



Department of
Transport



ESPERANCE

2050 CYCLING STRATEGY



EXECUTIVE SUMMARY

Cities and towns with high levels of cycling enjoy a range of economic, environmental and social benefits. Not only is cycling proven to reduce traffic congestion and improve air quality, it also helps to create more vibrant and welcoming communities. Cycling can facilitate new industries (such as cycle-tourism) and more generally, it enables people to live happier, healthier and more active lives. Fundamentally, increasing cycling mode share is about improving quality of life – something that is critical for attracting and retaining people in regional areas such as Esperance.

The key to increasing cycling mode share in Esperance is providing infrastructure which is not only safe and convenient, but also appealing when compared with other modes of transport. To achieve this, the cycling network needs to be continuous, interconnected and fully integrated with adjoining land uses. If we are serious about reducing car dependency and helping people prioritise active transport choices for short trips, such as those to schools, shops and workplaces, these priorities need to be reflected in the way our communities are planned and developed.

In recent years, the Shire of Esperance (the Shire) has delivered a number of strategically important cycling projects and policies. There are already great examples of cycling infrastructure around the region. This includes the high-quality paths along the foreshore corridor, Pink Lake Road and along parts of the Harbour Road corridor. The Shire has also developed a comprehensive network of wide footpaths which help facilitate local trips through suburban areas.

Despite this, cycling in some areas (such as cross-town routes and roads in built up areas such as Chadwick) remains unappealing due to the network's lack of continuity, connectivity, and separation from motorised traffic. Whilst the local footpath network provides a high level of coverage, its built form could be improved to better cater for people riding in Esperance.

This strategy sets out a blueprint for connecting, enhancing and extending Esperance's cycling network through the development of a network of off-road shared paths and trails, additional formalised routes and low-stress residential streets. Opportunities to improve safety for road cyclists are also considered in this strategy.

This long-term, aspirational strategy has been developed by the Department of Transport (DoT) in collaboration with the Shire. It is accompanied by a short-term action plan that reflects the priorities shared by local and State Government. The plan will help to inform future investment through the Regional Bike Network (RBN) Grants Program, the Shire's Capital Works Program and potentially other funding sources.

Extensive consultation has been undertaken with key stakeholders such as Shire and State representatives, cycling groups and the local community during the development of this strategy. Community consultation sessions have helped to refine the overarching aims and objectives of the strategy, as well as clarify expectations in terms of where key routes are most needed and the requirements of different user groups. Community and stakeholder feedback on the draft strategy has also informed the priority projects outlined in the Action Plan (Section 5).

In progressing the cycling infrastructure projects identified in this document, it is important to consider potential environmental impacts and ensure that the unique characteristics of the area are maintained. Some locations may be limited by legislation and policy which could result in alignments changing as further feasibility and planning is undertaken.

There are a number of opportunities to create world-class cycling facilities in the Esperance region. An extension of the network east and west would create a 25 km coastal cycling route between Bandy Creek and Eleven Mile Lagoon. New formalised paths and routes will complete links across town and between previously disconnected suburbs, connecting residents to the places that they live, work and play. Enhancement of local trails could complement the active transport network and potentially attract visitors from further afield, inspire them to stay longer in the region as well as explore on two wheels rather than four. This strategy brings all this together, and outlines how Esperance can realise its full cycling potential, leading to a healthier, happier and more engaged community.

WHY DO WE WANT MORE PEOPLE CYCLING

TO ENABLE PEOPLE TO ENJOY HEALTHIER AND MORE ACTIVE LIVES

Obesity rates are 10% higher in regional WA compared to Perth. As a result, people living in regional areas are 1.25 times more likely to suffer from cardiovascular disease and 1.4 times more likely to be hospitalised for diabetes.

TO IMPROVE MENTAL HEALTH AND SOCIAL INCLUSION

People who engage in regular exercise experience reduced stress, improved sleeping patterns, improved concentration and a better outlook on life. More people riding and walking provides greater opportunities for incidental interaction on the streets, enhancing a sense of community.

TO HELP FAMILIES SAVE MONEY, AND INCREASE TRANSPORT OPTIONS

Families who have at least one person commuting by bike (instead of car) save on average \$8 per day which equates to nearly \$2,000 per year. Cycling provides an economic and independent travel option for those who might otherwise have their travel options restricted.



TO IMPROVE THE STRENGTH AND RESILIENCE OF OUR REGIONAL COMMUNITIES

The popularity of outdoor and adventure tourism is increasing all over the world, with cycle-tourism identified as a key growth area. In 2015, almost 3 million people went cycling while on holiday in Australia.

TO REDUCE PRESSURE ON THE PUBLIC PURSE

A study commissioned by the RAC found that the economic, social, health and environmental benefits attributed to cycling infrastructure outweigh their costs incurred by between 3.4 and 5.4 times. In dollar terms, it is estimated that for every kilometre cycled, \$1.42 of economic benefits are generated for the community.



TO REDUCE TRANSPORT IMPACTS ON THE ENVIRONMENT

Transport is Australia's third largest source of greenhouse gas emissions, with emissions from transport increasing nearly 60% since 1990, more than any other sector. In Australia, cars are responsible for roughly half of all transport emissions.

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1. INTRODUCTION

1.1 Guiding principles

The Shire of Esperance (the Shire) has a vision to create a vibrant, welcoming and supportive community that values its social connections and natural landscape, as outlined in the *Strategic Community Plan 2017-2027*.

The *Esperance 2050 Cycling Strategy* aims to create a safe, direct, comfortable and integrated cycling network. Connecting people to where they work, learn and play, comprehensive cycle networks promote social inclusion, lead to more active and vibrant communities and help to showcase natural landscapes to residents and visitors alike.

The cycle network proposed in this strategy has been developed based on the following principles:

Safe: The 2050 cycling network should be built to a standard which reflects the “8 to 80” design philosophy. People of all ages should be able to cycle safely and confidently to the places they need and want to go. Unprotected cycling facilities located on busy roads are not considered suitable for vulnerable road users and will not encourage more people to cycle more often.

Connected: Like a road network, all cycling routes should connect to something at each end (whether that is a destination or another cycling route).

The “8 to 80” design philosophy is about creating people-orientated towns and cities which are suitable for everyone. It is based on the notion that if you design a cycle path for example, which caters for the needs of an 8 or 80 year old, it is likely to be suitable for everyone.

Widespread: In suburbs and towns, the network should be extensive enough for people to safely assume they can get to their destination without encountering hostile traffic conditions. When cycling networks reach a certain level of density it enables families to live comfortably without a second car.

Legible: The cycling network needs to be both intuitive and direct. To achieve this, it makes sense to locate major cycling routes parallel to natural land forms such as rivers and coastlines or within existing road and rail corridors. The development of coherent wayfinding initiatives is also important in supporting legibility.

Aspirational: Given the long-term nature of this strategy, several ambitious ideas have been put forward to help enable residents to adopt cycling as a viable and priority transport mode, as well as encourage visitors to stay longer and explore Esperance comfortably by bike. This includes extensions to the flagship coastal cycling trail, loops taking in the lakes and longer distance routes that embrace the Shire’s amazing natural assets.

Achievable: For the most part, the proposals put forward in this strategy adopt tried-and-tested planning principles. The case studies chosen provide regional, interstate and international examples of similar projects undertaken in recent years.

Cycling disciplines that are dependent on purpose-built facilities (such as BMX parks, downhill mountain bike trails and velodromes for track cycling) typically perform non-transport related functions and as such are not considered within this strategy. However, the existing and planned locations of these facilities have been considered as part of planning the overall network.



1.2 Esperance in context

The Shire is home to over 14,000 people spread across 42,000 square kilometres. It extends from Munglinup in the west, to Israelite Bay in the east, to 50 km north of Salmon Gums, and embraces over 400 km of spectacular coastline.

With a population of 14,236 (2016), the Shire has one of the lowest population densities to be found anywhere. Most of this population is concentrated around the Esperance townsite (10,421), with the remaining residents living on the outskirts of the urban area or rural-based. As such, this strategy focuses on strategic cycling projects within and around the Esperance townsite, with some wider reaching regional projects embracing the coastline and connecting tourist facilities such as caravan parks to nearby visitor attractions.

Several small townsites are scattered throughout the Shire, including Cascade in the west, Condungup in the east, and Gibson, Scaddan, Grass Patch and Salmon Gums on the highway linking Esperance with the north. The study area is shown in Figure 1.1.

Esperance has significant coastal assets and a mixed economy of agriculture, mining, tourism and fishing. Esperance Port provides infrastructure for the whole region, being the entry and exit point for produce from the agricultural, pastoral and resources industries throughout the Goldfields-Esperance region. Tourism based on natural attractions is an important and growing industry in the region.

1.3 The need for a long-term regional cycling strategy

Esperance's most recent cycling strategy is the *Esperance Trails Master Plan 2007-2017*, a document that has guided the development of the Esperance cycling network for the past 10 years. Along with the Shire's extensive investment in footpaths, the Trails Master Plan has served the region well as many of the priority projects have been completed, but the way forward for cycling in the region needs to be reconsidered.

Other reasons for preparing this strategy include:

- To address key opportunities which may have previously been overlooked, particularly in relation to future land use and transport developments;
- To help guide investment between local government and State Government;

- To facilitate the planning and development of long-distance cycling routes;
- To ensure that the standard of future cycling facilities meets current best practice; and
- To adopt a consistent approach with other long-term cycling strategies being developed across WA.

Going forward, it is important that this strategy is reviewed on a regular basis to ensure it keeps up with the changing face of Esperance and reflects future changes to cycling as a mode of transport. A framework outlining how this strategy will be maintained is provided in Section 5.

1.3.1 Expected changes in population

The population of the Esperance area remained relatively static between 2012 and 2016, with the Shire's population growing by a little over 0.1% in that time¹. However, the *Esperance Local Planning Strategy 2016* forecasts up to 1,300 new residents in the Shire to 2026.

In 2011, Esperance was identified by the Department of Primary Industries and Regional Development as one of nine WA SuperTowns with the potential to accommodate a greater proportion of the state's expected population increase through to 2056. Population is expected to double in this time across WA, and the SuperTowns project was devised to assist these nine towns to plan and prepare for this increase to share the growth and reduce pressure on metropolitan Perth. To achieve and sustain such growth in Esperance requires substantial planning in many areas, not least transport.

The vast majority of population growth, regardless of rate, is likely to be focused on the existing Esperance townsite. The Shire has developed and endorsed a number of Local Structure Plans to guide the development of additional residential lots within and on the periphery of the townsite, as well as designated areas for future industrial employment land.

1. ABS, Region Data Summary for Esperance

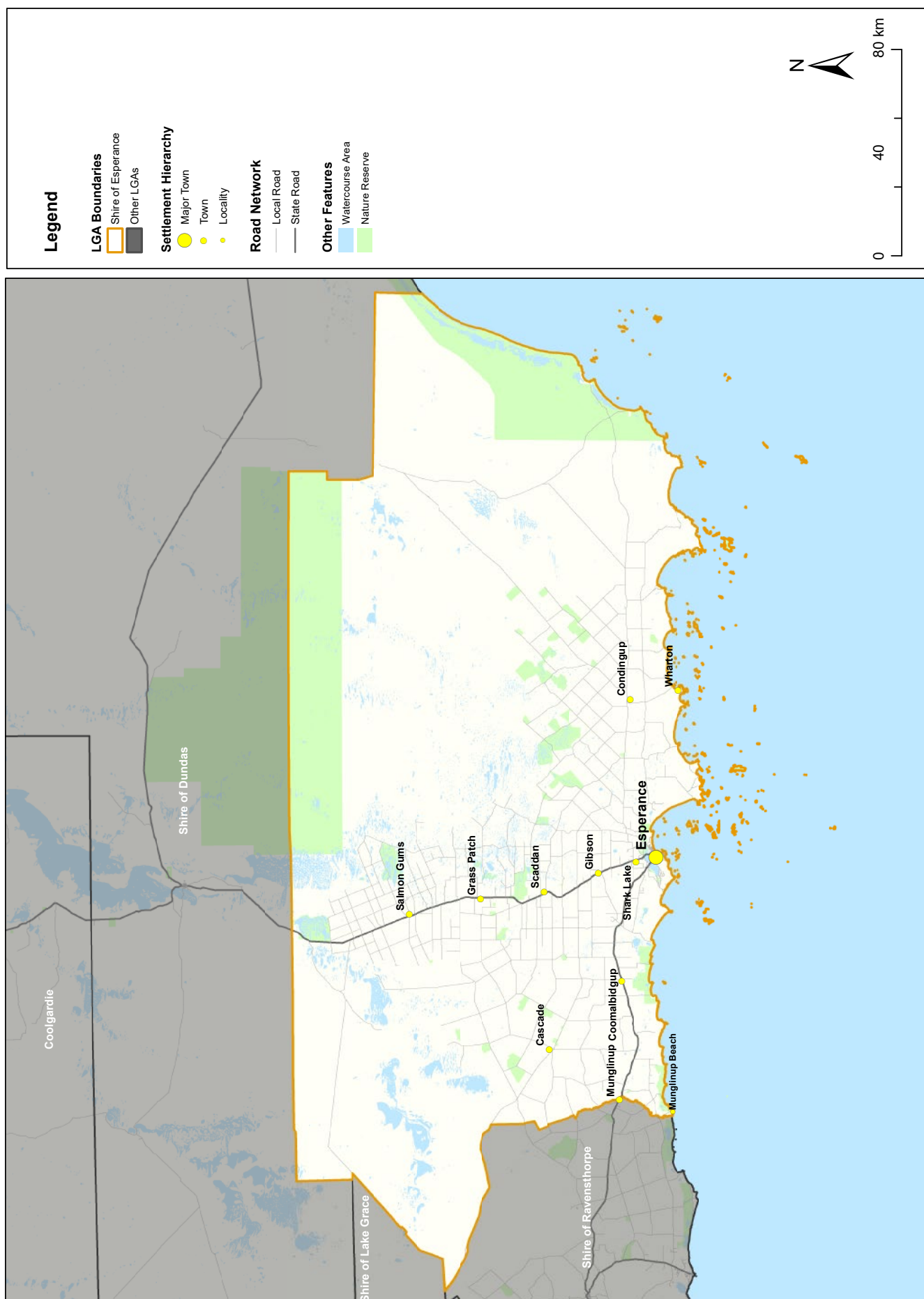


Figure 1.1 Study area

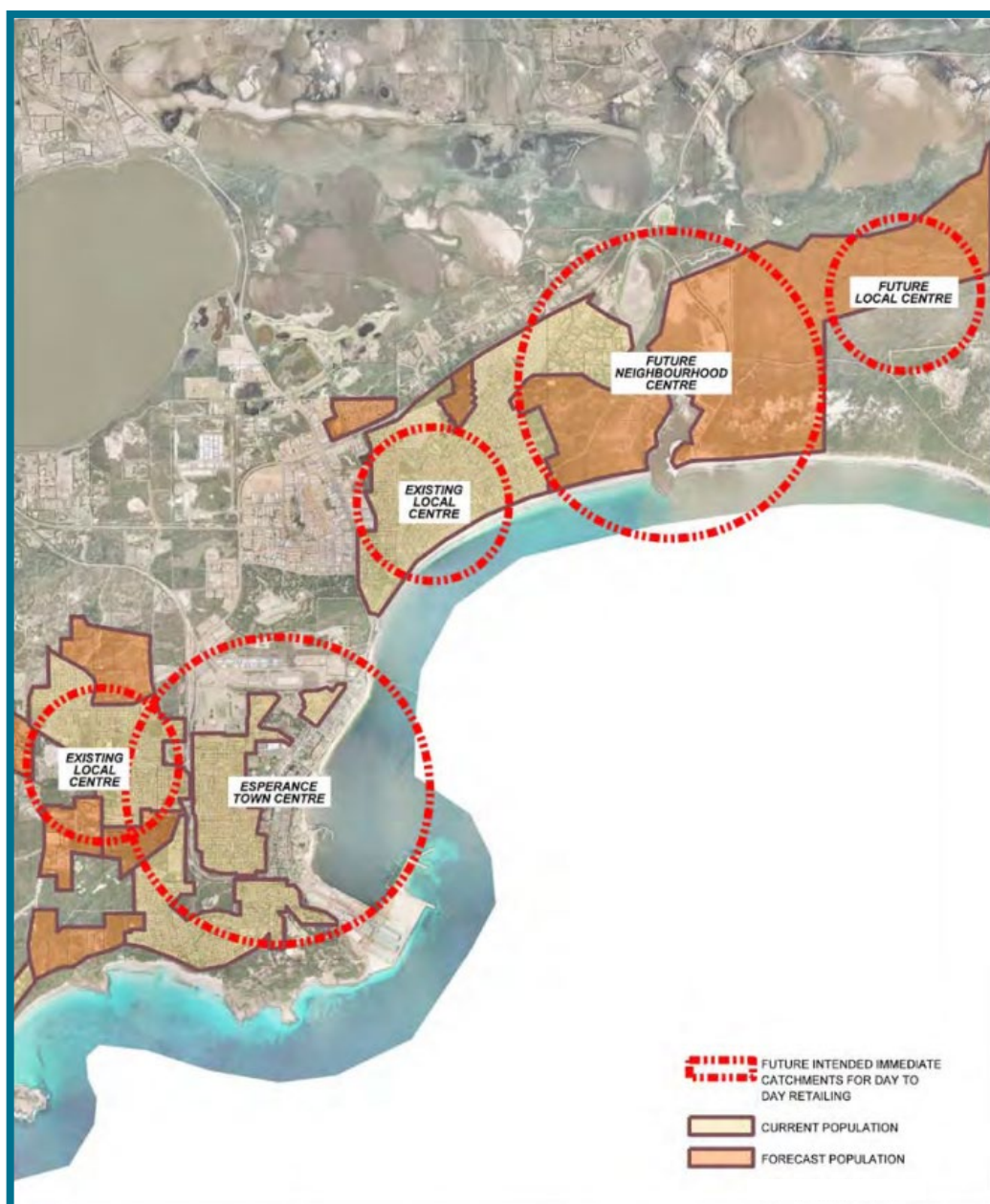
1.3.2 Expected changes in land use

As outlined in the *Esperance Local Planning Strategy* (2017), the principal expansion of the townsite is planned along the north-eastern axis from Castletown to and beyond Bandy Creek Harbour. Land for large lot industrial expansion and inland port facilities are identified in the Shark Lake area to the north. Limited residential or industrial growth is envisaged in the other townsites which, for the foreseeable future, are planned to remain as local service centres for the surrounding agricultural land.

Key to Esperance's growth and longevity is the revitalisation of the town centre, which will be guided by the *Esperance Town Centre Revitalisation Master Plan 2015-2035*. The Master Plan envisages

enhancing and future-proofing the town centre as the heart of Esperance and the economic, social and cultural hub of the south east region. The Master Plan recognises that improvements to cycling amenity and connections are needed to create a more cycle-friendly town centre.

The Shire's *Commercial Strategy* (2011) outlines its Activity Centres Hierarchy Distribution (see Figure 1.2), which provides an insight into the location of existing and future local and neighbourhood centres. It is critical that appropriate cycle routes and infrastructure are planned well in advance so that activity centres are linked as development takes place and before transport habits are established.



Source: *Commercial Strategy 2011*

Figure 1.2 Residential and commercial expansion will drive growth in local cycling demand along the northeast corridor.

1.3.3 Expected changes to transport

Strategic transport improvements for the area are mainly focused on the efficient and safe transport of freight to and from Esperance Port. It is expected that the port will grow in importance over the coming years and this will result in increased volumes of traffic, particularly heavy vehicles. While much of the freight will be transported via rail, a significant proportion of this will still require road transport and associated infrastructure.

As outlined in Section 1.1, unprotected cycling facilities on busy roads (particularly those with high heavy vehicle volumes) are considered unsuitable for vulnerable road users and do little to encourage more people to cycle, more often. Accommodating a growing freight industry while simultaneously encouraging greater cycling participation requires clear thought and planning. Diverting heavy vehicle routes onto alternate routes can help to improve safety for vulnerable road users, however this is not always possible. Considering how protected cycling infrastructure can be provided during the construction of new roads is imperative, given that it can be difficult (and prohibitively expensive) to retrofit them at a later stage.

There are already good examples of this being achieved in Esperance. DoT's *Western Australian Regional Freight Transport Network Plan* (2013) identified a number of strategic priorities throughout the Goldfields-Esperance region. One of these priorities was the upgrade of the Esperance Port Access Corridor. Stage one is now complete and has significantly improved safety for all road users, including cyclists, through the provision of a high quality shared path and grade-separated crossings across the railway line. Stage two (realignment of Barney Hill and construction of a dual carriageway for harbour access through to the Shark Lake Industrial area) is listed as a long-term project. Whilst there is currently no funding allocated, completion of this project would result in the construction of an upgraded limited access road linking Harbour Road directly to Coolgardie-Esperance Highway. Such a project has the potential to complete a north-south cycling spine through Esperance, including separated paths and safe crossing points.

Main Roads WA (Main Roads) is also progressively widening and reconstructing both South Coast Highway and Coolgardie-Esperance Highway, with the upgraded cross-sections including 1.5-2.0m wide sealed shoulders in each direction. This work will provide a safer riding environment for the more confident training and touring rider.

The *Esperance Local Planning Strategy* (2017) identifies that continuous upgrades are planned for the tourist drive along The Esplanade, Twilight Beach Road, Eleven Mile Beach Road and Pink Lake Road. This work will result in associated shared use paths, vantage points, parking areas and improved infrastructure for all users including recreational and training cyclists.

The new weir at Bandy Creek includes an elevated road platform. Accessible to pedestrians, cyclists, emergency and service vehicles, the new road will provide cyclists with a more direct route to Wylie Bay from Castletown and Bandy Creek.

1.3.4 Relationship with other documents

The *2014-2031 Western Australian Bicycle Network (WABN) Plan* identifies the need to review cycling facilities in WA's regional centres. Although many regional local governments have their own local bike plans, it is recognised that there is a need to develop long-term regional strategies which have an aspirational focus and, where appropriate, span across entire regions. Key objectives of this process include improving connections to activity centres and schools, identifying inter-regional routes and harnessing the potential of cycle-tourism.

Funding applications for the development of key strategic projects within these areas can be made through the RBN Grants Program. This program makes funds available for the planning, design and construction of cycling infrastructure by local governments in regional WA, with funding matched on a dollar-for-dollar basis.

Long-term cycling strategies such as this do not preclude local governments from preparing a local bike plan. While the purpose of this strategy is to provide a blueprint for Esperance's 2050 cycling network, a local bike plan may be used to identify short-term priorities such as upgrades to existing infrastructure and maintenance requirements. Local bike plans are also important for outlining strategies around the activation of cycling infrastructure and various education, promotion and encouragement strategies aimed at affecting behavioural change.

1.4 Background research and analysis

1.4.1 Document review

In preparing this strategy several documents were reviewed pertaining to land use and transport in Esperance. Combined with extensive stakeholder engagement, these documents were critical to understanding previous and current approaches to planning and designing for cycling and where planning and feasibility for certain routes has already been undertaken. The most important of these documents was the *Esperance Trails Master Plan 2007-2017*. A list of these documents is contained in Appendix B.

1.4.2 Mapping of current and future trip generators

Before commencing the development of the network, all existing and known future trip attractors were mapped. Trip attractors are defined as any place that someone could reasonably be expected to need or want to cycle to and include places like schools, shopping centres, industrial areas, tourist destinations, health campuses and sporting precincts. The trip attractors are shown together with the proposed 2050 cycling network in the figures contained in Section 3.

1.4.3 Analysis of crash data

The most recent five-year crash statistics (2014-2018) were obtained from Main Roads' Crash Analysis Reporting System (CARS). Both pedestrian and cyclist crash data was obtained, noting that areas which are dangerous for pedestrians are often also dangerous for cyclists. An analysis of this data is provided in Appendix B.

1.4.4 Analysis of GPS travel data

The GPS mapping tool, Strava Labs, was used to better understand which parts of the Shire's road and path networks are most heavily used by cyclists. Strava is a website and mobile app which is used to track athletic activity via GPS. Despite the usefulness of this information, it should be noted that GPS travel data is typically representative of people who cycle for training or high-intensity recreational purposes. An analysis of this data is contained in Appendix B.

1.4.5 Community consultation

Consultation with the local community was central to the development of the *Esperance 2050 Cycling Strategy*.

The objectives of the consultation were to:

- Help refine the overarching aims and objectives of the strategy;
- Gain an understanding of the community's expectations when it comes to cycling infrastructure, as well as the needs of different user groups;
- Reveal the major issues and missing links associated with the existing cycle network;
- Provide the community with the opportunity to share their ideas; and
- Seek local buy in and ongoing community support for the strategy.

The consultation was carried out in two distinct phases. Phase 1 was undertaken shortly after the project commenced and involved several informal drop-in sessions. Community members were also able to provide written submissions to contribute to the development of the strategy. Phase 2 consisted of a formal community comment period. A detailed analysis of the community consultation is contained in Appendix C.

1.4.6 Stakeholder consultation

This strategy has been developed by DoT in partnership with the Shire. An internal working group consisting of representatives from across the Shire's directorates was established to provide input and guide the development of the document.

A number of other government and non-government stakeholders were consulted, including:

- Esperance Chamber of Commerce and Industry
- Goldfields Esperance Development Commission
- Department of Local Government, Sport and Cultural Industries (DLGSC)
- Department of Biodiversity, Conservation and Attractions (DBCA)
- Department of Water and Environmental Regulation (DWER)
- Main Roads
- Tourism WA
- Road Safety Commission
- WestCycle, Bicycling WA and local cycle groups.

The draft strategy has also been presented to the WA Trails Reference Group and the WABN Cycling Operations Reference Group, both of which include additional stakeholders and interest groups.

1.4.7 Review of the existing cycling network

A technical review of the existing cycling network was undertaken, along with consultation with the community, to identify strengths, weaknesses and opportunities.

Esperance benefits from existing high-quality cycling infrastructure located along the foreshore, Pink Lake Road and sections of the Harbour Road corridor. The Shire has also developed a comprehensive network of wide footpaths in recent years which help facilitate local cycling trips through suburban areas. However, several opportunities remain to enhance the existing network and better cater for cycling trips.

Along with the development of new cycle routes, these opportunities include:

- Improving connectivity for cross-town trips by constructing missing links;
- Upgrading indirect crossing points on the local network to improve continuity;
- Providing new or upgrading existing major road crossings to improve levels of safety and comfort; and
- Widening older sections of shared paths to provide more comfortable walking and cycling experiences.

The maps contained in the Action Plan (Section 5) classify the existing cycle network in the context of the proposed network hierarchy.



Figure 1.3

There are a number of opportunities to build on existing high quality cycling infrastructure in Esperance and provide a more comfortable cycling experience. This includes providing more direct crossings points, providing new or upgraded major road crossings, completing missing links and widening older sections of shared paths.

2. REGIONAL ROUTE HIERARCHY

A hierarchy comprising five types of cycling route has been used to illustrate Esperance's 2050 cycling network. This hierarchy will be adopted for all future cycling strategies in WA. An important aspect of the hierarchy is that unlike many traditional cycling infrastructure plans, routes are defined primarily by function, rather than built form. The key differences between the five types of route are explained in Sections 2.1 to 2.5, with additional detail provided in Appendix A.

2.1 Primary routes

Primary routes form the backbone of Esperance's 2050 cycling network. Sometimes referred to as freeways for bikes, primary routes afford cyclists with safe and generally uninterrupted journeys.

Primary routes should be completely separated from motorised traffic. Due to this, major road and rail corridors, as well as river and ocean foreshores tend to be the most practical locations for these types of facilities.

In terms of built form, primary routes predominantly consist of high-quality shared paths at least 3m in width. To ensure high levels of rideability and legibility, red asphalt is usually the preferred surface treatment.

An important consideration for shared paths is managing safety and ensuring etiquette between different users. In areas of high pedestrian activity, it may be necessary to provide separate walking and cycling facilities.



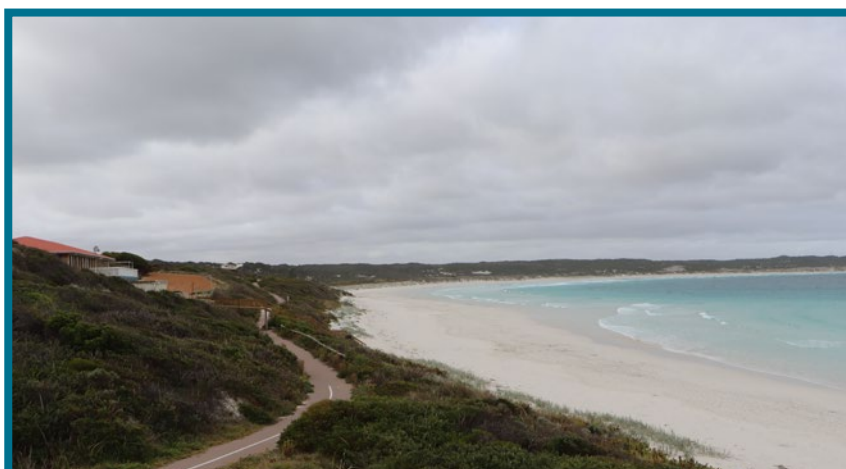
Shared path parallel to a major road



Shared path parallel to active freight rail corridor



Shared path along foreshore



Shared path along coastline

Figure 2.1

Primary routes for the backbone of urban cycling networks and allow cyclists to safely undertake long, uninterrupted journeys.

2.2 Secondary routes

Secondary routes are typically located within urban or built-up environments. The aim of these routes is to provide users with access to and from important trip attractors such as shopping centres and industrial areas, as well as education, health and sporting precincts.

In most cases, secondary routes are located adjacent to busy urban streets and take the form of protected on-road bike lanes. Going forward, it is important that the design of all new cycling infrastructure (including secondary routes) incorporates the “8 to 80” design philosophy. To ensure that on-road cycling infrastructure is safe and attractive to such a wide range of users, separation in the form of kerbed medians is desirable to minimise the interaction between cyclists and vehicular traffic – particularly on busier roads.

Where this is not possible, softer measures such as painted hatching, mountable plastic kerbing or flexible bollards can be considered, however these treatments are normally only acceptable in low speed environments. In some cases, off-road shared paths are the best option for secondary routes.

Unlike primary routes, secondary routes do not necessarily provide users with uninterrupted journeys. Consequently, it is important that appropriate consideration is given to the design of secondary routes at all intersecting roads, but particularly those controlled by either traffic signals or roundabouts. Where possible, priority should be given to the cycling route at intersecting minor roads and driveways.



Bike lane protected by concrete kerb



Shared path protected from parking bays



Shared path separated by plastic bollards along semi-rural road environment



On road bike lane with plastic kerbing for separation

Figure 2.2

Secondary routes are typically found in busy, built-up environments, and can consist of either on-road or off-road cycling infrastructure.

2.3 Local routes

The objective of local routes is to collect cycling traffic from local residential areas and distribute it to the secondary and primary cycling networks. Local routes are also used by cyclists to access a range of lower-order destinations such as local shops and parks. The look and feel of local routes is distinctively different from primary and secondary routes.

Examples of local route treatments include:

- 30 km/h safe active streets which adopt “self-explaining street” and “filtered permeability” urban design principles;

- Very quiet suburban streets, communicated using sharrows² and other signage or way finding;
- Sections of shared path (normally linking two or more quiet streets together); and
- On-road bike lanes (but only on quiet roads with low traffic volumes and where posted speed limits are less than or equal to 50 km/h).

In many cases, a local route may consist of a combination of two or more types of treatment. Where this is the case, the transition from one type of facility to another needs to be carefully considered.



30 km/h safe active street



Way-finding to direct cyclists along local routes



Shared path linking two quiet streets together



One-way slow point with bicycle-bypass facilities

Figure 2.3 Local routes are typically used in connecting residential areas with higher order cycling facilities.

2. Sharrows are a wayfinding tool that also assist cyclists in road positioning and alert motorists to the presence of people on bikes.

2.4 Tourist trails

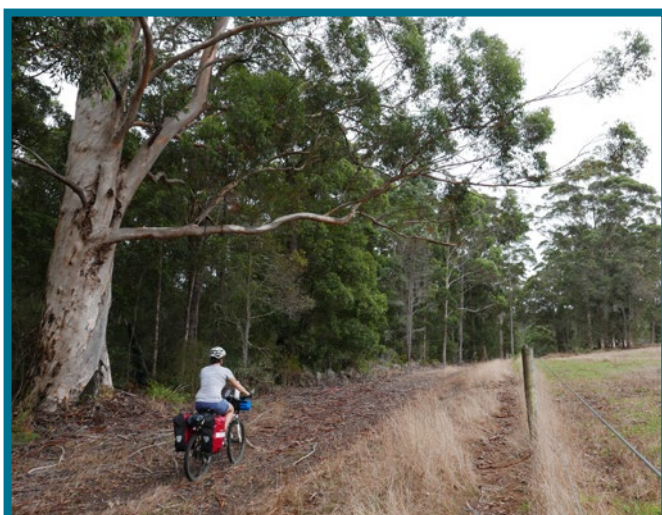
Tourist trails are long-distance, predominantly unsealed trails which are typically used to connect towns. Unlike downhill mountain biking trails, tourist trails are non-technical in design. While there will be some level of crossover, tourist trails provide users with a more passive cycling experience.

In some cases, tourist trails cater for other types of user including bushwalkers, trail runners, horse-riders and motorbike-riders. On such trails, it is essential that paths are managed appropriately to ensure the safety and satisfaction of all user groups.

In terms of their built form, tourist trails should ideally be wide enough to allow two people to ride comfortably side-by-side. As they are often located in remote locations, it is important that extensive wayfinding signage is used to direct users to, from and along the route.

Tourist trails are often constructed along the alignments of disused or closed railways, watercourses (such as rivers, drains and irrigation channels), utility corridors (such as electricity, gas or water supply), as well as fire breaks and other tracks through forested areas including nature reserves and national parks.

Depending on land ownership, the planning, design, construction and maintenance of tourist trails is typically led by local government or the DBCA. Funding is usually sought through the Department of Local Government, Sport and Cultural Industries or Lotterywest (DLGSC). Other government agencies such as DoT and Tourism WA can assist in the planning, design and promotion of these facilities.



Trail along firebreak adjacent to property boundary



Trail along closed rail corridor



Unsealed trail connecting the Esperance coastal path to Pink Lake



Trail within utility corridor

Figure 2.4

Unsealed tourist trails are important in areas where higher standard facilities cannot be justified or where they would spoil the natural environment.

2.5 Road cycling routes

Cycling is one of the most popular forms of recreation in Australia, ranking third for males and fifth for females³. There are two broad types of recreational cyclist in WA – leisure cyclists and sports cyclists. While investment has traditionally been directed towards providing infrastructure which supports leisure cycling, there is an emerging need to provide road cycling routes which cater for the needs and aspirations of people cycling long distances for training, sport or recreational purposes. For this user group, distances of 100 km or more are achievable.

This type of cycling, which is often undertaken by groups or clubs, is commonly carried out on rural and semi-rural roads which tend to feature nice scenery, challenging terrain and low traffic volumes, but are also selected in order to minimise the likelihood of interactions with pedestrians and lower speed cyclists.

Around WA there is a growing need to review the key routes being used by road cyclists in order to improve

safety and user experience. Initiatives may include shoulder widening, pull-off bays, advisory signage, and electronic flashing warning signs which detect when groups of cyclists are using certain sections of road. Detailed assessment is required in partnership with cycling bodies and groups to determine appropriate locations and preferred safety measures, which will likely differ on each route.

Further supporting the safety of road cyclists in WA is the introduction of safe passing legislation. From 30 November 2017, a driver of a motor vehicle must pass a bicycle travelling in the same direction at a safe distance (1 m on roads with a posted speed limit of ≤ 60 km/h and 1.5 m on roads > 60 km/h.) While legislation for passing safely has always existed in WA, these amendments to the *Road Traffic Code 2000* clarify the minimum distance a driver must keep between their vehicle and a bicycle when overtaking. The results of the two-year trial will be evaluated by the Road Safety Commission in 2020.



Figure 2.5 Road cycling routes are predominantly used by people riding for training, sport or recreational purposes and consist of advisory measures (such as signage and electronic flashing warning lights).

3. Participation in Sport and Physical Recreation, Australia, abs.gov.au



3. PROPOSED NETWORK

This strategy covers the Esperance townsite and surrounds, generally stretching to Gibson in the north, Munglinup Beach in the west and Cape Le Grand in the east, with consideration for longer distance connections for touring cyclists.

Figure 3-1 and Figure 3-2 provide an overview of the proposed 2050 cycling network for Esperance and the surrounding area. Key features include:

- A series of **primary routes** converging on the Esperance Town Centre and paralleling significant transport corridors and natural features including:
 - Connecting the town centre to Bandy Creek Harbour and Wylie Bay via The Esplanade and Castletown Quays;
 - Providing a key east-west connection along Pink Lake Road to connect Pink Lake and The Esplanade;
 - Capitalising on Esperance's coastal setting by connecting the town centre to Eleven Mile Lagoon alongside Twilight Beach Road;
 - Providing a safe passage for cyclists to and through the Chadwick industrial area via Harbour Road; and
 - Linking Esperance with Shark Lake and Gibson, either via Coolgardie-Esperance Highway or the railway reserve.
- A network of **secondary routes** complementing and connecting the primary route network, including:
 - Norseman Road, Fisheries Road and Goldfields Road, extending north and north east from the town centre;
 - Johns Street connecting Pink Lake Road to Twilight Beach Road through West Beach;
 - Sheldon Road, linking to the primary routes on Harbour Road and Norseman Road;
 - Sims Street, connecting Harbour Road with Pink Lake Road through Nulsen (via Symons, Dean and Rowse Streets), and continuing onto the Fisheries Road primary route leading out of Esperance.
- A fine-grain network of **local routes**, linking residential areas to schools, shops, employment and community facilities, as well as connecting to higher order cycling facilities.
- A series of shorter **tourist trails** and loops through and connecting DBCA and Shire managed wetland reserves such as Pink Lake, Lake Warden and the Windabout Lakes, and linking to the mountain bike facility at Shark Lake.
- Two potential long distance **tourist trails**, including:
 - Towards Albany, initially extending from Esperance to Lake Monjingup but with the long term vision of connecting with the Munda Biddi Trail (between Mundaring and Albany). Further investigation is required in collaboration with the neighbouring shires of Ravensthorpe and Jerramungup and the City of Albany, as well as DBCA, the WA Trails Reference Group and other key stakeholders.
 - Along the coastline towards Cape Le Grand National Park, linking up and formalising a number of existing informal off-road trails through Nature Reserves and Crown Land.
- A network of **road cycling routes** to better accommodate local and visiting road cyclists, including Eleven Mile Beach Road, Merivale Road, Myrup Road, Shark Lake Road and Stearne Road.

The proposed network includes a series of loop rides of varying lengths to be promoted as tourism experiences in Esperance (refer to Section 4.4).

The exact alignments of some routes may change following further feasibility assessment and consideration of local environmental, heritage and engineering constraints. Of particular relevance to the Esperance region are wetlands, dieback risk, and public drinking water source areas. Prior to the development of paths and trails in these areas it is critical that appropriate consultation is undertaken with DWER and DBCA.

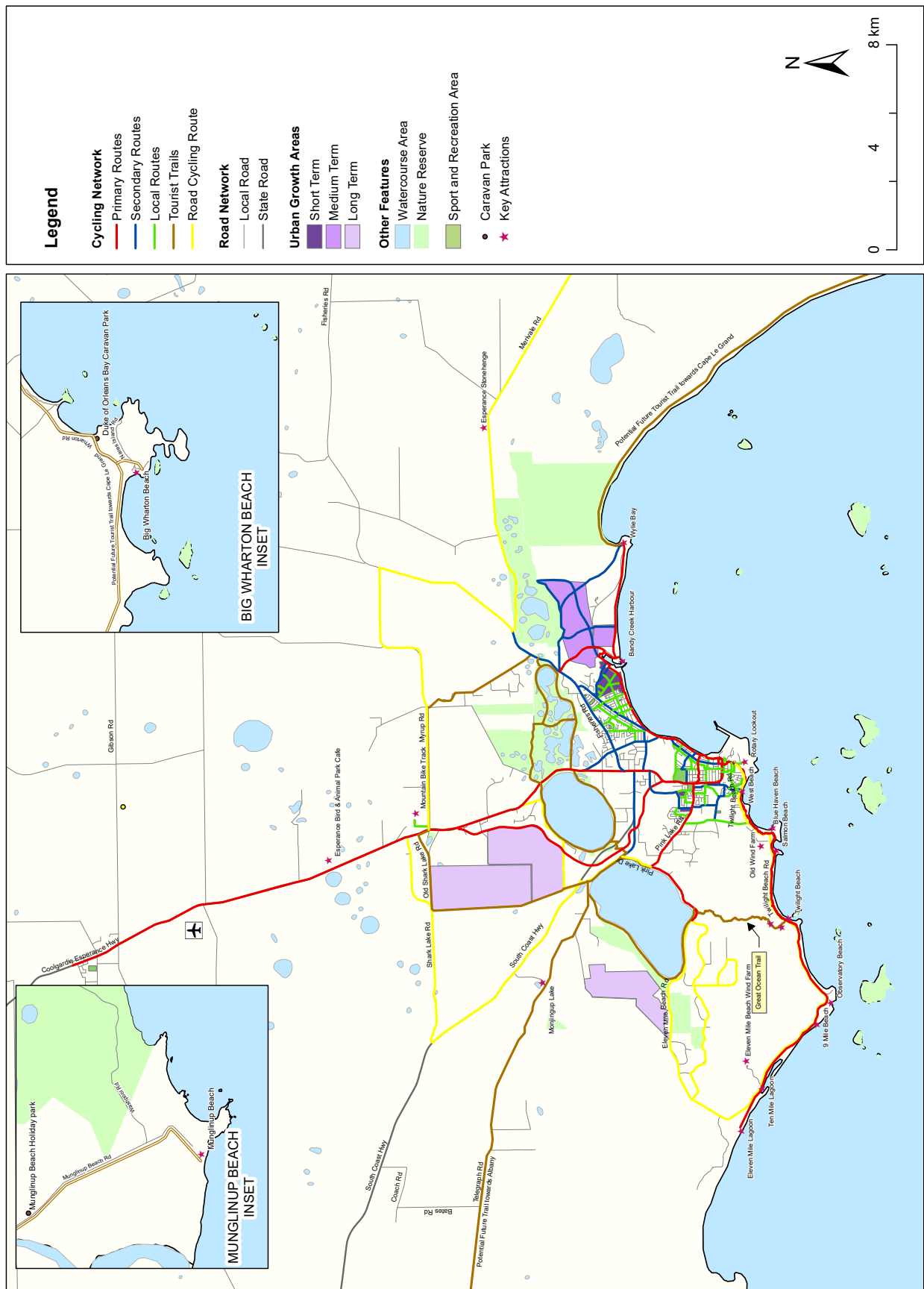


Figure 3.1 Proposed 2050 cycling network for the Esperance region.

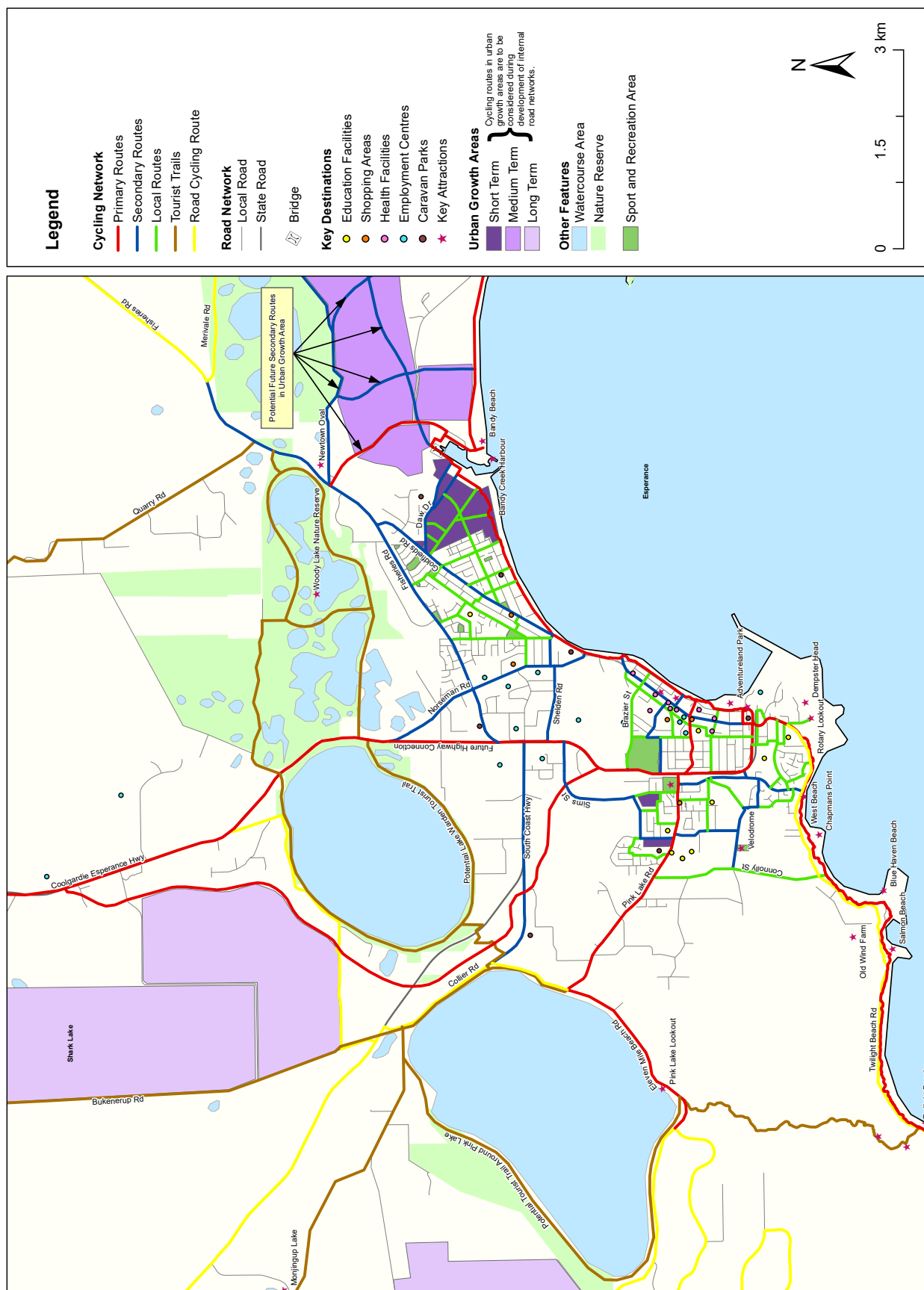


Figure 3.2 Proposed 2050 cycling network for the Esperance townsite.

4. THE WAY FORWARD

This section outlines the key themes that have guided the development of this strategy. Within each of the themes a number of opportunities have been identified to highlight the potential for cycling in and around Esperance. Case studies are used to illustrate where similar outcomes have been achieved elsewhere.

4.1 Creating a world-class coastal cycling route

Esperance is an internationally recognised destination centred on its beautiful coastal scenery and cycling is one of the best ways for residents and visitors to experience it.

Over the years, the Shire has developed a continuous, off-road shared path from Castletown Quays in the north to Twilight Beach in the west, a distance of over 13 km. This existing facility provides users with a range of coastal experiences, from the beaches along the Esplanade to views of the jetty, marina and port, and dramatic cliff-lined vistas along the southern coast to the west of town.

There are several key opportunities to enhance this popular route, including:

→ Extending the coastal path from Castletown

Quays to Bandy Creek, providing access to Bandy Creek Harbour and Bandy Beach, and creating loops via the Bandy Creek Road (future) Daw Drive and Goldfields Road shared paths back towards the town centre (refer to Section 4.1.2).

- Extending the coastal path from Bandy Creek to Wylie Bay, as urban development progresses in this area, and in the long term, potentially developing a route all the way to Cape Le Grand National Park.
- Extending the coastal path from Twilight Beach to Observatory Point, Ten Mile Lagoon and Eleven Mile Beach (refer to Section 4.1.3).

Many of these opportunities are well supported by the community, as identified in the consultation exercises summarised in Appendix C.



Figure 4.1

Extension of the coastal shared path in both directions would open up different experiences for cycle tourism and increase accessibility to coastal recreational facilities.

4.1.2 Opportunity – Extending the coastal path to Bandy Creek and beyond

Extending the coastal path along the foreshore from Castletown to Bandy Creek was one of the most frequently discussed ideas during community and stakeholder consultation.

The coastal path currently terminates at the end of Castletown Quays, with the final section east of Chaplin Street in need of improvement. Whilst only 1.2 km from Sammy's Park at Bandy Creek Harbour, the existing cycling route is over 2.5 km long via a circuitous and poor amenity route following Ormonde Street and Daw Drive, with no option for a return loop to town.

An extension of the coastal path along the foreshore to Bandy Creek Harbour, including a connection across the weir to Bandy Beach, would open up a further section of coastline to people walking and riding. Given the gentle topography, this section of coastal path would be suitable for people of all ages and abilities to ride, particularly compared to the existing westbound path through to Twilight Beach. This connection would not only improve access to Bandy Creek Harbour and Bandy Beach but also facilitate a convenient loop ride for residents and visitors.



Figure 4.2

The existing coastal path currently finishes at the eastern end of Castletown Quays, with the final section being relatively low quality, lacking separation and often obstructed by parked cars during holiday periods and weekends.

In time, a coastal path could potentially be continued beyond Bandy Creek Harbour to Wylie Bay, connecting with the beach track to Lucky Bay (or even a more formalised trail as discussed in Section 4.4.6).

4.1.3 Opportunity – Extending the coastal path to Eleven Mile Lagoon

The westbound coastal path from Esperance town centre currently terminates at Twilight Beach, with cycling access to the remaining coastline (including Observatory Point, the wind farm and Ten Mile and Eleven Mile Lagoons) via a narrow and hilly on-road riding environment. An extension of the coastal path would provide spectacular views and open up access to another 10 km of the coastline to less experienced riders.

Detailed feasibility, planning and design will need to be undertaken to locate an appropriate alignment along the steep cliffs, should this opportunity progress.



Figure 4.3

Extending the Twilight Beach path along the spectacular coastline to Eleven Mile Beach would offer an exceptional longer distance walking and cycling experience to a wide range of users.

4.1.4 CASE STUDY: COASTAL PATHS AROUND REGIONAL WA

Coastal shared paths have been developed in many locations across Australia and are a popular way for people to experience the natural beauty of coastal towns. They are particularly successful when they form part of a broader cycle network that intuitively connects key destinations and attractions. Done well, they have the potential to attract visitors to a destination in their own right.

Ocean Beach Cycleway, Denmark



Source: www.uncoolcyclingclub.com

Connecting Denmark town centre to Ocean Beach, the 8.5km long **Ocean Beach Cycleway** is a scenic cycle route that performs transport, tourism and recreational functions for both locals and visitors. From Ocean Beach it is possible to follow the Wilderness Ocean Walk/Ride (WOW) trail a further 6km to Lights Beach and the Munda Biddi Trail for 5km through to Greens Pool, a total distance of nearly 20km.

Turquoise Way, Jurien Bay



The **Turquoise Way Trail** is a 14km shared path which offers remarkable views over along the coral coast between Jurien Bay and Hill River. A tourist attraction in its own right, the path is also being marketed as a venue for fun runs, bike races and triathlon events with the potential to generate significant economic returns for the wider community. Once complete, the Turquoise Way Trail will cross Hill River and continue through to Cervantes, providing a 28km long link between the two popular holiday towns.

Geraldton coastal path



In Geraldton, there is a long term vision to connect **Drummond Cove to Cape Burney**, a distance of around 30km. The existing route stretches north and south of Geraldton's town centre and there is strong community support to deliver a continuous corridor, particularly between Sunset Beach and Drummond Cove to the north.

4.2 Connecting people to places where they live, work and play

For cycling to be considered a viable transport option by most people, key destinations need to be connected by safe, direct and legible cycle routes. Such a network enables people to move seamlessly through an urban area. In Esperance this is particularly critical given the lack of regular public transport services. Those who cannot or do not drive rely on walking and cycling networks to get around independently.

Despite Esperance's low-density land use, much of the urban area is located within comfortable cycling distance from the town centre and other significant trip attractors. There is an opportunity to develop safer and more direct cross-town linkages and improve connections for people between the places where they live, work and play.

4.2.1 Opportunity: Creating safe, comfortable and convenient cross town connections

Esperance has a large network of shared paths and footpaths, connecting most areas of the townscape and suburbs into the town centre. However for some suburb-to-suburb journeys, and for access to employment areas such as the Chadwick industrial area, comfortable bicycle access is very limited. Barriers include a lack of paths along heavily trafficked roads with high truck volumes, irregular or inconvenient crossing points and, in some cases, only informal tracks between suburbs.

Opportunities exist to provide safer, more convenient ways for people to ride between cross-town destinations. These include:

- Extending the shared path along Fisheries Road to Quarry Road, providing safer access to this residential area and the mountain bike park.
- Extending the shared path from the Pink Lake Lookout to the Sanctuary Estate, providing safer access to this residential area.
- Completing the missing link along **Harbour Road** between Brazier Street and Shelden Road, providing a continuous cycling facility between the town centre and the Chadwick industrial area, and connecting with cycling facilities on Shelden Road;
- Improving east-west connections north of the town centre along **Shelden Road** (between Harbour Road and Norseman Road). This would provide better access for residents of Nulsen travelling to Castletown Quays, and students based in the north eastern suburbs travelling to Esperance Senior High School (Esperance SHS);

Harbour Road and Shelden Road provide an important link for residents to workplaces in Chadwick, the high school and other community facilities such as the hospital. However large numbers of trucks combined with a lack of protected cycling infrastructure stops most people from considering cycling a feasible option.

- Completing missing sections of shared path along **Sims Street** from Nulsen to Harbour Road to provide an alternate connection to Chadwick and the northern suburbs.

Sims Street provides a short cut from Nulsen to Chadwick (south of Shelden Road) avoiding the busy Harbour Road. There are already several sections of shared path, including at the bridge over the railway yard. Linking these together would ensure that there is a direct, safe and continuous route for cyclists travelling in an easterly direction from Nulsen, providing them with protection from traffic, in particular heavy vehicles.

- Formalising the off-road link currently used between West Beach and Esperance SHS, providing students with a safer and more direct route to and from school.

Linking the West Beach residential area with Esperance SHS would significantly reduce the commuting distance by bicycle and avoid the hilly terrain via the current Johns Street route. In addition, this route could be used by cyclists wishing to access the velodrome, once it is redeveloped (see Section 4.2.2).

- Setting new standards and principles for roads and paths within new developments, ensuring that bike-friendly infrastructure is installed as part of new schools, new hospitals, activity centres, new roads, black spot treatments, road resurfacing and maintenance programs to ensure that the cycling network can grow without significant retrofitting costs.



Figure 4.4 Harbour Road between Brazier Street and Shelden Road has no cycling facilities. Protected infrastructure along this section would complete a key connection for residents travelling to workplaces in Chadwick and students travelling to Esperance SHS.

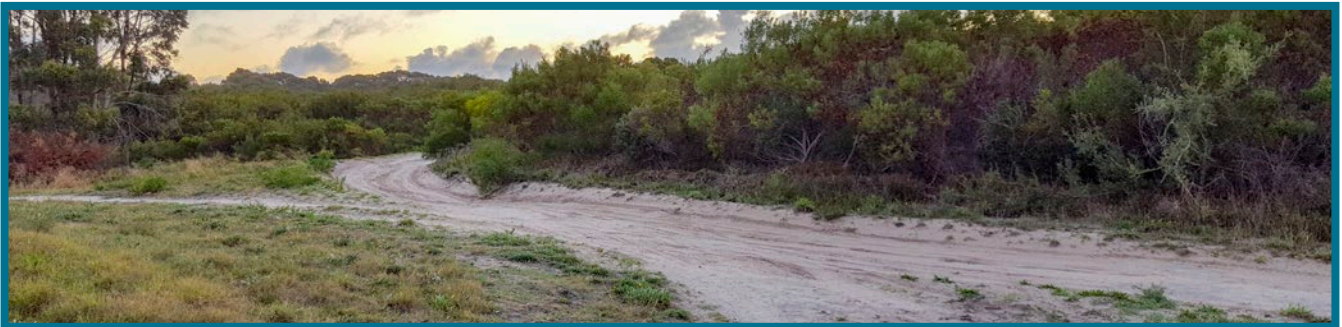


Figure 4.5 The existing informal track from West Beach to Thompson Street in Sinclair could be formalised to provide a more direct route for students to get to Esperance SHS and for cyclists to get to the velodrome.

4.2.2 Opportunity: Connecting residents to community hubs

There are several existing and future community facilities in Esperance that would benefit from being better connected by bicycle infrastructure. These include the showgrounds, the Esperance and Newtown football ovals, Esperance Turf Club and, once upgraded, the Esperance Velodrome.

The Esperance Cycling Club is proposing to upgrade the currently disused velodrome on Thompson Street. The club's vision is to create a facility that can be used to train junior riders away from busy road traffic, host regular cycling events and provide regular club riders with an alternative location to train during harvest season (away from heavy haulage vehicles). Upon completion the velodrome is likely to become a focal point of cycling in the Esperance region.

Accordingly, safe cycling access to the velodrome needs to be considered. A number of potential linkages have been proposed in this strategy to improve access to the velodrome, including:

- A link from Amelia Circuit, West Beach, to Thompson Street;
- A link to the Pink Lake Road cycle corridor (see Section 4.3.3) via Freeman Street; and
- A link along Moir Street and the unconstructed Synnot Street road reserve.

Improved cycling access to the velodrome will also benefit students riding to Esperance SHS, TAFE and various primary schools, given their proximity to the velodrome.



Figure 4.6 Esperance Velodrome is currently in a state of disrepair, but once developed, will provide the Esperance community with an important cycling hub, with the potential to attract cyclists from other parts of the state and the country to compete.

4.2.3 CASE STUDY: SAFE ACTIVE STREETS IN WA

Safe active streets are cycle routes on quiet local streets, where lower vehicle speeds and volumes help to create a safer on-street environment shared between people in cars and on bikes.

Currently being trialled across various locations in WA, key elements of safe active streets include:

- 30km/h speed limits complemented by one-way slow points and other traffic calming treatments aimed at reducing vehicle speeds and traffic volumes;
- Red asphalt pavement treatments with safe active street pavement markings;
- Reversal of stop or give way controls along a route to provide priority to people riding (where possible);
- Various improvements to crossing facilities to increase safety and highlight the presence of cyclists; and
- Landscape enhancements to provide shade and improve the overall amenity of the street.

Safe active streets provide a much more pleasant on-road riding environment for cyclists of all ages and abilities and, importantly, facilitate safer and more convenient journeys by bicycle between the places where people live, work and play. Safe active streets are becoming a popular alternative for local routes that connect residents, schools and community hubs, as well as higher order cycling facilities.

Shakespeare Street, Mount Hawthorn

WA's first completed safe active street runs along Shakespeare Street and Scott Street in Mount Hawthorn. Connecting schools, parks and activity centres to higher order cycling facilities, the 3km route has been well received by the local community as well as people riding through the area on their way to Mount Hawthorn, Leederville and onwards towards the Perth CBD.

Project evaluation has shown a reduction in vehicle speeds and traffic volumes, and an increase in the number of people riding and walking. The number of people riding on the road (rather than the footpath) has also increased, indicating improved amenity for pedestrians.

Bayswater to Morley

Stage one of the Bayswater to Morley safe active street connects residents with the popular Riverside Gardens recreational area, two local primary schools and the Bayswater town centre. It also links primary cycle routes along the river foreshore and railway line, both of which are popular with commuter and recreational riders. Stage two of the project will connect two additional schools, local parks and the Morley town centre.

Railway Street, Geraldton

Currently in the concept design phase, Geraldton's first safe active street aims to connect two primary schools, sports grounds, parklands and mountain bike trails. It will also form part of a broader commuter route between the Geraldton CBD and the northern suburbs.



Figure 4.7

Safe active streets are one way of creating safe, convenient and attractive cross-town cycle routes.

4.2.4 Opportunity: Connecting caravan parks

Caravan and camping tourism is a growing domestic and international tourism market, characterised by people who like independence and the freedom to discover and experience new places. A key component of any tourism strategy for the Esperance region will be how to encourage these visitors to stay, or stay longer, in and around Esperance.

With the increasing popularity of active-lifestyle tourism, there is a growing number of visitors who travel by motor vehicle between towns but embrace the opportunity to experience destinations on foot or by bicycle once they arrive.

Many of the inner Esperance tourism accommodation facilities are provided with excellent walking and cycling access (e.g. along The Esplanade) however there are several major caravan parks and holiday villages that are located on the fringe of the urban area, such as the Bushlands Caravan Park, Pine Grove Holiday Park and Esperance Chalet Village. While they are located within comfortable cycling distance of tourist attractions, the town centre and other facilities, a lack of safe, legible and connected infrastructure is a barrier to walking and cycling.

Ensuring that Esperance's caravan parks are serviced by a well-connected cycle network, will provide visitors with a safe, convenient and unique way to explore the local area. Coupled with appropriate promotional material, this feature could be used to entice more visitors to explore Esperance by bicycle and help to alleviate congestion issues, particularly during the busy summer season.

There are also opportunities to connect outlying caravan parks, such as those at Munglinup Beach and Wharton, to nearby beaches. Such connections could also form part of future long distance trails.



Source: www.aseakoelectricbikes.com.au

Figure 4.8

E-bikes are becoming an increasingly popular addition to the back of caravans and motorhomes and allow visitors greater opportunities to explore an area and interact with their host communities.

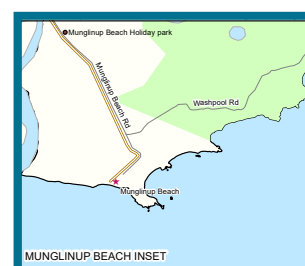
Until recently, cycling has relied solely on human power which has limited the distance and type of terrain most people are prepared to tackle by bicycle. In recent years, the popularity of e-bikes has increased significantly, with many people finding them a convenient way of getting around. In combination with caravans and motorhomes, e-bikes are providing families and older travellers with a different way to explore more of the holiday destination they have come to see, without having to pack up their RVs.

For Esperance, e-bikes provide an opportunity for visitors to travel further afield for less effort and may open up unique experiences, such as the spectacular coastal ride west of town, to people who may otherwise find it too challenging.

Conveniently located e-bike charging stations should be considered in the planning and design of trails.



Figure 4.9 Connecting caravan parks to a safe and legible cycling network would open up a wide range of visitor experiences on two wheels.



4.2.5 CASE STUDY: BRIGHT, VICTORIA

Bright in north east Victoria is well known for its fantastic natural landscape, perfect for all kinds of outdoor activities. In particular, there are various opportunities for different cycling experiences. Recognising this, Alpine Shire Council has brought together a wealth of information in one website – visitbright.com.au.

The website not only promotes Bright and its surrounds to potential visitors, but also makes the connection between tourist experiences and tourist requirements. Using the tagline “A life lived outside”, visitbright.com.au is a one-stop shop catering to people who love to combine travel and the great outdoors, but recognises that they also have practical needs. Particularly targeted towards people who enjoy cycling, the website combines information

about accommodation, activities, and events. This differs from other tourism sites where information on cycling is often on a standalone platform and not linked in with other tourist services.

Understanding that although the majority of visitors are unlikely to travel to Bright by bike, it is encouraged to park the car upon arrival and thereafter use bikes as the primary transport mode. The site promotes bicycle transport services, guided cycling holidays, cycle hire facilities and hundreds of Cycle Friendly Businesses, all with the aim of encouraging tourists to stay in the area longer, interact with the wealth of cycling experiences that Bright and its surrounds has to offer, and explore the area by foot or bike, rather than by car.



Source: www.visitbright.com.au

Figure 4.10 Visit Bright (www.visitbright.com.au) provides information on all kinds of cycling related experiences for residents and visitors to the Victorian region.

4.3 Building a low-stress, cycle-friendly town centre

Best practice approaches to revitalising town centres overwhelmingly involve reducing vehicle speeds to a level where walking and cycling become comfortable, low-stress transport options. Various studies have shown that there is a clear relationship between 30km/h speed environments and a significant reduction in the number, and severity, of crashes involving pedestrians and cyclists.

A 30km/h town centre street environment not only makes cycling safer and more attractive, but also

makes it easier and safer to cross the road for pedestrians (particularly children and the elderly), reduces noise and pollution, and contributes to a more people-focused urban environment.

Where speeds and/or traffic volumes cannot be reduced to desirable thresholds, high-quality separated infrastructure should be provided to achieve a similar level of safety and comfort for pedestrians and cyclists.

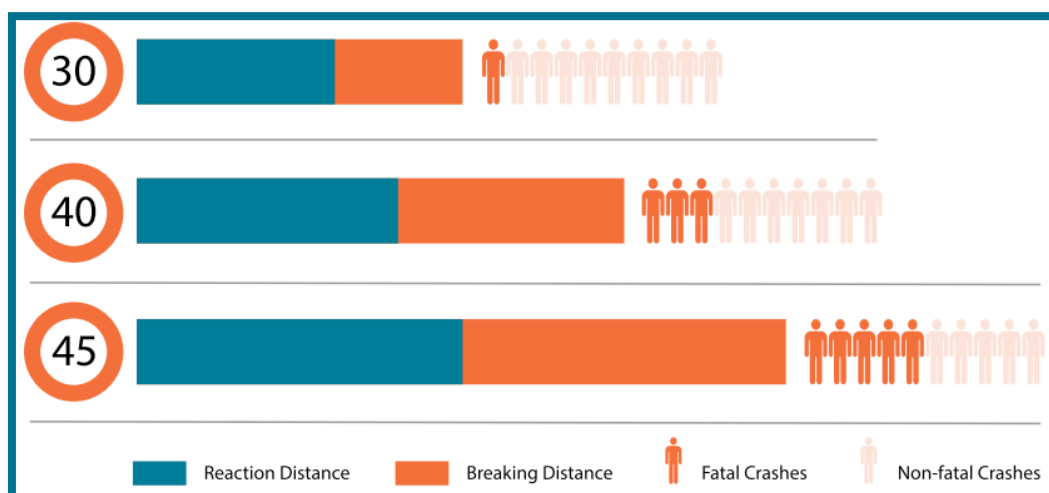


Figure 4.11

Source: Auckland Transport

When impact speeds exceed 40km/h the likelihood that a pedestrian or cyclist will survive reduces considerably.

4.3.1 Opportunity – Revitalising Esperance town centre

The Shire is embarking on an ambitious revitalisation plan in order to re-establish the town centre as the heart of Esperance and the economic, social and cultural hub of the wider south east region of WA.

A series of changes to the town centre transport network are planned over the coming years, as outlined in the *Esperance Town Centre Revitalisation Plan 2015-2035*. These include:

- Making Andrew Street a pedestrian-friendly environment;

- Slowing traffic on Dempster Street to create a pedestrian and cycle-friendly environment;
- Modifying the Andrew Street/Dempster Street roundabout to slow traffic;
- Providing bike lanes and path networks to improve bicycle priority in the main activity areas;
- Improving transport options to and within the town centre; and
- Providing more cycle parking in activity areas.

Cycling will play an important role in revitalising the town centre. The planned investment provides an opportunity to develop a high quality cycling environment, suitable for cyclists of all ages and abilities, which encourages both residents and visitors to make the short trip into town by bicycle.



Figure 4-12

The upcoming reconstruction of the main town centre roundabout, including raised crossings with pedestrian priority, is a first step towards creating a more people-friendly, slow speed environment in the Esperance town centre.

4.3.2 Opportunity – Pink Lake Road cycle corridor

The Pink Lake Road Corridor is a key vehicular and active transport route into the town centre connecting a large residential area and key trip attractors such as Esperance SHS, TAFE, Pink Lake Tourist Park and various sporting facilities. Pink Lake Road also forms part of the Great Ocean Drive cycling loops (refer to Section 4.4).

West of Harbour Road, there is an existing shared path which ends within the vicinity of Downes Street, with separation from traffic and reasonable alignment. East of Harbour Road the existing shared paths are narrow and poorly aligned, with inconvenient 'goose neck' crossings at intersections. The road pavement is generally not wide enough for protected on-road cycle lanes yet is wider than necessary for the needs of motor vehicles.

There is an opportunity to holistically reimagine Pink Lake Road as an integrated transport corridor, providing an improved environment for all road users. This could include:

- Reducing the width of the traffic lanes;
- Reallocating road and verge space to provide either a continuous, bidirectional cycle path along one side of the road (with priority crossings of side-streets) or protected, unidirectional bicycle lanes on both sides;

- Upgraded footpaths; and
- Additional street trees and water-sensitive landscaping.

In addition to the above, an improved crossing of Harbour Road will ensure that anyone, whether they are 8 or 80 years old, can cross the major haulage route safely.

This corridor may also tie into any future long distance trail towards Albany as the primary entrance to the Esperance town centre.



Figure 4.13 Well-designed cycling facilities increase actual and perceived levels of cycling (and pedestrian) safety.

4.3.3 CASE STUDY: INCREASING CYCLE-FRIENDLINESS IN REGIONAL TOURISM DESTINATIONS

A number of regional towns, including Albany in WA, Bendigo in Victoria and Cairns in Queensland, have set a vision to become regional cycling capitals, investing in high quality cycling infrastructure and programs and increasingly gaining recognition for this investment.



Source: Bike Bendigo

Greater Bendigo has 700km of paths, 165km of trails and 12 road underpasses. The existing bicycle network has been progressively developed by the City and a combination of on and off road infrastructure is being delivered to address gaps, reduce conflict points and improve safety.

Greater Bendigo is the first place in Australia to be recognised as a Bicycle Friendly Community. The silver accreditation recognises Bendigo for engagement in bicycle education, inclusion of bicycle facilities, preservation of off-road cycling facilities, and the integration of bicycle planning with community facilities. This will be supported by the City's new Walking and Cycling Strategy which is currently under development.



In order to achieve its vision to be one of Australia's primary cycling destinations, the **City of Albany** endorsed its 2014 Cycle City Strategy, which set out a plan to improve the bicycle network, increase cycling participation, and promote cycle tourism. Since endorsement, the City has created and/or upgraded more than 20km of cycle infrastructure.

Where the City of Albany has been unable to provide dedicated cycling infrastructure they have focused on highlighting road space as a shared asset, reduced vehicle speed limits and provided wide footpaths for young or inexperienced cyclists.

Other initiatives have included a significant upgrade to the Middleton Road cycle lanes, on road safety signage, cycling maps to help journey planning, extra bike parking at key destinations and school bike skills training.

Mann Street Cycleway, Cairns

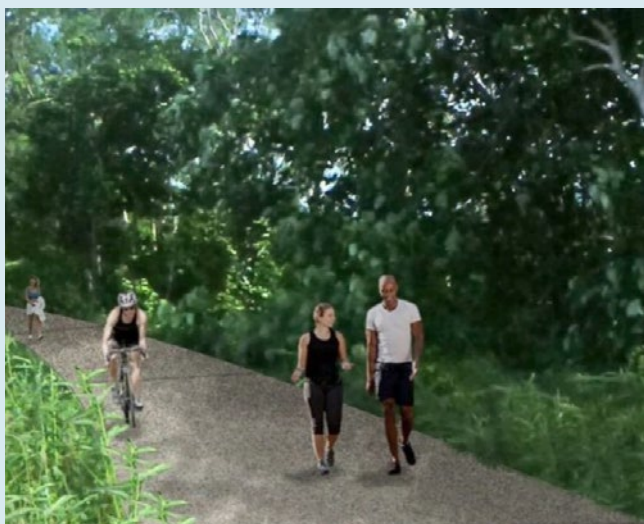


Source: Nearmap

The tropical city of **Cairns** has been rapidly developing a cycleway network, linking the city centre to surrounding suburbs. Recognising that separation from motor vehicles is critical to encouraging people of all ages and abilities to ride a bike more often, the network includes a series of protected cycleways. Key routes that have been developed include:

- Mann Street (left) – A 1.5km long protected cycleway including priority for path users at side streets.
- Cairns Esplanade – this path runs along the primary coastline reserve adjacent to the city centre and links to the Northern Beaches Leisure Trail. The busy Esplanade section has separate cycling and pedestrian facilities.
- Cairns Southern Cycleway – this 5km facility links Wharf Street in the CBD with Gordon Creek using protected cycle lanes and a part of a redundant railway corridor.
- Northern Beaches Leisure Way – once completed, this trail will provide a unique recreation and tourism experience, showcasing beautiful beaches and island views, whilst also providing an important active transport alternative for the community.

Northern Beaches Leisure Trail



Source: Cairns Regional Council

A significant driver for the development of the cycle network is to cater for the large volume of tourists that visit the Cairns region each year. Development of the cycleways, particularly the Northern Beaches Leisure Way, enables both residents and visitors to experience Cairns on bicycle in a safe and convenient manner.

4.4 Developing unique cycle tourism experiences

The popularity of outdoor and adventure tourism is increasing globally, with cycle tourism accounting for a significant part of this growth⁴. In recognition of cycle tourism as a growing niche market and the potential economic benefits for the state, WestCycle and Tourism WA have recently developed the *Western Australian Cycle Tourism Strategy*.

The strategy identifies two main segments within the cycle tourism market: destination cycle tourists and cyclists while on holiday.

- Destination cycle tourists are cyclists who are motivated to travel to destinations primarily or solely because of the routes, trails and riding experience at the destination.
- Cyclists while on holiday might ride while on holiday in a destination, but bike riding is not the primary reason for their holiday.

In Esperance, there are opportunities to improve offerings for both markets. For ‘destination cycle tourists’ this could include formalising and promoting road cycling routes to showcase the remarkable coastal and lake landscapes that characterise the area (refer to Section 4.1 and 4.4), or developing long distance cycle touring routes, such as a route to connect with the Munda Biddi Trail from Albany.

Esperance is a growing destination for long distance cycle touring, with local bicycle shops reporting over 100 cross-country cycle tourists passing through a year. Many of these riders currently travel across the Nullarbor Plain, reaching Esperance via Condingup before continuing westward towards Albany and vice versa.

A range of other opportunities for ‘destination cycle tourists’ exist, some of which are outside the scope of this strategy, such as capitalising on the thriving mountain biking industry.

For ‘cyclists whilst on holiday’ offerings will typically involve recreational cycling experiences that encourage existing and new visitors to extend their stay in the area. Making it easier to ride to the beach, to the local shops or around town, or creating shorter cycling itineraries which allow people to experience Esperance on a bike are all examples that may appeal to ‘cyclists whilst on holiday’. The potential growing popularity of “fat bike” tours along the Esperance foreshore are a good example of such initiatives, as are the opportunities identified in Section 4.2.4 around better connecting caravan parks to the cycle network.

While infrastructure plays an important part of attracting and retaining visitors, marketing and promotion also play an integral role, as does the availability of information such as maps, wayfinding and digital resources.

Existing cycle route maps could be improved to ensure that a range of unique cycling experiences in Esperance are promoted to visitors. For example, a simple cycling brochure illustrating the various coastal rides on offer, distance of the ride and type of cycling experience. Loops could include shorter flat rides along The Esplanade and Castletown Quays, short steeper rides via West Beach and Johns Street, and a longer loop ride via Twilight Cove, Great Ocean Trail and Pink Lake. The range of cycling experiences on offer, along with associated cycling services, could also be communicated using online channels (for example, see Section 4.2.5).

During the planning phase of any new routes, consideration should be given to appropriate setbacks from the shoreline and the need to protect significant natural, indigenous and cultural features of the coast, in line with State and local coastal planning policies.



Figure 4.14

Promoting a range of different cycling experiences and catering to broad range of users can encourage visitors to stay longer and explore more.

4.4.2 Opportunity: Connecting Esperance to the Munda Biddi Trail and beyond

The South West Region of WA has the Munda Biddi Trail, but as of yet there are no formal cycle touring trails in the Esperance region.

Connecting Esperance to the Munda Biddi Trail from Albany (and potentially further east to Cape Le Grand or Israelite Bay) is a long term, aspirational project that could completely reinvigorate tourism experiences in the Esperance region. Such a trail would encompass a dramatic range of coastal scenery and vegetation types, linking with existing major attractions such as Bremer Bay, Fitzgerald National Park, Stokes Inlet, Cape Le Grand National Park and even the Stirling Range.

While delivering a 450km tourist trail between Albany and Esperance (likely to consist of a series of trails

connecting existing back roads, fire breaks, existing utility corridors and the like) would be a long term undertaking, there are a number of shorter term opportunities to develop tourist trails centred on Esperance to maximise benefits for residents and visitors. Planned appropriately, in conjunction with the Munda Biddi Trail Foundation, some of these trails could potentially form part of a connection to the Munda Biddi at some point in the future.

Trails developed in the Esperance region should accentuate the unique experiences available compared to other destinations within WA. The provision of facilities such as e-bike recharging stations and first aid stations should also be considered in the development of new trails, to increase the accessibility of cycle touring.



Source: Munda Biddi Trail Foundation/Follow My Ride

Figure 4.15 The Munda Biddi Trail offers long distance cycle tourists a range of cycling experiences through the south west region. Growing in popularity, there may be an opportunity to connect Esperance to the Munda Biddi Trail at some point in the future.

4.4.3 CASE STUDY: MAWSON TRAIL, SOUTH AUSTRALIA

The Mawson Trail is a 900km off-road cycle touring trail that starts on the outskirts of Adelaide. Winding its way through the Adelaide Hills, Barossa and Clare Valley wine regions, historic towns, farmland and the Bundaleer Forest, the route finishes in Blinman in the Flinders Ranges.

Taking two to three weeks to complete, the route is mostly unsealed and follows a combination of quiet country roads, State forest and national park fire trails, access tracks and unused road reserves. Distinctive trail markers are placed at intersections, turn-offs and at one-kilometre intervals along the length of the trail to help navigate riders.

Whilst the South Australian Government's investment is reflected in the comprehensive signage and impressive trail documentation, the cost of developing such a trail is relatively low comparative to other tourism initiatives. Passing through several small towns, the Mawson Trail brings in tourism dollars for accommodation and hospitality businesses, as well as tour operators that organise supported rides and associated businesses such as shuttle services.



Figure 4.16 Similar to the Munda Biddi Trail, the Mawson Trail is a long distance off-road cycling route that traverses a range of landscapes through the South Australian countryside.

4.4.4 Opportunity: Lake trails and loops

Esperance townsite is bounded to the north and west by a series of saltwater wetland lakes with abundant birdlife. Located only a short distance from the urban area, parts of Lake Warden and Woody Lake reserves have already been developed for low-intensity visitor use, such as walking trails, however no comprehensive trail network suitable for cyclists currently exists.

A trail has recently been constructed along a portion of Pink Lake (forming part of the Great Ocean Trail) and there may be opportunities to create a more comprehensive facility around the entirety of Pink Lake and to connect this to other lake trails – forming a continuous multi-use trail, east to west from Fisheries Road to Pink Lake, as well as a series of lake loops.

The Lake Warden System is a Ramsar⁵ site, and one of the primary purposes of the site reserve is for conservation. Its close proximity to Esperance makes it a highly desirable recreational destination for a wide variety of activities, but any development needs to adequately consider conservation outcomes.

Trail development would need to be progressed in collaboration with DBCA and follow the DLGSC's Trail Development Process, as identified in the WA Mountain Bike Management Guidelines.

Such a trail network could provide up to 10km of nature-based riding in a completely traffic free environment, linking to primary cycle routes such as Pink Lake Road, the coastal path and (future) Coolgardie-Esperance Highway. The trail network would also provide alternative traffic-free routes for journeys to various parts of the Esperance townsite and immediate surrounds, including destinations such as Bandy Creek Harbour and Shark Lake.

This would provide another reason for people to stay longer in the Esperance area and experience a wide range of unique cycling environments, including coastal cycling, off-road cycling and lake side trails.

The routes shown in this strategy are indicative only and represent possible trail development subject to more detailed investigations. As an initial step, a feasibility study could be undertaken to identify areas where potential environmentally sensitive trail development could occur.

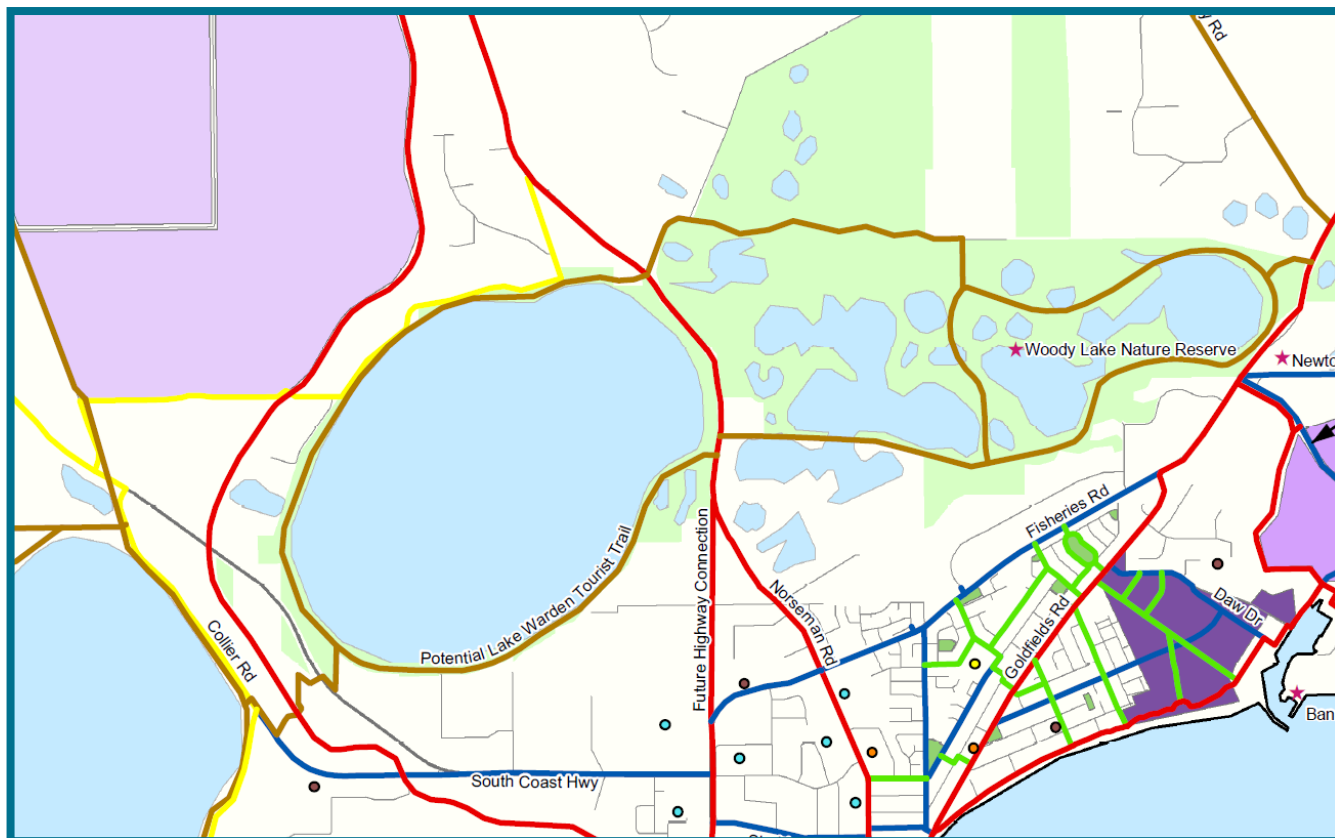


Figure 4.17 Connected to the broader cycle network, a lake based trail system would not only offer a different recreational cycling opportunity but could also provide a unique transport experience linking east to west across the northern perimeter of town.

5. The Ramsar Convention is an international treaty on the conservation of important wetlands

4.4.5 Opportunity: Linking Esperance to Lake Monjingup

This project was identified in the 1999 *Esperance Trails Master Plan*, linking Esperance townsite and Pink Lake with the Lake Monjingup Nature Reserve, 14km west of Esperance. Lake Monjingup is the Esperance area's only freshwater wetland lake and has been developed with a network of walk trails and picnic facilities.

Commencing at the intersection of Pink Lake Road and Eleven Mile Beach Road, the Lake Monjingup Trail would skirt the eastern and northern edges of Pink Lake, then proceed via Keenan Road and an unconstructed road reserve to Lake Monjingup. This would give a substantially traffic-free route for leisurely trail riding.

In the longer term, this trail could be progressively extended west along Telegraph Road (a very quiet, mostly gravel road), linking to natural attractions such as Lake Gore, Stokes Inlet and Munglinup Beach. Featuring a number of different cycling environments in one ride, this route could also connect cycle tourists to settlements beyond the Shire of Esperance border, and eventually form part of a continuous long-distance tourist trail to Albany.

4.4.6 Opportunity: Connecting Esperance to Cape Le Grand and beyond

Cape Le Grand National Park, encompassing Cape Le Grand and Lucky Bay, is one of the most popular natural tourism experiences in the Shire of Esperance. A 60km drive from Esperance by road, there are opportunities to develop a substantially shorter cycling trail linking Esperance, Castletown, Bandy Creek, Wylie Bay and Cape Le Grand along the coast.

Much of the land along the coastline is under the care and control of either the Shire or DBCA and a network of informal vehicular tracks currently exist through much of the area. A 40-45km long trail would be a comfortable day or overnight ride for the more adventurous cycle tourist and could be aligned with camping, glamping or other accommodation and tourism experience opportunities in the National Park.

In the longer term, there is potential for such a trail to continue eastward to Duke of Orleans Bay (90km by road from Esperance) and eventually Israelite Bay (190km by road). The historic route of the Overland Telegraph Line is one potential alignment that could be considered for such a trail.

4.4.7 Opportunity: Linking Esperance to Gibson

There is an opportunity to develop a cycling connection from Esperance to Gibson, located 25km to the north. Such a facility could be developed along either the Coolgardie-Esperance Highway or the adjacent (active) railway reserve, or a combination of both. A portion of unused rail reserve near Pink Lake could also be incorporated into the route.

A number of key destinations would be serviced including the Shark Lake industrial employment area, Piggery Mountain Bike Trail, Esperance Bird and Animal Park, Helms Arboretum, Gibson Soak Hotel and townsite, as well as Esperance Airport. The facility would also provide a safe route for cyclists through the 'lakes section' of the highway.

Due to the active nature of the railway line, a traditional rail trail is unlikely for this route within the short to medium term. Location and design of the facility will require collaboration between the Shire, Main Roads and Arc Infrastructure. However, depending on its built form, such a facility has the potential to serve commuters, tourists, mountain bikers, day-trippers and even horse riders.

4.4.8 CASE STUDY: #COLLIETRAILS

Collie has long been recognised as a must-ride destination for mountain bikers and road cyclists alike, hosting the Collie to Donnybrook and Return Cycling Classic (the oldest cycle race in WA), and home to many mountain biking trails, the most recent of which opened in January 2018.

To achieve its vision of becoming a Trails Town, the Shire of Collie recently published the *Collie River Valley Trails Strategy*, which outlines a plan to formalise trails for walking, cycling (on and off-road), horse riding, paddling and diving.

A diverse range of cycling trails are identified to cater to a broad cycling demographic. This includes:

- A series of **paved bike trails**, or shared paths, suitable for all ages and abilities. These connect key tourist destinations such as Diamond Lake and Minninup Pool to and through Collie's town centre, and offer scenic experiences through state forest and along the Collie River.
- Several different **mountain bike trails** ranging in type, length and level of difficulty. This includes the Minninup Pool, Black Diamond Lake, Westralia, Arklow Forest Area and Wellington National Park mountain bike trails, a pump track and skills loop, as well as other opportunities on private land.
- A variety of **road cycling trails** (road cycling routes) of differing lengths including three return

rides to Donnybrook, Harris Dam and Coolangatta Hill, and four loop rides including one around Wellington National Park and another through the Mumbalup Forest.

The Shire is also in the process of realigning the Munda Biddi Trail to ensure the town is on the main alignment rather than accessed by a spur trail. The realignment will take advantage of other projects being progressed in Collie, such as the recently constructed Karak Trail, and be well connected to the trails proposed through Arklow and Wellington National Park.

In order to further accommodate, promote and normalise cycling, the Shire of Collie has recognised the benefits of a Bike Friendly Business accreditation scheme and awarded membership to a number of local Collie businesses to date. The intention is for this to be rolled out across Collie as a priority, either as a local or state-wide scheme.

It is anticipated that the range of experiences on offer, coupled with initiatives such as the Bike Friendly Business accreditation scheme, will attract a much greater number of visitors to the area and encourage them to stay longer, resulting in significant economic benefits for local businesses. The State Government is supporting #CollieTrails with over \$10 million in funding to create over 180km of high-quality mountain bike and bushwalking trails, a trail centre and secondary trail hubs.



Figure 4.18 The Shire of Collie is progressively delivering a diverse range of cycling trails that cater to a broad demographic, attracting more visitors to the area and enticing them to stay longer.

4.5 Achieving safer experiences for road cyclists

Road cycling, as described in Section 2.5, is typically carried out on rural and semi-rural roads that feature scenic landscapes, challenging or undulating terrain and low traffic volumes. Road cyclists do not typically require, or use, protected cycling infrastructure (such as shared paths) in these environments.

In Esperance, while traffic volumes are relatively low, there are a number of unique challenges that impact on the perceived safety of road cycling in the area.

This strategy has highlighted a number of opportunities which could result in improved safety outcomes, including:

- Establishing a cycling and trucking industry working group;
- Increasing awareness of road cycling routes through signage and road markings; and
- Sealing shoulders of road cycling routes in hilly areas and on higher volume roads.

4.5.1 Opportunity – Cycling/Trucking Industry Working Group

During consultation on this strategy it was evident that lines of communication between freight companies and cycle clubs in Esperance were already open, demonstrated by the re-routing of club rides during harvest season to minimise conflicts at peak haulage times.

There is an opportunity to formalise this collaboration which would not only benefit people that cycle regularly in the area, but would also extend to visitors and tourists, ensuring that cyclists and heavy vehicles can coexist without conflict.

The group's focus would primarily be educational in nature, however there are also opportunities to collaborate to identify hazardous roads or infrastructure, and for the group to work with the Shire to improve conditions where necessary. Establishing regular communication between the varied user groups could improve the nature of relations between them and grow awareness around each other's needs.

4.5.2 CASE STUDY: TOLL GROUP AND AMY GILLET FOUNDATION

The partnership between the Amy Gillet Foundation and Toll Group serves as a good example of trucking groups and cycling groups working together. Toll Group, a major sponsor of the Amy Gillet Foundation, uses the partnership to share experiences and learn from each other about how to make the road safer.

This partnership initially saw 14 branded trucks travelling the roads in each state and capital territory, and a key element of the partnership was to provide

road safety training for Toll staff, focusing on how bicycle riders and drivers in the road transport industry can share the road safely.

Formalising and extending such an initiative (or one like the that described in Section 4.5.3), or even regularly promoting this partnership in Esperance could result in road safety benefits for cyclists and truck drivers, particularly given the high volume of heavy vehicles on Esperance roads in harvest season.



Source: Toll Group

Figure 4.20 Toll Group promoting the road safety message “A metre matters”

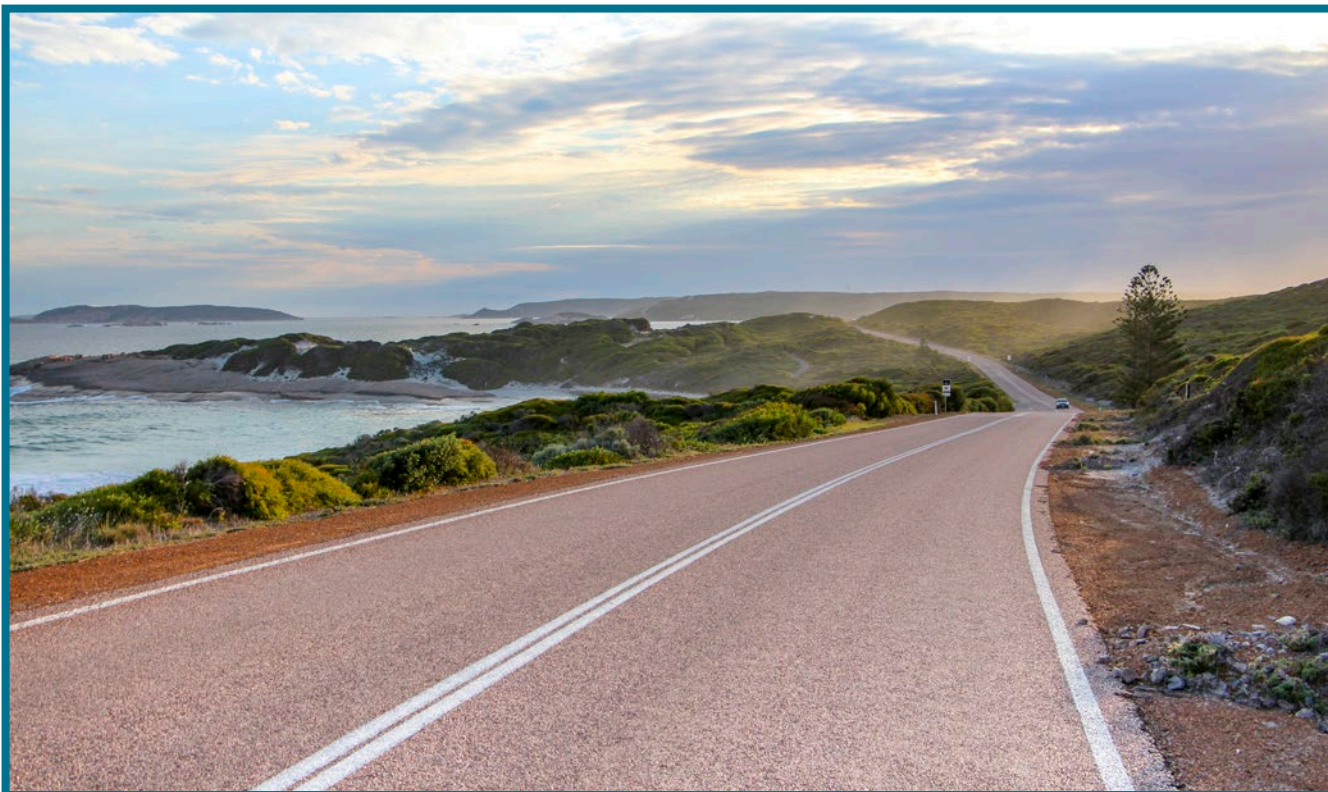


Figure 4.21 The Twilight Beach Road corridor provides spectacular views for riders and drivers. Targeted widening of uphill sections would help make overtaking easier and reduce potential for conflict between the different user groups.

4.5.3 CASE STUDY: FACTOR THE TRACTOR, KENTISH TOWN, TASMANIA

The “Factor the Tractor” program was implemented in 2016 to help raise awareness of agricultural vehicles amongst tourists visiting the north west coast of Tasmania. Being a rural area with many primary production businesses, it is common to see large harvesters, tractors and other agricultural machinery on the local roads. There were numerous reported incidents of road users having to take evasive action to avoid slow moving agricultural machinery.

In any given year, over 300,000 interstate and international tourists visit the region. Based on these numbers, it was clear that many road users were not familiar with the traffic features of the area. Therefore the overarching aim of the campaign was to reduce the potential for crashes on rural roads involving agricultural machinery through broadcast media, direct mail campaigns and displays at community events.

The program included a portable variable message sign which was to be strategically placed to relay relevant safety messages. Funding was also directed to marketing collateral such as bumper stickers and posters.

The campaign received an encouragement award at the 2017 Australia Road Safety Awards and there is currently a proposal being considered to re-establish the campaign for 2019.



Source: Kentish Council, TAS

Figure 4.22 Factor the Tractor bumper stickers were one of a number of mediums used throughout the media campaign which aimed to increase awareness of farm machinery on rural roads.

4.5.4 Opportunity – Increasing awareness of road cycling routes through signage and delineation

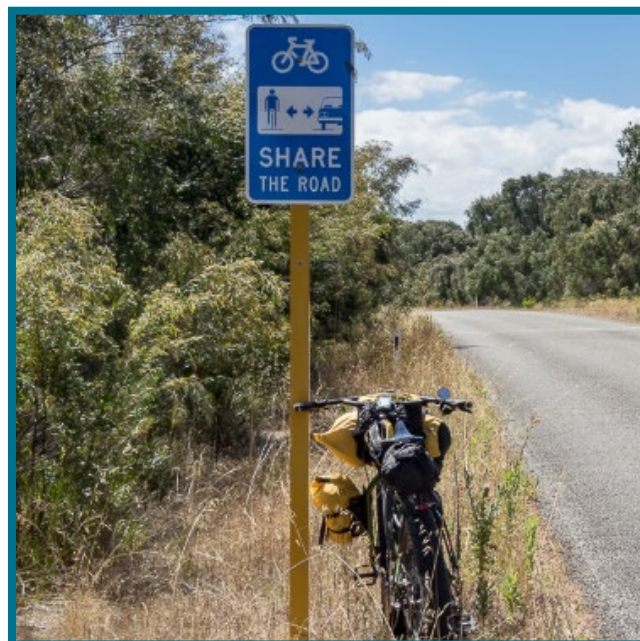
Clear signage and delineation of popular road cycling routes can help to reduce actual and perceived levels of conflict between road users. It also helps to spread the message that the road is a shared asset and that cyclists are a legitimate road user.

Signage and delineation can be used to highlight known conflict areas (for example, where cycling routes cross major haulage routes) as well as inform motorists that they are likely to encounter cyclists along these routes. Delineating road cycling routes is also helpful for visitors and could be tied to a promotional campaign to attract more road cyclists to the area, or to stay longer.

A number of initiatives should be investigated further, including:

- Installing ‘share the road’ or ‘road cycling route’ type signage along popular cycling routes including Fisheries Road, Merivale Road, Myrup Road, and Eleven Mile Beach Road;
- Installing warning signs where cycle groups regularly cross or join major haulage routes, such as South Coast Highway and Coolgardie-Esperance Highway; and
- Trialling activated warning lights or signs at particular pinch points.

Such initiatives would need to be progressed by the Shire in conjunction with Main Roads and the Road Safety Commission.



Source: www.bicycles.net.au

Figure 4.23

Share the road signage can be used to highlight popular road cycling routes and remind drivers to be vigilant for cyclists on these roads

Figure 4.24

The existing Great Ocean Drive tourist loop, already popular with locals, could be better promoted to visiting road cyclists with loop ride options of varying distances. Wayfinding signage or on-road route markings would serve both as a directional tool and a reminder to drivers to be on the lookout for cyclists.



4.5.5 Opportunity – Sealing shoulders program

There are a number popular road cycling routes in the Esperance area which have sections of narrow shoulder or no shoulders at all. This can increase the potential for conflict between different road user groups, particularly on heavy vehicle haulage routes and where speed differentials are greatest, such as uphill sections.

Sealed shoulders provide significant safety benefits to all road users by reducing 'run off road' crashes. They also offer maintenance benefits to asset owners.

There is an opportunity for the Shire and Main Roads to target the provision of sealed shoulders in a manner that also reduces conflicts between cyclists and other road users. Examples of priority areas for shoulder sealing include:

- Coolgardie-Esperance Highway between Shark Lake and Esperance, but particularly through the winding 'lake section' (SLK 360-364)
- Fisheries Road to Norseman Road to Myrup Road with the following priority sections:
 - Fisheries Road between Goldfields Road and Merivale Road (SLK 2.87-6.36)
 - Fisheries Road on the uphill section towards Myrup Road (approx. SLK 11.0-12.0)
- Great Ocean Drive (Tourist Loop)
 - Twilight Beach Road full length with priority given at various uphill sections where speed differentials are high
 - Eleven Mile Beach Road.

4.5.6 CASE STUDY: BONNET HILL (TASMANIA)

Bonnet Hill forms part of a popular cycle route south of Hobart between Tarooma and Kingston Beach along the Channel Highway. Providing views of the Derwent River and connecting to the Sandy Bay Cycleway (which continues through to Hobart), this scenic route generates approximately 1,800 cyclist movements per week; a number which is growing by about 5% per year.

The combination of hilly terrain and narrow carriageway resulted in a history of conflict between different road user groups. A strong community-led campaign for safety improvements resulted in a decision to prioritise improvements where the speed differential between cyclists and motor vehicles was highest.

The project involved widening the carriageway to provide sealed shoulders at least 1.2 metres wide

on uphill sections of the route, as well as improved signage on the approach to corners to reduce the risk of vehicles running off the road by misjudging the curve.

Safety benefits have been seen by all road users (not just cyclists) including larger vehicles such as buses who are now able to pass cyclists safely. In an Australian Bicycle Council case study⁶, feedback from riders and drivers was positive, and anecdotal evidence indicated increased numbers of people using bicycles on the route, as well as observed use of the shoulder by pedestrians.

The final sections of the project have just been completed to provide a sealed shoulder for over 4.4km in the uphill direction (98% of the Channel Highway over Bonnet Hill).



Source: Australian Bicycle Council

Figure 4.25 Before this project, Bonnet Hill was a narrow road with blind corners. The addition of a sealed shoulder on the uphill stretch improved safety for all road users.

6. <http://bicyclecouncil.com.au/case/shoulder-lane-treatment-to-improve-cycling-safety>

5. ACTION PLAN AND MAINTENANCE

This section outlines the strategic priorities that are proposed to be progressed over the next five years. This approach will help enable the Esperance region to realise its long-term cycling potential over time. The priorities have been informed by community and stakeholder consultation throughout the project, as summarised in Appendix C.

5.1 The existing cycling network

To inform the action plan's strategic priorities, each route within the 2050 cycling network was classified as one of the following:

- **Existing (adequate)** – the level of service reflects current best practice for this type of cycling route (as defined in the route hierarchy);
 - **Existing (needs improving)** – although possible to cycle along this corridor, the level of service provided does not reflect current best practice for this type of cycling route (as defined in the route hierarchy); or
 - **Non-existent (proposed)** – it is either not possible to cycle along this route due to the corridor being non-existent, or, because of existing road conditions, most people are unable to cycle comfortably.
- These classifications are reflected in the maps on the following pages, with each route considered in the context of the five-year timeframe of this action plan.



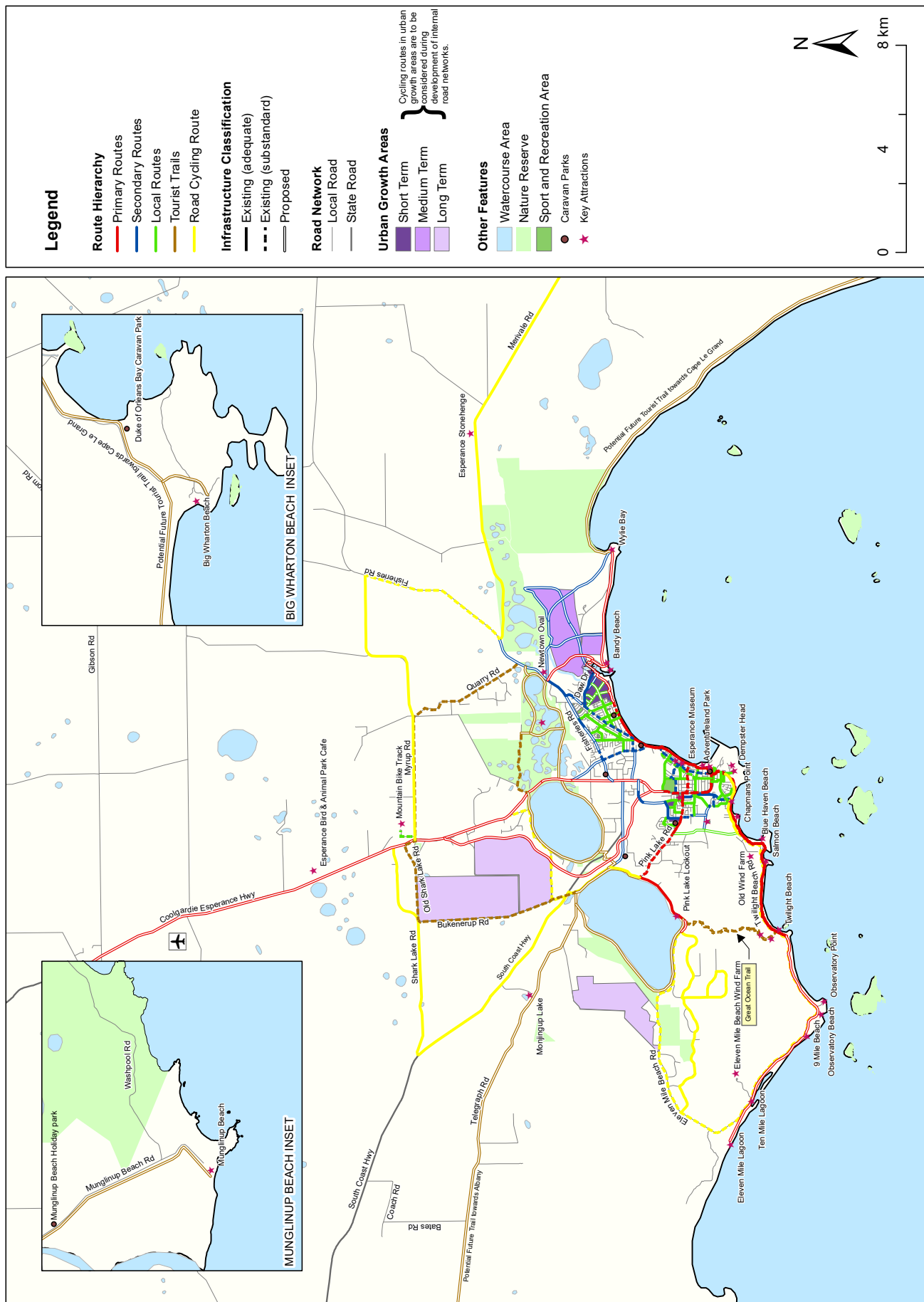


Figure 5.1 Overall 2050 Cycling network - Region

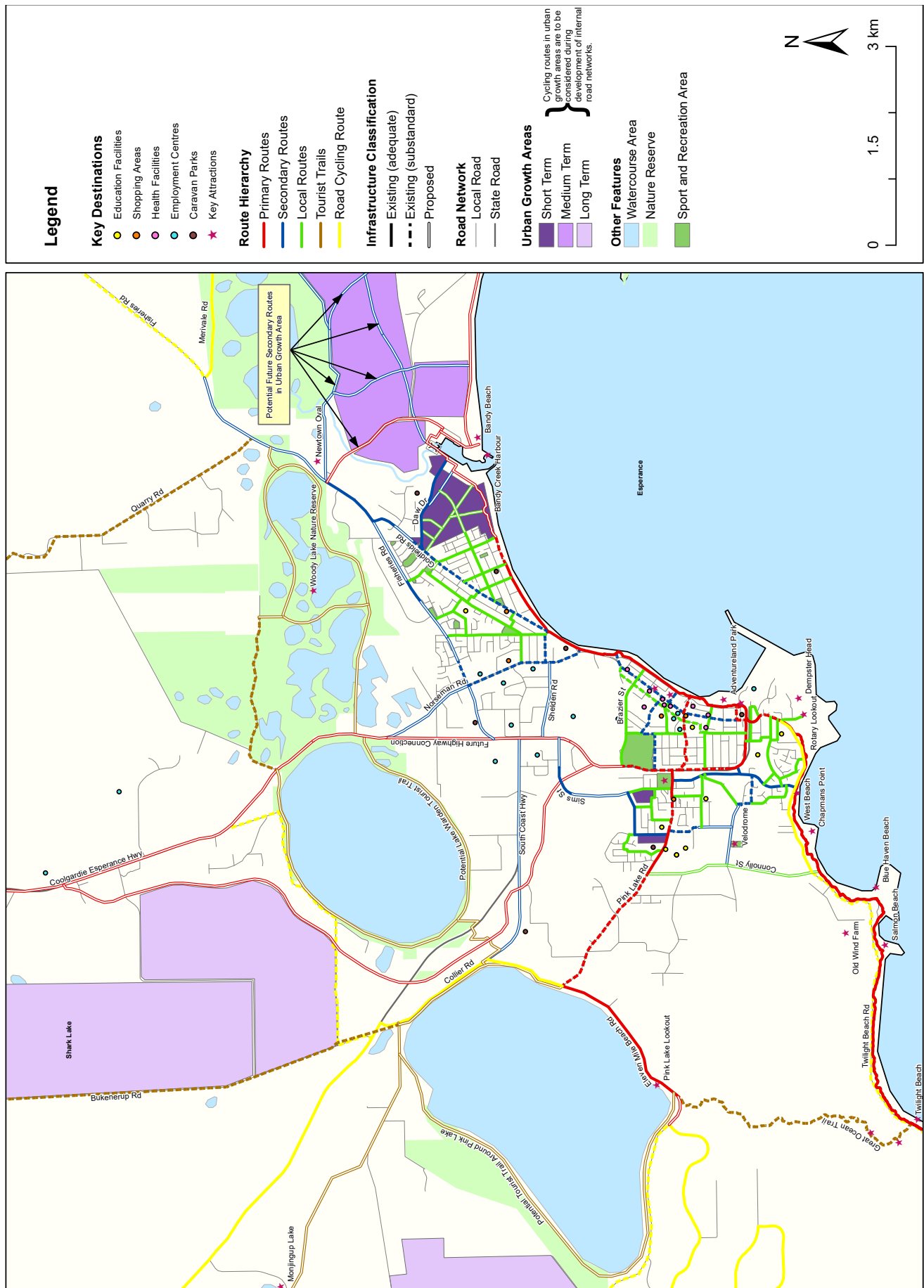


Figure 5.2 Overall 2050 Cycling network - Townsite

5.2 Priority project

The following tables identify the strategic priorities for cycling in the Esperance region over the next five years.

5.2.1 Developing the primary network

Ref	Project	Project Type	Project Description	Timeframe
1	Pink Lake Road Corridor Upgrade	Planning, design and construction	Undertake a corridor study for Pink Lake Road (and Andrews Street) between The Esplanade and Eleven Mile Beach Road to identify the preferred infrastructure for each section of the route and prioritise sections to be upgraded to Primary Route standard. This project will include working with Main Roads and Arc Infrastructure to develop a preferred option to improve the crossing(s) of Harbour Road and the railway.	Within three years
2	Coastal Path (Castletown Quays/ Ormonde Street to Daw Drive)	Planning, design and construction Construction	Construct a shared path from the current terminus of Castletown Quays, along the coast, to Daw Drive adjacent to Bandy Creek Harbour. The proposed path would extend the existing coastal route to Bandy Creek Harbour and facilitate loop rides via the recently completed Daw Drive path.	Within three years
3	Harbour Road (Brazier Street to Shelden Road)	Design and Construction	Work with Main Roads and Arc Infrastructure to design and construct a shared path along the eastern side of Harbour Road from Brazier Street to Shelden Road. This project will provide a continuous cycling facility between the town centre and the Chadwick industrial area, and, combined with the proposed shared path along Shelden Road, directly connect Nulsen with Castletown.	Within three years
4	Harbour Road (Shelden Road to Norseman Road)	Design and Construction	Work with Main Roads to design and construct a shared path along the eastern side of Harbour Road from Shelden Road to Norseman Road. Combined with the above project, this project will provide a continuous cycling facility to connect Chadwick industrial area with the wider cycling network. (Note: This project encompasses a portion of Secondary Route along Harbour Road)	Within five years
5	Coastal Path (Daw Drive to Bandy Creek Beach)	Design and Construction	Construct a shared path from Daw Drive, via the Bandy Creek Weir, and along the eastern side of Bandy Creek Harbour to Bandy Beach. This project will connect the commercial and recreational facilities on the eastern side of Bandy Creek Harbour to the wider cycling network.	Within five years

Ref	Project	Project Type	Project Description	Timeframe
6	Bandy Creek Road (Fisheries Road to Bandy Creek Harbour)	Design and Construction	Construct a shared path along Bandy Creek Road, providing a connection from the recently constructed Fisheries Road path to Bandy Creek Harbour and Bandy Beach. This path will facilitate flat loop rides at the eastern extent of the coastal path, suitable for people of all ages and abilities.	Within five years
7	Coastal Path (Castletown Quays path upgrade, Chaplin Street to Ormonde Street)	Design and Construction	Design and construct a protected shared path adjacent to Castletown Quays. A path currently exists along this section of road however it is separated from vehicles by paint only. This project will provide physical separation between road users and path users, improving safety and ensuring that parked vehicles do not obstruct the pathway.	Within five years
8	Coastal Path (Twilight Beach to Eleven Mile Lagoon Feasibility Study)	Planning	Undertake a feasibility study to extend the coastal path from Twilight Beach to Eleven Mile Lagoon and develop a preliminary design. This path extension would make a further 10km of coastline accessible to pedestrians and cyclists.	Within five years

5.2.2 Developing the secondary network

Ref	Project	Project Type	Project Description	Timeframe
1	Shelden Road (Harbour Road to Norseman Road)	Design and Construction	Construct a shared path along Shelden Road between Harbour Road and Norseman Road. Combined with the proposed shared path along Harbour Road, this path will greatly improve connectivity for people accessing Chadwick industrial area, and directly connect Nulsen with Castletown.	Within three years
2	Goldfields Road (Daw Drive to Frank Freeman Drive)	Design and Construction	Construct a shared path along a short section of Goldfields Road. This project will complete a missing link in the otherwise continuous path between Esperance town centre and Newtown Oval.	Within three years
3	Fisheries Road (Bandy Creek Road to Quarry Road)	Design and Construction	Extend the shared path along Fisheries Road from Bandy Creek Road to Quarry Road, including a safe crossing and path connection to Quarry Road. This path will connect the residents of Quarry Road to the cycling network and improve access to the local mountain bike park which many people access via Quarry Road.	Within five years

Ref	Project	Project Type	Project Description	Timeframe
4	Freeman Street (Pink Lake Road to Thompson Street)	Design and Construction	Construct a shared path along Freeman Street, providing a connection to the Velodrome and a connection (in combination with the below project) to West Beach for Esperance Senior High School students and staff.	Within five years
5	Connection between Thompson Street/Freeman Street and Amelia Court	Design and Construction	Develop a shared path connection between Thompson Street and Amelia Court following the general alignment of the existing sandy track. This link will provide a short cut for access between West Beach, the Senior High School and the Velodrome.	Within five years

5.2.3 Developing the local network

The Shire has developed a comprehensive network of wide footpaths which form a strong base for the local cycling network. The priority action for the local network focuses on maximising the benefits of this base in the short term. The actions identified in Section 5.2.6 will also significantly improve the local network.

Ref	Project	Project Type	Project Description	Timeframe
1	Update Path Network Design Standards	Design	Update the Shire's design standards for path infrastructure with a particular focus on designing crossings to eliminate undesirable features such as right-angle bends, blind corners and improve goose necks. Improving crossings to allow easy negotiation by cyclists can significantly improve safety and unlock the potential of the path network.	Within three years

5.2.4 Developing tourist trails

Ref	Project	Project Type	Project Description	Timeframe
1	Lake Trails Network	Feasibility	Esperance townsite is ringed by a number of fresh and saltwater lakes which are environmentally significant. There is an opportunity to develop a trails network which encompasses some or all of these lakes, and integrates existing walk trails (e.g. Kepwari Trail) with the cycling network where appropriate. Due to the environmental significance of the lake and wetland systems, extensive feasibility investigations and consultation should be undertaken to determine what an appropriate trail network would look like, environmental management requirements and potential funding sources. Outcomes from this project will inform future updates to the Esperance 2050 Cycling Strategy.	Within five years

5.2.5 Developing road cycling routes

Ref	Project	Project Type	Project Description	Timeframe
1	Road Cycling Routes Signage Strategy	Signage	In collaboration with Main Roads and the Road Safety Commission, undertake and implement a signage strategy to delineate designated road cycling routes. This may include general 'share the road' warning signs or more innovative solutions. Site specific warning signage should also be implemented where road cycling routes enter or cross major heavy haulage routes.	Within three years
2	Eleven Mile Beach Road	Construction	Construct sealed shoulders in stages from Twilight Beach to Pink Lake to improve safety for road cycling and increase opportunities for safe overtaking. Priority should be given to sections where there is a significant speed differential between motorised and non-motorised vehicles (e.g. on sustained uphill grades) and at crests where drivers may be tempted to overtake unsafely.	Within five years
3	Twilight Beach Road	Construction	Construct sealed shoulders in stages from West Beach to Twilight Beach improve safety for road cycling and increase opportunities for safe overtaking. Priority should be given to sections where there is a significant speed differential between motorised and non-motorised vehicles (e.g. on sustained uphill grades) and at crests where drivers may be tempted to overtake unsafely.	Within five years
4	Fisheries Road (Norseman Road to Dempster Road)	Construction	Construct sealed shoulders in stages from Norseman Road to Dempster Road to improve safety for road cycling and increase opportunities for safe overtaking. Priority should be given to the higher speed road sections to reduce conflict between heavy haulage traffic and non-motorised traffic. It should be noted that this project reflects the use of Fisheries Road as a road cycling route and does not replace the need for secondary route provisions along the corridor.	Within five years

5.2.6 General

Ref	Project	Project Type	Project Description	Timeframe
1	Esperance Cycle Loops Promotional Material	Planning	Develop a suite of promotional material including brochures, maps and wayfinding signage to designate and direct both locals and visitors around the cycling network and between destinations, centred on Esperance townsite. For example, the material should promote a series of loop rides embracing the coastal path (both east and west), Goldfields Road, Johns Street, Connolly Street and the Great Ocean Trail, as well as highlighting key tourist destinations and accommodation providers (e.g. caravan parks). As new infrastructure is delivered, materials will be updated.	Within two years
2	Route Audit and Quick Wins	Network Audit	Undertake an audit of the existing network to identify and carry out quick wins such as crossing improvements, construction of short missing links, removal of obstacles and reconstruction of failed pavements.	Within three years
3	Safe Active Streets	Planning	Identify suitable locations within Esperance for Safe Active Street treatment.	Within three years

5.3 Activation, Consultation and Evaluation

This strategy outlines how new cycling infrastructure can support greater participation in cycling in Esperance. However, planning and building infrastructure in isolation will not necessarily lead to significantly more people riding.

There needs to be an emphasis on creating inclusive infrastructure projects so that the product delivered fully serves the needs of the local community as well as people visiting the region. This can be achieved through a range of engagements and monitoring activities as projects are planned, designed and constructed, and as the infrastructure continues to be used after construction.

Ongoing engagement and evaluation starts by incorporating three essential elements into project delivery – activation, consultation and evaluation. This approach is outlined in the following framework.



- **Activation** includes promotions and programs designed to encourage people onto the infrastructure by raising awareness and appeal. This can range from highlighting the new facilities in media releases and creating local maps, to making cycling trips more pleasant through added amenities such as end-of-trip facilities, bike parking, natural landscaping, art works, and other initiatives. Activation can take place throughout all phases of an infrastructure project – starting well before a project is built – and can be temporary (one-off activities), intermittent (such as a monthly group ride) or permanent (such as wayfinding signage).
- **Consultation** is a crucial part of the delivery of inclusive cycling infrastructure to ensure that the facilities meet the needs of users, stakeholders and the local community. Consultation can be undertaken in a variety of formats, and is typically led by local government.
- **Evaluation** of the infrastructure is essential to measuring the impact it is having, both for people using the infrastructure and for the wider community experiencing the outcomes of increased transport mobility. These outcomes may include better local liveability, improved congestion and parking management, growth in cycle tourism and increased spending at local businesses. Ongoing monitoring will ensure facilities are well maintained and that the planning and delivery of cycling initiatives undergo continuous improvement.

All three of these elements are inherently linked and some activities will deliver outputs for more than one, such as a community workshop where people are asked to review existing facilities (evaluation), help prioritise new ones (consultation), and participate in the delivery and promotion of new facilities and amenities (activation).

At its core, this approach acknowledges that cycle networks are part of a richer local landscape and should be delivered in an inclusive way that invites participation and supports a range of community outcomes.

5.4 Plan maintenance

Progress on the priority actions identified in Section 5 of this strategy will be reported to DoT on an annual basis by the Shire.

The strategic priorities will be reviewed every five years to ensure current conditions are reflected and relevant projects are prioritised. This review will include reassessing each route's classification as either existing (adequate), existing (needs improving), or non-existent (proposed) and updating the existing network maps.

The Esperance 2050 cycling network should remain consistent over the medium term. A review of the overarching strategy document every 8-10 years will allow new opportunities to be identified and incorporated into a revised document.



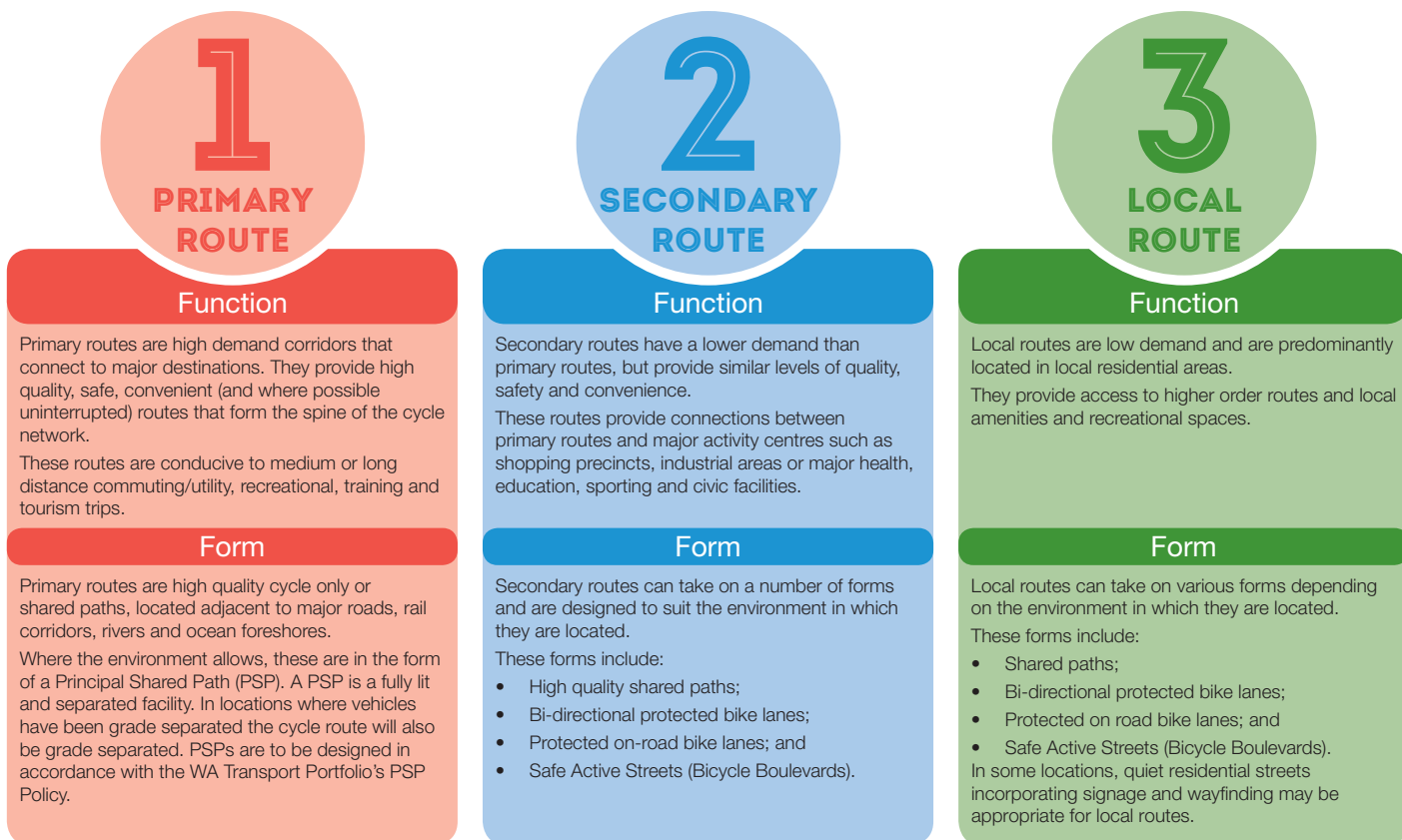
APPENDIX A

ROUTE HIERARCHY SUMMARY

A1. ROUTE HIERARCHY SUMMARY

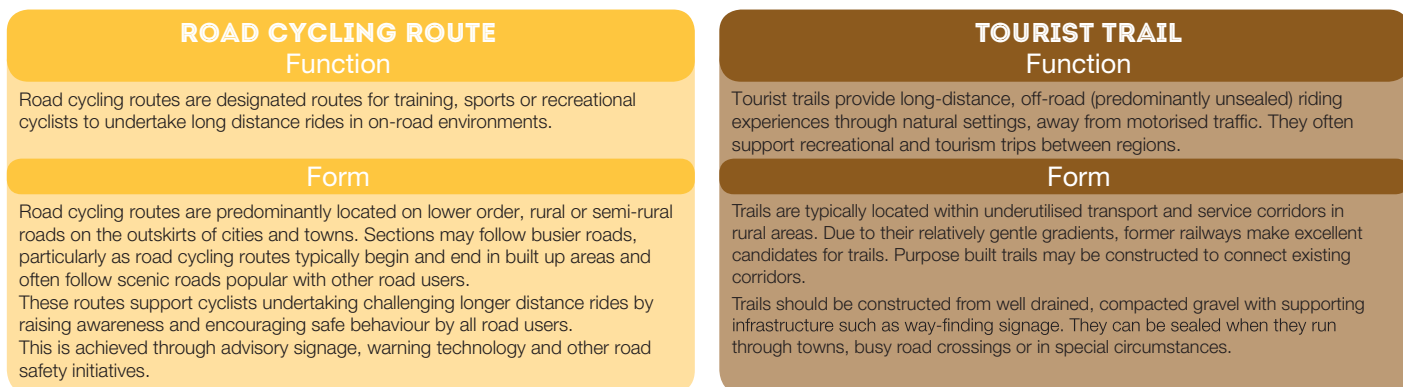
NETWORK PRINCIPLES

The Cycling Network Hierarchy is arranged by route function. The function pertains to the type of activities that take place on the route. A routes' built form is based on the physical characteristics of the location. Each form, apart from those supporting training routes, is designed with the "8 to 80" design philosophy in mind.



COMPLEMENTARY NETWORK

While not all areas will include Road Cycling Routes and Tourist Trails, they play an important part in the overall network. These routes are typically used by smaller and more select user groups for recreational purposes.



Dedicated cycling infrastructure - five typologies of route

		Primary Routes	Secondary Routes	Local Routes	Tourist Trails	Road Cycling Routes
Type of trips	Commuting	✓	✓	✓	x	x
	Utility	✓	✓	✓	x	x
	Recreation	✓	x	x	✓	x
	Touring	✓	x	x	✓	✓
	Training	✓	x	x	x	✓
Responsible agencies (planning, delivery and support):		DoT MRWA Public Transport Authority (PTA) Local government	DoT MRWA Local government	DoT MRWA Local government	Department of Biodiversity, Conservation and Attractions Local government PTA Department of Water & Environmental Regulation DoT Department of Local Government, Sport and Cultural Industries Lotterywest MRWA	Department of Local Government, Sport and Cultural Industries Road Safety Commission DoT MRWA Local government
Infrastructure should be designed for:		8 to 80 design philosophy	8 to 80 design philosophy	8 to 80 design philosophy	8 to 80 design philosophy	Confident cyclists

Other supporting cycling infrastructure – footpaths

Footpaths

Since April 2016 all cyclists, irrespective of age, are permitted to ride on footpaths in WA (unless signposted). Footpaths support low-speed, low-volume cycling, and are particularly important for young and inexperienced user groups.

However there are some reasons why people choose not to ride on footpaths. These include:

- **Speed:** Because footpaths are rarely afforded priority across intersecting side roads, riding on footpaths is slow, and stop-start. The geometric design of footpaths at many intersections often results in cyclists needing to deviate from their intended desire lines.
- **Ride quality:** As footpaths are typically constructed from concrete slabs or bricks, the ride quality is lower than that of parallel roadways, or purpose-built (asphalt) shared paths.
- **Conflict with pedestrians:** In many cases footpaths are insufficient width for pedestrians and cyclists to pass each other safely and comfortably.
- **Blind driveways:** Riding on footpaths can be dangerous, particularly on streets which contain large numbers of driveways. At walking speed this isn't normally a problem; however, for cyclists it is often impossible to see reversing vehicles until the last minute, particularly where paths butt-up against property boundaries.

Despite footpaths not forming part of the official cycling network, it is important developers and local governments design, construct and maintain footpaths that provide a safe alternative for people who prefer to ride at low speeds and away from motorised traffic.



Figure A.1 Poor ride quality, parked vehicles, blind driveways and unfavourable intersection designs make riding on footpaths unattractive for many people.

Other supporting cycling infrastructure – roads without dedicated cycling infrastructure

Roads without dedicated cycling facilities

Cyclists are, and will continue to remain, legitimate users of all roads in WA (with the exception of freeways and controlled access highways). It is important to remember that roads without purpose-built cycling facilities serve an important function for some cycling journeys. Wayfinding signage can be a valuable tool to direct cyclists (particularly novice cyclists) to the most suitable streets or corridors.



APPENDIX B

DESKTOP ANALYSIS SUMMARY

B1. ANALYSIS OF PEDESTRIAN AND CYCLIST CRASH DATA (2014-2018)

Figure B1.2 and Figure B1.3 illustrates the location and severity of pedestrian and cyclist crashes occurring in the Shire of Esperance between January 2014 and December 2018. Figure B1.1 provides a breakdown of these crashes by severity.

On reviewing the crash data, the following findings were noted:

- One fatal crash involving a pedestrian was recorded in the five-year period.
- There are more recorded pedestrian crashes (11) than cyclist crashes (5).
- There are no identifiable bicycle crash hotspots, however 2 bicycle crashes had occurred along Goldfields Road, between Castletown Quays and Mitchell Street. One required hospital treatment and the other resulted in minor property damage.

- All of the recorded crashes occurred within the Esperance townsite except for 1 bicycle crash on Coolgardie-Esperance Highway (hospitalisation) and 2 pedestrian crashes on South Coast Hwy (property damage only) and Davis Rd (fatal).
- As mentioned above, the available data set covers the period between 2014 and 2018 only. It also only captures reported incidents. Currently there is no reliable data available on near misses, accidents between cyclists and pedestrians, or single cyclist crashes in Esperance. It has been estimated that cycling incidents reported to WA Police make up only 20% of all cycling related incidents that result in hospitalisation.

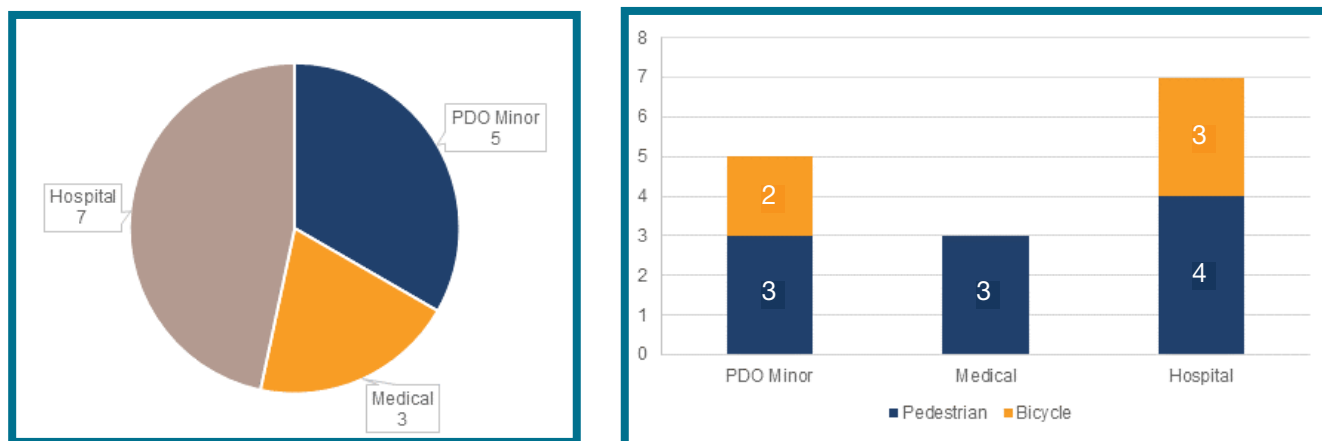


Figure B1.1 Pedestrian and Bicycle Crashes

Figure B1.2 Crash Locations – Esperance Surrounds

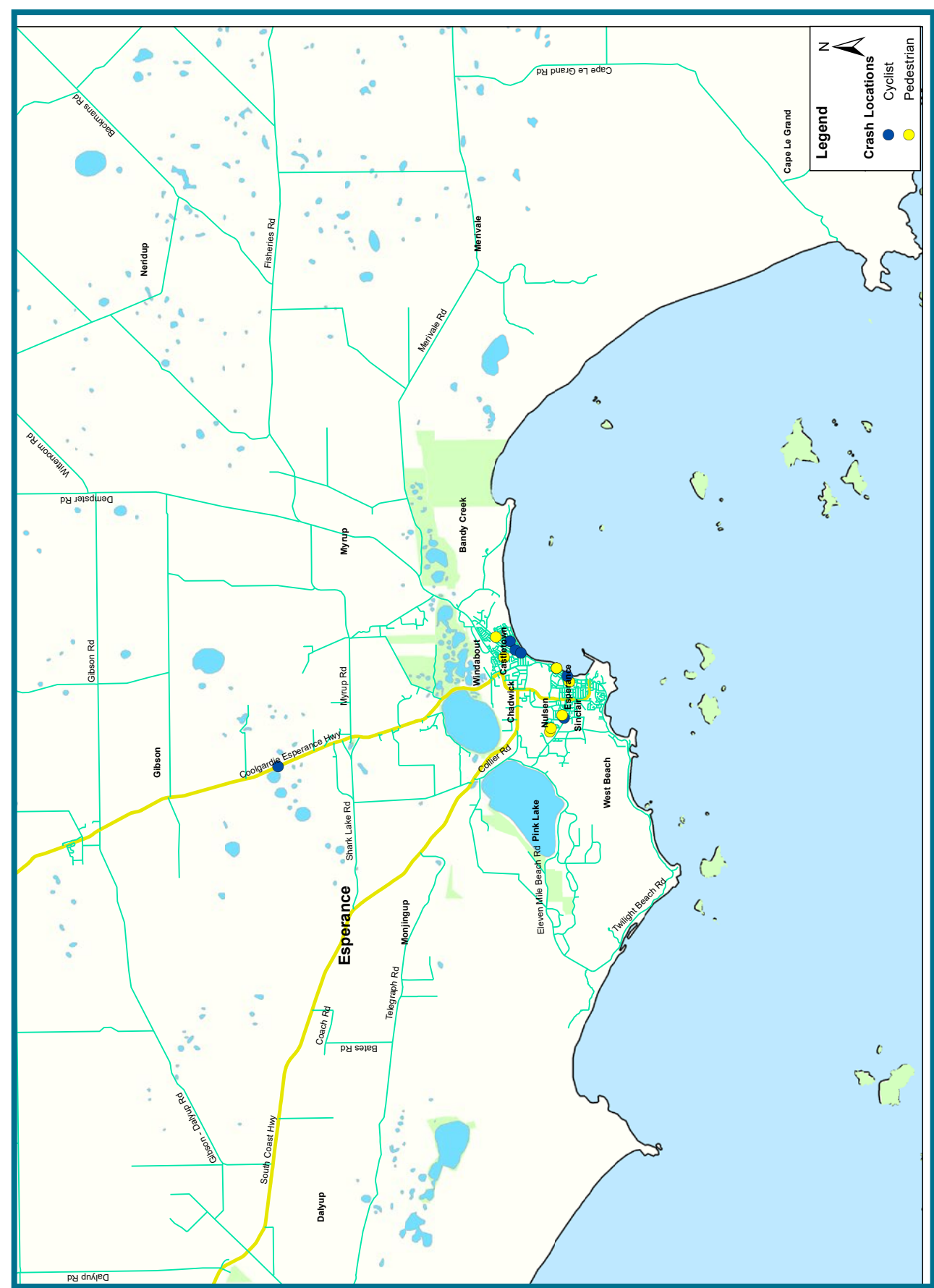
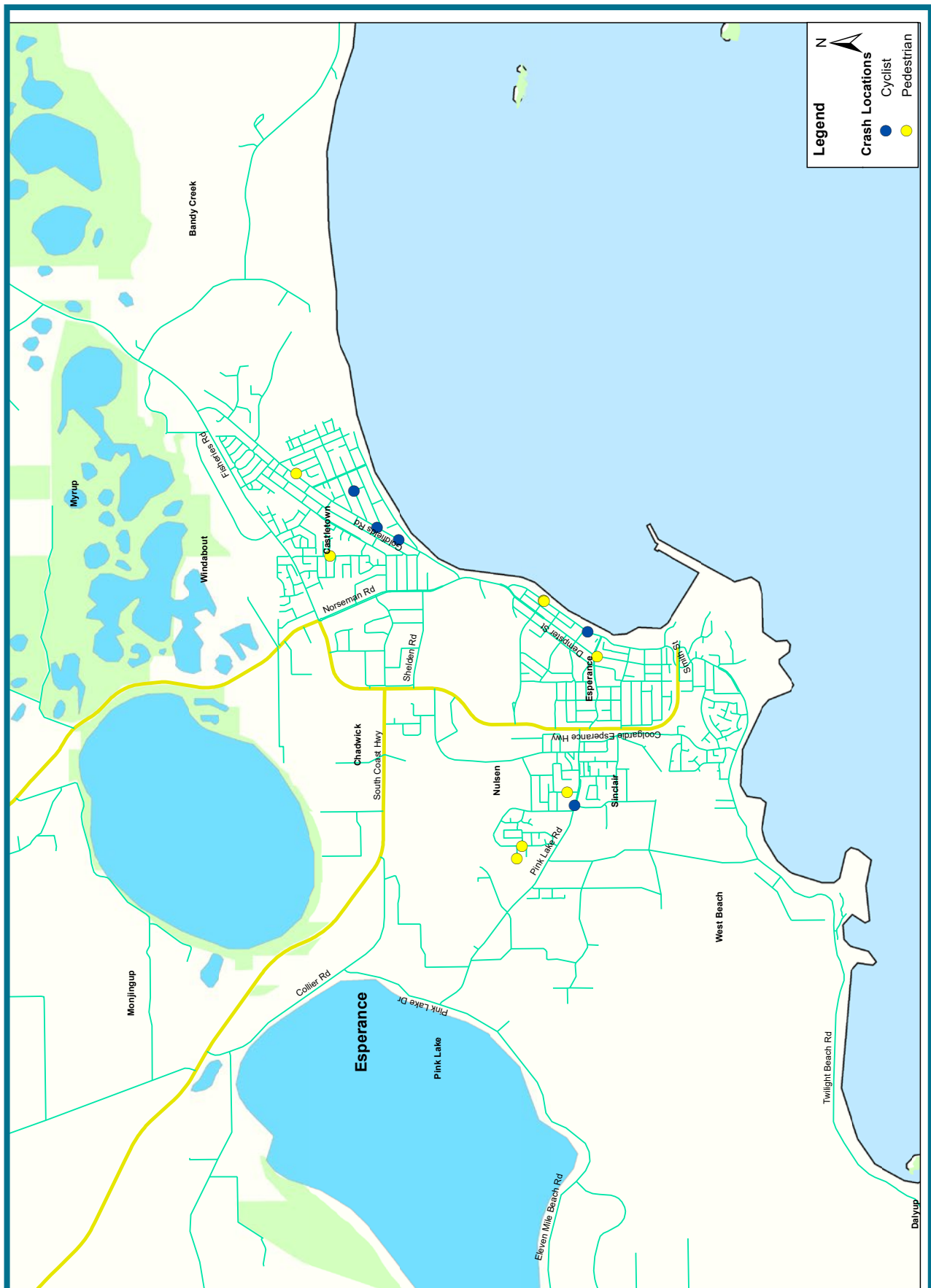


Figure B1.3 Crash Locations – Esperance Townsite



B2. ANALYSIS OF GPS TRAVEL DATA

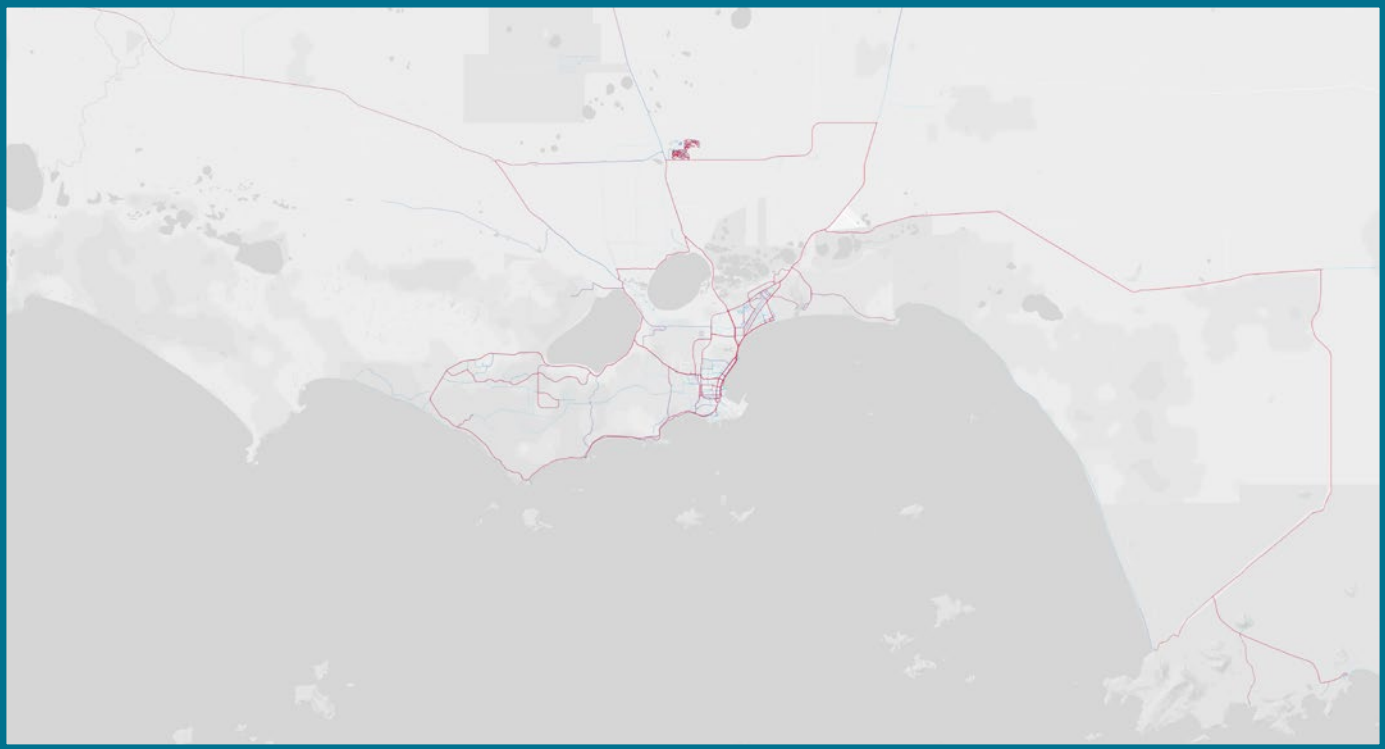
The GPS mapping tool, Strava Labs, was employed to better understand which parts of Esperance's road and path network are most heavily utilised by cyclists. The maps shown in Figure B2.1 highlight popular cycling routes in Esperance and surrounding areas.

Strava is a website and mobile app used to track athletic activity via GPS. Despite the usefulness of this information, it should be noted that GPS travel data is typically representative of people who cycle for training or high-intensity recreational purposes. It is noted that the more heavily used roads outside of the townsite are consistent with those used by the Esperance Cycling Club.

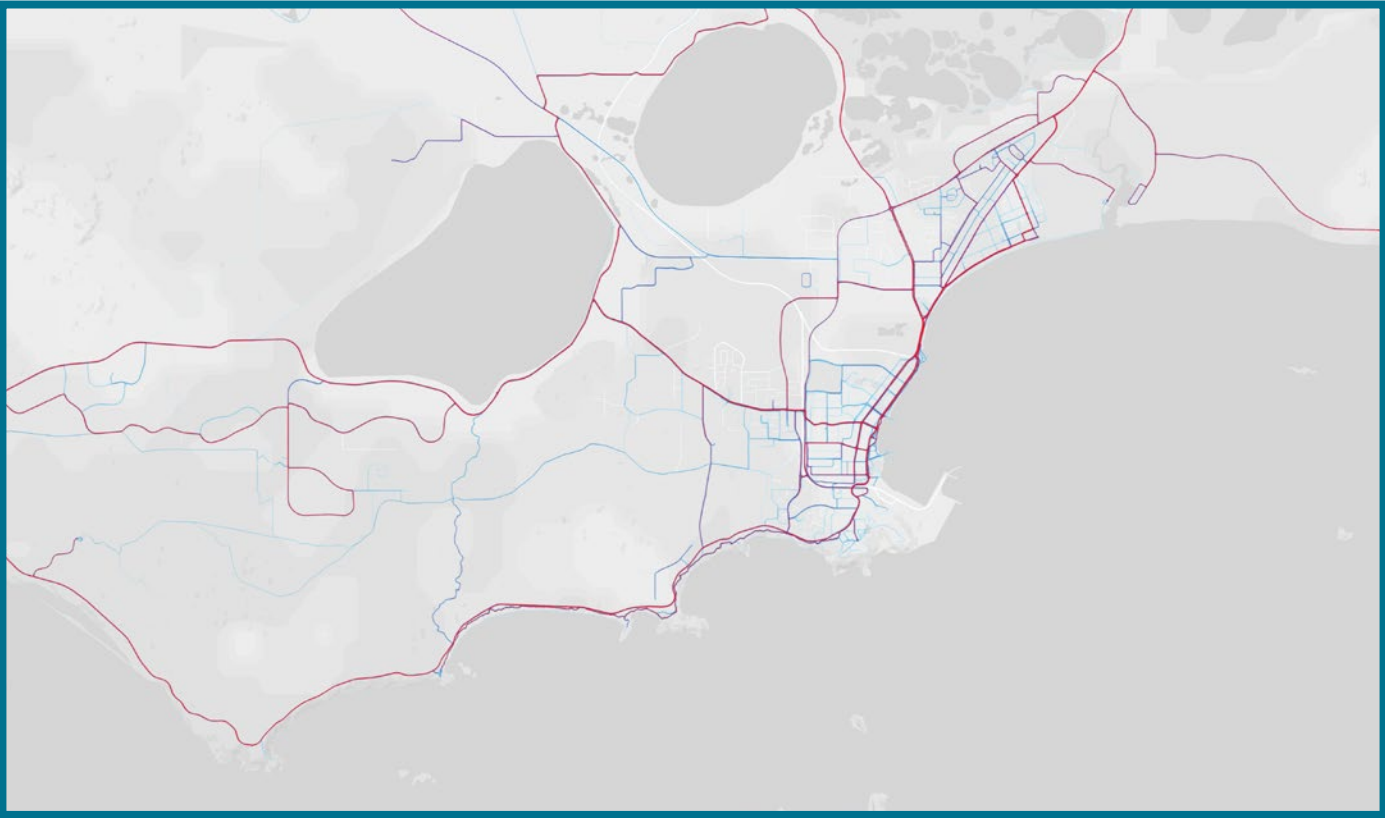
The following trends/generalisations were noted with respect to the GPS travel data:

- The Piggery Mountain Bike Track at Shark Lake is heavily used.
- High levels of cycling activity along The Esplanade, Norseman Road, Goldfields Road and Castletown Quays.
- Twilight Beach Road is more heavily used (by Strava users) than the adjacent coastal path.
- Evidence of longer distance loop rides taking in:
 - Twilight Beach Road;
 - Eleven Mile Beach Road;
 - Pink Lake Road;
 - Stearne Road;
 - Stearne Road;
 - Coolgardie-Esperance Highway;
 - Myrup Road; and
 - Fisheries Road.
- Evidence of long distance tourism using:
 - Merivale Road, Cape Le Grand Road and Lucky Bay Road; and
 - South Coast Highway.
- Key internal link roads within the townsite include:
 - Dempster Street;
 - Sims Street;
 - Shelden Road;
 - Mungan and William Streets;
 - Harbour Road (Between Mungan and Johns Streets);
 - Johns Street; and
 - Connolly Street.
- Cyclists appear to prefer to enter Esperance via Pink Lake Road rather than via South Coast Highway.
- The most commonly used cycle routes (as outlined in the Regional Route Hierarchy) are generally Primary Routes, followed by Training Routes, Secondary Routes and Local Routes.

Figure B2.1 Tools such as Strava Labs assist in understanding existing demand patterns for cycling in the Esperance area



GPS Heatmap for Esperance area



GPS Heatmap for Esperance townsite and immediate surrounds

B3. DOCUMENT REVIEW

A number of documents have been considered as part of the background review. This includes, but is not limited to:

- Austroads National Cycling Strategy (2010)
- Cycling Aspects of Austroads Guides (2017)
- Development Control Policy 1.7 - General Road Planning (under review)
- Esperance Commercial Centre Strategy (2011)
- Esperance and Recherche Parks and Reserves Management Plan (2016)
- Esperance Region Economic Development Strategy (2014)
- Esperance Strategic Community Plan (2017-2027)
- Esperance Supertown Interim Growth and Implementation Plan (2012)
- Esperance Town Centre Revitalisation Plan 2015-2035 (2015)
- Esperance Town Centre Parking, Traffic and Pedestrian Strategy (2016)
- Esperance Trails Master Plan 2007-2017 (2007)
- Main Roads WA Policy for Cycling Infrastructure (2000)
- Regional Centres Development Plan (SuperTowns) Framework 2011-2012
- Shire of Esperance Coastal Management Plan (2014)
- Shire of Esperance Footpath and Cycleway Asset Management Plan (2010)
- Shire of Esperance Local Planning Strategy (2016)
- State Coastal Planning Policy (SPP 2.6, 2.13)
- Western Australian Bicycle Network Plan Update (2017)
- Western Australian Cycle Tourism Strategy (2018)
- Western Australian Mountain Bike Strategy 2015-2020 (2015)
- Western Australia Strategic Trails Blueprint (2017-2021)



APPENDIX C

COMMUNITY CONSULTATION SUMMARY

C1. PHASE ONE (DROP-IN SESSIONS)

A consultation strategy was developed in partnership with the Shire of Esperance, designed to maximise input from the Esperance community and stakeholders.

Following initial consultations with a range of stakeholders, two community drop-in sessions were held:

- Thursday 14 June 2019 – Esperance SHS
- Saturday 16 June 2019 – Dome Café, Andrew Street

In addition to the drop-in sessions, a Councillor workshop was held on Friday 15 June.

The drop-in sessions were promoted through online and print media and via direct contact with a wide range of local stakeholder groups who also promoted the sessions via their internal networks. Community members who could not or did not wish to attend the drop-in sessions were invited to provide written submissions via email.

Approximately 40 people attended across the two sessions, and some lively informal discussions were had between interested community members and representatives from the Shire, DoT and Cardno.

Participants were encouraged to highlight routes which they currently use by bike, as well as ideas they had for expanding or improving the existing network.

Some key themes arose from Phase 1 of the community consultation process. These included:

1. **Castletown Quays to Bandy Creek Path Extension** – this was the most commonly identified idea for the network. Community members and stakeholders cited this project as one which would open up easy access to the underutilised recreational facilities at Bandy Creek, provide for easy loop rides on flat terrain (with the return loop via Daw Drive/Goldfields Road) and be very suitable for children and families. Participants noted that many visitors to Esperance are put off by the very steep grades on the coastal path from The Esplanade to West Beach, and this path extension would provide a suitable alternative for more family-friendly rides along the coastline.
2. **Providing a safer on-road cycling facility on Fisheries Road** – This road is used regularly by grain haulage vehicles and is also one of the major road cycling routes around Esperance. The Esperance Cycle Club avoids using the route during the busy harvest period, however there are still conflicts between heavy vehicles and cyclists at other times during the year. Providing sealed shoulders between Goldfields Road and Merivale Road would significantly improve safety for cyclists and reduce potential for conflict between road users.
3. **Promoting a series of loop rides, embracing the coastal path** – Many visitors arrive in Esperance without any knowledge of where the best cycling experiences can be found. The visitor information centre, for example, does not currently have maps illustrating cycling infrastructure. There is big opportunity to develop a simple cycling brochure with a series of loop rides of differing lengths for a range of visitor experiences. These loops could include shorter flat routes along The Esplanade and Castletown Quays, short steeper rides via West Beach and Johns Street, and the longer loop via Twilight Cove, Great Ocean Trail and Pink Lake.
4. **Harbour Road / Pink Lake Road intersection** – This crossing of Harbour Road was raised as a significant concern by many participants due to the volume of traffic and high number of heavy vehicles.
5. **Better Bike Parking** – participants strongly supported the provision of more and better quality bicycle parking in the Esperance town centre through the provision of more u-rails in more locations.
6. **Local Connections** – participants suggested the construction and/or formalisation of missing links in the network to enable seamless cross-suburb travel without needing to pass through the town centre. The absence of traditional public transport services was cited as a key reason that better cycling infrastructure was needed, to assist young people and non-drivers to access the services and facilities they need. Particular routes suggested include Harbour Road, Shelden Road, and West Beach to Esperance SHS.

7. **Different routes for different riders** – A number of participants mentioned the need to ensure that planning of the network considered different routes and infrastructure types for different types of cyclists, as well as other path users. These would ensure that cycle facilities cater for the multitude of cyclist types and paces in Esperance, including families, the elderly, leisure and recreational cyclists, and commuter cyclists. Considerations including the provision of rest stops (e.g. seats, shelters, water taps) and protection from the elements to assist less confident or less fit riders in using the coastal path and loop rides.
8. **Develop a trail network away from traffic** – Participants suggested many ideas for the development of trails in various parts of Esperance with the common theme of ‘getting away from traffic’. Some of the ideas suggested included:
 - Lake Warden / Woody Lake;
 - Quarry Road link to The Piggery;
 - Cape Le Grand;
 - Gibson to Fraser Range via the old stock; and
 - Rail trail or highway trail from Esperance to Gibson.
9. **General wayfinding and promotion** – Some participants proposed apps for navigation, promoted alongside other materials such as good news stories and local cycling maps via tourism websites. Education through school and behavioural programmes such as Your Move should be prioritised to help foster and embed a culture of cycling within the community, and encourage tolerance between cyclists and drivers. Events and activities catering for the different cyclist profiles should also be promoted throughout the year.
10. **Improving safety on road cycling routes** – Many existing training riders expressed their concern about conflicts with other road users on certain sections of the popular road cycling routes. Suggestions for improvements included:
 - General signage across all road cycling routes advising motorists of the presence of cyclists, e.g. ‘share the road’ type signs as seen in Albany;
 - Targeted warning signage where road cycling routes intersect with or cross the major haulage routes, e.g. South Coast Highway/ Bukenerup Road intersection;
 - Installing a centreline at the sharp bends on Stearne Road to reduce instances of motor vehicles cutting the corner; and
 - Widening of shoulders on sections where speed differentials are high, such as Coolgardie-Esperance Highway lakes section, Fisheries Road hill towards Myrup Road and various sections of Twilight Beach and Eleven Mile Beach Roads.
11. **Provide safer environments for young riders to ride away from traffic** – The Esperance Cycling Club has been pursuing grant funding to recondition and upgrade the disused Esperance Velodrome. One of the main drivers of this project has been a desire to provide a safer environment for young riders to learn their skills without having to interact with heavy traffic on the road cycling routes. To complement this initiative, the development of a safe access route for young riders to the Velodrome is important. Several potential routes were identified, including Freeman Street, Synnott/Moir Streets and a link to Amelia Circuit at West Beach.
12. **Sweeping and maintenance** – A number of locations were mentioned as having a need for more regular maintenance and sweeping. Cycle lanes often suffer from being beset with debris which can pose a risk to cyclists and their bikes. Pink Lake Road was mentioned by a number of participants as having issues at a number of locations along this route.



Figure C1 Scenes from Phase 1 community consultation

Key themes arising from the Councillor Workshop included:

- Cross-town connections;
- Training loops for road cyclists;
- Safety (particularly at roundabouts);
- Target users: families, kids, youth, visitors, “grey nomads”;
- Promotion of existing and future facilities (wayfinding, apps, good news stories);
- Connectivity between community facilities e.g. velodrome, football club;
- Catering for different cyclist typologies;
- Protection from the elements; and
- Quality links and trails.

Comments received from stakeholders via email included the following key themes:

- The construction of new trails should take place outside of public drinking water source areas (unless there are not alternative locations);
- An interest in off road tracks which form part of a 3-5 day trail in and around the area;
- Bike paths should not be proposed along operational railway corridors;
- The importance of sweeping paths and roads;
- Connectivity to local facilities and destinations;
- The importance of planning for cycling during the design stages of new developments;
- The importance of planning for cycling during the design stages of new developments;
- Provision of cycle stop points and rest facilities;
- Consideration of behaviour campaigns to minimise conflicts between road user groups; and
- Encouraging the use of shared paths by cyclists.

C2. PHASE TWO (FORMAL COMMENT PERIOD)

Local community members and key stakeholders were invited to provide feedback on the draft Esperance 2050 Cycling Strategy over a three-week period commencing on 11th March 2019. The draft document was hosted on the DoT website, promoted through social media and circulated to all stakeholders and community members that had provided the project team with an email address during Phase 1 consultations. A total of 64 submissions were received from the community.

The submissions have been grouped into a number of themes and are listed below in the order of frequency with which they arose in the submissions.

Table C2.1 Summary of community consultation themes

Community consultation theme	Response
Fisheries Road – extension of shared path from Bandy Creek Road to Quarry Road, and connection to Quarry Road	This opportunity is captured in the strategy. Specific actions are outlined in Table 5.2.2.
Harbour Road – provision for cyclists between Brazier Street and Norseman Road, particularly the section to from Brazier Street Shelden Road	This opportunity is captured in Section 4.2.1 of the strategy. Specific actions are outlined in Table 5.2.1.
Coastal path from Castletown Quays to Bandy Creek, and connection to Fisheries Road. Many people mentioned that the main recreation area is located on the eastern side of the weir and therefore a loop across the weir and up Bandy Creek Road to Fisheries Road would be great as an alternative flat coastal ride for residents and visitors.	This opportunity is captured in Section 4.1.2 of the strategy. Specific actions are outlined in Table 5.2.1.
Shelden Road – shared path from Harbour Road to Norseman Road.	This opportunity is captured in Section 4.2.1 of the strategy. Specific actions are outlined in Table 5.2.2.
Eleven Mile Beach Road/Twilight Beach Road – a continuation of the cycle/walk trail from Twilight Beach to Eleven Mile Lagoon.	This opportunity is captured in Section 4.1.3 of the strategy. Specific actions are outlined in Table 5.2.1.
Lakes Loops – concerns around the feasibility and environmental acceptability of the routes illustrated in the strategy. Concerns regarding the impact on wetlands, bird nesting areas and dieback risk, as well as topographical constraints on the indicative routes.	The routes shown in the strategy are indicative only and subject to detailed environmental investigation to determine feasibility of various route options, environmental impact and mitigation requirements. A feasibility study is included as a priority action in Table 5.2.4. This study will be undertaken in collaboration with key stakeholders including DBCA.
Support for a cycle path along Sims Street to Harbour Road and connecting with the industrial area.	This opportunity is captured in Section 4.2.1 of the strategy.

Community consultation theme	Response
Support for the Velodrome renewal plan.	The Velodrome renewal project is outside the scope of this strategy, however opportunities for providing safe routes to access this facility have been captured in Section 4.2.2. Specific actions are outlined in Table 5.2.2.
Create/upgrade mountain bike tracks and areas such as Dempster Head or trails to lesser used gravel roads.	Specific mountain bike trail facilities like Dempster Head and Shark Lake are outside the scope of this strategy, however opportunities for providing safe access routes have been captured in the strategy. An opportunity to develop a network of trails embracing the lake system to the north and west of Esperance townsite is also captured in Section 4.4.4, subject to detailed feasibility and environmental investigations.
Support for improvements to cycling facilities on Pink Lake Road.	This opportunity is captured in Section 4.3.2 of the strategy. Specific actions are outlined in Table 5.2.1.
Support for extending the shared path on Eleven Mile Beach Road from Pink Lake Lookout to the Sanctuary Estate area	This opportunity is captured in Section 4.2.1 of the strategy.
Cycle connection from West Beach to the Senior High School	This opportunity has been captured in Section 4.2.2 of the strategy. Specific actions are outlined in Table 5.2.2.
Improved bike racks in the town centre and accommodation for cyclists within new paths	This opportunity is captured in Section 4.3.1 of the strategy.
Support for safer routes to Shark Lake (including the Piggeries) and Gibson, via Coolgardie-Esperance Highway or other gravel routes such as Quarry Road.	This opportunity is captured in Section 4.4.7 of the strategy.
Support for longer distance trails east and west of Esperance townsite, including to/through Cape Le Grand, and between Duke of Orleans Bay and Wharton Beach. Support for inclusion of e-bike recharging stations and first aid stations to support cycling in remote areas.	These opportunities are captured in Sections 4.4.2, 4.4.5 and 4.4.6 of the strategy.
Suitable routes for road cyclists during harvest season	This opportunity is captured in Section 4.5 of the strategy, with a combination of shoulder sealing, signage and warning systems, and collaboration between road user groups outlined in Table 5.2.5.
Support for improved crossing facilities at road crossings, such as zebra crossings.	This opportunity is captured in Sections 4.2 and 4.3 of the strategy, and a specific action to improve crossing facilities on the network is included at Table 5.2.6.

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