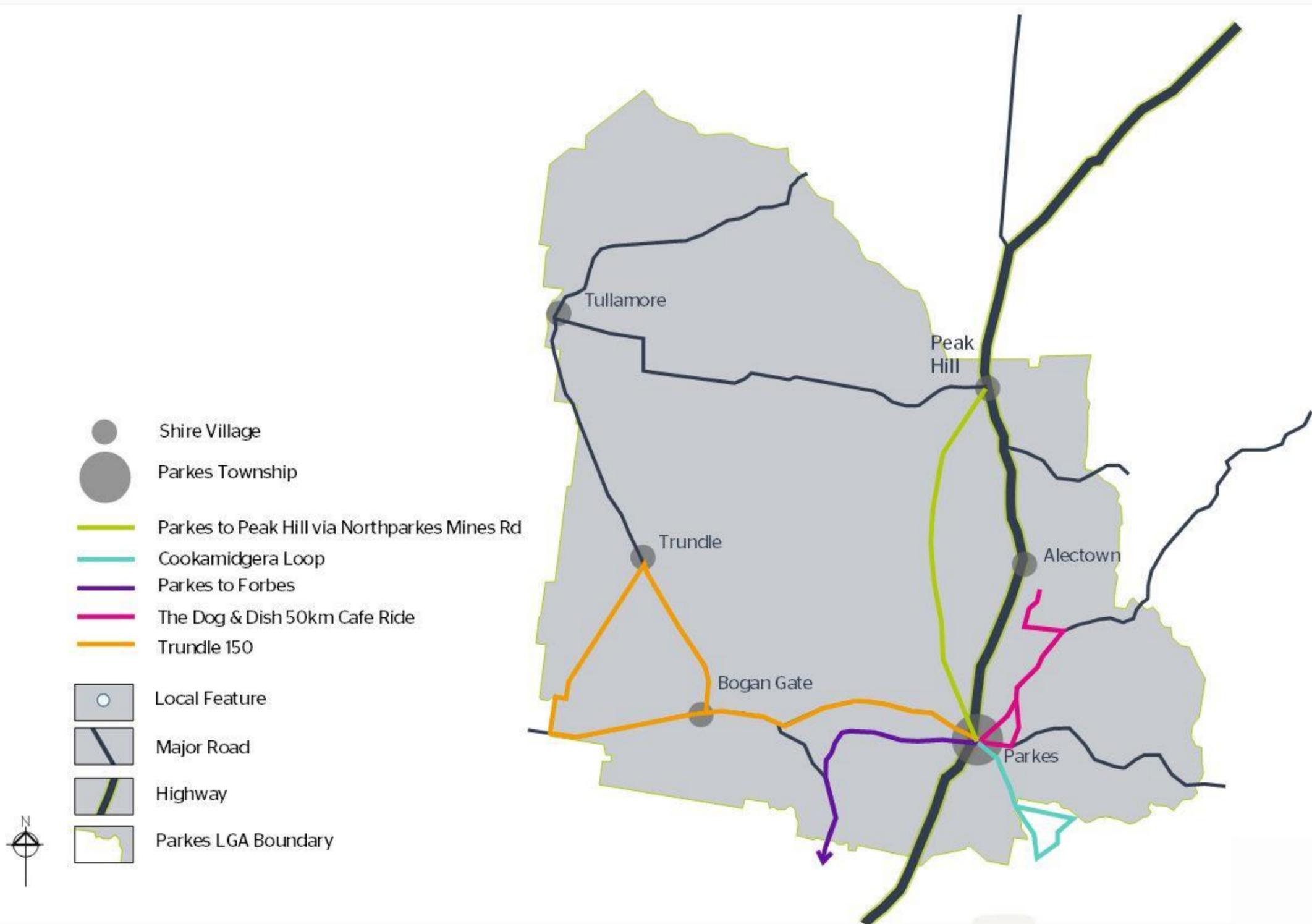


Map Sheet 6

Regional Cycling Routes Map

REGIONAL CYCLING ROUTES

There are a number of regularly used cycling routes throughout the Parkes Shire.



12.0

Proposed Active Movement Plans

SNAPSHOT

The facilities and treatments required to create a cohesive, safe, direct and attractive network forms the basis of the new Active Movement Plans presented in this section.

12. PROPOSED ACTIVE MOVEMENT PLANS

The Active Movement 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?
- Has it been identified in Consultation?
- 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 in a Primary Pedestrian or Cyclists Route?
- Is it in a hazardous area?
- Will it reduce vehicle 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?

Map Sheet 7

PARKES TOWNSHIP

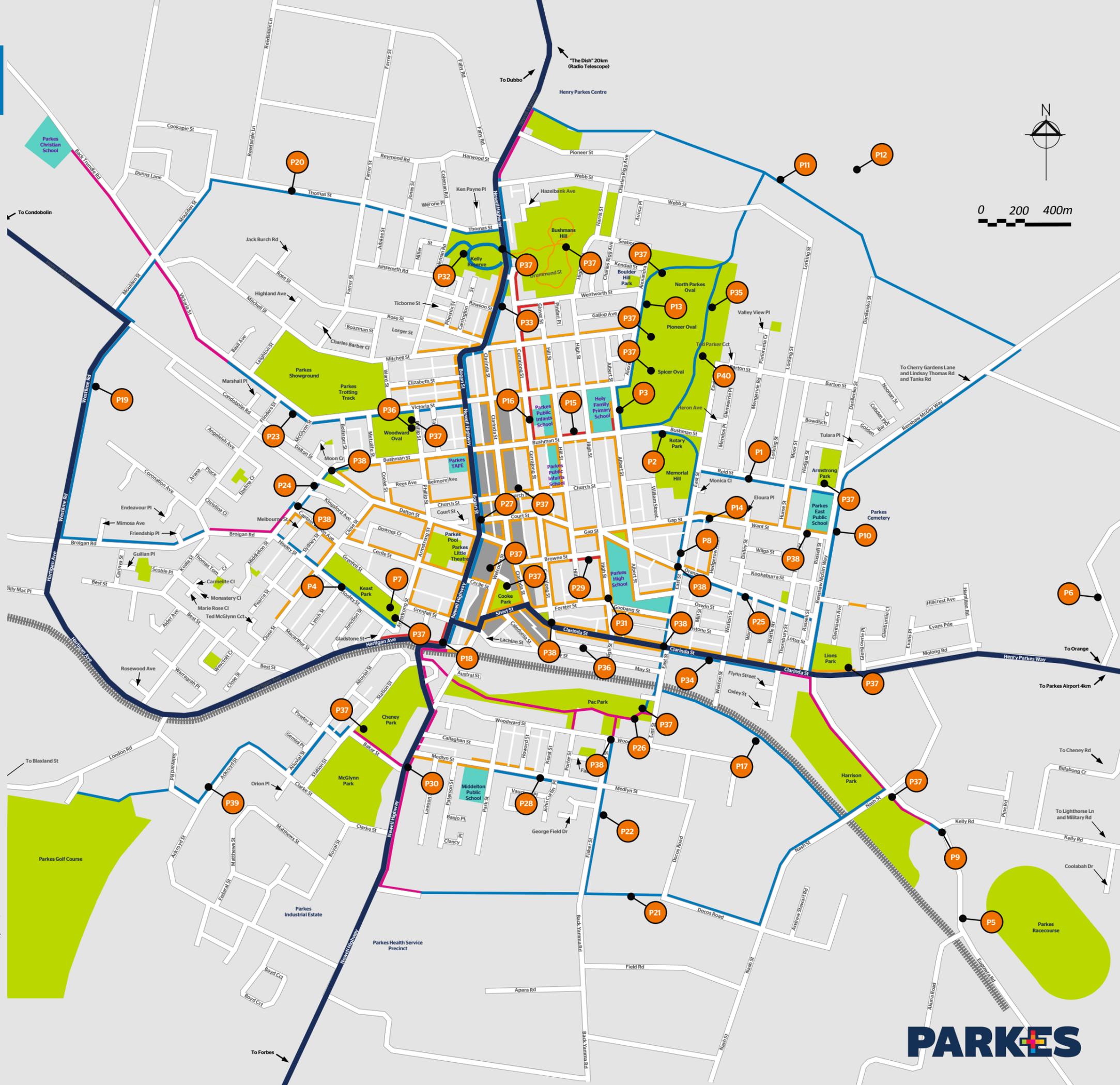
Active Movement Plan

LEGEND

- | | | | |
|--|-----------------------|--|-----------------------|
| | Highway / Main Road | | Parkes CBD |
| | Railway | | Existing Footpaths |
| | Schools | | Existing Shared paths |
| | Proposed Shared Paths | | Proposed Footpaths |

PROJECT DESCRIPTIONS

- P1** Shared Path Reid St - Renshaw McGirr Way to East St
- P2** Memorial Hill shared path replacement
- P3** Shared path central playing fields precinct
- P4** Hooley St shared path
- P5** Cyclist signage Cookamidgera loop
- P6** Cyclist signage Tanks Lane loop
- P7** Keast Park Activity Centre
- P8** East St pedestrian and cycling on road path
- P9** Kelly Rd shared path link / extension
- P10** Renshaw McGirr Way shared path
- P11** Golden Bar activity centre shared path
- P12** Golden Bar flow trail signage and wayfinding
- P13** Ovals connector path
- P14** Want St footpath link
- P15** Parkes Primary School to Holy Family School footpath link
- P16** Currajong St footpath extension
- P17** Pac Park to Harrison Oval shared path link
- P18** Newell Highway pedestrian link
- P19** Western ring road shared path links
- P20** Thomas St shared path link
- P21** Hospital to Harrison Park shared path extension
- P22** Back Yamma Rd shared path link
- P23** Victoria St shared path link
- P24** Southern Cross Village shared path
- P25** Orange St pedestrian and cycling on road path
- P26** Pac Park exercise equipment
- P27** Bogan St / Court St pedestrian improvements
- P28** Middleton School shared path
- P29** Browne St footpath - Hill St to High St
- P30** Bogan St shared path crossing at Baker St
- P31** Parkes High School - High St / Forster St pedestrian crossing
- P32** Kelly Reserve outdoor exercise equipment and shared paths
- P33** Bogan St shared path
- P34** Clarinda St shared path to Pac Park incl. weir crossing
- P35** Pioneer Oval shared path link
- P36** Outdoor exercise equipment
- P37** Bicycle racks - various locations
- P38** Pedestrian crossing improvements - various locations
- P39** Parkes Golf Course shared path link
- P40** Ovals precinct outdoor exercise equipment



Map Sheet 8

PEAK HILL VILLAGE

Active Movement Plan

LEGEND

-  Highway / Main Road
-  Local Road
-  Railway
-  Open Space / Parkland / Recreation
-  Schools
-  Peak Hill CBD
-  Existing Footpaths
-  Proposed Footpaths
-  Proposed Shared Paths
-  Proposed signage route

PROJECT DESCRIPTIONS

- P1** Peak Hill Open Cut Experience footpath link to CBD
- P2** Flora and Fauna Reserve walk link to CBD
- P3** Shared path - Newell Highway to O'Leary's Lane
- P4** Cyclists signage on route to Bogan Wier
- P5** Cyclists signage - Golf Club Rd / Sunnyside Road and O'Leary's Lane



Map Sheet 9

TRUNDLE VILLAGE

Active Movement Plan

LEGEND

-  Highway / Main Road
-  Local Road
-  Railway
-  Open Space / Parkland / Recreation
-  Schools
-  Trundle CBD
-  Existing Footpaths
-  Proposed Footpaths
-  Proposed Shared Paths

PROJECT DESCRIPTIONS

- P1** St Patricks Primary School footpath renewal and extension
- P2** Multi-Purpose Service & Berryman Park footpath link
- P3** Trundle Service Club footpath link
- P4** Trundle Showground / camping area link to CBD



Map Sheet 10

TULLAMORE VILLAGE

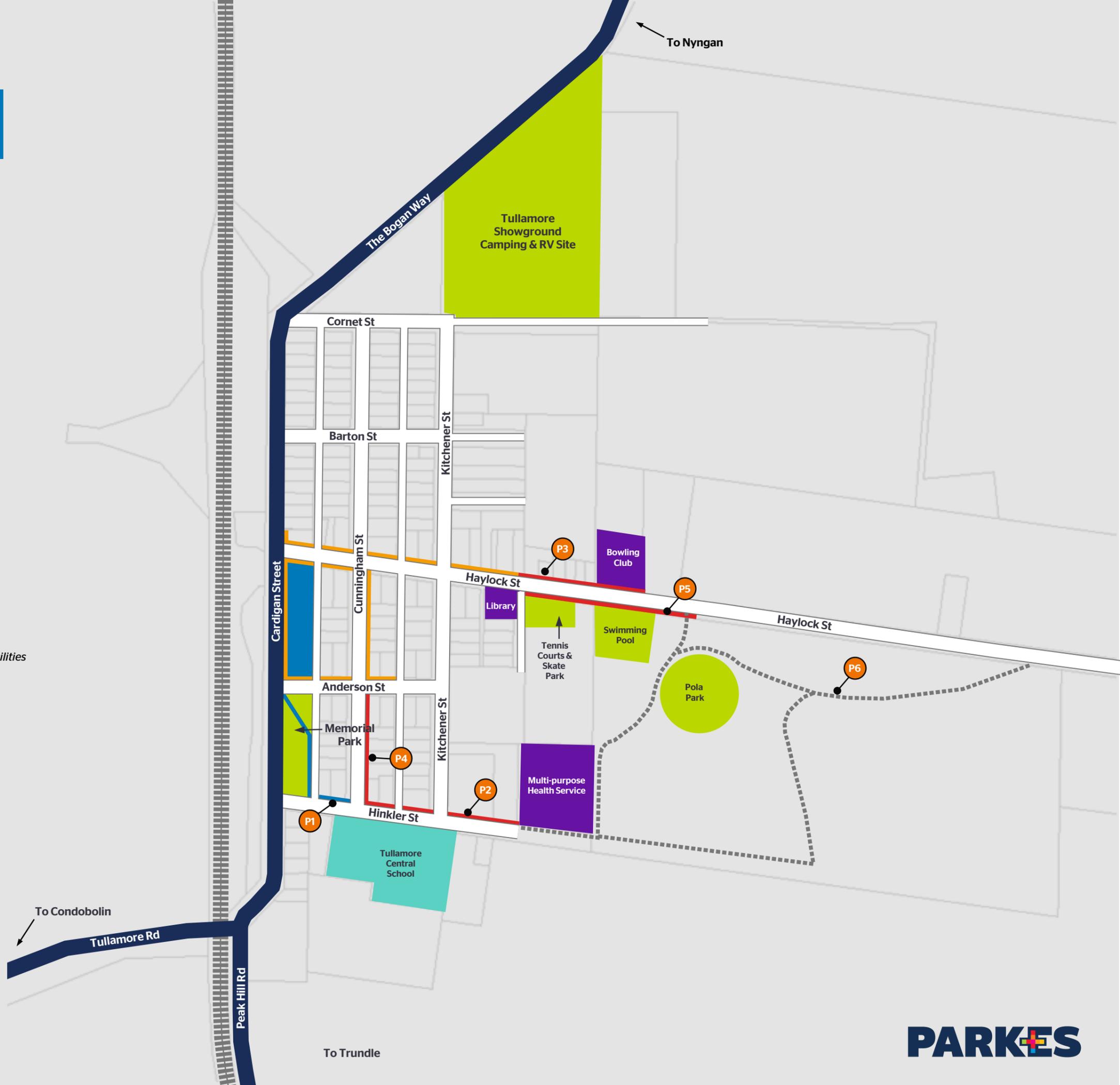
Active Movement Plan

LEGEND

-  Highway / Main Road
-  Local Road
-  Railway
-  Open Space / Parkland / Recreation
-  Schools
-  Tullamore CBD
-  Existing Footpaths
-  Proposed Footpaths
-  Proposed Shared Paths

PROJECT DESCRIPTIONS

- P1** Hinkler St link - Primary School to CBD
- P2** Hinkler St - Hospital to Primary School
- P3** Haylock St link to Bowling Club and sports facilities
- P4** Cunningham St footpath link
- P5** Haylock St shared path - Library to Pola Park / recreation facilities
- P6** Improve existing gravel path network (e.g. childrens cycling / exercise equipment and walking paths)



13.0

Maintaining the Active Movement Network

SNAPSHOT

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

13. MAINTAINING THE ACTIVE MOVEMENT 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.



14.0

Supporting a Culture of Active Movement

SNAPSHOT

This section suggests a number of community awareness, education and activation strategies for consideration by Parkes Shire Council and the wider local community over the life of the Parkes Shire Pedestrian and Cycling Strategy.

14. SUPPORTING A CULTURE OF ACTIVE MOVEMENT

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 Parkes Shire Council and the wider local community over the life of the Parkes Shire Pedestrian and Cycling Strategy.

14.1. 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.

14.2. 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 engagement and / or employment of a Road Safety Officer (RSO) would establish the role of a road safety educator in the community, with a focus on behavior-change programs to facilitate safer road user practices.

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. An RSO is employed at Parkes Shire Council to develop and implement local road safety programs.

14.3. 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.

14.4. 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.

15. 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 developed through an interactive process between Parkes 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 chapters. 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?
- Has it been identified in Consultation?
- 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 in a Primary Pedestrian or Cyclists Route?
- Is it in a hazardous area?
- Will it reduce vehicle 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?

Given the limited resources available to Parkes Shire Council to undertake improvements during the life of the Parkes Shire Pedestrian and Cycling Strategy (10 years) a score higher than 85 is a high priority, that may be able to be achieved.

Table 5 shows the list of projects identified for Parkes, Peak Hill, Trundle and Tullamore and scores each project based on the ranking questions above.

15.0

Proposed Improvements Analysis

SNAPSHOT

This section identifies the list of projects developed for Parkes, Peak Hill, Trundle and Tullamore, and ranks each project according to their importance in pedestrian and bicycle planning outcomes.

15.0

Proposed Improvements Analysis

SNAPSHOT

This section identifies the list of projects developed for Parkes, Peak Hill, Trundle and Tullamore, and ranks each project according to their importance in pedestrian and bicycle planning outcomes.

Table 5 - Proposed Improvements Analysis Table

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
Parkes Township																	
Parkes 30	Bogan St Shared Path Crossing at Baker St	9	5	9	8	8	6	7	7	7	7	7	7	8	7	7	116
Parkes 24	Southern Cross Village Shared path	8	7	8	7	9	6	8	7	7	4	8	7	8	7	7	115
Parkes 33	Bogan St Shared path	8	8	7	7	7	5	6	7	9	4	9	7	9	8	7	115
Parkes 31	Parkes High School - High St / Forster St Pedestrian Crossing	8	7	8	7	6	8	6	7	7	5	7	7	8	8	7	113
Parkes 34	Clarinda St Shared Path to Pac Park incl. weir crossing	8	8	8	8	8	5	7	8	8	4	7	7	6	7	8	112
Parkes 32	Kelly Reserve Active Movement improvements	8	8	8	8	8	5	7	8	8	4	7	7	6	7	8	112
Parkes 8	East St Pedestrian and Cycling on road Path	8	8	8	9	7	3	6	6	5	7	7	7	8	8	7	111
Parkes 29	Browne St Footpath Hill St to High St	9	8	7	8	6	8	6	8	8	4	8	5	6	7	7	111
Parkes 18	Newell Hwy Pedestrian link	8	8	8	8	8	7	6	7	7	4	7	5	7	7	7	111
Parkes 4	Hooley St Shared Path	8	8	8	8	8	7	5	6	5	3	8	5	7	8	7	108
Parkes 38	Pedestrian crossing improvements - various locations	7	8	8	8	8	5	6	6	5	5	8	5	7	8	7	108
Parkes 14	Want St Link footpath	8	8	8	8	6	3	8	8	7	3	5	6	7	8	8	108
Parkes 1	Shared Path Reid St - Renshaw McGirr Way to East St	7	8	8	7	8	3	8	6	7	3	8	5	7	8	7	106
Parkes 37	Bicycle rack installations - various locations	7	8	8	7	8	3	8	6	7	3	8	5	7	8	7	106
Parkes 3	Shared Path Central playing fields precinct	7	7	7	7	8	6	7	5	6	6	7	6	7	7	6	106
Parkes 6	Cyclists Signage Tanks Lane Loop	4	9	9	7	6	4	4	8	6	6	5	7	7	7	8	104
Parkes 15	Parkes Primary School to Holy Family Footpath link	8	8	8	7	6	3	7	6	7	3	5	6	7	8	8	104
Parkes 28	Middleton School shared Path	8	7	7	7	7	6	7	5	7	5	7	5	7	6	7	104
Parkes 35	Pioneer Oval shared path link	7	7	7	7	7	7	7	5	7	5	7	5	7	6	7	104
Parkes 9	Kelly Road shared path extension	6	6	7	7	8	3	6	6	5	5	7	7	7	7	7	101
Parkes 5	Cyclist Signage Cookamidgera Loop	4	8	8	6	6	4	4	7	6	6	5	7	7	7	8	100

15.0

Proposed Improvements Analysis

SNAPSHOT

This section identifies the list of projects developed for Parkes, Peak Hill, Trundle and Tullamore, and ranks each project according to their importance in pedestrian and bicycle planning outcomes.

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	
Parkes 10	Renshaw McGirr shared path	6	7	7	7	8	3	4	6	6	5	7	7	7	7	5	8	100
Parkes 11	Golden Bar Activity Centre Shared Path	6	6	8	7	8	3	4	5	5	4	8	7	6	7	8	8	100
Parkes 16	Currajong St Parkes Primary Footpath	7	7	7	7	6	3	7	6	7	3	6	5	7	7	8	7	100
Parkes 27	Bogan St / Court St Pedestrian improvements	7	7	7	7	6	7	4	5	6	4	6	6	7	7	6	7	99
Parkes 13	Ovals Connector Path	6	7	7	7	7	3	7	5	3	3	8	4	4	7	8	9	95
Parkes 2	Memorial Hill Shared Path Replacement	7	7	7	7	7	3	7	4	5	3	7	4	5	7	7	6	93
Parkes 20	Thomas St shared path link	6	6	6	6	7	5	4	6	6	4	7	6	6	6	6	5	92
Parkes 25	Orange St Pedestrian and Cycling on road Path	6	6	6	6	7	4	4	5	5	5	7	5	6	6	6	6	90
Parkes 23	Victoria St shared path link	6	5	5	6	7	4	5	5	6	5	6	6	5	6	6	6	89
Parkes 19	Western Ringroad shared path links	4	6	6	5	6	4	4	6	5	4	7	6	5	5	6	5	84
Parkes 22	Back Yamma Rd shared path link	6	5	6	6	7	4	4	5	5	4	6	4	6	5	6	5	84
Parkes 39	Parkes Golf Course shared path link	6	5	6	6	7	4	4	5	5	4	6	4	6	5	6	5	84
Parkes 26	Pac Park Active Movement improvements	2	6	7	8	6	4	4	5	4	3	3	3	3	8	8	8	82
Parkes 17	Pac Park to Harrison oval shared path link	5	6	5	5	6	3	6	4	4	4	6	4	5	6	6	6	81
Parkes 12	Golden Bar Flow trail signage and wayfinding	2	6	7	7	5	3	6	3	3	3	7	3	3	7	8	7	80
Parkes 21	Hospital to Harrison Park shared path extension	7	7	7	7	6	4	5	5	3	3	4	4	4	5	5	4	80
Parkes 36	Outdoor exercise equipment	2	7	7	7	4	3	3	3	3	2	7	5	8	7	5	3	76
Parkes 40	Ovals precinct outdoor exercise equipment	2	7	7	7	4	3	3	3	3	2	7	5	8	7	5	3	76
Parkes 7	Keast Park Activity Centre (exercise path and internal kids cycling development park)	2	7	7	7	4	3	3	3	3	2	7	5	8	7	5	3	76
Peak Hill																		
Peak Hill 4	Cyclists signage on route to Bogan Wier	4	7	7	6	5	3	3	8	8	5	6	6	7	7	5	7	94
Peak Hill 5	Cyclists signage - Golf Club Rd / Sunnyside Road and O'Leary's Lane	4	7	6	6	5	3	3	8	7	5	6	6	7	7	5	7	92
Peak Hill 3	Shared path - Newell Highway to O'Leary's Lane	4	7	6	6	5	2	4	6	7	2	7	5	6	7	5	5	84

15.0

Proposed Improvements Analysis

SNAPSHOT

This section identifies the list of projects developed for Parkes, Peak Hill, Trundle and Tullamore, and ranks each project according to their importance in pedestrian and bicycle planning outcomes.

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
Peak Hill 2	Flora and Fauna Reserve walk link to CBD	6	6	7	6	6	3	5	3	5	3	5	4	5	7	6	6	83
Peak Hill 1	Peak Hill Open Cut Experience footpath link to CBD	6	6	7	6	6	3	5	3	5	3	5	4	5	6	6	6	82
Trundle																		
Trundle 1	St Patricks Primary School footpath renewal and extension	8	6	7	7	6	5	7	4	7	2	6	4	7	7	7	7	97
Trundle 2	Multi-Purpose Service & Berryman Park footpath link	8	6	7	7	6	4	7	5	6	2	7	4	4	7	7	3	90
Trundle 3	Trundle Service Club footpath link	8	5	7	7	6	4	7	6	6	2	4	4	4	5	7	7	89
Trundle 4	Trundle Showground / camping area link to CBD	4	7	4	5	6	3	5	3	3	2	5	4	3	6	5	3	68
Tullamore																		
Tullamore 1	Hinkler St link - Primary School to CBD	8	8	7	7	6	8	6	8	7	2	6	5	6	7	7	5	103
Tullamore 2	Hinkler St - Hospital to Primary School	6	7	6	7	6	6	7	6	5	2	6	5	6	7	7	4	93
Tullamore 3	Cunningham St footpath link	7	7	7	7	6	4	6	4	5	2	7	7	6	7	7	4	93
Tullamore 4	Haylock St shared path - Library to Pola Park / recreation facilities	7	6	6	7	6	5	6	4	5	2	6	7	7	7	7	5	93
Tullamore 5	Haylock St link to Bowling Club and sports facilities	6	6	6	6	6	3	7	3	3	2	5	4	5	6	7	3	78
Tullamore 6	Improve existing gravel path network(e.g. childrens cycling / exercise equipment and walking paths)	4	5	5	6	6	3	5	4	3	2	2	2	3	7	7	5	69

16. PROJECT PLANS

This section includes Project Plans for the top priority improvements to the Active Movement Network in Parkes Townships, Peak Hill, Trundle and Tullamore.

The Project Plans include the following details:

- Project Description
- Specifications for each improvement.
- Estimated costs for each improvement.

A number of Project Plans have also been completed to illustrate key improvement options for the Active Movement Network in Parkes Township, Peak Hill, Trundle and Tullamore.

16.0

Project Plans

SNAPSHOT

This section includes Project Plans for the top priority improvements to the Active Movement Network in Parkes Township, Peak Hill, Trundle and Tullamore.

16.0

Parkes Project No. 30

PROJECT DESCRIPTION

This project involves the construction of a pedestrian refuge at the intersection of Bogan Street and Baker Street.

SPECIFICATION

10m x 2.5 metre wide concrete shared path

1 x kerb ramp upgrade

1 x pedestrian refuge installation

2 x new kerb blisters

ESTIMATED COST

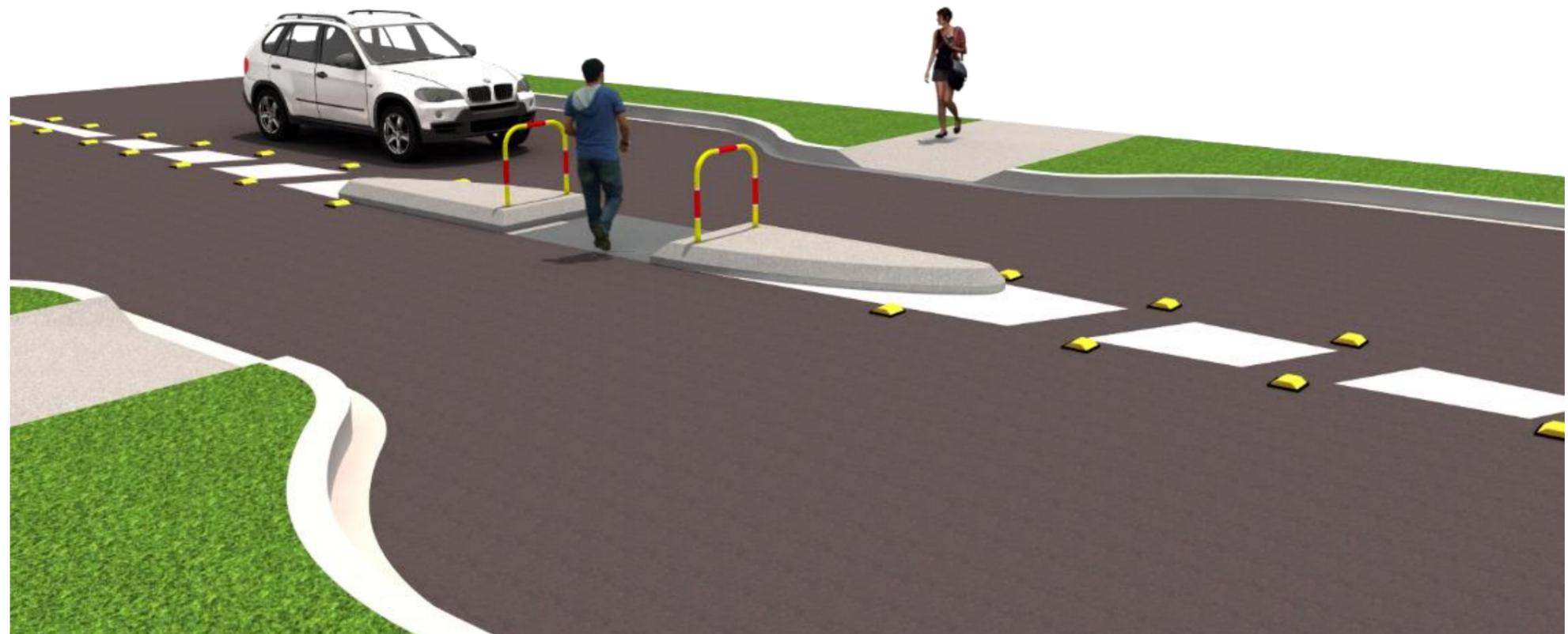
\$31,510



Site Photograph



Project Location Map - Extract of Map Sheet 7



Concept Drawing - Typical Pedestrian Refuge Design



Site Photograph

Project Location Map- Extract of Map Sheet 7

16.0

Parkes Project No. 24

PROJECT DESCRIPTION

This project involves the installation of a 2.5m wide shared path linking the Southern Cross Village to the existing network in Dalton St

SPECIFICATION

- 305 metres x 2.5 metre wide concrete shared path
- 6 x kerb ramp upgrades
- 1 x pedestrian refuge island

ESTIMATED COST

\$132,768



Concept Drawing - Typical 2.5m shared path design

16.0

Parkes Project No. 33

PROJECT DESCRIPTION

This project involves the installation of a 2.5m wide shared path along the length of Bogan Street (Newell Highway)

SPECIFICATION

2082 metres x 2.5 metre wide concrete shared path

10 x kerb ramp upgrades

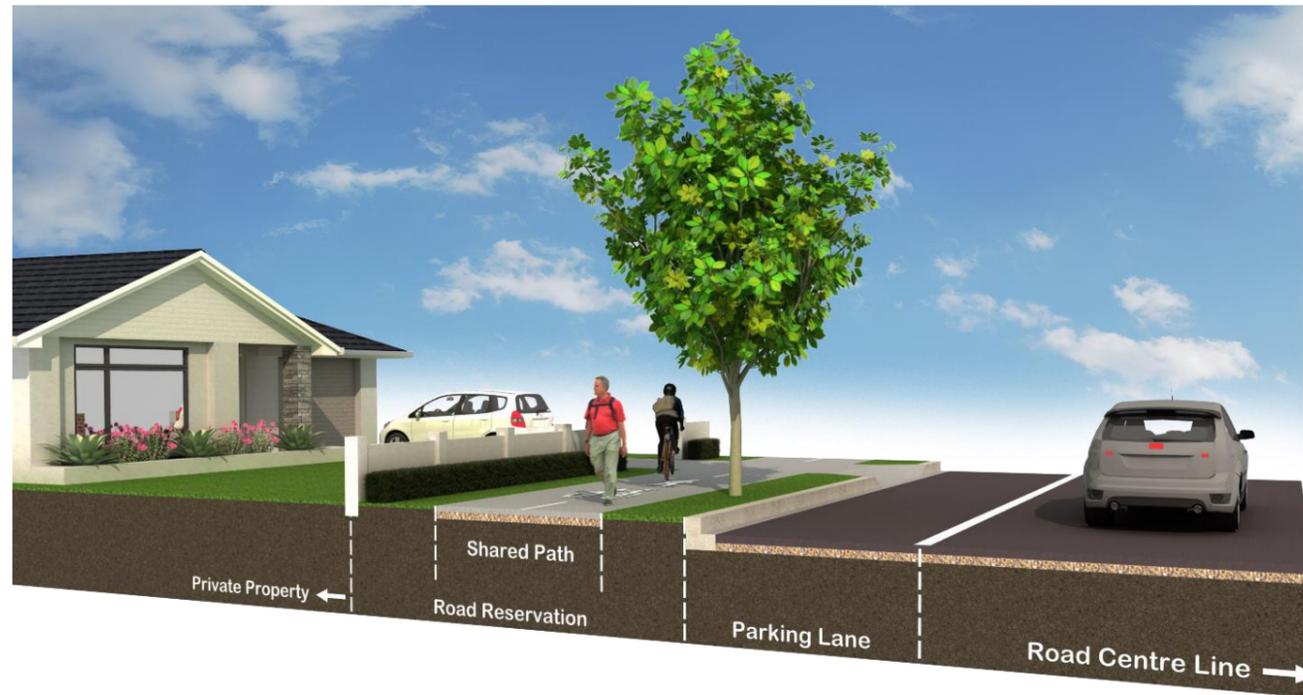
3 x pedestrian refuge islands

ESTIMATED COST

\$764,497



Site Photograph



Concept Drawing - Typical 2.5m wide shared path design



Project Location Map - Extract of Map Sheet 7

16.0

Parkes Project No. 31

PROJECT DESCRIPTION

This project involves the construction of a pedestrian refuge to enable the safer crossing of High Street.

SPECIFICATION

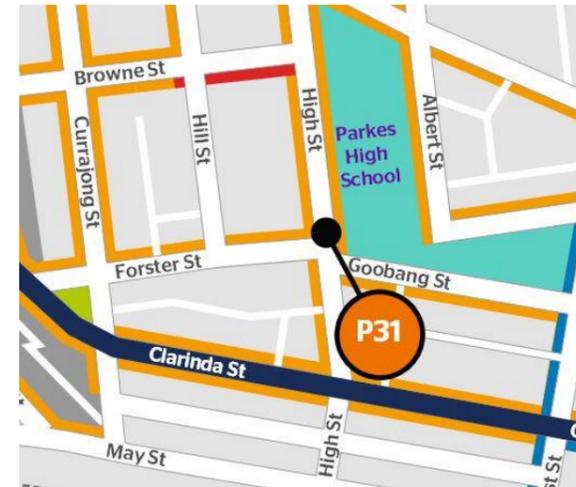
- 2 x kerb ramp upgrades
- 1 x pedestrian refuge island
- 1 x raised pad crossing
- Drainage Infrastructure
- Kerb & Gutter

ESTIMATED COST

\$62,000



Site Photograph



Project Location Map- Extract of Map Sheet 7



Concept Drawing - Parkes High School bus stop crossing design

16.0

Parkes Project No. 34

PROJECT DESCRIPTION

This project involves the installation of a 2.5m wide shared path linking Clarinda Street to the Pac Park.

SPECIFICATION

792 metres x 2.5 metre wide concrete shared path

3 x kerb ramp upgrades

1 x pedestrian refuge island

ESTIMATED COST

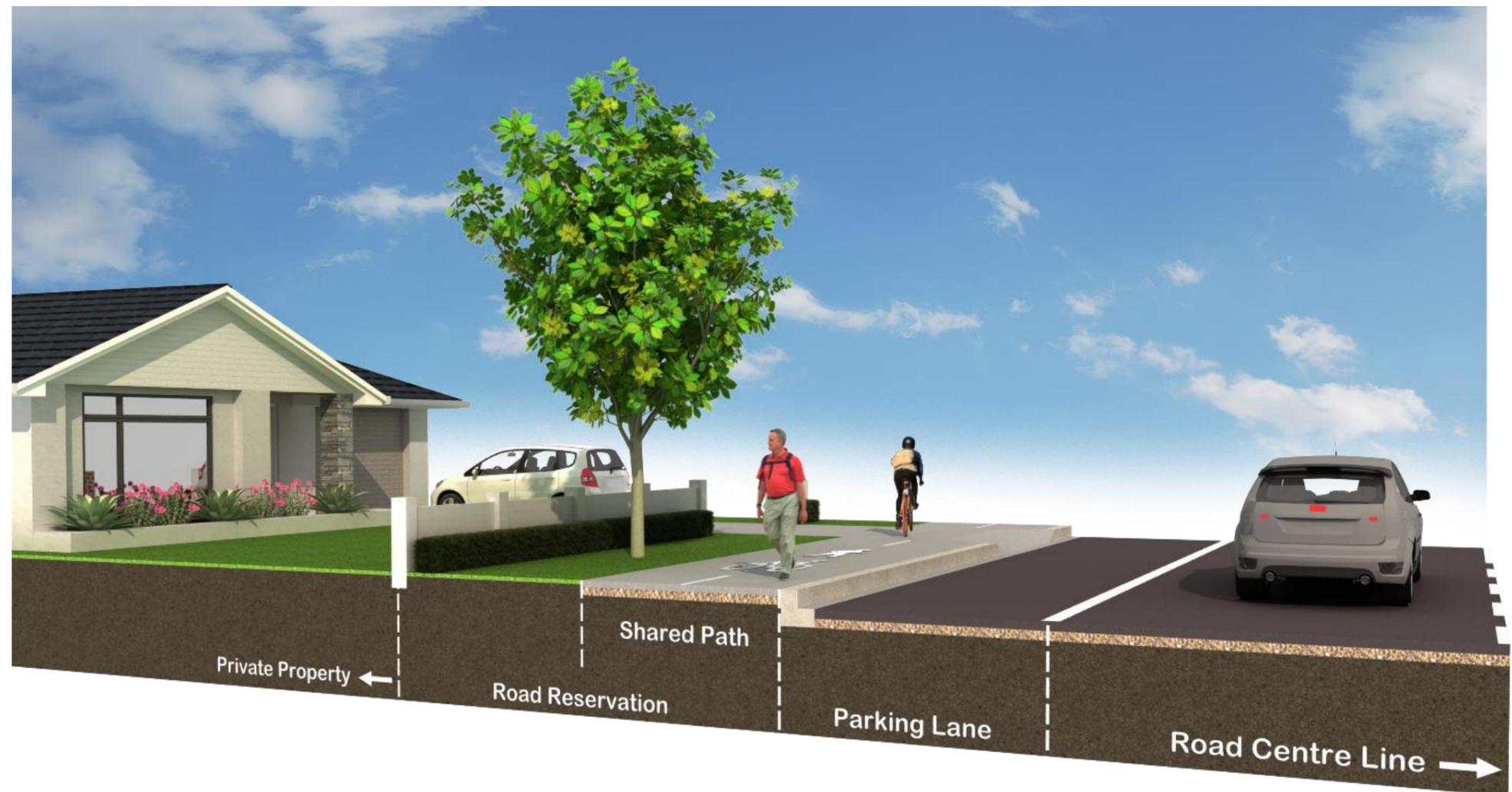
\$286,557



Site Photograph



Project Location Map - Extract of Map Sheet 7



Concept Drawing - Typical 2.5m wide shared path design.



Project No. 32 of the Parkes Pedestrian and Cycling Strategy involves the installation of outdoor exercise equipment at Kelly Reserve, located on the corner of Thomas Street and the Newell Highway.

Kelly Reserve is ideal for recreational / health walking and fitness circuits, as detailed in the project specification.

The need for outdoor exercise equipment at Kelly reserve was identified in community engagement workshops.

A typical section of a new shared path installation and associated outdoor fitness equipment is shown in the 3D concept diagram below.



16.0

Parkes Project No. 32

PROJECT DESCRIPTION

This project involves improvements to the Active Movement Network at Kelly Reserve, including the installation of new shared paths and outdoor fitness equipment.

SPECIFICATION

- 430 metres x 2.5 metres wide concrete shared path.
- 10 metres x bridge decking
- 3 pods of outdoor exercise equipment, each pod containing a minimum 3 units.

ESTIMATED COST

- Concrete shared path - \$130,000
- Bridge Decking - \$10,000
- Outdoor Exercise Equipment - \$36,000

16.0

Parkes Project No. 32

PROJECT DESCRIPTION

This project involves improvements to the Active Movement Network at Kelly Reserve, including the installation of new shared paths and outdoor fitness equipment.

SPECIFICATION

430 metres x 2.5 metres wide concrete shared path.

10 metres x bridge decking

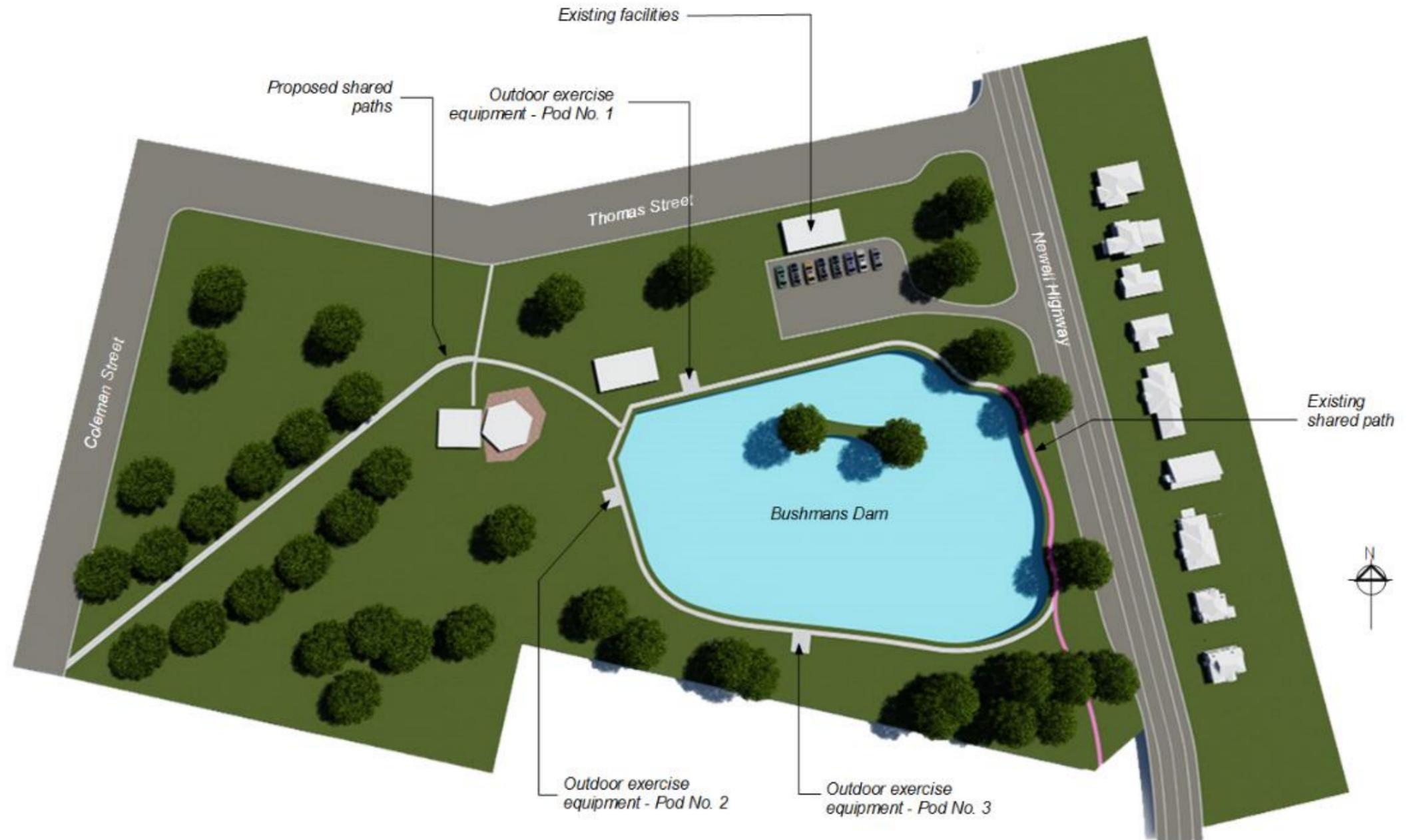
3 pods of outdoor exercise equipment, each pod containing a minimum 3 units.

ESTIMATED COST

Concrete shared path - \$130,000

Bridge Decking - \$10,000

Outdoor Exercise Equipment - \$36,000



16.0

Parkes Project No. 32

PROJECT DESCRIPTION

This project involves improvements to the Active Movement Network at Kelly Reserve, including the installation of new shared paths and outdoor fitness equipment.

SPECIFICATION

430 metres x 2.5 metres wide concrete shared path.

10 metres x bridge decking

3 pods of outdoor exercise equipment, each pod containing a minimum 3 units.

ESTIMATED COST

Concrete shared path - \$130,000

Bridge Decking - \$10,000

Outdoor Exercise Equipment - \$36,000



POD No. 1 - Typical detail of stretching / warm up equipment

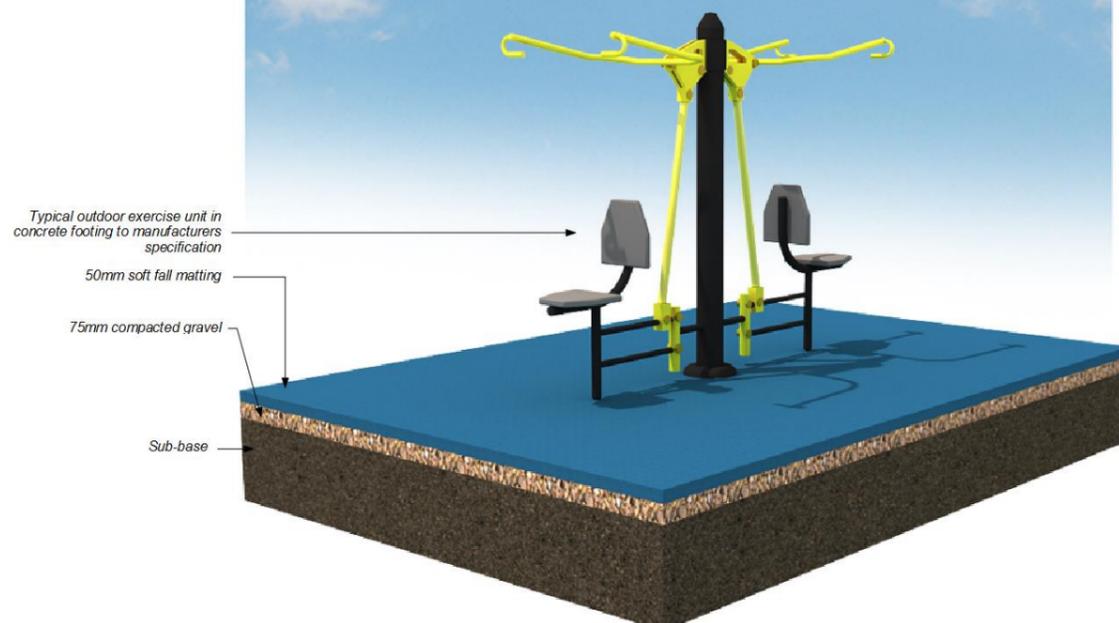


POD No. 2 - Typical detail of cardio equipment



POD No. 3 - Typical detail of strength / resistance equipment

Typical Detail of outdoor exercise area ground treatment



Typical detail of 2.5 metre wide concrete shared path



16.0

Parkes Project No. 8

PROJECT DESCRIPTION

This project involves the installation of a new shared path network along East St. There are numerous options available for this project.

SPECIFICATION

- 900 metres x on-road shared path
- 14 x kerb ramp upgrades
- 2 x pedestrian refuge islands
- 6 x blisters

ESTIMATED COST

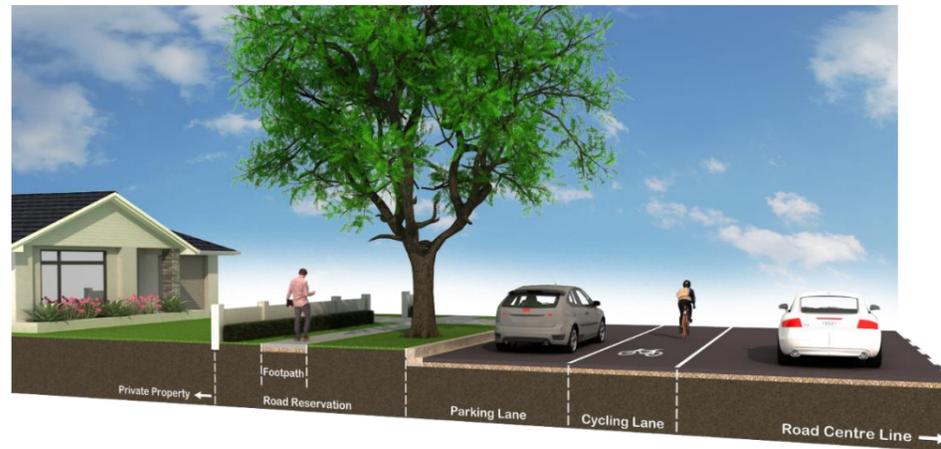
\$117,875



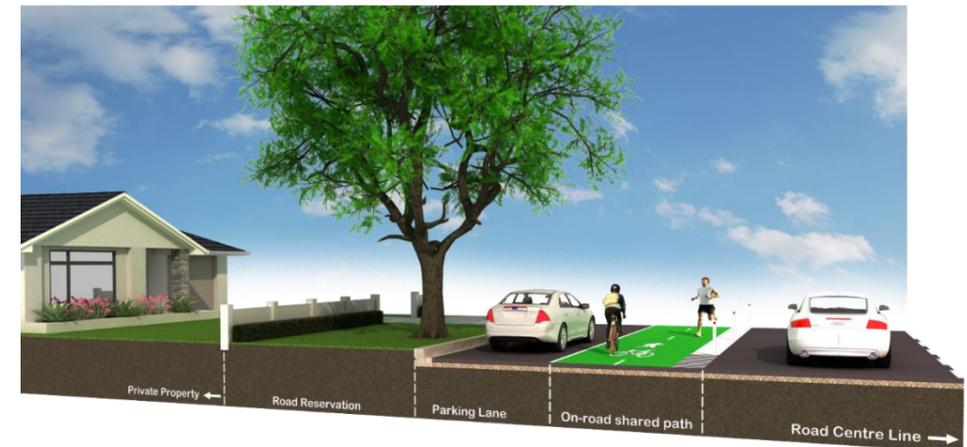
Site Photograph



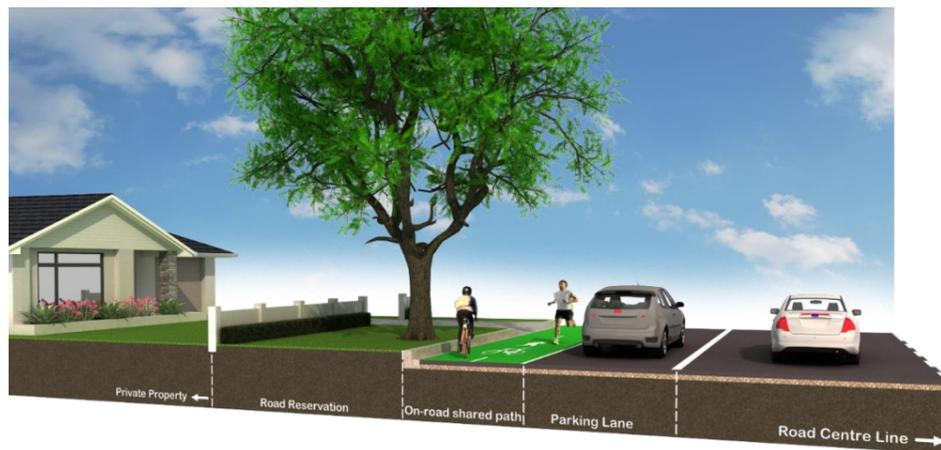
Project Location Map - Extract of Map Sheet 7



Option 1 - Footpath within road reserve, on-road cycling lane.



Option 2 - On-road 3m wide shared path between parking and travel lanes.



Option 3 - On-road 2.5m shared path between road reserve and parking lane.



Option 4 - On-road 3m wide shared path with no parking lane.

Concept Drawing – Typical kerb extension arrangement for East St intersections.



16.0

Parkes Project No. 8

PROJECT DESCRIPTION

This project involves the installation of a new shared path network along East St. There are numerous options available for this project.

SPECIFICATION

900 metres x on-road shared path

14 x kerb ramp upgrades

2 x pedestrian refuge islands

6 x blisters

ESTIMATED COST

\$117,875

16.0

Parkes Project No. 37

PROJECT DESCRIPTION

This project involves the installation of new bike racks at various locations throughout the Parkes Township.

SPECIFICATION

Standard stainless steel loop bicycle racks in concrete footing. Minimum three racks per location.

ESTIMATED COST

\$4,500 per bicycle rack installation.



16.0

Parkes Project No. 37

PROJECT DESCRIPTION

This project involves the installation of new bike racks at various locations throughout the Parkes Township.

SPECIFICATION

Standard stainless steel loop bicycle racks in concrete footing. Minimum three racks per location.

ESTIMATED COST

\$4,500 per bicycle rack installation



Photo - Additional wayfinding signage to identify bicycle rack installations.



Photo - The corner of Clarinda Street and Church Street provides an ideal location for the installation of 3 new standard bicycle racks.



16.0

Parkes Project No. 5

PROJECT DESCRIPTION

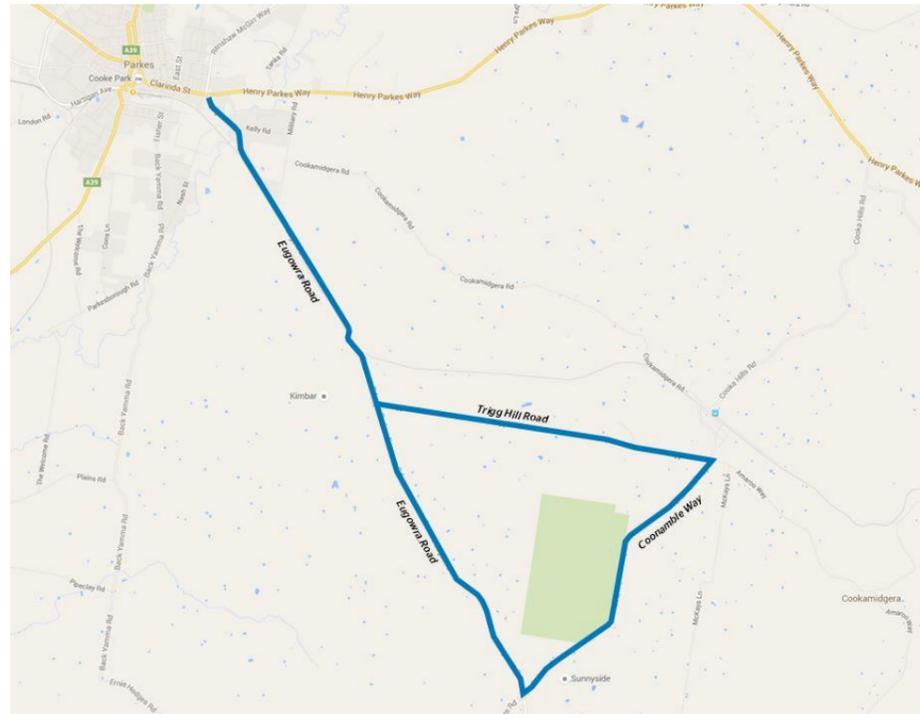
This project involves the installation of new cyclist signage along regular riding routes.

SPECIFICATION

Signs at mapped locations along 41km of cyclist road routes.

ESTIMATED COST

\$47,150



Cookamidgera Cyclist Loop Map – Base Map courtesy of Google Maps



Typical cyclist crossing signage installation.



Option A – Cyclist activated warning light signage.



Option B – Standard cyclist warning signage.

16.0

Parkes Project No. 6

PROJECT DESCRIPTION

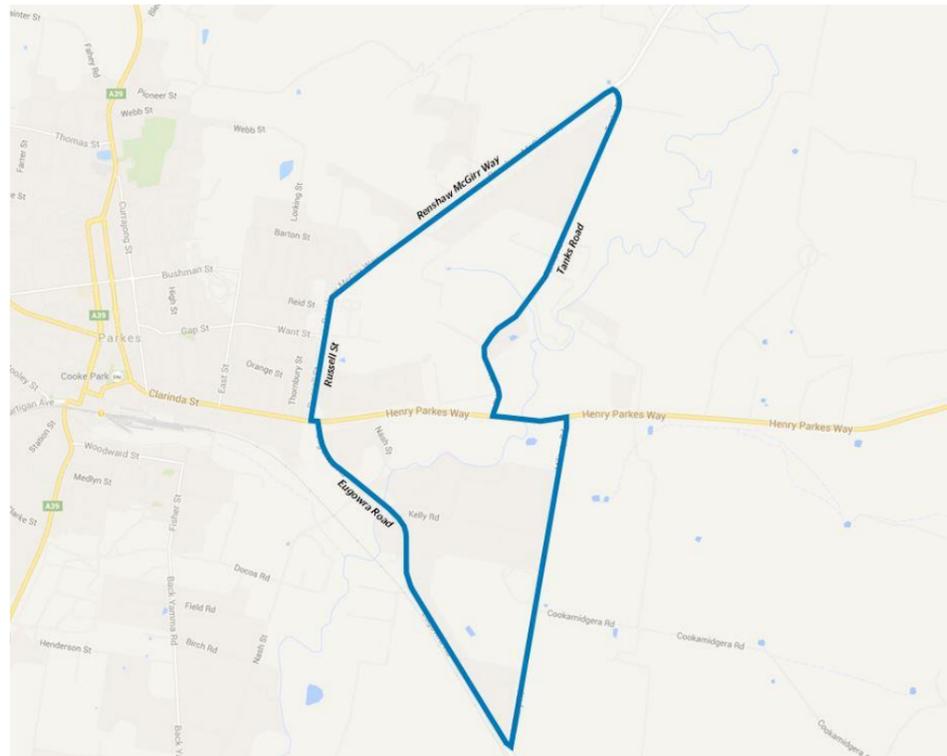
This project involves the installation of new cyclist signage on regular riding routes. There are two options for signage for consideration in detailed design.

SPECIFICATION

Signs at mapped locations along 7.6km of cyclist road routes.

ESTIMATED COST

\$8,740



Tanks Lane Cyclist Route – Base map courtesy of Google Maps



Typical cyclist crossing signage installation.



Option A – Cyclist activated warning light signage.



Option B – Standard cyclist warning signage.

16.0

Peak Hill Project No. 3

PROJECT DESCRIPTION

This project involves the installation of a 2.5m wide gravel shared path on the Newell Highway to O'Leary's Lane.

SPECIFICATION

1600 metres x 2.5 metre wide gravel shared path

Drainage Infrastructure

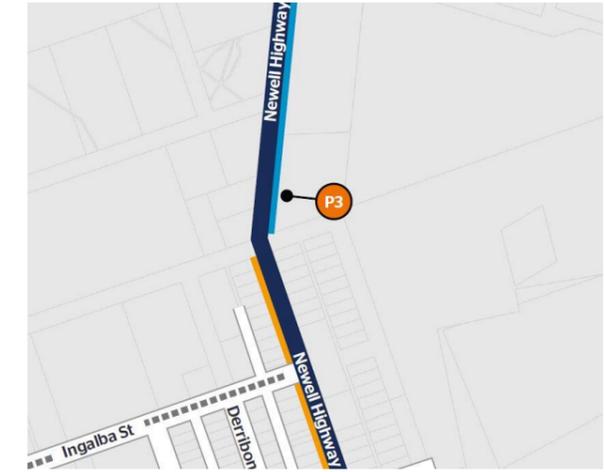
Signage

ESTIMATED COST

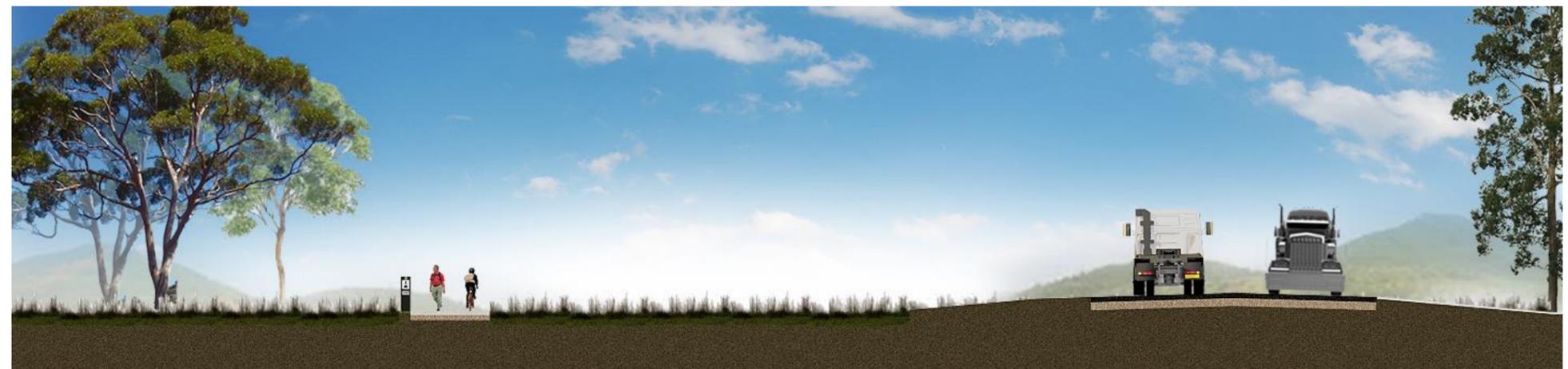
\$55,000



Site Photograph



Project Location Map - Extract of Map Sheet 8



Concept Drawing - Typical 2.5m wide gravel shared path installation along Newell Highway to O'Learys Lane

16.0

Peak Hill Project No. 4

PROJECT DESCRIPTION

This project involves the installation of cyclist warning signage along the Peak Hill - Tullamore Road in Peak Hill to Bogan Wier.

SPECIFICATION

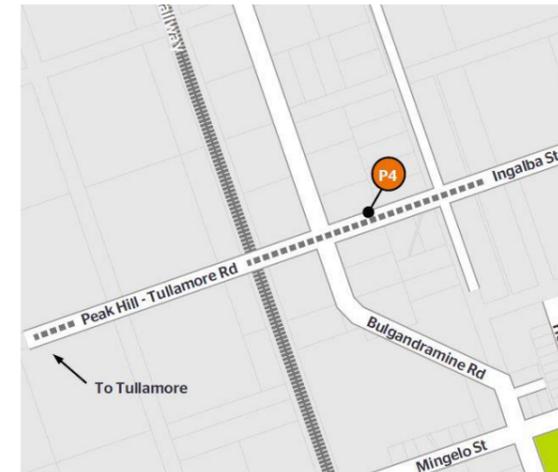
Road cyclist signage installations at appropriate locations along 6.1km of road

ESTIMATED COST

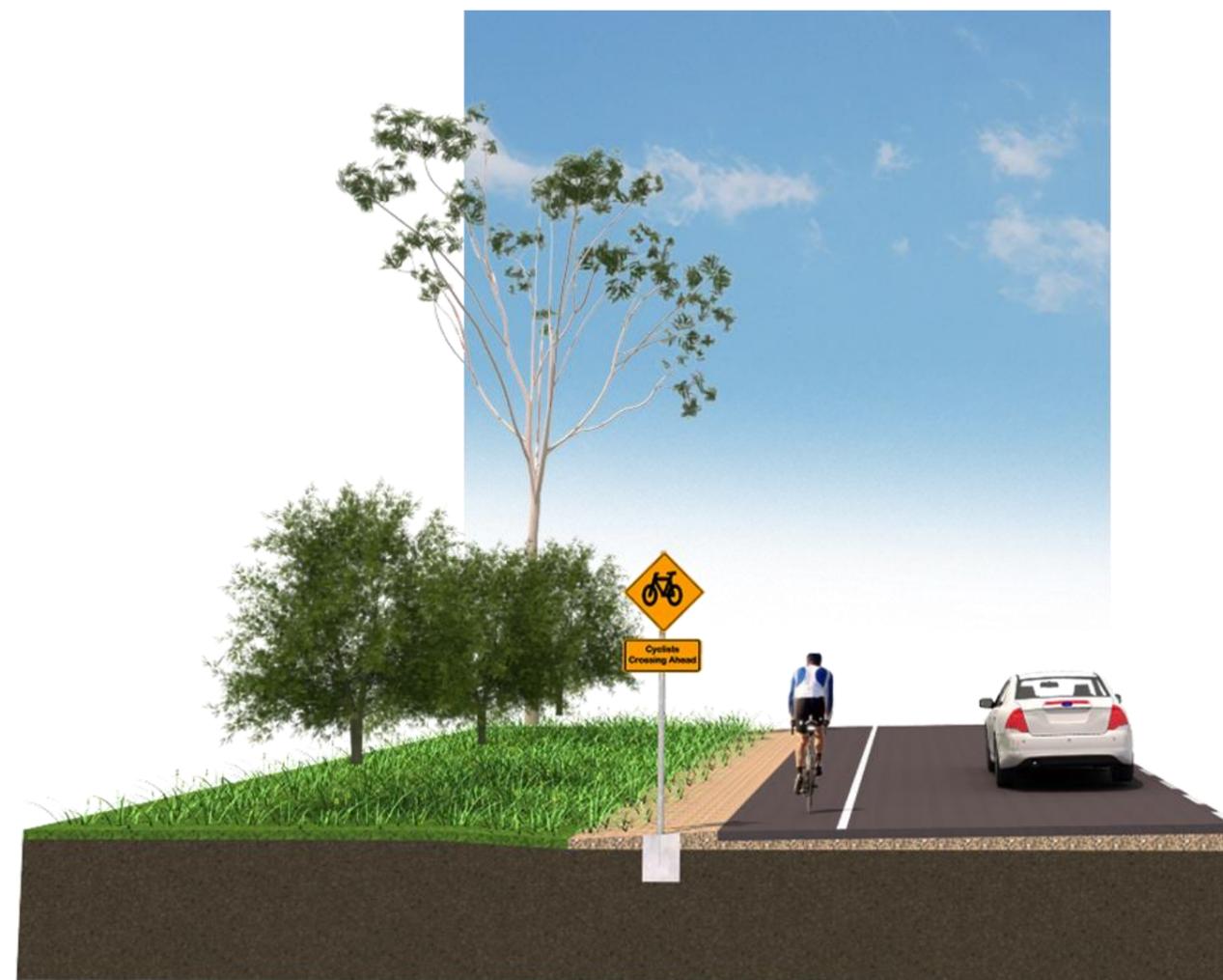
\$7,015



Site Photograph



Project Location Map - Extract of Map Sheet 8



Concept Drawing - Typical on-road 3 m wide shared path design, including 500mm buffer

16.0

Trundle Project No. 1

PROJECT DESCRIPTION

This project involves the installation of a new 1.2m wide footpath to link the St Patrick's Primary School to the CBD.

SPECIFICATION

154 metres x 1.2 metre wide concrete footpath

2 x kerb ramp upgrades

ESTIMATED COST

\$32,315



Site Photograph



Project Location Map - Extract of Map Sheet 9



Concept Drawing - Typical 1.2m wide footpath installation on a road with kerb and gutter

16.0

Tullamore Project No. 1

PROJECT DESCRIPTION

This project involves the installation of a new 2.5m wide shared path linking the Tullamore Central School to the CBD.

SPECIFICATION

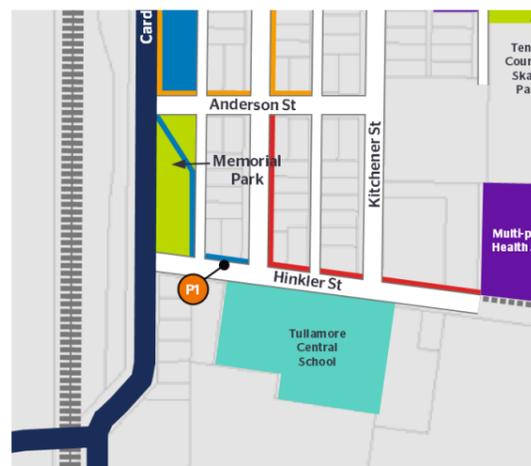
252 metres x 2.5 metre wide concrete shared path

ESTIMATED COST

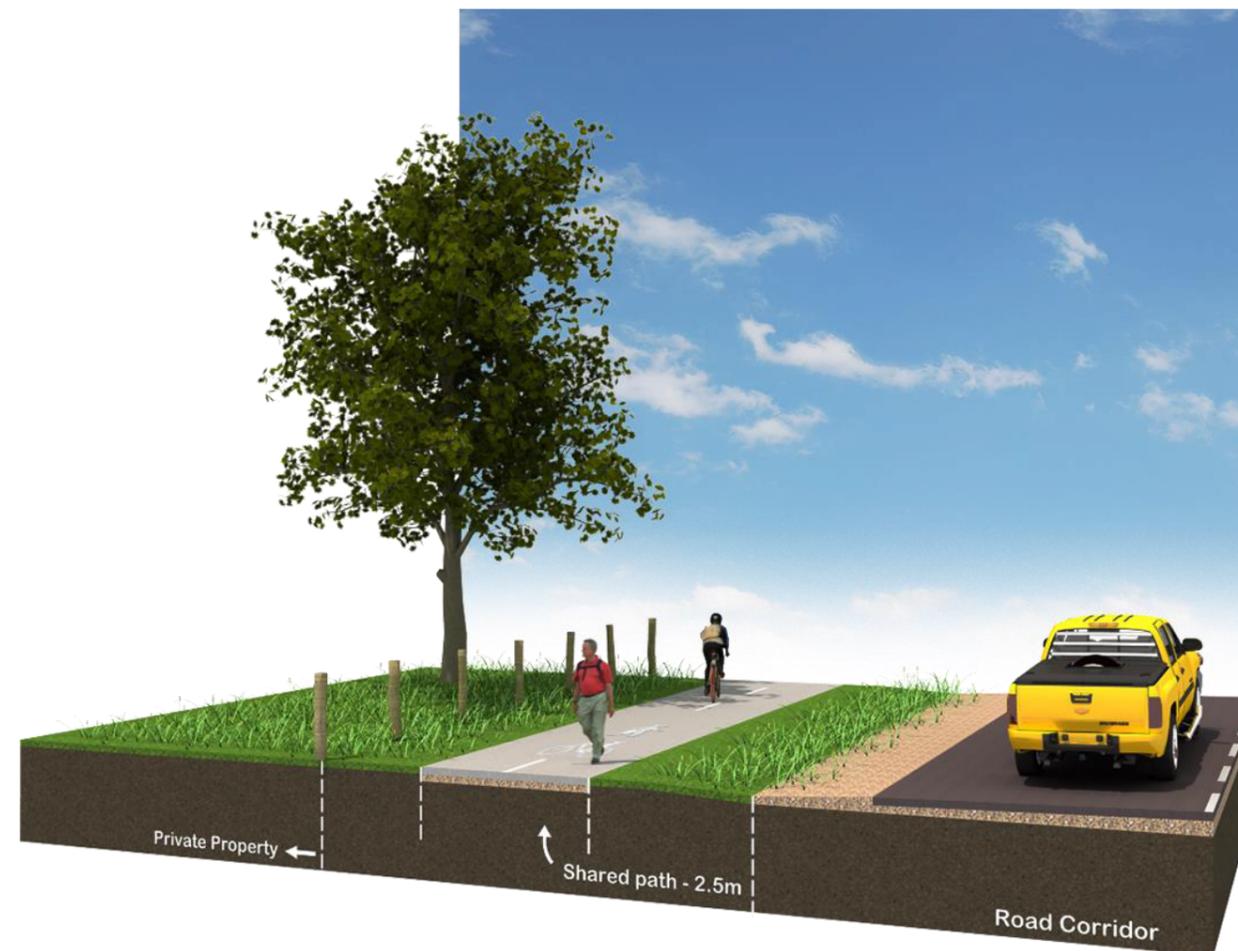
\$83,000



Site Photograph



Project Location Map - Extract of Map Sheet 10



Concept Drawing - Typical 1.2m wide footpath installation on a road with no kerb and gutter

16.0

Footpath to Shared Path Conversion

PROJECT DESCRIPTION

This Project Plan illustrates the steps required to convert an existing 1.2m footpath into a 2.5m shared path.

SPECIFICATION

2.5 metre wide concrete shared path

ESTIMATED COST

\$160 per 1 metre length of path



16.0

Signage Installation Options

PROJECT DESCRIPTION

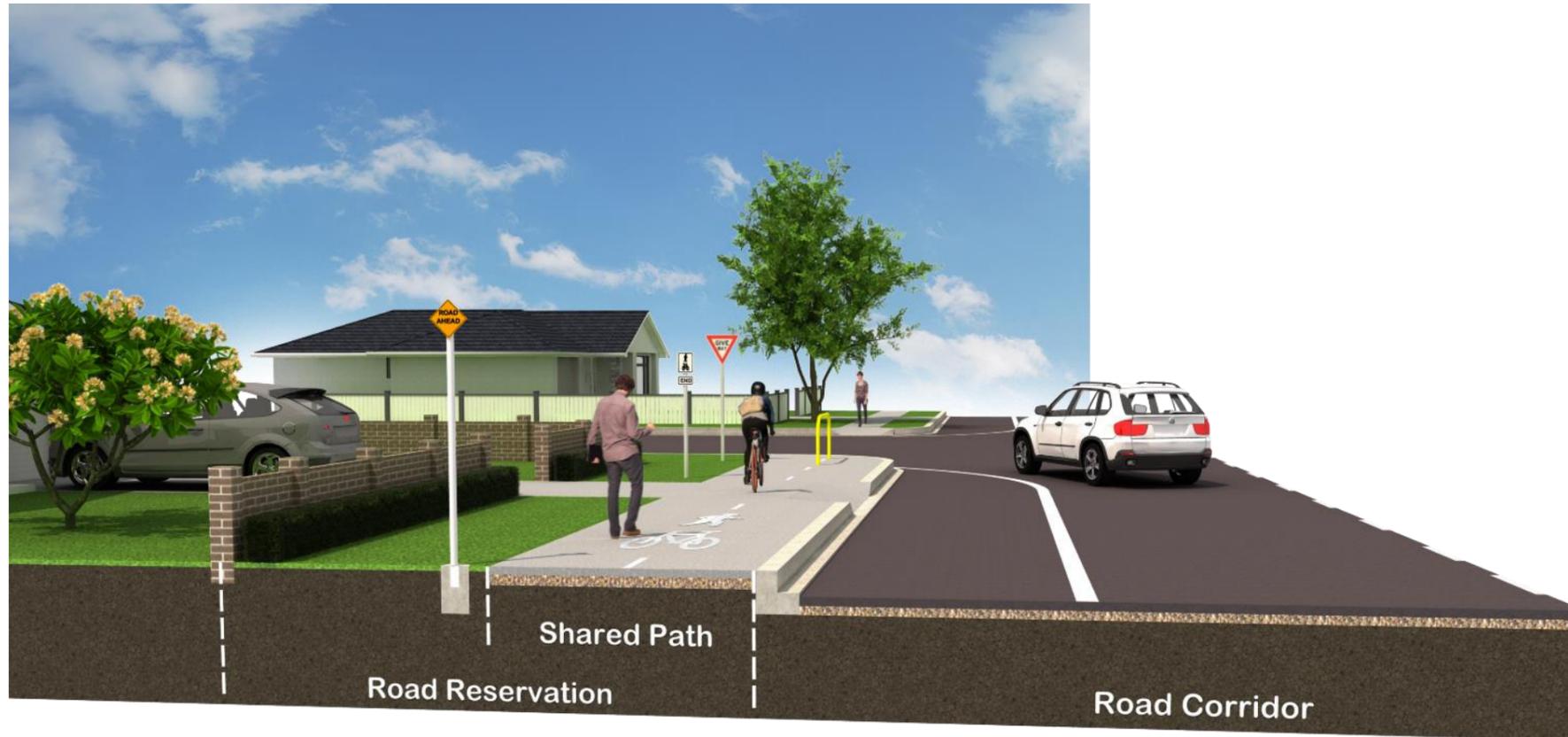
This Project Plan illustrates the different options for installing signage on shared paths where there are few and many intersections.

SPECIFICATION

Signs to relevant Australian Standards.

ESTIMATED COST

\$300 per signage installation



16.0

Water pipeline to shared path conversion

PROJECT DESCRIPTION

This Project Plan illustrates the steps required to convert a water pipeline trench to a 2.5m wide gravel shared path.

SPECIFICATION

2.5 metre wide gravel shared path

ESTIMATED COST

\$25 per 1 metre length of path



Step 1 - Survey pipeline route



Step 2 - Dig pipeline trench



Step 3 - Lay water pipeline



Step 4 - Backfill trench



Step 5 - Complete conversion by laying gravel and installing signage

17. APPENDIX A - DEFINITIONS

Active travel

refers to human powered mobility, such as walking, cycling or riding for all or part of a travel journey.

Active Movement Network

To be inserted.

Arterial road

means a road that predominantly carries through traffic from one region to another.

Bicycle

means a vehicle with two or more wheels that is built to be propelled by human power. For the purposes of this Plan, 'bike' and 'bicycle' means the same thing.

Bicycle facility

means a public facility especially constructed for bicycle traffic. This term has broad use and can refer to any part of a bicycle route, path, lane, associated signage or parking equipment.

Bicycle lane

is a marked lane used by bicycles and ending at the nearest of the following:

- An end bicycle lane sign applying to the lane.
- An intersection (unless the lane is at the unbroken side of the continuing road at a T-intersection or continued across the intersection by broken lines).
- A dead end – the end of the road.

Bicycle rider

is a person who is riding a bicycle. Other words used in this Plan (cyclist, rider, bike rider) means the same thing. The Australian Road Rules also define a rider as a motorcycle rider or the driver of an animal drawn vehicle but these definitions do not apply within this Plan.

Canes

There are three main types of Cane:

- 1. Long Cane – used by people with reduced or no vision, this cane is designed to be one step ahead of its user – it detects obstacles, hazards, ground level changes and stairs.
- 2. Identification Cane – used by people with low vision, this cane can check the height of stairs and any ground level changes.
- 3. Support Cane – Used by people with low vision who also need support, this cane can provided when walking and check the height of stairs.

Collector road

means a non-arterial road that collects and distributes traffic in an areas as well as serving abutting property.

Contributions plans

are council plans that specify the circumstances in which a council may impose developer charges.

Crutches

are a mobility aid that transfers weight from the legs to the upper body. They are used by people who cannot use their legs to support their weight, for reasons ranging from short-term injuries to life-long disabilities. They are commonly used in Parkes Shire by persons recovering from lower limb surgery, such as total knee or hip replacement or from a lower limb injury such as a sprained ankle or bone fracture.

Cycleway

is a generic term used to describe a bicycle route, lane, path or that part of a separated path used by bike riders.

Electric bike

also known as an e-bike, is a bicycle with an integrated electric motor which can be used for propulsion. E-bikes use rechargeable batteries and the lighter varieties can travel up to 25km/h. In some overseas markets, E-bikes are gaining in popularity and taking some market share away from conventional bicycles, fossil fuel-powered Mopeds and small motorcycles.

17.0

Appendix A Definitions

Footpath

means a sealed path for use by pedestrians only. The width of the footpath in the Parkes Shire is generally 1.2m (existing paths) in low traffic areas and up to 3.5m in the Parkes CBD.

Intersection

is an area where two or more roads meet. In this Plan an intersection is also the area where an off road bicycle path or shared path intersects with a road or other bicycle path, shared path or footpath.

Kick scooter

has a simple handlebar, deck and wheels that is propelled by a rider pushing off the ground. They are ridden on roads and footpaths and in skate parks. There are many children and youth in Parkes Shire that use scooters to travel around their house, town, school and at the Parkes Skate Park.

Local road

means a road or street primarily maintained by Parkes Shire Council and used for access to abutting properties.

Mobility scooter

has a seat over three or four wheels, a foot plate for the feet, and handlebars in front to control direction and speed. They are usually battery powered, recharged from standard electric power. Mobility scooters provide important advantages to people with mobility problems and are generally more affordable than powered wheelchairs. There are many people in Parkes Shire that use a mobility scooter.

Mountain bike

is a bicycle created for off-road cycling. Mountain bikes are typically ridden on purpose built tracks, fire trails, and other unpaved environments. Because of their toughness, mountain bikes are regularly used by children and some adults as part of their everyday transport. The most noticeable differences from other bikes are the inclusion of suspension on the frame and fork, larger knobby tires, more durable heavy duty wheels, more powerful brakes, and lower gear ratios needed for steep grades. Mountain bike riding is growing a support base in Australia, with many events being developed in recent years. In Parkes Shire a moderate number of children and recreational riders ride mountain bikes.

Pedestrian

often describes a person travelling by foot or walking rather than travelling in a vehicle. In this Plan a pedestrian also refers to a person that uses one of the following devices to move about:

- Motorised wheelchair that cannot travel over 10 km/h on ground level.
- Non-motorised wheelchair.
- Bicycles, where the rider is 12 years old or younger.
- Bicycles, where the adult rider is supervising a young rider or carrying a child 10 years old or younger.
- Other wheeled recreational devices, such as kick scooters, skateboards or toys.

On-road route

means a route on the road and may form part of the road shoulder for use by cyclists only. The on-road route may be line-marked, may have the bicycle symbol painted on the road surface and signposted as appropriate.

Road network

comprises the following:

- Motorways and freeways
- State roads
- Regional roads
- Local roads.

Road

is an area that is open to or used by the public for the driving or riding of motor vehicles.

Road bike or racing bike

is built for traveling at speed on paved roads. The tires are narrow, high-pressure, and smooth to decrease rolling resistance. They usually use derailleur gears to tackle all types of topography. A strong sporting culture underpins road bike riding in Parkes Shire, stimulated by competitive riding events in the region and wider afield. A growing number of road bike riders regularly ride their bicycles in Parkes Shire, either on their own or in small to large groups.

Road reserve or road corridor

means the total parcel of public land on which a road or path is located.

Road Safety Officer

Insert definition of road safety officer.

Separated bicycle lane

means an on-road bicycle lane with physical separation from other motor traffic.

Separated path

means a length of path where an exclusive bicycle path is laid adjoining a footpath.

Shared path

means a sealed path for use by pedestrians and cyclists. The width of the path is generally 2.5m wide, is signposted as a shared path and is an off-road route.

Shoulder

includes any part of the road that is not designed to be used by motor vehicles in travelling along the road.

Squeeze point

describes a location where a constriction in the normal road carriageway width forces a cyclist out into the main traffic stream and hence into a potential conflict situation. A narrow bridge, reduction in pavement width and intersections where additional lanes are marked onto the same pavement widths are examples of squeeze points.

Tactile surface or tactile paving

can be used to convey important information to visually impaired pedestrians about their environment, for example hazard warning, directional guidance, grade change, or the presence of an amenity.

Time trial bike

is similar to a road bike, but is more streamlined in function and appearance. The tires are narrow, high-pressure, and smooth to decrease rolling resistance. They can have carbon disk wheels for further aerodynamics. The handlebars are also different and include 'time-trial bars' to allow the rider to assume a more

aerodynamic position on the bike. In Parkes Shire you will see time trial bikes ridden at race events.

Track bike

is a bicycle optimised for racing at a velodrome or outdoor track. They are fixed-gear bikes; thus, it has only a single gear and has neither a free-wheel nor brakes. Tires are narrow and inflated to very high pressure to reduce rolling resistance. A track sprinting frame is as rigid as possible, while those for general racing are as aerodynamic as possible. The nearest velodromes are at Dubbo, Bathurst and Orange.

Unicycle

is a single wheeled bike, with the rider sitting over the wheel on a seat. It takes skill and good balance to ride a unicycle. It can be very entertaining and spectacular to watch a person riding a unicycle. They are ridden at home, school and circus events and at other special events.

Walking frame

is a tool for people who need additional support to maintain balance or reduce energy requirements while walking. The basic design consists of a frame that is height adjustable to allow the user to maintain a slight bend in their arms. It is common to see wheels or glides on the back legs of a walker. A walking frame is a good tool for those who are recuperating from leg or back injuries. They are commonly used in Parkes Shire by elderly persons having problems with walking or with mild balance problems.

Wheelchair

is a chair with wheels that is used by people who cannot walk because they are disabled, sick, or injured. Wheelchairs come in two major designs - manual or electric. Manual wheelchairs can be folding or rigid and require human power to move them. An electric-powered wheelchair is moved via the means of an electric motor and navigational controls, usually a small joystick mounted on the armrest. An increasing number of electric wheelchairs are being used in Parkes Shire by mobility impaired persons. Manual wheelchairs are often used outdoors in Parkes Shire where there is a carer available to help propel the wheelchair.

Zebra crossing

Insert definition of zebra crossing.