

# Knox Cycling Action Plan 2024–2035





# Message from the Mayor

Knox is a diverse city, with urbanised landscapes, activity centres, rural areas and treed foothills nestled beneath Mount Dandenong. Together our people form a wonderful tapestry of varying backgrounds, ages, abilities, needs and lifestyles.

Transport plays an integral role in our daily lives. Our community deserves great transport options to support daily commutes to improve how we work, play and live.

The Knox Cycling Action Plan 2024-2035 is an ambitious vision towards an enhanced transport network. The vision - a well-designed user-friendly cycling network - will provide opportunities for people to access affordable transport, encourage us to become healthier and support the preservation of our natural environments.

Cycling is one of the most diverse of our transport options - for families, the young, the elderly, the fit, and for those with mobility needs too. Our cycling action plan has been shaped by thousands of individuals and groups through strong engagement during a period in history where our shared paths were utilised and appreciated more than ever - a global pandemic.

The Knox Cycling Action Plan outlines an exciting pathway towards a sustainable transport future for our beautiful city.



**Councillor Jude Dwight**  
Knox City Council Mayor, 2023-2024

# Contents

Cycling in Knox	4
Engaging our community	6
Delivering a safer network	11
Our future network	12
Network delivery	14
Our actions, our future	16
Evolving our network design	18
Investing in capital works	20
Increasing our awareness	22
Managing our network	24
Investing in the future	26

# Cycling in Knox

The Knox Cycling Action Plan (KCAP) is a 10-year plan that identifies key operational and capital works priorities for Knox City Council to improve cycling uptake within the municipality. The plan responds to current needs and acknowledges the change in Knox’s cycling community.

The KCAP supports Council’s goals towards being well connected, improving social and physical wellbeing, increasing transport options and reducing negative impacts to our natural environment. It is underpinned by four principals of thought:

### Safe systems

Transport safety is improved by making Safer Roads, Safer People, Safer Speeds and Safer Vehicles.

### Low stress cycling

Each cyclist, depending on their experience and skill, has a different level of acceptance of danger. Each individual’s perceived dangers influence their trip choices, bicycle choice and route selection.

### Movement and place

Place (land use) and movement (transport corridors and transport types) have an inter-relationship that impacts on how transport systems should be designed.

### All abilities and all ages

Our cycling network should be accessible to all skill levels and ages.

Whilst this plan is designed with consideration to Council’s financial limitations and the need for external funding opportunities to support its delivery, this plan sets out a clear roadmap on how Council can provide its community with a feasible alternative transport option to the private motorised vehicle and guidance on future developments when providing cycling infrastructure. As a result, the plan’s objectives, proposed cycling network and identified actions extend beyond 2035.

The 10-year timeframe allows Council to deliver significant change to Knox’s cycling network and similarly encourages the review of the plan to ensure its relevance to Knox’s future community in 2035.

## Knox Cycling Action Plan Timeline

YEAR	DELIVERY PHASE	
May 2019	Initial consultation (phone survey and data analysis)	✓
Feb 2020	Initial draft completed	✓
2020-2021	COVID-19 pandemic	✓
Oct 2021	Online community consultation	✓
Feb 2022	Consultation with Knox advisory committees	✓
Apr 2022	Randomised household phone survey	✓
Jun 2022	Data verification	✓
Jul 2022	Analysis of ABS Census data	✓
Aug 2023	Draft KCAP	✓
Nov 2023	Internal review	✓
Apr 2024	Council endorsement for consultation	✓
May 2024	Re-engage Knox advisory committees and online survey	✓
Aug 2024	Council endorsement	✓
2029 & 2033	Progress update on the action plan	✓
2034	Commence review of the KCAP	



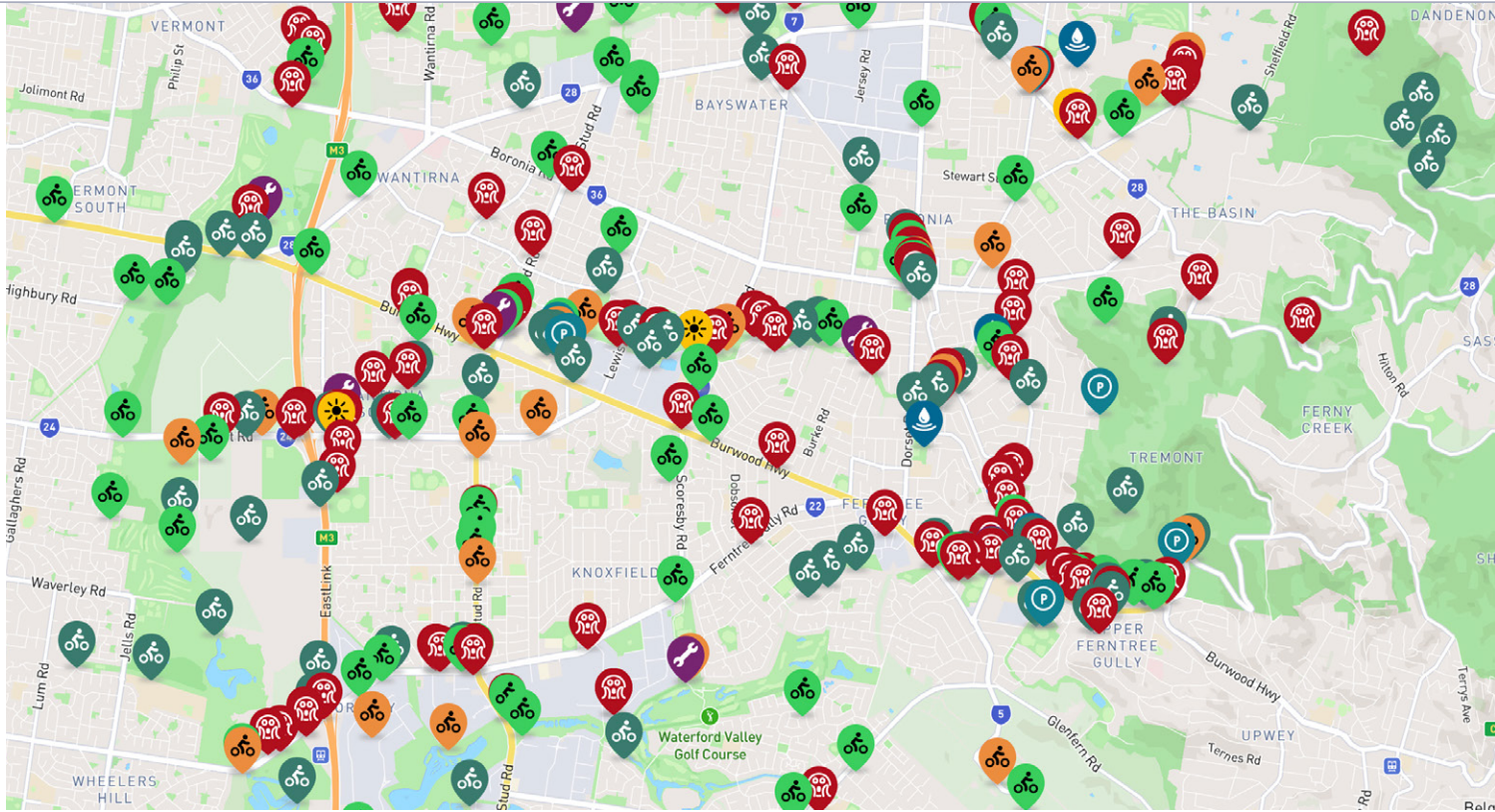


# Engaging our community

The KCAP emanated from an extensive community consultation process pre and post COVID-19 restrictions to better understand our shifting community needs. Results were referenced against recorded crash statistics, historical cycling counts, land use assessment and the 2021 Census data. The table below highlights the engagement level for each community consultation phase that has influenced the Knox Cycling Action Plan.

Figure 1: Overview of community engagement processes and participation rates

2019 Initial Draft Plan		2021 Second Draft		2024 Public Exhibition		
Phone Survey	Online survey	Knox Advisory Committees	Phone Survey	Online submissions	Public exhibition by invitation	Knox Advisory Committees
469 completed household interviews  1087 captured household individuals  Conducted through the National Walking and Cycling Participation Survey  Randomised household phone survey	592 Contributions  184 unique contributors  1,659 individual visits  Online survey  Geomapping survey with a total of 409 self-reported individual sites for network improvement	7 Committees  7 separate focus groups  86 participating individuals  Advisory committees engaged include: <ul style="list-style-type: none"><li>• Recreation and Leisure Committee</li><li>• Disability Advisory Committee</li><li>• Active Ageing Advisory Committee</li><li>• Early Years Committee</li><li>• Environment Advisory Committee</li><li>• Youth Advisory Committee</li><li>• Multicultural Advisory Committee</li></ul>	430 completed household interviews  1038 captured household individuals  Conducted through the National Walking and Cycling Participation Survey  Randomised household phone survey (total of 3,467 households were dialed including attempted, ineligible and completed surveys)	Draft KCAP downloaded 378 times during engagement.  Background document downloaded 90 times  40 individual contributions  1198 visits with 969 individual visitors during the active engagement period  The 969 visitors were first time readers of the plan.  229 visits included people returning to reengage with the plan.	Neighbouring Councils  Department of Transport  Melbourne Water  Internal workshops with City Futures, Recreational and Leisure and Biodiversity  Road Safety User Group  Eastern Regional Trails Strategy Working Group  Eastern Transport Coalition  Bicycle User Groups	Seven advisory committees were invited  The following were engaged in a workshop to check in and prioritise the proposed KCAP actions: <ul style="list-style-type: none"><li>• Disability Advisory Committee</li><li>• Active Ageing Advisory Committee</li><li>• Early Years Committee</li><li>• Environmental Advisory Committee</li><li>• Youth Advisory Committee</li></ul>





## We discovered...



On average, residents own 1.3 bikes per person per household which is higher than the average Australian and Victorian household.

Cycling uptake and frequency increased with the onset of COVID-19 restrictions.



### Cyclists indicated that they:

- > prefer shared path facilities over on-road cycling facilities
- > think that sharrows do not provide any comfort as a cycling facility.
- > prefer a sign system that combines on-ground and pole-mounted directional signage
- > feel least comfortable cycling along an arterial road and along industrial roads even if it is a low speed environment

The general community has a poor understanding of etiquette and cycling road rules, and are unaware of Council's efforts to increase cycling uptake through programs or constructing new cycling facilities each year.



## Our community is saying:

Installing drink fountains, seating and bike repair stations at key locations would greatly improve cycling experience and comfort.

Improve access and availability of mountain bike facilities.

A bike lane with car parking permitted is preferred over using sharrows on the road.

"Good cycling accessibility and tracks in Knox" however, we "need better north-south links". The network "feels disjointed" and "doesn't have a purpose" because it doesn't "link to destinations". "Please ensure paths allow you to cycle from A and B anywhere in the municipality".

A high-quality wider shared path on one side is preferred to footpaths on either side with no off-road cycling facility.

Cycling is uncomfortable at night due to little to no lighting.

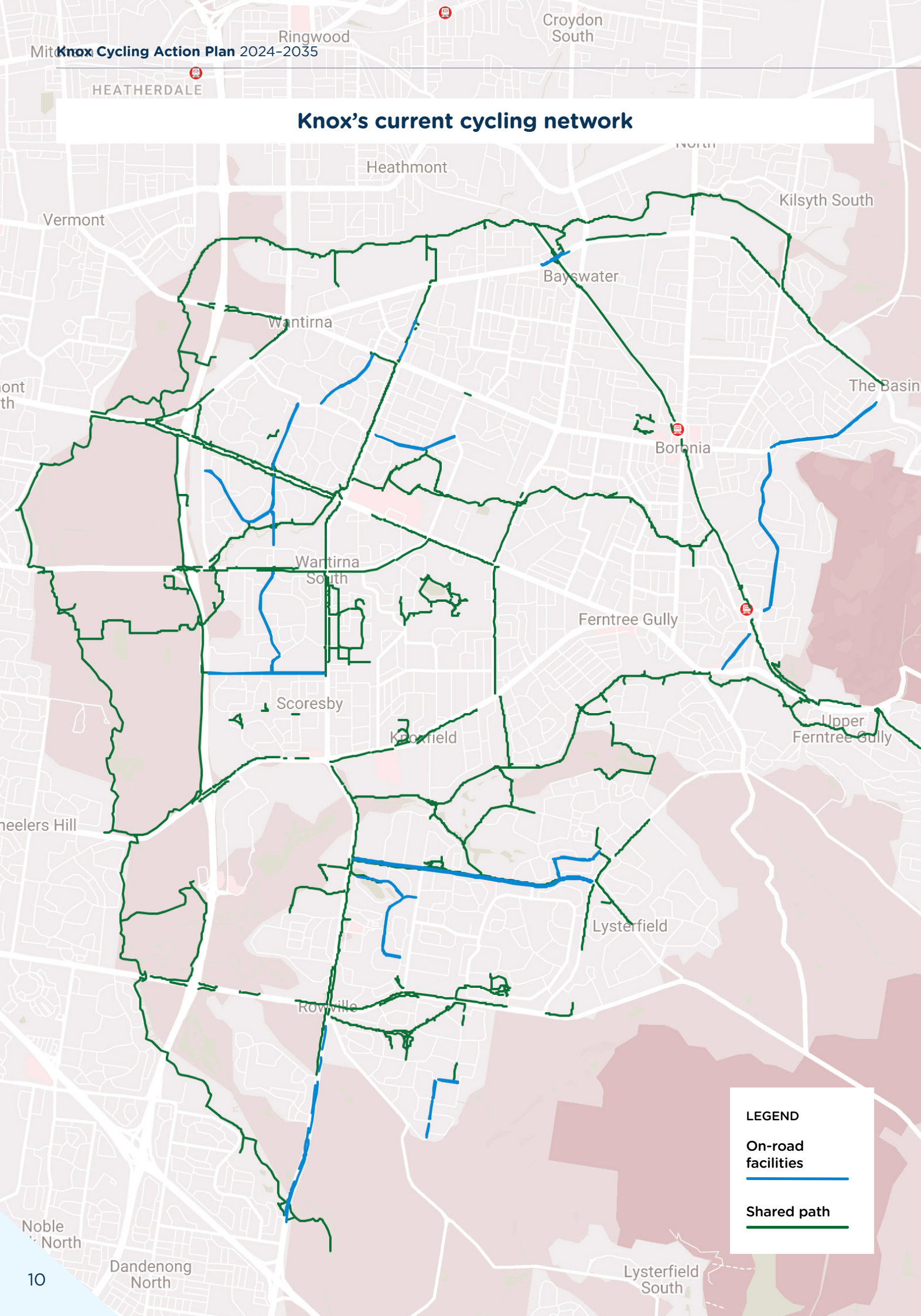
A safer route is much more preferred even if it is less direct.

We need safer spaces for children and families where younger children can safely learn to ride.

81% of respondents prefer a shared path facility with pedestrians rather than bike lanes on the street.

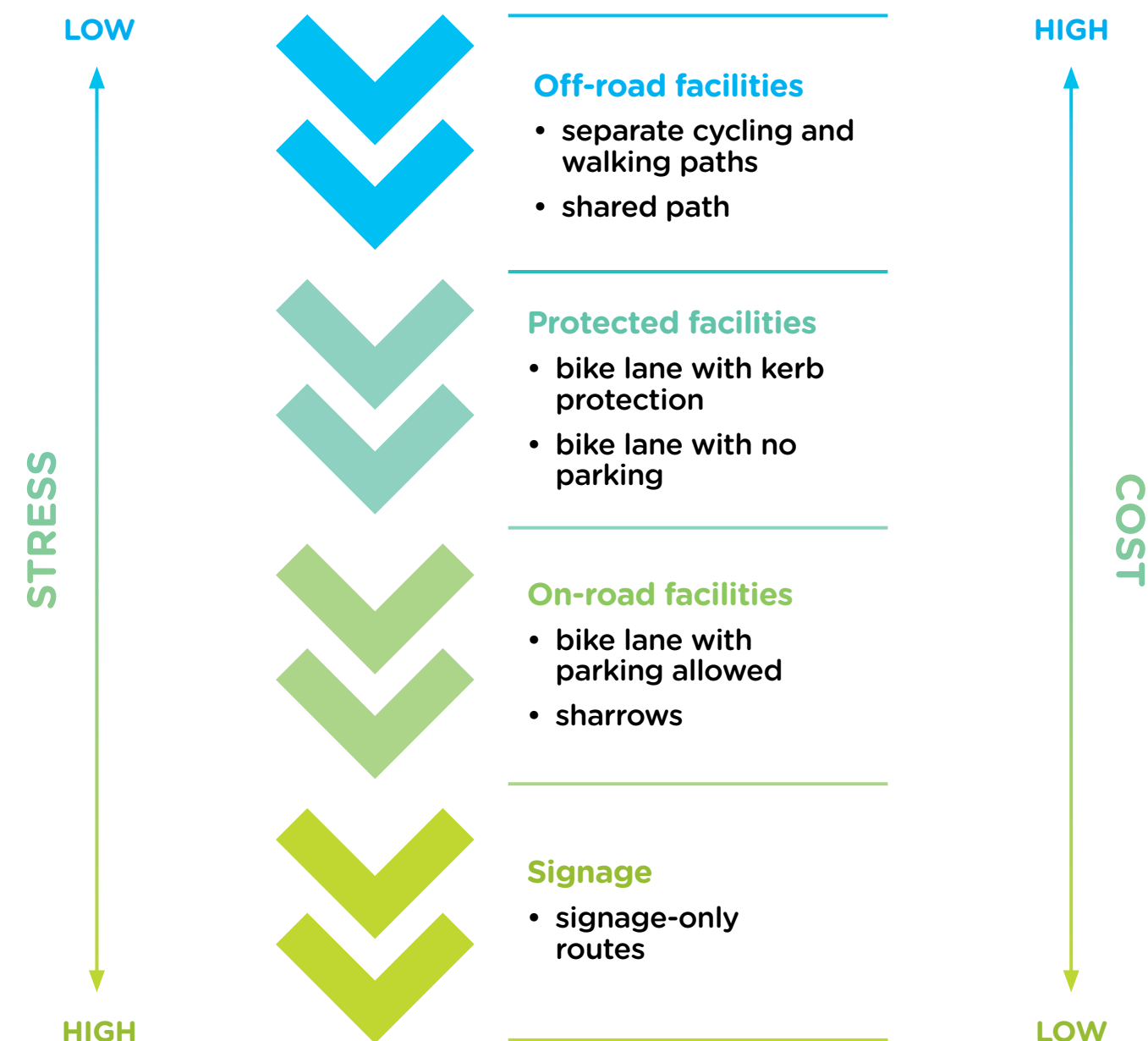


## Knox's current cycling network



# Delivering a safer network

Council will work towards a low stress network while balancing priorities around enhancing the natural environment and funding availability. To achieve this approach, the table below highlights how the project's costs and the street amenity will determine the type of cycling facility that is most appropriate for each location. As an example, a high stress situation would have large volumes of traffic, higher traffic speeds with less segregation from general traffic. Other factors such as land use, road geometry and route classification will also be considered for each cycling link to ensure a tailored approach is taken when designing facilities.

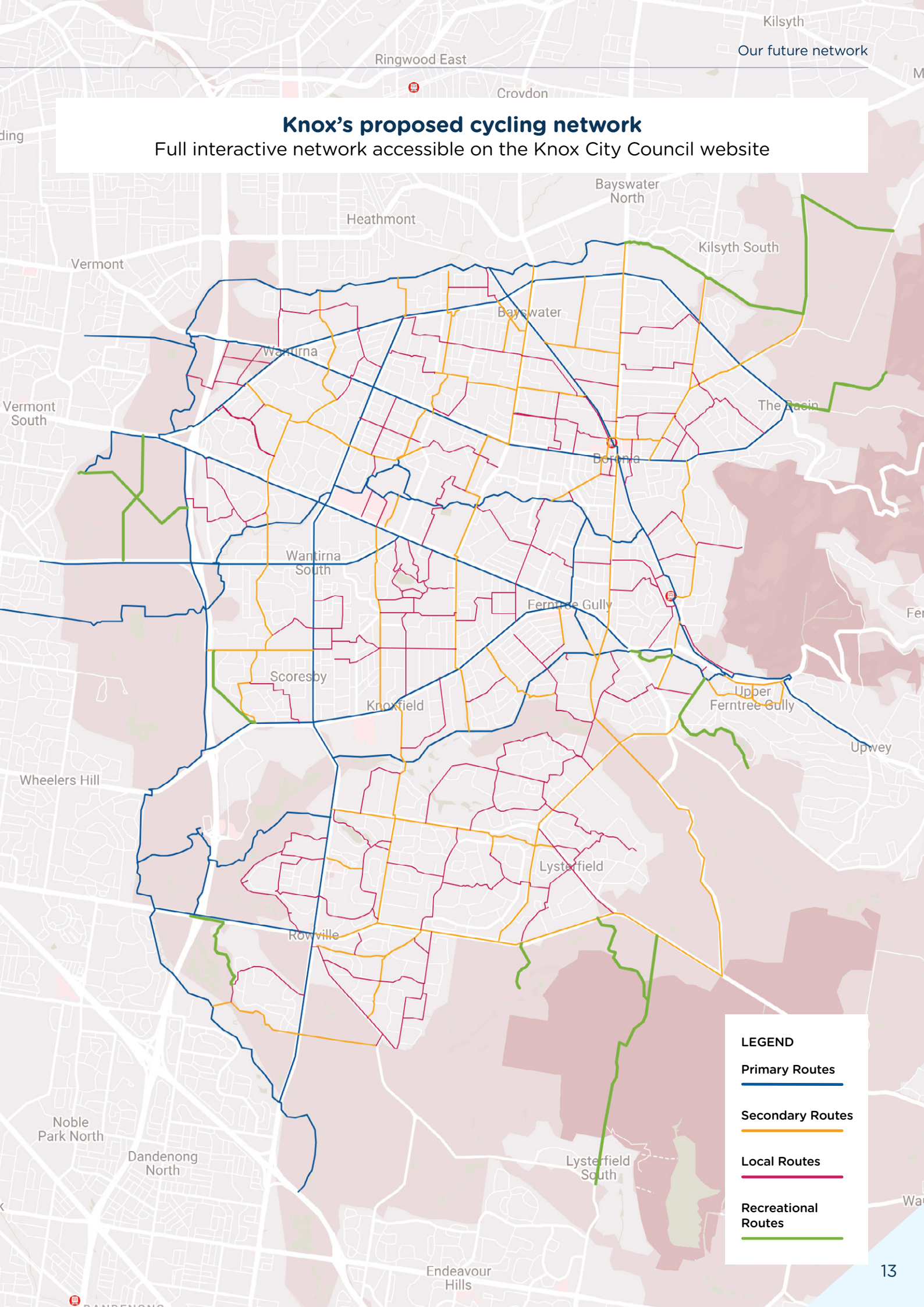




# Our future network

We developed a route hierarchy using the Movement and Place categories which were applied to both the existing and future cycling network in Knox. The route hierarchy is as follows:

Knox Cycling Network Hierarchy	Movement and Place category	Description	Example
Primary route (blue)	C1 and C2	Arterial routes that are direct and can facilitate higher volumes of cyclists at a time. These routes minimise interaction with general traffic to allow for continuous travel and provide regional connections to adjacent municipalities.  This category also includes the State Government identified Strategic Cycling Corridors.	Eastlink Trail Burwood Hwy Ferry Creek Trail
Secondary route (orange)	C3	Link routes that provide a connection between primary routes and local streets. These routes have dedicated cycling facilities that may be either on-road or off-road that provide significant connections within the City of Knox.	George Street Kelletts Road Napoleon Road
Local routes (pink)	C4 and Cycling Non-Priority Routes (CPN)	Routes along streets with low traffic speeds and volumes. These routes are generally on-road facilities which provide a last mile connection.	Koomba Road
Recreational routes (green)	Cycling Recreation (CR)	Regional trails that are generally shared paths and largely separated from general traffic.	Proposed Ferry Creek extension to Glenfern Valley Bushland Reserve





# Network delivery

Council is dedicated to improving our cycling network and enhancing cyclists experiences. Providing a comfortable and attractive cycling network encourages new and less confident users to cycle more frequently for a range of trip types.

Based on the community’s feedback, supporting cycling infrastructure that will be delivered in our network are listed below in no particular order.



# Our network will...



**Link our homes to key destinations, services and facilities across Knox.**



**Connect both locally and to the wider regional cycling network.**



**Be a low-stress cycling environment suitable for all skills and ages.**



**Guide private and public development to include appropriate cycling connectivity through new estates and developments.**



# Our actions, our future 2024-2035





# Evolving our network design

A well-planned cycling network will improve user experience, increase consistency, address safety concerns and ensure that projects within the same space can work together rather than compete for priority.

Routes should be designed for all ages from families with young children to retirees transitioning back on their bikes.

## We aim to:

- > Create a consistent standard for cycling facilities in Knox that considers the local urban and natural environments.
- > Advocate to State Government agencies for improved road crossings.
- > Include cycling facilities during road reconstruction projects.
- > Seek additional external funding opportunities to fast track the construction timeline of our network.
- > Improve underpass safety in Knox.

## We will do this by:



- 1.1** Utilising off-road or separated cycling facilities rather than bike lanes that allow car parking.



- 1.2** Improving underpass safety for cyclists and pedestrians.



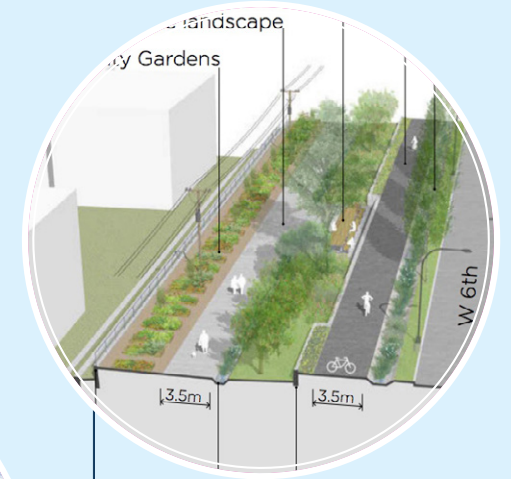
- 1.3** Establishing design standards for wayfinding, on-road, off-road and supporting infrastructure tailored for Knox's urban and natural environment.



- 1.4** Investigating suitable sites for mountain bike trails and jumps for Council to invest in the future.



- 1.5** Seeking external funding opportunities to fast track construction timelines.



- 1.6** Designing project phases early to identify overall investment.



# Investing in capital works

Since the COVID-19 pandemic and associated lockdowns, people have increased their use of active transport for commuting and for social gatherings.

The network needs to allow for local and regional trips that connect into adjacent municipalities. Our community is seeking well-connected, comfortable and continuous routes that are more than recreational trails.

## We aim to:

- > Prioritise the construction of primary routes to improve regional and municipal connections.
- > Improve wayfinding facilities across Knox’s existing network.
- > Build meaningful cycling connections.
- > Plant more canopy trees along cycling routes, where possible, to improve cyclist comfort.
- > Reduce safety concerns and user conflict on the existing shared path network.
- > Increase comfort by providing more frequent supporting cycling infrastructure.
- > Deliver key routes continuously until they are completed.
- > Connect to neighbouring council links and supporting the Eastern Regional Trails Strategy.

## We will do this by:



**2.1**  
Building all primary routes by 2035.



**2.2**  
Improving cyclist comfort by installing drinking fountains, seating, repair stations and parking.



**2.3**  
Formalising ‘quiet’ and ‘linking streets’ by installing wayfinding and linemarking.



**2.4**  
Connecting cycling links to key activity centres and employment clusters.



**2.5**  
Increasing project budgets to include tree planting post construction.



**2.6**  
Maximising shared path widths where possible.



**2.7**  
Trialling shared path lighting in Knox.



**2.8**  
Installing cycling wayfinding for new and existing links.



**2.9**  
Extending our recreational routes to improve regional connections.



# Increasing our awareness

Our cycling community has shifted from confident recreational cyclists to mixed-age families and inexperienced cyclists who wish to travel for commuting purposes.

These newer cyclists are looking for more information about our existing network. Through consultation sessions, community members indicated that users wanted more than recreational facilities but experiences on trails where they could learn about the local environment, indigenous and local history or discover interesting landmarks in Knox.

## We aim to:

- > Raise awareness of general etiquette and road rules around shared path use, cycling, scootering and cycling facilities.
- > Increase public awareness of Council-run programs and newly constructed cycling facilities.
- > Improve trail branding to make cycling routes easily identifiable.

## We will do this by:

3.1

Increasing media presence to promote new rules, new routes, cycling etiquette and Council-run programs.



3.2

Promoting newly constructed cycling facilities each year.



3.3

Identifying a location for a new children's bike training facility.



3.4

Further expanding Council's cycling courses to support inexperienced cyclists.



3.5

Developing trail branding to increase the community's awareness of existing trails.



# Managing our network

To manage our network and use resources efficiently, we need to improve the way we govern and strategically deliver our infrastructure.

## We aim to:

- > Improve auditing and maintenance process for on-road cycle lanes.
- > Determine maintenance procedures for non-standard lighting to support the trial of shared path lighting in Knox.
- > Re-evaluate the ranking criteria of cycling infrastructure and incorporate the support of cycling facilities in the Capital Works program.
- > Align the Department of Transport and Planning’s Movement and Place network with Knox’s priorities.
- > Coordinate with other Capital Works programs to make delivery cost effective and efficient.
- > Improve project coordination with internal and external departments to ensure efficient management of projects and associated funds.

## We will do this by:

**4.1** Delivering Capital Works programs that have multi-disciplinary objectives, creating functional and greener streets.



**4.2** Adopting and updated the State Movement and Place network to reflect Knox’s cycling priorities.



**4.3** Developing a Council policy highlighting eligible lighting locations, lighting type, installation and maintenance procedures to support the trial for solar lighting along shared path and environmentally protected areas.



**4.4** Establishing a road safety and maintenance auditing procedures that capture the value of on-road facilities, and improve network safety.



**4.5** Continuing to utilise new technology to design, deliver and monitor our cycling network’s performance, safety and delivery.



**4.6** Updating Council’s capital works ranking criteria to better reflect the plan’s priorities.



**4.7** Allocating space for future shared path alignments versus future canopy and habitat corridors to reduce conflict when delivering future projects.



**4.8** Improving street sweeping for on-road cycling facilities.





# Investing in the future

Personal mobility is a type of transport that is continuously evolving. Although not a key objective of this plan, Knox will work towards investigating or monitoring the following initiatives to ensure that our transport network responds to and reflects the growth of technological advances within the active transport field.

## Bike Share/Scooter Hire



Bike or e-scooter rental schemes where users can pick up a personal vehicle from a selected location and pay for the time used through an app.

## Bikes on buses



Advocacy for storing bicycles on buses to allow commuters to cycle the last leg of their journey and connect from Smart Bus routes into local estates.

## Parkiteer



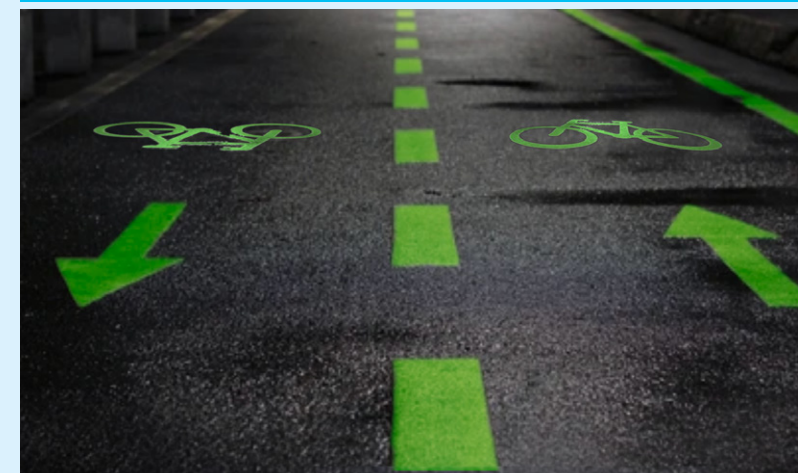
Free service that provides a safe bike-parking facility at a station. Users are required to pay a refundable bond. Although located only at local train stations, Knox will aim to advocate for Parkiteer installations at major transport hubs.

## Bike tower parking systems



Bike towers allow for high-capacity bike parking with minimal footprint. They can also serve as key landmarks to enhance the local urban environment.

## All glow linemarking



Glow in the dark linemarking that could be used within environmentally sensitive areas to improve delineation at night as an alternative to street lighting. This product could reduce impact on local nocturnal animals. However, sufficient access to UV is required to be effective.





**For further information contact:**

Transport and Traffic Team  
Knox City Council  
511 Burwood Hwy  
Wantirna South VIC 3152  
9298 8000

[knoxcc@knox.vic.gov.au](mailto:knoxcc@knox.vic.gov.au)

Or visit the website:

[knox.vic.gov.au/cycling-action-plan](https://knox.vic.gov.au/cycling-action-plan)

knox

