

Goomalling Bike Plan

2020 to 2030

Prepared by: GTA Consultants (WA) Pty Ltd for Shire of Goomalling

on 20/04/20

Reference: W1219429

Issue #: B



GTAconsultants

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EXECUTIVE SUMMARY

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Goomalling is a growing townsite in the Wheatbelt region of Western Australia, approximately 132km north-east of Perth. This bike plan has been prepared for the Goomalling townsite and focuses on understanding the barriers to cycling and the community's needs and desires through community consultation and recommending the appropriate best practice infrastructure for the network. This medium to long term plan is intended to support the development of Goomalling's bike network over the next 10 years. The vision for this bike plan is:

“To create a connected and safe cycling network for all members of the community.”

The Bike Plan's overall goal is to **provide an effective and efficient active transportation network**. To achieve this goal, some objectives have been formed. The objectives of this bike plan are:

- Support cycling for local trips for community members of all ages
- Create a connected cycling network
- Create a safe cycling network for the community
- Increase accessibility of the existing network
- Utilise existing opportunities to expand the network.

The Goomalling townsite currently has a reasonable path network, with paths generally on both sides of most roads. However, the existing network is in need of repair or upgrading to a shared path standard. The existing network comprises of:

- 4.6km of concrete shared paths,
- 7km of gravel pathways and
- 9.5km of pathways to a footpath standard.

This bike plan also identifies the cycling network hierarchy consistent with the Department of Transport's Cycling Infrastructure Hierarchy (Network Principles) for the road network within the Goomalling townsite.

Throssell Street, Railway Terrace and Goomalling-Toodyay Road are identified as primary routes as they are located adjacent to major roads and provide access to major destinations including the Town's commercial strip. Quinlan Street, Hoddy Street and Forrest Street have been identified as secondary routes, providing connections between primary routes and major activity centres. All other routes have been identified as local routes. Figure i shows the network hierarchy and table i provides a summary of the proposed network features.

Figure i. Cycling Network Hierarchy



Table i: Proposed Network Summary

Type of Route	Road	Future Form
Primary Route	Throssell Street / Main Street / Northam-Pithara Road	High quality shared path connecting the Caravan Park and Swimming Pool to the Town Centre in the short to medium term. Connections to other town sites and Slater Home Stead in the long term.
	Railway Terrace	Parking protected on-road cycle lanes on both sides.
	Goomalling-Toodyay Road	High quality shared path to the northern side (potentially behind the existing trees) connecting the new development of Hennessey Place through to the primary school and Oval.
Secondary Route	Hoddy Street	2.5m wide shared path on the western side of Hoddy Street with connections at intersections (kerb ramps) OR Upgrade the entire street to a Safe Active Street to improve safety and amenity for all users and residents who live along it
	Quinlan Street	Tree protected on-road cycling as part of the upgrade, sealing and kerbing of the road. OR 2.5m wide shared paths on both sides of the road, transitioning on road through the filtered permeability section near the Recreation Hub.
	Forrest Street	Parking protected or tree protected on-road cycling (see examples in Section 9.3.2) OR 2.5m wide shared paths on both sides of the road
Local Routes	All other roads	2.5m wide Shared Path on both sides Repair cracks and lifted paths as upgrades are required.

The following are the **top priorities** of this bike plan and have taken usage, attractions and community consultation comments into consideration.

1. Kerb ramp upgrades – kerb ramp connections should be constructed as a priority to ensure a continuous and connected network. Connections to Hoddy Street and Quinlan Street are considered particularly important. The kerb ramp locations are shown in purple (crossing points) in Figure 10.1.
2. Shared Path (3.0m wide) connection along:
 - o Throssell Street from Railway Terrace to Goomalling Caravan Park.
3. Path connection (minimum 2.5m for a Shared Path) to complete the missing links along:
 - o Bowen Street between Hoddy Street and Forrest Street.
 - o High Street between James Street and Throssell Street.
4. Pump park access path to connect users through the Recreation Hub but also provide children with access to the pump park.
5. On-road protected cycle lanes along Railway Terrace.
6. Safe Active Street along Hoddy Street
7. Closure of Quinlan Street between Lockyer Street and Hoddy Street, as set out in the Goomalling Recreation Hub Master Plan.
8. Protected on-road cycle lanes along Quinlan Street.
9. Bicycle parking at the Goomalling Primary School, Recreation Hub, Railway Terrace Commercial Strip, Swimming Pool and Goomalling District Hospital.
10. Seating at the Recreation Hub and near the Goomalling District Hospital.
11. Water fountains at the Recreation Hub and Swimming Pool.
12. Bicycle repair stations at the Pump Park, Recreation Hub and Swimming Pool.

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1. BACKGROUND

1.1. Introduction

Goomalling is located within the Wheatbelt Region of Western Australia, within the Shire of Goomalling and is approximately 132km north-east of Perth. Goomalling is a growing townsite due to its proximity to Perth.

As part of the preparation of this bike plan, the following has been undertaken:

- i. Background and literature review of strategic documents
- ii. Desktop review of the existing cycling network
- iii. Site analysis and ride through of the Goomalling townsite
- iv. Online consultation
- v. Development of a draft cycling network plan
- vi. Workshop consultation
- vii. Draft and final bike plan.

1.2. Purpose

Active travel is an important part of the transport network. This can include, but is not limited to, cycling and walking. To support a safe and connected network, supporting infrastructure is required to ensure that active transport can be a more viable transport option, particularly where external factors such as the temperature can have an impact.

The Goomalling Town Centre already benefits from an extensive footpath network, which can help support an active community. However, there are a number of gaps in the network. These are addressed and discussed in this Bike Plan.

Figure 1.1: How does cycling and walking benefit you and the community?

How does Cycling and Walking benefit you and the community?

Individual Benefits		Transportation System Benefits		Community Benefits	
<ul style="list-style-type: none"> ✓ Convenient door to door access without parking hassles in busy urban areas ✓ Improved mental and physical health and fitness – evidence suggests that the health benefits of cycling outweigh the associated risks ✓ Increased independence, particularly for school children ✓ Access to a vehicle which is much cheaper to own and operate than a car ✓ Increased opportunities to observe, experience and enjoy the scenery and environment 	<ul style="list-style-type: none"> ✓ Cycling can reduce the number of trips made by cars, thereby reducing congestion and freeing up road space for essential motor vehicle trips ✓ Cycling can reduce costs for construction and maintenance of roads ✓ Cycling can reduce costs for provision of parking facilities ✓ Cycles can move large numbers of people relatively quickly and conveniently over moderate distances ✓ Cycling can be combined with public transport, making both cycling and public transport more accessible 	<ul style="list-style-type: none"> ✓ Greater social interaction amongst neighbours is likely to occur ✓ Personal security and crime prevention are enhanced with more “eyes on the street” ✓ Provision of improved facilities for cyclists can also improve the amenities available to local residents for walking (such as paths through parks) ✓ Provision of cycling facilities can reduce traffic speeds and volumes in urban areas, improving the quality of life in our City ✓ Cycling can reduce the amount of space we devote to roads and car parking thereby enabling the enhancement of the urban amenity ✓ Provision of cycling facilities promotes civic pride 			

Health Benefits	Economic	Urban Lifestyle	Environment	Road Safety
<ul style="list-style-type: none"> ✓ Healthy weight and physical activity are major contributors to good health ✓ Poor diet and inactivity directly contribute to chronic diseases including cardiovascular disease, diabetes and cancer ✓ Access to good cycling and pedestrian networks supports a more active population 	<ul style="list-style-type: none"> ✓ Cycling is relatively low cost for the initial purchase and to operate ✓ Walking is Free ✓ Providing opportunities for people to cycle and walk for their everyday transport needs does not impose on them the economic burden of having to use a motorised transportation or pay for public transport ✓ Cycling and walking reduces road congestion and associated costs caused by delays ✓ Cycling and walking encourages local shopping ✓ Peak Oil will impact on the availability and price of fuel, further highlighting cycling and walking as attractive and cost effective modes of transport 	<ul style="list-style-type: none"> ✓ Cycling is a mode of transport that takes up little space, is very flexible and enables riders to converse with each other and passers-by ✓ Cycling is social and contributes to improved residential amenity ✓ Cycling does not threaten the lives of pedestrians, pets or wildlife to the same extent as motor vehicles ✓ Cycling is generally unrestricted by age or competence, enjoyable and fun 	<ul style="list-style-type: none"> ✓ Cycling and walking emits no greenhouse gas or other pollutants. Cycling and walking trips can replace short car trips, which are the most polluting ✓ Cycling trips can replace public transport trips, freeing up space for others on public transport ✓ While walking forms a part of all transport trips across all modes and should be the highest priority mode, connected and safe cycling network designed around the user’s requirements has a greater potential to replace driving trips ✓ Increasing the amount of cycling and walking is highest priority action that the Council can take to improve transport sustainability ✓ Cycling and walking reduces the need for vehicle parking spaces and frees up roads for alternative uses. As well as allows existing parking spaces to be converted to cycle parking – ‘One Car Park Space can allow for XXX cycles to park’ 	<ul style="list-style-type: none"> ✓ Cycling and walking has less of a local road safety threat to other road users, compared to motor vehicles ✓ Converting driving trips to cycling and walking trips will improve road safety outcomes ✓ Studies world wide⁽¹⁾ have shown that the higher the bicycle use, the safer it is for cyclists. This is due in part to: higher bicycle use leading to modified road user conduct as cyclists are more dominant and more drivers are also cyclists with a greater appreciation and respect for other road users, higher bicycle use leads to less car use and lower potential conflicts, and higher bicycle use creates more support so more is invested in a safer bicycling infrastructure

¹ “Cycling in the Netherlands” – Ministerie van Verkeer en Waterstaat

2. VISION AND OBJECTIVES

2.1. Guiding Principles

Of utmost importance for any cycle and pedestrian network is to ensure the network adheres to the five guiding principles to network planning: Safety, Directness, Coherence, Attractiveness and Comfort.

2.1.1. Safety

A well-designed cycle network improves and enhances the road safety of riders, pedestrians and motorists. This includes:

- **Intersections** should be designed to explicitly include bicycles as well as other categories of road users. Special intersection designs that include a path for bicycle riders are an important element of integrated network design.
- **Mid-block treatments** need to provide safe and easy crossings for riders and pedestrians on major roads.
- **Public lighting** and other features that improve personal **safety** are also crucial. Particularly for routes more likely to be used at night, or for pedestrian crossings (both formal controlled and uncontrolled) which should have appropriate Discrimination Disability Act (DDA) compliant design.

2.1.2. Directness

The cycling network should be as direct as safely practicable and based on desire lines. Long detours should be avoided, as this often deters users. Indirect cycle routes or excessive delays may lead cyclists to choose more direct routes with greater risk.

2.1.3. Coherence

Connected network linking people to places via strategic and local routes is an important aspect. The network should be continuous and be very clear to the user where the facility leads. This can be in the form of way finding and signage. The quality of network facilities should also be consistent throughout the length of the route regardless of whether the facility uses a separated or shared road profile.

2.1.4. Attractiveness

Enjoyable cycling and walking requires attractively designed and located facilities. The network should address the community's needs in order to be attractive. Attractiveness can also be increased through awareness including clear well-placed signposting which should indicate major destinations, while centre lines and edge lines should indicate the serious transport intent of the off-road sections of routes. Cycle routes should also feel like socially "safe" places to be.

2.1.5. Comfort

The bicycle and pedestrian network must be easy to use for all types of riders and pedestrians. A smooth well-maintained riding surface (free of debris) is essential both for comfort and operating safety. Effective intersection treatment is critical to ensure comfortable and safe crossing for cyclists and pedestrians.

2.2. Vision

This bike plan will guide the future network to ensure connectivity between town amenities ensuring it has a strong community focus providing a safe and connected local network. On this basis, this bike plan has the vision:

“To create a connected and safe cycling network for all members of the community.”

2.3. Goal and Objectives

The Bike Plan’s overall goal is to **provide an effective and efficient active transportation network**, which is consistent with the Shire of Goomalling Strategic Community Plan 2019.

To achieve this goal, some objectives have been formed. The objectives of this bike plan are:

- Support cycling for local trips for community members of all ages
- Create a connected cycling network
- Create a safe cycling network for the community
- Increase accessibility of the existing network
- Utilise existing opportunities to expand the network.

2.4. Key Initiatives

The following key initiatives together will work toward achieving the proposed objectives.

- Plan and deliver a connected network of “safe cycle routes” that achieves:
 - Increased active travel through the Town
 - Improved access to retail and recreational attractors
 - Safe routes to local schools.
- Plan and deliver appropriately located end of trip facilities for the community’s needs including rest points / seating, water fountains and bike parking.

3. EXISTING NETWORK

3.1. Understanding Goomalling

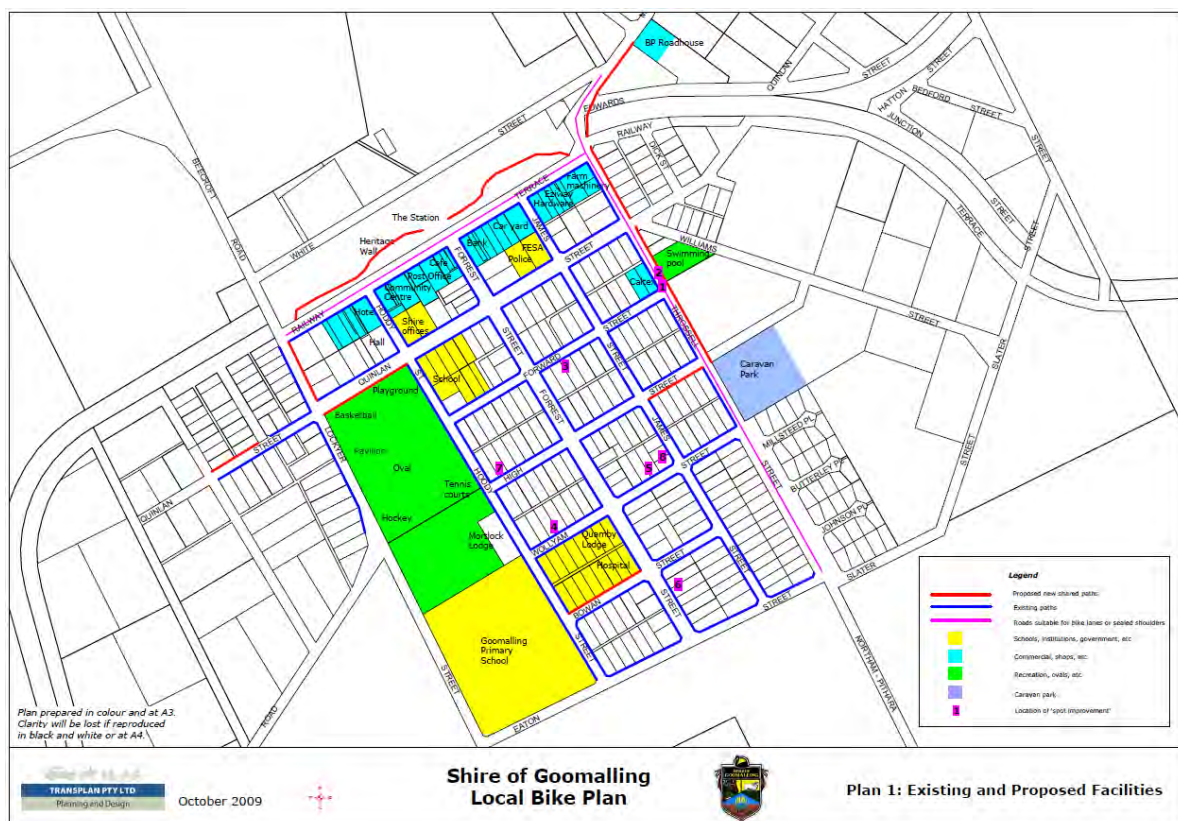
The current cycling network in Goomalling comprises of a mix of paths including concrete, gravel and other pathways that link the residential area to the town amenities. Goomalling has a large quantity of open spaces, parks and reserves of significance, which could be connected to the bicycle network.

The Shire have advised that the town currently comprises of:

- 4.6km shared path (concrete)
- 7km gravel pathways
- 9.5km of pathways to a footpath standard.

In the 2009 Goomalling Bike Plan, it was identified that there were existing paths on at least one side of each street between Railway Terrace, Throssell Street, Eaton Street and Lockyer Street, with the exception of Throssell Street between Wollyam and Slater Streets and Lockyer Street south of Goomalling-Toodyay Road.

Figure 3.1: Existing and Proposed Bike Network – 2009 Bike Plan



Following a site inspection of the town, it was noted that a number of initiatives identified in the 2009 Bike Plan have been completed. These are identified below.

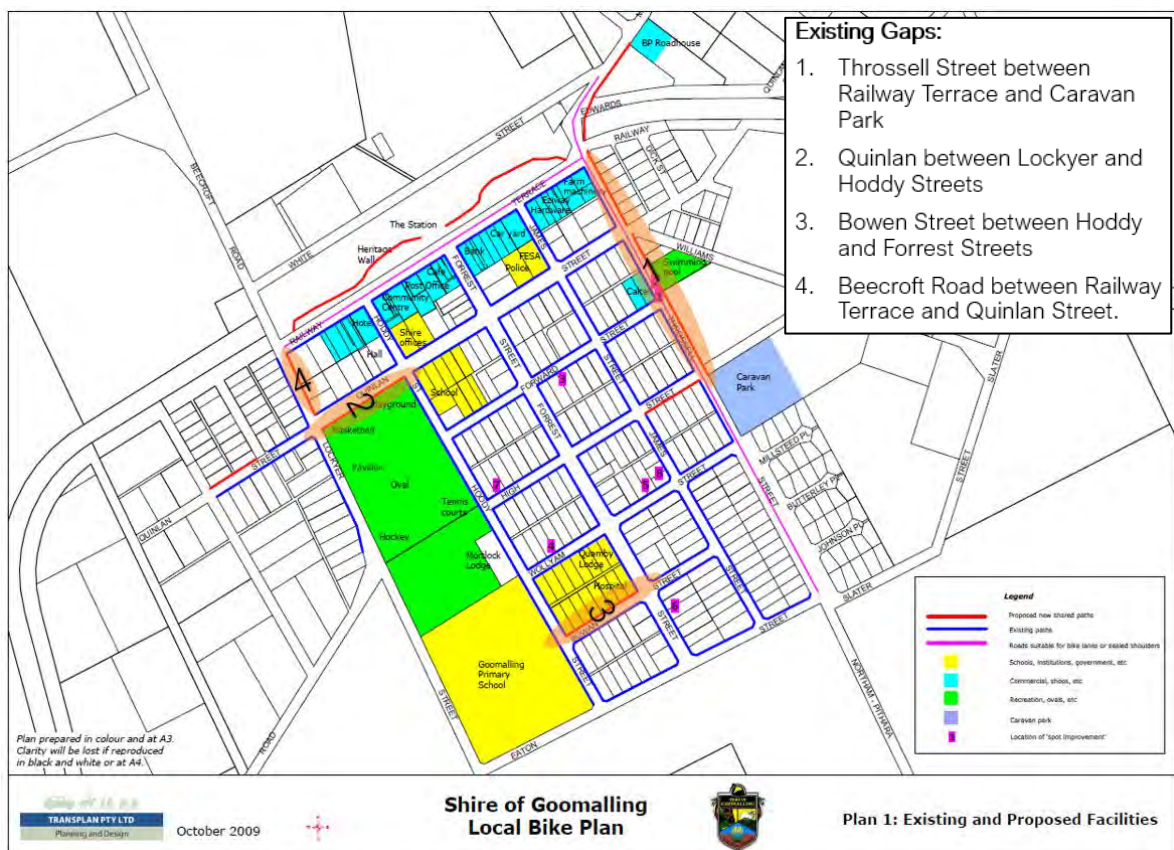
- A section of the Priority 1 Project: Shared Path – Caravan Park to BP Roadhouse has been constructed. The constructed section is approximately 225m, between Railway Terrace and the BP Roadhouse.

EXISTING NETWORK

- One of the five Priority 5 Projects: New Paths Program have been constructed, which includes Quinlan Street between Helena Street and Maher Street. Funding has been successful for a path on the northern side of Bowen Street between Forrest Street and Hoddy Street. These projects will be carried out in 2020/21 and 2021/22.
- Shared path (or trail) through the 'railway precinct' on the northern side of Railway Terrace, between Forrest Street and James Street.
- Shared path on the eastern side of Throssell Street, between the railway line and the BP Roadhouse.
- Various spot improvements including Wollyam Street (Forrest Street to James Street), Forrest Street (between Eaton Street and Bowen Street) and High Street (between Hoddy Street and Forrest Street). Funding has also recently been sought for Wollyam Street between Hoddy and Forrest Street.

The site inspection found that whilst the Shire is well connected in terms of the provision of paths on almost both sides of every single road, the quality, width and connections of these paths require improvement. Sections of many paths are narrow, cracked or lifted and there is a lack of connecting ramps between paths, which cause bike riders and pedestrians to encroach onto the road in order to cross. The Shire also has a number of wide roads with no median refuge, which can be difficult to cross. The existing gaps from the previous bike plan are highlighted in Figure 3.2.

Figure 3.2: Existing Gaps in the Network



3.2. Strategic Guidance

3.2.1. Western Australian Bicycle Network (WABN) Plan (updated 2017)

The Western Australian Bicycle Network (WABN) Plan was prepared by the Western Australian State Government, through the Department of Transport. It was originally prepared in 2014 and has since been updated in 2017. It sets out a vision, targets and objectives relating to cycling to the year 2031 across the state. There are a number of programs which are funded through the initiatives of the WABN Plan, including the Principal Shared Path (PSP) Program and local government grants (through the Perth Bicycle Network (PBN) and Regional Bicycle Network (RBN) Grants), as well as the Department of Transport's Safe Active Streets grant program. Additionally, the Department of Transport have reviewed local bicycle routes to assist with the development and creation of the Cycle Network Hierarchy, and have also prepared, or are preparing, long-term strategic plans for the Western Australian Regions. The Department of Transport are currently preparing a strategy for the Avon and Central Coast region; however, Goomalling has not been included in this strategy.

The WABN Plan notes that short vehicle trips are the easiest to convert to cycling trips, with the majority of short trips being less than 5km, which is the equivalent to a 20 minute cycling trip. The WABN Plan identified that the barriers to cycling for people includes:

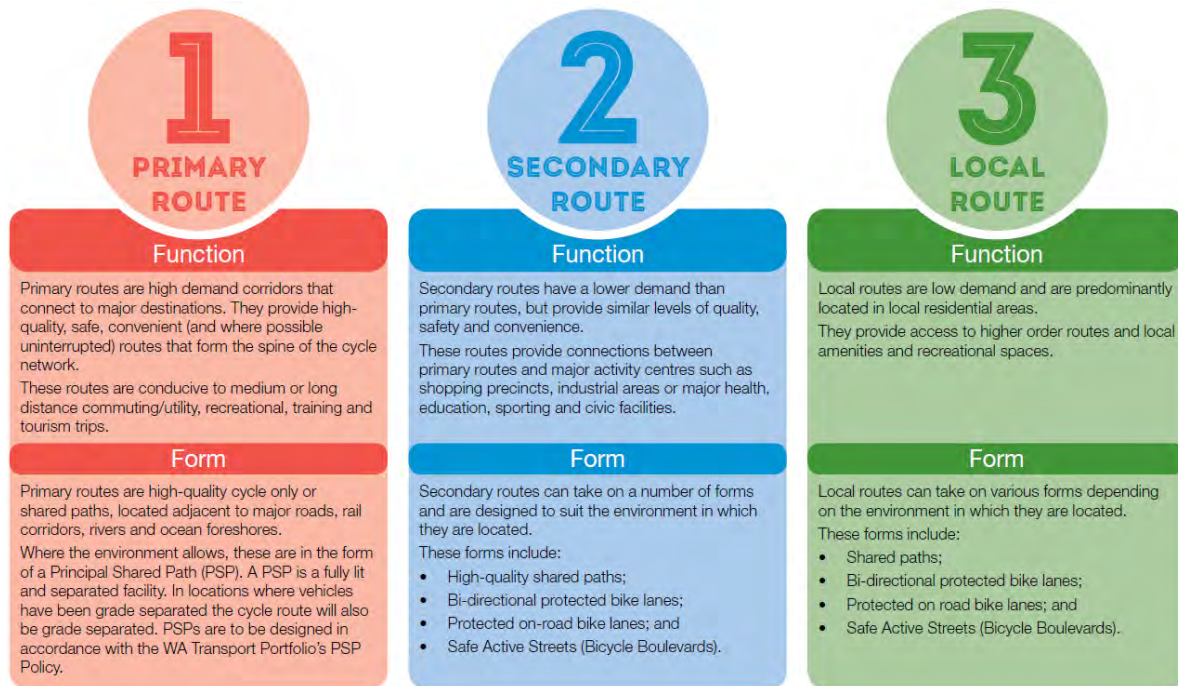
- Too far (33% of the population surveyed)
- Don't have a bike (18%)
- Not Safe (13%)
- Need to carry stuff (13%)
- Didn't occur to me (7%)
- Not fit enough (5%)
- No facilities (3%).

The transport, economic, health, environmental and social benefits are also identified in the WABN Plan. Key actions of the WABN Plan are:

- Long-Term cycle Strategy for Regional WA
- Long-term Cycle Strategy for Perth
- Expansion of the PSP network
- Perth Bicycle Network Grants Program
- Regional Bicycle Network Grants Program
- Development of a cycling counting and monitoring strategy
- Connecting Stations
- Perth Central Area Transport Plan Cycling Projects
- Safe Active streets
- End of Trip Facilities in Perth CBD and Activity Centre
- Connecting Schools.

The Department of Transport's Long-Term Cycle Strategy for Regional WA is consistent with the Department's approach for the Long Term Cycle Strategy for Perth, and sets out a hierarchy which is applied to designate principal, strategic and local routes, as shown in Figure 3.3.

Figure 3.3: Department of Transport's Cycling Infrastructure Hierarchy (Network Principles)



(Source: WABN Plan, Department of Transport)

There is also the complimentary network, which include training routes and tourist trails, as shown in Figure 3.4.

Figure 3.4: Department of Transport's Cycling Infrastructure Hierarchy (Complementary Network)



(Source: WABN Plan, Department of Transport)

The Department of Transport have also identified the typology for each of these route types, as shown in Figure 3.5

Figure 3.5: Cycling Network Hierarchy Typologies

Dedicated cycling infrastructure - five typologies of route						
		Primary Routes	Secondary Routes	Local Routes	Tourist Trials	Road Cycling Routes
Type of trips	Commuting	✓	✓	✓	✗	✗
	Utility	✓	✓	✓	✗	✗
	Recreation	✓	✗	✗	✓	✗
	Touring	✓	✗	✗	✓	✓
	Training	✓	✗	✗	✗	✓
Responsible agencies (planning, delivery and support):		Department of Transport, Main Roads, Public Transport Authority, Local Government	Department of Transport, Main Roads, Local Government	Department of Transport, Main Roads, Local Government	Department of Biodiversity, Conservation and Attractions, Local Government, Public Transport Authority, Department of Transport, Department of Local Government, Sport and Cultural Industries, LotteryWest Main Roads,	Department of Local Government, Sport and Cultural Industries, Road Safety Commission, Department of Transport, Main Roads, Local Government
Infrastructure should be designed for:		The 8 to 80 user group	The 8 to 80 user group	The 8 to 80 user group	The 8 to 80 user group	Confident cyclists

(Source: WABN Plan, Department of Transport)

The Connecting Schools Program is funded from the Perth Bicycle Network and Regional Bicycle Network Grants Program. Projects funded under the Connecting Schools Program have included end of trip facilities such as bicycle racks, scooter racks, bicycle sheds, bicycle shelters, and cycling infrastructure projects such as paths, way-finding signage and sensory paths. Engagement in the Department’s Your Move behaviour change program is also vital as part of receiving funding.

3.2.2. Shire of Goomalling Local Bike Plan (2009)

The Shire of Goomalling's 2009 Local Bike Plan utilises the "4 Es" approach to preparing a bike plan. However, notes that it mainly focuses on the Engineering (or infrastructure) improvements, with consideration for the other 3 Es of Education, Enforcement and Encouragement. The local bike plan aimed to:

- Make cycling safer within the townsite (by eliminating hazards, barriers and obstacles);
- Increase the number of cycling trips made by local residents;
- Make cycling more convenient for the residents of Goomalling (enabling cycling to become the preferred choice of travel mode within the town);
- Make cycling safer on the approaches to, and through, the town for cycle tourists;
- Increase public awareness of the needs of cyclists (and therefore a greater empathy for those riding bicycles); and
- Encourage cycling for health, fitness and recreation.

The main recommendations of this Local Bike Plan were:

1. Constructing a new path between the caravan park (on Throssell Street) to the BP roadhouse (on the north side of town). This project includes 600 metres of path, a maze crossing of the railway and a 30 metre bridge over the Bajorpin Brook.
2. Improvements (and additions) to the existing path network, primarily through the installation of kerb ramps, by the installation of numerous short pieces of paths ("missing links"), and by some general maintenance issues.
3. The development of a new shared use path (or 'trail') through the railway precinct on the northern side of Railway Terrace.
4. The installation of bike lanes on Railway Terrace, between Throssell Street and Lockyer Street.
5. Provision of bike parking rails at numerous destinations within each town encouraging more people to use a bicycle for local trips (instead of a car).
6. The provision of 'sealed shoulders' along Throssell Street, between Eaton St and Quinlan Street.
7. Encouragement, education and enforcement strategies – to complement the ever-increasing cycling network.
8. Development of a web-based cycling hazard reporting system to enable cyclists to inform Council staff of deficiencies in the road network that affect the safety and convenience of cycling.

Of these projects, part of recommendations 1, 2 and 3 have been completed.

3.2.3. Shire of Goomalling Strategic Community Plan (2019)

The 10 year plan initially prepared in 2013, however has recently been reviewed in 2019. It is part of the strategic planning for the Shire and identifies goals which then inform the Shire's Corporate Business Plan, Annual Budget and Annual Report. The Plan's objectives and strategies focus on themes such as social, economic, the natural environment, the built environment and civic leadership objectives. Relevant objectives for this plan include:

- **Outcome 2.1 - Provide an effective and efficient transportation network**
2.1.1 Maintain an efficient, safe and quality local road network (short term goal).

3.2.4. Corporate Business Plan (2013)

The Corporate Business Plan is a four-year plan that builds on the objectives of the Strategic Community Plan, which was initially prepared in 2013 and reviewed and updated in 2019. The Corporate Business Plan is due for review, as the performance indicators are set to a maximum 2016/17-year period. Notwithstanding, the key relevant program noted in the Corporate Business Plan included:

- Footpaths/Dual use paths improvement Program \$271,065.

3.2.5. Asset Management Plan (2013)

The Asset Management Plan sits under the Asset Management Policy, an action of the Strategic Community Plan, and Corporate Business Plan. Relevant level of service measures for Sealed and Unsealed Roads include:

- A smooth ride is provided
- Safe roads are provided
- Safe footpaths are provided
- Assessed footpath condition.

Annually, the Shire's budget allocates some finances for the upgrade and maintenance of paths.

3.2.6. Goomalling Recreation Hub Master Plan (2018)

The Goomalling Recreation Hub Master Plan focuses on the provision of sports, recreation and community facilities and services within the Shire. The relevant strategic guiding principle of the opportunities and options of the Master Plan include:

- "Connected to Public Transport, Pedestrian and Cycling Networks
Planning for sports and recreation facilities requires a focus on enhancing efficiency and utilisation. Public transport enhances accessibility for all population groups. As a principle, sports and recreation facilities should ideally be located within 400 metres walking distance of a regular public transport stop. **Linking to pedestrian and cycling networks provides another avenue to promote the accessibility of facilities to all groups in the population and is a further means to encourage sustainable behaviour and a healthy and active lifestyle.**"

As part of this Recreation Hub Master Plan, it was identified that Quinlan Street would be closed between Lockyer and Hoddy Streets. This has been reflected in this bike plan. However, it is proposed that filtered permeability is applied. This is where the road is closed to motor vehicles, but cyclists and pedestrians may still travel along.

3.2.7. Age Friendly Community Plan (2016)

The Age Friendly Community Plan is a 10 year strategic, long term plan for the Shire. The Plan notes that transport is a deficiency, restricting mobility and connection and access to healthcare. It also notes that access difficulties can create the risk of social isolation, particularly for those living in smaller towns or on farms. The Plan notes that there will be a significant increase in the older population, with the percentage of people aged over 70 expected to increase by 96.2%, or 2,020 people between 2011 and 2027.

The Plan also found that footpaths were generally wide enough for wheelchairs, gophers and walking frames, and they were also generally well maintained, free of obstruction and generally well lit. However, a shortfall noted in the Plan was that there was inadequate seating offered along major pedestrian routes.

3.2.8. Disability Access and Inclusion Plan (2018-2023)

The Disability Access and Inclusion Plan identifies seven outcome areas. The relevant outcome areas include:

- “Outcome 1: People with disability have the same opportunities as other people to access the services of, and any events organised by, the Shire of Goomalling.”

Standard: A disability access and inclusion plan must provide a means of ensuring that people with disability have the same opportunities as other people to access the services of, and any events organised by, the relevant public authority.”

Actions to implement:

- Improve access to footpaths to promote access to public.
- Review pathway access including kerb cuts located along parks, reserves and major picnic areas.
- Continue improvements to footpaths, cycle paths and roads.

In addition to this, the Plan also notes the need to comply with AS1428 (Parts 1 – 4) which prescribes the basic requirements for physical access for use in the planning, development and construction of all buildings and facilities.

3.2.9. Youth Friendly Community Plan (2017)

The Youth Friendly Community Plan notes that the Shire has difficulty with youth retention following their schooling years. As a result, a critical issue identified is that there is a lack of transport options, which then has carry on effects on the sustainability of the region. The Plan notes a key objective is the need to improve paths for scooters and skateboards, ensuring that available paths are free of cracks and undulations, particularly along key routes such as Railway Terrace and recreation and community facilities.

3.2.10. Summary

The Shire has a number of key strategies, policies and plans which inform the desire for increased accessibility around the Goomalling Town Site. Footpaths and cycle paths are noted consistently through these documents. Access to key areas such as Railway Terrace and recreational and community facilities was identified to be important.

With a change in legislation on 27 April 2016, cyclists of all ages are now allowed to use footpaths, unless otherwise signed. The amendment to the *Road Traffic Code 2000* brought WA’s bicycle laws into line with the rest of Australia, making it legal for parents to cycle alongside their children on footpaths, improving safety.

Therefore, this bike plan will consider footpaths as a cycle route, in addition to dedicated cycle paths, on-road cycle lanes, existing shared paths and the consideration of on-street cycling on local streets.

3.3. Behaviour Change

3.3.1. Department of Transport WABN Grants Guidelines 2020-21/2021-22 Grant Rounds (2019)

The Department of Transport's WABN Grants Guidelines identifies the project staging as a general guide. Relevant to this bike plan is Stage 2: Concept and Activation, Consultation and Evaluation (ACE). It aims to assist in the planning, delivering and recording of the engagement and evaluation aspects of projects. ACE items include:

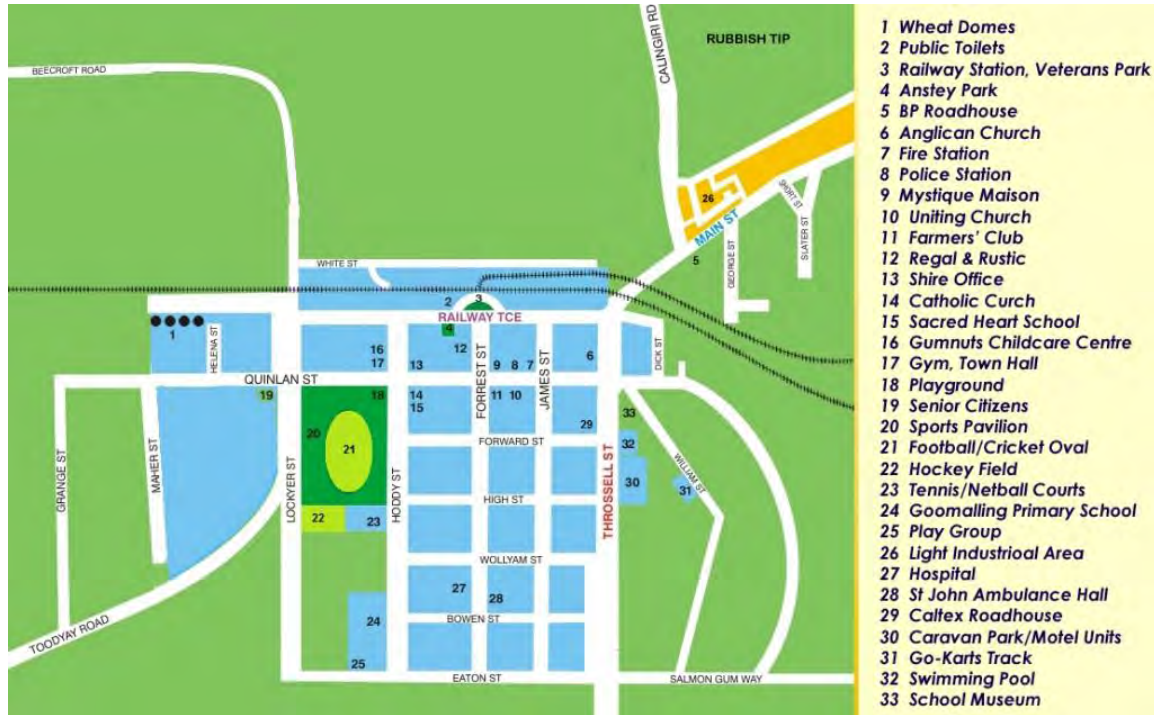
- **Activation** – four types include
 - Information – letting people know about the project through communications, promotions and publications;
 - Engagement – directly engaging with stakeholders and user groups through consultation, events and other participatory activities;
 - Co-delivery - mobilising and working with community groups, LGA colleagues and other local stakeholders to deliver activation; and
 - Amenities - providing additional facilities to enhance the project (bike parking, wayfinding etc but also increased greening and artworks).
- **Consultation** – identify all stakeholders and demonstrate their input and support where appropriate (via surveys and consultation summaries)
- **Evaluation** – pre and post evaluation measures include data collection, hands-up surveys from schools and community feedback.

3.3.2. Your Move Program

The Department of Transport's *Your Move* (previously TravelSmart) program provides tools and resources to promote active transport in households and communities, schools and workplaces. It is a free program that provides tools and resources such as education, programs and rewards. It works through a point system for involvement, which can be put towards gaining rewards.

3.4. Main Town Amenities

Figure 3.6: Map of Town Amenities



(Source: Visit Goomalling Town Site Map)

3.4.1. Railway Terrace

Railway Terrace is the main commercial strip in the town, which has the highest amount of activity; however, it is impacted by the heavy vehicle network. Given this conflict, on-road cycling is not encouraged unless it is separated by a physical barrier. Currently there is a path on the southern side of Railway Terrace, which would have a high pedestrian environment.

3.4.2. Schools

There are two schools in the Town. Both schools are accessed along Hoddy Street. Goomalling Primary School is located on the south-western side of the Town off Hoddy Street, and Sacred Heart School located further north, near Quinlan Street.

3.4.3. Recreational and Community Facilities

Recreational and community facilities are expected to carry a higher volume of pedestrians and cyclists. The key areas are listed below.

Recreation Hub

The Recreation Hub (which includes the playground, oval, hockey field and tennis/netball courts) and Pump Park precinct, just north of Goomalling Primary School. This is centrally located in the town, however there is only one access gate along Hoddy Street, which inhibits access into the area. The connection to the Pump Park is poor as patrons are required to walk through the grass oval to access the Pump Park.

Local AFL games are held at this oval, as Goomalling is part of an eight-team league. Goomalling and Wongan Hills hold the finals every year, alternating the grand final. Games are played on Sundays from April through to September.

Aged Precinct

The hospital and aged precinct are located east of Goomalling Primary School bound between Wollyam, Forrest, Bowen and Hoddy Streets. The Shire have advised that the main hospital access route is Forrest Street, and therefore any design considerations need to consider ambulance access.

Key desire lines, as outlined in the *Age Friendly Community Plan (2016)* include the Pharmacy, which is located on the northern end of Forrest Street, near Railway Terrace. Other items to consider include accessibility of paths through the town to accommodate wheelchairs, gophers and walking frames.

Civic Precinct

To the north of the Recreation Hub is the civic precinct, comprising of the town hall and shire offices. Sacred Heart School is also in this vicinity. The precinct borders the potential closure of Quinlan Street noted within the Recreational Hub Masterplan.

Goomalling War Memorial Swimming Pool

The Swimming Pool is located along Throssell Street, immediately north of the Caravan Park and across from the Shell Petrol Station. The pool is open on Monday, Wednesday, Thursday and Friday between 6.30am to 6.30pm and 1.30pm to 6pm on Saturday and Sunday between early November and late March. The Swimming Pool is located on the north-eastern edge of the town, and provides an opportunity to encourage cycle access. End of trip facility provision and placement should be carefully considered to encourage cycling.

Go-Kart Track

The Go-Kart Track is located off Williams Street, along an unsealed road. The Goomalling Go-Kart Club hosts race days approximately every 3 weeks and have approximately 44 members. They race as part of the Wheatbelt Association which includes the Dowerin, Bencubbin, Wongan Hills and Jurien Bay clubs, and would therefore draw a small crowd to Goomalling.

Recreational Trails

There are currently informal recreational trails through the reserve, east of Throssell Avenue, near the pavilion off Salmon Gum Way.

3.4.4. Other Amenities

Connections

Appropriate connections between paths are required. The Town currently has poor connectivity despite the availability of paths on both sides of almost every residential street. This is because these paths do not connect and patrons are often required to shift onto the road then cross before being able to use the path again. This is because there are no ramps in all directions. There is no connection to Hoddy Street, High Street and Bowen Street.

Goomalling Caravan Park

The Goomalling Caravan Park, along Throssell Street, is one of the key places of accommodation in the Shire. It is located on the north-eastern part of the Town and is within walking distance to attractions. The Caravan Park is less than 1km from the end of the commercial strip along Railway Terrace, is approximately

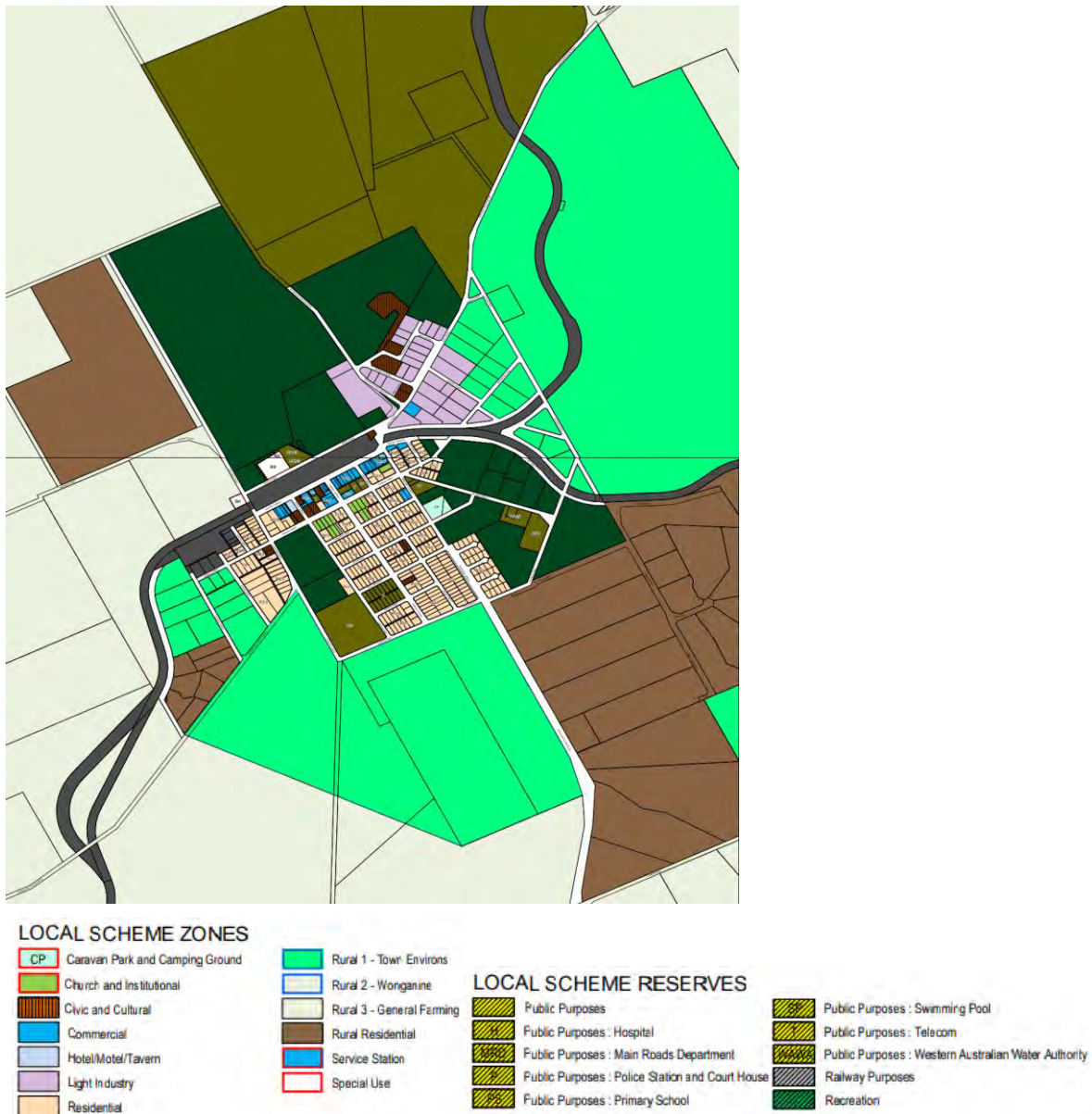
500m from the Oval and Recreation Hub, abuts (approximately 150m from) the swimming pool and is across the road from the Shell Petrol Station.

3.5. Shire Development

3.5.1. Recent and Planned Development

A 35 lot subdivision on the eastern side of Throssell Street was previously approved. However, this development is no longer proceeding due to the significance of the vegetation on site and for the protection of the trees. Development of houses in a rural-residential area along Hennessey Place is also currently progressing, and developments will occur as driven by the market. There are no other known planned developments within the Goomalling Town Centre. A copy of the Shire's Local Planning Scheme Map is illustrated in Figure 3.7.

Figure 3.7: Shire of Goomalling Local Planning Scheme Map

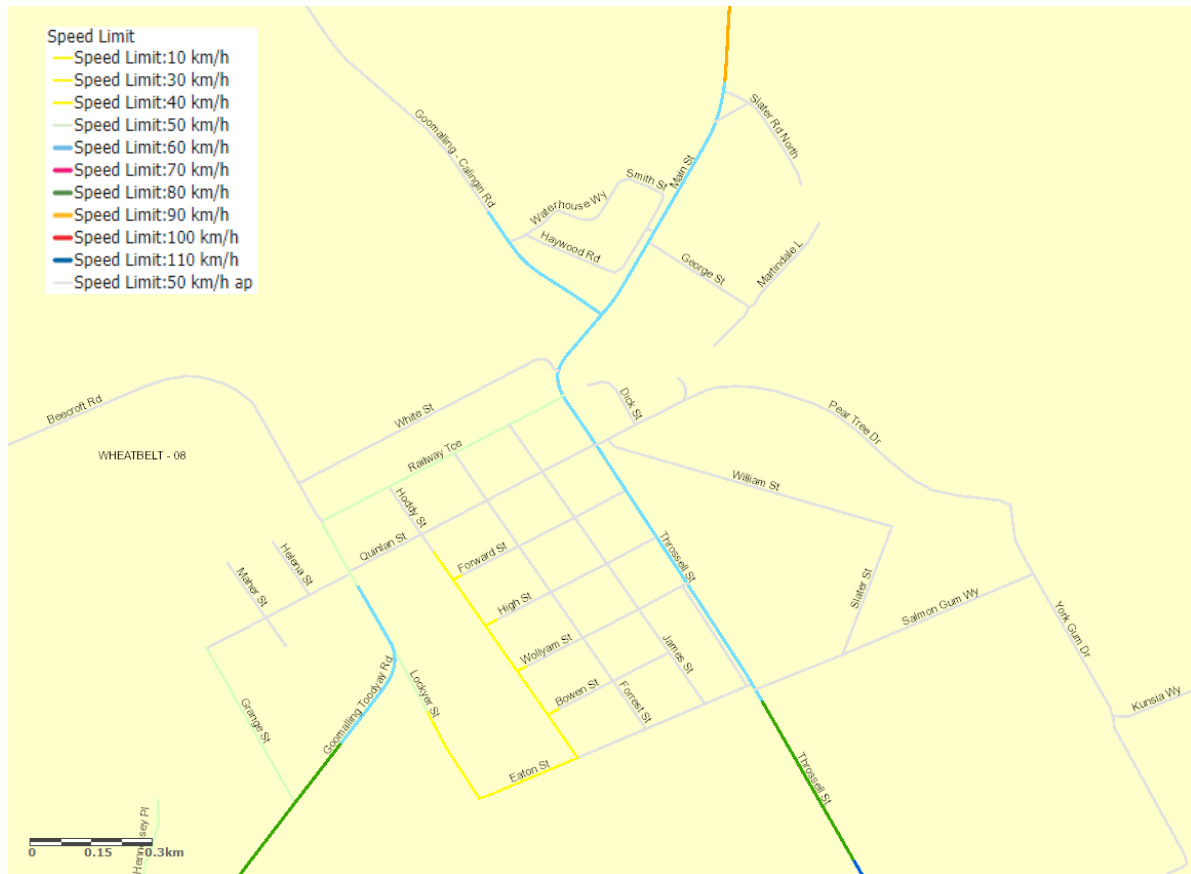


3.6. Road Network

3.6.1. Speed

The majority of streets in the Shire have a default speed limit of 50km/h, with the exception of the main streets into the Town including Throssell Street, Goomalling-Toodyay Road, Calingiri-Goomalling Road which have a higher speed limit. The areas around the school have a lower posted speed limit of 40km/h.

Figure 3.8: Network Posted Speed Limits



(Source: Main Roads WA Road Information Mapping System)

3.6.2. Road Hierarchy

The majority of the roads through the town are identified as Access Roads in Main Roads WA's Road Information Mapping System. Throssell Street, Main Street, Northam-Pithara Road, Railway Terrace, Goomalling-Toodyay Road and Lockyer Street North of Goomalling-Toodyay Road are all Primary Distributors. Goomalling-Calingiri Road is a Regional Distributor Road and Beecroft Road is a Local Distributor Road.

Figure 3.9: Road Hierarchy

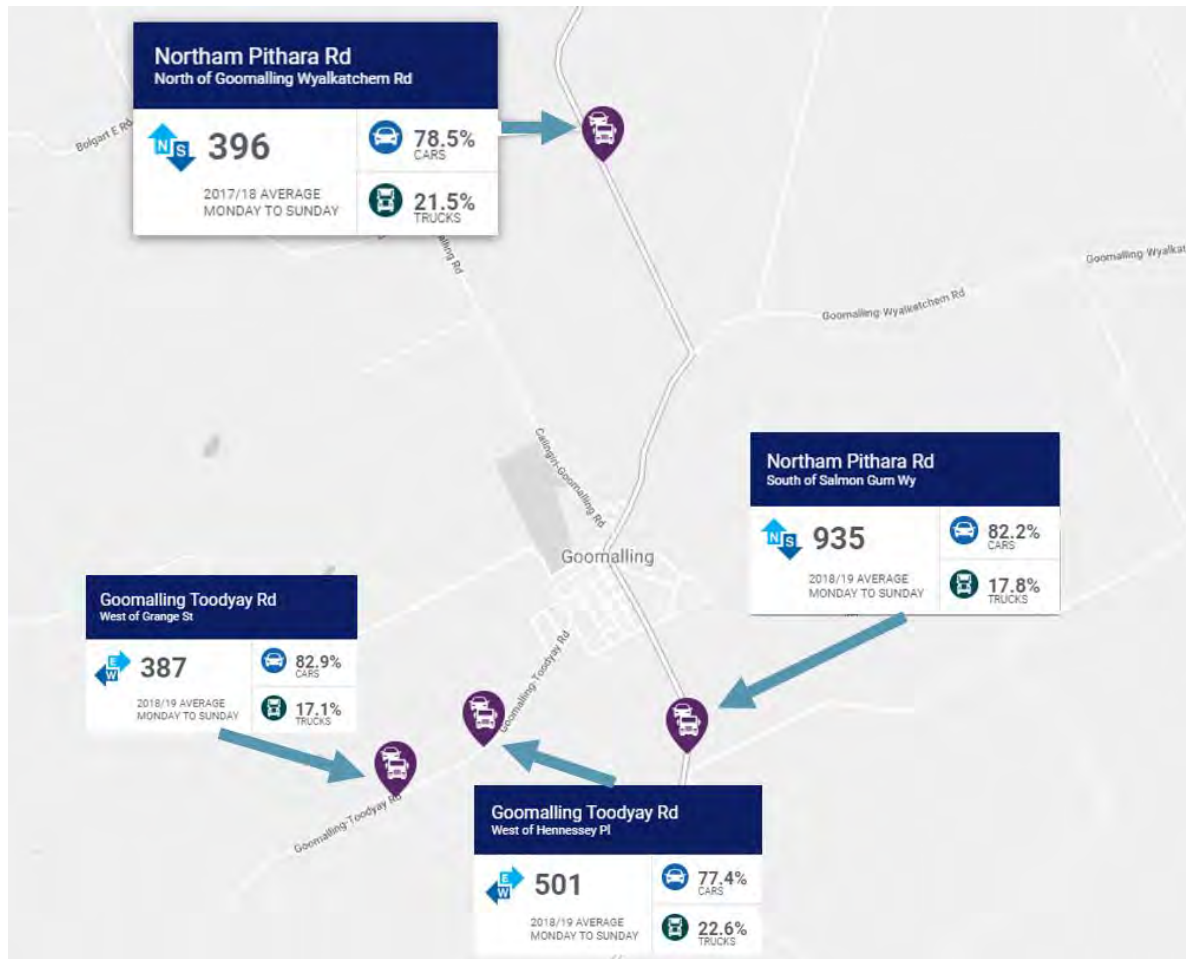


(Source: Main Roads WA Road Information Mapping System)

3.6.3. Network Volumes

Traffic counts sourced from the Main Roads WA Traffic Maps show traffic volumes for routes surrounding the Town. The surrounding network carries relatively low volumes, and it is expected that the majority of traffic volumes in the Town would be local trips, and therefore also relatively low.

Figure 3.10: Traffic Counts and Heavy Vehicle Percentage



(Source: Main Roads WA Traffic Map)

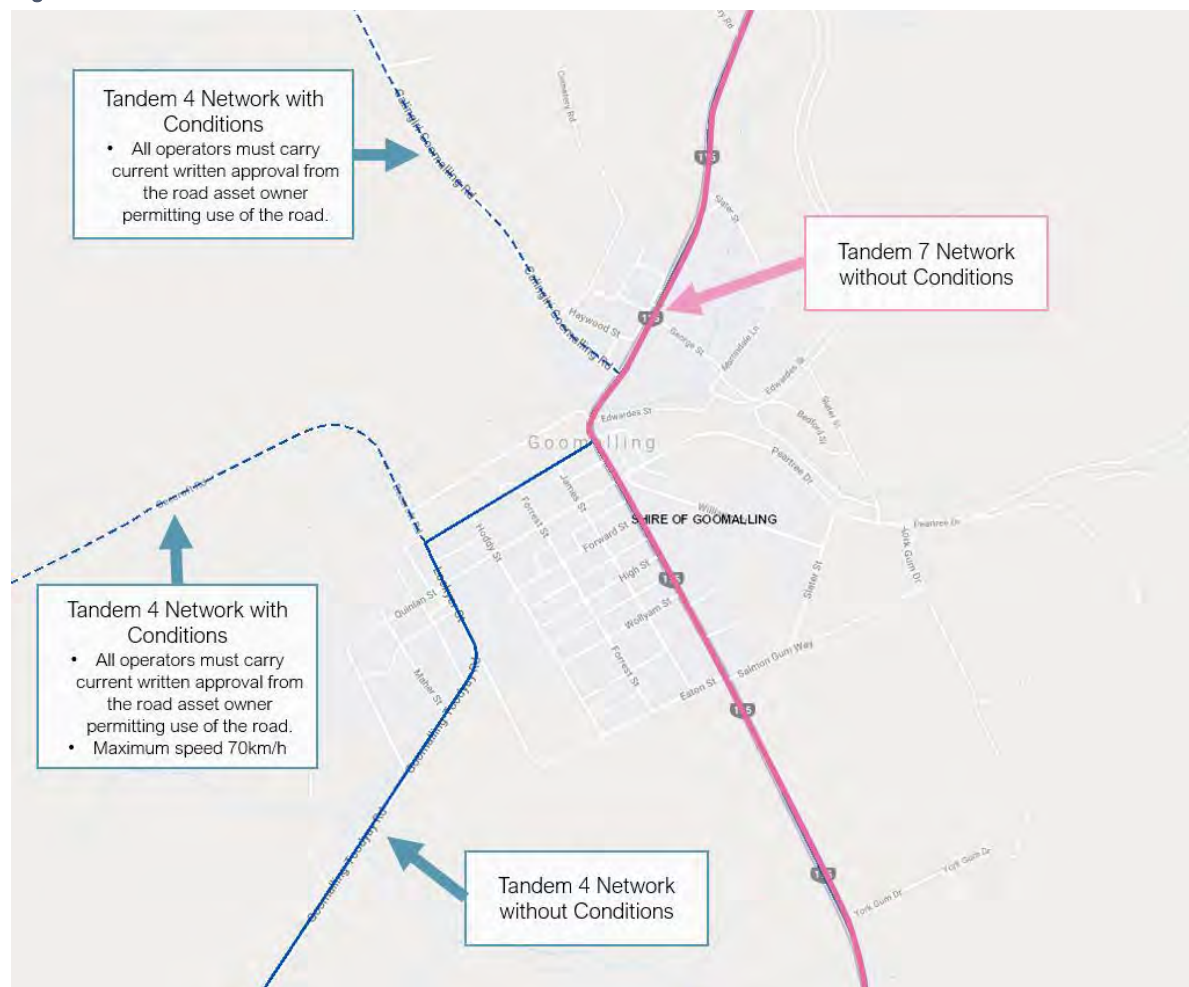
The estimated low network volumes within the town provides the opportunity to utilise roads for cycling. Features which can support this, particularly for non-confident riders include reducing road speeds and road treatments to create a slower road environment.

4. CONSTRAINTS

4.1. Heavy Vehicle Demand

The presence of heavy vehicles can have an impact on the utilisation of cycling along a particular route. As such, Figure 4.1 shows the Main Roads WA Restricted Access Vehicle (RAV) Network, which is the heavy vehicle network for the State. A number of freight routes run along the periphery of the Goomalling Town Centre, with Throssell Street (and Main Street, and Northam-Pithara Road) accommodating heavier vehicles than Calingiri-Goomalling Road, Railway Road, Goomalling-Toodyay Road and Becroft Road. This would see larger trucks travelling through the residential area, past the caravan park and swimming pool.

Figure 4.1: MRWA RAV Network



(Source: Main Roads WA RAV Network)

Throssell Street, being the part of Northam-Pithara Road, is a Tandem 7 network, and does not have any conditions applied to it. A Network 7 route accommodates a prime mover towing a semi-trailer and a B-double, and also a B-double towing a dog trailer with a length between 27.5m-36.5m.

CONSTRAINTS



Goomalling-Toodyay Road is part of the Tandem 4 network and is in the direction to / from Perth, and as such has higher truck patronage. A RAV 4 route accommodates a prime mover, semi-trailer towing six axle dog trailer with a maximum length of 27.5m

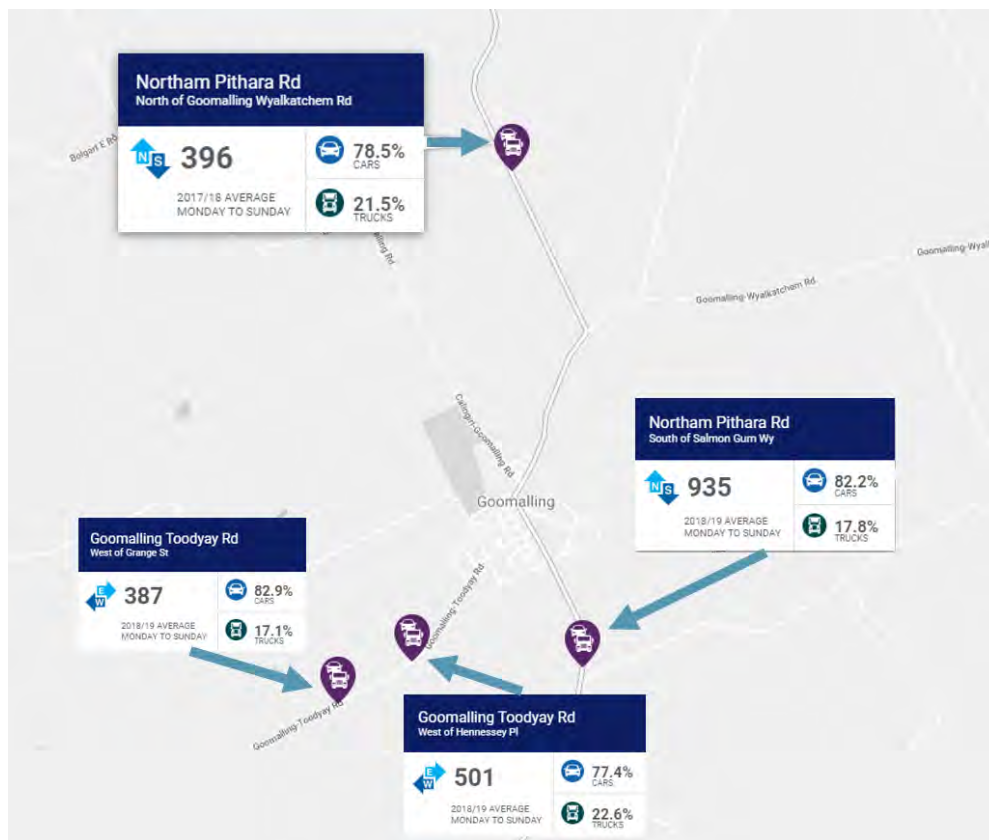
Main Roads Traffic Map data shows the traffic count for the major roads bordering the Town Centre, and has observed between 17.1% and 22.6% of heavy vehicles along these roads, as shown in Figure 3.10.

A review of Main Roads Western Australia’s Crash Analysis Reporting System (CARS) for the period between 2014 and 2018 has recorded 48 crashes within the entire Shire of Goomalling area. Of these 48 crashes, only one crash occurred within the Goomalling Town Site. The incident occurred in 2018 and resulted in minor property damage only due to a vehicle loss of control and hit an object (fence). This occurred on Throssell Street, just north of Eaton Street.

4.1.1. Network Volumes

Traffic counts sourced from the Main Roads WA Traffic Maps show traffic volumes for routes surrounding the Town. The surrounding network carries relatively low volumes, and it is expected that the majority of traffic volumes in the Town would be local trips, and therefore also relatively low, as shown in Figure 4.2.

Figure 4.2: Network Traffic Volumes



Source: Main Roads WA Traffic Maps

4.2. Intersection Widths

The Town Centre has a number of different street typologies.

The majority of local roads are set in a 20m wide road reserve. However, there are three roads set within a 30m road reserve.

- **Railway Terrace** is set in a 30m wide road reserve, with a single lane in either direction of approximately 5.8m wide. Street parking is available on both sides. In some sections, there are flush painted medians of approximately 3m wide.
- **Forrest Street** is set in a 30m reserve, with a single lane of approximately 6m in each direction and an approximately 6m wide flush unsealed central median with trees.
- **Quinlan Street** is set in a 30m wide road reserve with a single lane of approximately 5m to 6m wide with a flush, unsealed central median of approximately 2.5m wide with trees.

Figure 4.3: Railway Terrace – 30m Road Reserve



Figure 4.4: Quinlan Street – 30m Road Reserve



The majority of other local roads are set in a 20m wide road reserve with a sealed and kerbed carriageway of at least 8m wide. High Street and Bowen Street have a slightly different configuration as follows:

- High Street is set in a 20m reserve with a 10m wide carriageway with approximately 5m of this carriageway sealed.
- Bowen Street is set in a 20m reserve with a sealed carriageway of approximately 9.5m wide, however it is not kerbed and does not have shoulders.

Salmon Gum Way and White Street are currently unsealed roads which run along the outer boundaries of the Town.

Figure 4.5: Bowen Street – 20m with unsealed shoulders



Figure 4.6: Salmon Gum Way – Unsealed Road



4.3. Crossing Opportunities

The wide carriageway widths of the roads set in a 30m road reserve can impact the safety of crossing these streets. Given that these streets are long and straight due to the grid layout of the network and the lack of a solid refuge, it can be difficult to cross these streets in one go.

Whilst there is good provision of paths throughout the Town site, there is the common theme that crossing opportunities are not well provided. The majority of intersections lack connecting ramps which connect the path to the road carriageway would negatively impact the user experience. Intersections either are kerbed to the edge (and therefore do not provide a ramp in both directions) (see Figure 4.7) or are unsealed (see Figure 4.8).

Figure 4.7: Crossing in one direction only



Figure 4.8: Unsealed crossing point between path and carriageway



Access to the newly constructed Pump Park is also extremely limited, and users need to push their bikes through the grassed oval, which would adversely impact patronage, as shown in Figure 4.9.

CONSTRAINTS

Figure 4.9: Pump Park Location Aerial



4.4. Path Quality

Whilst there is a good network of footpaths through the Town, the quality of some of these paths are poor and are either cracked, have lifted and/or are covered in gravel which poses a slip hazard and adversely impacts user experience. Paths along the Local Routes should be constructed in accordance with *Austrroads Guide to Road Design Part 6A: Pedestrian and Cyclist Paths*.

Figure 4.10: Examples of lifted, cracked or gravel covered paths



5. OPPORTUNITIES

The grid network of the Town supports connectivity. The Town also has a good network of paths, with the majority of streets having a path on both sides, which can be utilised for cycling. There are a number of opportunities which can utilise the existing network, as well as a number of improvements to the existing network.

5.1. Parks and Reserves

The Recreation Hub on the western side of the town is a major attractor and recreational area. Its co-location with Goomalling Primary School makes it a key cycling destination.

There is an existing path along both sides of Hoddy Street, however there is no access from the east to the west, as there are no ramps to encourage crossing. Cyclists are required to cross and access the path via vehicle crossovers.

The Pump Park, located south of the hockey field does not have any direct access. Patrons are required to push their bikes through the oval to access the pump park. There is also only one access to the park via Hoddy Street, which is a detour for users of the pump park from the south of the entrance. The site could benefit from an additional gate, which could be locked on AFL game days, so that they do not impact attendance. There is also the opportunity to utilise the firebreak around Goomalling Primary School as a route to the school, and the Pump Park.

Figure 5.1: Potential additional access to the Pump Park



There is also a large portion of land, north of Salmon Gum Way and west of Slater Street which is reserved for Recreation under the Local Planning Scheme. The Shire have constructed a Gazebo in this area for resting. This is a popular recreational and walking route. It has been identified as a Local Route in the long term, however, would be suitable to be formalised and recognised as a recreational trail.

5.2. Volumes and Speed of Streets

The streets through the Town have relatively low volumes, but with reasonably moderate to high speed limits. The low volumes support the opportunity for on-street cycling in a “every street is a cycle street” format. However, this would need to be supported by a reduced speed limit. The Shire could investigate the feasibility of a blanket speed reduction through the Town Centre. This would require signposting and on-road treatments to slow driver behaviour.

These streets could then support safe cycling connectivity through cyclists and cars sharing the road space, rather than the need to provide designated off road or protected on-road cycling infrastructure

The City of Vincent is currently undertaking a two-year trial of a speed reduction to 40km/h through its southern suburbs. The purpose of this trial is to demonstrate safer, more welcoming streets where people are more likely to ride and walk and kids feel safe playing outdoors. The trial ends in April 2021, and analysis of the results will help determine whether this is an appropriate long-term concept to introduce to the Town.

Figure 5.2: 40km/h Trial – City of Vincent



Source: Google Maps

5.3. Wide Street Treatments

The Town's wide streets can be a deterrent to on-street cycling, as it may induce speeding. Three main streets are considered to be set in a wide road reserve including Railway Terrace, Quinlan Street and Forrest Street. As such, these roads provide the opportunity for protected bike lanes. These are discussed further in Section 9.3.2.

Hoddy Street has been identified as a good opportunity for a Safe Active Street, given it provides access to key attractors for vulnerable road users, including Goomalling Primary School, Sacred Heart School and the Recreation Hub. Safe Active Streets are discussed in Section 9.3.1.

5.4. Recreation Hub

The Recreation Hub Master Plan identified that Quinlan Street would be closed between Lockyer and Hoddy Streets. This has been reflected in this bike plan. It is proposed that filtered permeability is applied, which is where cyclists and pedestrians may still travel along this road, with it being closed to motor vehicles. Filtered Permeability is discussed further in Section 9.3.4.

Figure 5.3: Examples of Filtered Permeability



Source: [Cycle Highways](#)

Source: [Haringey Cycling](#)

5.5. Schools

Paths around schools should be wider, with a desirable width of 2.5m¹, to accommodate pedestrians and cyclists. Whilst there is a good network of paths in the vicinity of the school, there is a lack of connections to the path on the western side of Hoddy Street. Ramps are not provided and therefore inhibit crossing opportunities or encourage children to either mount the kerb or utilise neighbouring crossovers. This presents the opportunity to complete the missing gaps in the network through the construction of ramps to connect the network.

5.6. Network Repairs and Upgrades

The existing cycling network would benefit from being upgraded and repaired. As discussed in Sections 4.3 and 4.4, the current quality of the path network is poor. The path is lifted, cracked, broken or damaged which poses a hazard for users. Repairing the damaged sections of the path network would instantly enhance the experience. *The paths are also narrow. Austroads Guide to Road Design Part 6A: Pedestrian and Cyclist Paths* recommends a 1.8m path and requires a minimum of 1.5m for pedestrian paths to allow two wheelchairs to pass.

However, as a minimum, shared path width is 2.0m in accordance with *Austroads Guide to Road Design Part 6A: Pedestrian and Cyclist Paths* and 2.5m in accordance with the Department of Transport's *Draft Shared Path Guidelines*. Given that the Department of Transport's *Draft Shared Path Guidelines* are a local State Government Guide, it is recommended that all shared paths are a minimum 2.5m wide. For Secondary Routes, where there is higher patronage such as along routes to schools, a 2.5m to 3m wide shared path is recommended. Shared Paths that are currently less than 2.5m wide are recommended to be increased as upgrades are undertaken, or for new sections, subject to achieving the required offsets from trees, light poles etc.

¹ Austroads (2009) Guide to Road Design – Part 6A: Pedestrian and Cyclist Paths

5.7. Funding Opportunities (Programs)

5.7.1. WABN Regional Bicycle Network Grants

The WABN grants program is one of the key actions detailed in the *Western Australian Bicycle Network Plan 2014-2031*. Funding is available to local government authorities in WA, for up to 50 per cent of the total project cost, for the design and implementation of bicycle network infrastructure and programs in accordance with State Government priorities set out in the WABN Plan.

The WABN Grant Applications are anticipated to open annually in July, where local governments are invited to submit an Expression of Interest for grant funding. Following the Expression of Interest process, applicants of shortlisted projects will be invited to submit a full proposal.

5.7.2. Roads to Recovery

The Roads to Recovery Program is a federal government program which supports the maintenance of the nation's local road infrastructure asset. This program sets out to reduce fatalities and serious injuries in crashes on Australia's regional roads. Pedestrian and cycling facilities associated with a road can also be funded as part of this grant, to improve the safety of vulnerable road users. Funding is allocated for each financial year.

5.7.3. Regional Economic Development Grants

The Regional Economic Development Grants Program is a \$28.8m, five-year, State Government initiative to stimulate economic growth and development. Applications for grants are open at the start of the financial year, with details provided on the Wheatbelt Development Commission's website. Previous projects that have been successful in attaining the grants include the construction of a river crossing along the Turquoise Way Path between Jurien Bay and Cervantes, boosting sports tourism.

5.7.4. Metropolitan Regional Road Group (MRRG) Rehabilitation and Improvement Programs

There are two MRRG grants, one for Rehabilitation and one for Improvement. These programs are primarily focussed on the road network. However, the potential to assist cycling as part of any project should not be overlooked in order to enhance the overall network. The construction of protected on-road bike lanes may be included as part of a design. Submissions are received annually.

6. INITIAL CONSULTATION

To understand the local community's needs and desires for the cycling network in Goomalling, a questionnaire survey was undertaken for a minimum period of two weeks between 24 January 2020 to 9 February 2020. The survey was available online, as well as hard copies at the Shire. The survey included 16 questions revolving around user types, routes and purposes. A total of 20 results were received with respondents from a variety of age groups including under 15 and up to 60 years of age. Respondents included a mix of those who cycle and those who do not. The full survey responses are included at Appendix A.

The survey identified the main barriers to cycling being a **lack of dedicated cycling infrastructure** (24%), that it was **unsafe** (24%) and that the **weather conditions** were too hot (20.7%). Other barriers noted were a lack of access to a bike (10.3%), the **terrain is too hilly** (3.4%), **other modes of transport are more convenient** (3.4%) and a **lack of end of trip facilities** available (3.4%). **Access** was also noted as a barrier, with **gravel roads** and **calthrop** noted to be an issue as well as a **lack of direct access** between the outer parts of the Shire and inner town centre.

It was noted that many of the respondents (88.9%) **walked more often than they rode their bike**. The majority of respondents rode their bikes less frequently, with 30% of respondents cycling occasionally (a few days a month) and 30% cycling rarely (a few times a year). 10% of respondents cycled every day, whilst 20% of respondents cycled 2 to 6 days a week and 5% of respondents cycled 1 to 2 days a week. Half of those who cycled, cycled with their children whilst 45% of respondents cycled alone. 20% of respondents cycled with the friends or partner, respectively and 5% cycled with their parents and 5% with their sibling(s). 50% of respondents were comfortable riding on the road, whilst 15% of total responses would consider riding on the road if it were safer to do so.

18 respondents provided 40 responses with regards to their time of travel. Respondents could select multiple options and it was noted that the most popular time for cycling was between **3pm to 6pm** followed by **6pm to dusk** with 66.7% of respondents noting that they cycle between 3 to 6pm, and 50% of respondents cycling between 6pm and dusk. Other common times were 7.30am to 9am and 9am to 11am with 33.3% and 22.2% respectively.

The purpose of trips were primarily for **fitness and health or fun**, with 80% of respondents identifying these are key motivations. 45% of respondents also identified riding to **shops, cafes or restaurants** as a purpose. This identifies the need for recreational routes, but also commuting routes linking to the main commercial strip along Railway Terrace.

The main attractions were the café/restaurants, oval, Goomalling sporting complex, swimming pool, Goomalling Primary School, playground, Goomalling Memorial Hall, the pump park and Gumnuts Childcare Centre.

The top six routes utilised include:

- | | |
|---------------------|-----------------------------|
| 1. Quinlan Street | 4. Hoddy Street |
| 2. Railway Terrace | 5. Forrest Street |
| 3. Throssell Street | 6. Goomalling-Toodyay Road. |

Other key routes include:

- Salmon Gum Way
- Forward Street
- High Street
- Lockyer Street
- Northam-Pithara Road
- James Street
- Eaton Street
- Beecroft Street.

These routes were identified as key routes due to their proximity to the recreation precinct (including Goomalling Primary School) and main street. Other reasons were that these routes were the route to Town, and utilisation of the track as a recreational walking track was also identified as a purpose.

When asked to identify the top 5 priority projects, the following were identified.

1. Access along Lockyer Street between Railway Terrace and Quinlan Street
2. Access along Throssell Street between the Caravan Park and Railway Terrace
3. Better connections between paths
4. Access along Goomalling-Toodyay Road
5. Access to Pump Park.

Other key priorities noted were:

- Easier crossing points along Railway Terrace
- Access along Bowen Street between Hoddy Street and Forrest Street
- Access along High Street between James Street and Throssell Street.

Water fountains were the most desired end of trip facility, followed by seats or resting areas and bike parking. Wayfinding and repair stands were also noted to help, but there was a lesser demand.

Other general comments noted were the desire for shady trees but also consideration of tree roots lifting paths. Safety was also noted as a concern, and there was the desire for the provision of more paths that were better connected.

7. COMMUNITY WORKSHOP

A community workshop was held at the Goomalling Sport and Community Centre on Thursday 12th March 2020. This workshop was an opportunity for the community to review the draft network plan and provide comments and feedback utilising valuable local knowledge. Unfortunately, the workshop was poorly attended. As such, the draft network plan has sought feedback through other means. Feedback received and an associated response has been summarised in Table 7.1.

Table 7.1: Workshop Comment Summary

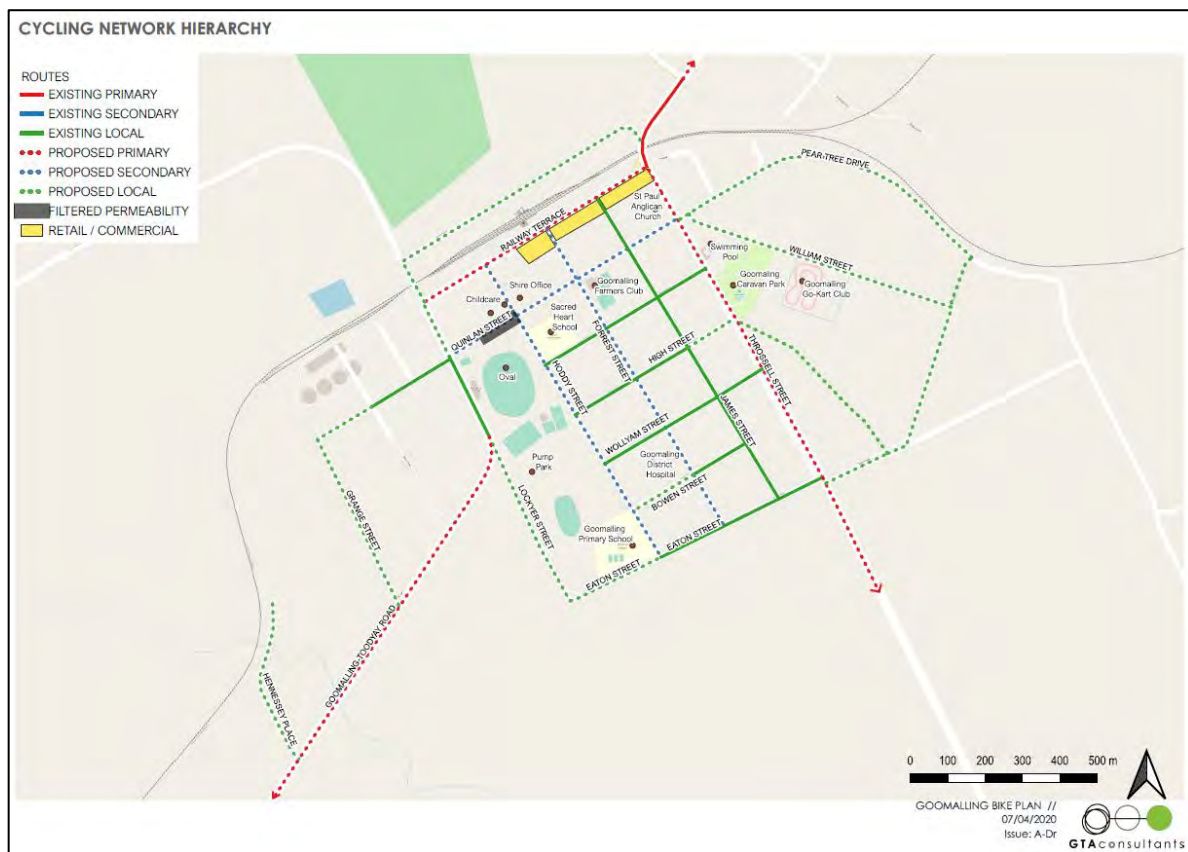
Comment	Comment From	Response / Action
Lockyer and Eaton Streets should be a higher importance than a future recreational route. These are the main routes into the school and the safety of the children should be of a greater importance.	Community	Lockyer and Eaton Streets are proposed as Local Routes, which the function is to provide access to higher order routes and local amenities and recreational spaces. Given the lack of development abutting Lockyer and Eaton Streets, a Local Route is considered appropriate
Hoddy Street, which is a key route to both Sacred Heart Catholic School and Goomalling Primary School plus Gumnuts Early Learning Centre is listed as a Future Secondary Route and should be of a higher importance.	Community	Secondary Routes have a lower demand than Primary Routes however provide a similar level of quality, safety and convenience. These routes generally provide connections to activity centres, retail, sporting and education facilities. Hoddy Street fits in with this function, as a Primary Route usually provides medium to long distance uninterrupted connections. The reference to future in this sense is that it should be constructed in the future. It is currently to a Local Route standard.
As the hierarchy identified function over form, classifying these routes as either secondary or local will mean the Shire can still construct anything from a recreational type trail or a bike lane – it just needs to be fit for purpose.	Department of Transport	The type of routes have been identified on the Network Hierarchy Map and recommended form is included in this bike plan.
Additional access to the pump track should be included.	Department of Transport	This has been noted on the network features plan as it is identified as an additional benefit to the community, however, would not form part of the network hierarchy.

8. CYCLING NETWORK HIERARCHY

Following consultation with the community and Department of Transport, the following cycling network hierarchy has been prepared. It focusses on improving the form and function of the internal network, and also identifies key strategic networks and directly responds to the community consultation feedback. The network is shown in Figure 8.1 and at Appendix B.

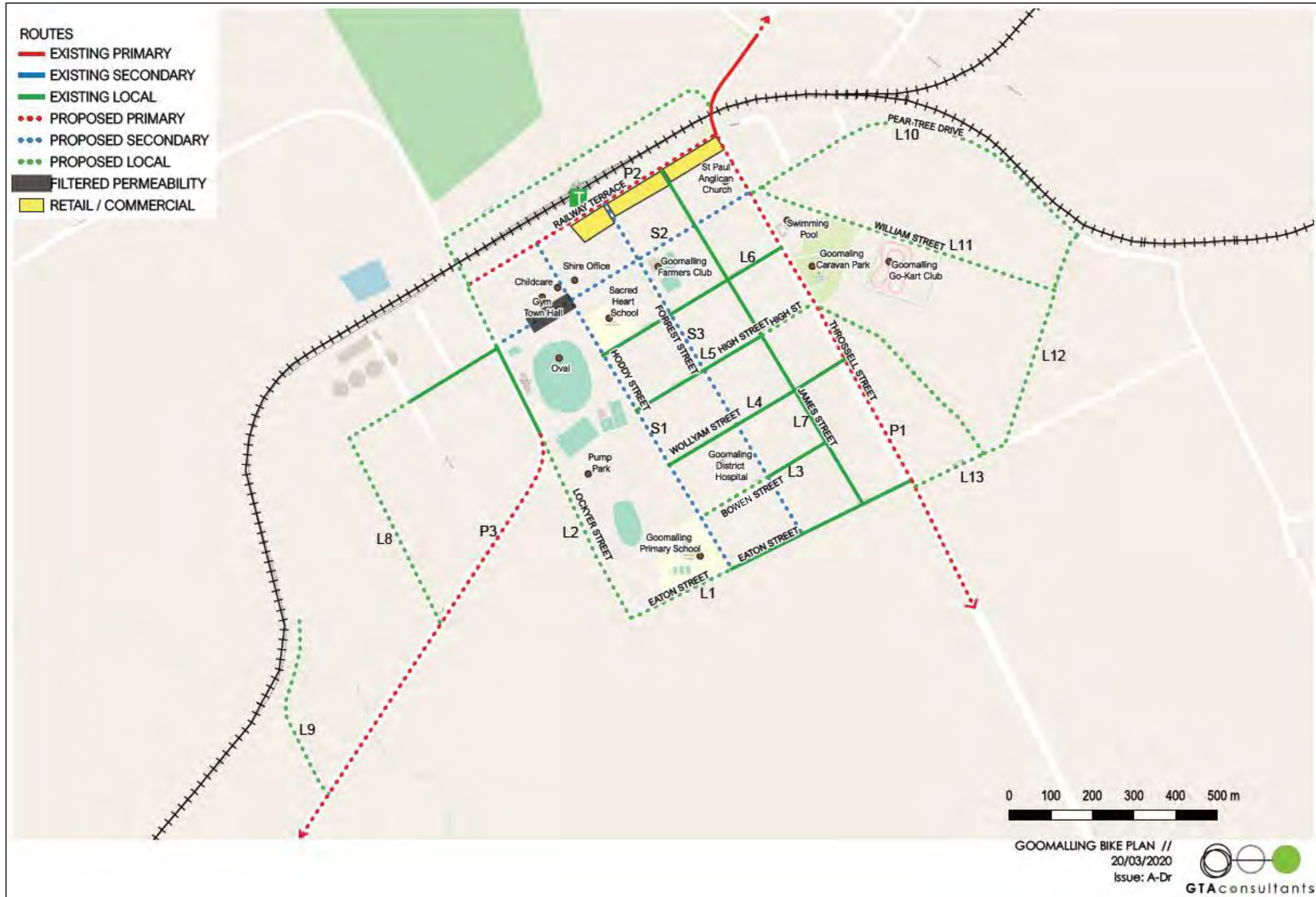
The network has been analysed, and a proposed form identified. Stages are also listed for each road.

Figure 8.1: Cycling Network Hierarchy



CYCLING NETWORK HIERARCHY

Figure 8.2: Cycling Network Proposals



8.1. Primary Routes

Item	Road	Function	Current	Stage	Proposed Form	Grant Opportunities
P1	Throssell Street / Main Street / Northam-Pithara Road	Primary route into and out of the Town Centre. This will provide a medium distance connection to Slater Homestead and long-distance connection to other towns including Northam to the south.	Shared Path built for a part of this route between the BP Roadhouse and Railway Terrace.	1	High quality shared path connecting the Caravan Park and Swimming Pool to the Town Centre in the short to medium term. Connections to other town sites and Slater Home Stead in the long term.	WABN Grants, negotiation with Main Roads WA, given this is a state road.
P2	Railway Terrace	Major road which is also a freight route and retail core for the Town Centre.	Footpath on the southern side and an unsealed path for a portion of the northern side. There is existing on-street parking along both sides of the street.	1	Parking protected on-road cycle lanes on both sides.	WABN Grants, negotiation with Main Roads WA, given this is a state road.
P3	Goomalling Toodyay Road	Primary route west of the Town Centre, which connects to Toodyay.	No specific cycling infrastructure. The road has no sealed shoulders and only two carriageways.	1	High quality shared path to the northern side (potentially behind the existing trees) connecting the new development of Hennessey Place through to the primary school and Oval.	WABN Grants, negotiation with Main Roads WA, given this is a state road.

8.2. Secondary Routes

Item	Road	Function	Current	Stage	Proposed Form	Grant Opportunities
S1	Hoddy Street	An important route through the Town Centre, providing connections to the Retail Centre (Railway Terrace), Recreational Centre and Goomalling Primary School.	Hoddy Street currently has a footpath on the eastern side and a continuous footpath on the western side, however, there are no connecting ramps between the east/west streets and Hoddy Street. Users are required to use driveways.	1	2.5m wide shared path on the western side of Hoddy Street with connections at intersections (kerb ramps) OR Upgrade the entire street to a Safe Active Street to improve safety and amenity for all users and residents who live along it	WABN Grants Safe Active Street Program
S2	Quinlan Street	A key route running east/west through the northern end of town, which provides a connection to the recreation area, Gumnuts Child Care Centre, Shire Office and Town Hall.	There is currently a path on both sides of Quinlan Street from Throssell Street to Hoddy Street, where the path is then only on the northern side.	1	Tree protected on-road cycling as part of the upgrade, sealing and kerbing of the road. OR 2.5m wide shared paths on both sides of the road, transitioning on road through the filtered permeability section near the Recreation Hub.	MRRG WABN Grants
S3	Forrest Street	A key north/south emergency vehicle route through the Town Centre. It provides a connection from	There are currently footpaths (approximately 1.5m wide) on both sides of Forrest Street.	1	Parking protected or tree protected on-road cycling (see examples in Section 9.3.2) OR	MRRG

		the District Hospital to the Goomalling Farmers Club and the Railway Terrace retail / commercial area.			2.5m wide shared paths on both sides of the road	WABN Grants
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8.3. Local Routes

Item	Road	Function	Current	Stage	Proposed Form	Grant Opportunities
L1	Eaton Street	Eaton Street provides access to the residential area and also the Primary School pick up and drop off area.	Paths are provided on the northern side of Eaton Street between Throssell Street and Hoddy Street. No facilities are provided surrounding the school.	1	Minimum 2.5m wide path on the northern side, west of Hoddy Street	WABN Grants
				2	2.5m wide path on southern side at the time of development of the southern land parcel.	N/A to be provided by developer at time of development
L2	Lockyer Street	Lockyer Street forms the western boundary of the Goomalling Town Centre. It provides a connection to the rear of Goomalling Primary School, the oval, Goomalling-Toodyay Road and Railway Terrace to the north.	Lockyer has a path on the western side between Quinlan Street and Goomalling-Toodyay Road only.	1	Minimum 2.5m wide path on both sides north of Goomalling-Toodyay Road. Minimum 2.5m wide path south of Goomalling-Toodyay Road.	WABN Grants WABN Grants
L3	Bowen Street	These streets form the local access	Paths are provided on	1	Provide a 2.5m wide Shared Path on Bowen	WABN Grants

CYCLING NETWORK HIERARCHY

L4	Wollyam Street	routes within the Town Centre. They provide access between residential houses and destinations such as the Oval, schools and Swimming Pool.	both sides of the street, with the exception of Bowen Street between Hoddy and Forrest Streets, and Grange Street, which do not have any paths. High Street between James Street and Throssell Street has a path on one side.		Street between Hoddy and Forrest Streets (primary missing link)			
L5	High Street			2	Provide a 2.5m wide Shared Path on High Street between James Street and Throssell Road (primary missing link)	WABN Grants		
L6	Forward Street				3	Repair cracks and lifted paths as upgrades are required.	WABN Grants	
L7	James Street					4	As upgrades are required, provide a minimum 2.5m wide path on both sides of the street.	WABN Grants
L8	Grange Street							
L9	Hennessey Place							
L10	Pear Tree Drive	These roads currently provide a recreational function for the Town, with the surrounding land uses all Reserved for Recreation.	These routes are all currently unsealed.	1	Whilst identified as a Local Route, these could temporarily be trails in the short term, and upgraded with shared paths constructed when these roads are developed as they run through a reserve.	WABN Grants		
L11	William Street				2	Ultimately, 2.5m m wide shared path should be constructed as development occurs.	N/A to be provided by developer at time of development	
L12	Slater Street							
L13	Salmon Gum Way							
L14	White Street							

8.4. Training Routes and Tourist Trails

No training routes or tourist trails have been specifically identified, given that the Bike Plan primarily encompasses the Town Centre. However, the need for a link between Lockyer Street and Hoddy Street through the Recreation Hub for access to the Pump Park is recommended. Given that this would be an access route through a park, it does not specifically fit into the cycling network hierarchy. Subsequently, it has been identified on the network map as an access path.

Tourist trails may be used by bush walkers, trail runners, horse riders and motorbike riders. These trails should allow two people to ride side by side and have extensive wayfinding due to their often-remote location. Tourist trails can include disused railway corridors, utility corridors and firebreaks.

In a local context, the use of the firebreaks surrounding Goomalling Primary School should also be considered and negotiated with the school.

Figure 8.3: Trail along a Utility Corridor



Figure 8.4: Trail along a Fire Break



Source: Department of Transport – Geraldton 2050 Regional Cycling Strategy

9. INFRASTRUCTURE IMPROVEMENTS

When developing a 10-year cycling and walking network it is important to understand the existing network, missing links, unsafe infrastructure and any conflict areas.

The existing cycling network includes 4.6km of concrete shared paths, 7km of gravel pathways and 9.5km of pathways to a footpath standard. A number of paths in the Town Centre are lifted or cracked. Short term improvements would include repairing these and also providing better connections in the network by constructing kerb ramps.

In the longer term, innovative infrastructure solutions can be applied to the network to create an even better cycling environment.

9.1. Short Term Improvements – Network Improvements

The cycling network in Goomalling has a number of small inadequacies that if addressed, would enhance cycling experience in the Goomalling town site.

9.1.1. Crossing Point Improvements and Ramp Upgrades

Providing kerb ramps would immediately enhance the cycling experience, allowing for a smoother and safer ride, particularly for younger cyclists. This would mean that cyclists would not have to mount the kerb to get to a path and would not have to cycle through loose rocks, which can be a slip hazard.

9.1.2. Complete the Missing Links

There are a few portions of the existing network which are missing. Completing these missing links would make the journey more convenient, and therefore more appealing to patrons. It would also mean that cyclists would not need to cross the road to access the constructed portion of the network, which can be particularly difficult as there are a number of kerb ramps missing in the network.

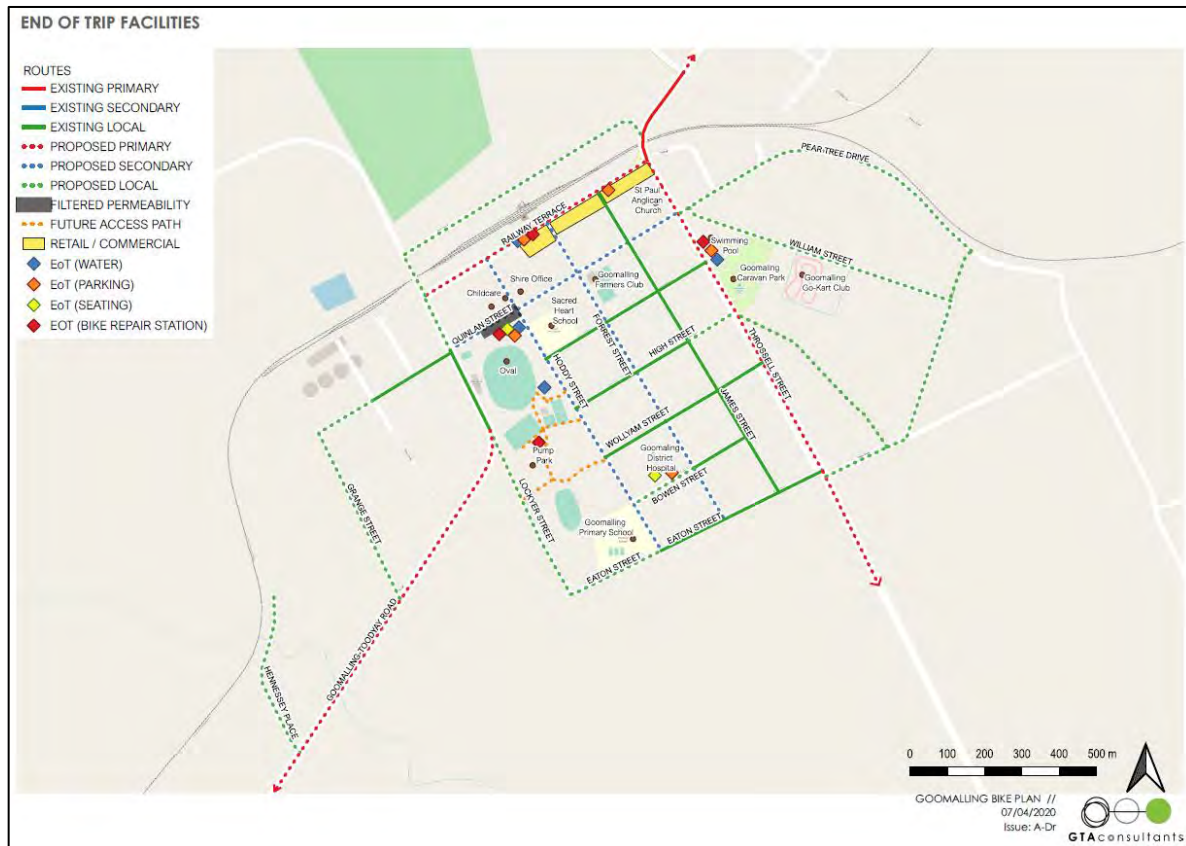
9.1.3. Access Path to Pump Park

Whilst not formally part of the cycle network, access to the Recreation Hub near the Pump Park would make the Pump Park more accessible, and also provide an alternative route for the community from the south-western part of Goomalling.

9.2. Short Term Improvements – End of Trip Facilities

End of Trip facilities will support cyclists and the broader community with active travel. A summary of the location of the End of Trip facilities are illustrated in Figure 9.1, and Appendix C. Funding opportunities for End of Trip facilities exist through the Department of Transport's Regional Bike Network Grants Program.

Figure 9.1: Location of End of Trip Facilities



9.2.1. Bike Parking

Bike parking should be provided throughout the Town, primarily at key locations such as the recreation hub, swimming pool, schools and Railway Terrace commercial strip. Given the expected high turnover in these locations, bicycle parking options could include:

- U-Rails
- Hoop Parking
- Cora Racks
- Toaster Racks
- Spiral U-Rail Parking.

Parking should be located to avoid direct sunlight, and shelter should be provided where possible, but in particular at the schools, where all day parking is expected.

9.2.2. Bike Repair Stations

Bike repair stations are becoming increasingly popular along routes of high cyclist activity and in parks and reserves. These generally include a foot operated bike pump and a series of tools for minor servicing and repairs.

Figure 9.2: Bike Repair Stations



9.2.3. Drink Fountains

Drink fountains should be set back 2m from a shared path to avoid creating a temporary obstruction in use. Two different heights should also be offered to accommodate the wider community. These are suggested in the Recreation Hub, along Railway Terrace and near the Swimming Pool, as shown in Figure 9.1.

Figure 9.3: Example Drink Fountains



9.2.4. Seating

Public seating can support pedestrians in travelling longer journeys, offer respite and were noted as missing during consultation. A number of items should be taken into consideration when determining the appropriate public seating. This includes:

- Location – placement of the seating, including distance from other obstacles including paths. Seating should be set back 1m from the front of the seat to a shared path to avoid any potential conflict². The location of the seating will also inform the material to be used. For example, metal seating would not be appropriate under the sun.
- Users – the type and number of users, which will impact the form of seating including whether back rests are required and size.
- Maintenance and durability – public seating will be an item for Council to maintain. Therefore, maintenance costs should be considered when determining the appropriate seating.

9.3. Medium to Long Term Improvements

Whilst on-road cycling could be considered in Goomalling, given the low traffic volumes, the lack of sealed shoulders, drainage arrangements and gravel on roads may make it unsafe for cyclists.

9.3.1. Safe Active Streets

Hoddy Street is proposed to be a Secondary Route. Given its location and proximity to the Goomalling Primary School, Sacred Heart School and the Recreation Hub, it is proposed that Hoddy Street takes the form of a Safe Active Street.

As set out in the Department of Transport's website, some measures which can be considered at a Safe Active Street include the below, noting that each route should be individually analysed and designed:



- Single-lane slow points, where approaching vehicles should give way to any car or bike already at or passing through the slow point.
- Raised platforms at intersections.
- Narrowing street widths by introducing on-street parking and plantings.
- Changing stop/give-way signs to give priority to movements along the safe active street.
- Using traffic islands and medians to restrict car movements at intersections, while allowing movements in all directions for people on bikes and on foot.
- Introducing new pedestrian or bike crossings.
- Introducing bicycle symbol road markings in the centre of each unmarked lane, to encourage cyclists to take the lane.

² Department of Transport Shared Path Guidelines (Draft 2019)

- Lateral shifts in the carriageway to reduce sightlines (i.e. swapping formalised on-street parking and new tree planting nibs from one side of the street to the other: and
- Additional tree planting and landscaping make them more attractive places to walk or ride.


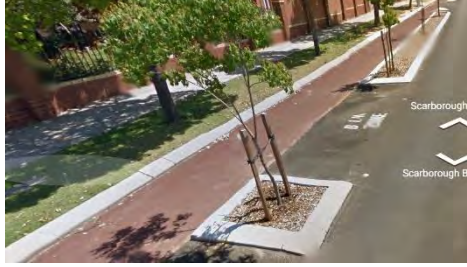

9.3.2. Protected on-road cycling

There is a negative perception on the safety of cyclists, which can be detrimental to the uptake of cycling. Often physical barriers can enhance both the cyclist’s safety (both perceived and actual) and can increase awareness to drivers. Therefore, it is important that, at a minimum, on-road cycle routes should have some form of protection. This can be achieved in several different ways – see Table 9.1. While it is acknowledged that *Austroads Guide to Road Design Part 6A* states that a bicycle lane can be 1.2m wide (with an absolute minimum of 1.0m for very short sections) – the Shire should consider using 1.5m as standard reducing to 1.2m as a minimum. It should also be noted that a single white line delineating the bike lane does not provide riders with any protection and should be avoided. Additional painted line, such as that shown in Figure 9.4 would provide separation. Armadillo separators also provide an additional physical barrier.

Bike lanes should also not be provided between on-street parking and the road, as this puts cyclists at risk of dooring.

On-road cycling should also consider the need of drivers to provide 1m separation where the posted vehicle speed is 60km/h or less, or 1.5m where it is over 60km/h, as part of the **One Metre Rule legislation**.

Table 9.1: Protected on-road cycling to general traffic examples

<p>Buffered Cycle Lane – additional painted line (Kind Edward Street, Osborne Park)</p>  <p>Low Cost</p>	<p>One Way separated cycle lane Protected in sections via kerb and planting (Scarborough Beach Road, Mount Hawthorn)</p>  <p>Medium to High Cost</p> <p><i>While planting trees increases the cost, the traffic is calmed, there is an increase in amenity and they provide shade/shelter</i></p>
<p>Armadillo Separators</p>  <p>Low to Medium Cost</p>	

9.3.3. Shared Paths

The Department of Transport currently have advertised the Draft Shared Path Guidelines. Shared paths can be located adjacent to a road or through a park or reserve. They are used by both cyclists and pedestrians with line marking and/or signage designating their legal status as a shared path and helping to encourage safe use by both user groups. Pedestrians have the right of way on shared paths. There is the potential for conflict between user types when volumes of pedestrians and cyclists are high or when the path width is narrow.


This type of facility can generally be implemented wherever there is sufficient width to accommodate a 3.0m wide path. Wider paths may be required depending on the volume of cyclists and pedestrians. However, given the low volume of pedestrians and cyclists, it is considered that a 2.5m wide path is sufficient. Subsequently, all paths in the Town should be progressively upgraded to this standard.

In Western Australia, high quality shared paths (Principal Shared Paths) which form Primary Routes generally are constructed of a red asphalt for delineation. Low speed shared path (Secondary Routes in the context of Goomalling) can be constructed in concrete or asphalt. Consideration should be given to centreline marking to provide guidance and passive wayfinding. Examples of shared paths are illustrated in Figure 9.5.

However, it should also be noted that on 27 April 2016, WA's laws were changed to allow cyclists of all ages to use footpaths, unless otherwise signed. The amendment to the *Road Traffic Code 2000* brought WA's bicycle laws into line with the rest of Australia, making it legal for parents to cycle alongside their children on footpaths, improving safety. In addition to the below standards, there should also be a vertical clearance of 2.5m, and ramps should be a maximum of 7% with a minimum 1.2m wide landing positioned not more than 9m apart³. Shared Paths should also maintain a 0.5m minimum clearance from the edge of the path to obstacles such as fences, signs, light poles, traffic and rigid road barriers and trees etc.

Other path connections for consideration include raised crossings, which highlights the cyclist priority and slows vehicles, creating a safer environment.

Figure 9.4: Shared Path General Design Standards





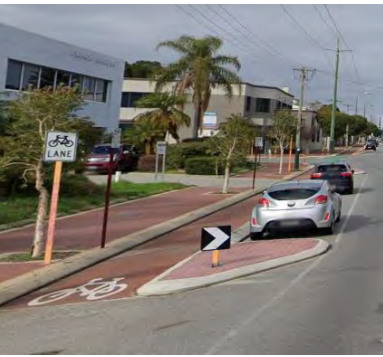
Function	Example
<p>Low speed shared path</p> <p>Low speed, low volume paths with a mix of pedestrian and cycling traffic. Suitable for utility cyclists, students and low-speed commuters.</p> 	<p>Design Speed</p> <ul style="list-style-type: none"> <20km/hr <p>Geometry</p> <ul style="list-style-type: none"> 2.5m-3.0m width Recommended curve radius 10m Min. curve radius 5m Min. connection radius 1m Crossfall 2-2.5% Max gradient 3% <p>Surface Treatment</p> <ul style="list-style-type: none"> Concrete or Asphalt Consider centreline marking to provide guidance & passive wayfinding.

Source: Department of Transport Shared Path Guidelines (Draft 2019)

³ See AS1428.1 Design for Access and Mobility Section 10.3 and Main Roads Standard Drawing 201131-0071 for details.

INFRASTRUCTURE IMPROVEMENTS

Figure 9.5: Examples of off road cycle infrastructure and Shared Paths

<p>Two-way separated bicycle paths (in road reserve)</p>	
<p>Kerbed, unmarked two-way cycle path</p>	
<p>Shared paths (in or not in the road reserve)</p>	
<p>Separation of cyclists and pedestrians</p>	
<p>Parking protected cycle lane</p>	

9.3.4. Filtered Permeability

Filtered permeability is a treatment that limits vehicle access through an area whilst still allowing permeability for cycling and walking to remain viable by reducing the length required. Filtered permeability can also help connect two culs-de-sac by providing a cycling and walking link. Quinlan Street between Lockyer Street and Hoddy Street is identified to be closed to road traffic in the Shire's Recreation Hub Master Plan. As such, this provides a good opportunity for Filtered Permeability to allow pedestrians and cyclists to still access, whilst restricting vehicular traffic.

Figure 9.6: Filtered Permeability



9.3.5. Wayfinding and Signage

Wayfinding can encourage and support cycling. Wayfinding signage can include cycle symbols, signposts and network signage showing distance to key locations.

Signage can also be an effective method for identifying cyclists to other road users, particularly if cycling on-road. The Department of Transport's Your Move program (discussed in section 9.3.6) also encourages active transport. Signage often used as part of the program provides a direction and walking distance in time.

Figure 9.7: Signage



9.3.6. Your Move Program

The Department of Transport's *Your Move* (previously TravelSmart) program provides tools and resources to promote active transport in households, schools and workplaces. Evaluations of the program between 2000 and 2004 have found that it has increased cycling participation and increased cycling trips 58%, ranging from 25% in Subiaco to 140% in Marangaroo. Examples of wayfinding which has been implemented as part of the Your Move Program is shown in Figure 9.8.

Figure 9.8: Your Move Cycle Safety and Directional Signage



9.3.7. Lighting

Lighting should be provided along key strategic routes, particularly routes which are expected to have high volume and high speeds. This would be applicable to the Primary Routes, including Railway Terrace and Throssell Avenue. All other routes should have human scale lighting that considered the existing natural environment. Examples of this can include lights which are strategically placed taking into consideration existing tree canopy and heights. Streets should be well lit to enhance safety and encourage active travel.

Main Roads WA's supplement to Austroads Guide to Road Design: 6a notes that lighting is to be in accordance with Main Roads Lighting Design Guideline for Roadway and Public Space, with lighting from shared paths not spilling or creating glare onto residences, in accordance with AS4282.

10. IMPLEMENTATION PRIORITY

Whilst it would be ideal to implement the entire network at the same time, the available funding needs to be considered. Additionally, construction time and traffic impacts would also impact the community. As such, the following priorities are identified, taking into consideration usage, attractions and community consultation comments.

1. Kerb ramp upgrades – kerb ramp connections should be constructed as a priority to ensure a continuous and connected network. Connections to Hoddy Street and Quinlan Street are considered particularly important. The kerb ramp locations are shown in purple (crossing points) in Figure 10.1.
2. Shared Path (3.0m wide) connection along:
 - o Throssell Street from Railway Terrace to Goomalling Caravan Park.
3. Path connection (minimum 2.5m for a Shared Path) to complete the missing links along:
 - o Bowen Street between Hoddy Street and Forrest Street.
 - o High Street between James Street and Throssell Street.
4. Pump park access path to connect users through the Recreation Hub but also provide children with access to the pump park.
5. On-road protected cycle lanes along Railway Terrace.
6. Safe Active Street along Hoddy Street
7. Closure of Quinlan Street between Lockyer Street and Hoddy Street, as set out in the Goomalling Recreation Hub Master Plan.
8. Protected on-road cycle lanes along Quinlan Street.
9. Bicycle parking at the Goomalling Primary School, Recreation Hub, Railway Terrace Commercial Strip, Swimming Pool and Goomalling District Hospital.
10. Seating at the Recreation Hub and near the Goomalling District Hospital.
11. Water fountains at the Recreation Hub and Swimming Pool.
12. Bicycle repair stations at the Pump Park, Recreation Hub and Swimming Pool.

IMPLEMENTATION PRIORITY

Figure 10.1: Cycling Network Upgrade Requirements

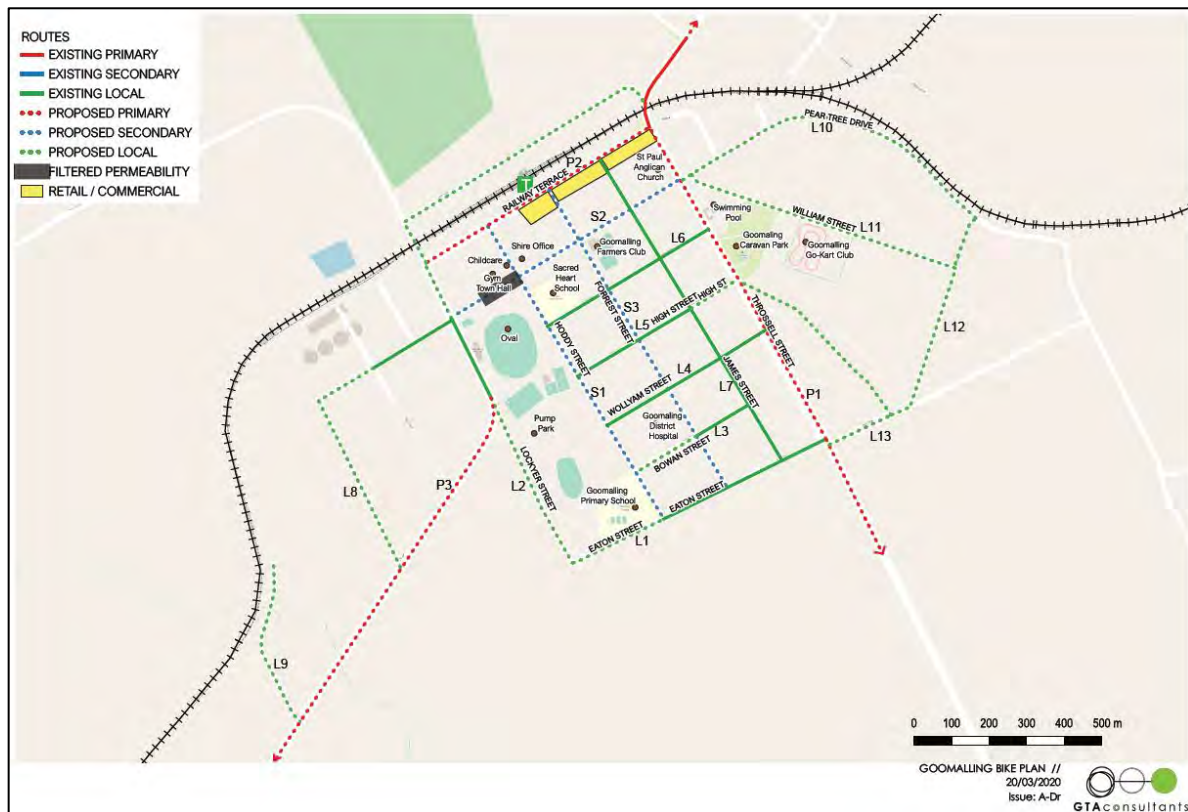


11. CONCLUSION

Based on the analysis of the local network and community consultation findings, the implementation of the initiatives outlined in this bike plan will support accessibility throughout the community for all members.

The cycling network upgrades, including the required location of kerb ramps (crossing points) and end of trip facilities. These are highlighted in Figure 11.1 and also included at Appendix D.

Figure 11.1: Cycling Network



The recommendations provided within this plan are presented in Table 11.1 and categorised by recommendation type (while keeping the original reference number attached):

Table 11.1: Key cycling and walking network plan recommendations

Primary Routes					
Item	Road	Function	Current	Stage	Proposed Form
P1	Throssell Street / Main Street / Northam-Pithara Road	Primary route into and out of the Town Centre. This will provide a medium distance connection to Slater	Shared Path built for a part of this route between the BP Roadhouse and Railway Terrace.	1	High quality shared path connecting the Caravan Park and Swimming Pool to the Town Centre in the short to medium term.

CONCLUSION

		Homestead and long-distance connection to other towns including Northam to the south.			Connections to other town sites and Slater Home Stead in the long term.
P2	Railway Terrace	Major road which is also a freight route and retail core for the Town Centre.	Footpath on the southern side and an unsealed path for a portion of the northern side. There is existing on-street parking along both sides of the street.	1	Parking protected on-road cycle lanes on both sides.
P3	Goomalling Toodyay Road	Primary route west of the Town Centre, which connects to Toodyay.	No specific cycling infrastructure. The road has no sealed shoulders and only two carriageways.	1	High quality shared path to the northern side (potentially behind the existing trees) connecting the new development of Hennessey Place through to the primary school and Oval.
Secondary Routes					
Item	Road	Function	Current	Stage	Proposed Form
S1	Hoddy Street	An important route through the Town Centre, providing connections to the Retail Centre (Railway Terrace), Recreational Centre and Goomalling Primary School.	Hoddy Street currently has a footpath on the eastern side and a continuous footpath on the western side, however, there are no connecting ramps between the east/west streets and Hoddy Street. Users are required to use driveways.	1	2.5m wide shared path on the western side of Hoddy Street with connections at intersections (kerb ramps) OR Upgrade the entire street to a Safe Active Street to improve safety and amenity for all users and residents who live along it
S2	Quinlan Street	A key route running east/west through the northern end of town, which provides a	There is currently a path on both sides of Quinlan Street from Throssell Street to	1	Tree protected on-road cycling as part of the upgrade, sealing and kerbing of the road.

CONCLUSION

		connection to the recreation area, Gumnuts Child Care Centre, Shire Office and Town Hall.	Hoddy Street, where the path is then only on the northern side.		OR 2.5m wide shared paths on both sides of the road, transitioning on road through the filtered permeability section near the Recreation Hub.
S3	Forrest Street	A key north/south emergency vehicle route through the Town Centre. It provides a connection from the District Hospital to the Goomalling Farmers Club and the Railway Terrace retail / commercial area.	There are currently footpaths (approximately 1.5m wide) on both sides of Forrest Street.	1	Parking protected or tree protected on-road cycling (see examples in Section 9.3.2) OR 2.5m wide shared paths on both sides of the road
Item	Road	Function	Current	Stage	Proposed Form
L1	Eaton Street	Eaton Street provides access to the residential area and also the Primary School pick up and drop off area.	Paths are provided on the northern side of Eaton Street between Throssell Street and Hoddy Street. No facilities are provided surrounding the school.	1	Minimum 2.5m wide path on the northern side, west of Hoddy Street
				2	2.5m wide path on southern side at the time of development of the southern land parcel.
L2	Lockyer Street	Lockyer Street forms the western boundary of the Goomalling Town Centre. It provides a connection to the rear of Goomalling Primary School, the oval, Goomalling-Toodyay Road and Railway Terrace to the north.	Lockyer has a path on the western side between Quinlan Street and Goomalling-Toodyay Road only.	1	Minimum 2.5m wide path on both sides north of Goomalling-Toodyay Road. Minimum 2.5m wide path south of Goomalling-Toodyay Road.

CONCLUSION

L3	Bowen Street	These streets form the local access routes within the Town Centre. They provide access between residential houses and destinations such as the Oval, schools and Swimming Pool.	Paths are provided on both sides of the street, with the exception of Bowen Street between Hoddy and Forrest Streets, and Grange Street, which do not have any paths. High Street between James Street and Throssell Street has a path on one side.	1	Provide a 2.5m wide Shared Path on Bowen Street between Hoddy and Forrest Streets (primary missing link)		
L4	Wollyam Street						
L5	High Street			2	Provide a 2.5m wide Shared Path on High Street between James Street and Throssell Road (primary missing link)		
L6	Forward Street						
L7	James Street			3	Repair cracks and lifted paths as upgrades are required.		
L8	Grange Street						
L9	Hennessey Place			4	As upgrades are required, provide a minimum 2.5m wide path on both sides of the street.		
L10	Pear Tree Drive			These roads currently provide a recreational function for the Town, with the surrounding land uses all Reserved for Recreation.	These routes are all currently unsealed.	1	Whilst identified as a Local Route, these could temporarily be trails in the short term, and upgraded with shared paths constructed when these roads are developed as they run through a reserve.
L11	William Street						
L12	Slater Street						
L13	Salmon Gum Way	2	Ultimately, 2.5m m wide shared path should be constructed as development occurs.				

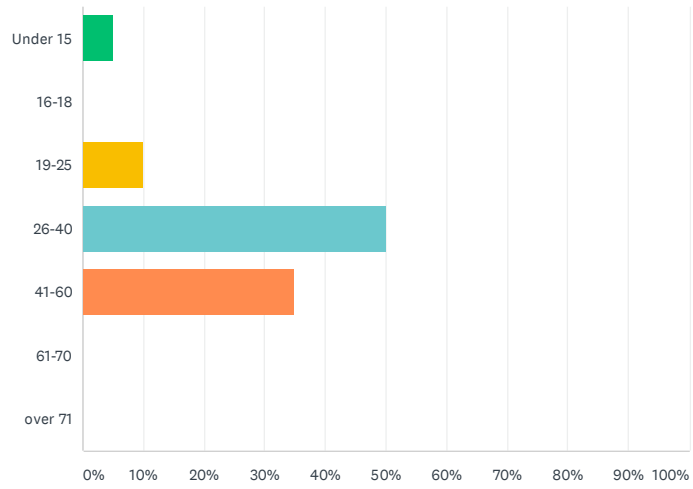
A. ACTIVE TRAVEL QUESTIONNAIRE SURVEY



ACTIVE TRAVEL SURVEY

Q1 How old are you?

Answered: 20 Skipped: 0

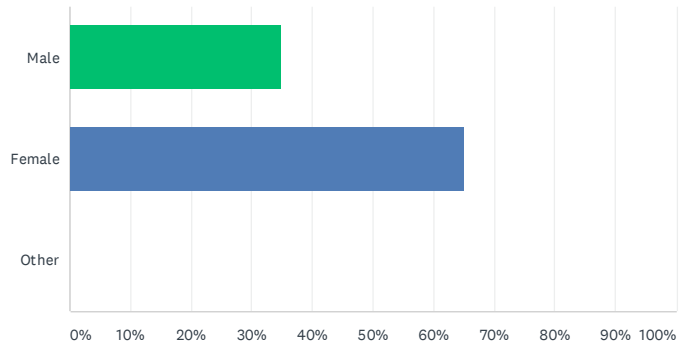


ANSWER CHOICES	RESPONSES	
Under 15	5.00%	1
16-18	0.00%	0
19-25	10.00%	2
26-40	50.00%	10
41-60	35.00%	7
61-70	0.00%	0
over 71	0.00%	0
TOTAL		20

ACTIVE TRAVEL SURVEY

Q2 What is your gender?

Answered: 20 Skipped: 0

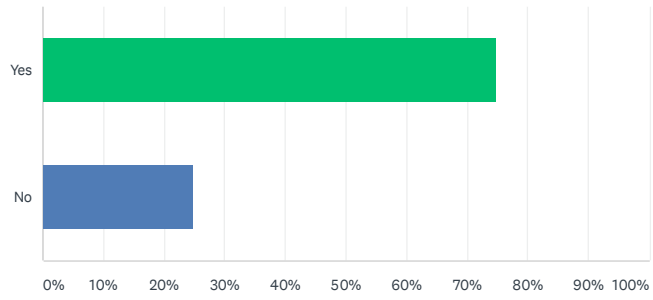


ANSWER CHOICES	RESPONSES	
Male	35.00%	7
Female	65.00%	13
Other	0.00%	0
TOTAL		20

ACTIVE TRAVEL SURVEY

Q3 Do you ride a bike?

Answered: 20 Skipped: 0

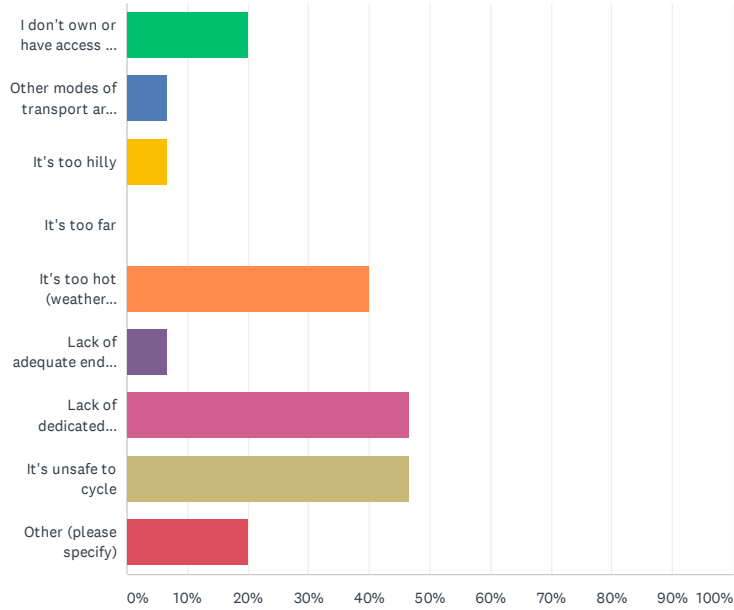


ANSWER CHOICES	RESPONSES	
Yes	75.00%	15
No	25.00%	5
TOTAL		20

ACTIVE TRAVEL SURVEY

Q4 If you don't ride, or don't ride often, what are your main reasons why?

Answered: 15 Skipped: 5



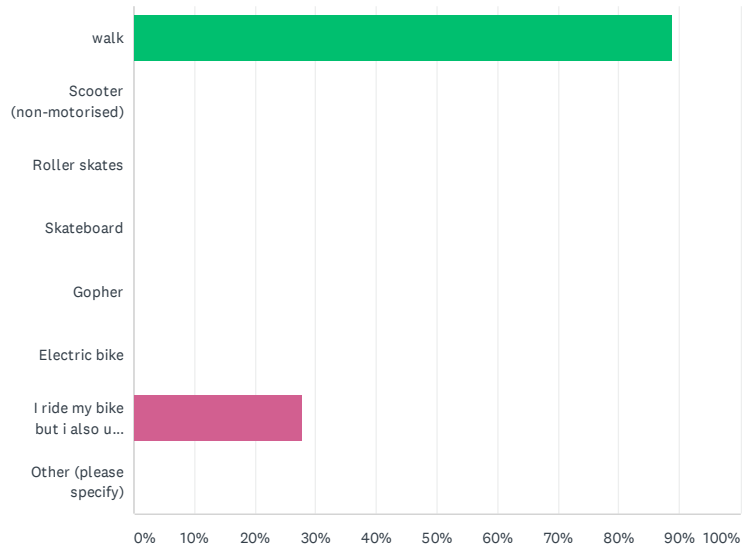
ANSWER CHOICES	RESPONSES
I don't own or have access to a bike	20.00% 3
Other modes of transport are more convenient	6.67% 1
It's too hilly	6.67% 1
It's too far	0.00% 0
It's too hot (weather conditions)	40.00% 6
Lack of adequate end of trip facilities (such as bike parking, lockers, showers)	6.67% 1
Lack of dedicated cycling infrastructure	46.67% 7
It's unsafe to cycle	46.67% 7
Other (please specify)	20.00% 3
Total Respondents: 15	

#	OTHER (PLEASE SPECIFY)	DATE
1	Work attire doesn't allow cycling to work	2/10/2020 2:51 PM
2	live of a farm, gravel roads - calthrop	2/10/2020 11:20 AM
3	I have 2 young children that love to ride & we would ride daily if we didnt have to push our bikes through other people's property as there is no access to town, with the exception of the main road. We have been sprayed in rocks from traffic and it is too dangerous to ride on the road. We would ride daily to school if we could.	1/25/2020 9:03 AM

ACTIVE TRAVEL SURVEY

Q5 If you don't usually ride a bike, do you frequently use an alternative method of active transport?

Answered: 18 Skipped: 2



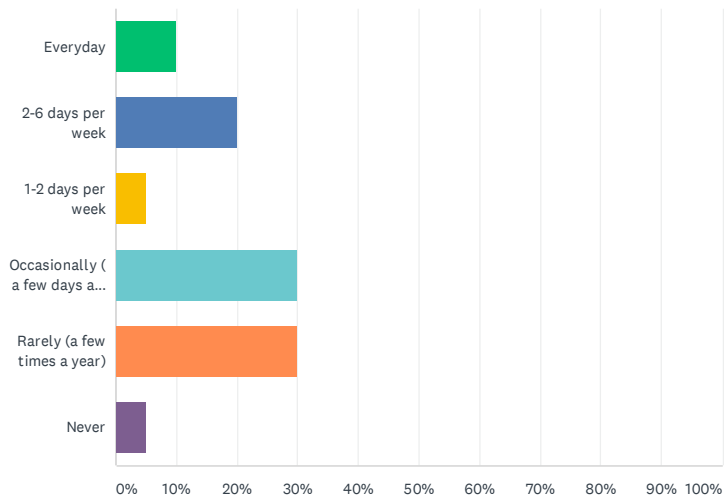
ANSWER CHOICES	RESPONSES	
walk	88.89%	16
Scooter (non-motorised)	0.00%	0
Roller skates	0.00%	0
Skateboard	0.00%	0
Gopher	0.00%	0
Electric bike	0.00%	0
I ride my bike but i also use one of the above methods equally or more	27.78%	5
Other (please specify)	0.00%	0
Total Respondents: 18		

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

ACTIVE TRAVEL SURVEY

Q6 How often do you ride a bike?

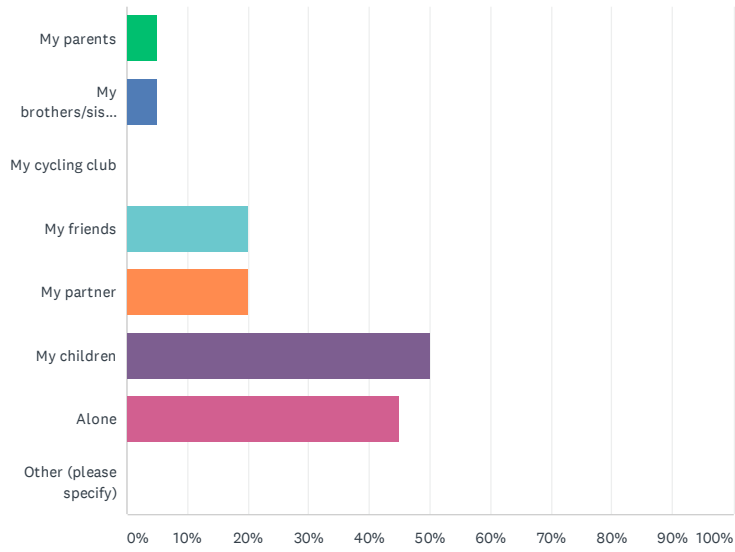
Answered: 20 Skipped: 0



ANSWER CHOICES	RESPONSES	
Everyday	10.00%	2
2-6 days per week	20.00%	4
1-2 days per week	5.00%	1
Occasionally (a few days a month)	30.00%	6
Rarely (a few times a year)	30.00%	6
Never	5.00%	1
TOTAL		20

Q7 Who do you mostly ride with?

Answered: 20 Skipped: 0



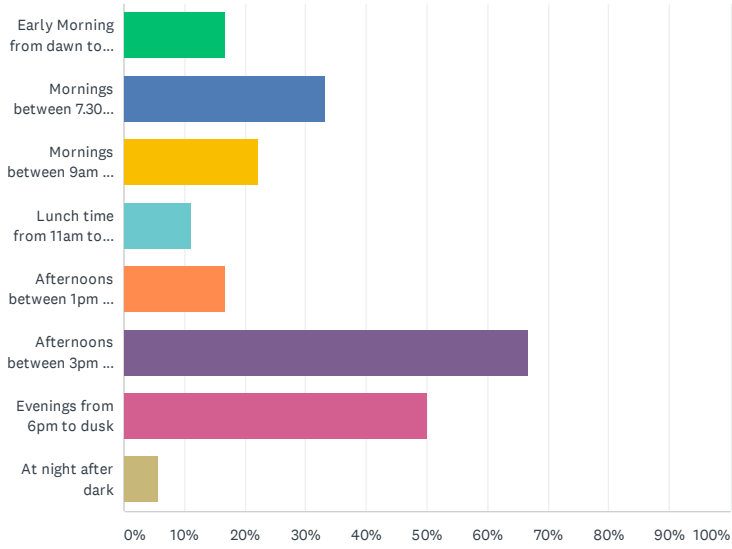
ANSWER CHOICES	RESPONSES
My parents	5.00% 1
My brothers/sisters	5.00% 1
My cycling club	0.00% 0
My friends	20.00% 4
My partner	20.00% 4
My children	50.00% 10
Alone	45.00% 9
Other (please specify)	0.00% 0
Total Respondents: 20	

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

ACTIVE TRAVEL SURVEY

Q8 What times(s) of the day do you ride?

Answered: 18 Skipped: 2

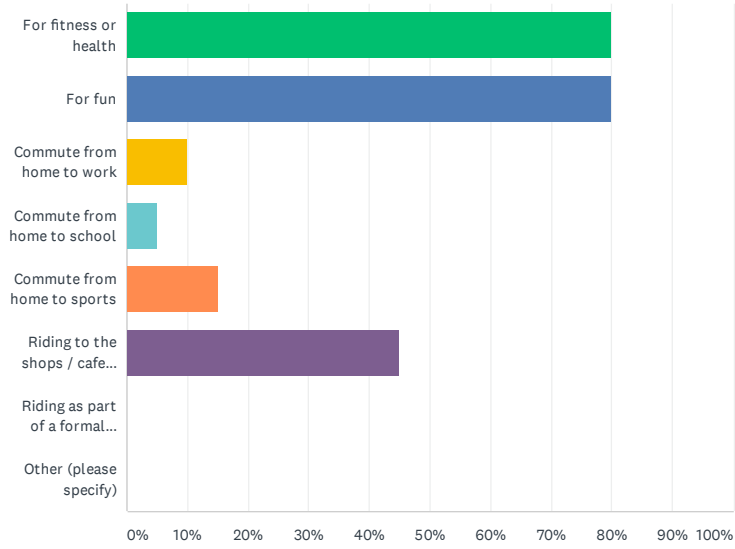


ANSWER CHOICES	RESPONSES
Early Morning from dawn to 7.30am	16.67% 3
Mornings between 7.30am to 9am	33.33% 6
Mornings between 9am to 11am	22.22% 4
Lunch time from 11am to 1pm	11.11% 2
Afternoons between 1pm and 3pm	16.67% 3
Afternoons between 3pm and 6pm	66.67% 12
Evenings from 6pm to dusk	50.00% 9
At night after dark	5.56% 1
Total Respondents: 18	

ACTIVE TRAVEL SURVEY

Q9 Why do you ride a bike?

Answered: 20 Skipped: 0



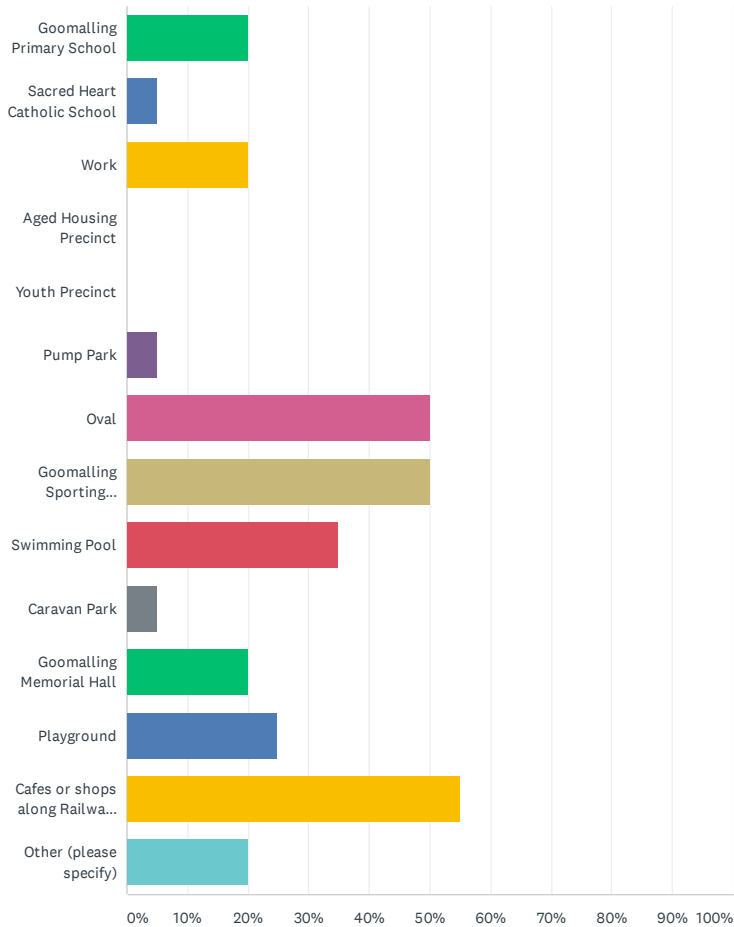
ANSWER CHOICES	RESPONSES	
For fitness or health	80.00%	16
For fun	80.00%	16
Commute from home to work	10.00%	2
Commute from home to school	5.00%	1
Commute from home to sports	15.00%	3
Riding to the shops / cafes or restaurants	45.00%	9
Riding as part of a formal club	0.00%	0
Other (please specify)	0.00%	0
Total Respondents: 20		

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

ACTIVE TRAVEL SURVEY

Q10 Where do you usually ride your bike to or from? (please select up to 3)

Answered: 20 Skipped: 0



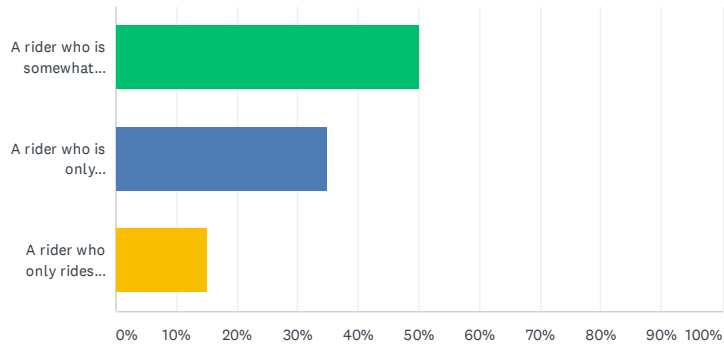
ANSWER CHOICES	RESPONSES
Goomalling Primary School	20.00% 4
Sacred Heart Catholic School	5.00% 1
Work	20.00% 4
Aged Housing Precinct	0.00% 0
Youth Precinct	0.00% 0
Pump Park	5.00% 1
Oval	50.00% 10
Goomalling Sporting Complex (for Hockey, Tennis or Netball)	50.00% 10
Swimming Pool	35.00% 7
Caravan Park	5.00% 1
Goomalling Memorial Hall	20.00% 4
Playground	25.00% 5
Cafes or shops along Railway Terrace	55.00% 11
Other (please specify)	20.00% 4
Total Respondents: 20	

#	OTHER (PLEASE SPECIFY)	DATE
1	people's homes	2/10/2020 11:55 AM
2	just around town - different path each time	2/10/2020 11:23 AM
3	on holidays	2/10/2020 11:20 AM
4	Gumnuts	1/25/2020 9:03 AM

ACTIVE TRAVEL SURVEY

Q11 What best describes you as a cyclist?

Answered: 20 Skipped: 0

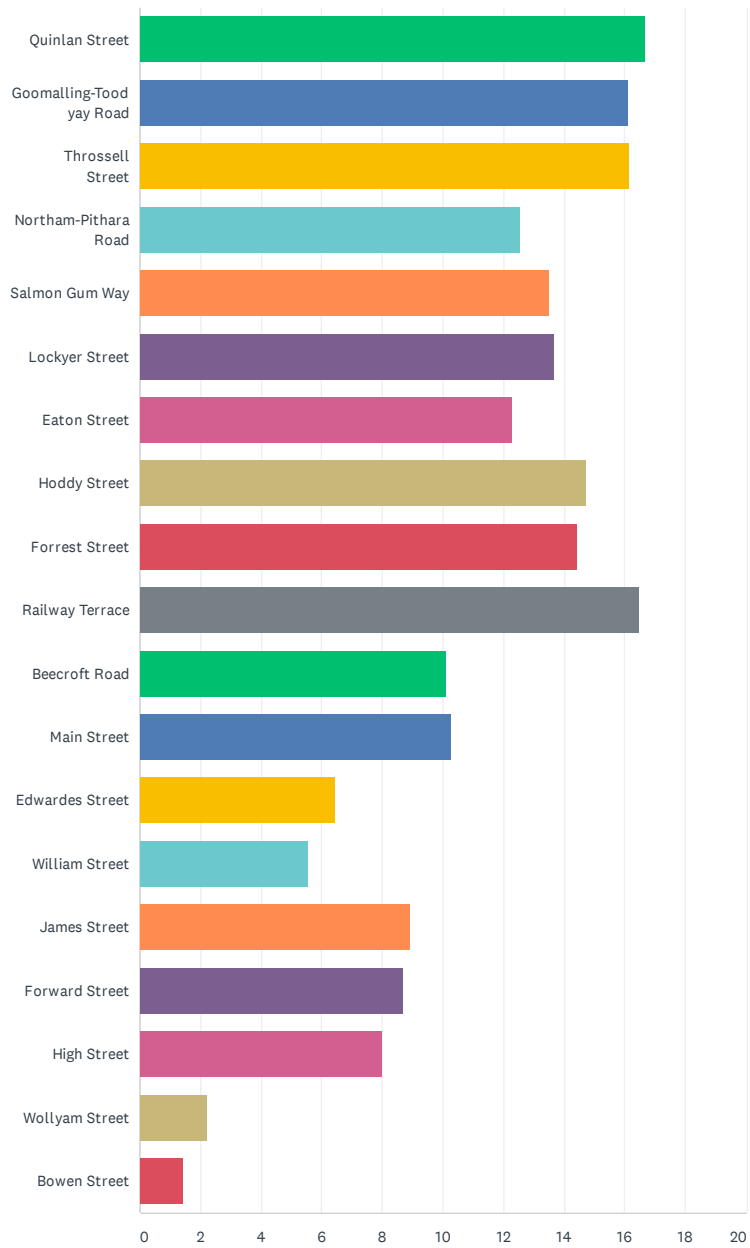


ANSWER CHOICES	RESPONSES	
A rider who is somewhat comfortable riding on the road	50.00%	10
A rider who is only comfortable riding off-road, on paths	35.00%	7
A rider who only rides off-road but would consider on road if it was safer to do so	15.00%	3
TOTAL		20

ACTIVE TRAVEL SURVEY

Q12 Which road(s) do you use the most when cycling or using an alternative mode of active transport? (Please rank up to 5, with 1 being the most often)

Answered: 19 Skipped: 1



ACTIVE TRAVEL SURVEY

	1	2	3	4	5	6	7	8	9	10	11	12	13	1
Quinlan Street	18.75% 3	31.25% 5	12.50% 2	12.50% 2	6.25% 1	12.50% 2	0.00% 0	0.00% 0	6.25% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	
Goomalling-Toodyay Road	30.00% 3	20.00% 2	10.00% 1	0.00% 0	10.00% 1	10.00% 1	0.00% 0	0.00% 0	20.00% 2	0.00% 0	0.00% 0	0.00% 0	0.00% 0	
Throssell Street	25.00% 3	8.33% 1	25.00% 3	8.33% 1	16.67% 2	8.33% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	8.33% 1	0.00% 0	
Northam-Pithara Road	0.00% 0	9.09% 1	0.00% 0	18.18% 2	9.09% 1	9.09% 1	18.18% 2	9.09% 1	0.00% 0	9.09% 1	0.00% 0	0.00% 0	9.09% 1	
Salmon Gum Way	8.33% 1	0.00% 0	8.33% 1	8.33% 1	16.67% 2	16.67% 2	8.33% 1	8.33% 1	8.33% 1	8.33% 1	0.00% 0	0.00% 0	0.00% 0	
Lockyer Street	0.00% 0	10.00% 1	0.00% 0	20.00% 2	10.00% 1	10.00% 1	10.00% 1	20.00% 2	10.00% 1	10.00% 1	0.00% 0	0.00% 0	0.00% 0	
Eaton Street	0.00% 0	0.00% 0	20.00% 2	0.00% 0	0.00% 0	0.00% 0	20.00% 2	20.00% 2	10.00% 1	10.00% 1	20.00% 2	0.00% 0	0.00% 0	
Hoddy Street	6.67% 1	20.00% 3	20.00% 3	6.67% 1	6.67% 1	0.00% 0	6.67% 1	13.33% 2	6.67% 1	6.67% 1	0.00% 0	6.67% 1	0.00% 0	
Forrest Street	21.43% 3	7.14% 1	14.29% 2	14.29% 2	0.00% 0	7.14% 1	0.00% 0	0.00% 0	7.14% 1	14.29% 2	7.14% 1	0.00% 0	7.14% 1	
Railway Terrace	18.75% 3	25.00% 4	12.50% 2	18.75% 3	12.50% 2	0.00% 0	6.25% 1	0.00% 0	0.00% 0	6.25% 1	0.00% 0	0.00% 0	0.00% 0	
Beecroft Road	0.00% 0	0.00% 0	0.00% 0	0.00% 0	11.11% 1	0.00% 0	11.11% 1	0.00% 0	0.00% 0	11.11% 1	55.56% 5	11.11% 1	0.00% 0	
Main Street	0.00% 0	0.00% 0	7.69% 1	7.69% 1	15.38% 2	0.00% 0	0.00% 0	7.69% 1	0.00% 0	0.00% 0	0.00% 0	38.46% 5	15.38% 2	
Edwardes Street	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	11.11% 1	55.56% 5	
William Street	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	
James Street	0.00% 0	0.00% 0	8.33% 1	16.67% 2	8.33% 1	0.00% 0	0.00% 0	0.00% 0	8.33% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	
Forward Street	7.69% 1	7.69% 1	0.00% 0	7.69% 1	7.69% 1	7.69% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	7.69% 1	0.00% 0	0.00% 0	
High Street	9.09% 1	0.00% 0	9.09% 1	0.00% 0	18.18% 2	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	
Wollyam Street	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	
Bowen Street	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	

ACTIVE TRAVEL SURVEY

Q13 Why do you use this road(s)? (please describe)

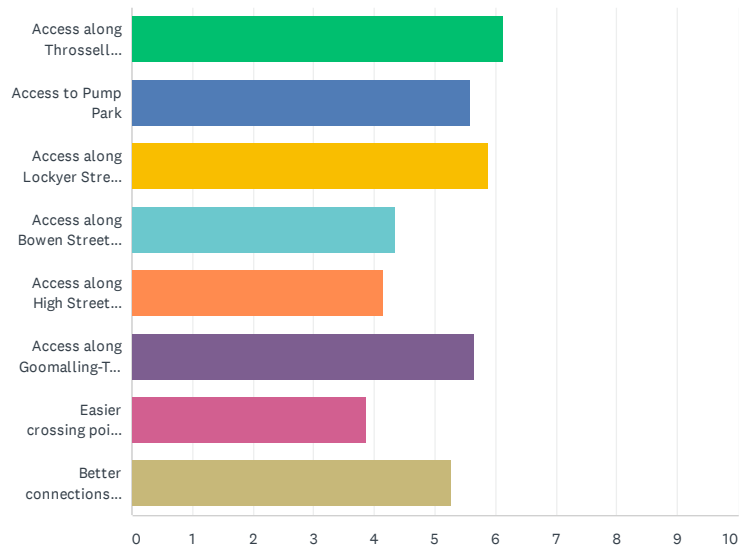
Answered: 16 Skipped: 4

#	RESPONSES	DATE
1	main routes to recreation precinct, work and cafe/shops	2/12/2020 9:11 AM
2	Pathways to swimming pool, pavilion, main street and friends houses	2/11/2020 3:18 PM
3	Where I live	2/10/2020 2:51 PM
4	to get to schools, sports oval and complex and in the summer pool	2/10/2020 12:13 PM
5	To go to the shops, servo and schools	2/10/2020 11:55 AM
6	like to ride/run on the outskirts of town, longer routes and less traffic	2/10/2020 11:23 AM
7	I don't cycle in Goomalling	2/10/2020 11:20 AM
8	Direct route for places i need to go	2/10/2020 11:17 AM
9	Goomalling - Calingiri Road (I live there - very close to town)	2/10/2020 11:15 AM
10	To travel to the swimming pool, service station and for a ride around the block with the children.	1/28/2020 1:57 PM
11	To get into town	1/27/2020 9:15 AM
12	Only way from house to town.	1/25/2020 3:53 PM
13	To gain access to town. I have to go up Grange Street as Toodyay Road is too dangerous.	1/25/2020 9:03 AM
14	gets me from home to town	1/25/2020 7:55 AM
15	Walking track	1/25/2020 7:42 AM
16	It's a nice route	1/25/2020 6:07 AM

ACTIVE TRAVEL SURVEY

Q14 What would be your top 5 priority project(s) to encourage more cycling? (please rank in order of most desired, with 1 being the most desired)

Answered: 20 Skipped: 0

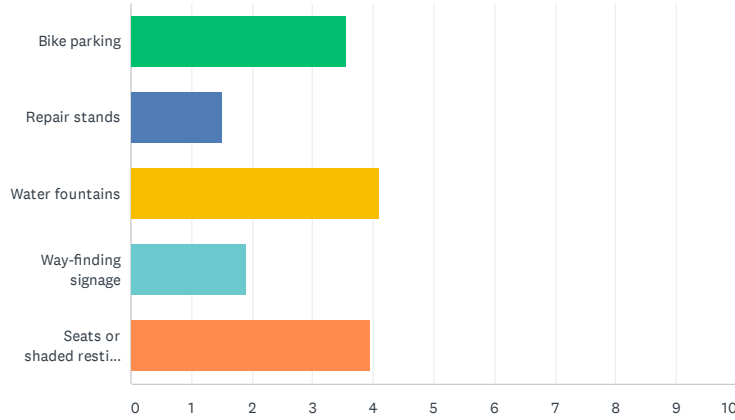


	1	2	3	4	5	6	7	8	TOTAL	SCORE
Access along Throssell Street between the Caravan Park and Railway Terrace	35.71% 5	7.14% 1	21.43% 3	7.14% 1	28.57% 4	0.00% 0	0.00% 0	0.00% 0	14	6.14
Access to Pump Park	16.67% 2	16.67% 2	16.67% 2	33.33% 4	0.00% 0	8.33% 1	8.33% 1	0.00% 0	12	5.58
Access along Lockyer Street between Railway Terrace and Quinlan Street	11.76% 2	23.53% 4	29.41% 5	11.76% 2	23.53% 4	0.00% 0	0.00% 0	0.00% 0	17	5.88
Access along Bowen Street between Boddy Street and Forrest Street	0.00% 0	14.29% 2	7.14% 1	35.71% 5	0.00% 0	35.71% 5	0.00% 0	7.14% 1	14	4.36
Access along High Street between James Street and Throssell Street	0.00% 0	7.14% 1	14.29% 2	21.43% 3	28.57% 4	0.00% 0	28.57% 4	0.00% 0	14	4.14
Access along Goomalling-Toodyay Road	42.86% 6	7.14% 1	7.14% 1	7.14% 1	7.14% 1	14.29% 2	7.14% 1	7.14% 1	14	5.64
Easier crossing points along Railway Terrace	5.88% 1	23.53% 4	5.88% 1	0.00% 0	17.65% 3	0.00% 0	23.53% 4	23.53% 4	17	3.88
Better connections between paths	26.67% 4	26.67% 4	13.33% 2	0.00% 0	0.00% 0	6.67% 1	0.00% 0	26.67% 4	15	5.27

ACTIVE TRAVEL SURVEY

Q15 What type of facilities would you like to see more of? (Please rank in order of most desired, with 1 being the most desired)

Answered: 20 Skipped: 0



	1	2	3	4	5	TOTAL	SCORE
Bike parking	30.00% 6	20.00% 4	30.00% 6	15.00% 3	5.00% 1	20	3.55
Repair stands	0.00% 0	5.00% 1	10.00% 2	15.00% 3	70.00% 14	20	1.50
Water fountains	45.00% 9	30.00% 6	15.00% 3	10.00% 2	0.00% 0	20	4.10
Way-finding signage	0.00% 0	0.00% 0	15.00% 3	60.00% 12	25.00% 5	20	1.90
Seats or shaded resting areas	25.00% 5	45.00% 9	30.00% 6	0.00% 0	0.00% 0	20	3.95

ACTIVE TRAVEL SURVEY

Q16 Do you have any other comments or feedback?

Answered: 8 Skipped: 12

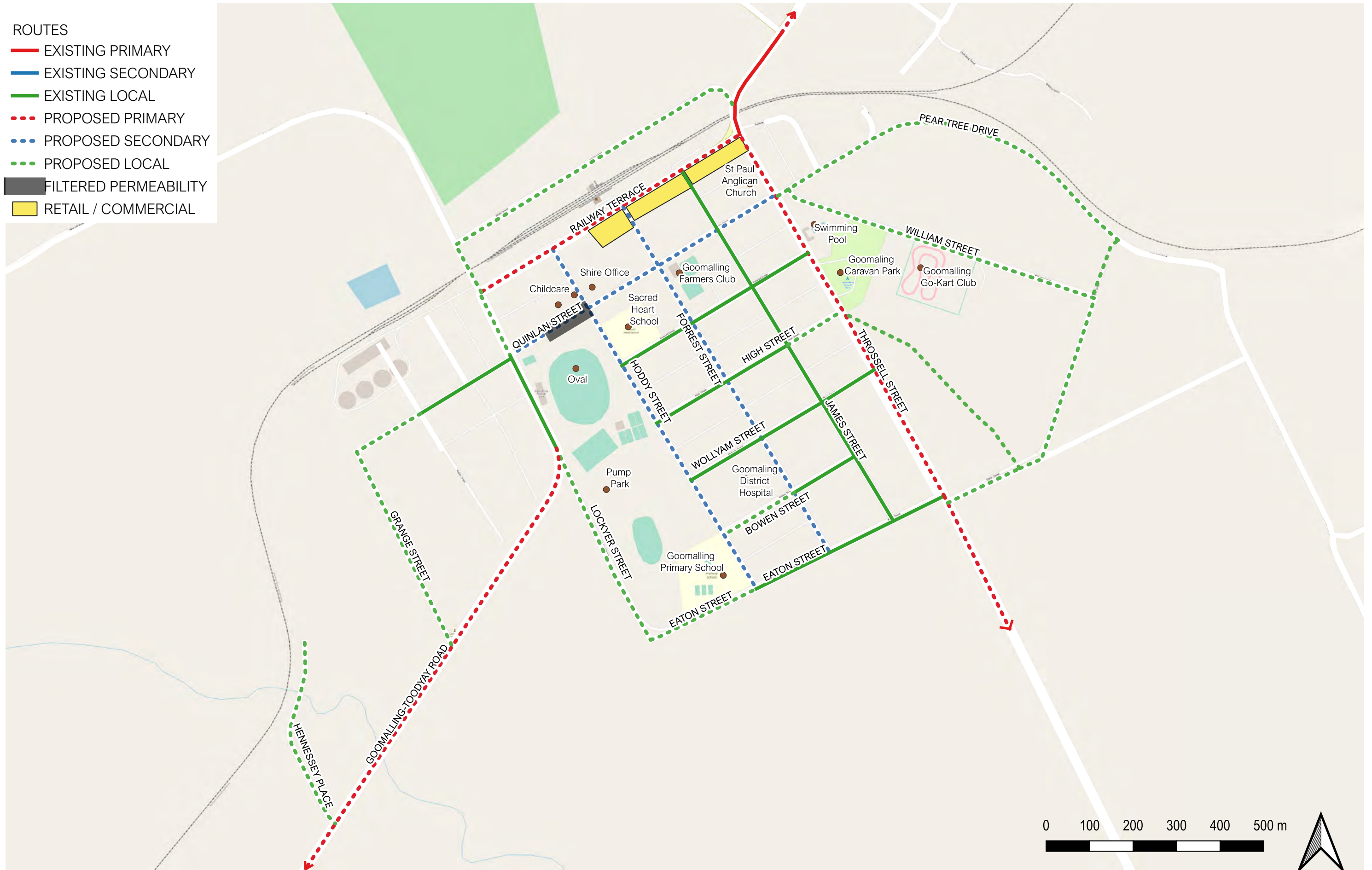
#	RESPONSES	DATE
1	More shady tree appropriate for use near pathways to make riding accessible in summer.	2/12/2020 9:11 AM
2	locations of some trees may lift new pathways	2/11/2020 3:18 PM
3	if they had more paths and it was safer to ride i believe more people would use these paths more and would rise to school and also work.	2/10/2020 12:13 PM
4	It would be fantastic to see more people cycling around Goomalling!! Thank you! :)	2/10/2020 11:55 AM
5	Q 14. no. 2 Salmon gum way/york gum drive pathways	2/10/2020 11:23 AM
6	Brilliant and this survey is taking place. We want to encourage an active lifestyle for our children & riding is so enjoyable for families. It would be great to know we are safe when riding.	1/25/2020 9:03 AM
7	The ramps onto footpaths off roads need improving for safe walking / bikes	1/25/2020 7:42 AM
8	No	1/25/2020 6:07 AM

B. CYCLING NETWORK HIERARCHY

B

CYCLING NETWORK HIERARCHY

- ROUTES
- EXISTING PRIMARY
 - EXISTING SECONDARY
 - EXISTING LOCAL
 - - - PROPOSED PRIMARY
 - - - PROPOSED SECONDARY
 - - - PROPOSED LOCAL
 - FILTERED PERMEABILITY
 - RETAIL / COMMERCIAL



GOOMALLING BIKE PLAN //
07/04/2020
Issue: A-Dr

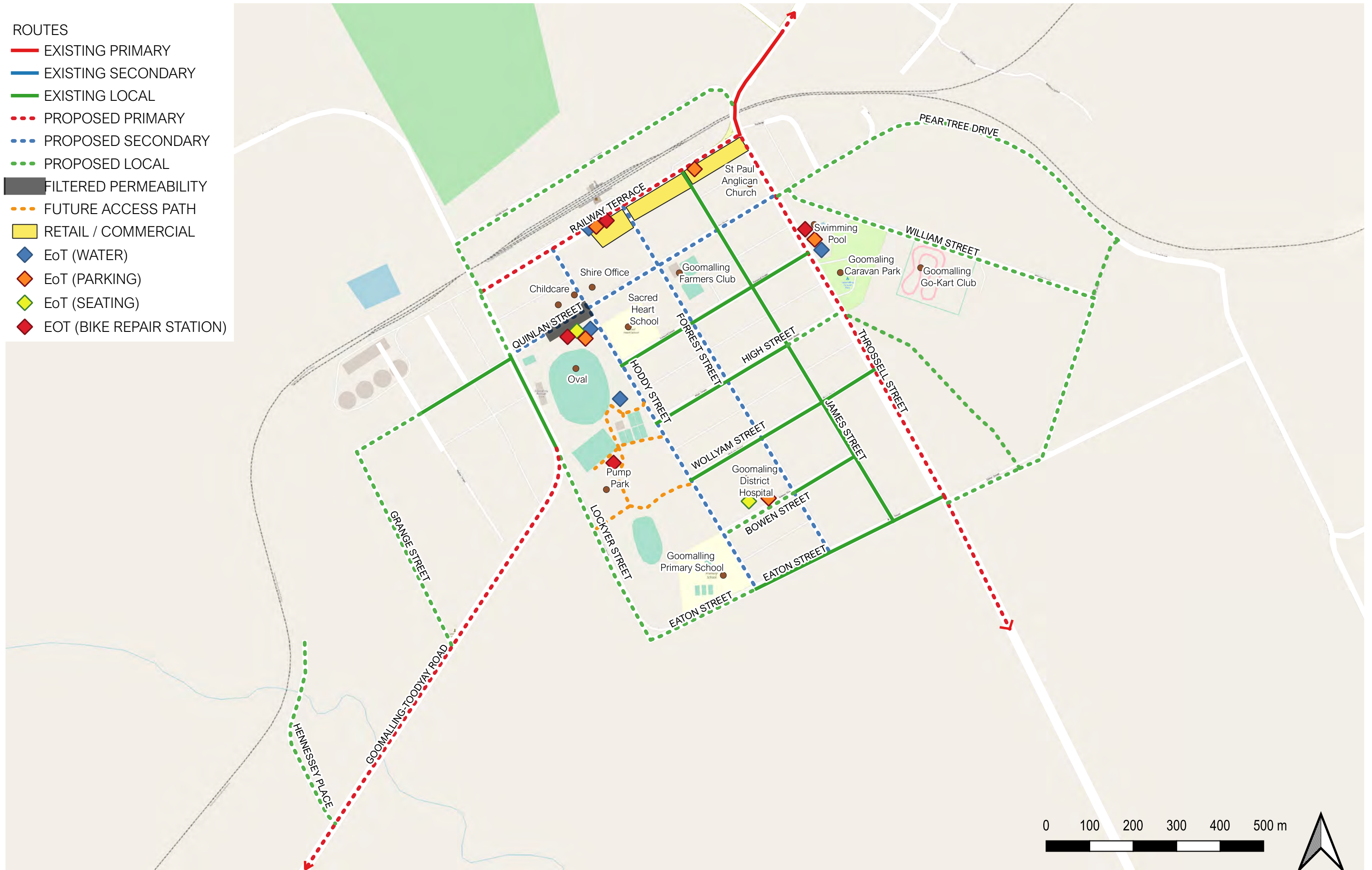


C. CYCLING NETWORK FEATURES, END OF TRIP FACILITIES



END OF TRIP FACILITIES

- ROUTES**
- EXISTING PRIMARY
 - EXISTING SECONDARY
 - EXISTING LOCAL
 - ... PROPOSED PRIMARY
 - ... PROPOSED SECONDARY
 - ... PROPOSED LOCAL
 - FILTERED PERMEABILITY
 - - - FUTURE ACCESS PATH
 - RETAIL / COMMERCIAL
 - ◆ EoT (WATER)
 - ◆ EoT (PARKING)
 - ◆ EoT (SEATING)
 - ◆ EoT (BIKE REPAIR STATION)



CYCLING NETWORK FEATURES

- ROUTES**
- EXISTING PRIMARY
 - EXISTING SECONDARY
 - EXISTING LOCAL
 - - - PROPOSED PRIMARY
 - - - PROPOSED SECONDARY
 - - - PROPOSED LOCAL
 - FILTERED PERMEABILITY
 - - - FUTURE ACCESS PATH
 - RETAIL / COMMERCIAL
 - CROSSING POINTS
 - ◆ EoT (WATER)
 - ◆ EoT (PARKING)
 - ◆ EoT (SEATING)
 - ◆ EOT (BIKE REPAIR STATION)

