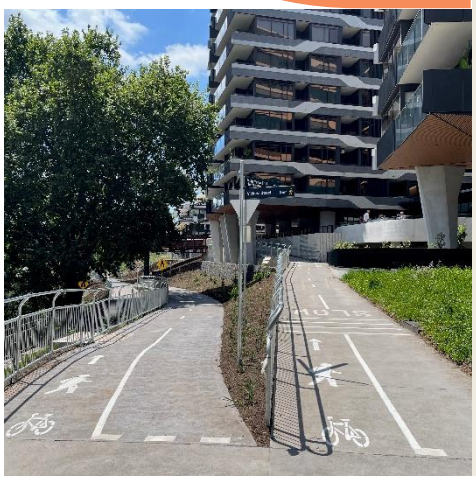
INFRASTRUCTURE VICTORIA

November 2025

Building safer cycling networks

Our method for assessing and prioritising strategic cycling corridor investment in Victoria



About us

Infrastructure Victoria is an independent advisory body with 3 functions:

- preparing a 30-year infrastructure strategy for Victoria, which we review and update every 3 to 5 years
- advising the government on specific infrastructure matters
- publishing research on infrastructure-related issues.

Infrastructure Victoria also helps government departments and agencies develop sectoral infrastructure plans.

Infrastructure Victoria aims to take a long-term, evidence-based view of infrastructure planning, and we inform community discussion about infrastructure provision.

Infrastructure Victoria does not directly oversee or fund infrastructure projects.

Secondary cover image credit: Bicycle Network

Acknowledgement

Infrastructure Victoria acknowledges the Traditional Owners of Country in Victoria and pays respect to their Elders past and present, as well as Elders of other First Peoples' communities. We recognise that Victoria's infrastructure is built on land that has been managed by Aboriginal people for millennia.

Contents

Introduction

Many Victorians do not feel safe when riding a bike.[1] More than 75% of Victorians are interested in cycling if they can use bike lanes separated from car traffic.[2] Investment in cycling infrastructure can encourage more people to cycle. This means less congestion on roads and less pollution.[3] Bicycle infrastructure is a sensible investment. It delivers up to $7 in benefits for every $1 spent.[4]

In 2020, the government announced its plans for a strategic cycling corridor network: a safe and high-quality network of 2,000 kilometres of cycling corridors in Melbourne and over 700 kilometres in regional Victoria. Investment by the Victorian Government in cycling infrastructure has historically been tied to major infrastructure projects, such as the West Gate Tunnel. The tunnel project includes 14 kilometres of new and upgraded walking and cycling paths.[5]

Small sections of Victoria's strategic cycling corridor network have already been built. *Victoria's infrastructure strategy 2025–2055* recommends the government prioritise investment in 16 cycling corridors for investment over the next 10 years. This would create around 250 kilometres of safe, connected cycling infrastructure for Victorians. Other users, including walkers and e-bike riders, can also benefit by using the network. Safer bike infrastructure encourages more people to ride. This helps reduce congestion and benefits all road users. The strategy notes that planning for more cycling and other active transport can be improved with a clear, integrated and staged approach to deliver strategic corridors. Improved coordination between state, local governments and other key stakeholders is needed.[6] Further community engagement can ensure local routes meet local needs.

Recommendation 15: Build safe cycling networks in Melbourne and regional cities

Build more protected and connected cycle corridors in Melbourne, Geelong, Ballarat, Bendigo and Wangaratta. Publish regular updates to the strategic cycling corridor network.

This report explains how we identified 16 cycling corridors on the government's strategic cycling corridor network for priority investment as part of *Victoria's infrastructure strategy 2025–2055*.

We estimate that building these corridors will cost $520 million to $660 million over 10 years. We recommend the government publish regular updates to the network to help inform planning by local governments and other stakeholders.

Delivering the full network of over 3,000 kilometres of safer cycling infrastructure may take decades. The government may choose to build more of the network faster. We have taken a measured approach to what is affordable and achievable over the next 5 to 10 years.

Investing in strategic cycling corridors can support mode shift

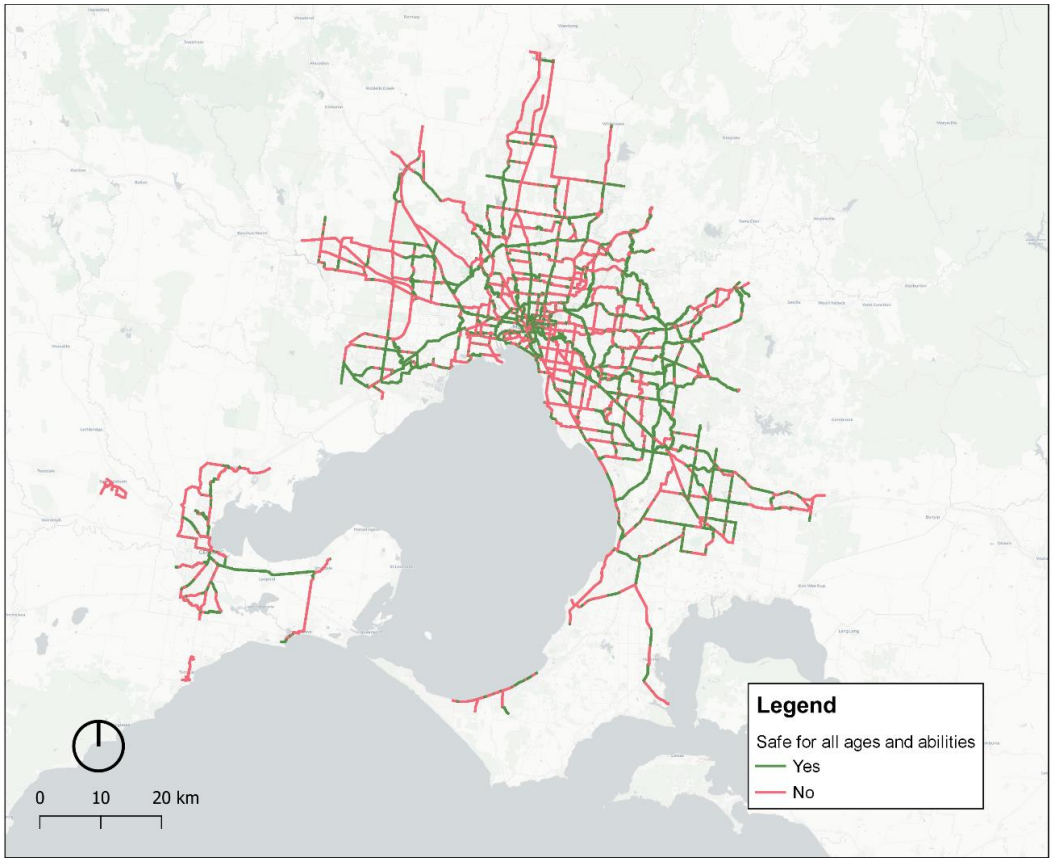
In 2021, the Victorian Government made a transport sector emissions reduction pledge that aimed for 25% of trips to be by foot or bicycle by 2030.[7] Given the ambition of this target, there is more the government can do to support more Victorians to choose walking and cycling.

The strategic cycling corridors network is a key part of the government's *Victorian cycling strategy 2018–28*. It is designed to connect Victorians to important activity and service destinations by bike and covers Melbourne and regional Victoria.[8] It identifies primary and secondary cycling corridors for future development.

Most of the network is planned but not built yet. More than 55% of the network is not safe for everyone to ride.[9] The network was designed in 2019 by the Victorian Government following consultation with local governments, key stakeholders and the community. It includes two types of bike routes: 'primary' corridors for busy cycling areas, and 'main' corridors that support medium flow and link into the primary ones.

Figure 1 shows the planned and built strategic cycling corridor network as at July 2025. It shows there are many gaps in safe cycling infrastructure across Victoria, particularly in middle and outer Melbourne.

Figure 1: Strategic cycling corridor network – safe versus not safe for all ages and abilities (Melbourne and Geelong)



Source: Infrastructure Victoria 2025. Note: Only considers whether corridors are separated from traffic. Intersection and lighting upgrades are not included.

People are more likely to ride in areas that have a higher population density, such as in inner and middle Melbourne.[10] This is because these areas have more local shops and services closer to people's homes, making cycling a convenient option. Residents in these areas are also more likely to cycle in these areas because of demographic factors, such as being younger and less likely to own a car.[11] Investing in safer cycling infrastructure in these areas can help more people choose to ride.

We used 5 principles to guide where government could prioritise investment

To inform our assessment, we chose 5 principles to guide investment in priority cycling corridors. These principles allowed us to consider which factors could encourage more people to ride their bike.

Strategic cycling corridor alignment

Priority corridors for investment should align with the strategic cycling corridor network. This is because they are already planned by government in consultation with local councils and the wider community.[12] We note that further work has been done by the government since the release of the strategic cycling corridors. Updates might be made in future in consultation with local councils and communities.[13]

Untapped demand

Priority corridors for investment should start with areas where people may be willing to ride but currently do not due to a lack of safe bicycle infrastructure.

Likelihood of short trips

Priority corridors for investment should focus on areas where people currently take car trips under 5 kilometres, including non-commuter trips, to encourage greater use of bikes for these short journeys.

Strategic corridor identification

Priority corridors for investment should focus on high use areas which can form the backbone for local cycling links, such as alongside freeways. These high visibility corridors can also increase the profile of cycling as a transport option for other Victorian road users.

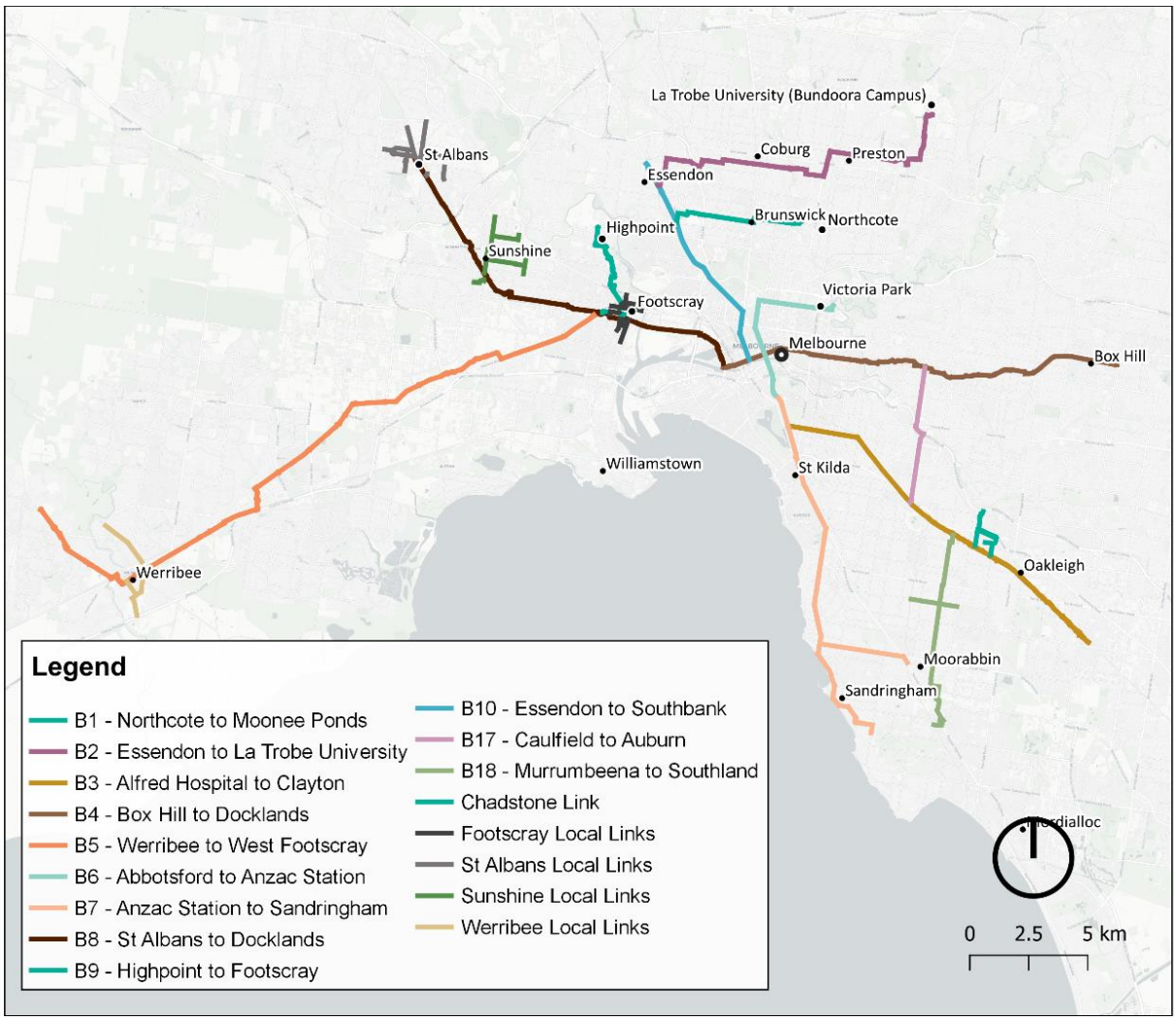
Statewide scope

State government investment in priority corridors should be across Victoria to help deliver better access to safer cycling to regional Victorians.

We recommend investment in 16 cycling corridors over the next decade

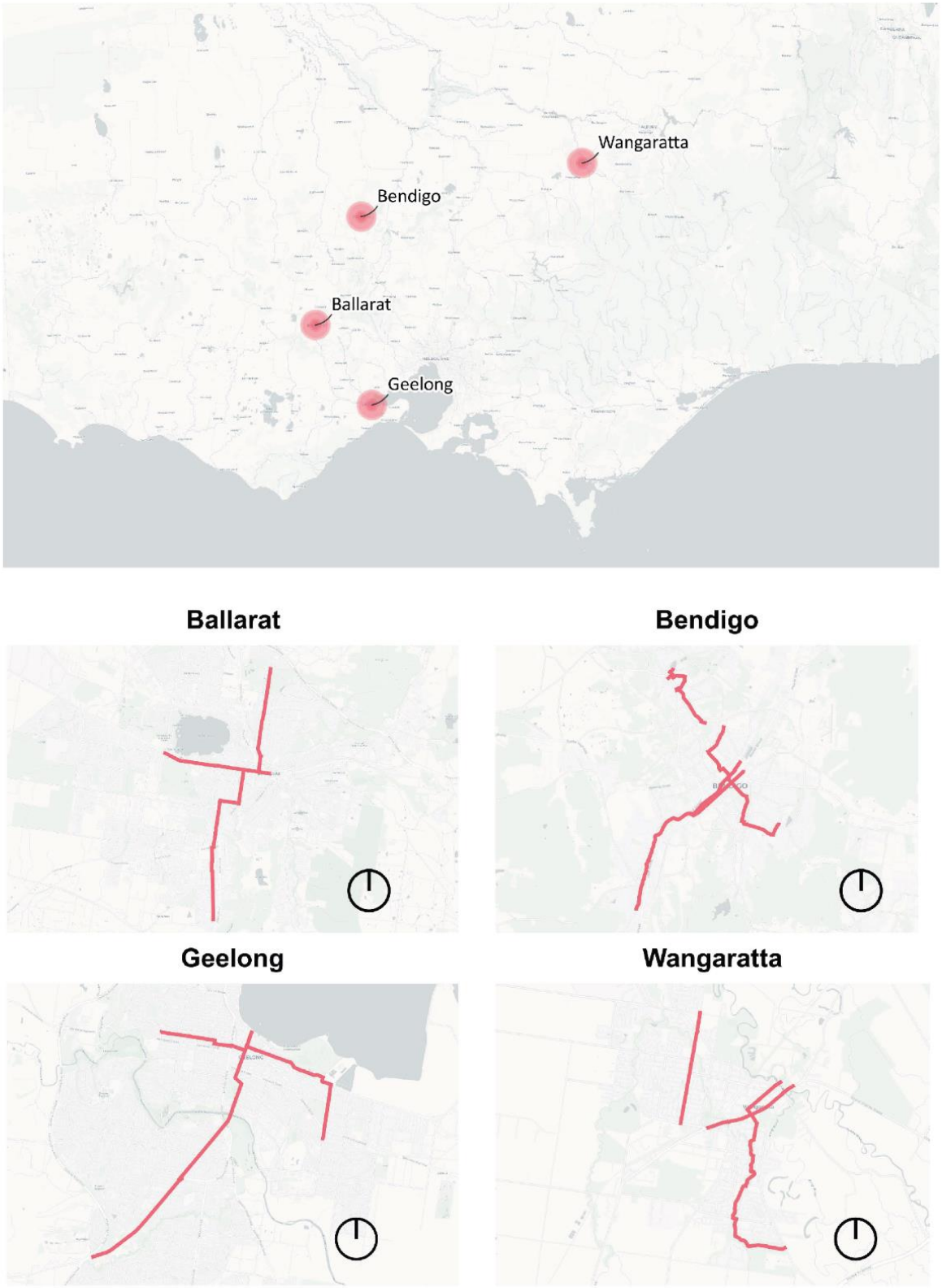
We developed a scoring system to rank each part of the strategic cycling corridor network. We combined this score with qualitative evidence and an economic assessment to identify 12 priority cycling corridors in metropolitan Melbourne for investment over the next 10 years. We also assessed regional cycling infrastructure and consulted with relevant local governments to help prioritise cycling corridor investment in 4 regional cities. These 16 corridors are shown in Figure 2 and Figure 3. The following chapters of this report outline the steps of our analysis in greater detail.

Figure 2: Priority corridors for new or upgraded bicycle infrastructure in Melbourne



Source: Infrastructure Victoria 2025

Figure 3: Priority corridors for new or upgraded bicycle infrastructure in regional Victoria



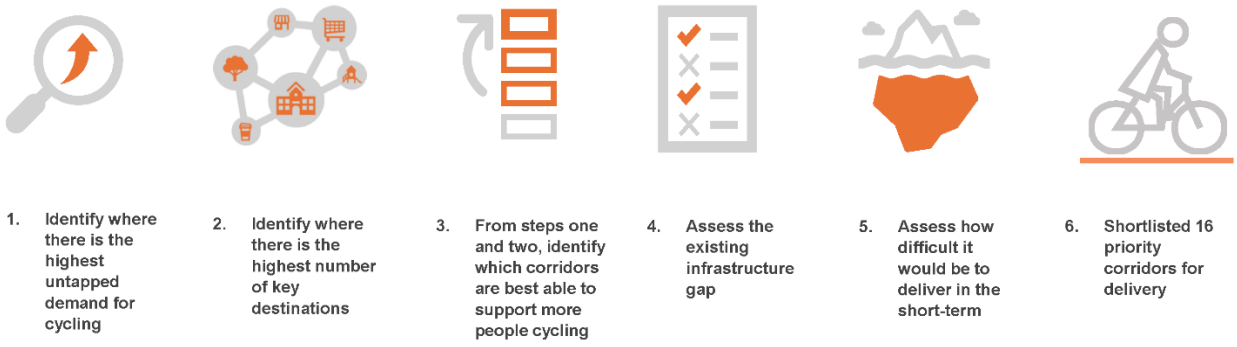
Source: Infrastructure Victoria 2025

How we chose which cycling corridors to invest in first

We compared the benefits of delivering safer cycling infrastructure in different parts of the network to help the Victorian Government focus its investment over the next 10 years. We looked at both Melbourne and regional Victoria. We took a different approach in regional Victoria compared to Melbourne to allow for data limitations and variations in existing cycling infrastructure and demand.

We applied 5 steps to assess Melbourne cycling corridors

Figure 4: The 5 steps we took to assess prioritise cycling corridors



Source: Infrastructure Victoria 2025

Step 1: We ranked areas with hidden demand

We started by identifying areas with hidden demand for cycling. This is sometimes also called supressed demand. These are areas where residents are more likely to cycle because of demographic factors including lower car ownership or there being more young people in the community. Studies in Brisbane and Melbourne found that these factors can encourage more cycling.[14] The demand is hidden because these are people who don't cycle now but could be encouraged to do so if safer and more convenient cycling infrastructure was provided.

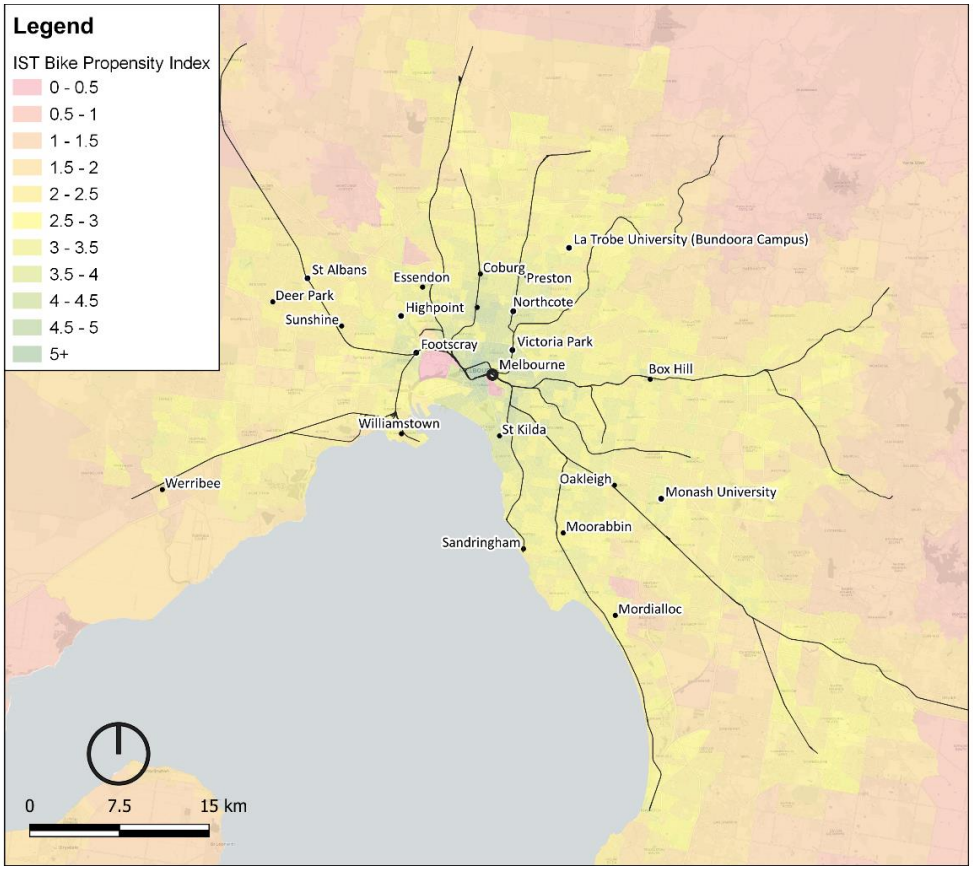
We used the following datasets to assess areas with hidden demand for cycling:

- The Institute of Sensible Transport's Bike Use Propensity Index to find areas with hidden cycling demand. This index is between 0 to 5 with a higher number describing a higher level of hidden demand for cycling. It is calculated using a combination of Australian Bureau of Statistics data and data provided by the Department of Transport and Planning's strategic transport model (the Victorian Integrated Transport Model).
- Australia Bureau of Statistics data was used for car ownership and current bicycle use.
- Data from the Department of Transport and Planning was used to calculate total population, population by age, employment density and the number of short trips taken by car.

The index was calculated for each metropolitan suburb (defined using the Statistical Area 2 geography). More information on these datasets and the methodology is provided in the *Bike use propensity index forecast* report.[15]

Figure 5 shows the index for each suburb in metropolitan Melbourne. Inner suburbs like the central business district, Brunswick, Footscray and St Kilda have higher hidden demand for cycling, even though they have more bike lanes than other areas. This is because more people live there, there are more young people, and fewer people own cars. It suggests that bike lanes are still insufficient overall – there aren't enough of them, and the quality of what exists doesn't full meet people's needs. Many people would cycle if there was infrastructure that made it easier and safer.

Figure 5: Hidden demand index for cycling across greater Melbourne suburbs



Source: Institute of Sensible Transport's Bike Use Propensity Index 2024

Next, we used the index to give a hidden demand score for each corridor identified in the strategic cycling corridor network. These corridors are made up of many individual sections of paths also known as links. See Figure 6 below.

Figure 6: Examples of strategic cycling corridor links, routes and corridors

Links are short sections along a cycling path

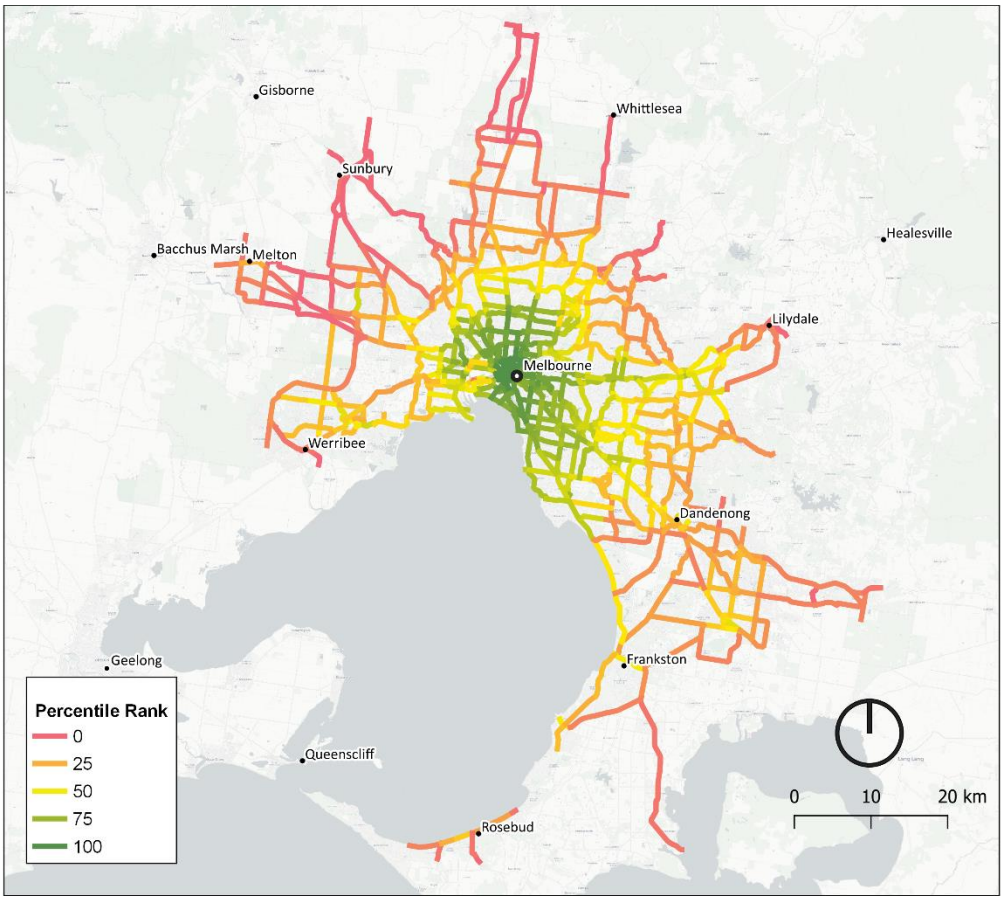
Corridors are made of multiple links

Routes are made up of multiple corridors, defined by Infrastructure Victoria

Source: Infrastructure Victoria 2025

We averaged the index within 400 metres of each strategic cycling corridor link and used this average index to rank the links. The scores by cycling link are shown in Figure 7.

Figure 7: Hidden cycling demand scores for each strategic cycling corridor



Source: Infrastructure Victoria, based on the Institute of Sensible Transport's Bike Use Propensity Index 2024

Cycling links within inner Melbourne (up to 10 kilometres from the central business district) had the highest hidden demand scores, followed by cycling links in middle Melbourne (between 10 to 30 kilometres from the central business district). These are places with higher population density, lower car ownership and a greater proportion of younger people. This is consistent with known factors that drive higher bike use: areas with more people, fewer cars, and younger populations tend to have greater demand for cycling.[16] Cycling links in outer Melbourne (more than 30 kilometres from the central business district) had the lowest hidden demand scores. These places in outer Melbourne are more likely to have greater car ownership and lower population densities. These are characteristics associated with lower bike use.

Step 2: We assessed how each corridor connects to key destinations

The hidden cycling demand score calculated in step 1 assessed the likelihood of residents to cycle based on where they live and other key demographic factors. In step 2, we calculated cycling destination scores to assess how well each cycling corridor connects people to key destinations. We also looked at how the route aligns with relevant Victorian Government policies and land use objectives, including *Victoria's Housing Statement.*[17] This helped us to understand the relative benefits of different destinations across Melbourne, including how they increase access for residents, commuters, local communities, and the transport network.

We considered a number of important destinations including transport connections, schools, TAFEs, universities, shops, parks, priority precincts, national employment and innovation clusters and activity centres identified in *Victoria's Housing Statement*.[18] We then gave a score out of 100 to each destination type to reflect their relative importance to Victoria's strategic cycling corridor network. We developed the scores

collaboratively in a workshop, drawing on a review of relevant literature and professional expertise. The scores are shown in the table below.

Table 1: The scoring system we used to rank key destinations

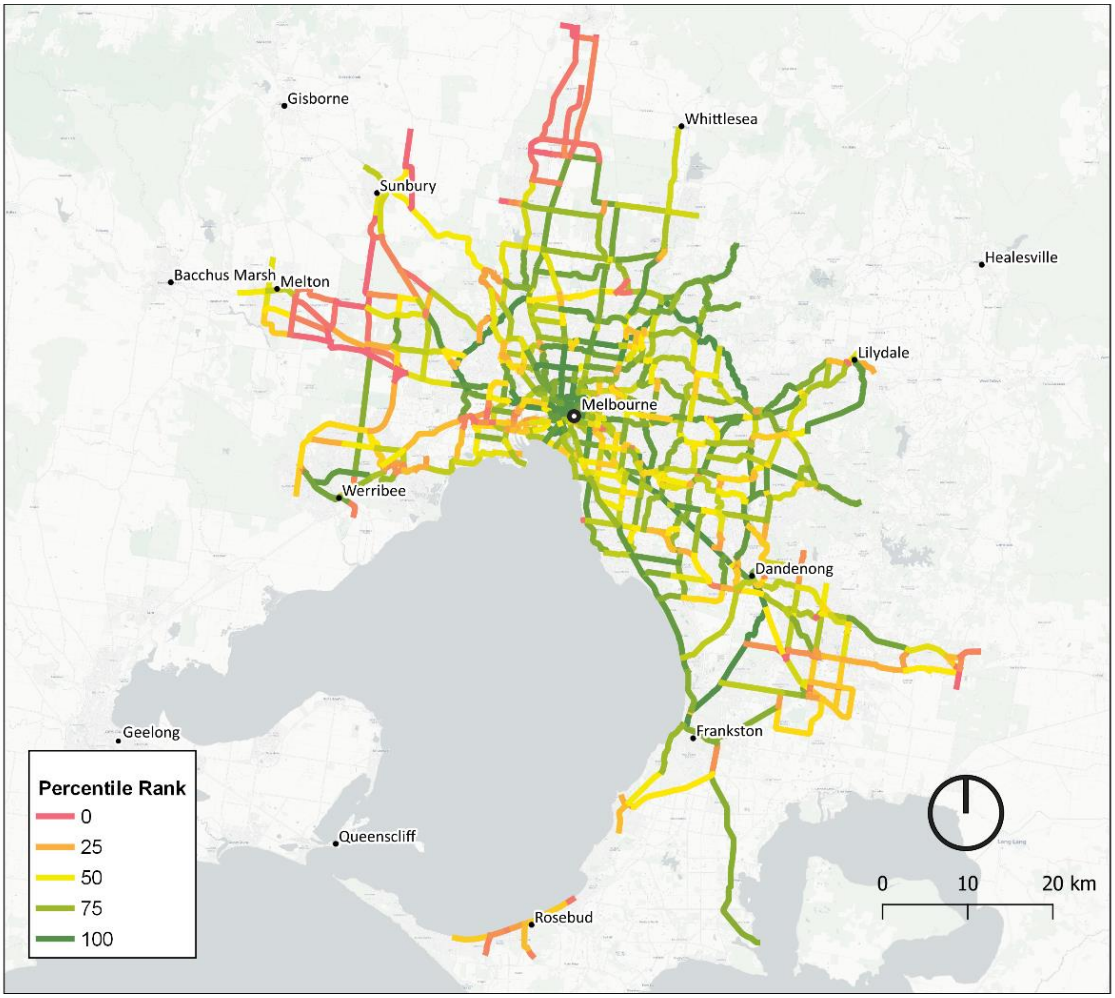
Destination type	Place	Score (out of 100)
Transport connection	Train station	25
	Bus stop	5 (10 if terminus stop)
	Tram stop	5 (10 if terminus stop)
Places of education	School	25
	University	50
	Kindergarten	5
	TAFE	50
Shops	Shops, restaurants, café, medical, pharmacy	5
Recreation	Local park (< 5 hectares)	5
	Large park (>= 5 hectares)	25
Housing statement activity centres	Broadmeadows, Camberwell Junction, Chadstone, Epping, Frankston, Moorabbin, Niddrie, North Essendon, Preston and Ringwood	100
Priority precincts	Suburban Rail Loop precincts (Box Hill, Burwood, Glen Waverley, Monash, Clayton, Cheltenham, La Trobe), Footscray, Docklands, Arden, Richmond to Flinders Street corridor	100
National employment and innovation clusters	Monash, Parkville, Fishermans Bend, Dandenong, La Trobe, Sunshine and Werribee	100

Source: Infrastructure Victoria 2025

We gave each bike path a score. The score shows how many useful places are nearby (within 400 metres) – like shops, parks, schools, and train stations. Paths with more types of places got higher scores. For example, a path near a train station, lots of shops, and a big park might get a score of 150.

We added up the scores for each place, as shown in the image below.

Figure 8: Destination score ranking for each strategic cycling corridor



Source: Infrastructure Victoria 2025

Step 3: We combined scoring for each cycling corridor

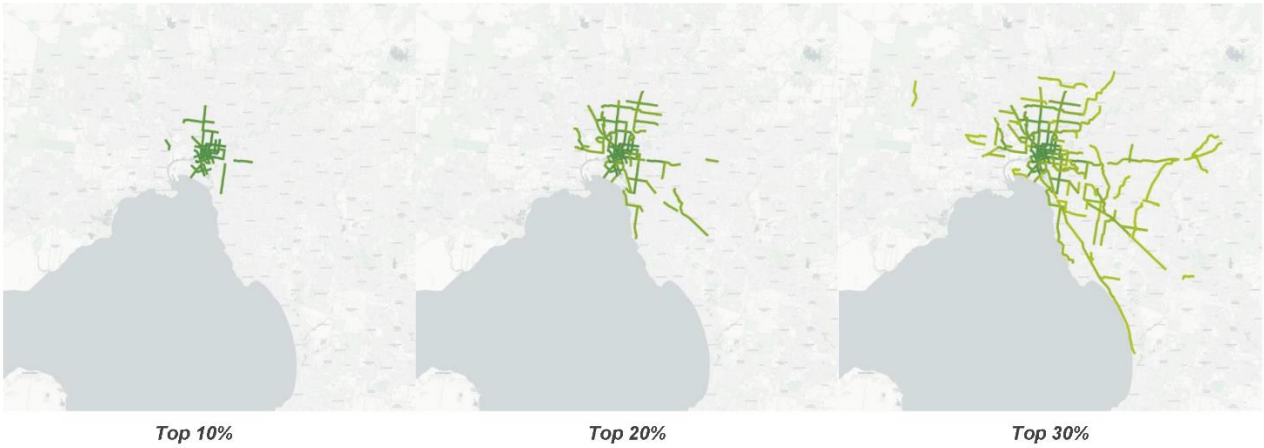
The scores from steps 1 and 2 were combined into a single score. This score captures the hidden demand for cycling, where trips might start, as well as the attractiveness of different destinations that people might travel to. Both were given equal weighting: 50-50. We also tested other weightings including 40-60 and 60-40. This was because the hidden demand score favours areas where people may already cycle. However, the results were similar. We chose to use the 50-50 weighting.

Step 4: We connected any disconnected corridors

Strategic cycling corridors are made up of many short links rather than fully defined cycling routes. When we looked at the combined score in step 3, the highest ranked links did not always form a continuous corridor. They often appeared disconnected.

To address this, we also considered the lower scoring links that connect with the higher scoring links. This helps people in the city and nearby suburbs, where lots of people want to ride and it is important to have safe and easy ways to get around. Figure 8 shows how the top scoring cycling links (90th to 100th percentile of the combined score) appear disconnected. But by including links within the 70th to 80th percentile, we were able to identify more continuous and cohesive corridors.

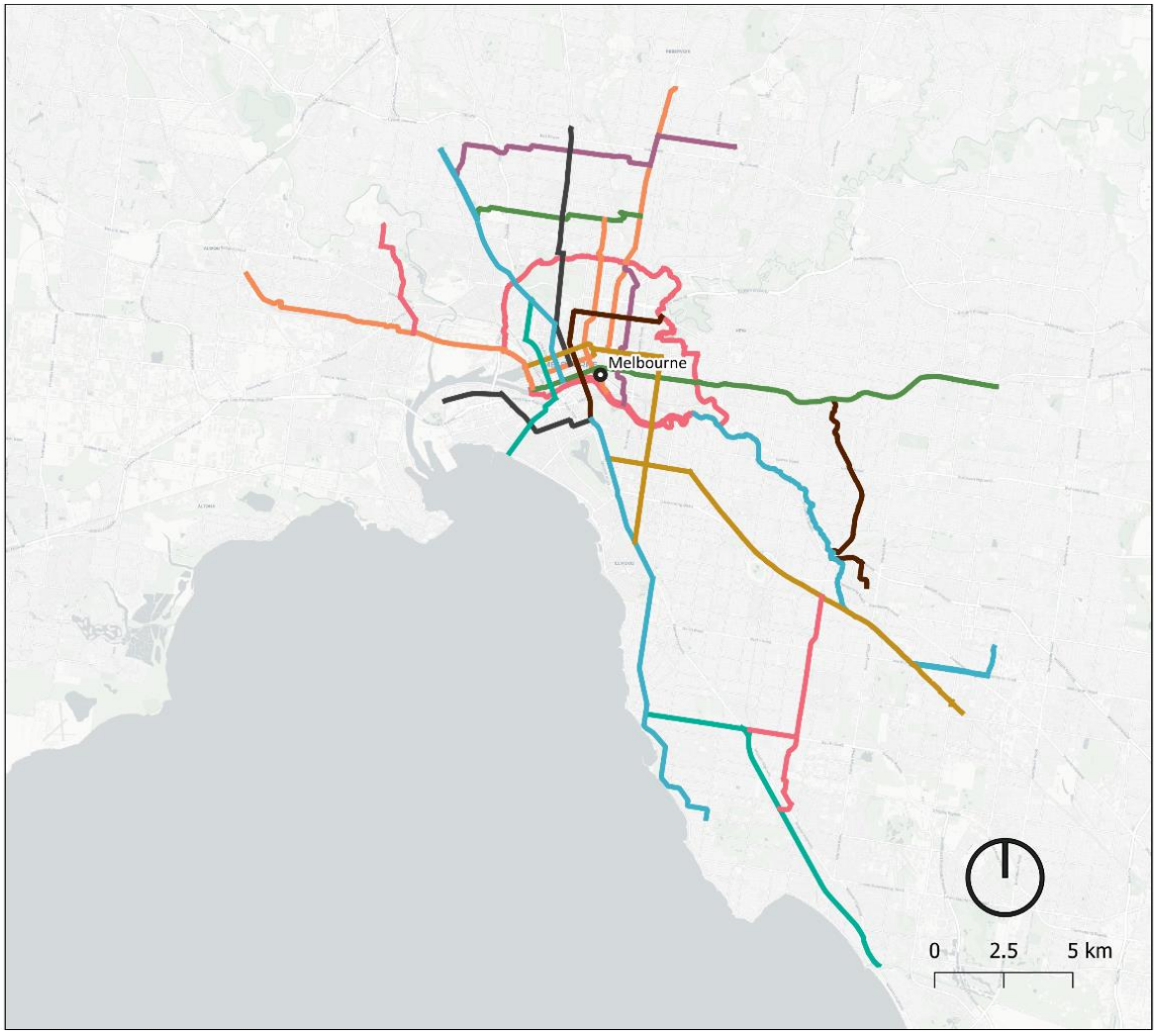
Figure 9: Combined scores for each strategic cycling corridor link, separated by top performing links



Source: Infrastructure Victoria 2025

By combining high performing links with slightly lower scoring links we could create 21 distinct cycling corridors, shown in Figure 10.

Figure 10: Initial list of 21 cycling corridors



Source: Infrastructure Victoria 2025

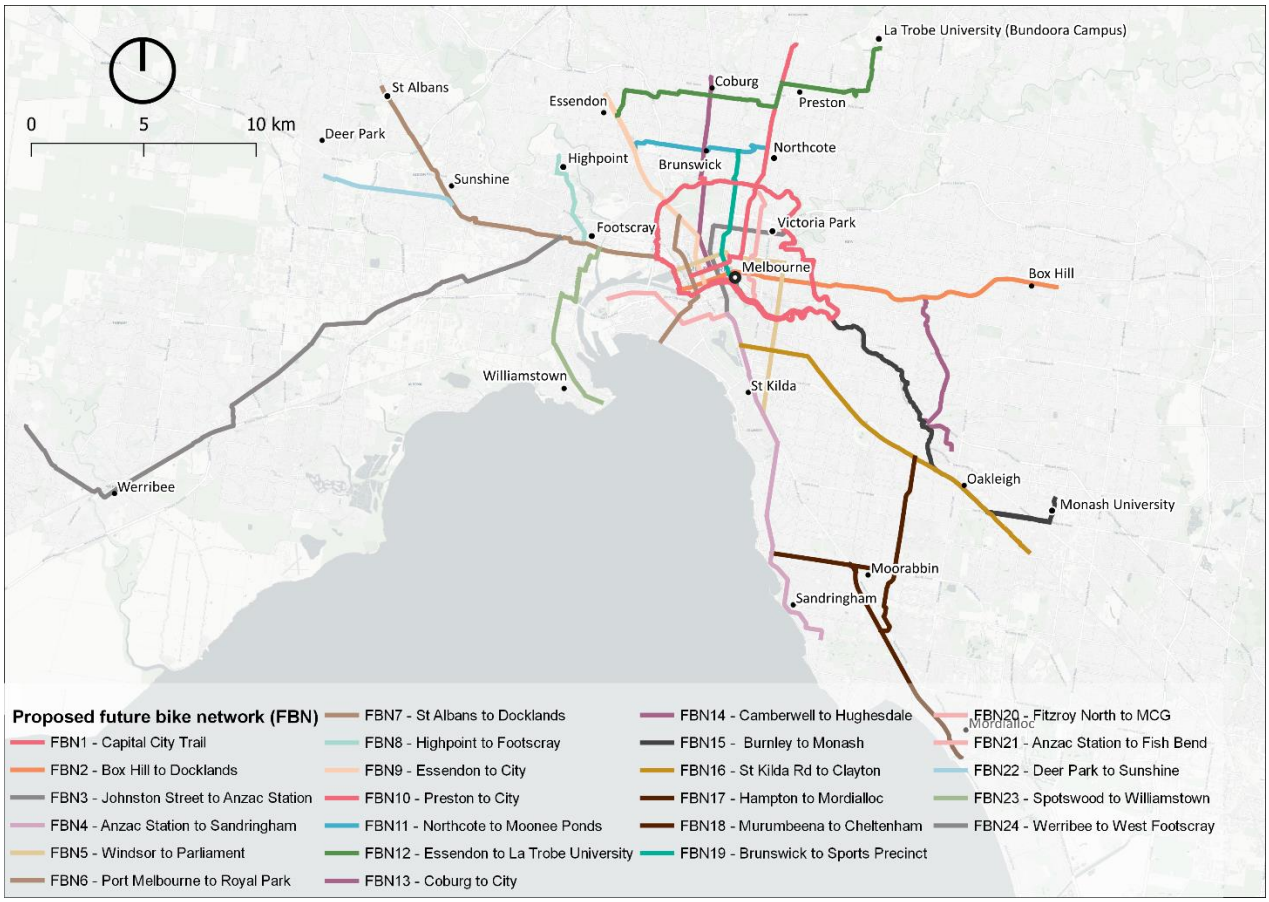
When reviewing this initial list of cycling corridors, we found that the western suburbs of Melbourne were underrepresented. The western suburbs of Melbourne are among the most disadvantaged suburbs for access to transport.[19] Some work has been done to improve active transport in growth areas. New Precinct Structure Planning Guidelines have improved walking and cycling infrastructure in new neighbourhoods.[20] However, there are few connections linking them to key destinations or neighbouring areas. To make access to transport fairer, the western suburbs will need more investment in new infrastructure relative to other parts of Melbourne.

The *Western integrated transport framework* was developed by the Victorian Government in collaboration with local governments.[21] It supports establishing active transport corridors to meet future demand. It identifies some cycling corridors that would help to address fairer transport access.

To address the lack of transport equity in the west, we added 3 cycling corridors from the *Western integrated transport framework* to our final list. These were:

- Werribee to West Footscray
- Deer Park to Sunshine
- Williamstown to Spotswood.

Figure 11: List of 24 high priority cycling corridors



Source: Infrastructure Victoria 2025

Step 5: We then refined the list of priority corridors

We reviewed the list of 24 cycling corridors to decide the highest priorities for delivery in the next 10 years. Delivering the full network could take decades. We wanted to identify where the Victorian Government should start.

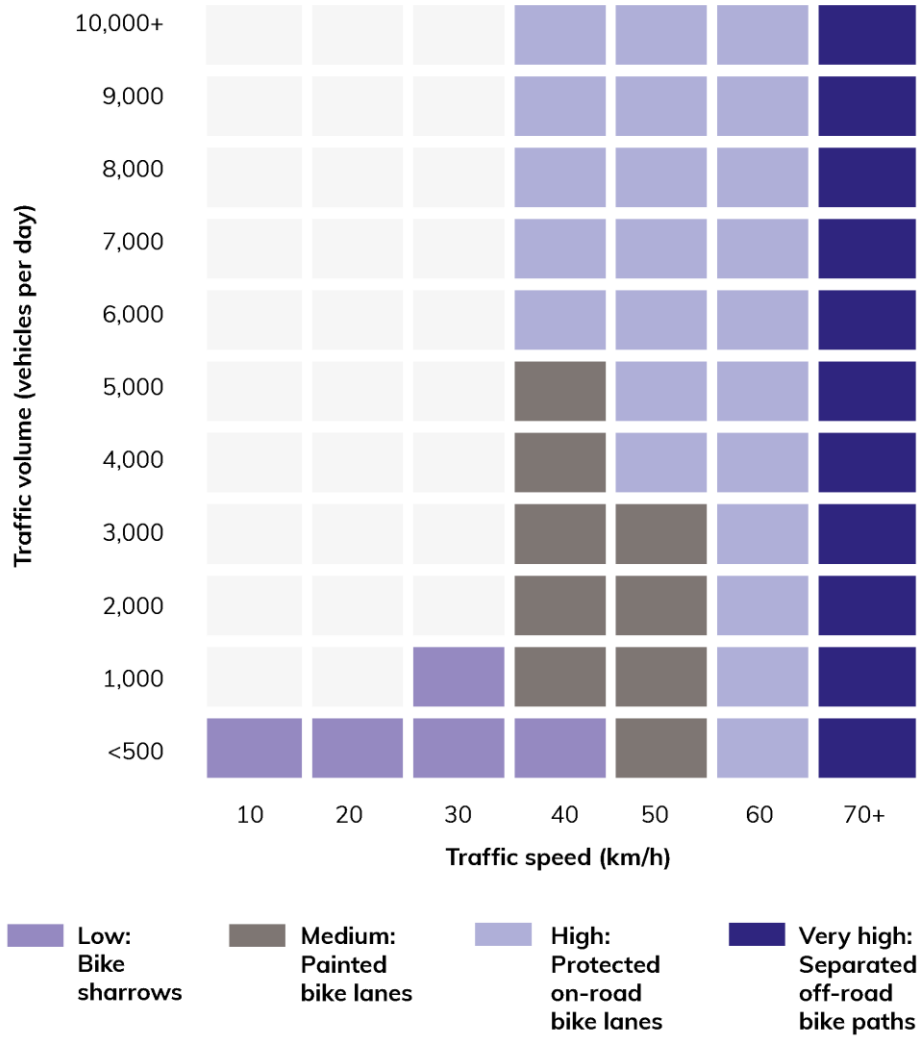
We considered:

- existing conditions for bike riders: including quality and use of existing bicycle infrastructure, traffic volumes and traffic speeds[22]
- socio-economic status: we looked at levels of disadvantage across Melbourne to see how cycling could be a safe and cheap mode of transport for those who need it most[23]
- development feasibility: including the complexity of the stakeholder environment and whether the project can be delivered in the next 10 years
- stakeholder feedback: including feedback received on draft strategy recommendation 15 released in March 2024
- cost benefit analysis: including how various corridors performed in an economic assessment of costs and benefits.

We looked at existing conditions for bike users on the 24 cycling corridors

We tested the existing infrastructure along these corridors against the minimum standards outlined in the City of Yarra's New Deal for Cycling guidelines, shown in Figure 12.[24] These guidelines broadly align with guidelines established by Austroads. They describe the safety interventions needed for cycling with motor traffic at a given speed limit and traffic volume. Using these guidelines, we decided the most suitable cycling infrastructure intervention for each corridor.

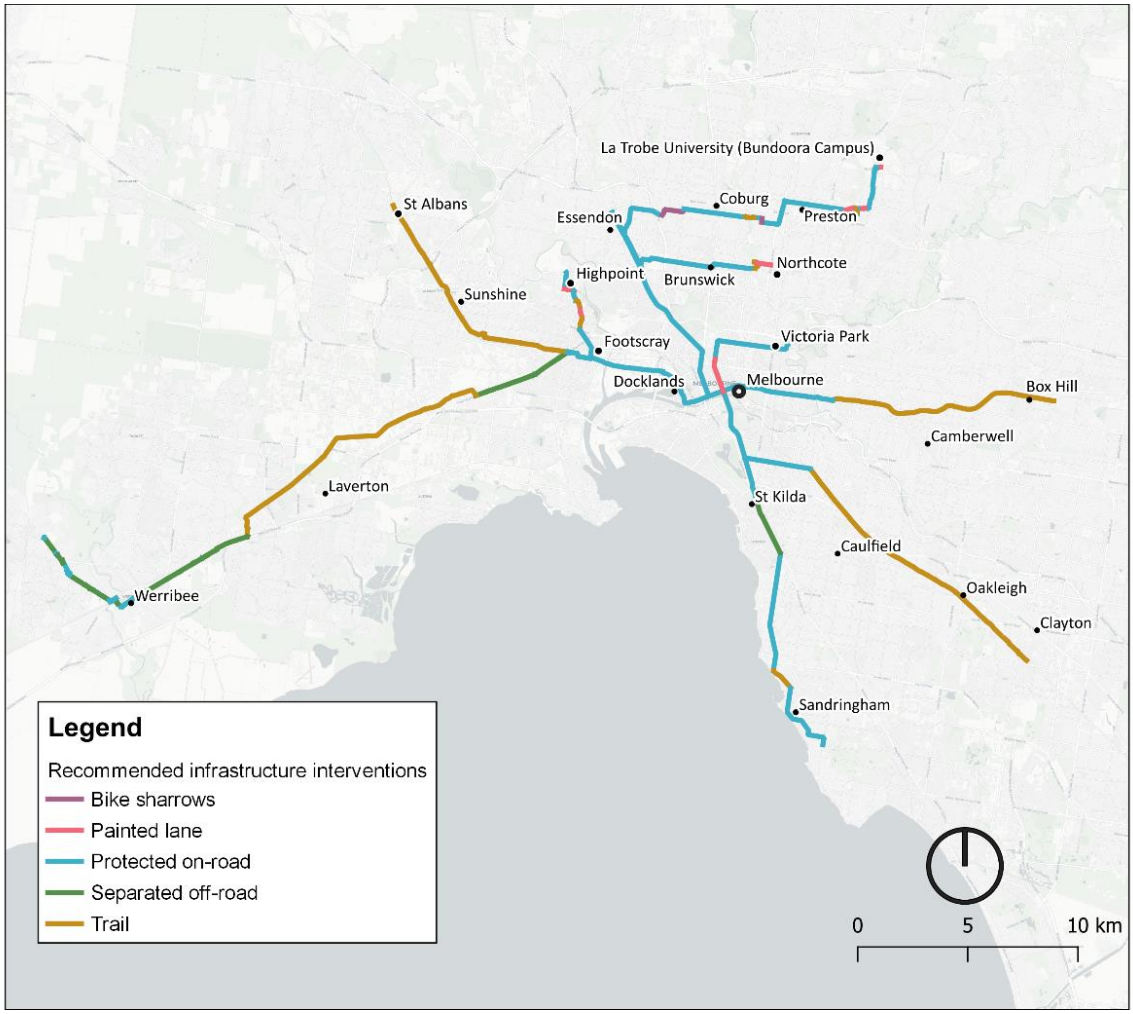
Figure 12: New Deal for Cycling Framework for bicycle lane safety infrastructure recommendations based on road speeds



Source: City of Yarra, Moving forward – Yarra's transport strategy, 2022–32

Figure 13 shows the types of cycling infrastructure we recommended for each corridor based on these guidelines. This includes ‘bike boulevards’ (an infrastructure category combining bike sharrows and painted bike lanes), protected on-road bike lanes, separated off-road bike lanes and shared walking and cycling trails. See pages 17-18 for more detailed descriptions of different cycling infrastructure.

Figure 13: Recommended infrastructure interventions for cycling corridors given traffic speed and volume



Source: Infrastructure Victoria 2025

We then compared the existing cycling infrastructure across the network with our recommended infrastructure interventions. We found that some corridors were already safe for most of their length. This includes established off-road trails such as the Upfield Rail, Capital City and St Georges Road trails.

Cycling infrastructure on most on-road routes is more fragmented. In the northern suburbs, many established corridors provide strong north-south connections. Our analysis prioritised east-west connections to fill missing links and connect existing bike paths. Completing these gaps means more riders can access the network sooner. This expands their reach and makes better use of existing infrastructure.

There are many types of bike lanes to support safer cycling

Different types of bike lanes are built in different ways to suit how they are used. This can impact cyclist safety and change how likely cyclists are to use the paths or to be injured. Table 2 below shows different types of cycling infrastructure.

Table 2: Different types of bike lanes

Name of infrastructure type	Image of infrastructure type	Description of infrastructure type
Bike sharrow		A **bike sharrow** (a “shared lane arrow”) is a lane marking showing where cyclists and motorists must share the road. This is typically a bicycle with 2 arrows above it painted on the road. These markings let cyclists know they should move into the main traffic lane. They let other road users know to expect bike riders in the middle of the lane. They are used when there is not enough space for a separate bike lane.
Painted bike lanes		**Painted bike lanes** are marked only with paint and lack physical separation from vehicles. While they are intended for cyclists, cars may enter them for limited purposes, such as parking or dropping off passengers.
On-road bike lanes separated by parking		**On-road bike lanes separated by parking** are a type of protected on-road bike lane dedicated to cyclists and physically separated from traffic using parked cars as a barrier.

On-road bike lanes separated by bollards

Source: Bicycle Network Victoria

On-road bike lanes separated by bollards are a type of protected on-road bike lane dedicated to cyclists and physically separated from traffic using bollards or similar infrastructure as a barrier.

Separated off-road bike lanes

Separated off-road bike lanes are when a cycle lane is dedicated to cyclists and fully separated from other traffic by being located off the road. These lanes can be for one or 2 way bike traffic.

Shared walking and cycling trail

A **shared walking and cycling trai**l is similar to a separated off-road bike lane but pedestrians share the trail with cyclists. These trails are completely separated from motorists and can have painted lines to separate cyclists and pedestrians along the shared path.

Source: Trafficworks, *Priority cycling corridor investment analysis*, report prepared for Infrastructure Victoria 2025

For research purposes, we combined bike sharrows and painted bike lanes with other cycling infrastructure to create a category called ‘bike boulevards’. ‘Bike boulevards’ are typically located on urban residential streets with low traffic speeds and volumes. To reduce traffic speeds, traffic calming devices such as speed humps, road narrowing and street closures are implemented to achieve a travel speed of 30 kilometres per hour or less.

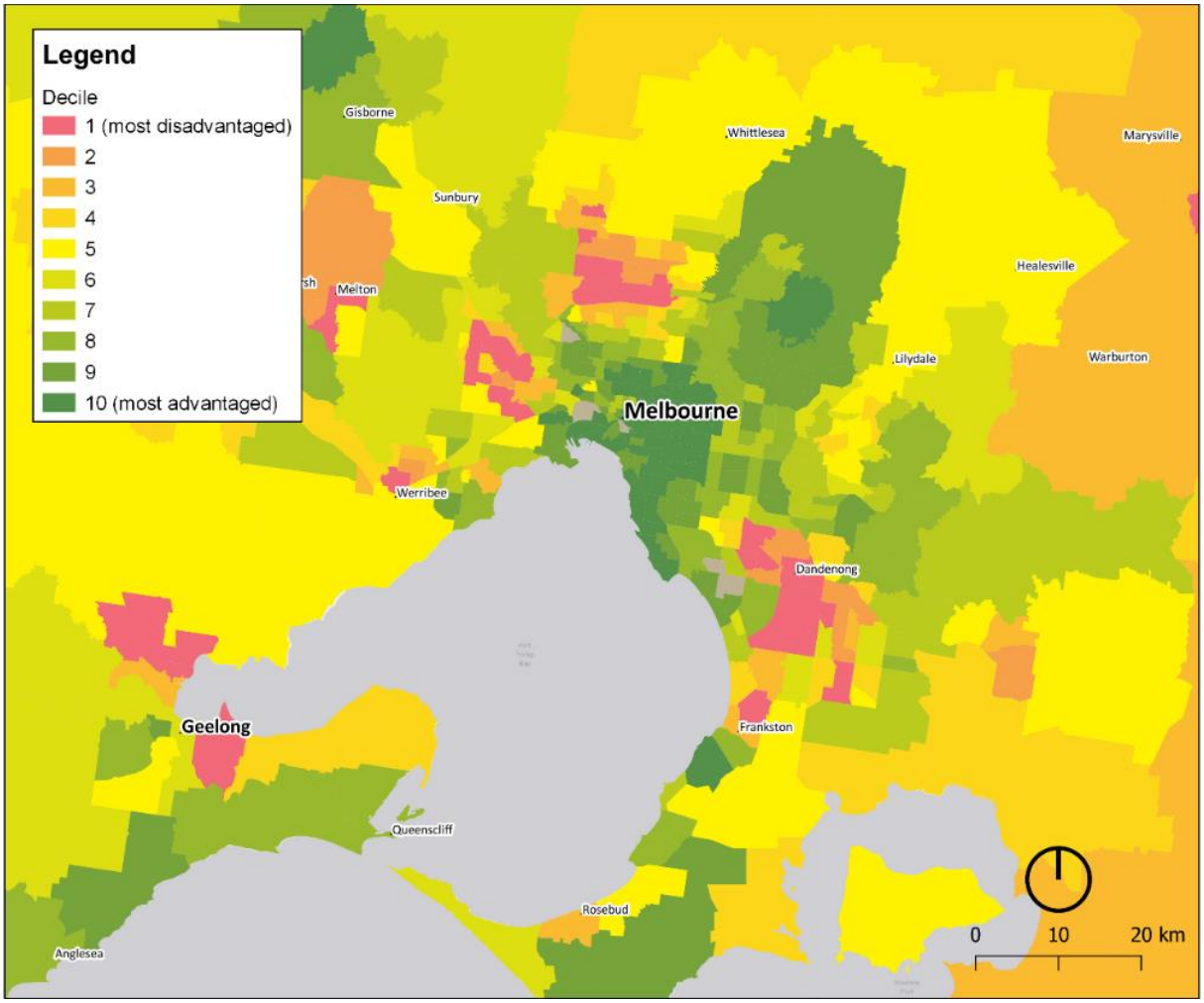
Separated off-road bike lanes, protected on-road bike lanes and shared trails are more attractive to cyclists than painted bike lanes or ‘bike boulevards’. But these bike lanes and boulevards are more attractive to cyclists than no bike lane infrastructure at all.[25]

We considered how some cycling corridors can benefit those who need it most

To help assess and prioritise corridors for delivery in the next 10 years, we also considered socio-economic status across Melbourne. We used the Australian Bureau of Statistics Socio-Economic Indexes for Areas (SEIFA). This index uses Census data to rank areas according to their relative socio-economic advantage and disadvantage.

We prioritised certain cycling corridors that could help to address disadvantaged areas, particularly in Melbourne's growth areas in the west. This index is shown in Figure 14.

Figure 14: SEIFA index of relative socio-economic advantage and disadvantage for Melbourne



Source: Australian Bureau of Statistics 2021

We met with local councils and visited proposed corridors to better our understanding

Some cycling corridors might be more difficult to deliver in the short term. This can be due to:

- physical constraints such as limited width for on-road or off-road cycle paths
- the extent of upgrades required for existing infrastructure
- some local community opposition
- funding shortfalls.

To better understand the local context, we met with councils and other industry stakeholders. They shared insights on which corridors they thought would be easier to deliver and which ones might be more difficult.

We also visited several proposed cycling corridor sites to understand the local context, review current infrastructure and assess any obvious limitations. To further confirm our work, we engaged Trafficworks to review the infrastructure we recommended for each priority corridor. They also provided estimates of what each corridor might cost to build. Their assessment also considered the complexity of delivering the infrastructure at each location. The report is available from our website.

We considered stakeholder feedback on our draft strategy recommendation

Victoria's draft 30-year infrastructure strategy was published online in March 2025 for feedback. We heard from government, industry professionals, advocacy groups and community members during the 8-week engagement period.

Based on this feedback, we updated our list of priority corridors by adding:

- 2 new orbital routes to provide north-south connections in the eastern middle suburbs
- an extension from the Anzac Station to Sandringham corridor to reach Moorabbin
- more local links along the proposed western corridors to better connect activity centres and other key destinations.

We considered the relative performance of each priority corridor

We engaged FTI Consulting to conduct an economic assessment of the relative costs and benefits of the priority corridors. This included a high-level assessment of:

- likely demand (estimated number of cyclists)
- travel time savings
- improved safety
- reduced congestion
- improved amenity for cyclists.

The report is available from our website.

We used this information to help further refine the list of priority corridors. We especially looked at the likely future demand on each corridor and potential benefits. We compared these to the estimated costs to assess the benefit-cost ratio of each corridor and tested how each corridor's ratios changed with different assumptions. We removed corridors with a benefit-cost ratio below one from the priority list for investment in the next 10 years. Corridors with a benefit-cost ratio above one remained.

The table below shows the benefit-cost ratio for each of the Melbourne corridors in 2031. The assessment also considered 'low' and 'high' demand along these corridors. The benefit-cost ratios for these scenarios are also shown.

Table 3: Summary of relative costs and benefits of the Melbourne corridors

Corridor	Benefit-cost ratio	Benefit-cost ratios with low and high demand
Northcote to Moonee Ponds	5.6	4.5 - 6.8
Essendon to La Trobe University	1.2	1.0 - 1.4
Alfred Hospital to Clayton	7.7	6.3 - 9.3
Box Hill to Docklands	5.8	4.7 - 7.1
Werribee to Footscray	1.9	1.7 - 2.2
Abbotsford to Anzac Station	7.5	6.2 - 9.0
Anzac Station to Sandringham	2.9	2.4 - 3.5
St Albans to Docklands	3.8	3.3 - 4.4
Highpoint to Footscray	5.4	4.3 - 6.8
Essendon to Southbank	1.6	1.3 - 1.8
Caulfield to Auburn	1.3	1.1 - 1.5
Murrumbeena to Southland	1.8	1.5 - 2.1
Combined Melbourne network result	4.0	3.0 - 4.4

Source: FTI, *Report on the economic assessment of cycling corridors*, report to Infrastructure Victoria, 2025, pp 6-7

We changed our approach for regional Victoria

We started by asking 2 key questions

We asked 2 questions to help us understand hidden demand and bike access in regional Victorian cities (steps 1 and 2 in Figure 4):

1. How many people might want to ride bikes?
2. How well are places connected by bike paths?

However, because regional areas have fewer bike corridors than Melbourne it makes it harder to know which cities would benefit most from new bike links. Local councils in regional Victoria told us they face the same problem.

How we chose the priorities

We used a scoring method to find regional cities with the best chance of building strong bike networks (step 3 in Figure 4). Instead of trying to connect every city, we focused on the ones with the best chance of building strong bike links.

Based on our assessment, the following cities stood out:

- top priorities for investment: Bendigo, Geelong, Ballarat, and Wangaratta
- other strong candidates: Mildura, Shepparton, and Wodonga

We looked at other things too:

- BikeSpot incident reports (to see where crashes happen)
- local council strategies (to check existing plans)
- advice from Active Transport Victoria
- spoke with transport planners in each city to understand what bike infrastructure already exists and what's planned for the future.

We replaced Mildura and Shepparton with Castlemaine because it had more bike crashes.

From this, we picked one to 3 key bike corridors in each priority city.

What the numbers told us

We also looked at the costs and benefits of the regional corridors, like the Melbourne corridors. Bendigo, Geelong, Ballarat and Wangaratta had benefit-cost ratio ranges near to or above 1, which means the expected benefits are greater than the costs. This makes these cities candidates for investment. By 2031, Ballarat could see a 1125% cycling increase, Geelong 250%, Bendigo 155%, and Wangaratta 505%.[26] Communities in these cities are growing fast, cycling is already part of daily life and local councils are ready to expand networks.[27] Investing now supports safer, healthier and more connected communities.[28]

Wodonga and Castlemaine had benefit-cost ratio ranges below 1. This is mostly due to their small populations relative to other regional centres and their low levels of cycling at present. This can make it harder to justify big upgrades based on benefit-cost analysis alone.

The table below shows the benefit-cost ratio for each of the regional Victorian corridors in 2031.

Table 4: Summary of relative costs and benefits of the regional corridors

Corridor	Benefit-cost ratio	Benefit-cost ratios with low and high demand
Wodonga	0.5	0.5 - 0.5
Wangaratta	0.8	0.7 - 0.8
Bendigo	0.8	0.7 - 0.9
Castlemaine	0.5	0.4 - 0.5
Ballarat	1.0	0.8 - 1.2
Geelong	2.2	1.9 - 2.6
Combined regional Victoria network result	**1.0**	**0.9 - 1.2**

Source: FTI, *Report on the economic assessment of cycling corridors*, report to Infrastructure Victoria, 2025, pp 6-7

Benefit-cost ratios are a useful tool but sometimes they do not tell the whole story. Investing in cycling in regional cities means fairer transport choices, less traffic and stronger communities and greener, healthier places to live.[29] Regional Victorians spend more on transport each week ($215 vs. $189 in Melbourne) and tend to have worse health outcomes. Giving people safer and easier ways to ride bikes can help lower transport costs and support healthier lifestyles.[30]

Small changes can encourage more people to cycle in regional cities

Small changes like protected bike lanes, safer crossings, and slower traffic can encourage more people to cycle in regional cities. They help people feel safer and more confident riding. A Monash University study found that more than three-quarters of Victorians are interested in riding a bike, but only if infrastructure separates them from cars.[31] Better safety can encourage more people to ride.[32] Serious crashes have happened in cities like Shepparton, Wodonga, and Castlemaine, and families in places like Mildura want safer roads.[33] Local communities and councils support change and safer cycling can help these key regional hubs grow and stay connected.[34]

We are not suggesting big cycling corridor projects in regional cities straight away. Instead, we recommend starting with small, high-impact changes like safer intersections, new crossings, protected bike lanes, and slower traffic. These quick wins help people feel safer riding.[35] As more people cycle, the government can invest in longer routes that connect homes, schools, shops, and workplaces.

Even though regional cities are different from big cities, the approach works in the same way: start small, build confidence, and grow the network. In Sydney, bike trips during the morning and evening peak periods went up 18% in from 2022 to 2023. Some spots had six times more riders than in 2010. This happened after adding bike lanes and fixing streets to make riding safer and nicer.[36] In Boulder, United States and Groningen, Netherlands, cycling rates doubled or tripled after similar upgrades.[37]

What we concluded

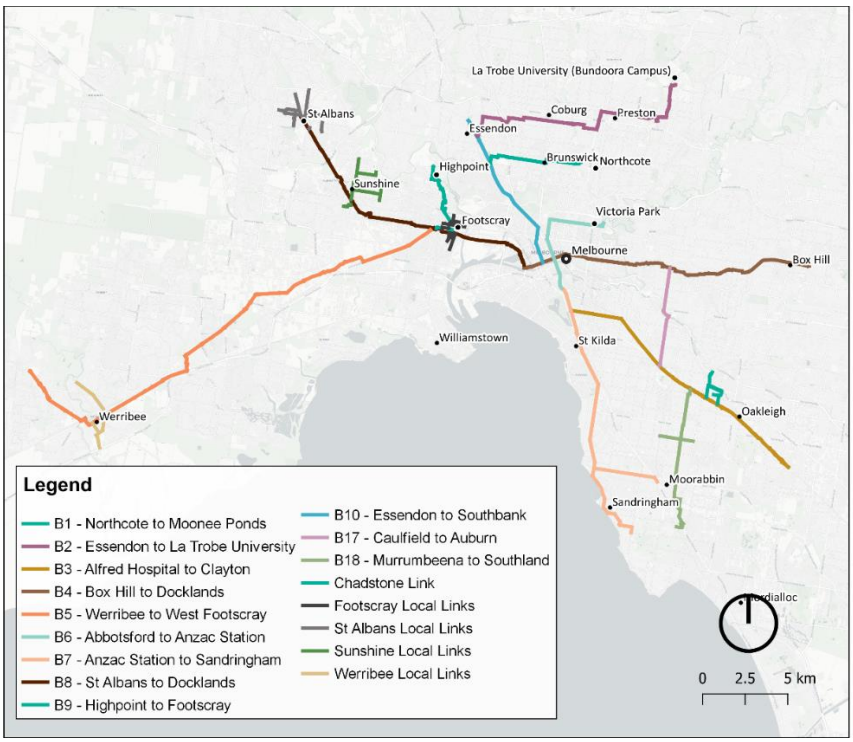
We shortlisted 12 priority corridors across Melbourne

We refined the list of 24 corridors to 12 priority corridors for Melbourne using the factors outlined in step 5. These corridors are shown in Figure 15. Based on our analysis, these priority cycling corridors will deliver the most initial benefit based on their potential to address transport disadvantage, fill critical network gaps, and support key cycling connections across Melbourne.

The final priority cycling corridors for Melbourne are:

- Northcote to Moonee Ponds
- Essendon to La Trobe University
- Alfred Hospital to Clayton
- Box Hill to Docklands
- Werribee to West Footscray
- Abbotsford to Anzac Station
- Anzac Station to Sandringham
- St Albans to Docklands
- Highpoint to Footscray
- Essendon to Southbank
- Caulfield to Auburn
- Murrumbeena to Southland.

Figure 15: We recommend 12 priority corridors for new or upgraded bicycle infrastructure in Melbourne



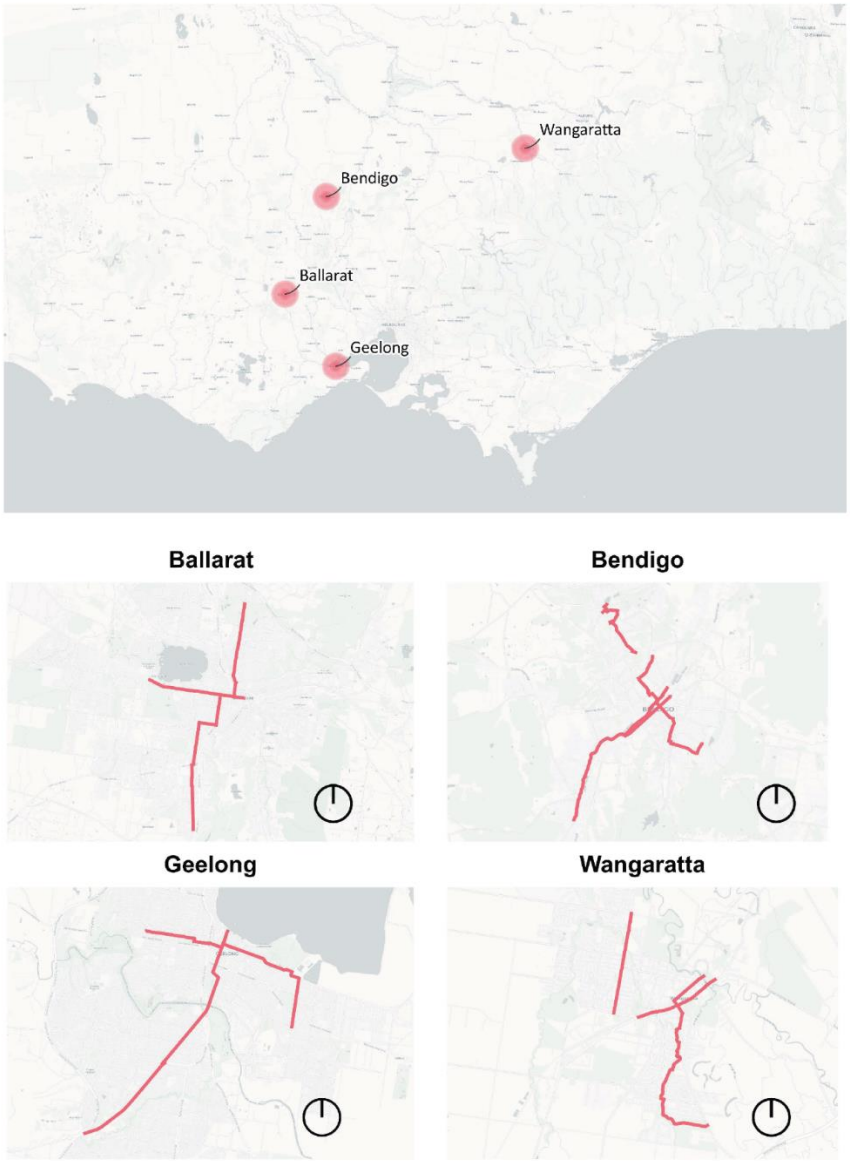
Source: Infrastructure Victoria 2025

We shortlisted 4 regional cities for investment in the next 10 years

The priority cycling corridors for investment in regional centres in the next 10 years are:

- Geelong
- Ballarat
- Bendigo
- Wangaratta.

Figure 16: 4 regional centres and proposed routes that will most benefit from priority investment according to our method



Source: Infrastructure Victoria 2025

Although not included in the list above, Wodonga, Castlemaine, Shepparton and Mildura are still good places for Victorian Government to consider investing in cycling infrastructure after the top regional priorities are delivered.

Endnotes

1 L Pearson, S Reeder, B Gabbe and B Beck, Designing for the interested but concerned: a qualitative study of the needs of potential bike riders, Journal of Transport and Health, 2024, 35(101770), doi:10.1016/j.jth.2024.101770.

2 L Pearson and B Beck, Three in four people want to ride a bike, but are put off by lack of safe lanes, Monash Lens, 31 January 2022, accessed 18 April 2024.

3 C Brand et al., The climate change mitigation effects of daily active travel in cities', Transportation Research Part D: Transport and Environment, 2021, 93, doi:10.1016/j.trd.2021.102764; B Knight, *Why cycling lanes should be on the fast track for cities*, UNSW website, 27 July 2022, accessed 12 August 2024.

4 FTI Consulting, Report on the economic assessment of cycling corridors, report to Infrastructure Victoria, 2025, p5.

5 Major Projects Victoria, Cycling benefits: take a virtual trip on the new veloway in Footscray, Victorian Government, accessed 17 July 2025.

6 Infrastructure Victoria, Victoria's Infrastructure Strategy 2025–2055, 2025, pp 68-71

7 Department of Energy, Environment and Climate Action, Victoria's climate change strategy, State of Victoria, 2021, p 39, accessed 17 April 2024.

8 Department of Transport, Strategic cycling corridor network review, State of Victoria, 2020, p 1.

9 Infrastructure Victoria analysis of Compass IoT, Vehicle speeds and traffic volume [data set], unpublished; Melbourne Bike Lane Project, Bicycle infrastructure [data set], 1 August 2025, accessed 1 August 2025; C Huggins, O Hayes, A Oakes, J Laing, W Fooks, S Stace, R Napper and W Symons, Improving cycling and micromobility planning across Australia and New Zealand, Austroads, 2025, p 34, accessed 3 August 2025. This analysis covers Melbourne, Bendigo, Geelong, and Ballarat only.

10 FTI Consulting, Report on the economic assessment of cycling corridors, report to Infrastructure Victoria, 2025, p12.

11 Institute for Sensible Transport, Infrastructure Victoria bike use propensity index forecast, methodology, report to Infrastructure Victoria, 2024.

12 Victorian Government, Strategic Cycling Corridors, accessed from: https://www.vic.gov.au/strategic-cycling-corridors, accessed 6 August 2025.

13 Department of Transport, Department of Jobs, Precincts and Regions and Arup, Western integrated transport framework stage 2: final report, State of Victoria, 2021, accessed 8 October 2024.

14 E Fishman et al., Factors influencing bike share membership: an analysis of Melbourne and Brisbane, Transportation Research Part A: Policy and Practice, 2015, 71: 17–30.

15 Institute for Sensible Transport, Infrastructure Victoria bike use propensity index forecast, methodology, report to Infrastructure Victoria, 2024.

16 Institute for Sensible Transport, Infrastructure Victoria bike use propensity index forecast, methodology, report to Infrastructure Victoria, 2024.

17 Department of Transport and Planning, Plan for Victoria, State of Victoria, 2025, accessed 17 July 2025.

18 Department of Transport and Planning, Victoria's housing statement, 2023, State of Victoria, accessed 17 July 2025.

19 G Currie et al., Investigating links between transport disadvantage, social exclusion and well-being in Melbourne – preliminary results, Transport Policy, 2009, 16: 97–105.

20 Victorian Planning Authority, Precinct structure planning guidelines: new communities in Victoria, State of Victoria, 2021, accessed 16 June 2025.

21 Department of Transport, Department of Jobs, Precincts and Regions and Arup, Western integrated transport framework stage 2: final report, State of Victoria, 2021, accessed 8 October 2024.

22 Infrastructure Victoria analysis of Compass IoT vehicle speeds and traffic volume data [data set]; Infrastructure Victoria analysis of OpenStreetMap bicycle infrastructure, OpenStreetMap Wiki [data set]; City of Yarra, Moving forward – Yarra's transport strategy 2022–32, 2021, accessed 9 October 2024.

23 Infrastructure Victoria analysis of Socio-Economic Indexes for Areas (SEIFA), Socio-Economic Indexes for Areas (SEIFA), Australia [data set], 2021, accessed 3 October 2024.

24 City of Yarra, Moving forward – Yarra's transport strategy 2022–32, 2021, accessed 9 October 2024.

25 FTI Consulting, Report on the economic assessment of cycling corridors, report to Infrastructure Victoria, 2025, p68.

26 Infrastructure Victoria, Building safer cycling networks, 2025, p 20; Infrastructure Victoria 2024 FTI Consulting, Report on the economic assessment of cycling corridors, report to Infrastructure Victoria, 2025, p26

27 Regional Development Victoria, Victoria's regions – Loddon Mallee, accessed from https://www.rdv.vic.gov.au/victorias-regions/loddon-mallee on 6 August 2025; City of Greater Geelong, Our region, accessed from: https://www.greatergeelong.vic.gov.au/Council/About-Council/Our-region on 6 August 2025.

28 City of Ballarat, Active transport strategy, accessed from: https://www.ballarat.vic.gov.au/city/strategies-and-plans/active-transport-strategy on 6 August 2025.

29 Environment Protection Authority Victoria, Fine Particle Pollution Factsheet, 2024, accessed on 6 August 2025; Victorian Government, Victorian Cycling Strategy 2018–28, 2018, p. 32; Victorian Department of Health, Victorian public health and wellbeing plan 2023–2027, Melbourne: State of Victoria, 2023, accessed from: https://www.health.vic.gov.au/victorian-public-health-and-wellbeing-plan-2023-27 on 6 August 2025.

30 Australian Automobile Association, Transport Affordability Index Q4 2022, 2022, p. 8, accessed 30 July 2025

31 L Pearson and B Beck, L Pearson, S Reeder, B Gabbe and B Beck, Designing for the interested but concerned: a qualitative study of the needs of potential bike riders, Journal of Transport and Health, 2024, 35(101770), doi:10.1016/j.jth.2024.101770.

32 Victorian Government, Victorian Cycling Strategy 2018–28, 2018, accessed 30 July 2025.

33 Midland Express, Community members are calling for urgent improvements to bicycle and pedestrian infrastructure at McKenzie Hill, 7 February 2023; Castlemaine Mail, An accident waiting to happen, 20 January 2023; Bicycle Network, $3m for Castlemaine bike link, 26 March 2025; Mount Alexander Shire Council, Funding support aimed at improving local road safety, 2024, all accessed 30 July 2025; Rural City of Wangaratta, Current projects, accessed from https://www.wangaratta.vic.gov.au/Your-Council/Projects-and-Works/Current-Projects on 6 August 2025; Bicycle Network, Driver using phone jailed over rider death, 11 April 2024, accessed from https://bicyclenetwork.com.au/newsroom/2024/05/08/driver-watching-video-jailed-over-rider-death/ on the 30 July 2025; Shepparton News, Cyclist hospitalised after crash on rural Goulburn Valley road, accessed from https://www.sheppnews.com.au/police-court/cyclist-hospitalised-after-crash-on-rural-goulburn-valley-road/ on 6 August 2025.

34 Mildura Rural City Council, Merbein pedestrian and cyclist safety project, accessed from https://www.mildura.vic.gov.au/Council/Major-Projects/Merbein-Pedestrian-and-Cyclist-Safety-Project on 6 August 2025.

35 Victorian Government, Victorian cycling strategy 2018–28, 2018, p 32.

36 Bicycle Network, Sydney bike riders hit the city in record numbers, 8 June 2023, citing City of Sydney peak hour counts and infrastructure reports, accessed 30 July 2025.

37 PeopleForBikes, Boulder's cycling boom, 2018, accessed from https://www.peopleforbikes.org/ on 30 July 2025

Sustainability note

Infrastructure Victoria is committed to reducing its impact on the environment. This report is available in accessible version online or in PDF format only.

Published by Infrastructure Victoria
November 2025

This document is also available in PDF and accessible HTML or Word format at www.infrastructurevictoria.com.au