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- Format > Shape Fill > Picture. Select your picture and press Insert.
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Moving Forward>>

Yarra's Transport Strategy 2022

DRAFT - For exhibition and community feedback



Yarra City Council acknowledges the Wurundjeri Woi Wurrung people as the Traditional Owners and true sovereigns of the land now known as Yarra. We also acknowledge the significant contributions made by other Aboriginal and Torres Strait Islander people to life in Yarra. We pay our respects to Elders from all nations and to their Elders past, present and future.

Mayor's foreword

Mayors foreword to be inserted in the Draft for Adoption.

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About this Transport Strategy

This *Transport Strategy* (the Strategy) is a 10-year multi-modal strategy that seeks to deliver an innovative, efficient, sustainable and accessible transport system for Yarra. It outlines Yarra City Council's policies, priority infrastructure outcomes and other supporting activities to meet the aspirations of our community outlined in the *Yarra 2036 Community Vision*.

"A transport system that is innovative, efficient, sustainable and accessible"

Yarra 2036 Community Vision

This Strategy is identified as an initiative under Strategic Objective five in Yarra Council's *Council Plan* 2021–2025.

"Yarra's transport network is sustainable and recognises that streets are important shared public spaces. Transport and movement is accessible, safe and well connected"

Yarra prioritises sustainable and active transport, to help people move safely and sustainably through and within our municipality. Council is committed to creating a city that is accessible to all, irrespective of levels of personal mobility, to support a fulfilling life without the need for a car. It is an integral part of our climate emergency response to reduce transport emissions towards net-zero emissions by 2030.

Council Plan 2021-2025, Strategic Objective five: Transport and movement

Once adopted, this Strategy supersedes the following documents:

- Strategic Transport Statement 2006 and Strategic Transport Statement Status Report and Recommended Changes and Actions 2012–2016
- Bicycle Strategy 2010–2015 and Bike Strategy 2016 Refresh
- Encouraging and Increasing Walking 2005

This Strategy identifies policies and actions that will deliver outcomes that the community is consistently asking us for. It is ambitious and focuses on what we as a council and community can do and influence most. Advocacy to State Government for transport action is also included so it is very clear on the outcomes we want and will support to encourage investment in Yarra's transport network.

Transport is a big and complex topic with lots of threads at global, federal, state and local levels all competing for our time and attention. There is always a lot going on and as a geographically small council with limited resources it is not possible for us to be all things to all people. On this basis a focused approach from us is required to get key outcomes for our community, and it will be important to consider the following questions before council resources are committed to something:

- To what extent will advocacy by Yarra Council specifically influence the decision-making of external organisations (for example, the State Government, private companies or others)?
- To what extent will a topic or project directly impact people or businesses in Yarra's community specifically in the foreseeable future?
- What is the likelihood of a topic advancing satisfactorily without council involvement, or with minimal council involvement?

What is the potential for topics to be advanced more effectively by leveraging the resources of others (for example, better-resourced larger councils and State Government, subregional bodies and the private sector)?

Who this Strategy is for

The three primary audience groups, their role and what this Strategy gives them is summarised below.

Our community as stakeholders

- Information on existing and emerging transport issues and how Yarra Council plans to address them.
- Information on strategic council objectives and how these relate to this Strategy.
- Information on transport policies and how we will apply these going forward at the local level when delivering projects.
- Feedback on how our plans, policies and actions are being implemented in local areas.

Our councillors as decision-makers

- A formally adopted Strategy which has been through a statutory process that provides support for making decisions that implement policy and deliver projects.
- A reference document to inform other decision-making on resourcing and budgeting, work priorities and supporting processes.

Federal and state governments and other third parties as investors in and managers of the transport network

- A one-stop shop for external parties to understand the transport policies, projects and approaches that Yarra Council will support as either a key stakeholder or a project partner.

How this Strategy relates to other policies and strategies

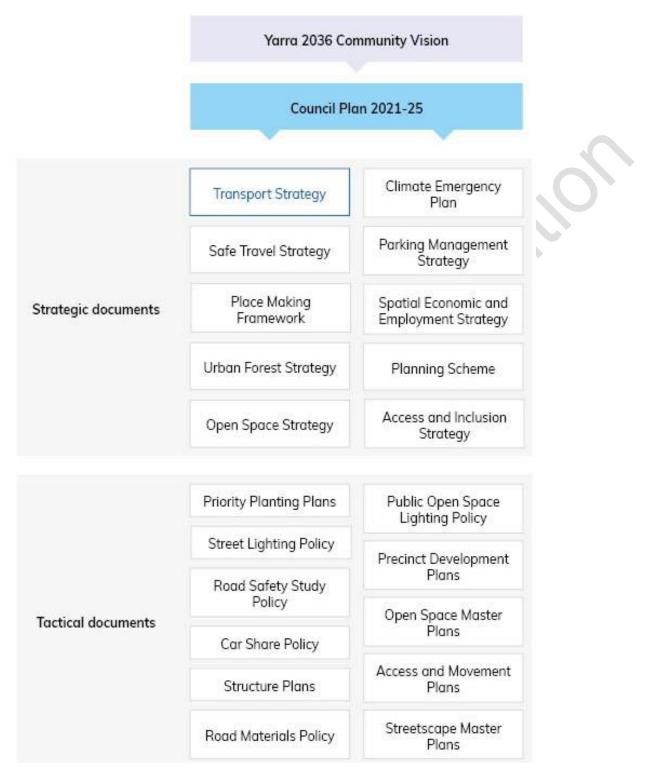
This Strategy is a strategic document containing strategic directions and policies to deliver our preferred transport future.

It is one of several Yarra Council strategies, plans and policies which impact streets and the broader transport system. Figure 1 shows how the Strategy relates to these other Yarra Council policy documents.

We have legal and legislative obligations under several pieces of legislation. These include the *Transport Integration Act 2010, Road Management Act 2004* and the *Planning and Environment Act 1987.* There are other key State Government strategies and policies that guide decision-making by Yarra. These include the *Victorian Cycling Strategy, Plan Melbourne* and the *Victorian Road Safety Strategy.*

The policies and strategies of other entities, such as neighbouring councils and the Municipal Association of Victoria are also taken into consideration.

Figure 1. Overview of related Yarra City Council policies, strategies and other documents showing the *Transport Strategy* in context



Roles and responsibilities for transport in Yarra

Many authorities, government organisations and other entities are involved in the construction, maintenance and operation of transport in Yarra. Some key examples of jurisdictional division are shown below.

	Local government	State government	Federal government	Private sector
Streets	Providing, managing and maintaining 225km of local roads and 85km of laneways in Yarra. Providing, managing and maintaining public on-street amenities, such as seating, bins, trees, other landscaping, lighting, bicycle parking and signage. Reviewing applications and issuing business and community permits such as outdoor dining, car share and events. Advocacy on issues affecting community outside the jurisdiction of local government.	The arterial road network and components like clearways, speed limits and road layout. Installation, operation and maintenance of most traffic signals. Road laws and other relevant legislation such as speed limits, clearways, truck bans and requirements for bike helmets. Victoria Police are responsible for enforcing road rules like speed limits, bike riders on footpaths and temporary turn bans. Setting strategic direction for transport, such as the <i>Victorian</i> <i>Cycling Strategy</i> and the Movement and Place Framework.	Providing intermittent funding for specific projects, such as the Roads to Recovery Program. Oversight and management of heavy vehicle operations through the National Heavy Vehicle Regulator.	Some developments include thoroughfares that are privately- owned and managed. Use of public roads for businesses so long as such use complies with road rules and relevant regulations (for example, ride share services, food delivery services, car share, bike share and scooter share).
Off-road paths and trails	Providing, managing and maintaining footpaths and shared paths for people walking and cycling.	Providing, managing and maintaining some shared paths, bridges and crossings (for example, Yarra Bend Park, Collins Bridge, Darebin Yarra Link).		Some publicly accessible paths are privately- owned and managed.

Table 1. Roles and responsibilities regarding transport in Yarra

	Local government	State government	Federal government	Private sector
Parking	Reviewing applications and issuing parking permits, and managing and enforcing on-street parking.	Implementation, enforcement and management of clearways.		Some publicly accessible off- street carparks are privately- owned and managed.
Public transport	Advocacy on issues affecting community outside the jurisdiction of local government. Provision of public transport priority infrastructure on local roads.	Planning, construction and management of public transport infrastructure (for example, Metro 1, tram tracks). Railway stations, tram stops and bus stops are owned by the State Government and managed by third- party operators. Public transport vehicles and depot infrastructure are owned and managed by the State Government.	Providing intermittent funding for specific projects, such as the Melbourne Airport Rail Link.	Public transport is planned by the State Government and run by privately- owned third-party operators (including Yarra Trams, Metro Trains and Kinetic). Railway stations, tram stops and bus stops are owned by the State Government and managed by third-party operators.
Land use	Reviewing applications and issuing permits for new developments and changes to land use, including the amount of car and bicycle parking to be provided in new developments. Reviewing applications and issuing construction and maintenance- related permits, including related traffic management. Advocacy on and proposing changes to provisions in the Planning Scheme.	Oversight and overall control of the planning system through mechanisms such as VCAT and the Victorian Planning Scheme.	The Federal Government is responsible for national policies and legislation such as climate and trade agreements which can have major impacts on land use patterns.	Yarra Council does not have a direct influence over the ownership or use of private land beyond statutory mechanisms, such as levers in the Planning Scheme. Development is often driven by market forces with the local government planning process used to help influence outcomes.

Looking forward – What we want to achieve

Yarra's 2050 transport vision

Yarra is a successful inner city community and our transport system has played a key role in achieving this vision. Opportunities to change and improve have been actively pursued and implemented to make the city a liveable, economically prosperous and environmentally sustainable place.

Yarra's 2050 transport network is robust, highly functional, and multi-modal. This allows people and goods to move efficiently on its historic network of streets, rails and paths. Although Melbourne's population is now over 8 million people, it is now easier, faster and safer for people of all ages and abilities to get around Yarra than it was in 2020.

Yarra's transport network provides genuinely attractive travel options for everyone. Those who can and want to live without owning a car can do so with ease due to widely available car share and ride share.

Well-connected train, tram and bus services provide convenient connections across the city so people can easily get where they need. Trams and buses are on time and travel quickly as they not delayed by traffic, giving the community confidence that the public transport network can be relied upon.

Parking revenue and a user-pays model provides essential funding that provides alternatives to car travel for everyone. Reforms to planning regulations mean that people are free to choose their parking arrangements and are no longer forced to build or purchase car parking that they do not want or need. This results in improved housing affordability, better building design, reduced building heights and enhanced street amenity. High-quality bicycle parking facilities and provision for zero-emissions private cars is standard in new developments and retrofitted into old ones.

Electric and other zero-emissions road vehicles are now common and a dense network of publicly and privately available chargers exists throughout Yarra, Melbourne and Victoria. Advances in technology mean that all public transport is carbon positive or neutral.

There are lots of choices for people who want to walk or use a bicycle or scooter at any time of day and night due to a well-developed network of safe paths and bike lanes which are comparable to those of Europe and North America's most liveable cities.

This has been all been achieved by the council:

- managing traffic growth and keeping through traffic off local streets. Streets are no longer dominated by cars. Active and public transport, place making, outdoor trading and trees have been consistently prioritised
- supporting local living so residents have services, jobs, and leisure facilities within 20 minutes of their home easily accessible by active or public transport
- facilitating an inclusive transport system that supports access and movement by people of all ages and abilities
- working with the State Government and others to deliver a connected network of bicycle routes that people of all ages and abilities feel safe and choose to use. This network is used by bikes of all types and other micro transport like electric scooters
- addressing long standing safety issues, particularly for vulnerable road users, so that there are zero deaths on Yarra's transport network and the number of people injured in crashes trends downwards
- working with the State Government to deliver a world-class street-based public transport network
- supporting the State Government in its rollout of high-capacity trains, accessible tram stops and new rail lines, including Melbourne Metro 2
- supporting zero-emissions vehicles through promotion and assistance in the operation of schemes to encourage uptake
- implementing parking management approaches that actively discourage non-essential car ownership and car travel, while also continuing to provide convenient parking for those who need it

Achieving all this has not been easy, however, Yarra City Council continues to build on its success by implementing policy to deliver the outcomes requested by the community.

What the community has told us

At the strategic level there is very strong support for active and sustainable transport

This Strategy is informed by considerable community engagement undertaken on a range of projects over several years. We have received tens of thousands of responses to various projects, strategies and processes, directly and indirectly. These responses collectively provide clear and comprehensive insights into community desires and expectations about transport.

In 2021, approximately 700 community members responded to a survey as part of engagement for the development of the *Yarra 2036 Community Vision*. The feedback from this most recent process was that greening and sustainable transport are very high priority and providing for cars and parking are very low priority.

- 86% of respondents want to see "a lot more active and sustainable transport options", rather than "a lot more cars and parking spaces"
- 85% of respondents want to see "a lot more trees and greenery", rather than "a lot more cars and parking spaces"

Survey for community vision in 2021

The community expects us to provide more active transport and public transport and acknowledges that this will be at the expense of provision for cars given space is finite and cars take up a lot of this space so this is the primary way of getting this outcome.

Other strategic engagement exercises like Liveable Yarra in 2015, the *Climate Emergency Plan 2020*, the parking forum in 2019, various Planning Scheme amendments, as well as localised engagement on streetscape master plans, local area traffic management studies and bike network upgrades all show support for improving non-car modes of transportation. These processes stressed to the community that it is often not physically possible to provide more space for everything so trade-offs need to be made and clear priorities identified. The wider community acknowledges these trade-offs and is clear in what it wants prioritised.

At the local level there are competing expectations and a desire for consensus

While there is strong support for active and public transport, there are and always will be competing desires and interests. These are more prominent at the local level as individuals consider their own personal circumstances in the context of a specific project on a specific street. In some cases, people can feel a project is impacting them unfairly or more significantly than others as their street or neighbourhood is changed to deliver a broader strategic benefit. There is a strong desire for full agreement on all aspects of projects at all levels which can make design and delivery of projects very challenging for the council, State Government and other parties.

Outcomes that consistently appear in local community input to specific projects are set out in Table 2.

Unfortunately, it is often not possible for the council to deliver all these outcomes as some directly contradict others. For example, it is not possible to have less traffic and more car parking. This is a common and obvious request as naturally people would like to get where they are going quickly with easy parking at the destination. The want for these two specific outcomes is understood, however, more car parking equals more traffic. Experience and best practice research over decades show that no city in the world has reduced traffic by providing more car parking.

Another challenge is that many requested outcomes also compete for the same limited space in Yarra's streets and public spaces. For example, it is not possible to provide bike lanes, multiple traffic lanes, on-street car parking, dedicated tram lanes, trees, street furniture, outdoor dining and wide pedestrian footpaths all in one space – particularly on Yarra's narrow streets.

This competition for space is a critical challenge and a question of prioritisation and trade-offs. We must all acknowledge that meeting everyone's wide net of expectations and desires is simply not possible. This applies whatever action we take, be it reallocating road space or leaving streets as they are.

Table 2.	Conflicting	community	desires	regarding	transport outcomes
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Community outcomes NOT related to moving and parking privately owned vehicles				
	Reduced traffic and associated congestion, and noise More traffic management to reduce rat running and through traffic Safer more activated streets particularly for vulnerable road users Slower vehicle speeds More street based public transport routes	-		
Large amounts of off- street parking at all new development More cheap readily available public off street car parking More off street public parking bays for electric vehicles	Convenient road access for all traffic More loading bays More disabled parking bays Wider traffic lanes Wider parking bays More on street parking bays for electric vehicles	Cheap and readily available on-street parking for residents and their visitors Cheap and readily available on street parking for business customers and other visitors More road capacity for traffic	Minimal journey times for general traffic More parking for parents at schools Cheap and readily available commuter parking for staff	
Community outcomes related to moving and parking privately owned vehicles				

The need to 'get on with it'

Frustrations that things take too long to do is another theme that consistently emerges from community engagement. This frustration is understood and there are opportunities for us to get more done more quickly through decisive decision-making and project delivery innovations.

In some cases, external factors beyond the council's control are the main barrier to rapid progress – such as statutory approvals from State Government for council projects. In other instances, projects such as tram stop upgrades are led and funded by State Government so timescales for all aspects of a project are set by them. Finally, other practical factors like large scale redevelopment projects can mean that it makes more sense to hold off on new projects at a particular location rather than have them damaged and worn early in their lifecycle due to large construction vehicles and associated debris.

Communication with the community that explain these aspects more clearly on a project-by-project basis can play a key role in reducing frustration due to lack of knowledge about what is happening or not happening and why.

Yarra data summary

Yarra is a growing and unique community. As an inner-urban city, we face pressing issues for existing and future residents, workers and visitors.

These factors are not new. Localised parking pressure from an increasing number of cars, degraded local amenity due to air and noise pollution, and crowded roads, public transport and bike lanes have all been experienced for many years.

We also know that there is great diversity within Yarra. From modern apartment complexes to historic shopping strips, all have different transport needs. Some people need cars to get around, while others would prefer to use active or public transport for all or some of their trips. We need to recognise these differences in our actions.

Increasing demand for street space

There are many competing needs and wants for Yarra's limited space. These include car parking, vegetation and trading area. Street space is limited and it is not possible to accommodate all requests. From a transport perspective, it is important to prioritise the efficient movement of people and goods. For example, in peak times, Bridge Road at Punt Road carries double the number of people in trams as private cars, despite no dedicated street space being allocated to trams.

For the past 70 years, the storage and movement of private cars has been allocated the most space on Melbourne's streets. Cities around the world now recognise that it is vital to prioritise the efficient movement of people and goods instead to ensure the efficiency and amenity of places.

The impacts of the COVID-19 pandemic have highlighted how street space is allocated or claimed for different uses. Less than 30% of parking in Yarra has a charge for access which drives up demand. Permit parking is available at relatively very low cost at less than a dollar a week and households can obtain multiple permits with ease which further drives up demand. Time restrictions are used to encourage turnover and manage high demand for longer stay parking (over 2 hours). There is no provision for commuters who are looking for long stay on street parking, value convenience and have a high propensity to pay for it. Instead commuters use free parking in Yarra be it unrestricted parking or 4-hour parking (which requires commuters to move cars at lunch time).

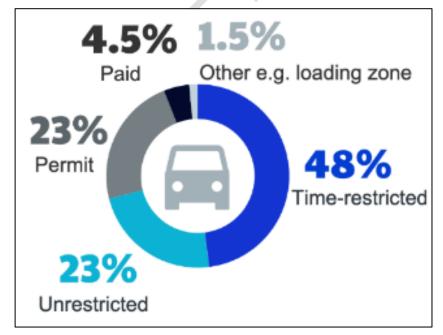
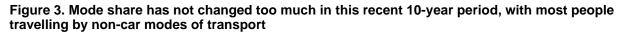
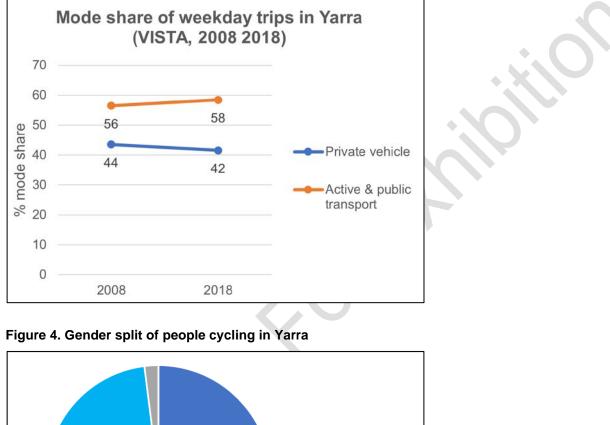


Figure 2. On-street car parking management in Yarra is primarily about cheap parking and free parking with time restrictions.

Plateauing mode shift

Since the early 1990s, rates of cycling in Yarra and inner Melbourne have increased. However, this increase has begun to slow. Most people who feel comfortable riding bikes in current conditions are already cycling. However, the other 78% of people who live in Yarra and are 'interested but concerned' in riding do not feel safe to do so.¹ As a result, women are still significantly underrepresented in cycling in Yarra² and further mode shift will not be possible without improvements in safety and infrastructure.





Women 32%
Men 66%
Unidentified

¹ Monash University and VicHealth, 2020.

² Bicycle Network Super Tuesday, 2021.

Fragmented bicycle network

Local, national and international experience and research show that a connected 'grid' of direct and safe cycling routes is essential to increasing bicycle mode share. While Yarra does have some high-quality routes, safe connections between them are limited. This means that the benefits of our cycling investment cannot be fully realised as people are unable to safely get to them.

Road and path safety

Between 2010 and 2019, the number of fatal and serious injury crashes in Yarra has overall remained stable. However, compared to Greater Melbourne, Yarra has a significantly higher share of crashes involving vulnerable road users.³ For example, crash rates involving people on bikes in Yarra is more than four times higher than the metropolitan average and mode share.⁴ Vulnerable road users are also overrepresented in fatal crashes, with pedestrian deaths making up 43% (n=6) of fatal crashes, and motorcyclists 29% (n=4) in 2011 to 2021. Yarra fully endorses the Victorian Government's 'Vision Zero' strategy.

One issue that is particularly prevalent in Yarra is perceptions of safety on our shared path network. Conflicts between path users are reported to the council, such as between people walking, wheeling and cycling.

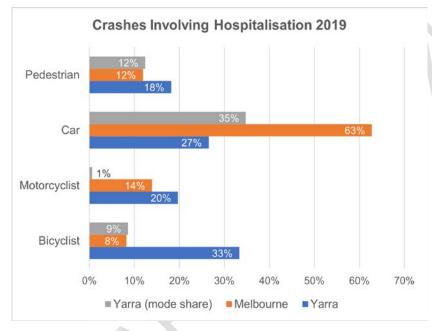


Figure 5. Crashes involving hospitalisation in 2019

Yarra also has some of the highest rates of collisions between cars and trams in Melbourne. There has been an increase of 10% between 2014 and 2018, with 97% of those being the fault of motorists.⁵ This disproportionately affects older people, with 72% of serious injuries in these crashes affecting people aged 60 years or more.⁶ Only 27% of tram tracks in Yarra are separated from traffic.^{7 8}

- ⁴ Victorian Integrated Survey of Travel & Activity (VISTA). Victorian Department of Transport, 2018.
- ⁵ 2018 Annual Incident Statistics, Transport Safety Victoria, 2019.
- ⁶ Transport Safety Victoria, 2019.
- ⁷ PTV Tram Track Centreline, Department of Environment,
- Land, Water & Planning, February 2022.
- ⁸ Yarra GIS aerial imagery, December 2021.

³ Road Trauma Statistics – Hospitalisations and Fatal 2010– 2021, Transport Accident Commission, 2022.



Bridge Road has one the highest number of tram-to-vehicle collisions of any street in Melbourne due to a high number of vehicle crossings and a lack of separation between trams and cars. This results in injuries to people on the trams and in the vehicles, and can cause significant delays for all road users.

Through traffic

Most road traffic in Yarra does not have a destination within the municipality. This means that residents and businesses suffer significant impacts and incur costs with little benefit in return.

Congestion

Yarra faces significant increases in road traffic. This is primarily from external sources and influences, such as the expansion of roads and increasing car use in other areas of Melbourne. Local factors also play a large role, with the number of cars owned by Yarra households continuing to increase.⁹

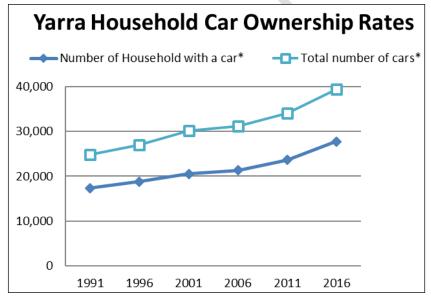
⁹ ABS Census, 1991–2016



Traffic congestion in Yarra is partly due to trips originating outside Yarra

Demand for road space for use by cars will always be high particularly in Melbourne which is one of the fastest growing cities in the world. The community need alternatives to sitting in traffic if liveability and economic objectives are to be met.





Congestion on both arterial and local roads has been increasing for many years and is forecast to continue.¹⁰ If current trends persist, Yarra will see a 48% increase in the number of car trips on our roads.¹¹ We know from local, national and international experience and research that building more parking and roads does not reduce congestion – it only increases it.¹²

Bicycle and footpath congestion are also becoming issues. Rapid increases in rates of cycling and concentrated pedestrian activity combined with limited safe route options has meant that crowding and congestion is now experienced in some locations.

Overcrowded public transport

Due to the radial nature of the public transport network and Melbourne's CBD structure, passenger loadings on trams, trains and buses are often at their peak by the time they reach Yarra. This means that Yarra residents are among the least likely to find a seat on public transport in Victoria during peak times. This makes it difficult for our residents, workers and visitors to get around. The COVID-19 pandemic has resulted in a temporary decrease in public transport use. However, some crowding is still experienced and will return at some point in the future due to population growth and other factors.

Unreliable on-road public transport

Most of Yarra's bus and tram routes do not have dedicated rights of way. This means that they are often delayed by private road vehicles – Melbourne's tram network is the slowest in the world. This in turn discourages people from using public transport and increases car use, which further delays public transport.



Where there is no on-road priority for trams they, too, get stuck in traffic

¹⁰ *Victoria's Infrastructure Strategy 2021–2051*, Infrastructure Victoria, August 2021.

 ¹¹ Yarra Climate Emergency Plan 2020–2024, Yarra City Council, 2020.
 ¹² Goodwin

Land use change

Yarra is continuing to change in many ways. Locations like Cremorne, Victoria Gardens and the Alphington Paper Mill are undergoing rapid shifts in their functions – significantly contributing to the 50% population increase that is expected in Yarra by 2036.¹³

As land uses change, so do transport needs. For example, changing job opportunities may mean greater demand for trips to a particular area which may not currently be well-serviced by public or active transport.

Increasing transport emissions

Transport is one of the largest and fastest-growing sources of greenhouse gas emissions in Yarra, with 15% of community emissions coming from transport – mostly from private cars.¹⁴ It will not be possible to meet the local, state, national or international targets needed to mitigate dangerous climate change if current trends continue.

The COVID-19 pandemic

The pandemic has been challenging for everyone on many levels and has significantly affected how, why, when and where we travel. Its medium and longer-term impacts are unknown currently and difficult to predict as there is so much uncertainty. For now, it seems to have dramatically accelerated various trends around how people live, work and socialise that have long been in the making.

The pandemic has provided opportunities for us to really look at how street space is used and how it can best serve the community and support local businesses. Yarra has delivered a lot of projects as an emergency response which have been successful in terms of meeting their objectives and generally received favourable feedback from the community. Many of these have required road space reallocation which has given the community a firsthand opportunity to see the outcomes that are possible through street environment changes.

Necessity has meant that these changes have had to occur quickly in many instances so people become more familiar and comfortable with change and adapting quickly as needed. In some cases projects delivered on a temporary basis have garnered significant support for remaining as they are and there is opposition to going back to how things were.

The pandemic as a watershed event has increased the appetite to question how all aspects of cities should function moving forward so they best respond to the needs of the community. This presents opportunities for better outcomes more quickly and more consistently.

¹³ Forecast. Id. Estimated Resident Population Forecast, 2019–2036.

¹⁴ Yarra Climate Emergency Plan 2020–2024, Yarra City Council, 2020.

The daily transport issues we face

Transport is a highly complex, difficult and sensitive subject with a very high profile at the federal, state and local levels of government. The transport topic in Yarra is no exception to this and consistently ranks as a top area of concern for the community in survey work. There are many issues and solutions that need to be found that respond to the needs of a modern, densely developed and growing inner city area if things are to get better for everyone as time passes.

Almost all streets in Yarra have been the same width for over 150 years and it is not practical or desirable to widen them regardless of the increases in travel demand that have occurred to date and that will occur in the future.

The objective is to unlock the potential of the street space we do have to support Yarra as a great place to live, work and visit.

Yarra has a diverse network of streets and no streets are the same, however, the Brunswick Street highlights many of the common transport issues. In many cases these have existed for many years and are obvious to people as they travel. On this basis it is important to understand not only what the issues are but why they persist, and what the challenges are in order to resolve them.

These issues and challenges facing us are not particularly unique to Yarra and are experienced elsewhere in Melbourne, Australia and internationally. There are proven and effective solutions that have been rolled out elsewhere. In many cases, we have already delivered effective solutions and are seen by other councils as a national leader. On this basis we will build on the good work that has already been done in Yarra as there are lots of opportunities to do more.



Many of Yarra's local area transport issues are experienced by people using Brunswick Street

Walking in Yarra

Pedestrians are often given narrow and cluttered footpaths to use next to busy roads.

Brunswick Street is an example of an area with relatively poor pedestrian amenity despite it being a popular and heavily used street. There can be long delays when crossing roads at traffic signals which causes frustration and encourages people to cross the road in a gap in the traffic without signal protection.



Space for pedestrians and café visitors to sit outside is limited despite a policy context which supports these types of activities in strip shopping centres

At busy intersections like Brunswick Street and Johnston Street crowds of waiting pedestrians can form which block the footpath and make it difficult for pedestrians to navigate street. Packed pathways and crowding also result in an unpleasant experience for people waiting at tram and bus stops or using outdoor dining facilities.

Pathways can be widened to give people more space and, in some cases, this has been done quickly and cheaply by the council during the pandemic as an emergency response. Road space reallocation is a requirement, and this is a challenge particularly on busy streets.

"Mode shift away from cars is required. More space needs to be provided for people travelling by active transport modes".



Policy consistently states that walking should be encouraged. There are opportunities for footpaths to function better for the community by reducing clutter and reallocating road space.



Narrow and cluttered footpaths often push pedestrians on to roads.

Cycling in Yarra

People riding bikes in Yarra are overrepresented in formally recorded annual crash statistics. Official statistics also significantly underrepresent the number and extent of crashes and near misses.¹⁵ These incidents and perceptions of safety put many people off cycling. This limits travel options and encourages more people to use cars, which in turn creates conditions that discourage active transport.

The picture of Brunswick Street shows people on bikes have narrow lanes for much of the day despite it being a key strategic corridor for cycling. As a result, they are at risk of being hit by car doors to the left and passing or turning vehicles to the right. Space for people riding can be particularly limited at intersections, creating an intimidating environment that actively discourages cycling.



Large numbers of people in Yarra would like to ride a bike but are very concerned about safety.

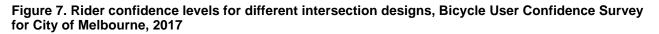
A key issue across Yarra is that bicycle routes vary in quality. Studies show that most people need to feel reasonably safe along a whole route when looking to ride. Any cycle route is only as attractive as its worst section. Even a short 200 metre section of cycling where people feel unsafe and anxious will put many people off using a whole four-kilometre route no matter how good the rest of the route is. The off-road trail network is available and allows people to avoid busy roads in some cases. However, trails are often indirect, increasingly crowded, poorly lit, have stair access in some places and are limited in number.

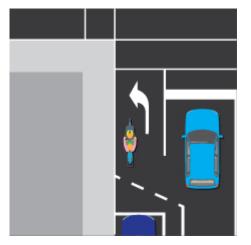
Other cities around the world have proven that investment in cycling facilities increases cycling, particularly when the focus is on building a grid of genuinely attractive and safe routes. The costs of delivering this network are relatively low when compared to those of new road and rail tunnels. There are now opportunities to use innovative treatments that make attractive cycleways even cheaper to deliver.

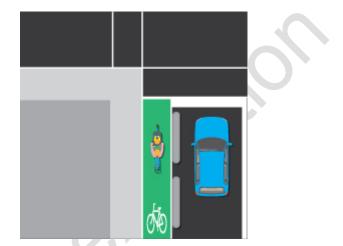
Scooters and electric scooters, electric bikes and cargo bikes are becoming increasingly easy to use, robust, affordable and popular. Traffic congestion, rising fuel prices, difficulties with parking and concerns about using public transport and COVID mean that more people than ever are actively looking to ride a bike or

¹⁵ 'Under-reporting bicycle accidents to police in the 'COST TU1101 international survey: Cross-country comparisons and associated factors', Shinar, et al. *Accident Analysis* & *Prevention*, 110, pp.177–186, January 2018. https://doi.org/10.1016/j.aap.2017.09.018 scooter. A wide cross section of the community just needs to feel comfortable and safe when using these cheap, space-efficient, environmentally friendly and highly convenient modes of transport.

Though there are some opportunities to further improve the popular off-road trail network, there are practical environmental, amenity and cost considerations which limit the role they can play. Therefore, the main opportunities lie with delivering improvements to the Yarra road network to better accommodate people riding.







16% of people riding bikes are confident using this layout

73% of people riding bikes are confident using this layout

An inclusive transport network is about providing all people with an infrastructure network that they can use with confidence that they will not be injured. This cannot be achieved in many cases without reallocating road space away from parked cars and traffic.



An intermittent advisory bike lane, with no protection, is a low-cost project that unfortunately will not encourage anyone but the most fearless cyclists to use this road.

Public transport in Yarra

Yarra has some of the best public transport access of any municipality in Victoria. However, there are still significant challenges and issues that need to be addressed in order to meet current and future needs.

Increasing public transport capacity, priority and stop/station access can require road space reallocation away from cars and traffic. It can also be expensive and relies on sustained State Government planning and funding as the responsible authority.

There are many opportunities for us to clearly set out the public transport outcomes we desire. These include an acceptance of the need for road space reallocation and other trade-offs so outcomes can be delivered.

Public transport speed and reliability

People on trams and buses face long journey times and poor travel conditions due to the movement of cars often being prioritised over on-road public transport.

Melbourne has the slowest tram network in the world. The picture of Brunswick Street shows how car traffic mixes with trams and causes delay for everyone.

Public transport safety

A lack of dedicated on-road tram facilities increases the risks of tram-to-car collisions. Yarra has some of the most collision-prone sections of tram tracks in Melbourne.

Public transport accessibility

In Victoria, 17% of the population lives with some form of disability. However, people with a disability are prevented from using most public transport due to inaccessible infrastructure.

A lack of accessible stops means that people in wheelchairs, carrying shopping bags or children, and older people can find it very difficult or impossible to board or alight trams. This not only causes social exclusion but is contrary to legal requirements for tram stops to have level access so everyone can use them under the *Disability Discrimination Act* (DDA).

Public transport capacity

Public transport can move large numbers of people quickly and efficiently so will need to play a key role in meeting increased travel demand as Melbourne grows. The State Government is aware of this and knows it needs to invest in public transport to support the economy and maintain liveability.

Accessing shared transport in Yarra

Shared transport includes car share, bike share and scooter share schemes and has the potential to provide convenient transport options for the community. Sharing reduces resource use which is good for the environment and saves people money and hassle. Using shared transport is not the answer to every issue but it can play an important role in Yarra's transport story.

Building on new approaches as a result of the COVID-19 pandemic

Heidelberg Road is a busy arterial road with fast moving traffic. The significant issues for cyclists on this road have been consistently recognised due to its narrow, non-continuous non-protected bike lanes.

In 2020, State Government made a commitment to deliver 100km's of bike routes upgrades via trials in response to the pandemic. Heidelberg Road was included in this program and wide protected bike lanes were installed. Since its installation the bike lane has carried 300,000 cyclists over an 18-month period despite multiple lockdowns and work from home orders reducing the numbers of people moving around.



Shared electric scooters are a shared transport mode that could have a place in Yarra's transport system.

Road space reallocation will sometimes be required to provide space is provided for car share, bikes and scooters which can be challenging.

There is an education aspect to this emerging area of transport as it is a new concept. The benefits of shared transport are not always obvious at first glance, however, the potential for sharing to address transport needs will become more commonly understood as these options are increasingly taken up by the community.

Travelling by car in Yarra

Car movement

Cars have played an important role in the movement of people and goods in Yarra for many decades. Most of the available street space has been allocated for their movement and storage but many drivers today face increasing delays and frustration due to congestion.

These delays often result in requests for more roads to be built, more lanes to be created and more parking to be constructed to move ever-increasing volumes of cars and trucks as quickly as possible. However, we know that this approach does not work and is not going to meet the current or future transport needs of Yarra as a growing city with limited space. As more roads are built, more people choose to drive. Any temporary benefits are then offset and overall congestion on the road network becomes even worse than before.¹⁶ No city can or has built its way out of congestion.

Today, there are more cars in Yarra than ever before. A lack of strategic traffic management and land use planning across Victoria means that many cars are making longer distance trips across Melbourne that go through Yarra. These are often on local roads which are used as 'rat run' shortcuts to circumvent arterial

¹⁶ 'The Road Ahead', Infrastructure Victoria.

roads. Brunswick Street, for example, is used as a shortcut to avoid using Punt Road and Nicholson Street nearby. This is compounded by rising rates of car ownership by households in Yarra, all scrambling to use the same amount of space. Moreover, various studies have shown that around 20% of all car trips in peak hour in inner Melbourne are non-essential.¹⁷ This strongly suggests that more could be done to get people to really think about when and how they travel, rather than only relying on the high cost and high frustration deterrent of traffic congestion or difficulties finding parking.

As traffic increases, so does the length of peak times which can go for most of the day. This causes or exacerbates a range of safety, amenity and environmental issues for everyone. This is shown by the fact that the highest net traffic flows on major roads in Yarra is now on Saturday afternoons.¹⁸ This increased traffic has severe negative impacts on local areas, such as increased risk of asthma in young children,¹⁹ impacts on residential amenity due to noise pollution, and even decreased life expectancy caused by local air pollution.²⁰



The policy context states Brunswick Street is a local road, with trams, pedestrians and cyclists being the priority. Placemaking which makes Brunswick Street a unique and pleasant historical precinct to visit is another objective. Outcomes on the street need to better reflect the aspirations of policy.

Car storage

Most cars are parked for more than 90% of a typical day, if space is occupied by a parked car it cannot be used for anything else. With the high volume of cars using Yarra's streets, those who really need to drive and park compete for a space with people who would choose another form of transport if the conditions were

¹⁷ Victorian Integrated Survey of Travel & Activity (VISTA), Victorian Department of Transport, 2018.

¹⁸ Ibid. Infrastructure Victoria.

¹⁹ 'Traffic pollution near childcare centres in Melbourne', Walter, Schneider-Futschik & Irving, *Australian and New* Zealand Journal of Public Health, 43(5), pp.410-412, October 2019.

²⁰ 'Particulate Matter and Premature Mortality: A Bayesian Meta-Analysis', Waidyatillake, et al., *International Journal of Environmental Research and Public Health*, 18(4), 2021. right for them to do so. This competition creates artificial scarcity and demand for parking and makes it more difficult for everyone to park.

The current situation has other far-reaching consequences and, importantly, impacts the journeys of other people and economic activity. This includes further increases to congestion on roads due to parked cars blocking lanes, or blocking sightlines making it more dangerous for pedestrians and cyclists. Or people being discouraged from visiting businesses in Yarra due to streets being parked out by people who occupy parking spaces because they exist rather than genuinely needing and valuing it. In this scenario, nobody appears to benefit.

There are potential solutions from both the supply and demand sides of managing parking. Building more parking is expensive and our city does not have the resources or space to continue doing this at the rate it has been. There are now well over 100,000 car parking spaces in Yarra including 48,000 on-street spaces. Over the coming years, tens of thousands of additional car parking spaces will be built because of new developments. Despite this, if the current trajectory continues, perceptions that there is not enough car parking will persist, unless changes are made to how parking is managed.

Other solutions involve reallocating space that is currently used for parking cars to other things that reduce demand for car travel and align with what the broader community have told us they want to achieve. These projects can be controversial given ongoing perceptions that there is not enough car parking.

One final issue to consider is the financial implications of car parking in Yarra. Approximately half of Yarra's on-street car parking has some form of charge associated with accessing it. Car parking is a community asset that generates a key revenue stream for the council's work so it needs be managed in a way that gets the best results of the wider community.

Using a zero-emissions car in Yarra

Electric cars are becoming an increasingly prominent topic globally, including in Yarra. At this stage, take up of electric cars in Australia is relatively low for a number of strategic reasons that are nothing to do with Yarra or local government more broadly. Notwithstanding this, zero emission cars have the potential to significantly reduce emissions.

There are significant opportunities for private businesses to fund charging infrastructure to get the benefits of electric cars at minimal cost to us. Changing technology, falling costs and uncertainty around which e-car is the best long-term investment may mean that some people seek a circuit breaker from car ownership. This provides a once in a generation opportunity to get people to really look at all their options before making the decision to just replace one car with another car.



Electric cars are beneficial and can significantly reduce greenhouse gas emissions. However, transitioning hundreds of thousands of car trips per day in Yarra from fossil fuel propulsion to electric propulsion will not address other transport issues.

How we will achieve our vision

In light of the key issues identified, and Yarra's 2050 Transport Vision, the following outcomes and strategic directions have been identified for this Strategy.

Outcomes

- O1. Increased use of space-efficient and environmentally sustainable forms of transport in Yarra
- O2. Enhanced places for people on Yarra's streets
- O3. Increased independent mobility for vulnerable road users in Yarra
- O4. Reduced car use for trips within or through Yarra

Strategic directions

D1. Allocate road space to preferred transport modes and other activities

Reallocate some of the large amounts of space given to car movement and storage on Yarra's streets to significantly improve conditions for people using space-efficient modes of transport.

D2. Reduce traffic speeds and volumes on Yarra's streets

Manage traffic volumes, turning movements and speeds on streets in Yarra where these are excessive given the function of the street, and/or where they create significant safety issues, particularly on council-managed local streets.

D3. Eliminate and reduce barriers to movement for all members of the community

Reduce obstacles that physically make it difficult for people of all ages and abilities to use the transport network in Yarra. Make it easier and safer for people to board public transport, cross major physical barriers, and to move through and around large development sites.

D4. Be agile in responding to transport needs

Use trials and pilot schemes to test designs or new treatments and to deliver change more innovatively, quickly and cheaply.

D5. Embrace partnerships

Work in partnership with State Government and others to identify and deliver transport improvements in Yarra.

The basis for our decisions

Policies

Fifteen policies covering all modes of transport are outlined in this Strategy. These align with various State transport planning documents, strategies and legislation. They also consider the all other Council strategies, policies and other documents that interface with the transport topic in Yarra as set out in figure 1 including directly relevant documents like the Placemaking Framework, and Road Safety Studies.

P1. Prioritise walking, cycling and using public transport over car use

The transport mode hierarchy in Figure 8 illustrates levels of priority by transport mode that is applied in all projects and policy decisions.

Figure 8. Yarra's transport mode hierarchy

Transport mode	Priority
Active transport modes (walking, cycling, scooters)	High
Public transport	
Vehicles facilitating access for people with a disability	
Freight, construction and servicing vehicles	
Car share	
Taxis and rideshare	
Local traffic	
Through traffic	Low

P2. Implement a New Deal for Schools – support active travel by children and families

Each year, schools will be selected for the New Deal for Schools program.

Yarra Council staff will form a working group for each selected school over the course of a semester, comprising of our staff, school staff, interested parents and students.

A travel behaviour event will occur so transport challenges and opportunities at each school can be understood. Infrastructure projects will then be identified in partnership with the reference group to help with local school travel.

"The New Deal for Schools is a focused approach looking at transport solutions for specific schools."

P3. Implement a New Deal for Walking - make the network suitable for all

A New Deal for Walking focuses on measures that maximise space to allow more people of all ages and abilities to walk around Yarra.

The preferred minimum width for a footpath in Yarra is 1.5 metres of unobstructed clear path. This is enough for people in wheelchairs or pushing a pram to navigate a street and pass each other. In busy areas it is desirable to have wide footpaths that provide comfort and space not only for people walking but for other fixtures and fittings that make a place that people use like bins, bike hoops, plantings, benches and out door trading. Widening footpaths by moving kerbs is complex and extremely expensive – even over very short distances. These costs present a significant practical challenge so Council has to look at opportunities to make the absolute best of the extensive pedestrian space that already exists by looking at opportunities to:

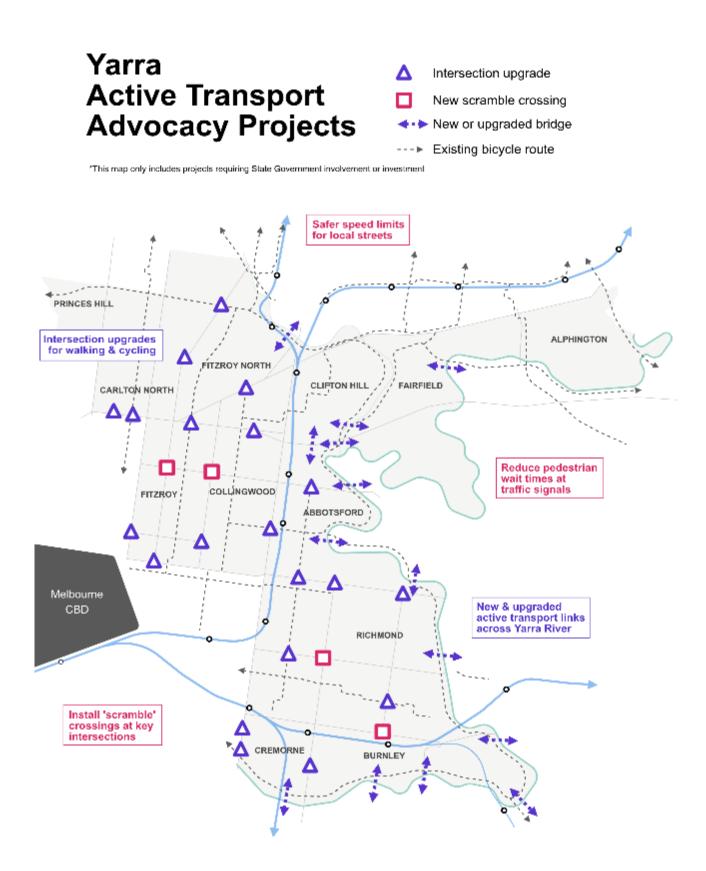
- Minimise street clutter, such as signage poles, guard rails, crash barriers and bins
- Relocate infrastructure that can clutter footpaths onto road carriageway, such as bicycle parking, scooter parking, trees, seating, bins and landscaping
- Provide more kerb outstands to compliment paths that contain trees, landscaping and street furniture, such as bike hoops and seats
- Remove slip lanes and other suburban road design solutions that marginalise pedestrians and that are not appropriate for Yarra
- Standardise the installation of tactile paving
- Embed the need to provide good outcomes for pedestrians in all Council transport projects and study work
- Relocate storage of household bins on narrow footpaths on collection days
- Prevent parked vehicles from obstructing footpaths
- Ensure that outdoor trading does not create an obstruction and complies with permits
- Install scramble crossings at busy four-way locations such as Brunswick Street and Johnston Street, and Bridge Road and Church Street
- Expand outdoor trading onto street space rather than footpaths
- Work with State Government to implement public transport stops on kerb outstands or on central island platforms to keep footpaths clear
- Reduce wait times at traffic signal crossings to keep busy footpaths clear of pedestrians
- Look to plant trees and install landscaping in road space to keep footpaths clear
- Proactively repair and improve existing footpath surfaces, particularly in high-use areas near schools and shops
- Ensure that crossings are level with the street. Where this is not possible, ensure that any bridges and subways are DDA-compliant and well lit
- Improve statutory planning practices to ensure that new developments particularly public buildings such as schools, universities and medical facilities – prioritise the needs of pedestrians and accessibility requirements
- Work with schools to look at opportunities to make it easier for children to walk to school
- Work with businesses to keep busy footpaths clear of queuing customers, banners, promotional materials and other temporary signage
- Work with construction firms to ensure that safe and direct arrangements are made for pedestrians and cyclists during temporary footpath occupations
- Work with utility service providers to ensure that footpaths are reinstalled correctly after construction
- Lower speed limits on local streets, in activity centres and at other appropriate locations
- Ensure all street lighting complies with luminosity standards

Priority areas for New Deal for Walking interventions are:

- Residential streets with high volumes of pedestrians, narrow footpaths and high traffic flows
- Residential streets subject to significant redevelopment or renewal
- Activity centres
- Station precincts and public transport stops
- Employment precincts
- Childcare centres, schools and education centres
- Hospitals
- Recreation and community centres

State Government has a vital role to play in encouraging walking and cycling in Yarra as a road asset owner. Specifically, when it comes to pedestrian crossings on arterial roads, and other infrastructure for people walking, wheeling and cycling that crosses rivers, railways and freeways.

Figure 9. Active transport advocacy projects under the New Deal for Walking Program that Yarra wants State Government to fund and deliver



P4. Implement a New Deal for Cycling – make the network useable for bike riders of all ages and abilities

A New Deal for Cycling is a key commitment to providing appropriate bicycle infrastructure on Yarra's street and path network. This fulfils our own stated objectives as well as state legislative obligations, such as the requirement to give priority to bicycles on specified roads under the *Road Management Act*.

It provides a minimum level of service, having considered the trade-offs to make cycling a safe and viable transport option for anyone who wants to ride a bike. This approach is now being used in towns and cities around the world.

Under the New Deal program, the volume and speed of traffic dictates the type of cycling infrastructure that is needed. This means that high-volume and high-speed roads will generally require protected lanes and other infrastructure to meet the minimum standard. If protect lanes are a requirement given traffic volumes, then parking may need to be removed. Alternately if parking is critical then it can be retained so long as traffic volumes are reduced to an appropriate level.

For lower traffic volume and lower-speed roads, lower-cost and lower-impact solutions such shared bike and traffic lanes can often be enough to meet the minimum standard.

This approach:

- standardises the way that we assess bike project options on the New Deal Network
- allows all options for getting bike infrastructure in to be on the table at the outset
- is cheap and easy to use given decisions are made using a standard, evidence-based process informed by data collected on traffic volumes, speeds and parking demand
- allows solutions to be tailored to local circumstances while still ensuring that facilities for people riding bikes are satisfactory and cycling is clearly and consistently treated as a priority in line with our strategic objectives
- is flexible and can allow for on-street parking or existing traffic volumes to be retained if one is significantly more sensitive than the other on a case-by-case basis
- increases the opportunities to look at lower costs over the lifecycle of assets and the trade-offs associated with that as part of a wider assessment process

The assessment guide in Figure 10 shows the traffic volume and speed parameters for the associated interventions. Illustrations of the relevant bike treatments for each situation are shown in Figure 11.

The first part of the New Deal for Cycling is a proposed network made up of a focused number of key routes and is shown in Figure 12. A 'traffic light' system shows existing levels of compliance on the New Deal network, with red being non-compliant and green being fully compliant. The map shows extensive areas of non-compliance that we need to address in cooperation with other stakeholders.

Several New Deal for Cycling Routes are on State Roads. State Government has a key role to play in making a world class cycle network in Yarra a reality. Installing upgraded bike facilities on State Roads has various practical challenges. Council will work with State Government to resolve these, this includes identifying new routes on local roads where these will meet the practical requirements of cyclists. Council will work with State and Federal Governments to explore funding opportunities to deliver the new deal network.

Beyond the New Deal network, all roads in Yarra should actively consider the transport needs of bicycles as a prioritised mode of transport.

'The New Deal for Cycling is an ambitious policy that will deliver a bike network in Yarra that is of a world class standard.'

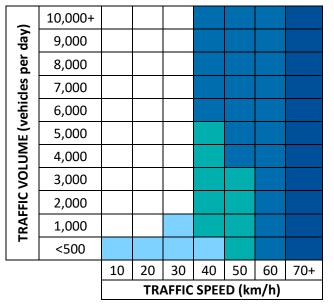


Figure 10. New Deal for Cycling assessment guide

Figure 11. New Deal for Cycling interventions

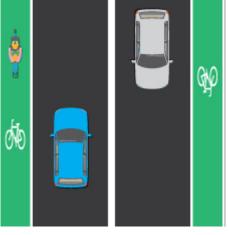


LOW: Bike sharrows



HIGH: Protected bike lanes

Cycling intervention required LOW: bike sharrows MEDIUM: painted bike lanes HIGH: protected on-road bike lanes VERY HIGH: separated off-road bike paths



MEDIUM: Painted bike lanes



VERY HIGH: Protected off-road bike paths



Figure 12. The New Deal for Cycling Network, and existing compliance levels

Increasing the number of green lines and reducing the number of red lines on the New Deal for Cycling Network map will significantly increase the attractiveness of cycling in Yarra for many people including women, children and older people

The second stage of the New Deal for Cycling is to phase out angled car parking and replace it with safer parallel parking on the streets in Yarra that have a formal cycle function, whether it is bike lanes or bike symbols, as part of a project or other renewal works. This will reduce instances of cars reversing out into the path of on-coming bicycles and other vehicles with poor visibility. Streets that are on the New Deal for Cycling Network and have a high turnover of cars parking are the priority for upgrade to reduce regular instances of cars reversing into people riding.

In some instances, the amount of car parking will need to be reduced to improve safety, access and amenity. To mitigate this, we will look at opportunities to improve parking restrictions in the local area under the parking management framework so the remaining parking spaces are used appropriately.

'The policies within this strategy regarding transport and its relationship with the street environment align with State Government Movement and Place framework and Council's own Placemaking Framework'.

P5. Use innovative approaches to deliver projects

Techniques such as pilots, pop-ups and trials allow projects to be delivered faster and in greater number than standard permanent delivery techniques. They can also result in more functional outcomes as lessons can be learnt as part of a project design process itself rather than after a final project when it is difficult to make changes.

There are three primary categories of innovative approaches available to us as a council:

- 1. Pilot
- 2. Pop-up
- 3. Trial

Table 3. Innovative project delivery options

	Definition	Examples
Pilot	An established design or idea that is planned to be permanent but is being evaluated in a specific context before the design is finalised.	Implement a proven design to evaluate its success in a particular context. For example, checking that new a bike lane on a potentially busy route is going to be wide enough before a permanent width is decided and installed.
Рор-ир	Infrastructure that is installed using 'quick build' materials that can be changed or removed easily.	Respond quickly to a community need. For example, providing more outdoor dining space in response to COVID-19.
Trial	Testing new designs and ideas in a real world setting for a fixed period of time.	Evaluate the demand for, and operational effectiveness of, something new. For example, the trial of electric scooters.

These innovative approaches to delivery are useful because they allow:

- users and other affected parties to actually experience a project outcome rather than having an opinion based on designs or descriptions
- adjustment to the design or other aspects of a project in response to issues raised or observed in real time by the community
- new or innovative interventions, that have not been well-tested previously, to be tested in real world circumstances
- testing of different options before decisions on a preferred final option are made

Innovative approaches are not always suitable or practical. They should not be used when:

- projects cannot be delivered using cheaper, temporary infrastructure

- the cost of using an innovative approach is excessive or does not offer good value for money
- projects require permanent works of a significant nature (for example, the removal of healthy, mature trees)
- when there are no negotiable elements to a project or ways to change the proposal
- parameters cannot be agreed upon

P6. Use good urban design principles in transport projects

Transport infrastructure should be functional and positively contribute to the urban realm. As such, decisionmaking on transport projects, policies and operations will be made using the following principles:

- Respect the character of the surrounding area.
- Consider aesthetics and broader values in design of infrastructure.
- Use simple and refined design suitable for our public spaces.
- Use materials that best suit a specific location, including those identified in any applicable streetscape or urban design guidance.
- Maximise opportunities to plant trees and other landscaping on streets to make our public spaces greener.
- Incorporate features that promote activity on streets, such as seating and good lighting.
- Incorporate opportunities for deep planting and water infrastructure in design, with design for future delivery.

P7. Manage car parking in a way that supports the use of active and public transport and the role of cars in an urban environment

Decision-making on projects, policies and operations will be made using the following principles:

- The cost of parking or ease of access to parking should not encourage people to travel by car, particularly over short distances.
- The cost of parking or ease of access to parking should not encourage people to own more cars than they need.
- Parking demand should be managed in a way that reduces the amount of circulating traffic looking for a parking space.
- Parking supply should be managed to ensure that spaces can be accessed by those who need them.
- Circulating traffic throughout the day should be minimised by ensuring that parking management approaches do not encourage people to shuttle a car between different parking spaces in the same area all day.
- Maintaining existing on-street car parking should not be a primary reason for failing to implement policies in this Strategy.
- Loss of car parking revenue should not be a primary reason for failing to implement policies in this Strategy.
- Off-street parking levels in new developments should be restraint-based.
- On-street car parking management should support car-free development.
- The number of vehicle crossovers on footpaths to access off-street car parking should be minimised, particularly on footpaths with high pedestrian volumes.
- Other new ways of managing parking should be considered on merit.

P8. Reduce, delay or remove vehicle turning movements where these create safety issues for other road and path users

In some cases, a relatively small number of vehicle movements can cause significant safety issues and delay for everyone else. This particularly applies where:

- turning vehicles block tram and bus lanes
- vehicles reverse blindly from angled parking into the path of people riding bikes
- left-turning vehicles cross busy bike lanes and pedestrian crossings at intersections
- turning vehicles collide with trams and buses causing severe disruption, delay and cost

- right-turning vehicles with poor forward visibility cut across approaching traffic and people riding on busy bike lanes
- vehicles pulling out of minor side streets and off-street car parks constantly hinder the movement of large volumes of people walking, wheeling and riding bicycles along a street

Decision-making on projects, policies and operations will seek to:

- minimise the number of legal vehicle turns across tram and bus lanes
- prioritise tram and bus movements at crossing points with cars
- deliver infrastructure to physically prevent illegal vehicle turns across tram and bus lanes
- minimise turning movements on key cycling and/or pedestrian routes where these cause safety issues
- minimise vehicle crossovers on busy pedestrian and cycle routes
- introduce measures which are effective without requiring heavy police or council enforcement

For some projects, State Government approval to get better outcomes will be required, and Yarra Council will work in partnership with the government and other agencies to secure these approvals.

P9. Reduce traffic volumes, particularly where it is excessive

Traffic volumes on roads in Yarra should reflect their role and function. Traffic management can ensure that major arterial roads are preferred routes for car and heavy vehicle traffic and local streets are not used as shortcuts. Actively managing traffic will also play a key role in encouraging active transport, improving safety, improving the quality of the environment and creating a sense of place.

We will implement traffic management measures as required through one or a combination of the following and other measures:

- turning bans
- full or partial permanent or temporary road closures
- one-way systems
- signal priority changes
- reducing speed limits
- physically slowing vehicles down via speed humps, chicanes and other treatments
- implementing restraint-based off-street car parking controls at new developments and redevelopments
- working with Victoria Police to ensure traffic rules are enforced
- regularly reviewing the function of Yarra's streets

For some projects, State Government approval will be required, and Yarra Council will work in partnership with the government and other agencies to secure these approvals. We will review the current road hierarchy and street function to achieve the vision and objectives of this Strategy.

P10. Lower traffic speeds

Lower speed limits and lower actual vehicle speeds improve safety and amenity for all, particularly for vulnerable road users. Lower speeds also allow roads to be designed in a more compact way creating opportunities for more shared space, trees, trading space for businesses and bike infrastructure.

We support reduced traffic speeds, including reduced speed limits. We are proud to have led the implementation of 40km/h speed limits in all areas and we support the introduction of safer 30km/h speed limits.

P11. Encourage the use of shared transport

Shared transport includes car share, bike share and scooter share. Sharing gives everyone more transport options without the hassle, cost and material consumption of ownership.

We support shared transport schemes. Decision-making on projects, policies and operations will be made using the following principles:

- Shared transport should not unreasonably disrupt or discourage other, higher priority modes of transport like walking and cycling.

- Shared transport will be required to consistently comply with relevant local laws and legislation, MOUs and any applicable agreements.
- Our fees and charges for shared transport installation and management will be set at a revenue neutral level to support shared transport as a viable commercial activity and keep user costs as low as possible.
- The role of the council is to facilitate investment in shared transport from other parties.

P12. Support use of streets for community development activities

Streets are public places and form an essential part of the public realm, the spaces between homes and businesses that we share. Pop-up activities like festivals, play streets, street parties and parklets all contribute to community development.

We support these activities and the use of our streets. However, movement for active and public transport needs to be maintained wherever possible. We acknowledge that traffic movement and car parking is likely to be disrupted.

P13. Encourage investment in new public transport services and improvements to existing services

We will work with the State Government and operators as a key stakeholders on public transport projects in Yarra and nearby that:

- increase the frequency and reliability of trains, trams and buses
- increase accessibility and reduce door-to-door journey times
- provide new and improved interchange opportunities in Yarra
- reduce pressure on the central city for interchange
- increase capacity generally and redistribute demand to relieve pressure on the Hoddle Grid
- improve network resilience (in the event of planned system maintenance, an upgrade or incident)
- support urban strategic renewal precincts including the Amcor site, the Cremorne employment precinct and the Gas and Fuel site

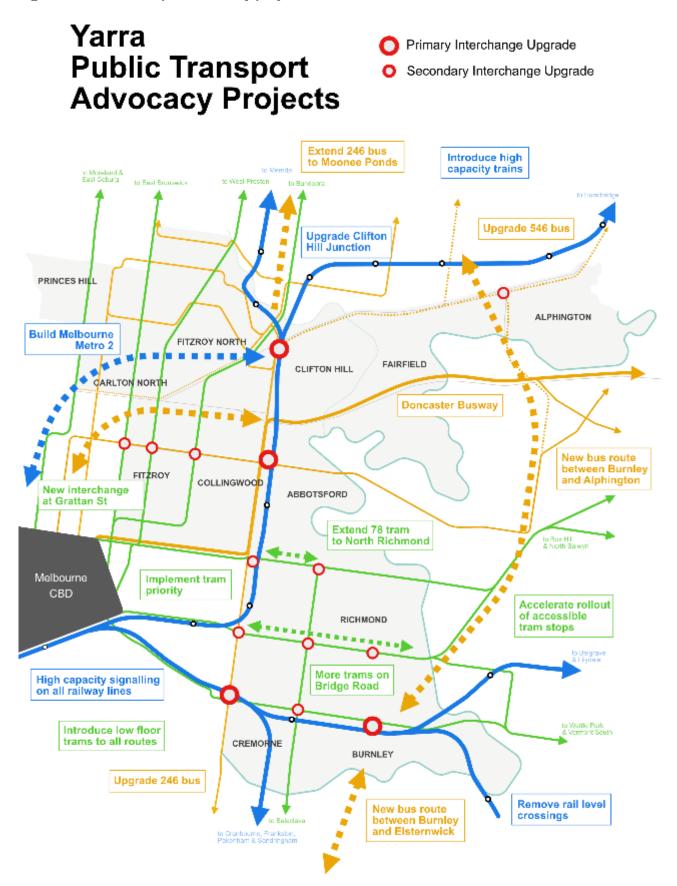
The key projects that Yarra supports and wishes to see delivered are shown Figure 13 and set out below:

- construction of Melbourne Metro 2
- upgraded bus route 246 and its extension to Moonee Ponds
- extension of Church Street trams to North Richmond Station
- running 'short' trams to provide more capacity on busy route sections such as Bridge Road
- introduction of high-capacity trains on the Clifton Hill and Burnley group train lines
- introduction of a new bus service between Amcor and Burnley Station via Chandler Bridge
- better integration of parallel tram lines into the north of the city via an interchange at Grattan Street in Parkville
- upgrade of all remaining non-DDA complaint tram stops so they are complaint
- removal of the Madden Grove level crossing in Burnley
- introduction of Bus Rapid Transit on the Eastern Freeway linking Manningham to the CBD
- introduction of a new bus service between Burnley Station and Elsternwick
- upgrade of Yarra's primary existing and emerging interchange hubs, specifically:
 - Clifton Hill
 - Richmond

- Burnley
- Victoria Park
- upgrade of Yarra's secondary existing and emerging interchange hubs at the following intersections:
 - Bridge Road and Punt Road
 - Church Street and Victoria Street
 - Swan Street and Punt Road
 - Victoria Street and Hoddle Street
 - Victoria Street and Punt Road
 - Victoria Street and Church Street
 - Swan Street and Church Street

- Bridge Road and Church Street
- Johnston Street and Smith Street
- Johnston Street and Brunswick Street
- Heidelberg Road and Chandler Highway
- Nicholson Street and Johnston Street
- Nicholson Street and Gertrude Street
- Bridge Road and Burnley Street

Figure 13. Public transport advocacy projects



P14. Encourage transition to zero emission road vehicles

Walking and cycling are the best transport modes for reducing greenhouse gas emissions. Beyond this, the use of public transport has low energy usage per passenger and has the potential to be zero emission, depending on the energy source used.

Electric cars, buses and other low emission vehicles are supported by Yarra Council as they have the potential to reduce noise and emissions if implemented well. The electric road vehicle sector is undergoing constant change due to new technology, increases in production capacity and emerging commercial possibilities. For the foreseeable future, our role is primarily one of facilitation and promotion of electric vehicle infrastructure where possible rather than direct operation. We will develop policies and strategies to manage this transition in a fair and sustainable way.

P15. Deliver transport projects and other policy work as per the Yarra's *Community Engagement Policy*

Engagement with the community on decisions made under this Strategy will be completed in accordance with Yarra's *Community Engagement Policy* and tailored to the decision or project. In accordance with our policy, we will engage based on the principles of being:

- representative
- accessible
- meaningful
- transparent
- accountable
- respectful
- flexible
- supportive
- prepared

How we will measure success

Yarra's *Council Plan 2021–2025* identifies the nine indicators through which we will monitor progress against reaching *Council Plan* objectives.

- i. Kilometres of separated cycling lanes delivered
- ii. Cycling projects delivered
- iii. Percentage increase in bicycle counts (agency data)
- iv. Percentage increase of bicycle parking hoops and corrals
- v. Number of pedestrian improvement related projects
- vi. Number of new shared zones
- vii. Number of 30km speed zones
- viii. Number of dedicated car share parking spaces
- ix. Method of travel to work (ABS JTW)

Council Plan 2021–2025, Strategic Objective five: Transport and movement, Indicators

These *Council Plan* indicators have been refined further to create indicators and measures for monitoring towards achieving the outcomes of this Strategy.

Most indicators and measures relate to actions taken by Yarra Council, and how we have delivered on the actions outlined in this Strategy. Some indicators and measures (in *italics*) relate to travel behaviours that should be affected by these actions.

Unfortunately, indicators and measures that relate to behaviour will be affected by the COVID-19 pandemic, both directly and indirectly. Caution should be used in interpreting the indicators and measures that relate to travel behaviours, until a 'new normal' has been achieved.

Table 4. Transport Strategy measures and targets

Council Plan indicator		Transport Strategy measure	<i>Transport Strategy</i> target	Data source
i.	Kilometres of separated cycling lanes delivered	 Total length of cycling routes upgraded to comply with the New Deal for Cycling 	15km more compliant routes by 2027 30km more compliant routes by 2032	Yarra Council
ii.	Cycling projects delivered	2. Number of other spot improvements to cycling	25 cycling projects by 2027 50 cycling projects by 2032	Yarra Council

iii.	Percentage increase in cycling *	 Percent change in total number of bike trips counted at key intersections Percentage share of female riders in total number of trips counted at key intersections 	20% more cycling or scooter trips by 2027 40% more cycling or scooter trips by 2032 50% female riders by 2032 (from 32% in 2021 ²¹)	Bike counts
iv.	Percentage increase of bicycle parking hoops and corrals	 Percent increase in total number of bike hoops (including corrals) located in public spaces 	30 hoops each year 1 bike corral per year	Yarra Council
v.	Number of pedestrian improvement related projects	 Number of additional pedestrian improvement projects completed 	25 pedestrian projects by 2027 50 pedestrian projects by 2032	Yarra Council
vi.	Number of new shared zones	7. Number of additional shared zones	20 additional shared zone projects by 2032	Yarra Council
vii.	Number of 30km speed zones	 Number of additional 30 kph zones 	5 more 30km/h zones by 2032	Yarra Council
viii.	Number of dedicated car share parking spaces	 Total number of car share spaces 	283 spaces by end FY2024 ²²	Yarra Council
ix.	<i>Method of travel to work *</i>	 Percent of commuters travelling by walking and cycling Percent of commuters travelling by public transport 	30% walking or cycling in 2026, 40% by 2032 (20% in 2016 ²³) 35% public transport in 2026, 40% by 2032 (29% in 2016 ²⁴)	ABS Census

* Indicators that measure travel behaviour will be affected by the COVID-19 pandemic

²² Targets from Yarra's Car Share Policy 2019– 2024.
²³ ABS Census, 2016.
²⁴ ABS Census, 2016

Glossary

Term	Meaning
active transport	Refers to walking, cycling and scooting, as well as wheeling and other environmentally friendly travel methods of people with a disability.
angled parking	On-street car parking that is designed for vehicles to be stored at an angle other than parallel to the road. Usually designed at a 45 degree or 90 degree angle but can also be installed at other angles.
bicycle route / cycle route	A route between locations that is preferred for use by people riding bicycles.
bike box	A bike box, or a bike head start box, is a marked space behind the stop line at a signalised intersection where bikes can stop ahead of cars while waiting for a green signal. A bike box separates people riding from, and makes them more visible to, other traffic at the intersection, while also giving them a head start at the signal.
crossover	Vehicle access to a property provided from a street or road. Commonly referred to as a 'driveway'.
kerb outstand	An extension of the footpath or nature strip into the road space to allow extra space for pedestrians or bike riders, or to narrow the road.
mode share	The proportion of trips that are taken using a transport mode (for example, bike or tram).
micro-mobility	Micro-mobility includes all personal, self-propelled, non-motorised modes of transport. Typically, these modes are for transporting one person at a time. They do not require registration, nor does the user need a licence to use it. They are non-motorised but can be powered by electricity. They are particularly useful and popular for short trips, including those just beyond the capacity of the user to walk. Examples include bikes and electric bikes, scooters and electric scooters, skateboards, hoverboards, roller skates, roller blades and segways. The term can also include wheelchairs and other mobility devices that support personal transport for people with disabilities.
painted bike lane	A painted bike lane is one that is allocated space in the carriageway but is not physically seperated from general traffic, only by painted lane markings. A painted bike lane can be temporary or permanent.
pedestrian route / walking route	A route between locations that is preferred for use by people travelling on foot or using a personal mobility device. A pedestrian route may include sections of footpath, shared paths, off-road paths, bridges and underpasses, and may cross streets, roads, railway lines and rivers.

personal mobility device	A device to assist a person with a disability to move independently. A personal mobility device is typically non-motorised. Examples include wheelchairs, walking frames, walking sticks, crutches and mobility scooters.
pilot	A pilot, in local transport terms, means a treatment, project or other intervention that is delivered using temporary infrastructure, but where the project is intended to ultimately be permanent. Pilots are used when the time or costs associated with permanent infrastructure are too great at the time of implementation, and where the intervention is intended to be constructed using permanent infrastructure when budget and time allow. Examples include protected bike lanes constructed with rubber and plastic bollards in advance of the final concrete bollards, or a shared zone being installed with paint in advance of a permanent raised roadway. A pilot intervention might be adjusted to respond to issues or opportunities that arise, but this is not the primary purpose for the pilot process. See also Pop-up and Trial.
protected bike lane	A protected bike lane is one that is allocated space in the carriageway (road) but is physically protected from general traffic by hard infrastructure, such as a median or island. A protected bike lane can be temporary, but the temporary infrastructure must still provide physical protection to people riding using the protected bike lane.
scramble crossing	A scramble crossing is a signalised pedestrian crossing that allows crossing all at once of all legs of an intersection, as well as in a diagonal direction. A scramble crossing can be useful when many pedestrians seek to cross more than one leg of an intersection. In this case it reduces the amount of waiting time, and therefore the number of pedestrians waiting to cross. Also referred to as a 'Barnes crossing'.
separated bike lane	See 'protected bike lane'.
shared transport	Shared transport is vehicles or trips that are owned by one entity but made available, typically for a fee, for multiple people to use. Shared transport is usually managed through membership schemes or a pay-per-use model. Shared vehicles can be owned by a single person, by a company or by a group. Shared transport includes ride share, car share, bike share and scooter share.
shared space	A street designated as a 'shared zone' under the Victorian road rules is a street where road vehicles must give way to people walking, wheeling and cycling. Usually installed with low speed limits, most commonly 10km/h. Also known as a 'living street'.
sharrow	A sharrow, a portmanteau of 'shared' and 'arrow', is a form of line marking that reinforces that bicycles share the lane with cars and other vehicles in particular locations. It is also used as a wayfinding aid to assist people riding bikes to follow a specific route or find a destination. This type of treatment is only suitable where volume and speed of traffic is suitable for bicycles.
sustainable transport	Active transport and public transport when referred to together.

temporary infrastructure	Temporary infrastructure is infrastructure that can readily be changed or moved. It is typically constructed with lightweight materials, such as rubber and plastic, that are bolted into place. Temporary infrastructure is typically cheaper and quicker to construct than permanent infrastructure. It is typically used for pop-up interventions and trial interventions. It is sometimes also used for permanent interventions.
vulnerable road user	A user of the road who is suspectable to injury and fatality in a collision, or who may be more likely to be involved in a collision because of reduced physical or cognitive capacity to avoid dangerous situations. For example, older people and children are considered more vulnerable than adults; people with disabilities are consider more vulnerable than able-bodied people; and people walking or wheeling are considered more vulnerable than people riding.

Appendices

Appendix 1. Community engagement activities that informed the Strategy

Further details of specific activities and projects where Yarra Council has received community and stakeholder feedback on the topic of transport are provided below.

Yarra transport and related studies and policies

Yarra Council has recently prepared, or is the in process of preparing, multiple studies, policies, strategies and plans where community feedback has been considered in preparing this Strategy. These include:

- Yarra's Council Plan 2021–2025
- Yarra 2036 Community Vision
- Review of Local Area Place Making Policy, and Draft Road Safety Studies Policy 2021
- Draft Place Making Framework 2021
- Draft Swan Street Streetscape Master Plan
- Brunswick Street Streetscape Master Plan 2020
- Draft Cremorne Streets and Movement Strategy 2020 (under the Cremorne Place Implementation Plan)
- Open Space Strategy 2020
- Climate Emergency Plan 2020
- Parking Forum (and pre-survey) 2019
- Bridge Road Streetscape Master Plan 2018
- Car Share Policy 2019–2024
- Access and Inclusion Strategy 2018–2024
- Urban Forest Strategy 2017
- Bicycle Strategy Refresh 2015
- Liveable Yarra 2015
- Draft Local Liveable Streets Framework 2022
- Priority Planting Plans
- Road Management Plan
- · Yarra Council's annual budgets
- Various Local Area Traffic Management and Local Area Place Making studies
- Various Yarra Planning Scheme amendments

Yarra transport and related projects

Yarra Council has delivered, or is the in process of delivering, multiple infrastructure projects and other interventions where community feedback has been considered when preparing this Strategy. These include:

- COVID response bike lane trials 2020
- COVID response outdoor dining trials 2020
- Elizabeth Street bike lane upgrades
- · Local area place making projects
- Trial of 30km/h streets 2018
- Rathdowne Street bike lane upgrades
- Wellington Street bike lane upgrades
- · Other council pedestrian and cycling improvement projects
- · Shared zones, such as Walnut Street and Stewart Street
- Rose Street Feet First project
- · Parklets, including the conversion of road space to parks
- COVID response via Street Dining Program
- Other projects and budget streams that respond to community feedback, such as the Safety Around Schools program

State Government transport and related projects

The State Government has delivered, or is in the process of delivering, several infrastructure projects in Yarra where community feedback has been considered in preparing this Strategy. These include:

- Nicholson Street tram stop upgrades 2019
- Victoria Street tram stop upgrades 2017
- Bridge Road tram stop upgrades 2014
- Chandler Bridge duplication 2016
- North East Link 2019
- Abbotsford Convent signals 2018
- Smith Street tram priority upgrades 2019
- Brunswick Street tram priority upgrades 2020
- Streamlining Hoddle Street 2017
- Walmer Street Bridge Upgrade (ongoing)
- Gipps Street bridge upgrade (ongoing)
- Strategic bike corridors and COVID response (multiple projects 2020-21 and ongoing)

Appendix 2. Overview of effectiveness of various cycling treatments in different environments

Figure 14. Effectiveness versus cost for	different cycling treatments
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 Lower cost, lower effectiveness projects. These are tokenistic projects as they don't do much to encourage cycling: Painted bike lanes next to kerb on high-speed / high traffic volume roads Painted bike lanes next to parked cars on moderate or high-speed / high traffic volume roads Bike sharrows on moderate or high-speed / high traffic volume roads Advisory bike lane symbols on a moderate or high-speed / high traffic volume road Wayfinding signage as a standalone measure in any road environment 	 Lower cost, higher effectiveness projects. These have merit and are particularly useful if encouraging cycling is genuinely a priority, but infrastructure cost is a constraint: Traffic calming on low speed / reduced speed / low traffic volume roads (for example, in mixed traffic environments) Protected bike lanes with bollards on moderate speed / moderate-to-high traffic volume roads Painted bike lanes next to the kerb on moderate speed / low-to-moderate traffic volume roads Painted bike lanes next to parked cars on moderate speed / low-to-moderate traffic volume roads
 Higher cost, lower effectiveness projects. These offer poor value for money and should be avoided: Narrow protected bikes lanes with kerbs on high-speed / high traffic volume roads Narrow protected bikes lanes with bollards on high-speed / high traffic volume roads 	 Higher cost, higher effectiveness projects. These have merit in encouraging cycling, but carry significant infrastructure costs: Protected bike lanes with kerb separators on moderate speed / moderate-to-high traffic volume roads Protected bike lanes with kerb separators on high-speed / low traffic volume roads Off-road bicycle paths on high-speed / high traffic volume roads