



# Active Transport Plan

**Bogan Shire** 



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PAGE 3 | Bogan Active Transport Plan

Bogan Active Transport Plan

# FROM THE MAYOR



I am pleased to introduce the first Active Transport Plan for the Bogan Shire and thank the community for their input into the planning process.

Council continues to make informed decisions about maintenance and improvement projects under its Intergrated Planning and Reporting Framework, and the draft Bogan Active Transport Plan is our most recent plan to help program improvements in the transport network.

Active Transport encourages walking and cycling, it benefits your health, is good for the environment and has many social and economic benefits within our community.

The NSW State Government has a goal to double active transport trips in 20 years and it is one that I support for the Bogan Shire given our our beautifull natural resources and open spaces.

Our goal is to make Nyngan, Hermidale, Girilambone, and Coolabah accessable locations with interesting destinations and to provide options for everyone to get there. With your continued help, Council will seek funding for new active transport projects that will support walking, cycling and personal fitness and mobility in Bogan Shire.

Councillor Glen Neill Mayor



PAGE 4 | SECTION 01 | INTRODUCTION Bogan Active Transport Plan

# **CONTENTS**

INTRODUCTION	5
THE VISION	ć
CHALLENGE + OPPORTUNITY	8
APPROACH + METHODOLOGY	10
LOCAL CONTEXT	12
STRATEGIC CONTEXT	26
BENEFITS OF ACTIVE TRANSPORT PLANNING	27
NETWORK PLANNING	29
Cyclist Types + Needs	30
Pavement Surfaces	39
PRIORITIES AND ACTIONS	50
ONGOING RESPONSIBILITIES	53

55
56
57
58
59
60
61
62
63
64
65
66
67

# 01

# PROJECT INTRODUCTION

Bogan Shire Council is preparing the first Active Transport Plan to apply in the Bogan Shire.

The Bogan Active Transport Plan (ATP) draws on the Transport for NSW Future Transport Strategy and Active Transport Strategy, both released in 2022. The aim is to make walking and cycling the preferred way to make short trips, with Transport for NSW encouraging regional councils to assist with achieving the NSW target to double the number of active transport trips within 20 years.

The Bogan Shire has a large network of constructed footpaths within the main towns and a smaller shared path and cycling network.

Travel patterns are dispersed across Bogan Shire and highly dependent on motorised vehicles for long and short trips. As a result, the road network can become quite busy, particularly along highways and main roads as well as local roads during the harvest season, peak shopping times, school zones times and around weekend sporting and community events.

To encourage more active transport trips throughout our towns and villages and to local destinations, a series of active transport plans are required that focuses on the needs of active transport users.

The Bogan ATP identifies a range of pathway improvements and social initiatives that will enhance pedestrian and cycling opportunities. The operation of public amenities, directional signage, water points, seating, bicycle racks, street lights and trees as well as other urban facilities that support the active transport network are also being considered.

Preliminary stakeholder engagement and investigations have already commenced through site meetings and workshops with various agencies, interest groups and residents. Feedback received so far provides valuable insight on active transport behaviour, attitudes and aspirations. It suggests the community is supportive of a more comprehensive and safer active transport network throughout the Bogan Shire.

Given there are limited funds available to improve the active transport network, the draft Bogan ATP proposes targeted improvements that are assessed to have the greatest benefits and user support.

Public exhibition of the draft Bogan ATP is the next step in the process. Following community input on the recommended projects in the Bogan ATP and final adoption by Council, it is intended the Bogan ATP will used by Council as a planning tool to assist with the programming of new projects.



PAGE 6 | SECTION 02 | VISION
Bogan Active Transport Plan

# 02

# PROJECT VISION

# The State Vision

The Transport for NSW Future Transport Strategy 2022 sets out the key actions to connect communities and encourage more people to choose active transport, including:

- Delivering continuous and connected cycling networks.
- Improving the safety and comfort of people walking and riding bikes by providing fit-forpurpose active transport infrastructure and appropriate road speeds.
- Facilitating children's and young people's independent mobility by improving safe walking and bike riding options for travel to and from school.
- Supporting multimodal journeys by integrating active and public transport.
- Encouraging a shift to walking and cycling trips by delivering walking and cycling infrastructure to support mode shift.
- Supporting emerging technology choices such as e-bikes and other micro-mobility devices.

The Transport for NSW Active Transport Strategy 2022 draws on the NSW Future Transport Strategy 2022 and its vision for walking, riding and personal mobility. The NSW Government wants walking and bike riding to be the preferred way to make short trips and a viable.

safe and efficient option for longer trips. The vision of the NSW Active Transport Strategy 2022 is to double active transport trips in NSW over the next 20 years by focussing on five areas:

- + Enable 15-minute neighbourhoods.
- Deliver continuous and connected cycling networks.
- Provide safer and better precincts and main streets.
- Promote walking and cycling and encourage behaviour change.
- Support our partners and accelerate change.

The NSW Active Transport Strategy provides longer term ambitions accompanied by five-year priority moves to guide planning, investment and priority actions for active transport across NSW, including regional and rural areas.







PAGE 7 | SECTION 02 | VISION Bogan Active Transport Plan



# The Vision for the Region

The Bogan Shire forms the western edge of the Central West and Orana Region of NSW and adjoins the local government areas of Cobar (west), Bourke (north-west), Brewarrina (North), Lachlan (south) and Warren to the east.

The Bogan Shire is a significant contributor to the State economy, driven by agriculture, mining, manufacturing, transport and general urban services.

The Central West and Orana Regional Plan 2041 provides the NSW Government's vision for land-uses in the region. While not specifically targeting transport planning, the Far West Regional Plan 2041 aims for strong and connected communities and supports the expansion of transport networks and improved connections between centres and other regions to bolster business and industry growth.

Other recent regional planning work such as the NSW 2040 Economic Blueprint, Transport for NSW Future Transport 2056, NSW Services and Infrastructure Plan, regional economic development strategies and regional water strategies have been incorporated into the regional plan...



# **Bogan Community Vision**

The Bogan Shire is located towards the centre of NSW and provides opportunity for comfortable country living in Nyngan, Girilambone, Coolabah and Hermidale as well as on farms and smaller rural holdings.

Key issues underpinning the future planning, development and prosperity of Bogan Shire communities include housing and accommodation, health, education, employment, the environment and cultural connections as well as general community service provision.

The Bogan Shire Community Strategic Plan 2022 -2032 sets the following long-term vision for Bogan Shire:

'To provide a comfortable country lifestyle by progressively improving the level of appropriate facilities and services and encouraging growth and economic development that is responsive to the needs of the community.'

Five focus areas have been agreed upon to achieve the community's aspirations and vision for Bogan Shire, as follows:

- Social an inclusive community that works together and is able to access services and opportunities to support our comfortable country living.
- Infrastructure construct and manage reliable and efficient community assets that provide access to quality services.
- Environmental to support, enhance and preserve the environment of our shire through sound planning and management practices to ensure a sustainable, healthy and safe community.
- Economic a vibrant local economy with a diversity of successful businesses that provide local employment opportunities and contribute to a prosperous community.
- Civic Leadership strong, transparent and effective governance with an actively engaged community to ensure we remain Fit For The Future.



# **Bogan ATP Vision**

Bogan Shire Council continues to focus on the maintenance and improvement of levels of service and amenity for residents and visitors.

The Bogan Shire Local Strategic Planning Statement 2019 advises:

'Active transport connections from affordable housing or aged care to key facilities in town is vital ..... There is also opportunity to providing pedestrian and cycle connectivity between key destinations such as the Bogan River and the main street.'

New active transport plans for Nyngan, Girilambone, Coolabah and Hermidale aim to lift Council's performance in active transport provision and should deliver benefits across all focus areas of the Bogan Shire Community Strategic Plan 2022 - 2032.

The vision for the Bogan ATP is:

'To create accessible towns and great local destinations and many options to aet there.'

PAGE 8 | SECTION 03 | CHALLENGES + OPPORTUNITIES

Bogan Active Transport Plan

# 03

# CHALLENGES + OPPORTUNITIES

# **Recent Changes**

A lot has changed since the Local Government Elections in December 2021, including:

- + Floods, bushfires and drought have demonstrated the need to build resilient communities and multi-modal transport systems.
- The COVID-19 pandemic has shown how quickly we can adapt and adopt new habits such as remote working and learning, different transport choices beyond motor vehicles and a rethink of housing supply and demand.
- There is more urgency around reducing greenhouse gas emissions from industry and transport, with a growing demand for electric vehicles and the NSW government making a commitment to Net Zero for transport operations by 2035.
- + Connecting with Country now informs the planning, design, and delivery of built environment projects in NSW.
- The 6 Cities Region of the Greater Sydney has supplanted the Metropolis of Three Cities, and there is renewed emphasis on regional planning and development.
- + The Movement and Place framework introduced in 2018 is now fully embedded in Transport for NSW policy.
- New targets for '15-minute neighbourhoods' have been adopted by Transport for NSW policy under the NSW Active Transport Strategy 2022
- Other Important policies that support active transport infrastructure were released, including the NSW Road User Space Allocation, Providing for Walking and Cycling in Transport Projects, the Walking Space Guide and the Cycleway Design Toolbox.

 Micro-mobility in the form of mobility scooters, e-bikes and e-scooters is growing strongly, requiring consideration of these new transport modes in the road environment.

Many of the streets within Nyngan, Girilambone, Coolabah and Hermidale were constructed at a time when footpaths and cycleways were not required. Over time, expectations have changed and new standards are required to improve the safety and comfort for all road users.

The focus of the Bogan ATP will be to provide a broad network of facilities across towns that respond to demand / safety driven issues and / or that have potential to encourage community members to become more active.



PAGE 9 | SECTION 03 | CHALLENGES + OPPORTUNITIES

Bogan Active Transport Plan



Population 2,750



Employment sector 53.8% labour force participation



Median Age



Housing 56.3% of housing is rented



Younger Population (0-14) 21%



Median weekly household income \$864

### **BOGAN SHIRE IN 2036**



Population Projection 3.100



Houses 100 new dwellings



Most common household 35% Lone Person



Older Adults (65+) 25%



Children 20% of population aged under



Dwellings 87% of dwellings are detached

# **Challenges**

- Relatively small population base (2,467 people) which is projected to remain static over the next decade.
- Changing climate conditions creating uncertainties in agricultural systems and damage from storms.
- Social and cultural connections and communication, with around 17.8 % of the population being from Aboriginal or Torres Strait Islander heritage.
- Dependence on mining and the need for more economic diversity to support long term employment and improvements in living standards.
- + Access to health, education and other community support services.
- Weeds and sediment movements over roads and paths and parkland facilities.

# **Opportunities**

- Unique and beautiful landscapes, riparian areas, National Parks and reserves, with locals and visitors wanting to experience open freedoms and connection to Country.
- Supportive communities, with caring for Country, water management, innovation, resource sharing, health, education and transport being at the forefront of community focus.
- Building even more resilient / connected communities around education, health, sports, natural landscapes, innovative farm and land management, natural landscapes and local business development.
- Providing active transport facilities to attractors such as to commercial precincts, schools, sports facilities and waterways.
- Using active transport initiatives to promote health, safety, environmental and economic / tourism goals.

PAGE 10 | SECTION 04 | APPROACH + METHODOLOGY Bogan Active Transport Plan

# APPROACH + **METHODOLOGY**

Active transport users 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 Bogan ATP is to build an understanding of the elements that will make a good pedestrian and cycling network in the local context. These include an understanding of the following:

- The types of existing / potential pedestrians and cyclists and their
- The condition of the existing pedestrian and cycling network (including existing 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 most appropriate design options that meet pedestrian and cyclists needs, including standard and innovative options.
- The views and aspirations of stakeholders.
- The key planning and engineering principles that underpin an effective and usable network.
- Mechanisms to program / fund improvements to the active transport

The approach is to develop new active transport plans that build upon existing infrastructure and that address the key issues and aspirations identified from community consultation and audits.

To achieve this approach, the Bogan ATP is being undertaken in the following stages:

# Stage 1 - Asset Review

The main elements of the existing network of active transport facilities have been recorded on maps in the draft Bogan ATP. This local data has been presented to key Council staff and Transport for NSW as the basis for reviewing the long-term management of the active transport network in Bogan Shire.

## Stage 2 - Independent Audit Investigations

Consultant planners and traffic engineers specialising in active transport planning and projects have been engaged by Council to independently investigate the existing active transport network. This audit work was undertaken by:

- + Drive-through and walk-through surveys of the study area, with particular focus on settlement areas, primary routes and attractors.
- On-site meetings with 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 Bogan Shire. The emphasis of the audits was on identifying gaps in the network as well as the barriers to people using the network.

# Stage 3 - Promotion

Information about the Bogan ATP was published on local media and Council's website and Facebook page to inform community members about the preparation of the new plan. Emails were also sent out to stakeholders known to Council who have an interest in pedestrian and cyclina activities.

# Stage 4 - Online Survey

An online survey was made available to assist with obtaining more information walking and cycling behaviour and attitudes.



PAGE 11 | SECTION 04 | APPROACH + METHODOLOGY Bogan Active Transport Plan

# Stage 5 - Preliminary Community Workshops

Informal community meetings and workshops were held in Nyngan, Girilambone, Coolabah and Hermidale in December 2022.

These meetings were structured around a series of local area maps. Questions were asked about the pedestrian and cycling network and local conditions that led the conversation to allow for problems, solutions, suggested routes and feedback to be covered within the allocated workshop.

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

# Stage 6 - Local Data Review and Planning

The audits and stakeholder feedback revealed a variety of pedestrian and cycling facilities provided in Bogan Shire, in varying conditions. Expectedly, the preliminary investigations and engagement findings identified a number of deficiencies and barriers in the network, which are discussed in Section 5 in more detail. Where these involved minor issues, they were raised with Council staff for addressing. Project planning and development issues were also discussed with relevant staff to assist with the formulation of projects and priorities in the Bogan ATP.

# Stage 7 - Draft Bogan Active Transport Plan

A draft Bogan ATP has been prepared (this report) to record the relevant information in one succinct strategy document. Incorporated into the draft Bogan ATP are a series of maps dealing with the audit and preliminary engagement findings.

Active transport plans have been prepared for Nyngan, Girilambone, Coolabah and Hermidale to 'visualise' the additional facilities required to achieve a connected network.

A Matrix Table in Section 10 provides full visibility on how priorities and actions were decided. Concept designs of the top priority projects recommended for action are also shown in the draft Bogan ATP along with project costings and any notes relating to project implementation.

## Stage 8 - Public Exhibition

Formal public exhibition of the draft Bogan ATP is the next step in the process. Feedback on the draft plan will then be used to develop an action plan and help finalise the plan.

# Stage 9 - Review of Submissions and Finalisation of Bogan ATP

The final task will be the review of any submissions received from public exhibition of the draft plan and recommended programme the infrastructure projects by Council. Final project cost estimates for each priority project will also be shown in the finalised ATP.







PAGE 12 | SECTION 05 | LOCAL CONTEXT

Bogan Active Transport Plan

# 05

# LOCAL CONTEXT

# **Bogan Shire**

Bogan Shire, situated in the Central West and Orana Region of New South Wales and has an area of 14,610 square kilometres. The Shire adjoins Cobar to the west, Bourke to the north-west, Brewarrina to the north, Warren to the east and Lachlan Shire to the south.

The Bogan Shire population is approximately 2,467 (2021 ABS Census) with Nyngan having the highest population and the administrative centre for the shire. Other urban settlements include Coolabah, Girilambone and Hermidale.

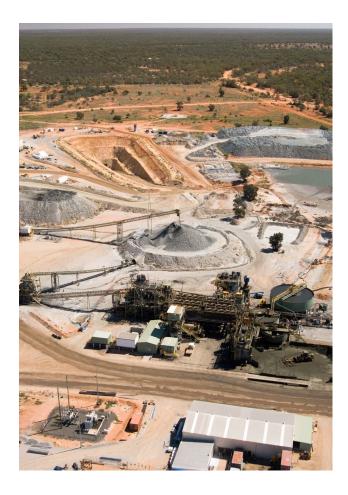
Mining and agricultural production, including livestock grazing and large-scale cropping, are primary economic drivers. Other key employment sectors include education, health, administration and retail trade. There also growing opportunities for the Bogan Shire to capitalise on visitor and tourism destination economies as well as freight and logistics industries.

Attractors in the Bogan Shire are the historic town centres, national parks and river systems, health and aged care facilities, schools, educational establishments, transport facilities, open space and recreational facilities.

The Bogan Shire community is considered to have high car dependency for both work and leisure. Analysis of car ownership in 2021 indicates over 55% of households in Bogan Shire had access to two or more motor vehicles, compared to 55% in Regional NSW and 46% in Greater Sydney.

Only a small proportion of the community use alternative methods to travel to work, with walking being the most preferred with around 2% of people walking to work. The dependency on motor vehicles is largely the result of limited public transport coverage and the large distances between origins and destinations of residents involved in the rural and mining industry sector.

In 2021, Bogan Shire had a relatively high proportion of children (approximately 20% of population) and persons aged 55 or older (20%) than Regional NSW. Access to education and support services and a long-term focus on improving health and well-being are important issues to cater to the needs of existing and future residents.





PAGE 13 | SECTION 05 | LOCAL CONTEXT

Bogan Active Transport Plan

# Nyngan

#### Overview

Nyngan is located at the junction of the Mitchell and Barrier Highways on the Bogan River, approximately 165 kilometres north-west of Dubbo.

With a current population close to 2,000 people, Nyngan is the largest urban area in the shire and the mainstay of industry, employment, housing and community activities. Conditions at Nyngan are ideal for walking and cycling, with over 90% of the town population living within one kilometre of Pangee Street, schools and workplaces.

Many of the streets in Nyngan are quite wide and have lower traffic volumes than in larger regional centres. Parklands in Nyngan offer ideal conditions for residents and visitors to enjoy these spaces. However, links to industrial areas, some schools and residential areas are patchy.

# Preliminary consultation and audit findings

The audit and consultation work in Nyngan revealed a relatively extensive footpath network in good condition and an informal gravel surface shared path network along levees.

A number of opportunities and constraints (deficiencies, gaps and barriers) were identified in the Nyngan active transport network, which are discussed in this section.

A map summarising the audit / consultation findings of the Nyngan investigations is presented in this section.

## Footpaths

The blue lines on the map show the existing network of concrete footpaths in Nyngan. There is a general need to extend sections of footpaths to achieve connected routes to key attractors in Nynaan (central urban precinct, schools. hospital and parklands). There is also a need to review road and rail crossing points and kerb ramps to ensure paths provide continuous all-weather and safe crossing conditions. Rationalisation of footpaths, signage and lights in and around the Nyngan Youth Centre, War Memorial Swimming Pool and O'Reilly Park is also needed. All community members consulted are supportive of more footpaths.

#### | Shared Paths

There are generally no constructed concrete shared paths in Nyngan. There are sections of the road network that are being readily used by pedestrians and cyclists which would benefit from a shared path. The existing gravel surface levees around town are readily used by pedestrians and cyclists as shared paths, which would benefit from improvement of surface conditions, seating and Wayfinding signage. All community members consulted are supportive of more shared paths.

## Kerb Ramps

There are kerb ramps along constructed footpaths with varying levels of compliance. There is a need to fix some kerb ramps along existing paths to ensure compliance. New kerb ramps should form part of any new footpath / shared path treatments.

#### School Zones

All schools in Nyngan have established school zone and there are existing footpaths along most adjoining streets. There is a need to extend the footpath / shared path network around Nyngan Public School and Nyngan High School and TAFE.

## Bicycle Lanes

There are a number of on-road cycling lanes in Nyngan along south of Pangee Street, as shown on the Nyngan audit / consultation findings map.

# Road crossings

There is a need to create a new pedestrian crossing of Pangee Street to provide an additional crossing point to access both sides of Pangee Street

## Barriers

The Main Western Railway is a barrier to active transport. No other barriers were observed.

#### Obstacles

No major obstacles observed.

# Trip hazards

Some kerb ramps and grassed footpaths where drainage has created washouts and erosion present as trip hazards. Provision of concrete footpaths and new kerb ramps along main walkways would help address potential trips and falls.

# Signage

Generally absent.

## Lighting

There is a need for lighting of the crossing at Cobar Street. No other major issues were raised / noted.

#### Tactile indicators

Generally absent in Pangee Street

#### End of trip facilities

There are end of trip facilities in various parks and commercial premises.





# Community Comments

Weeds are generally a problem for active transport, particular catheads.

Some roads in Nyngan are high volume roads with lots of trucks, which is a barrier to active transport. Truck parking, storage and servicing is another similar issue.

Existing bike lanes on roads around Nyngan aren't being well maintained or well-utilised.

There is a need to consider shade trees when planning the new active transport network

A general concern is the speed of trains through the township.

There is need to review kerb ramps and road crossings generally throughout the Nyngan Township.

Wingangali Walk is regularly utilised for active transport

# Project

Bogan Active Transport Plan

# Map Title

Consultation / Audit Map

# Map Location

Nyngan

# Sheet Ref

Sheet 01 of 04

# Map Legend

Local Road Network
Railway
Existing Pedestrian Bridge
Footpaths - Existing
Shared Paths - Existing
Public Telephone
Existing Pedestrian Crossing
Speed Signs
Existing Bus Stop

Main Road Network

Existing Bus Stop
Existing Refuge
Drainage

Water Feature
Community Facilities
Parks + Recreation

Education Facilities Key Commercial

# Map Scale

0 100 200 m







Weeds are generally a problem for active transport, particular catheads.

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Existing bike lanes on roads around Nyngan aren't being well maintained or well-utilised.

trees when planning the new active transport network

A general concern is the speed of trains

There is need to review kerb ramps and road crossings generally throughout the Nyngan Township.

Wingangali Walk is regularly utilised for active transport

Local Road Network Existing Pedestrian Bridge Footpaths - Existing Shared Paths - Existing Public Telephone

Existing Pedestrian Crossing Speed Signs

Existing Refuge

Community Facilities Parks + Recreation **Education Facilities** 

200 m

Joins Map Sheet 04



Weeds are generally a problem for active transport, particular catheads.

Some roads in Nyngan are high volume roads with lots of trucks, which is a barrier to active transport. Truck parking, storage and servicing is another similar issue.

Existing bike lanes on roads around Nyngan aren't being well maintained or well-utilised.

trees when planning the new active transport network

A general concern is the speed of trains

There is need to review kert ramps and road crossings generally throughout the Nyngan Township.

Wingangali Walk is regularly utilised for active transport

\_\_\_\_ Local Road Network Existing Pedestrian Bridge Footpaths - Existing Shared Paths - Existing Public Telephone

Existing Pedestrian Crossing

Existing Refuge

Community Facilities Parks + Recreation

200 m

PAGE 19 | SECTION 05 | LOCAL CONTEXT

Bogan Active Transport Plan

# Coolabah

#### Overview

Coolabah is located approximately 75 kilometres north of Nyngan on the Mitchell Highway with a population around 70 people.

The town took its name from a nearby property called 'Coolabah' which was named after the coolibah trees that arow in abundance in the area.

The commercial and parkland strip west of the Mitchell Highway is used as a service centre for locals and passing motorists. Public toilets, playground facilities, Countrylink Bus Stop, tourist signage and 'The Coolabah Tree' are concentrated in this area. Other attractors at the Community Hall, Tennis Courts and Oval are to the north-east on the other side of the Mitchell Highway.

# Preliminary consultation and audit findings

The audit and consultation work in Coolabah revealed a general absence of constructed paths and facilities. People were observed walking along the road network.

A number of opportunities and constraints (deficiencies, gaps and barriers) were identified in the Coolabah active transport network, which are discussed in this section.

## Footpaths

There are no constructed footpaths in Coolabah. Residents and visitors walk along the road or along the side of the road to access services and visit friends and family. There is a need to improve walking and cycling conditions along Arthur Hall VC Way and at the Mitchell Highway rest area. Any new paths should improve drainage along these roads.

#### Shared Paths

There are no constructed shared paths in Coolabah.

#### | Kerb Ramps

There are no kerb ramps as there are generally no footpaths / shared paths in Coolabah. New kerb ramps should form part of any new footpath treatments.

#### School Zones

Coolabah has no school and there are no school zones.

#### | Bicvcle Lanes

There are no on-road cycling lanes or exclusive cycling paths in Coolabah, nor are they warranted at this stage.

#### Road crossings

No urban streets within Coolabah were observed to present major crossing issues. The Main Western Railway is inactive at Coolabah.

#### Barriers

The Mitchell Highway act as a barrier to active transport. No other significant barriers were identified at Coolabah.

#### Obstacles

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

## I Trip hazards

Some grassed footpaths where drainage has created washouts and erosion present as trip hazards. Provision of concrete footpaths and new kerb ramps along main walkways would help address potential trips and falls.

# Lighting

No major issues were raised / noted.

#### Tactile indicators

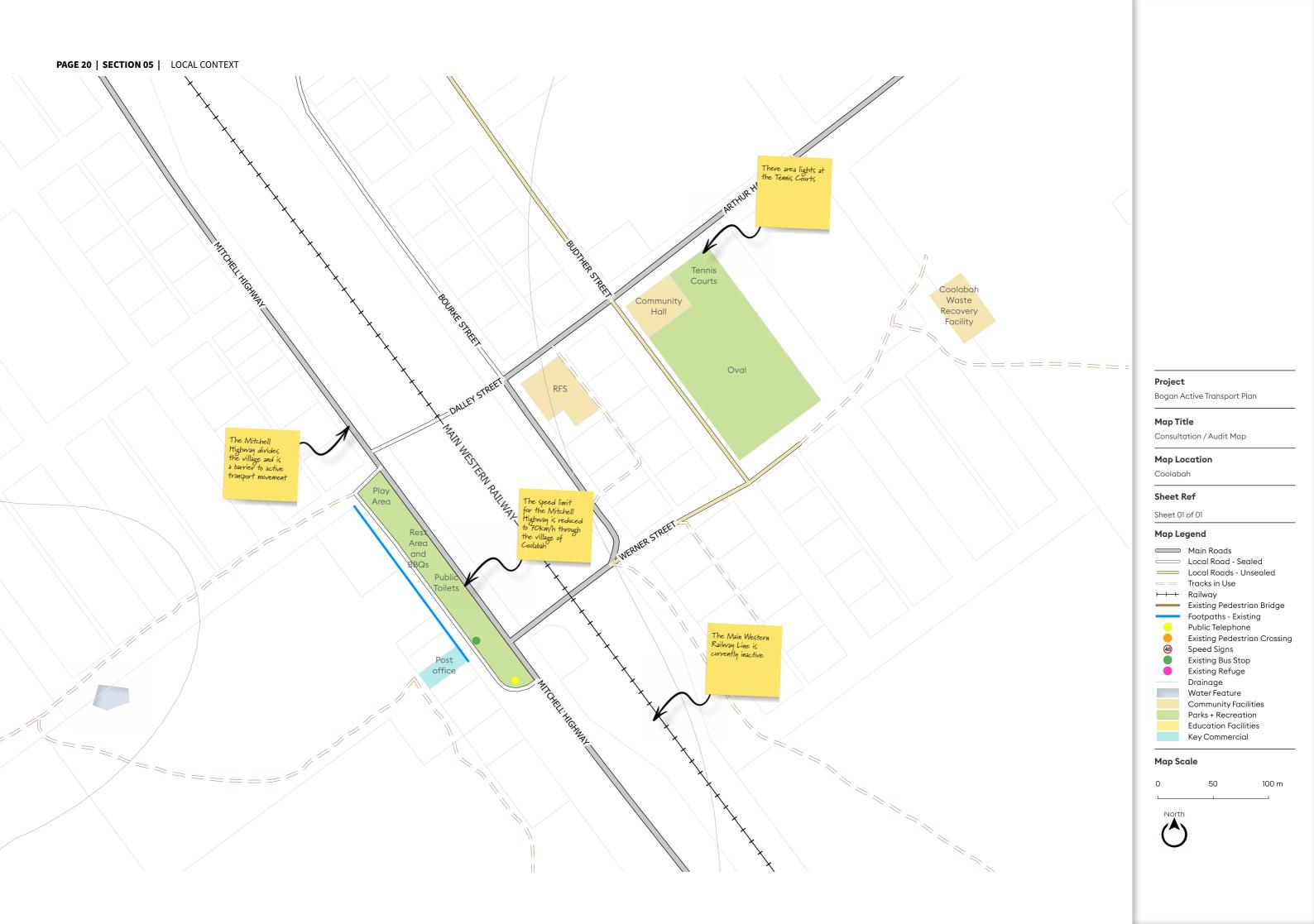
Generally absent in Coolabah and not required at this stage.

## End of trip facilities

There are end of trip facilities at the Mitchell Highway rest area. The southern end of the rest area is being used as an access from Werner Street which could present a safety issue for tourists / visitors walking between facilities and attraction such as toilets and 'The Coolabah Tree'. The use of large rocks along the edge of the rest area would prevent motor vehicle traffic from accessing this pedestrian / parkland area.

#### Signage

Generally absent.



PAGE 21 | SECTION 05 | LOCAL CONTEXT

Bogan Active Transport Plan

# Girilambone

#### Overview

Girilambone is located approximately 50 kilometres northwest of Nyngan on the Mitchell Highway. The town population is around 100 people and there is mining camp for around 50 workers located east of town off Murrayombie Road.

The Avoca Mine and Murrawombie Mine are in close proximity to Girilambone. The Gundabooka and Toorale National Parks and the town of Bourke are also located to the north-west.

Girilambone acts as a service centre for surrounding farms and mines and for passing traffic. The Service Centre Cafe, Countrylink bus stop, Girilambone Primary School, Hog and Billy Hotel, Memorial Park, Community Hall and Post Office are attractors in the town.

The Post Office is moving to the Service Centre Café and the historic Girilambone Railway Station his being refurbished to function as a tourist facility, which will likely create more activity around Sydney Street, which forms part of the Mitchell Highway.

Master planning of Memorial Park facilities to improve free camping was raised, including access, drainage and lighting.

# Preliminary consultation and audit findings

The audit and consultation work in Girilambone revealed a general absence of constructed paths and facilities. People were observed walking along the road network.

A number of opportunities and constraints (deficiencies, gaps and barriers) were identified in the Girilambone active transport network, which are discussed in this section.

A map summarising the audit / consultation findings of the Girilambone investigations is also presented.

## Footpaths

There are no constructed footpaths in Girilambone. Residents and visitors walk along the road or along the side of the road to access services and visit friends and family. There is a need to improve walking conditions along Sydney Street and Arcturus Street and Myall Street. Any new paths should aim to improve drainage and street tree plantings for shade along routes.

#### Shared Paths

There are no constructed shared paths in Girilambone. There is a need to improve walking and cycling conditions along Sydney Street and Arcturus Street and Myall Street. Use of shared paths are considered the most appropriate response to deal with all user situations. Any new paths should improve drainage and street tree plantings for shade along these routes.

#### Kerb Ramps

There are no kerb ramps as there are generally no footpaths / shared paths in Girilambone. New kerb ramps should form part of any new footpath treatments.

#### School Zones

Girilambone Primary School has an established school zone. There are generally no constructed paths servicing the school. There is a need to ensure the school has adequate footpath/shared path facilities at and around the main entrance and potentially to other attractors (where practical). There is also a need to extend bitumen seal at the School access and drop-off in Vega Street.

#### Bicycle Lanes

There are no on-road cycling lanes or exclusive cycling paths in Girilambone, nor are they warranted at this stage.

# Road crossings

No urban streets within Girilambone were observed to present major crossing issues and the need for road crossings was not identified. It is recommended that motorist warning signage being installed along Sydney Street (either side of the Service Centre Cafe and Girilambone Railway Station) warning motorists of the regular crossing of the road by pedestrians.

#### Barriers

The Mitchell Highway and the Main Western Railway (not operating) act as barriers to active transport. There is a need to provide a pathway linking the Service Centre Cafe and the Girilambone Railway Station to other parts of town to the east. No other barriers were identified at Girilambone.

#### Obstacles

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

# Trip hazards

Some grassed footpaths where drainage has created washouts and erosion present as trip hazards. Provision of concrete footpaths and new kerb ramps along main walkways would help address potential trips and falls.

## Lighting

No major issues were raised / noted.

#### Tactile indicators

Generally absent in Girilambone and not required at this stage.

# End of trip facilities

There are end of trip facilities at the Memorial Park and at commercial premises. Refurbishment of the Girilambone Railway Station will also provide end of trip facilities.

## Signage

Generally absent and should form part of any Railway Station shared path facilities.



PAGE 23 | SECTION 05 | LOCAL CONTEXT

Bogan Active Transport Plan

# Hermidale

#### Overview

Hermidale is a small town of around 150 people, located on the Barrier Highway, approximately 45 kilometres west of Nyngan. The Hermidale Nymagee Road bisects the town with considerable truck traffic accessing the Barrier Highway from this road to the south.

Hermidale retains a sports ground, hall and tennis courts, post office, public school, hotel and accommodation facilities. The Community Hall is the centre of activity and is used by the nearby Hermidale Public School for events.

The Nyngan Cobar Railway passes through town and acts a barrier to active transport. A new multi-user rail siding is being planned at Hermidale to accommodate the loading of trains up to 1,200 metres long.

Residents have suggested a playground facility east of the Community Hall and Tennis Courts, such as a new pump track and skate park facility.

# Preliminary consultation and audit findings

The audit and consultation work in Hermidale revealed a general absence of constructed paths and facilities. People were observed walking along the road network.

A number of opportunities and constraints (deficiencies, gaps and barriers) were identified in the Hermidale active transport network, which are discussed in this section.

A map summarising the audit / consultation findings of the Hermidale investigations is also presented.

## Footpaths

There are no constructed footpaths in Hermidale. Residents and visitors walk and ride along the road or along the side of the road to access services and visit friends and family. There is a need to improve walking conditions along Mouramba Street, Hermidale Nymagee Road and Cobar Street to link Hermidale Public School, Hermidale Community Hall and Park facilities. The footpath access to the Post Office also needs to be improved to facilitate access for all users. Any new paths should aim to improve drainage and street tree plantings for shade along routes.

#### Shared Paths

There are no constructed shared paths in Hermidale. There is a need to improve walking and cycling conditions along Mouramba Street, Hermidale Nymagee Road and Cobar Street to link Hermidale Public School, Hermidale Community Hall and Park facilities. Use of a shared path is considered the most appropriate response to deal with all user situations. Any new paths should aim to improve drainage and street tree plantings for shade along the route.

#### | Kerb Ramps

There are no kerb ramps as there are generally no footpaths / shared paths in Hermidale. New kerb ramps should form part of any new path treatments.

#### School Zones

Hermidale Public School has an established school zone. There are generally no constructed paths servicing the school and there is a need to provide a path along Mouramba Street, and potentially to other attractors such as the Community Hall. There is also a need to extend bitumen seal at the School access, bus stop and drop-off in Mouramba Street.

## Bicycle Lanes

There are no on-road cycling lanes or exclusive cycling paths in Hermidale, nor are they warranted at this stage.

#### Road crossings

No urban streets within Hermidale were observed to present major crossing issues and the need for road crossings was not identified.

#### Barriers

The Barrier Highway, Hermidale Nymagee Road and the Nyngan Cobar Railway act as barriers to active transport. There is a need to provide shared paths and kerb ramps along main active transport routes.

#### Obstacles

No street furniture, signs or other structures were observed to present major obstacles or hazards to pedestrians or cyclists on constructed paths. Cat head thorns were raised as an issue that encourages on road walking and cycling.

#### Trip hazards

Some grassed footpaths where drainage has created washouts and erosion present as trip hazards. Provision of concrete paths and new kerb ramps along main active transport routes would help address potential trips and falls.

# Lighting

No major issues were raised / noted.

#### I Tactile indicators

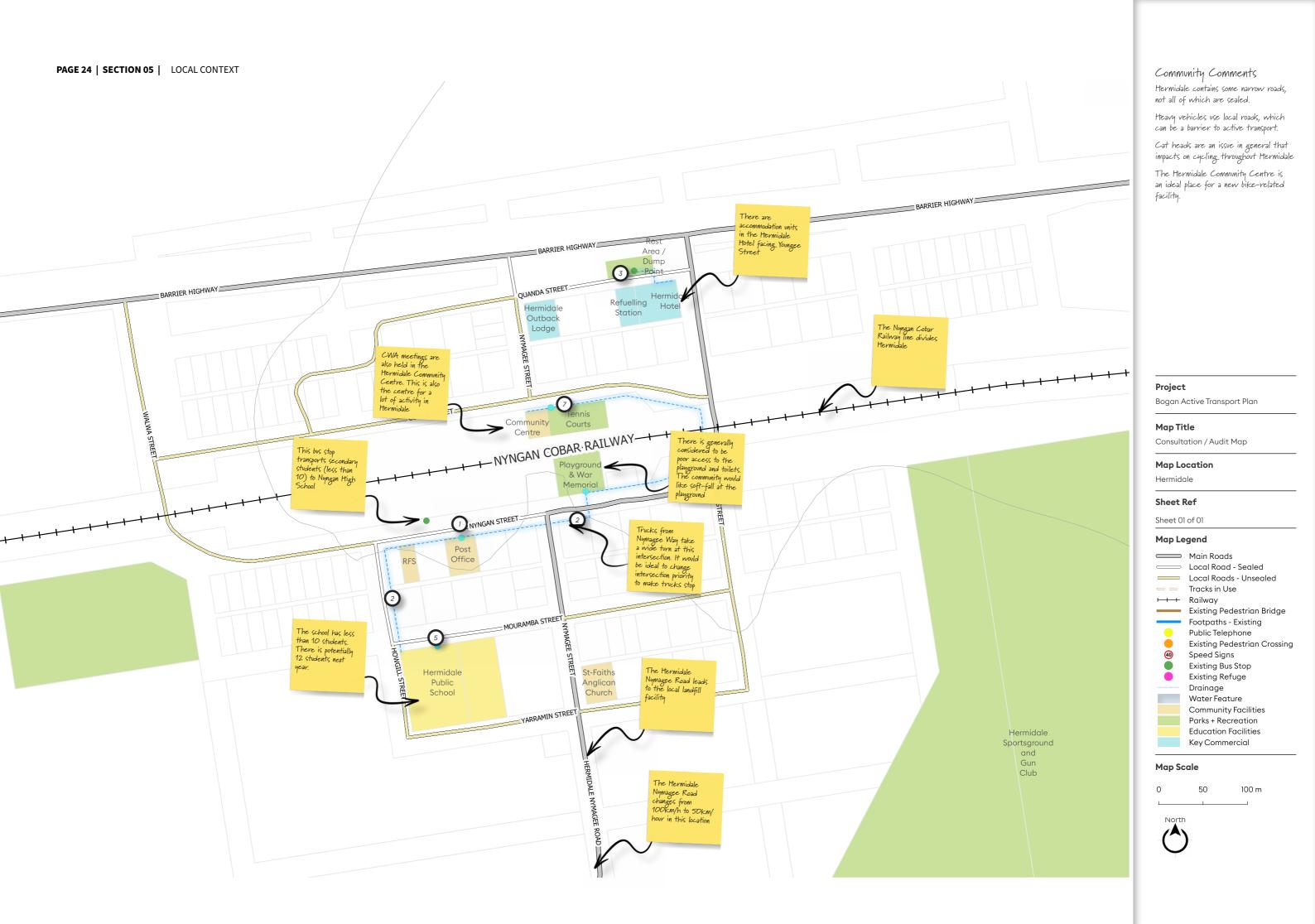
Generally absent in Hermidale and not required at this stage.

# End of trip facilities

There are end of trip facilities at the Park and at commercial premises. Provision of footpath improvements at the Countrylink bus stop, opposite the Hermidale Hotel, would improve all weather access.

#### Signage

Generally absent.



PAGE 25 | SECTION 05 | LOCAL CONTEXT

Bogan Active Transport Plan

# Riparian and other iconic rural areas

There are no formal pedestrian or cycle routes connecting towns and villages in the Bogan Shire.

Cycling along rural roads is undertaken infrequently by individuals and small bunch rides via a number of wellestablished routes known to local cyclists and tour groups.

Road touring events are not regular occurrences in the Bogan Shire, and perhaps this is due to more favourable road conditions and more active cycling clubs and groups in Dubbo and other regions.

The preferred mode of choice for local cyclists appears to be all-terrain bicycles, such as flat bar BMX, touring bikes and mountain bikes. Locals tend to ride these more sturdy bikes due to the existing road conditions and the freedoms they provide in accessing quieter gravel roads and rural attractions.



PAGE 26 | SECTION 06 | STRATEGIC CONTEXT

Bogan Active Transport Plan

06

# STRATEGIC CONTEXT

Planning decisions at a local level are influenced by broader global, National, State and regional issues, trends, needs and planning priorities.

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.

The following documents are particularly important.

#### Movement and Place Practitioner's Guide



Explains how built environment practitioners can apply a Movement and Places approach to projects and plans

#### Walking Space Guide



WALKING SPACE GUIDE
Towards Pedestrian Comfort and Safety

standards and tools to ensure that sufficient space is provided on streets to achieve comfortable environments which encourage people to walk.

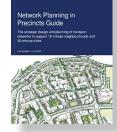
Provides a set of

### Cycleway Design Toolbox



Provides guidance on desired outcomes for cycling and micromobility. It establishes design principles for cycleways in specific contexts, including temporary initiatives and public bicycle parking facilities.

#### Network Planning in Precincts Guide



Provides best practice principles, tools, examples and case studies of a transport network that facilitates the efficient movement of people and goods while supporting 15 minute neighbourhoods.

# **NSW Public Spaces Charter**



The NSW Public Spaces Charter has been developed to support the planning, design, management and activation of public spaces in NSW. It identifies 10 principles for quality public space.

# NSW Guide to Walkable Public Space



Outlines why walkable public spaces are needed. It includes ideas and opportunities for how they can be created and methods for trialling and evaluating improvements.

# **BENEFITS OF ACTIVE TRANSPORT PLANNING**

# **Healthy Lifestyle**

Leading an active lifestyle brings many benefits for the general health and well-being of Bogan 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, bike riding and rolling can aid the prevention of:

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

Active transport activity can also improve psychological well-being, metabolism, muscle strength and flexibility, endurance, respiratory function, energy levels and weight management. All this aids in a speedy return to good health in the event of illness or recovery from trauma / surgery.

Children's health should include regular physical activity, with at least 60 minutes of moderate to vigorous physical activity each day being recommended for children 5 to 18 years of age to keep healthy. Outdoor activity, such as playing, walking, running, rolling and bike riding can contribute to children's health, as well as their development of physical, practical, emotional and social skills.

The presence of footpaths, shared paths and cycleways are associated with active travel across all age groups.

# Creating a comprehensive movement network

Comprehensive road environments are ones that incorporate efficient transport options (roads, public transport, footpaths and cycleways) as well as aesthetic presentation and general walk-ability. Quality footpaths and shared paths are particularly influential in encouraging people across all ages to lead more active lifestyles.

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

The transport network in the Bogan Shire is largely based around private motor vehicles on roads. Continued lack of public transport options in the Bogan Shire are key reasons for improving the active transport network in the urban areas of the shire.

As the centres with the most activity and growth in the shire, Nyngan, Coolabah, Girilambone and Hermidale all need their own active transport plan to cater for the growing needs of residents and visitors.



PAGE 28 | SECTION 07 | BENEFITS OF ACTIVE TRANSPORT PLANNING

Bogan Active Transport Plan

# **Achieving Safer Conditions**

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

Connected active transport 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. Connected street networks that are perceived as safe by users tend to encourage greater levels of active transport across all age groups. Older adults, particularly women, are more fearful and more vulnerable to crime thus the design and location of active transport facilities to achieve good levels of perceived / actual safety is important to avoid people constraining their behaviour.

Evidence indicates that Crime Prevention Through Environmental Design (CPTED) elements, such as good street lighting, neighbourhood upkeep, and less physical incivilities (e.g. litter, graffiti and vandalism) can encourage active transport. The design of commercial buildings and their relation to the street also has the potential to increase natural surveillance which improves safety and feelings of safety. Providing safe, well-lit building entrances that face the street and are directly accessible from the street and footpath and car parks has been shown to encourage active modes of transport to and from buildings.

# **Economic Benefits**

For the wider community, leading a healthier lifestyle reduces the impacts on our health care system. It also reduces costs of living and boosts industry productivity from fit and healthy workers. Active transport creates more footfall for local businesses and caters to the burgeoning visitor market interested in exploring main street environments, heritage walking trails, riparian areas and bushland trails, either on foot or on a bike.

# **Social Benefits**

Active transport, 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 include:

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

# **Great Places**

The way we design and build our streets and neighbourhoods has an effect on many residents' social connections, sense of community and social capital, and thus their use of active transport facilities. Neighbourhood 'walk-ability' (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 and residents, 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, including the very young, older persons and people with a disability, which can reduce social isolation for these groups. For example, living within close proximity (400-800m) of a mix of destinations is associated with higher levels of active travel across all age groups.

In terms of active transport 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 gridstyle street layout, which create few barriers to direct travel, resulting in high levels of connectivity and a choice of routes. In contrast, more modern 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 active transport 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 travel facilities in new residential estates.

PAGE 29 | SECTION 08 | NETWORK PLANNING

Bogan Active Transport Plan

# 08

# **NETWORK PLANNING**

# **Pedestrian Types + 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.

Pedestrians are considered 'at risk road users' due to the severe outcomes that can occur when they come into conflict with motor vehicles. In the five years from 2015 to 2019, about one in six people killed on our roads was a pedestrian.

In the Bogan Shire context, the main pedestrian groups are as follows:



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.

#### Commuters

This group comprises adults and secondary age students who use the footpath network mainly as a mode of transport for journeys to and from a workplace, school or TAFE. They prefer the fastest safe route between their origin and destination and are generally more skilled and experienced. On-road lanes and footpaths are suitable for commuters.

# Utility/shopping

Trips are generated for specific purposes, such as running errands, shopping, visiting friends and relatives and points of interest. Local trips are often short length trips and can be unpredictable. Users may be constrained by time and vary widely in skill and experience. They prefer footpaths, shared paths, low volume roads, minimal gradients and a high degree of safety and personal security.

# Secondary/tertiary school students

Older students have similar characteristics as commuters and utility/ shopping users. Footpaths, on-road lanes and shared paths are suitable for older students.

# Infants / primary school students

Infant and primary school aged pedestrians have undeveloped cognitive skills, lack good peripheral vision, and have little knowledge of road traffic rules. They require adult supervision and / or off-road paths and facilities. Road crossing points must be carefully designed to give greater visibility / priority to children.

#### Fitness

Sports people use the road environment for fitness and training purposes and to access sporting events. They often travel alone or in small groups - seeking long distances for training purposes which can take them onto busier roads. Fitness pedestrians prefer footpaths and shared paths but will use any path or the road / road shoulder if necessary.



PAGE 30 | SECTION 08 | NETWORK PLANNING

Bogan Active Transport Plan

# **Cyclist Types + Needs**

There are a range of cyclists who access different parts of the Bogan Shire on their bike 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 aware of their vulnerability on the road network and use safety lights, helmets and high visibility gear when riding.

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

#### Older bike riders

Older people in the local context are tending to avoid using bicycles.

#### 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. Commuters ride reasonable distances, typically less than 20km. They prefer flat, direct routes, but may tolerate up to 10% gradients, or 15% with e-bikes. Bike commuters desire all day secure parking, showers and change facilities.

# 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, 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. Fear of traffic and bike theft appear to be factors in this age group riding their bikes regularly.

#### **Fitness**

Adult riders are more confident mixing with traffic. If riding for training purposes, may ride very long distances, sometimes more than 100km. A number of adults use road bikes, touring bikes and MTB bikes for fitness and recreation. Road and touring cyclists often travel in small groups or larger bunch rides seeking long distances for training 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.

#### Families with children

Prefer separation from traffic. Ride shorter distances. Prefer flat routes with less than 5% gradient. Adults / guardians may be walking alongside young children on bicycles.



PAGE 31 | SECTION 08 | NETWORK PLANNING

Bogan Active Transport Plan

# **Access Impaired Needs**

Disability is an issue that affects a significant proportion of the population. The 2018 ABS Survey of Disability, Ageing and Carers reported that 17.7% 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 active transport network than a person who is sight impaired. Navigation to end of trip facilities, such as parking facilities, water points and toilets also requires special consideration.

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.

A key focus of the Bogan ATP should be to provide mobility and access facilities for disabled and older persons in our community, particularly in high activity areas such as commercial precincts, health care facilities, public buildings and parklands.



PAGE 32 | SECTION 08 | NETWORK PLANNING

Bogan Active Transport Plan

# **Aged Access Needs**

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. 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.

Older people continue to be overrepresented in pedestrian crashes. According to the publication by Job RF (Pedestrians at Traffic Light Controlled Intersections: Crossing Behaviour in the Elderly and Non-elderly), several factors work together to increase the risk of older people:

- Deterioration in visual acuity may have a negative impact on an older person's ability to cross the road safely.
- Reduced mobility can render older people unable to react quickly in imminent danger to avoid a crash.

- Underlying health conditions or frailty can result in greater injury severity when a crash occurs.
- Reduced speed when crossing the road can be an issue at automated signals that do not allow sufficient time for slower pedestrians to cross safely.

A key focus of the Bogan ATP should be to provide mobility and access facilities for disabled and older persons in the community, particularly in high activity areas such as commercial precincts, health care facilities, public buildings, parklands and town swimming pools. The following measures have been adapted from the WHO Pedestrian Safety Manual 2013 and the NSW Centre for Road Safety 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 trafficcalming techniques.
- Raise public awareness about the safety needs of elderly pedestrians.
- Reduce legal speed limits to where necessary.
- Strengthen enforcement of laws on speed limits, and drink-driving.



PAGE 33 | SECTION 08 | NETWORK PLANNING

Bogan Active Transport Plan

# Need of Young Children

Children are highly vulnerable road users. Infant and primary school aged children need their parents or other adult supervision when they ride along 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 bike and scooter riders 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 road users.
- 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 Bogan 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 transport network.

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



PAGE 34 | SECTION 08 | NETWORK PLANNING

Bogan Active Transport Plan

# Network Planning Principles

The planning focus of the new active travel network is to make pedestrian and cycling activities a safe, healthy and attractive travel option throughout the Bogan Shire. To achieve this over such a vast area requires a targeted and systematic approach, based on a number of principles which are explored further in this section.

# Coherence

Coherence can be characterised by the completeness of the network or the completeness of connecting routes. A cohesive network should be continuous and it should be clear to the user where the path leads. 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 where there are key desire lines to 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. However, cyclists are still slower and smaller than motor 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 cyclina 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 travellina 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.

# 15 minute neighbourhoods

People will generally walk or use assisted mobility for 10-15 minutes to access local shops and services, depending on their age, health, the walking environment and the weather. Active transport networks are based on active transport trip distances of 15 minutes.

# Suitability for all users

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







PAGE 35 | SECTION 08 | NETWORK PLANNING
Bogan Active Transport Plan

# Identifying Activity Generators

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

# **Primary Activity Areas**

Primary activity areas include commercial precincts, large schools and health facilities as well as other areas that attract large concentrations of people. Safety, connected / wide footpaths, road crossing points, disability access infrastructure, secure bike parking and end of trip facilities are important design goals for primary activity areas.

# Secondary Activity Areas

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

# **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 dangerous or particularly stressful places for pedestrian and cyclists.







PAGE 36 | SECTION 08 | NETWORK PLANNING

Bogan Active Transport Plan



# **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, which are covered in this section:

# **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.



#### **NETWORK PLANNING**



#### Shared paths

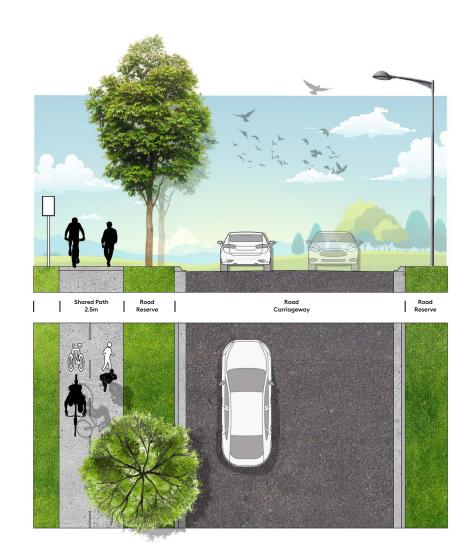
Shared use paths are a type of off-road facility that are generally wider than footpaths (minimum 2.4m) and allow common use of the facility by both cyclists and pedestrians.

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.

#### **Shared streets**

Shared local streets are safer streets with 'design speeds' of no more than 40km/h that enable more people of all ages and abilities to cycle.



#### **NETWORK PLANNING**



#### 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.

#### 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.



PAGE 39 | SECTION 08 | NETWORK PLANNING

Bogan Active Transport Plan

#### **Pavement Surfaces**

There are a variety of pavement materials commonly used as part of the construction of new active transport infrastructure. These are described as follows:

#### 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 Bogan 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 commercial areas and at tourist 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.



#### Spray seal emulsion

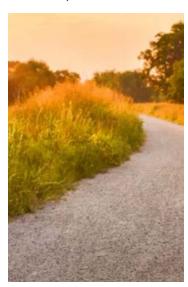
Generally less hard wearing than concrete, asphalt or pavers. It is often used as a cheaper option in low trafficked areas where drainage is not an issue. It may also be considered where a new path is being trialled to determine its longer-term material type.



#### 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 paths should be free of obstructions and therefore should not include steps, stairways or obstacles that affect safety.



PAGE 40 | SECTION 08 | NETWORK PLANNING

Bogan Active Transport Plan



#### Lighting

Night time 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.

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.

#### **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 and the like.

#### **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, the NSW RTA Bicycle Guidelines 2005 and other guidelines referred to in Section 6 provides guidance on the key considerations for landscape design.

PAGE 41 | SECTION 08 | NETWORK PLANNING

Bogan Active Transport Plan

#### 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).

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

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

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

Symbols - Simple lettering, distinctive logos and symbols can help convey information effectively where print may be difficult to use e.g. male and female.



# 09

# ACTIVE TRANSPORT PROJECT PLANS

Active Transport Project Plans have been prepared for Nyngan, Coolabah, Girilambone and Hermidale. The Active Transport Project Plans are presented in a series of maps, as necessary, for each locations and typically include the following detail:

- + Public Roads (sealed, unsealed, tracks-in-use).
- + Railway Infrastructure.
- + Primary Activity Areas.
- + Secondary Activity Generators.
- + Primary Routes.
- + Hazard Areas.
- + Other key land-uses and / or landmarks.
- + Existing and proposed footpath locations.
- + Existing and proposed shared path locations.
- Existing and proposed off-road path locations.
- + Existing and proposed end of trip facilities.

#### **Guiding 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. Bogan Shire Council has limited funds for improvements and these funds need to be carefully directed towards achieving optimal outcomes. The Bogan ATP 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

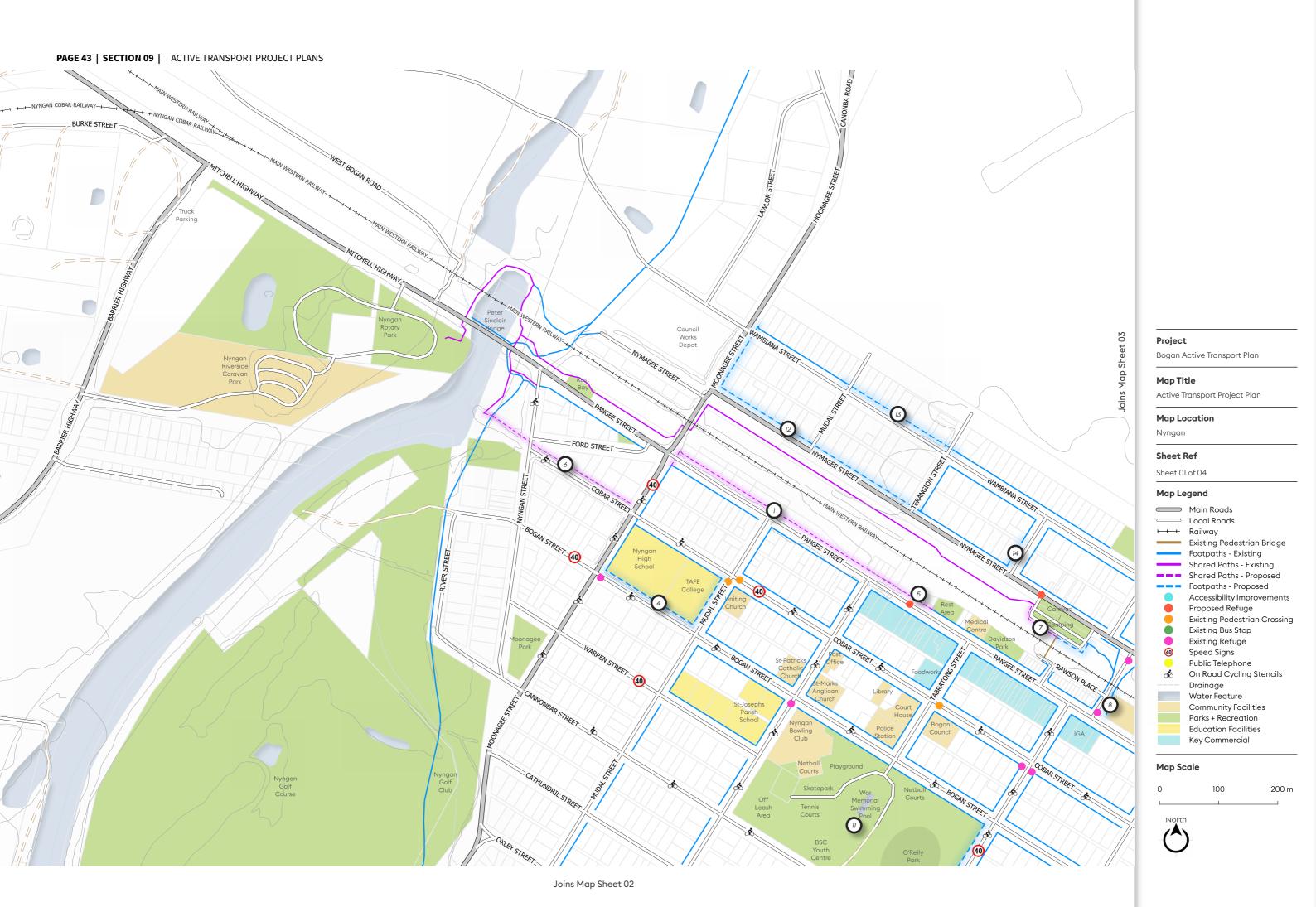
It is important to consider existing pedestrians and cyclists, however, the biggest advantage in terms of increasing patronage is to target people who currently are not active pedestrians or cyclists, but who are likely to become so if conditions improve. The Bogan ATP needs to consider ways to promote behaviour-changes that encourages new users.

#### Developing effective infrastructure to improve conditions

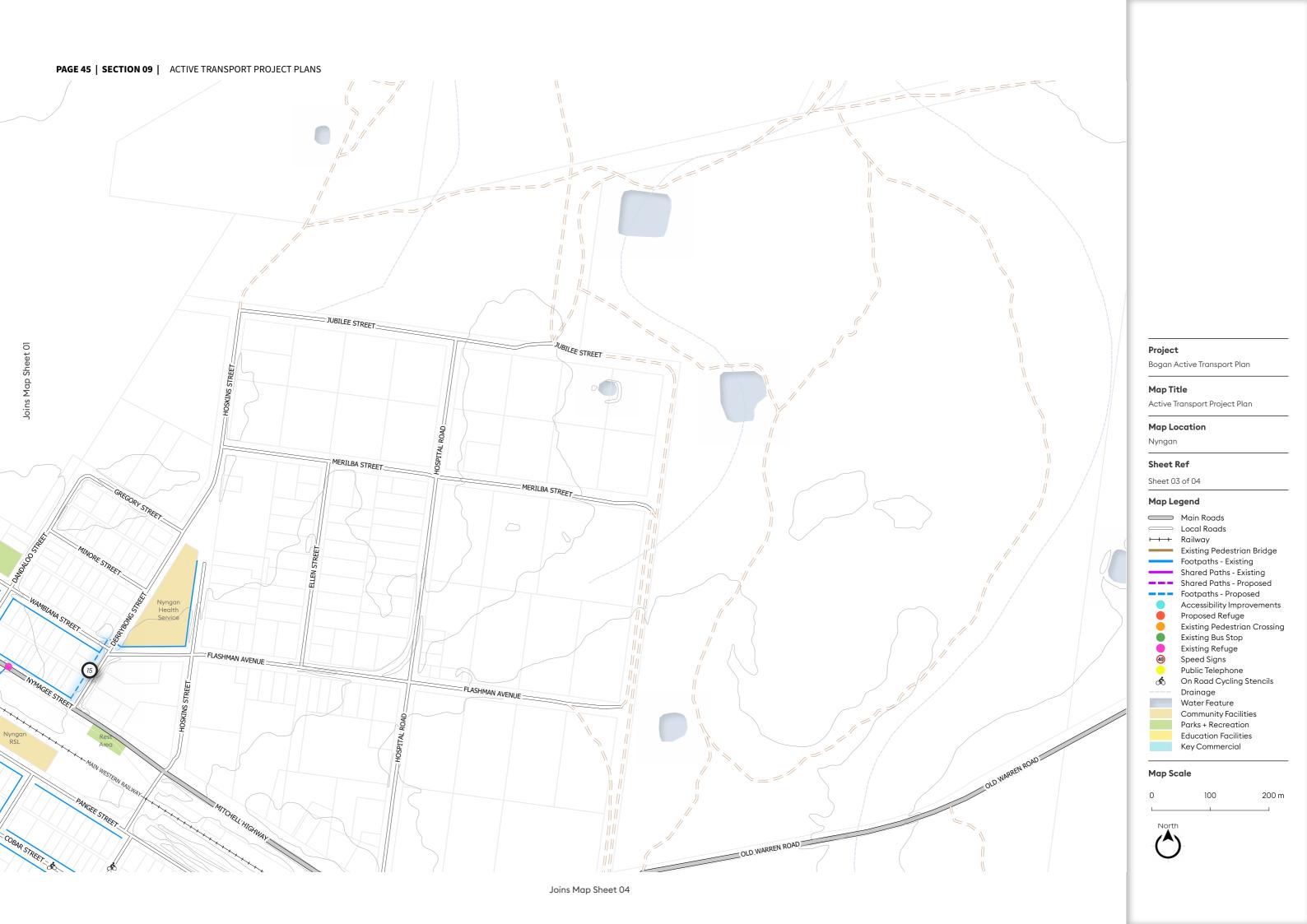
The Bogan ATP aims to develop innovative infrastructure interventions, based on the NSW guidelines and other applicable guidelines and standards.

#### 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.















PAGE 50 | SECTION 10 | PRIORITIES + ACTIONS Bogan Active Transport Plan

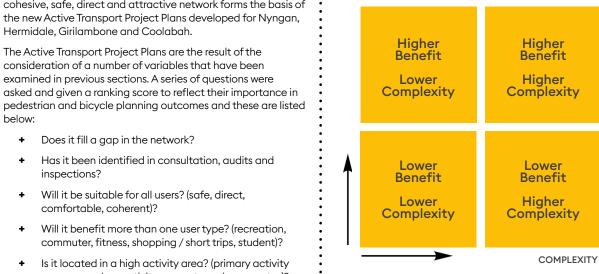
# 10

### **PRIORITIES + ACTIONS**

The facilities and treatments required to create a more cohesive, safe, direct and attractive network forms the basis of the new Active Transport Project Plans developed for Nyngan, Hermidale, Girilambone and Coolabah.

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 and these are listed below:

- inspections?
- + Will it be suitable for all users? (safe, direct,
- + Will it benefit more than one user type? (recreation,
- + Is it located in a high activity area? (primary activity area, secondary activity generator, primary routes)?
- Is it located in a hazard area? (In a black spot. or near miss area, arterial or collector road, school zone, a place visited at night, or place where alcohol is available)?
- Does it improve pedestrian / cyclist separation from motor vehicles?
- Is it an iconic link that inspires greater uptake of walking and cycling?
- Will it lead to greater active transport trips, user support and general awareness?
- Is is practical / cost effective?



**BENEFIT** 

PAGE 51 | SECTION 10 | PRIORITIES + ACTIONS

Bogan Active Transport Plan

Project Description		From	То	Does it fill a network gap?	Has it been identified in consultation?	is it suitable for all users?	Are there user type benefits?	Is it located in a high activity area?	Is it located in a hazard area?	Does it improve separation of from motor vehicles?	Is it an iconic route that inspires greater activity?	Will it increase active transport trips and support?	Is it practical and cost effectively?	Total
Place	Project Description	Street Name	Street Name		Τ 0	<u>8</u>	∢	<u>s</u>	<u>s</u>		∞ .=	> =	ls ef	F
Nyngan Projects					1			1						
Project #1	Pangee Street shared path link	Pangee Street	Moonagee Street	10	10	10	10	10	9	10	9	10	9	97
Project # 2	Dandaloo Street footpath extension	Cannonbar Street	Bogan Street	10	10	10	10	10	9	10	7	10	9	95
Project # 3	Derrybong Street crossing and footpath extension	Bogan Street	Cannonbar Street	10	10	10	10	10	9	10	7	10	9	95
Project # 4	Bogan Street and Mudal Street footpath extension	Cobar Street	Moonagee Street	10	10	10	10	10	9	10	7	10	9	95
Project # 5	Pangee Street crossing improvements	Tabratong Street to Moonagee Street	Moonagee Street	9	10	10	9	10	9	9	9	8	9	92
Project # 6	Cobar Street shared path link	Moonagee Street	Peter Sinclair Bridge	10	10	9	8	8	7	9	9	8	8	86
Project # 7	Nyngan Railway Station shared path link	Nymagee Street slip lane and car park	Existing shared path along Nymagee Street	10	8	8	7	8	7	8	7	7	8	78
Project # 8	Mitchell Street footpath extension	Pangee Street	Existing footpath linking to Nymagee Street	9	8	7	7	8	7	7	8	7	8	76
Project # 9	Kerb ramp improvements	Various locations	Various locations	8	8	8	8	7	8	7	7	7	7	75
Project # 10	On-road bike lane paint improvements	Various locations	Various locations	7	7	6	6	8	8	7	7	6	7	69
Project # 11	O'Reily Park and Memorial Swimming Pool access masterplan	O'Reily Park	O'Reily Park	6	8	6	6	6	6	6	6	6	6	62
Project # 12	Nymagee Street and Moonagee Street footpath extension	Wambiana Street	Terangion Street	6	6	6	6	6	5	6	5	5	5	56
Project # 13	Wambiana Street footpath extension	Mudal Street	East of Terangion Street	6	6	6	6	6	5	6	5	5	5	56
Project # 14	Tabratong Street footpath extension	Nymagee Street	South of Wambiana Street	6	5	6	6	6	5	6	5	5	5	55
Project # 15	Derrybong Street footpath extension	Nymagee Street	Flashman Avenue	6	5	6	6	6	5	6	5	5	5	55
Project # 16	Wingangali Walk shared path link	Derrybong Street	Nyngan Cemetery	6	7	5	5	5	5	5	7	4	4	53

PAGE 52 | SECTION 10 | PRIORITIES + ACTIONS

Bogan Active Transport Plan

Project Description		From	То	Does it fill a network gap?	Has it been identified in consultation?	Is it suitable for all users?	Are there user type benefits?	Is it located in a high activity area?	Is it located in a hazard area?	Does it improve separation of from motor vehicles?	Is it an iconic route that inspires greater activity?	Will it increase active transport?	Is it practical and cost effectively?	Total
Place	Project Description	Street Name	Street Name											
Coolabah Projects														
Project #1	Mitchell Highway (Coolabah Tree) pedestrian separation bollards	Bourke Street	Mitchell Highway	7	7	8	8	6	6	9	7	4	8	70
Project # 2	Dally Street footpath link	Mitchell Highway slip lane	East of Budthers Street	7	7	8	7	6	5	6	7	4	7	64
Project #3	Mitchell Highway rest area improvements	Mitchell Highway slip lane	Mitchell Highway slip lane	7	7	7	7	5	5	6	5	5	5	59
Hermidale Projects														
Project #1	Post Office footpath and access improvements	Nyngan Street	Nyngan Street	8	8	9	7	9	7	7	7	8	6	76
Project # 2	Hermidale Public School to Memorial Park footpath extension	Mouramba Street	Nyngan Street via Post Office	8	9	9	7	7	6	7	7	7	6	76
Project # 3	Phillip Dutton Rest Area and Country link bus stop footpath improvements	Quanda Street	Quanda Street	8	8	8	6	9	8	8	7	6	6	74
Project # 4	Hermidale Public School bus stop and drop-off improvements	Mouramba Street	Mouramba Street	8	8	8	6	6	7	8	6	6	6	69
Project # 5	Hermidale Post Office bus stop improvements	Nyngan Street	Nyngan Street	7	7	5	5	5	5	6	5	5	6	56
Project # 6	War Memorial Park to Hermidale Community Hall footpath link	Mouramba Street	Cobar Street	7	7	5	5	5	5	5	5	5	6	55
Project # 7	Hermidale Community Hall and Tennis Courts pump track	Cobar Street	Cobar Street	4	7	4	4	5	5	4	4	5	4	41
Girilambone Projects														
Project #1	Service Centre Cafe to Hog and Bill Hotel shared path link	Sydney Street	Pine Street	8	7	8	7	7	6	8	6	6	5	68
Project # 2	Girilambone Public School access and drop-off improvements	Vega Street	Vega Street	8	8	6	6	5	5	5	5	5	5	58
Project # 3	Myall Street footpath link	Arturus Street	Sirius Street	8	7	5	5	5	5	5	5	5	5	55
Project # 4	Bourke Street footpath link	Arturus Street	Sirius Street	8	7	5	5	5	5	5	5	5	5	55
Project # 5	Murrawombie Road Mining Camp shared path link	Pine Street	Mining Camp entrance on Murrawonbie Road	7	8	5	5	4	4	5	4	4	4	50

PAGE 53 | SECTION 12 | ONGOING RESPONSIBILITIES

Bogan Active Transport Plan

awareness initiatives.

## ONGOING RESPONSI-BILITIES

## Supporting a Culture of Active Transport

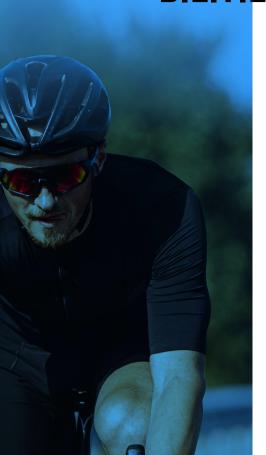
Even a locally tailored evidence-based plan of action is not a guarantee of lasting results once completed and implemented. According to the WHO Pedestrian Safety Manual 2013, safe road-user behaviour and increasing user support depends on a number of factors, including:

- + 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 behaviourchange 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 Bogan Shire Council and the wider local community over the life of the Bogan ATP.

Actions	Time frame
Create a cycling routes guide and / or way-finding map.	1-5 years
Review active transport path signage and investigate opportunities for improvements.	1-5 years
Encourage shared path etiquette, including signage and use of social media.	1-5 years
Investigate community crowd funding models that ensure delivery of priority projects for Bogan Shire.	1-5 years
Install bicycle parking facilities, and encourage the inclusion of change room facilities in new employment generating developments.	5-10 years
Investigate / implement street tree plantings in appropriate locations along walking and cycling routes.	5-10 years
Partner with the NSW government and community organisations to deliver skills development and road safety	Ongoing



PAGE 54 | SECTION 12 | ONGOING RESPONSIBILITIES

Bogan Active Transport Plan

#### Maintaining the Active Transport Network

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

#### **Monitoring Progress**

Implementing the priorities of the Bogan ATP will require on-going review of progress and regular feedback to key stakeholders and the wider community. Council will monitor, review and report on its progress under the Bogan ATP using the existing Integrated Planning and Reporting (4-Year Delivery Program) Framework under the Local Government Act 1993 to ensure that its planning priorities are being achieved.

## Funding Programs, Initiatives + Infrastructure

Moving forward, Council has the opportunity to make significant upgrades to walking and cycling infrastructure across the Bogan Shire with support from other government authorities

Options for funding the actions outlined within the Active Transport Action Plan include:

- Section 7.11 contributions collected from new development in the relevant areas. However, these contributions will not be able to fund all of the actions in this Plan:
- Grants and contributions (operational and capital)
   Council will actively pursue grant funding and other contributions to assist in the delivery of new infrastructure; and
- Delivery partnerships where Council and key partners (such as State Government agencies or private developers) collaborate to deliver a new infrastructure.

The following grant programs are currently available for active transport in NSW:

- Transport, through the Get NSW Active grant program funds grants to local and State governments for walking and cycling infrastructure as well as the development of strategies that support walking and cycling in local communities. To fund the development and delivery of the 15-minute neighbourhoods, the Get NSW Active grant program will fund the delivery of links and networks that support 15-minute neighbourhoods, including the local links and networks that integrate with strategic cycleways.
- The Liveable and Safe Urban Communities Initiative funds targeted, area-based actions and treatments to improve safety. In busy urban places, the Safer Roads Program will deliver traffic calming, pedestrian facilities, and the expansion of safer speed settings.
- The Streets as Shared Spaces program provides grants for NSW Councils to deliver temporary and demonstration projects that test and pilot innovative ideas for streets as safe, shared public spaces. The program tests possible permanent changes that can strengthen the amenity, accessibility and economic vitality of a high street and surrounding areas.



PAGE 55 | SECTION 12 | PROJECT SHEETS

Bogan Active Transport Plan

# 12

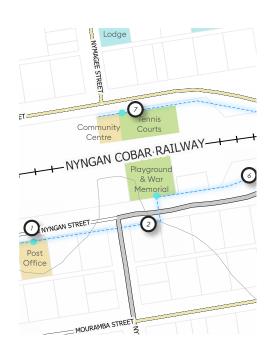
# PROJECT SHEETS

A number of project sheets have been developed for some of the priority projects in Nyngan, Coolabah, Girilambone and Hermidale. These project sheets are presented in the following sections of the Bogan ATP. Permission was obtained from all people in photos and recording of their views and ideas on projects.









PAGE 56 | SECTION 12 | PROJECT SHEETS

Bogan Active Transport Plan

#### Nyngan Project #1

#### **Project Description**

Pangee Street shared path link

#### **Project Benefit**

The northern side of Pangee Street has a wide range of railway, commercial, open space and visitor attraction land-uses that link to the Bogan River to the west. Provision of a shared path along this iconic route would encourage walking and cycling trips and have a wide range of user benefits for residents and visitors

#### **Project Specifications**

Shared path x 950m @ \$430/lm

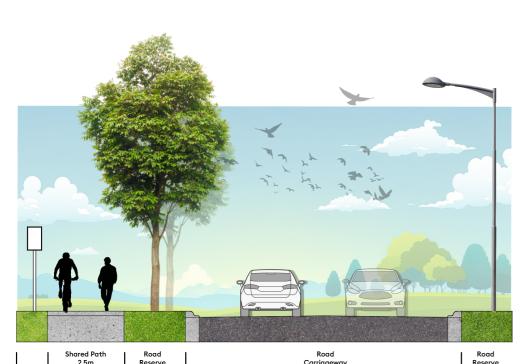
End of trip facilities (seating, signage and water points), estimated at \$75,000

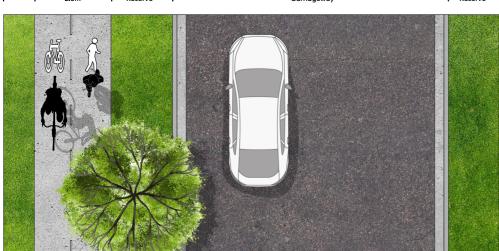
Drainage and footpath rehabilitation, estimated @ \$7.500

Traffic control, estimated @ \$3,500 for preparation / implementation of a Traffic Control Plan

#### **Estimated Cost**

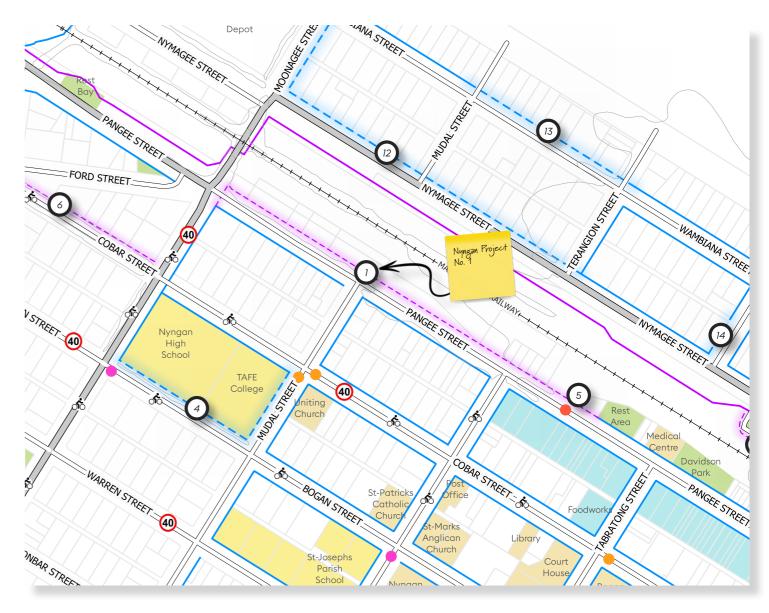
\$494,500





Typical Plan View









PAGE 57 | SECTION 12 | PROJECT SHEETS

Bogan Active Transport Plan

#### Nyngan Project #2

#### **Project Description**

Dandaloo Street footpath extension

#### Project Benefit

The western side of Dandaloo Street opposite the Nyngan Public School is used by students wishing to access O'Reilly Park and other attractors in town further to the north and north-west. An existing crossing has been established but there is currently no formal pathway that connects to existing paths. Extension of a concrete footpath would students and residents with provide much need separation from motor vehicles along this street, especially during busy school zone times

#### **Project Specifications**

Footpath x 160m @ \$270/lm

Drainage and footpath rehabilitation, estimated @ \$2,500

Traffic control, estimated @ \$3,500 for preparation / implementation of a Traffic Control Plan

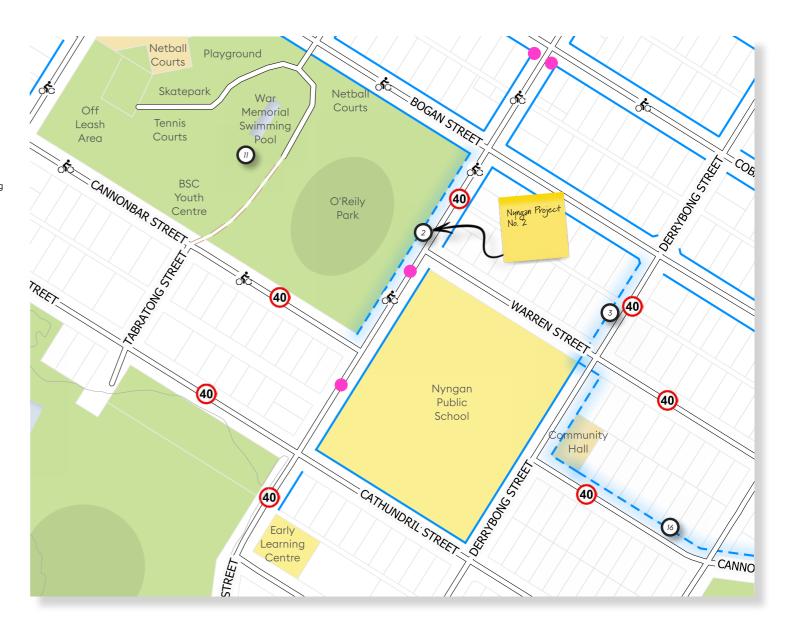
#### **Estimated Cost**

\$49,200











PAGE 58 | SECTION 12 | PROJECT SHEETS Bogan Active Transport Plan

#### Nyngan Project #3

#### **Project Description**

Derrybong Street crossing and footpath extension

#### Project Benefit

The eastern side of Derrybong Street opposite the Nyngan Public School has a Community Hall and residential neighbourhoods wider afield. Provision of An existing crossing has been established but there is currently no formal pathway that connects to existing paths. Extension of a concrete footpath street crossing would provide students and residents with much needed separation from motor vehicles along this street, especially during busy school zone times. This project could also link with other future projects in the Nyngan ATP

#### **Project Specifications**

Footpath x 120m @ \$270/lm

Road refuge island, estimated @ \$15,000

Kerb side blisters x 2 @ \$7,000 each

Kerb ramps x 4 @ \$3,500 each

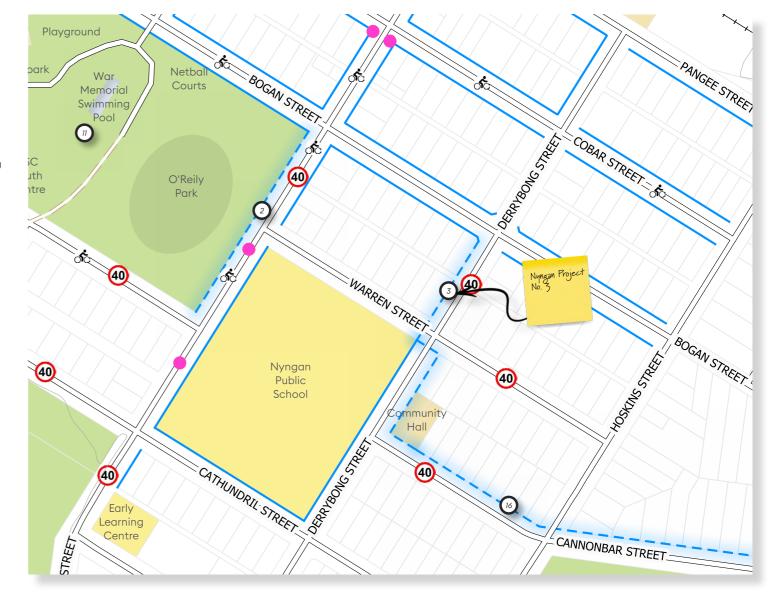
Drainage and footpath rehabilitation, estimated @

Traffic control, estimated @ \$5,500 for preparation / implementation of a Traffic Control Plan

#### **Estimated Cost**

\$83,400

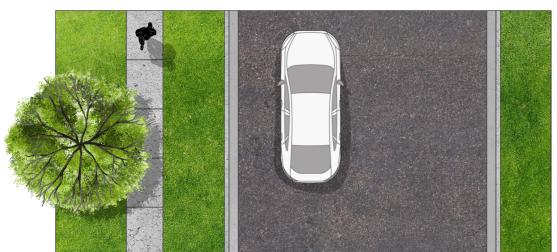






Site Photograph





Typical Plan View

PAGE 59 | SECTION 12 | PROJECT SHEETS

Bogan Active Transport Plan

#### Nyngan Project #4

#### **Project Description**

Bogan Street and Mudal Street footpath extension

#### Project Benefit

The eastern and southern sides of Nyngan
High School and TAFE do not have constructed
footpaths. Extension of footpaths along Bogan
Street and Mudal Street would provide students and
residents with much needed separation from motor
vehicles along this street, especially during busy
school zone times

Footpath x 330m @ \$270/lm

Kerb ramps x 4 @ \$3,500 each

Drainage and footpath rehabilitation, estimated @ \$3,500

Traffic control, estimated @ \$5,500 for preparation / implementation of a Traffic Control Plan

#### **Estimated Cost**

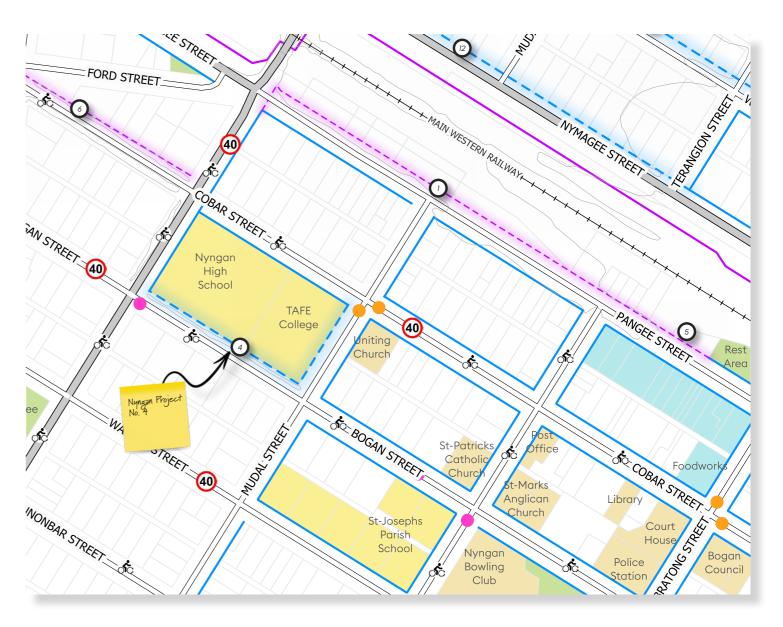
\$112,100

#### **Project Specifications**











PAGE 60 | SECTION 12 | PROJECT SHEETS

Bogan Active Transport Plan

#### Nyngan Project #5

#### **Project Description**

Pangee Street crossing improvements

#### **Project Benefit**

Pangee Street has a wide range of commercial, open space and visitor attraction land-uses, both sides of the street. There is a need to provide improved pedestrian crossing facilities in Pangee Street, east of the intersection of Pangee and Terangion Streets. The standard of crossing would be similar to the existing commercial crossing point of Pangee Street further to the east

#### **Project Specifications**

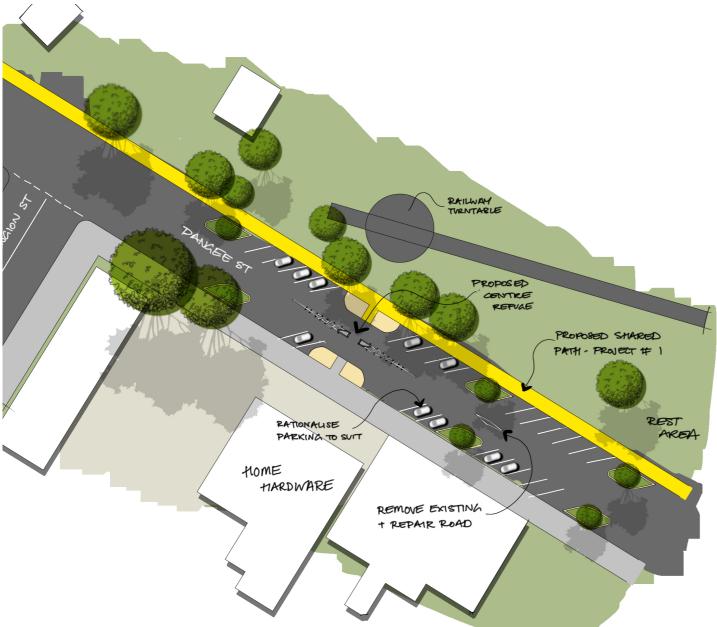
Commercial grade pedestrian crossing works, estimated @ \$105,500

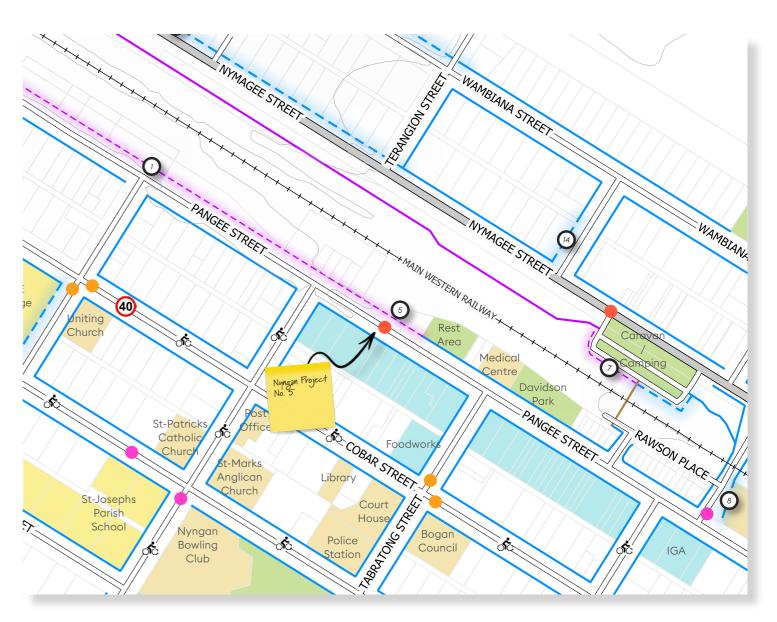
Traffic control, estimated @ \$8,500 for preparation / implementation of a Traffic Control Plan

#### **Estimated Cost**

\$114.000









PAGE 61 | SECTION 12 | PROJECT SHEETS

Bogan Active Transport Plan

#### Nyngan Project #6

#### **Project Description**

Cobar Street shared path link

#### Project Benefit

There is a disconnect between Nyngan and the Bogan River and levee pathways. A shared path route along Cobar Street would link to levee paths. There is an existing concrete footpath but it is too narrow and impacted by road drainage crossings. Provision of a shared path along this route would encourage walking and cycling trips along the iconic Bogan River and have a wide range of user benefits for residents, students and visitors

#### **Project Specifications**

Demolition of existing concrete path, estimated @ \$15,000

Shared path x 330m @ 430/lm

Drainage upgrades, estimated at \$75,000

Footpath rehabilitation, estimated @ \$7,500

Traffic control, estimated @ \$3,500 for preparation / implementation of a Traffic Control Plan

#### **Estimated Cost**

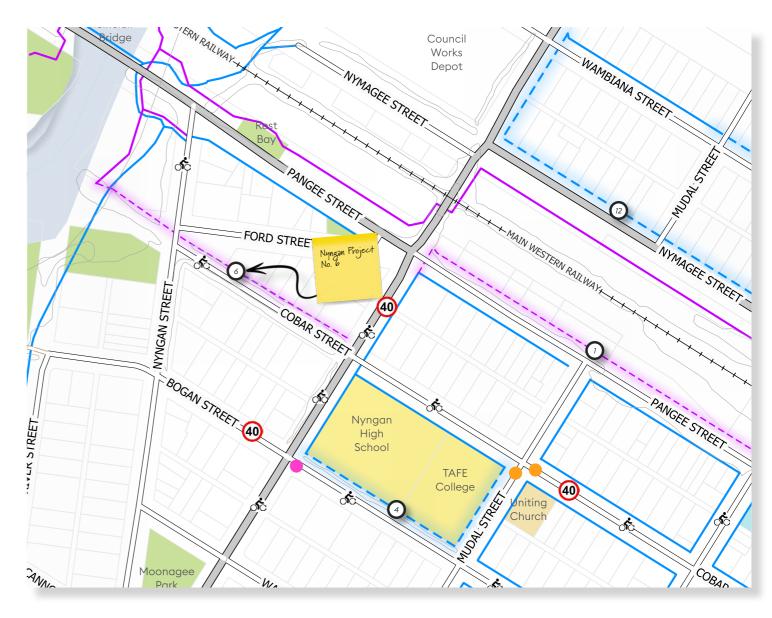
\$242,900







Typical Plan View





PAGE 62 | SECTION 12 | PROJECT SHEETS

Bogan Active Transport Plan

#### Nyngan Project #7

#### **Project Description**

Nyngan Railway Station shared path link

#### Project Benefit

The pedestrian rail overpass and Nymagee Street public car park are not connected to the existing shared path heading west along Nymagee Street. Connection of routes would encourage walking and cycling trips along the iconic Railway precinct that is regularly used as an RV parking area

#### **Project Specifications**

Shared path x 50m @ \$430/Im

Footpath rehabilitation, estimated @ \$7,500

Traffic control, estimated @ \$3,500 for preparation / implementation of a Traffic Control Plan

#### **Estimated Cost**

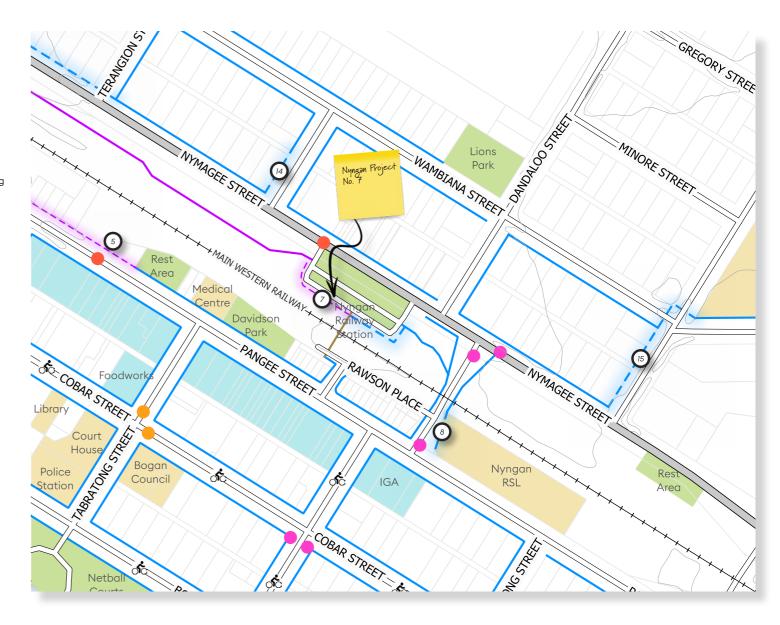
\$32,500

Main Roads — Local Roads Railway Existing Pedestrian Bridge Footpaths - Existing Shared Paths - Existing Shared Paths - Proposed Footpaths - Proposed Accessibility Improvements Proposed Refuge Existing Pedestrian Crossing Existing Bus Stop Existing Refuge Speed Signs Public Telephone On Road Cycling Stencils Drainage Water Feature Community Facilities Parks + Recreation **Education Facilities** 











PAGE 63 | SECTION 12 | PROJECT SHEETS

Bogan Active Transport Plan

#### Coolabah Project #1

#### **Project Description**

Mitchell Highway (Coolabah Tree) pedestrian separation bollards

#### Project Benefit

Some motorists from Werner Street are accessing the commercial facilities at the Mitchell Highway rest area via an informal driveway that crosses open space area next to the Coolabah Tree and other visitor facilities. Prevention of motor vehicles using crossing the parkland would have important safety benefits

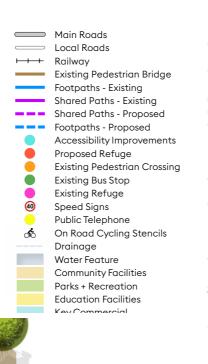
#### **Project Specifications**

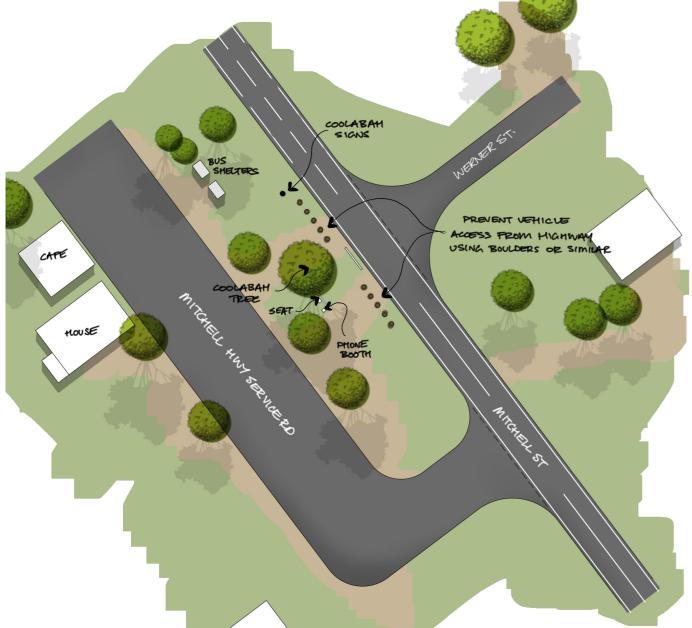
Installation of rock bollards, estimated @ \$6,200

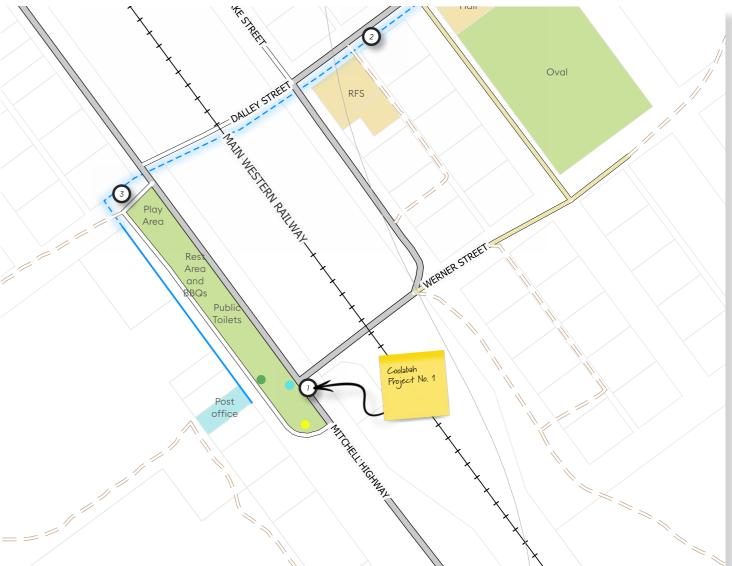
Traffic control, estimated @ \$2,500 for preparation / implementation of a Traffic Control Plan

#### **Estimated Cost**

\$8,700











Site Photograph

PAGE 64 | SECTION 12 | PROJECT SHEETS

Bogan Active Transport Plan

#### Coolabah Project #2

#### **Project Description**

Dally Street footpath extension

#### **Project Benefit**

There is an existing footpath along the western side of the Mitchell Highway rest area, which is proposed to be extended further east along Dally Street. Extension of a footpaths along Dally Street would provide residents with much needed separation from motor vehicles along this street

#### **Project Specifications**

Footpath x 475m @ \$270/lm

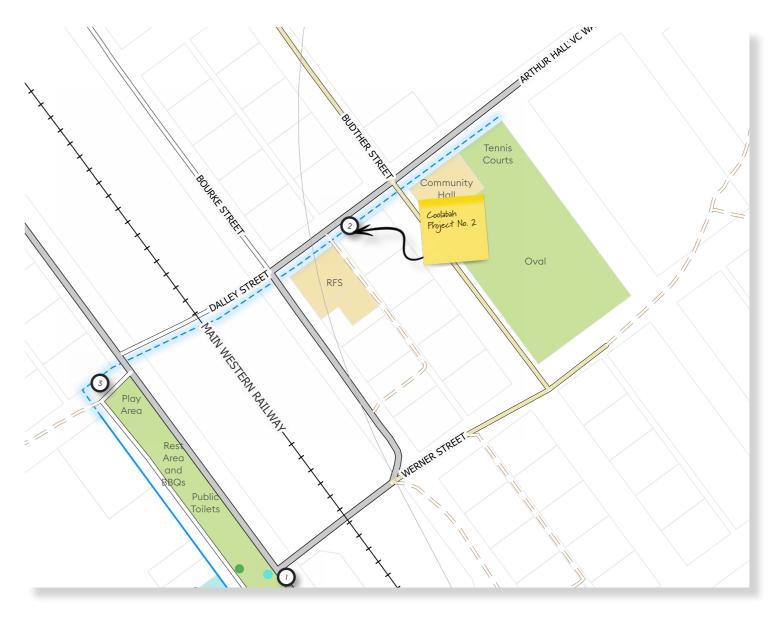
Drainage and footpath rehabilitation, estimated @ \$3,500

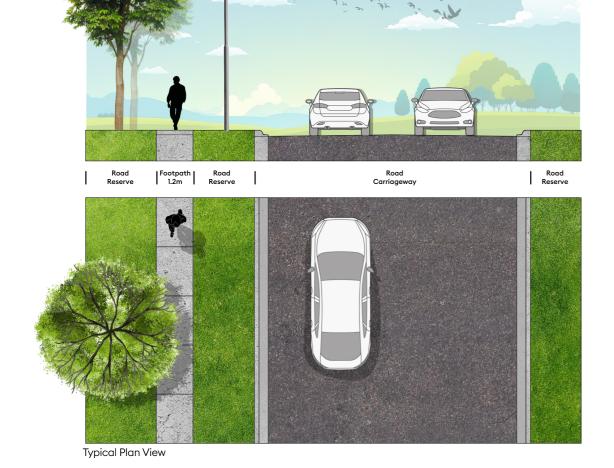
Traffic control, estimated @ \$5,500 for preparation / implementation of a Traffic Control Plan

#### **Estimated Cost**

\$137,250











PAGE 65 | SECTION 12 | PROJECT SHEETS

Bogan Active Transport Plan

#### Hermidale Project #1

#### **Project Description**

Post Office footpath and access improvements

#### Project Benefit

The footpath into the Hermidale Post office is in poor condition and does not facilitate access for all users, including older and access impaired residents and visitors. Provision of compliant access ramps and footpaths along the Post Office frontage would provide residents with much needed access improvements to this important facility as well as separation from motor vehicles along this street

#### **Project Specifications**

Footpath and ramp improvements, estimated at \$15,900

Drainage and footpath rehabilitation, estimated @ \$3,500

Traffic control, estimated @ \$2,500 for preparation / implementation of a Traffic Control Plan

#### **Estimated Cost**

\$21,900









PAGE 66 | SECTION 12 | PROJECT SHEETS

Bogan Active Transport Plan

#### Hermidale Project #2

#### **Project Description**

Hermidale Public School to Memorial Park footpath extension

#### Project Benefit

Hermidale School is isolated from other urban landuses and has no pathway facilities. A new footpath is to connect Hermidale Public School, Post Office and Memorial Park. Internal path extensions are also proposed inside the park grounds to access public toilets and playground equipment.

#### **Project Specifications**

Footpath x 500m @ \$270/lm

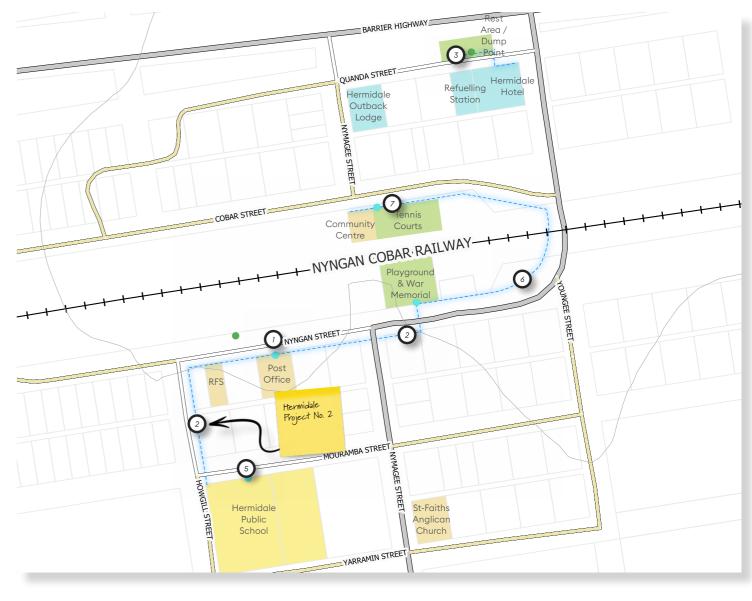
Drainage and footpath rehabilitation, estimated @ \$3,500

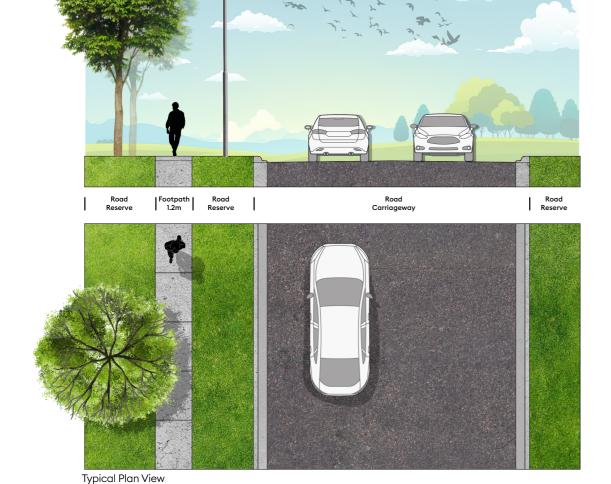
Traffic control, estimated @ \$3,500 for preparation / implementation of a Traffic Control Plan

#### **Estimated Cost**

\$142,000











PAGE 67 | SECTION 12 | PROJECT SHEETS

Bogan Active Transport Plan

#### Girilambone Project #1

#### **Project Description**

Service Centre Cafe to Hog and Billy Hotel shared path link

#### Project Benefit

The Service Centre Cafe and Railway Station are to become larger attractors in Girilambone with the Post Moving to the cafe and the railway station under refurbishment for a tourism attraction.

Access to these facilities from residences and other attractors in Girilambone will have a number of benefits

#### **Project Specifications**

Shared path x 575m @ \$430/Im

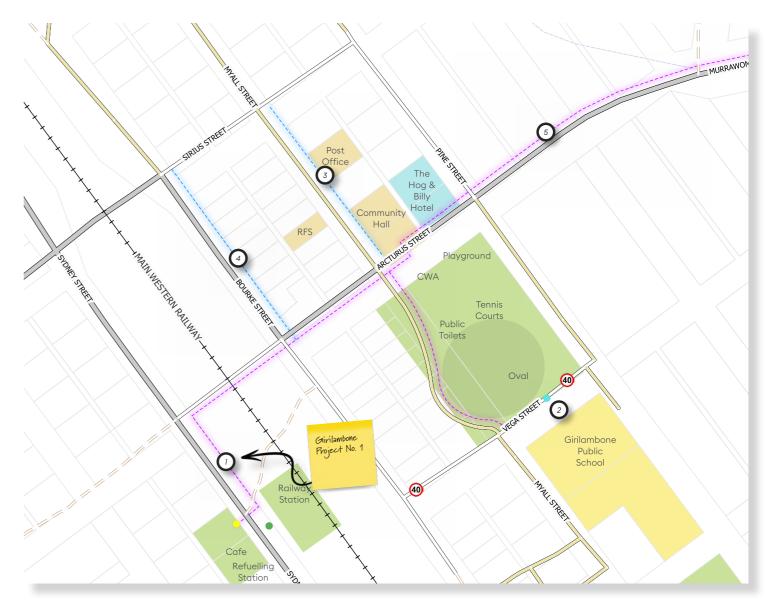
Footpath rehabilitation, estimated @ \$7,500

Traffic control, estimated @ \$5,500 for preparation / implementation of a Traffic Control Plan

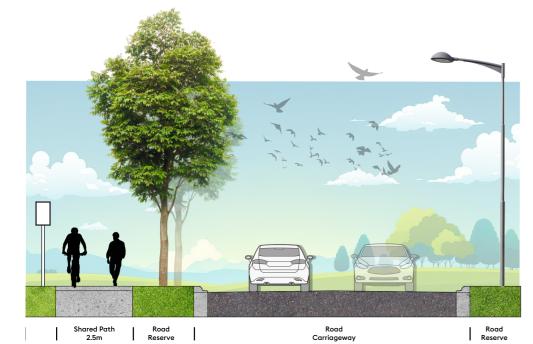
#### **Estimated Cost**

\$260,250





Site Photograph















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