

Introduction

The City of Fremantle Strategic Community Plan 2015-2025 aims to have Fremantle recognised as a pedestrian and cycle friendly city and sets a target to double riding to work from 2.9% to 5.8% by 2018. The City adopted a Local Bicycle Plan (Bike Plan) in 2014 which set an implementation framework to achieve this goal over 5 years through a range of infrastructure projects and promotional programs. The Bike Plan also complements the City's broader Integrated Transport Strategy objectives. In 2018 the City reviewed the Bike Plan to determine if targets had been met and to consider what further actions would assist in achieving an improved cycling environment and usage rates over the next 5 years.

The review included:

- Audit of what has been achieved since the last Bike Plan adoption in 2014.
- Revaluation of the Bike Plan's three approaches to providing a safe and well-connected bike network namely:
 - o Everyone to have access to a bike (encourage bike share and bike hire opportunities).
 - o Provide 'hard infrastructure' (bike lanes, paths, parking).
 - Provide 'soft infrastructure' (education and promotion programs).
- Gap analysis of cycling infrastructure and further infrastructure opportunities and constraints.

- Identification of existing and new cycle routes, based on their current and future function (primary, secondary and local routes).
- Analysis of 2016 Census data, 2018 City Centre bike cordon counts, 2018 Super Tuesday and Sunday commuter and recreation bike counts.
- Community and Bicycle User Group (BUG) engagement and discussions with key stakeholders (DoT, Main Roads WA, Public Transport Authority, adjoining local governments).

It also considered the wide range of infrastructure projects and programs which have been undertaken over the last 5 years, including on-road bike lanes, new off-road paths, bike parking, scheme amendment for end of trip facilities, annual Bike Month events, intersection treatments, path maintenance and upgrades, free bike hire and new bike data monitoring.

The review concluded that good progress has been made in the pursuit of a cycle-friendly and active city but that there are further opportunities to further these goals. The safer the cycling infrastructure, the greater the opportunity to get more cautious riders out commuting to work or school, local trips and recreation. It is pleasing that since the adoption of the 2015 Bike Plan people commuting and general bike trips in and around the City has increased, where the trend in greater Perth has plateaued or in some areas, declined.

Why Ride?

There are many benefits in riding a bike, whether commuting or for other trips:

- Economic: save costs on fuel and car maintenance. Creates growth in jobs in the bike and construction industry. Increases spending in shopping areas. Increases tourism visit spend. Reduces car congestion costs.
- Liveable City: reduces congestion, creating a more efficient and pleasurable road experience. Helps create social connections by increasing interaction with people and places.
- Health: increases fitness, regular physical activity helps reduce stress. Can reduce health costs.
- Environment: pollution free, low fossil fuel use.

Purpose of the Bike Plan

The purpose of the new Bike Plan is to establish the long term bike network and set priorities for bike infrastructure projects, programs and promotional activities for the next 5 years. The Bike plan also formalises the methods to be used to measure changes in rider volume over time. The goal is to continue to work towards increasing commuter cycling rate to 5.8% and beyond, and increasing other cycling trips (shopping, recreation etc).

The Bike Plan is the City's approach to make cycling as convenient, connected, safe and enjoyable as possible, so that travelling by bike is an attractive alternative to the car.

The Bike Plan identifies two primary approaches to increasing cycling rates:

<u>Hard Infrastructure</u>: providing or working with the state and other stakeholders to provide infrastructure to ensure a well-connected, convenient and safe cycling environment e.g. on and off-road cycle lanes, bike parking, signage and key intersection/crossing treatments.

The City will ensure its cycling network is safe, enjoyable and well connected with a completed network of separated bike lanes, clearly marked cycle routes and clear signage. The City will also plan for and provide improved "end-of-trip" facilities such as bicycle lockers, secure bike parking areas and convenient bike parking at its facilities.

<u>Soft Infrastructure</u>: education and promotion of the benefits of cycling and the facilities and routes available in the City and Perth metropolitan area, and other endeavors to encourage cycling.

The City will encourage bike riding through education and promotion of the available facilities and benefits of cycling and advocate and assist where possible the uptake and promotion of the Department of Transport Your Move program. Promotion and education will also include facilitation of external bike share schemes, private and public bike hire opportunities and economic/tourism cycling opportunities.

How we are travelling

Using 2016 Census statistics and 2018 cordon counts, the review found infrastructure improvements and promotional programs have helped influence commuter and other rider behaviour. Though not doubled, people riding as a commute to work increased to 3.1% and the City Centre cordon count found a 13% increase in people riding (from 2012). Over the 14 survey sites, the intersections which saw the greatest increase in people riding were at Quarry and James Street, Knutsford Street and Hampton-road and the Mews Road path. Decreases in people riding were recorded at only two intersections (Finnerty/James Streets and Alma Street/ Hampton-road). Annual 'Super Tuesday' commuter counts and 'Super Sunday' recreational counts were undertaken in March and November 2018. The Super Tuesday cyclist counts indicated a 1% growth in cycling movements whilst the Super Sunday counts indicated a decrease in recreational cycling from 2017.

Community and stakeholder engagement has provided further input into infrastructure improvement opportunities, with the most identified areas for improvement located in North Fremantle, northern City Centre area, South Terrace/Marine Terrace area and Hampton-road/Cockburn Road area.



Strategic Bike Network

The Bike Plan network represents the ultimate network of routes the City is working towards. It has been developed based on:

- Connectivity to activity centres, key origins and destinations, schools and links to existing and planned primary cycle routes and paths in adjoining local government areas.
- Information received from community engagement, feedback and observational data.
- The the Department of Transport's route hierarchy guidelines, which aims to provide consistency and legibility for cycle routes and planning across the Perth Metropolitan area.

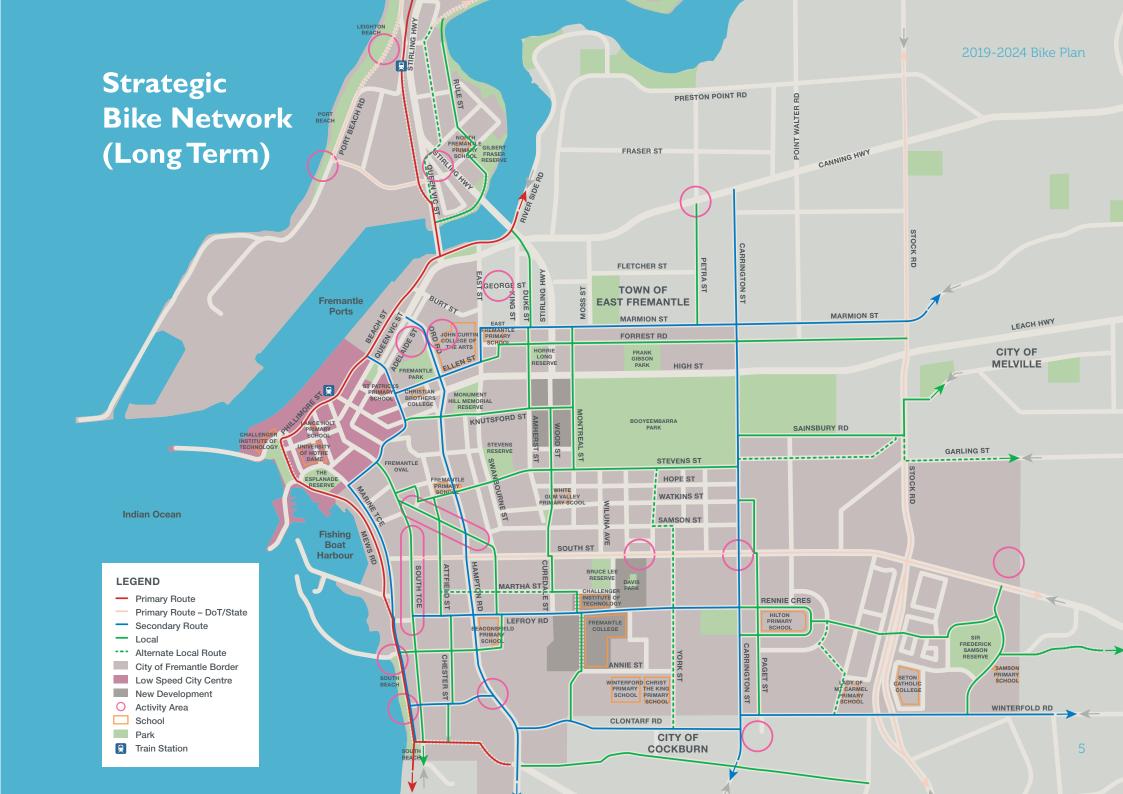
The hierarchy is to guide and inform network design, taking into account local conditions and constraints. It includes three (sometimes overlapping) typologies for the cycling network. It is recognised the City has additional existing and planned corridors and areas that complement the basic network such as the low speed city core, shared streets and low speed mixed zones which contribute to a cycle friendly city and the City's overarching transport objectives.

Network Route Hierarchy

The Department of Transport route hierarchy for Primary, Secondary and Local are summarised below. Diagrams are notional and provide examples only. Mixed Areas and Shared Street examples are additional bike-friendly street types that can be applied to the City Centre and other activity areas. In developing the network for the city's streets, various unique attributes and functions will require a considered design response such as the Kings Square shared street design approach and reducing vehicle speeds in the the City Centre.

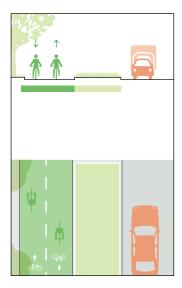
The Department of Transport Primary Routes located in the City of Fremantle (under review) are along high speed, high traffic roads. As such the route hierarchy recommends complete separated bike lanes. Except for the coastal and City Centre primary route (South Beach, City Centre, North and East Fremantle connection) these roads and routes are not in the City's design, construct or funding control. The City does, however, have an important stake in these and will advocate for positive outcomes for cyclists.





Primary Route Function and Form

Full Separated



High demand corridors that connect major destinations e.g. Perth and Fremantle City Centres. Provide high quality, safe and convenient (where possible uninterrupted) routes that form the spine of the metropolitan cycle network. Riding speed can be fast, therefore path widths need to be wide (typically 2.4m - 4m).

Form

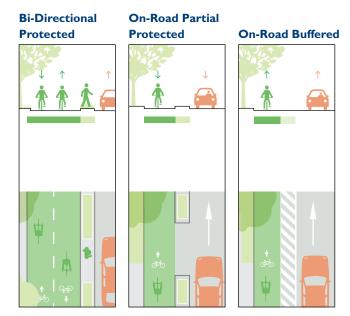
High quality cycle only or shared paths, located adjacent to major roads, rail corridors, rivers and ocean foreshores. Ideally grade separated.

Design and Implementation Factors

Mainly state government controlled routes.

Along high vehicle speed and volume routes, including freight links.

Secondary Route Function and Form



Lower demand than primary routes, but provide a similar level of quality, safety and convenience. Secondary routes provide connections between primary routes and major activity centres such as shopping areas, industrial areas and major health, education, sporting and civic facilities. Bi-Directional Protected lanes can be shared so riding speed is lower. Partially Protected and Buffered on-road lanes require road space each side which impacts on car lanes and parking.

Form

Combination of high quality shared paths, bi-directional protected bike lanes and protected onroad lanes.

Design and Implementation Factors

Provide an alternative safer route parallel to Primary Routes. Greater infrastructure protection than Local Routes. Require greater separation widths and road reserve.

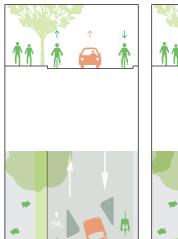
Local Route Function and Form

Safe Active

Street



Local Street Calmed



Ouiet Local Street

Low demand, predominantly located in local residential areas. Local routes provide access to secondary and primary routes, local amenities, schools and recreational spaces.

Form

Combination of shared paths, protected bike lanes and low speed and low traffic volume shared streets. May involve Safe Active Street treatment and bike friendly Local Area Traffic Management (LATM) treatments. Can utilise existing quiet local streets and include wider footpaths.

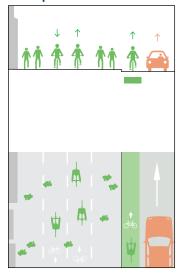
Design and Implementation Factors

Provide an alternative safer route parallel to Primary Routes.

May involve the reconfiguration of on street parking

Other Streets and Spaces

Low Speed Mixed Area



An area of activity that includes pedestrian, cyclist and driver movements, encouraging low speeds for all modes. Often a transition zone from an activity area to the street e.g. Esplanade Park to Fishing Boat Harbour.

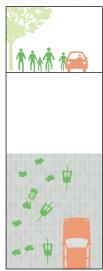
Forn

A combination of bike lane/direction marking, pavement treatments and landscaping.

Design and Implementation Factors

Integration of urban design and civil design.

Shared Street



A street design approach to change the way streets operate by reducing the dominance of cars, primarily through lower speeds and encouraging drivers to share the space with pedestrians and cyclists.

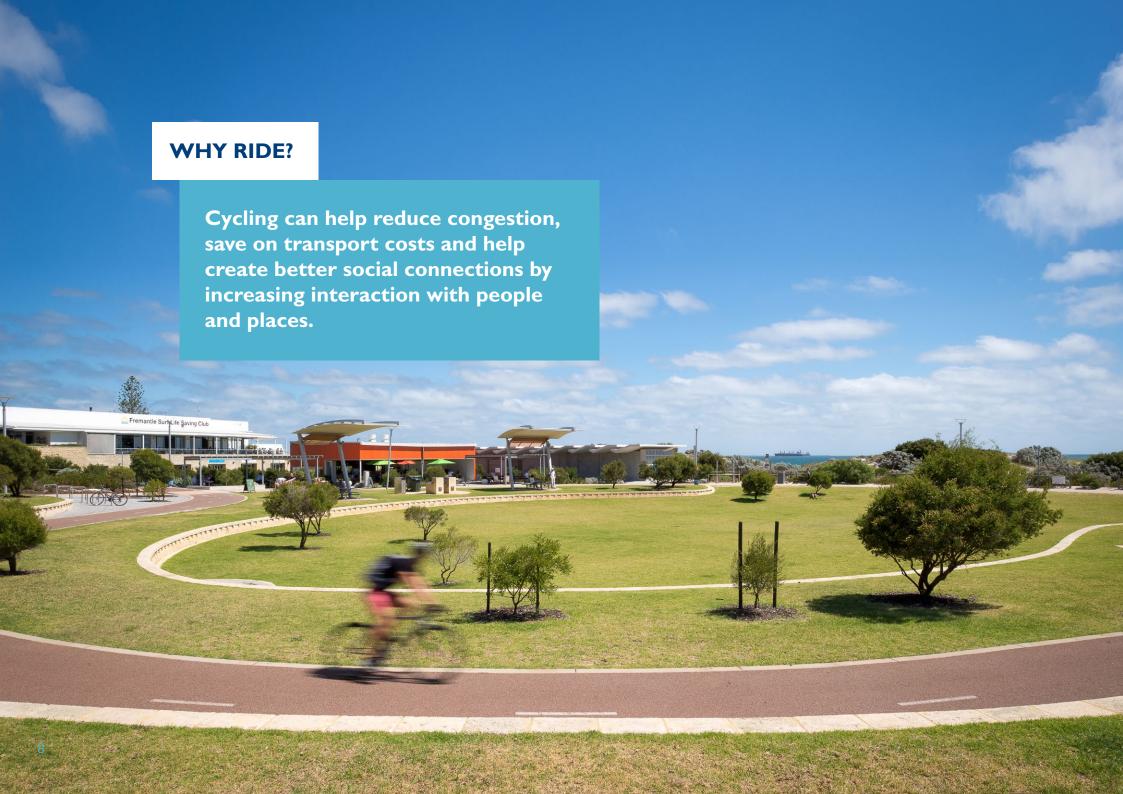
Form

Minimal to no level change between the footpath and the street. Different pavement treatments, landscaping.

Design and Implementation Factors

Integration of urban design and civil design.

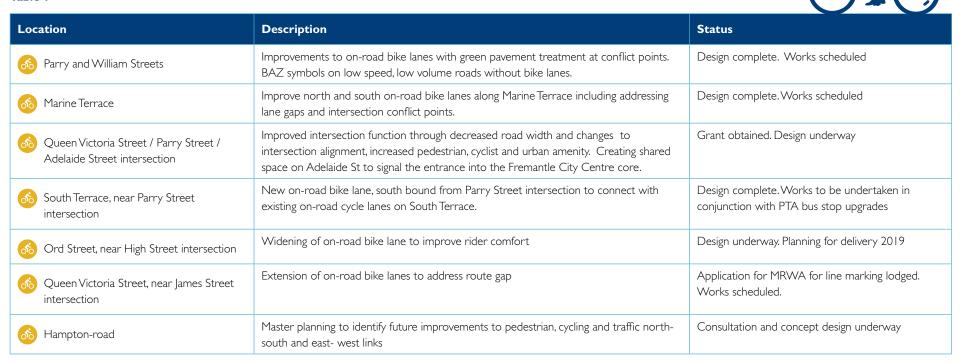
The City's Integrated Transport Strategy also recognises that contemporary civil design should create safer, more connected cycling environments on all local streets, irrespective of their inclusion in the Bike Plan route network. The City recognises the advantages of providing consistent and legible infrastructure treatments for bike routes to create networks across the City and connecting to other metro networks. The City will continue to work with DoT and WALGA on the emerging design guidelines. The City also recognises new riding trends such as the increasing use of e-bikes and cargo bikes and will take into account the requirements in infrastructure design (e.g. bike parking and refuge island widths).



Project pipeline

Bike infrastructure projects that are underway.

Table I



In addition to progressing projects in the pipeline, the Bike Plan recommends a series of new actions to advance its objective of the City of Fremantle being a cycle friendly city. These focus around the development of plans for network routes then the identification of funding opportunities for their staged implementation. Some works may be completed within the Bike Plan 5 year horizon whilst others may take longer due to scale and resources. However better defining the necessary improvements across the network through design and development, helps enable opportunities to implement them in stages or as components of other civil works (e.g. road resurfacing).

Table 2 sets the general order in which the City will progress the planning and design of the cycling network over the next 5 years (some of the routes will be concurrent). This planning and design will assist with budget and grant applications. Projects can be brought forward or re-prioritised depending on opportunities and resources. The table includes opportunities for short term network improvements (which should be able to be implemented within the 5 year Bike Plan horizon) and also longer term network planning and design (5 years +, which will most likely be included in the next Bike Plan).

The City will begin focusing on routes A, B, C and D, liaise with Department of Transport for Safe Active Street opportunities and advocate/support for the northern road and river crossing improvements

The rationale for the staging is a combination of factors:

- Street design is underway to address gaps in the current path network
- Completion of key sections of existing infrastructure
- Integration and timing with other infrastructure projects and development
- Ability to deliver design and construct (i.e city controlled roads are given priority)
- The scale of the project and where multiple stakeholders are involved (e.g. other local governments, state government agencies, require traffic modelling etc)
- Community input

Project Planning Process

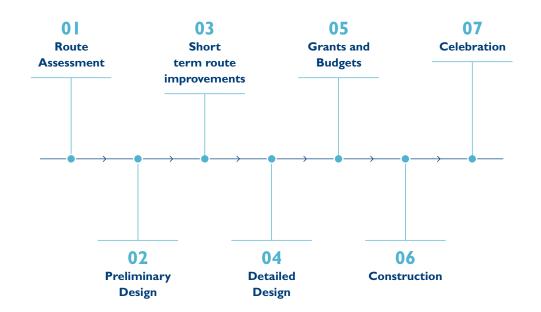


Table 2: Network Improvements and Planning Priorities

| Map Location | Planning and design for the bike network 5 Year Plan | Network | Rationale for priority in 5 year plan | Short term improvements and current actions |
|-----------------|--|---------|---|--|
| A | East Fremantle to Beaconsfield Link - Connection from Stirling Bridge to Clontarf Road | Local | Connection into the High Street pedestrian and cyclist underpasses at Forrest Road and Montreal Street due for completion in 2020. Alternative route to Carrington Street and Hampton-road. Connects three Primary Schools, a High School and Heart of Beaconsfield development. Opportunity for Safe Active Street design principles and DoT grant application. | Intersection improvements at Lefroy Road and South Street. Wayfinding signage/bike crossing marking at key intersections from High Street to Clontarf. Liaison with City of Cockburn for future north-south link opportunities to Healy Road. Liaison with Town of East Fremantle for connections to Canning Highway/Stirling Bridge. |
| В | Knutsford Street Link – Connection from Booyeembara Park to City Centre | Local | Design is underway as part of the development of Knutsford Street East Structure Plan. Provides a link from the development area, Booyeembara Park to the City Centre. Links into the High Street underpass connection at Amherst Street and Montreal Street. Opportunity for Safe Active Street design principles and DoT grant application. | Hampton-road/Knutsford Street intersection improvements to be identified in the development of the Hampton-road master plan. Knutsford Street concept plan development. |

| Map Location | Planning and design for the bike network 5 Year Plan | Network | Rationale for priority in 5 year plan | Short term improvements and current actions |
|-----------------|--|---------|---|---|
| С | Attfield Street Alternative to Hampton-road/South Terrace – Connection from South Fremantle to City Centre | Local | Alternative route to Hampton-road and South Terrace. Connects South Fremantle and Hollis Park separated path (connecting to Hamilton Hill) to City Centre, hospital and primary school. Opportunity for Safe Active Street design principles and DoT grant application. | Traffic calming treatment on Attfield Street near primary school (including Brennan Street) proposed. New wayfinding signage. Engagement/education with school. |
| D | Northern Gateway Link – Connection to Perth/Fremantle PSP North Fremantle and southern coastal route and Tydeman Road/River Crossing | Primary | Connection to the DoT primary route (Principal Shared Path - PSP) along the Perth to Fremantle rail line. State government commitment to construct Fremantle Railway Principle Shared Path from Grant Street to North Fremantle 2020/2021. | Advocate for the early provision of a pedestrian and cycling connection into the City Centre, including design advice. Prepare concept plan and options for Tydeman Road and river crossing. Include local connection along foreshore to Fremantle Bridge In discussion with the DoT review of the Long Term Cycling Network (LTCN). |
| Е | Forrest Road Link – Connection from Palmyra to City Centre | Local | Connection to underpasses at Stirling Highway Connects suburbs of Bicton, Palmyra and Fremantle to the City Centre. Connects to primary school and high school. Opportunity for Safe Active Street design principles and DoT grant application. | Investigation on intersection improvements (reconfiguration of stop signs) Wayfinding signage Education/promotion |



| Map Location | Planning and design for the bike network 5 Year Plan | Network | Rationale for priority in 5 year plan | Short term improvements and current actions |
|-----------------|--|---------|--|---|
| F | Wray Avenue Loop – Connection loop from South Terrace to South Fremantle | Local | Connection for Beaconsfield, White Gum Valley and Hilton to the Wray Avenue activity area and City Centre. Link between South Terrace, South Street and Lefroy Road routes. | Investigate a reduced speed limit to 40kmph (MRWA approval required) Investigate on-road bike lanes on Wray Avenue east of Hampton Road |
| G | City Centre to South Fremantle/ North Coogee Link – Connection along South Terrace activity area | Local | Connection from South Beach/South Fremantle into the City Centre. Sections of South Terrace are destination activity areas. | Install Bicycle Awareness Zone (BAZ) at intersection on north approach as well as extend cycle lane from Wray Ave on South Terrace, south bound. Speed bump to be removed when resurfacing occurs. Ongoing roll out of 'node' traffic treatments to reduce traffic speed and improve streetscape amenity. |
| Н | Hilton Rennie Crescent Loop – Connection to Carrington Street/ Lefroy Road and Collick Street including primary school loop | Local | Connection into Lefroy Road secondary route through to Collick Street, then Winterfold Road. Long term connection into Samson. | Investigate install BAZ at key points along Rennie Crescent, Holmes Place and Collick Street |
| I | Paget Street Link – Connection from Hamilton Hill to Hilton North | Local | Connection from Hamilton Hill activity area, Community/sporting centre and Hilton activity area Alternative route to Carrington Street | Liaison with City of Cockburn on crossing improvements as part of the DoT review of the LTCN. |

| Map Location | Planning and design for the bike network 5 Year Plan | Network | Rationale for priority in 5 year plan | Short term improvements and current actions |
|-----------------|---|---------|--|--|
| J | Willagee, White Gum Valley to City Centre Link – Stevens Street connection | Local | Alternative to High Street and South Street. Connection from Willagee to City Centre, including 2 primary schools. | In discussion with the City of Melville as part of the DoT review of the LTCN. Investigate additional Garling Street connection. |
| K | North – South network connection – Coastal Route – South Beach to Norther Gateway | Primary | Primary Connection into the Hollis Park separated path, Rockingham Road, Healy Road and Cockburn coast path. Links North Coogee, Hamilton Hill, Spearwood, City Centre and East Fremantle, with activity areas of South Beach, The Esplanade, West End, Fremantle train station. | Liaise with the DoT on opportunity for path priority at rail crossings along the route to improve cyclist safety. Review of shared path guidelines. Investigate intersection and on-road bike lane extensions at southern end of Marine Terrace. Continue ongoing coordination and liaison with the DoT and adjoining local governments to integrate the bike network across boundaries, including (but not limited to) connecting Fremantle's coastal and Hampton-road north-south routes into Rockingham Road, Healy Road and connecting Manning Park. |
| | North-South connection — North Fremantle/Leighton | Primary | Coordinate in with current planning for extension of Perth-Fremantle PSP and planned installation of Stirling Highway signalised pedestrian crossing. | Advocate for improved rail crossing facilities at North Fremantle station which better connect into the bike and pedestrian network, and preferably include crossings at both northern and southern ends of station platform. |



| Map Location | Planning and Design for Bike Network 5+ years | Network | Rational for priority | Short term improvements and current actions |
|-----------------|---|-----------|---|--|
| | Samson – Sowden Drive, Sellenger Avenue and McCombe Avenue Link | Local | Local route through Samson and to Kardinya Stock Road crossing dependent of MRWA | Extension of on-road bike lanes on McCombe Avenue In discussion with the City of Melville and Cockburn as part of the DoT review of the LTCN. |
| | North – South connection – Carrington Street | Secondary | Connection from Spearwood to the Swan River. Links activity areas in Hamilton Hill and Hilton and into the Lefroy Road and Marmion Street secondary route network. Provides an alternative to the DoT LTCN Stock Road route. Provides an opportunity to improve separated path (on-road or off-road) located between Jeffrey Street and Lefroy Road. | Investigate signage to direct cyclists to parallel route along Darling Street, Cadd Street and Minilya Avenue. Feasibility analysis to determine impacts of protected/separated paths to inform design parameters and concepts. First stage analysis for bike path from Lefroy Road to Stevens Street. In discussion with the DoT review of the LTCN. |
| | Parry Street Ring Road – Connection around the City Centre from Marine Terrace to Beach Street | Secondary | Key 'ring road' around City Centre low speed core. Connection to primary coastal route (Norfolk Street to Beach Street). Require detailed urban design and streetscape analysis. | BAZ installation and bike lane extensions |
| | Marmion Street Link – Connecting Booragoon with the City Centre | Secondary | Alternative route to Leach Highway and High Street. Links activity areas of Booragoon (and potential to Freeway PSP) and City Centre. Links local activity areas from Booragoon to Fremantle, including schools and recreation facilities. Requires collaboration with Town of East Fremantle and City of Melville. | In discussion with Town of East Fremantle and City of Melville as part of the DoT review of the LTCN. |

| Map Location | Planning and Design for Bike Network 5+ years | Network | Rational for priority | Short term improvements and current actions |
|-----------------|---|-----------|--|--|
| | Marine Terrace Link – A higher speed riding route connecting South Fremantle to the City Centre | Secondary | Provides a parallel fast on street network from South Beach and North Coogee to the City Centre (confident riders). Links North Coogee, South Beach to the City Centre Connects into the coastal path route and Hollis Park path | Investigate kerb ramps at Scott Street cul-de-sac Investigate improvements for bikes at signalised intersections at Scott Street Liaise with the DoT on opportunity for path priority at rail crossings along the route to improve cyclist safety. Review of shared path guidelines. Improve north and south on-road bike lanes along Marine Terrace including addressing lane gaps and intersection conflict points including green marked cycle lanes. |
| | Clontarf Road Link – Connection to Hamilton Hill to South Fremantle and City Centre | Secondary | Build on existing on-road bike lane infrastructure. Requires collaboration with City of Cockburn. | In discussion with the City of Cockburn as part of the DoT review of the LTCN. |

| Bike Parking Audit | Bike Signage Audit | Bike Intersection/Lane Audit |
|--|---|--|
| Undertake an audit to document location and condition of existing bike parking. Identify locations for new/replacement bike parking - informing annual project, asset management and budget programming. | Undertake an audit to determine location and condition of existing bike signage. Identify locations for new/replacement bike way finding signage -informing annual project and budget programming and in discussion with DoT metro wide bike signage. | Undertake an audit of lane widths and lane connections to intersections (including 'pinch points'). Identify locations and opportunities for on-road lane widening, better lane protection and better connections to intersections with a focus on the installation of separation treatments (e.g. low profile delineators) at key intersections with traffic lights-informing annual project and budget programming and in discussion with DoT. |



Programs and Promotion

| Facilitation, Education ar | Facilitation, Education and Promotion | | | | |
|--|--|--|--|--|--|
| Opportunities to expand Your Move Program | Identify opportunities with DoT to promote, assist and expand programs into schools. Encourage Your Move schools to participate in activities to reduce car use. Engage with existing Your Move organisations and businesses (including One Planet organisations) to participate in activities to reduce car use. Work with the DoT to identify initiatives and campaigns to improve driver and cyclist awareness of safe road rules (e.g. Im passing rule). | | | | |
| Corporate Your Move activities | Continue to deliver Corporate Your Move initiatives (also part of One Planet Sustainable Transport - Corporate) e.g. staff bikes, bike parking, end of trip facilities, education and promotion activities | | | | |
| Community programs/ events | Continue to identify, facilitate and participate in commuting programs and events that educate and promote cycling e.g. Bike Month, Ride to Work Day, Your Move, One Planet and sustainable events | | | | |
| | Produce a bike parking and other facilities information flyer for the community to use for events | | | | |
| | Update web riding information | | | | |
| Place Marketing, Visitors | Continue to provide free visitor bike hire – investigate opportunities to increase use | | | | |
| | Facilitate bike share opportunities, where possible | | | | |
| | Promote other visitor and place marketing bike related facilities and events | | | | |

Implementation and Monitoring

Implementation progress will be monitored annually as part of internal business planning.

Cycling rates will be monitored annually through Super Tuesday and Super Sunday counts and 5 yearly through the national census. Localised monitoring will occur 5 yearly through bike counters as part of the plan review.

Progress on the plan will be formally reported in 2023/24 as part of its next review, however more frequent informal reporting will occur through the Bicycle Reference Group and other Council forums and information reports.





Fremantle Oval 70 Parry Street Fremantle

T: 08 9432 9999

F: 08 9430 4634

TTY: 08 9432 9777

E: info@fremantle.wa.gov.au

