Connected >> Yarra Ranges
Integrated Transport Strategy 2020-2040

DRAFT

The Institute for Sensible Transport were commissioned by Yarra Ranges Council to prepare this Integrated Transport Strategy.

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Overview

What is ***Connected***?

Connected is the new Integrated Transport Strategy for the Yarra Ranges. It is the key strategic document that guides transport planning and decision-making over the next two decades. ***Connected*** outlines the most pressing challenges and the big moves required to make getting around in the Yarra Ranges more convenient, safer and more sustainable. ***Connected*** is our vision for the transport network of the future. ***Connected*** highlights our current travel patterns, and a set of targets and actions designed to respond to the community's concerns and aspirations regarding transport and accessibility.

Why we need an Integrated Transport Strategy and the case for change

Connected creates the framework and direction to align transport investment and policy decisions with the aspirations the community hold for the Yarra Ranges of the future. A well implemented Integrated Transport Strategy ensures we are all pulling in the same direction, to get the outcomes we want, to create a Yarra Ranges that is:

- Safer
- Healthier
- More connected
- Sustainable, and
- More inclusive.

How do we want our children and grandchildren to get around in the future? Connected is Council's strategy to ensure we have sustainable, safe and efficient options to get around Yarra Ranges and beyond.

As one of the most car dependent communities in Greater Melbourne, it's difficult to overstate the magnitude of the challenge Yarra Ranges faces. We've heard the community want more options to get around without having to always get in their car. Creating more walkable neighbourhoods, a cohesive cycling network, and integrated public transport can only be achieved through the creation of a coordinated approach to transport planning. ***Connected*** provides the strategic blueprint to guide transport investment, policy and advocacy actions.

The traditional approach to transport planning has not delivered the best outcomes for the community. Traffic and parking congestion remains a pressing issue, growing risks from climate change requires a decrease in emissions from transport, and most of our townships are already built-out, with little room to expand or widen roads.

Walking and cycling to work dropped rapidly in Yarra Ranges in the ten years to 2016, according to the latest Census

Melbourne's population continues to increase, and Yarra Ranges will need to accommodate some of this growth. We have reached the maximum supply for our road network. There are limited opportunities to widen roads or add new lanes. Additional population growth will need to be managed within the existing transport network.

To make sure the road network is suitable for those that need to drive, we will provide more attractive options for those trips that can be done by foot, bicycle or public transport. Developing a suite of actions that make it easier for people to leave the car at home and jump on a bike or take a stroll to the shops will help replace many of the +700,000 car trips that take place every week in Yarra Ranges under 3km. This will allow us to absorb a growing population without increasing the number of cars on our roads. Without the actions to encourage more walking, cycling and public transport that are included in ***Connected***, we'd see an estimated extra 50,000 car trips everyday by 2036. Bumper to bumper, these cars would stretch from Lilydale to the NSW border (over 220km).

To ensure Yarra Ranges remains a great place to live, work and visit, ***Connected*** outlines a modest target of reducing trips by car by 20% from current levels.

A unifying theme within ***Connected*** is the need to 'do more with less'. Better managing our transport assets with initiatives like real time information of vacant car parks and innovative treatments to ensure our streets are welcoming to a diverse set of transport options are characteristic of this 'doing more with less' theme. ***Connected*** also takes advantage of some exciting new transport technology. We're going to develop a network of electric vehicle chargers so that residents, businesses and visitors can begin to take advantage of the newer, lower cost electric vehicles that are starting to become available in Australia.

A Yarra Ranges with a more diverse set of transport options means that when you do need to get in your car, that trip will be better because there will be less competition for road space and parking.

What we're going to do

Our overall approach to investing and managing the transport system is centred around providing better transport options for trips that can be converted to sustainable modes, so that the journey becomes more reliable for those that have to drive.

For trips less than 3km

We will increase opportunities for people to walk and cycle to local destinations, including shops, schools, and train stations.

Just over half of all car trips in Yarra Ranges are less than 3km. While some of these trips will need to be done by car, there are many that could be easily completed by walking or cycling if the right infrastructure was provided. We will expand the current walking and cycling network to allow people the opportunity to walk and cycle. This category represents the biggest opportunity for Yarra Ranges Council to reduce local traffic and parking congestion.

For trips greater than 3km

We will advocate to the State Government for more frequent train and bus services that are better integrated, and an overhaul of the bus network with direct routes that take people where they want, when they want.

Many residents work outside the municipality and access essential services across Greater Melbourne. Very often, these trips are beyond comfortable walking and cycling distances. When talking to the community, we were frequently told that people wanted to use the bus and train network but a lack of service coordination meant it was not uncommon for people to see their bus depart just as they were pulling into the station on a train, leaving a very long wait for the next bus. We will advocate to the State Government to improve bus and train connectivity using pulse timetabling, overhaul the bus network to create more direct bus routes that connect to local destinations, and create a truly accessible network that all Yarra Ranges residents can enjoy.


60
60

Connected has been a combined effort

A hallmark of this Integrated Transport Strategy has been the consultative process that has been used, from day one. Community members have been central to the development of this Strategy by providing their views on the transport challenges in Yarra Ranges. Council's Internal Working Group, Strategic Leadership Team and Councillors have also played an active role in the development of the Strategy we call ***Connected***. It's called ***Connected*** because it connects the different areas of Yarra Ranges policies that transport touches on; the environment, economic development, social inclusion, accessibility and community wellbeing.

Fundamentally, the future of transport in Yarra Ranges needs to be about connecting people and communities through sustainable, accessible mobility. ***Connected*** has been developed with a wide range of community members that all have an interest making transport work for all members of the Yarra Ranges community and its visitors.

An ***External Reference Committee*** was established to assist in the development of ***Connected*** and included State Government representatives. This group has been able to identify issues and solutions to improve the functioning of the transport system. Moreover, pre-existing groups, such as Council's Youth Ambassadors, the Indigenous Advisory Committee and the Disability Access Committee have been consulted at various stages in the development of the Strategy. Many of the Actions included in the Strategy have occurred as a direct result of these discussions.

The Yarra Ranges community have also been central to the development of the Strategy, across a number of platforms and at various stages. This includes hundreds of individual conversations through the pop-up sessions held across the Yarra Ranges, and hundreds of responses to the online survey and CrowdSpot platform. The community's views and aspirations for the future of transport in Yarra Ranges has been a fundamental input into the creation of ***Connected***.

The Youth Ambassadors and the Indigenous Advisory Committee provided great local insight, and the following passages offer examples of what they shared with the ***Connected*** team.

> "We rely on bus services, as car ownership is lower in Indigenous communities because of economic constraints."
>
> **Indigenous Advisory Committee member**

> "70% of people with a disability are indistinguishable from the general community."
>
> **Disability Advisory Group member**

> "When people turn 18, getting a license offers a sense of freedom."
>
> **Youth Ambassador**

Big issues facing Yarra Ranges

Yarra Ranges is a collection of unique towns and villages, closely connected to some of the most beautiful natural environments in Australia. The lifestyle that makes living in the Yarra Ranges so special is coming under threat from a range of issues that can be partially addressed through effective transport policy. The big issues facing Yarra Ranges ***Connected*** will help address are included in Figure 1 and describe described below.

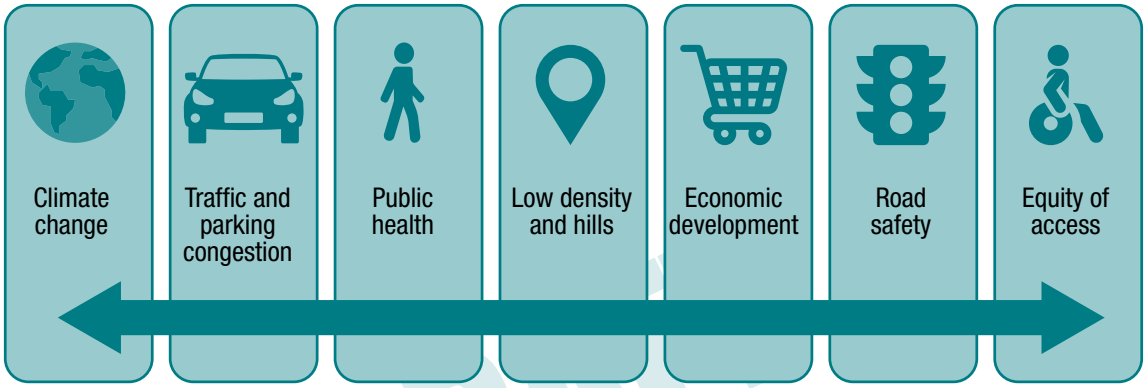


Figure 1 Big issues facing Yarra Ranges ***Connected*** will address

1. Climate change – transport is one of the largest and fastest growing sources of carbon emissions. In 2019 Yarra Ranges Council recognised we face a global climate emergency, requiring urgent action by all levels of government, including local councils, to bring down emissions and that this must include more low carbon transport options. This includes replacing some car trips through better conditions for walking, cycling and public transport, as well as electric vehicles.
2. Traffic issues associated with population growth – the dominance of car travel, even for short trips in Yarra Ranges, exacerbates traffic congestion and parking issues.
3. Public health – walking and cycling will be made easier and safer through the implementation of Connected, to encourage people to live a more active lifestyle and promote wellbeing.

4. Low density and topography – even though 90% of the Yarra Ranges community live in just 9% of the landmass, there are still many residents that need to travel long distances and this can be outside the public transport network. The hilly regions of Yarra Ranges can also present an additional barrier for walking and cycling, although e-bikes are beginning to offer an attractive options for overcoming topographical challenges. For these trips, the car will continue to be the dominant mode for the foreseeable future.
5. Economic development – creating people orientated, vibrant town centres will bolster businesses in the Yarra Ranges, helping locals and visitors support commerce in the region.
6. Road safety – connected supports the Vision Zero goal of eliminating deaths on Yarra Ranges roads by designing streets that minimise the risk and severity of collisions, so that every road user can travel in safety, whether travelling by foot, bicycle, public transport or motor vehicle.
7. Equity of access – mobility is important to everyone in Yarra Ranges. Whether you are young, elderly, disabled, low income or from a cultural or ethnic minority, everyone has the right to convenient, safe transport options. The implementation of Connected will make accessing everyday services and destinations easier for these groups.

By creating a diversified, integrated transport system, Yarra Ranges residents, workers and visitors will be able to choose between a more diverse set of transport options, beyond having to use the car for every trip.

Yarra Ranges – Strategic direction and policy alignment

Connected has been designed to align and support the strategic direction set by Council and the community.

The five strategic objectives within the Council Plan are identified below, as well as a brief explanation of how ***Connected*** serves to support these objectives.

Connected and Healthy Communities

A strategic approach to transport provides a diverse set of mobility options, helping to connect communities. A transport system that prioritises walking and cycling provides everyday opportunities for physical activity and connection to nature, helping to make the Yarra Ranges community healthier.

Quality Infrastructure and Liveable Places

Connected delivers a plan for using the capacity of our transport network in a more efficient manner. It recognises the importance of creating vibrant streets and provides the guidance necessary to progressively re-align our key streets in Activity Centres to reflect the aspirations of our community for sustainable, liveable town centres.

Protected and Enhanced Natural Environment

The natural environment is one of the reasons Yarra Ranges is so unique. ***Connected*** has been designed to minimise the impact transport patterns can have on Yarra Ranges' natural environment and bolsters opportunities for the community to connect with these special places via improvements to walking, cycling and public transport.

Vibrant Economy, Agriculture and Tourism

An effective transport system is critical to a healthy economy, bringing product to market and activating the growing tourism industry. By reducing the heavy reliance on motor vehicles, ***Connected*** helps take cars off the road, making it easier for primary producers to get their products out. Enhancing the quality of the walking and cycling network helps to support local businesses by encouraging people to do their shopping locally, and makes Yarra Ranges an even more attractive place to visit. A practical example of how ***Connected*** helps to bolster the vibrancy of the local economy is through its electric vehicle charging network, helping to attract visitors to come and stay in the region longer. Integrating active transport with public transport and improving the integration of buses and trains also gives more people the option to leave the car at home more often.

High Performing Organisation

As an organisation, we will strive to become a leading Council in implementing transport policy and initiatives that align with our wider strategic goals, lower reliance on car use for short trips and make Yarra Ranges a great place for walking, cycling and using public transport. While we understand the car will still be central to the lives of Yarra Ranges residents, workers and visitors for decades to come, we are not going to be afraid to trial innovative solutions that make the best use of existing assets.

Key themes

A set of interlinked key themes have been developed and designed to support Council's wider strategic direction. These key themes are identified in Figure 2.

A **Safe Yarra Ranges** will be achieved by adopting the Safe Systems approach to transport safety in which the fallibility of the road user contributes to the design outcome of our roads. Moreover, the actions contained in ***Connected*** provide strong support for a safer pedestrian and cycling environment, helping to reduce the risk of collisions.

A **Healthy Yarra Ranges** will be achieved by prioritising the incidental physical activity that can be gained from everyday walking and cycling. Moreover, by reducing the need to take short car trips, ***Connected*** will help improve local air quality.

The Yarra Ranges community will become more **connected** and **inclusive** by strengthening the diversity of transport options and advocating for enhanced integration between different modes of transport, including more accessible transport infrastructure (e.g. DDA Compliant design).

Yarra Ranges will become more **sustainable** through the implementation of ***Connected*** through initiatives such as better opportunities to walk and cycle, and electric vehicle charging stations.

More than half of all fatal crashes occur on roads with a posted speed limit of 70km/h or higher.

40km/h zones were the only areas of the road network to record no fatalities in Yarra Ranges in the last five years.

15% of bicycle and pedestrian crashes were hit and runs in Yarra Ranges

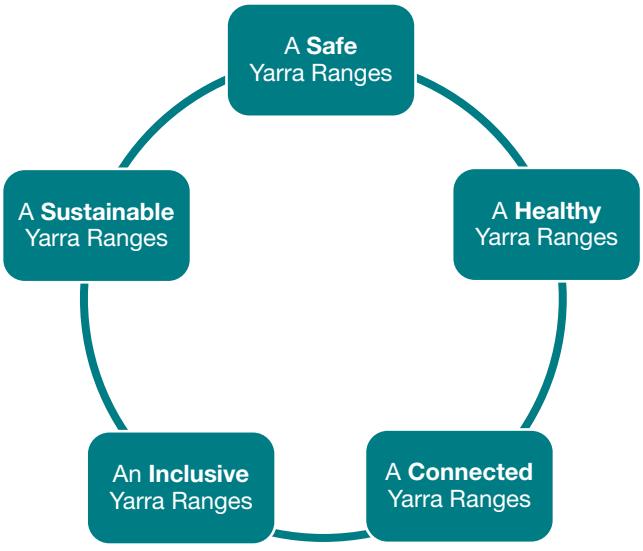


Figure 2 Key themes of Connected

Vision and guiding principles

Vision[1]

Transport in Yarra Ranges provides safe, efficient access for the whole community, while protecting the natural environment and unique character of its towns and villages.

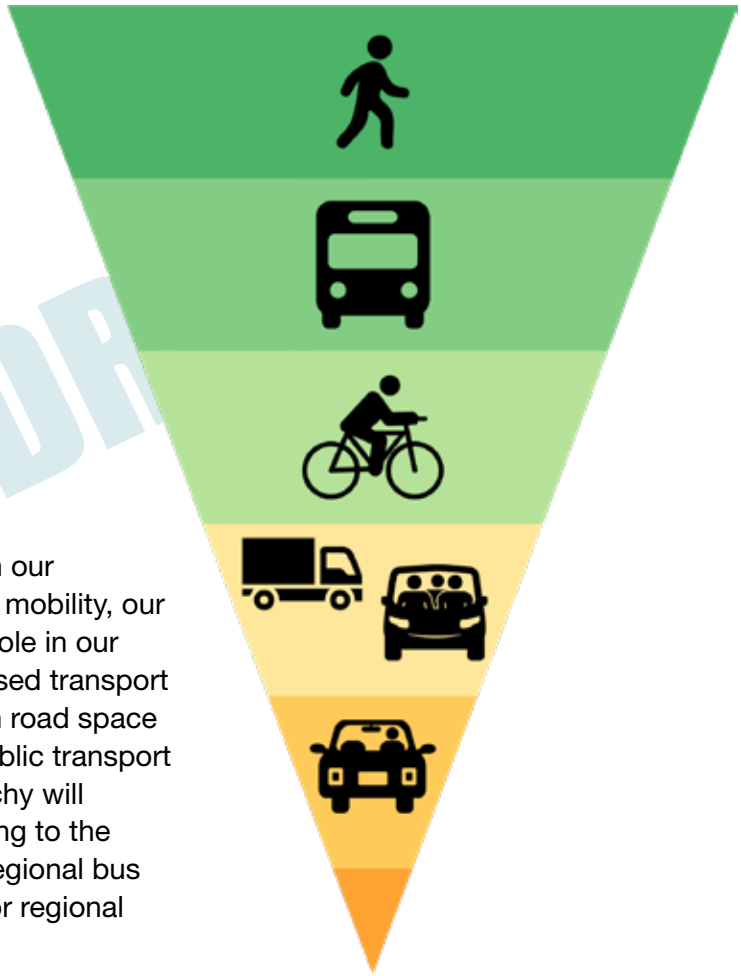
Guiding principles

1. Townships are vibrant, people focused destinations to socialise, engage in commerce and access services.
2. Public transport along key corridors is fast, accessible, frequent and offers seamless integration between modes.
3. Public transport hubs are connected to communities through best practice pedestrian design and a cohesive, attractive bicycle network.
4. Safe Systems underpins the design of the entire transport network.
5. Walking and cycling are convenient for trips under 3km: Residents are provided with safe, high quality walking and cycling opportunities for local trips.
6. Demand for car use is reduced in order to support the wider vision and objectives.

[1] A vision does not attempt to describe the current situation. Rather, it highlights what Council wants to see in the future.

Mode hierarchy

The space on our road network is limited and there is strong competition for scarce space. To assist Council in making consistent, transparent decisions that work to support our vision and principles, two transport mode hierarchies have been developed; one for town centres and another for regional roads. This is in recognition of the townships and villages connected by regional roads that is part of Yarra Ranges' unique character. These mode hierarchies represent our aspirations for how we want our streets to work in the future. Our mode hierarchy, which we will use to allocate space in the heart of our towns and villages is shown in Figure 3. This hierarchy helps us to focus on improving pedestrian access to shops and schools and making our townships more vibrant and accessible.



While the mode hierarchy within our townships prioritise sustainable mobility, our regional roads have a different role in our transport system, where motorised transport will continue to be the priority in road space allocation decisions. Placing public transport at the top of the regional hierarchy will help support our work advocating to the State Government to improve regional bus services. The mode hierarchy for regional roads is shown in Figure 4.

Figure 3 Mode Hierarchy - Town Centres

In practical terms, these road hierarchies will assist Council in determining how space is allocated between modes in situations in which there is insufficient space to cater to every mode of transport. For the regional road hierarchy, having people on bicycles and foot at the bottom does not mean they will go un-catered for. Instead, separate facilities should be provided (such as the Warburton Rail Trail). While motor vehicles may have priority on the main carriageway on these regional roads, providing a safe, separated pathway for active modes will be a priority of ***Connected.***

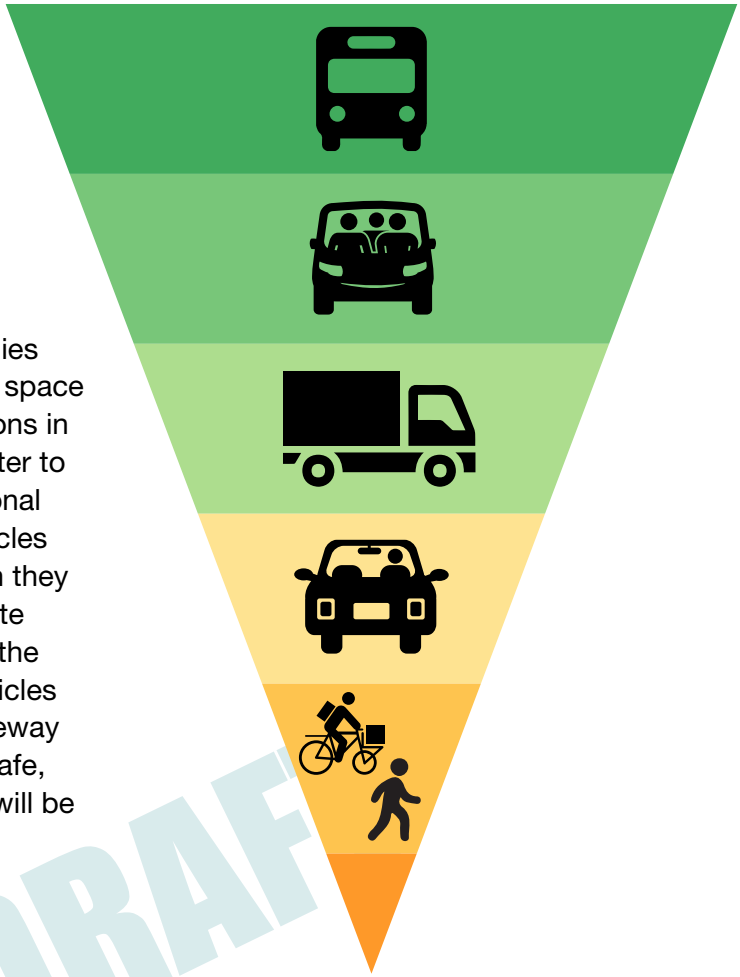


Figure 4 Mode Hierarchy - Regional Roads

Community consultation: what you told us

The development of ***Connected*** began with an extensive community engagement process. The following activities were undertaken in order to build a deep understanding of community sentiment and aspirations for Yarra Ranges.

Five pop up sessions were held in popular shopping areas across Yarra Ranges, including in urban areas, the Hills and Valley. Hundreds of face to face conversations took place, to develop a strong understanding of the frustrations and aspirations for the community on how they want to get around in the future. Each pop up took place on Saturday, allowing anyone to stop by and provide their input on transport issues in Yarra Ranges.

A digital map-based survey (CrowdSpot) was promoted, with hundreds of Yarra Ranges residents dropping a pin on a map to identify areas they'd like to see improved.

An online survey gave the community a more in-depth opportunity to understand travel behaviour and what it would take to make walking, cycling and public transport more attractive.

Deep dive interviews were held with an External Reference Group, to learn what professional stakeholders and community leaders considered to be the biggest transport issues and how transport policy can be used to make Yarra Ranges an even better place to live and work.

What we heard

Overall, the key theme the community expressed was a frustration associated with car use (congestion and parking difficulty), and a desire to have better options for walking, cycling and public transport use. People did not like that buses and trains were uncoordinated, and an infrequent bus service exacerbated this issue.

Consistent points raised by the community included:

- Buses and trains don't meet up, meaning that all too often people are left waiting for very long periods when interchanging transport modes.
- Buses do not run frequently enough, stop too early in the evening and don't meet the needs of people travelling on the weekend.
- Separated bike paths/lanes would help more people riding and reduce the frustration of cars and bikes mixing in unsafe ways.
- More new footpaths are required to be constructed and many existing footpaths are in a poor state of repair
- Some existing footpaths cross busy roads and pedestrians feel unsafe.
- People rely on their cars.
- Traffic congestion detracts from the quality of life in Yarra Ranges and many people expect it will get worse with population growth. The Warburton Highway and the future Quarry development were identified as specific areas of concern.
- Tele-bus users are passionate about the service it offers.
- People are concerned that large, empty buses are not a good use of resources.
- Extending train lines would help to bring the rail system to more of the Yarra Ranges community and boost tourism.
- Car parks at train stations are full very early in the morning.
- There is not enough disabled parking at key destinations.

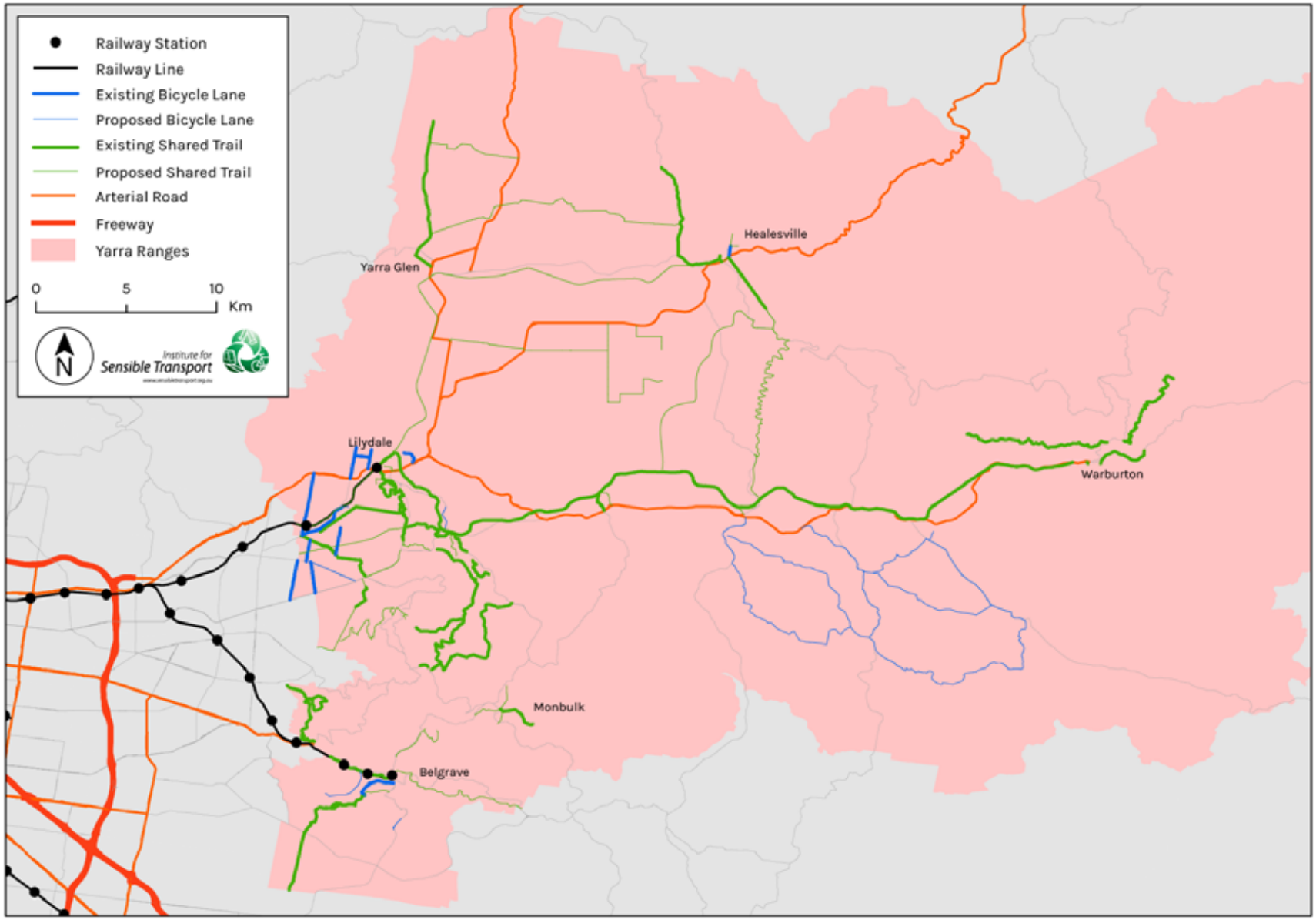


Figure 6 Yarra Ranges - Transport Infrastructure

Figure 6 Yarra Ranges - Transport Infrastructure provides an overview of the major transport infrastructure that connects Yarra Ranges, including proposed/planned infrastructure.

How we get around, now and in the future

How we travel today

Yarra Ranges is a highly car dependent municipality. While there are many trips well beyond the public transport network, or too far or hilly to walk or cycle, there are a surprisingly large number of short car trips that happen every day. The car has become the default mode of transport for many. This adds to congestion and parking pressure, reduces opportunities for physical activity and adds to climate change, local air and noise pollution.

In 2016, there was an estimated 270,000 car trips that began in Yarra Ranges every day. With population growth, this is set to rise to 320,000 car trips by 2036. There is also an estimated 130,000 car trips taking place every day within Yarra Ranges under 3km. Put another way, half of all car trips within Yarra Ranges are less than 3km. If the transport system doesn't change, with projected population growth, this could increase to 152,000 by 2036.

We need to take action, to at the very least hold car trip numbers at their current level. To fully support the vision of Council and the community, we must begin to reduce car travel, to boost the reliability of the road system for those that need to use their car. By transition out the short car trips for walking and cycling offers the easiest way to reduce local traffic and parking congestion, while increasing the vibrancy and liveability of Yarra Ranges.

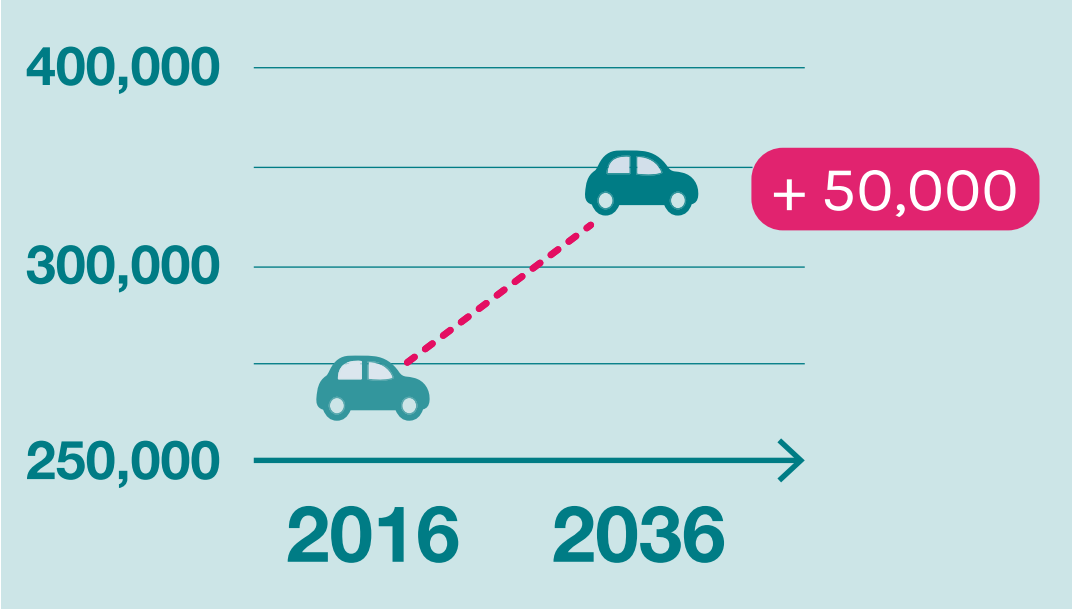
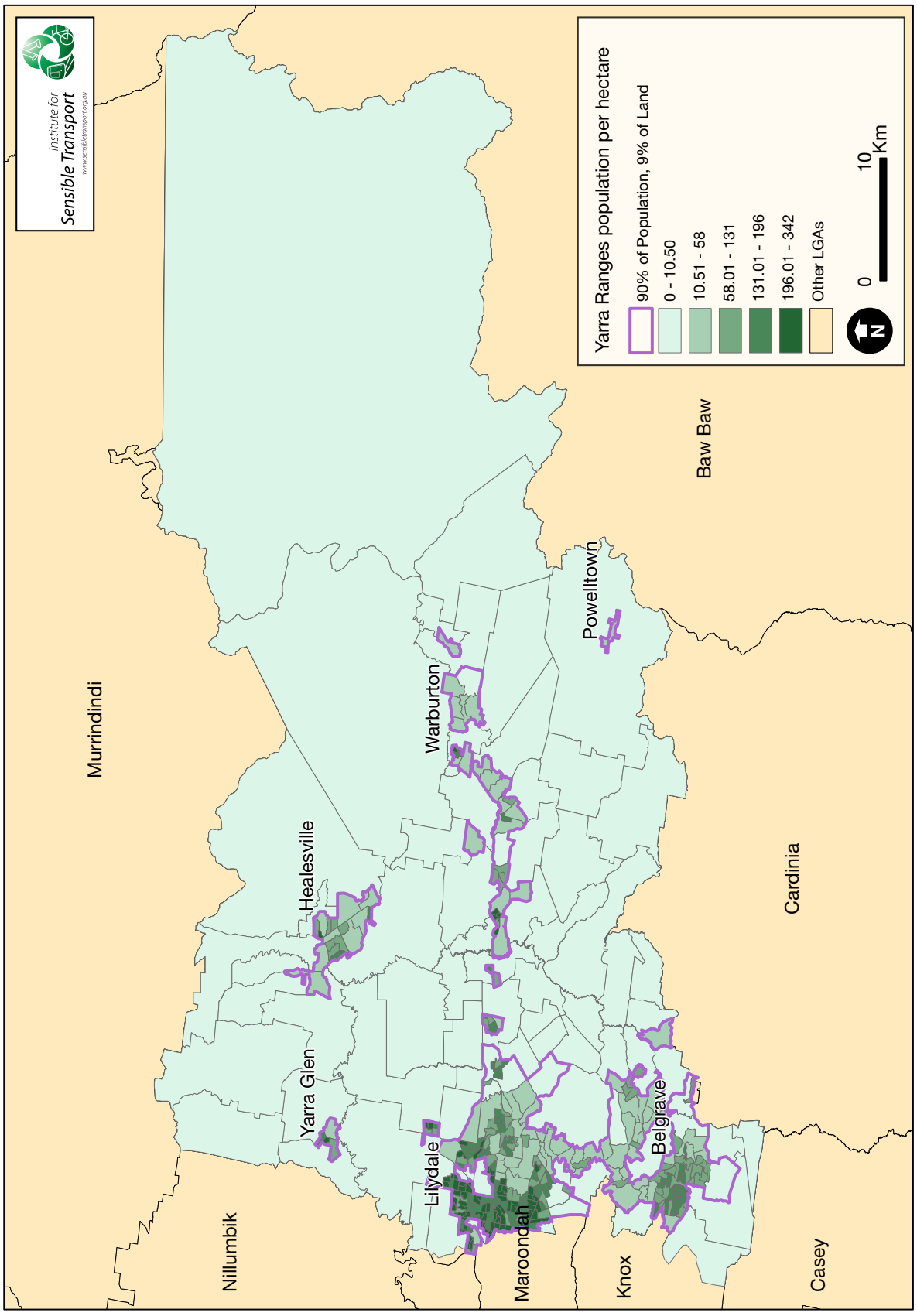


Figure 7 Car trips beginning in Yarra Ranges, now and in 2036 under BAU
NB: BAU is Business as Usual

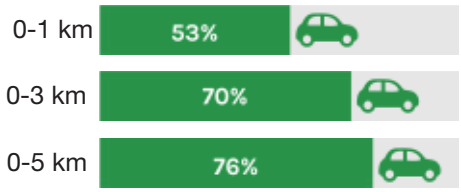


The good news is that our community is largely concentrated in the key suburbs and towns that make up Yarra Ranges, as shown in Figure 8 Population density - Yarra Ranges | Source: ABS. In fact, 90% of our population reside in just 9% of our land area.

Figure 8 Population density - Yarra Ranges | Source: ABS

Figure 9 below offers a snapshot of existing transport conditions in Yarra Ranges.

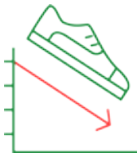
MOST CAR TRIPS ARE SHORT



Source: VISTA

WALKING AND CYCLING ARE DECREASING*

-67%



-50%

* For trips to work between 2006-2016. Source: ABS Census

HOW COMMUTERS ACCESS THE TRAIN

Source: VISTA

15% of trips within Yarra Ranges are by foot

Source: VISTA

E-BIKES

2X Sales doubled in 2017-18*

Perfect for commuting and climbing hills

Maintains speed with less effort

Allows to travel longer distances than a regular bike

* Based on national sales. Source: The Australian

SAFETY IN YARRA RANGES

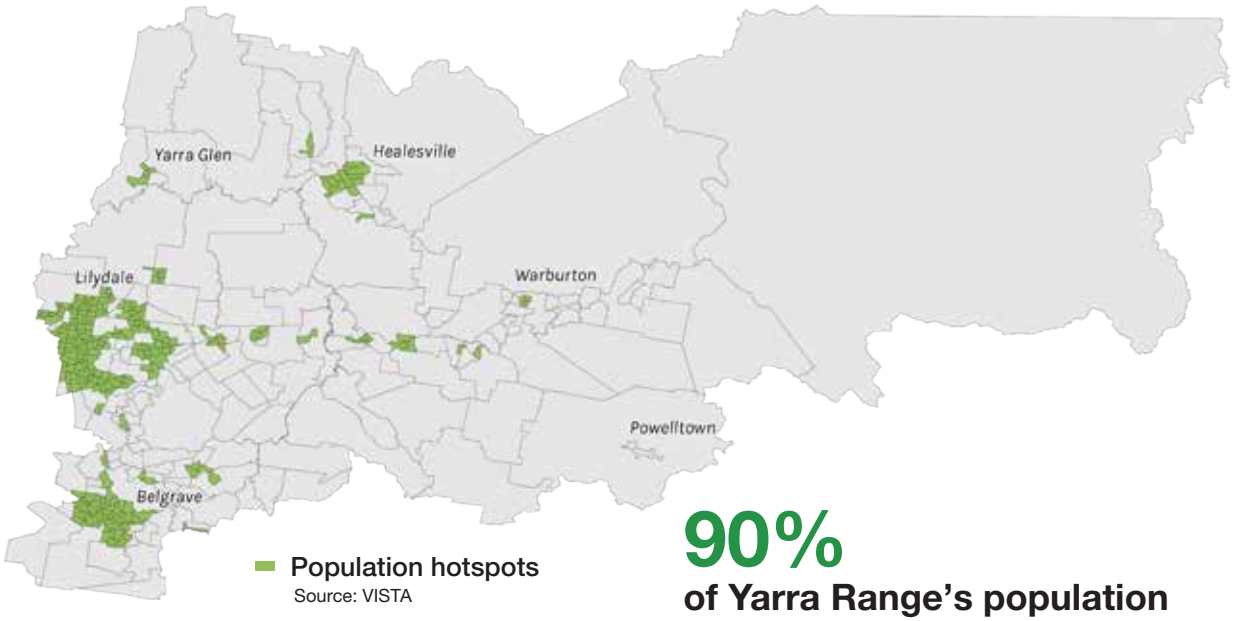
More than **65%** of fatalities occurred on roads with speed limits of 80km/h or more

1 in 5 crashes involve a motorcycle

15% of bike and pedestrian crashes were hit and runs

Source: VicRoads

Figure 9 Key transport data - Yarra Ranges

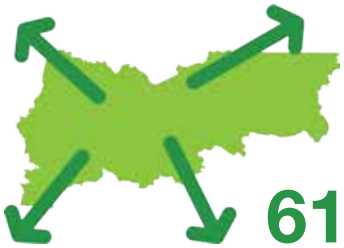


90%
of Yarra Range's population lives on 9% of the land

130,000
car trips per day in Yarra Ranges are under 3km

WHERE RESIDENTS WORK

39%
live and work in Yarra Ranges



61%
live in Yarra Ranges but work outside

Source: ABS Census

If we don't act, there will be an additional
50,000 car trips
on Yarra Ranges roads everyday by 2036

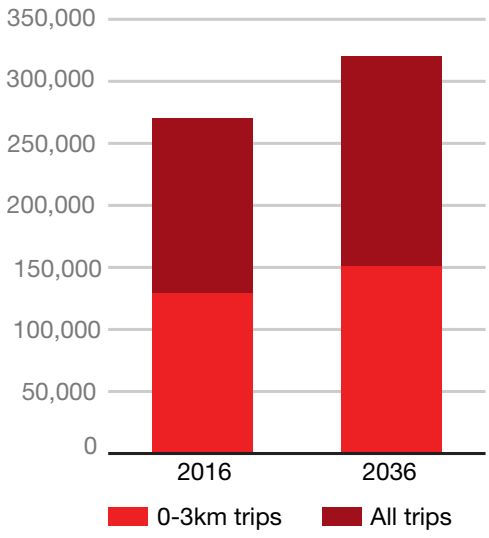


Figure 9 Key transport data - Yarra Ranges

The data shown in Figure 9 highlights the case for change. The modes of transport that need to grow for the Council and community to achieve their strategic objectives are declining and car use is growing. If these trends continue, it threatens to detract from the quality of life that draw people to the Yarra Ranges. Walking and cycling to work is becoming less common than it was a decade ago and too many people are injured on our roads.

The large number of short car trips and the concentration of the Yarra Ranges population provides a real opportunity to reverse the trends and patterns shown in Figure 9. The actions included in ***Connected*** will help more people get to where they need to go, safely and conveniently by foot, bike and public transport.

Transport scenarios

A series of transport scenarios have formed an important element of ***Connected***. These scenarios provide achievable targets that will allow us to monitor our progress towards realising our vision for transport in our community. These scenarios are based on Yarra Ranges transport patterns, from the latest 2016 data. Two future scenarios are offered – a business as usual (BAU) scenario, which is what we'd expect to happen if we don't change the way we plan transport. A sustainable scenario is also offered, which includes realistic targets for modest growth in sustainable transport. Each of these scenarios have a forecast year of 2036.

Trips to work

The latest data shows some 89% of Yarra Ranges residents drive to work. If nothing is done, this is forecast to rise to 90% by 2036. With population growth increasing by 18% by 2036, this will put an extra 50,000 car trips on Yarra Ranges roads at current mode share levels. This threatens the unique natural environment and relaxed way of life that people love about the Yarra Ranges.

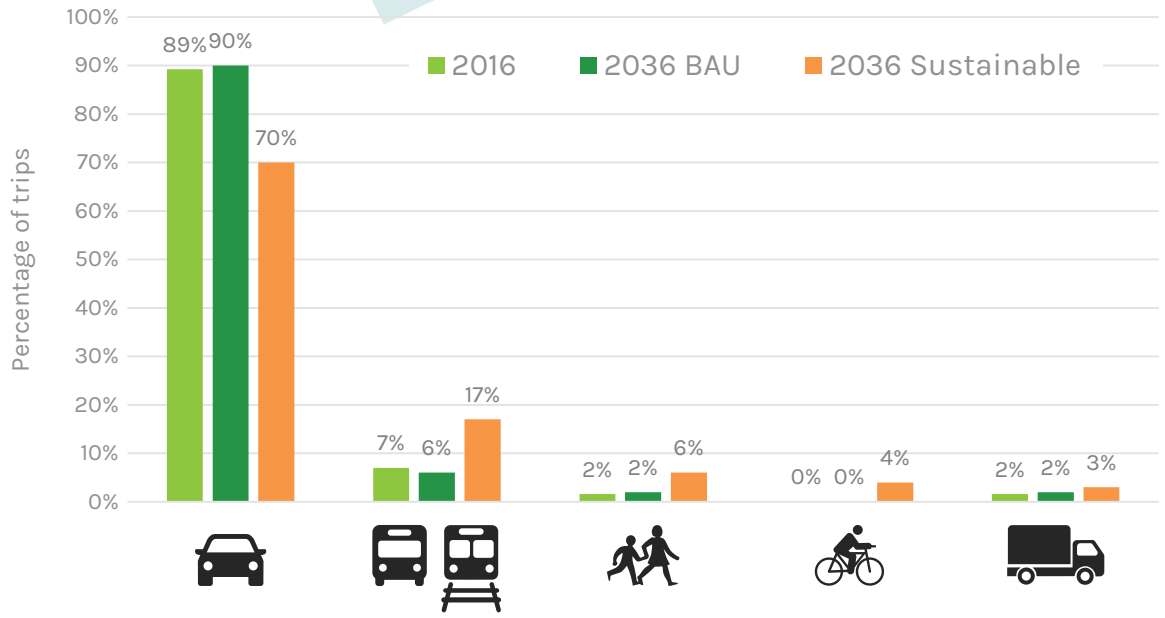


Figure 10 Journeys to work, now and in the future

NB: BAU is Business as Usual, Truck symbol is 'other' and includes, in addition to trucks, taxis, motorbikes etc.

Source: 2016 data based on Australian Bureau of Statistics (2017)

The ***sustainable scenario*** shown in Figure 10 is the option that best aligns with Yarra Range's long-term strategic objectives and community aspirations. This scenario sees the car continue to account for the majority of trips, but now only 7 out of 10 trips are by car, with a greater set of options for those seeking to travel by public transport, walking and cycling. Figure 11 expresses trips to work in total numbers, highlighting the magnitude of the challenge. If we take a BAU approach, there are going to be more cars on the road leading to worsening traffic congestion and parking problems. By taking the sustainable scenario approach, ***Connected*** helps to maintain and improve our quality of life.

If we don't start to build the sustainable transport network, it is estimated more than 10,000 extra cars will use Yarra Ranges' roads every peak hour.

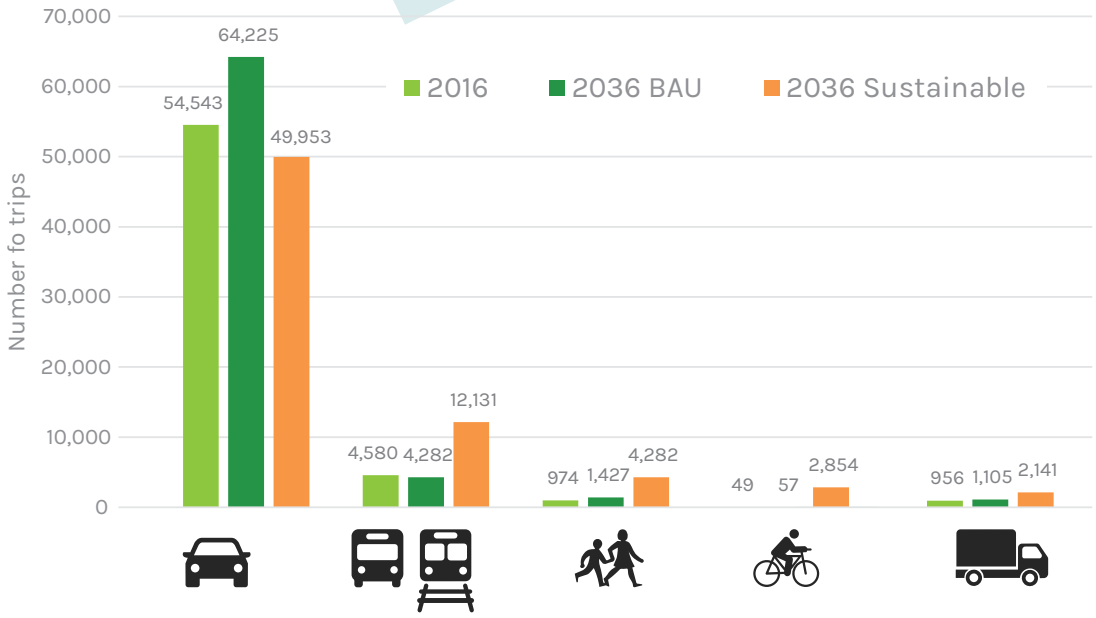


Figure 11 Journeys to work, now and in the future (total numbers)
NB: Truck symbol is 'other' and includes, in addition to trucks, taxis, motorbikes etc.

Figure 12 provides key targets across each of the Census years between now and 2036, to help ensure we are staying on track to meet our long-term target.

Some 90% of trips to work in Yarra Ranges are by car. Providing suitable infrastructure to give people more sustainable options is a consistent theme of ***Connected***.

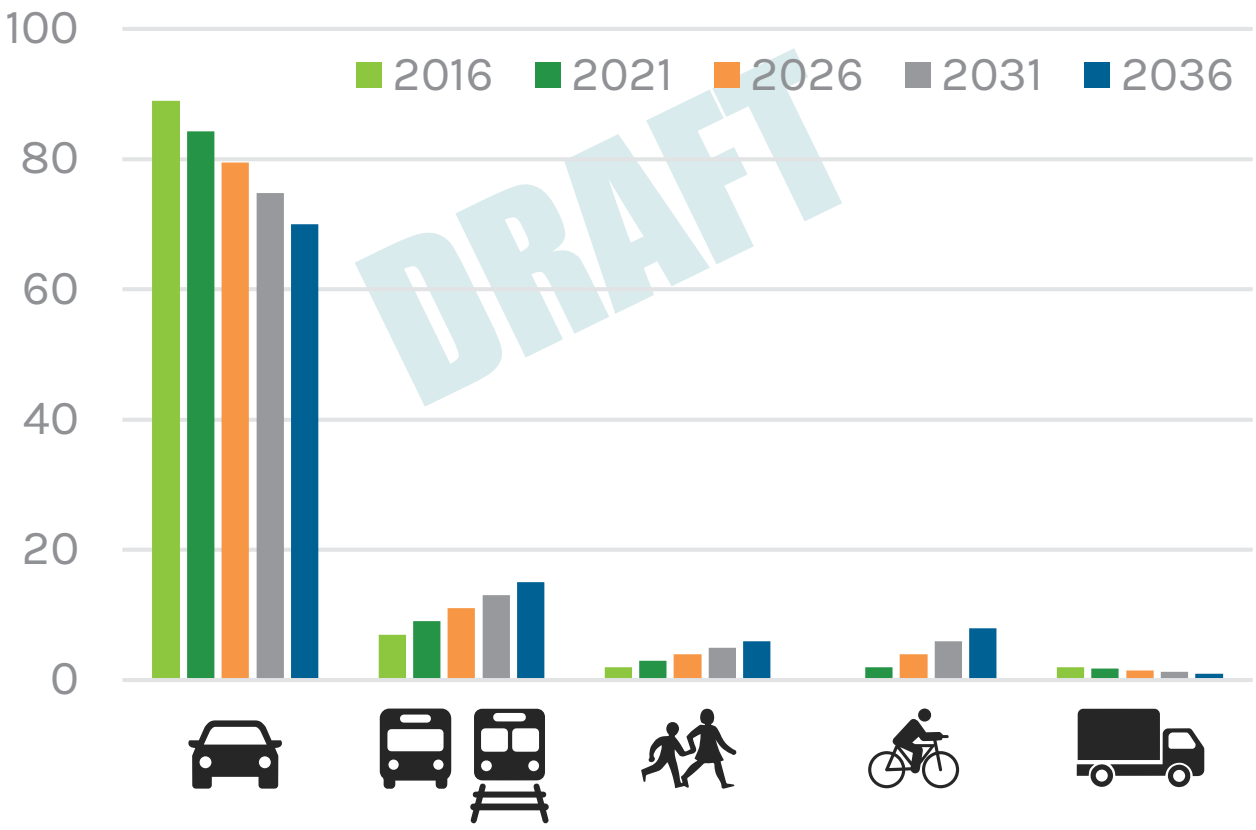


Figure 12 Sustainable scenario mode share interim targets - journey to work
NB: Truck symbol is 'other' and includes, in addition to trucks, taxis, motorbikes etc.
Source: 2016 data based on Australian Bureau of Statistics (2017)

Figure 13 identifies the targets across each of the Census years between now and 2036 for trips to work under 7km.

The sustainable scenario shown in Figure 13 continues to see 6 out of 10 people who live 7km or less from their work drive. It provides a target to boost walking and cycling especially, given that it is trips under 7km that are most transferrable to active modes.

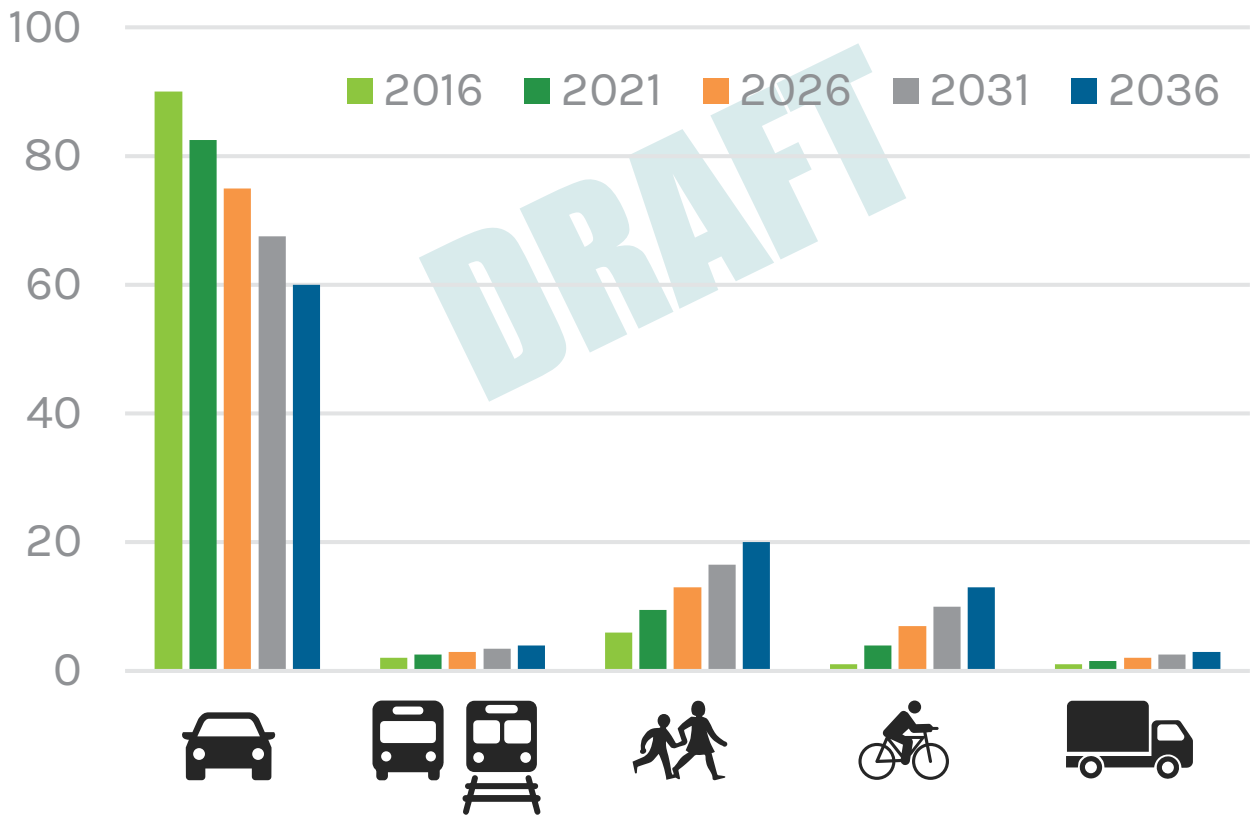


Figure 13 Sustainable scenario mode share interim targets - journey to work < 7km
Source: 2016 data based on Australian Bureau of Statistics (2017)

The benefits to the community from a more supportive environment for sustainable transport include greater transport choice, healthier lifestyles, cleaner air, safer streets and a better outcome for those that have to drive.

Shopping, social and personal trips under 3km

Figure 14 shows that around 3 out of 4 Yarra Ranges' residents use the car for trips less than 3km. A BAU approach (i.e. do nothing new) would result in this rising to 83% by 2036. This, coupled with population growth would make congestion and parking problems worse than they are today.

The 2036 sustainable scenario shown in Figure 14 offers a pathway for the future, in which the transport system is designed to diversify the options for people travelling in Yarra Ranges. This leads to car use for these very short trips dropping to 40%, and a growth in all other modes, but especially walking and cycling. The benefits to the community include greater transport choice, healthier lifestyles, cleaner air, safer streets and a better outcome for those that have to drive.

Figure 15 provides the interim targets under the sustainable scenario for shopping, social and personal trips under 3km. By providing these interim targets, we're able to monitor how we are tracking and making sure Yarra Ranges in 2036 continues to be a great place to live, work and visit.

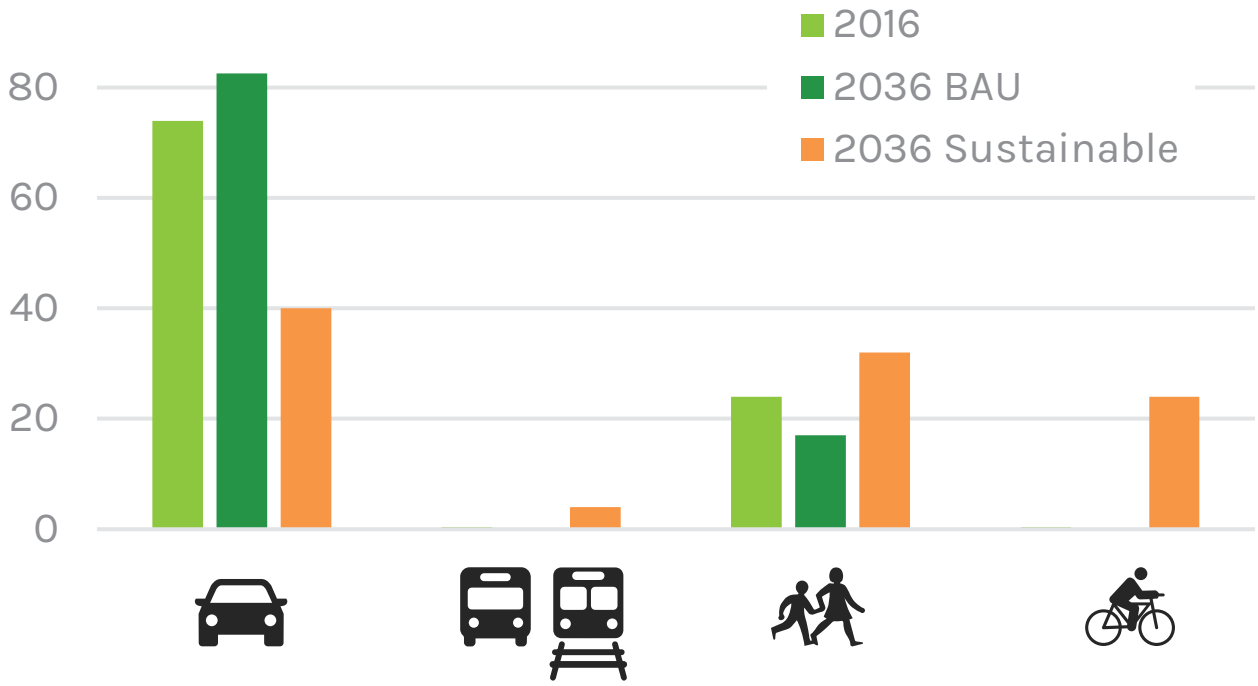


Figure 14 Shopping, social and personal trips 3km or less
Source: 2016 data based on Transport for Victoria (2017) figures.

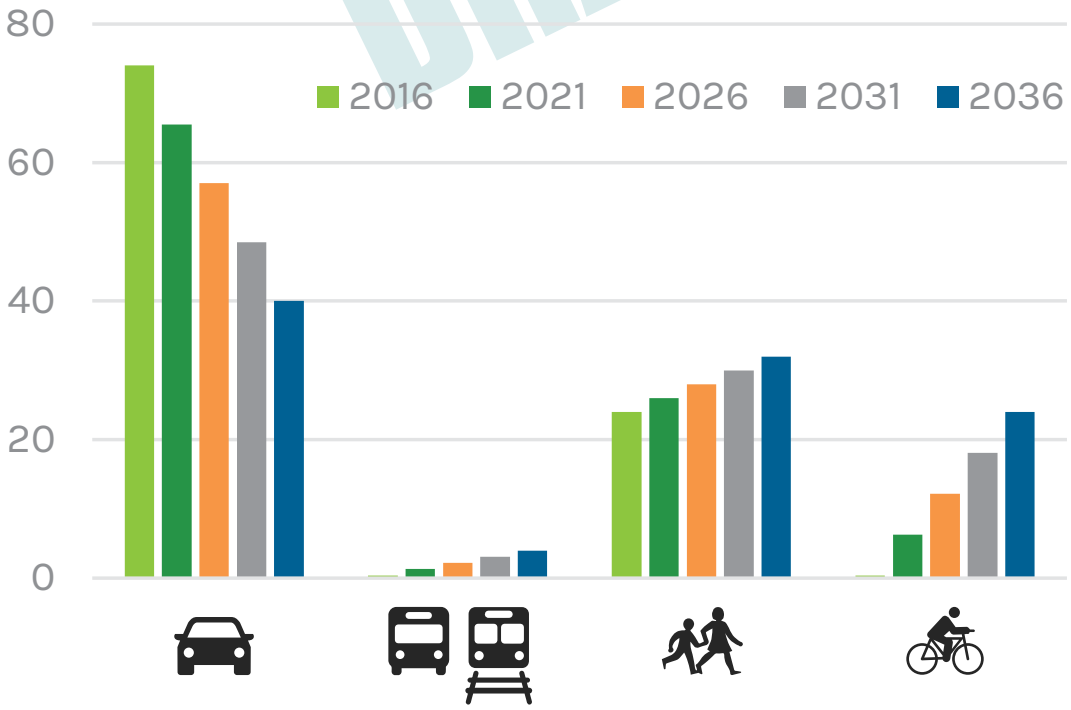


Figure 15 Sustainable scenario interim targets - non-work trips under 3km
Source: 2016 data based on Transport for Victoria (2017) figures.

What we're going to do – our major moves

Achieving the vision and transport targets outlined in ***Connected*** will require a fresh approach to the way Council make transport and land use decisions. We know past efforts could have done more to deliver the outcomes our community want.

This section describes what we're going to do to ensure our day to day and long-term actions align with our broader community vision for a more sustainable, safer, accessible and and more connected Yarra Ranges.

The following provides a snapshot of some of the major moves includes in ***Connected***. A more detailed set of Actions can be seen in the Implementation Table.

Build 20-minute neighbourhoods with active transport priority

Connected includes a suite of actions designed to make walking and cycling the first choice for the many short trips that occur every day within our local neighbourhood. Street designs that make walking and cycling safe, including prioritised crossing points, dedicated shared paths and protected bicycle lanes, lower speed limits and tree planting in built up areas will make our town centres more people oriented.

Better integrate our train stations with the wider transport network

For many people in Yarra Ranges, the train station is their connection to the rest of Melbourne and ***Connected*** contains a series of actions designed to make it easier for people to transfer from one mode of public transport to another. Some of the key transport integration actions are introduced below.

Create high quality walking and cycling networks connecting the community to their train stations

We've heard that finding a car park at a train station is getting harder, and we know that building more car parks only goes so far. ***Connected*** makes it easier for more people to access train stations via sustainable modes, meaning less people looking for car parks and more reliable journeys.

Coordinate buses and trains by advocating for pulse timetables

Few experiences are more frustrating than seeing your bus pull away from the station just as your train arrives on the platform. We understand this is an all-too-common occurrence, which is why ***Connected*** advocates to the State Government for the introduction of pulse timetables. In essence, this means that the bus arrives at a station with sufficient time for passengers to get to their train and then the bus waits at the station until disembarking train passengers can get to the bus.

Integrate cycling and public transport by advocating for bike racks on buses

Many trips in the Yarra Ranges can be too hilly or far to cycle and sometimes the closest bus stop is beyond an easy walk from home. Installing bus racks on the front of buses is an easy way to expand the catchment of routes and helps improve the door-to-door journey time for people travelling by bus. Importantly, for those new to cycling, it can be comforting to know that if something goes wrong, you can always pop your bike on the bus. Council will be advocating to the State Government for all suitable bus routes in the Yarra Ranges to have bike racks installed on the front of the bus.

For the Route 683 (Chirnside Park to Warburton), we will be advocating for a bike trailer capable of holding more than 20 bikes, to assist those visiting the Warburton Mountain Bike Destination to use a combination of train and bus. This will help to alleviate concerns regarding car parking issues in Warburton and increase accessibility.

Facilitate the creation of community co-working spaces

Technology and the shift towards a service led economy means tele-commuting is an increasingly viable option. For various reasons, it is not always easy for people to work from home, and it for this reason that Yarra Ranges will be facilitating the creation of community co-working spaces. This will help people in some of the more remote townships of the Yarra Ranges reduce the number of long trips they need to make each week by car.

Create a coherent, attractive and safe cycling network

So many of the trips we make by car are surprisingly short – and cycling is a great mode for trips under 5km. Council will be developing a comprehensive cycling network to enable more people to ride in a safe environment, connecting communities to shops and other key destinations.

We will develop and construct a Cycling Transport Network, oriented on three levels of cycling routes. Figure 16 provides an overview of different types of cycling environments.

At the Neighbourhood scale, streets will be low-stress and low-speed with bicycles mixing with other modes. Local connections will include separated infrastructure that connects to key destinations, including activity centres and schools. Regional bicycle links will be long distance links that connect townships together.

Cycling in the Hills

Council will work with the Department of Transport to help ensure the Mount Dandenong Tourist Road cycle infrastructure project achieves a better experience for all users of this iconic road.

Council will advocate for a 'Slow Sundays' pilot, in which a selected area of the Hills, popular with walkers, cyclists and runners will be declared a low speed shared zone from 7am to 11am on Sundays.

Figure 16 Main types of cycling environments - future cycling network

Figure 17 provides an outline of what type of infrastructure appeals to different types of cyclists. Currently the typical street riding environment in Yarra Ranges only caters to the 'fast and fearless'. A goal of ***Connected*** is to widen the appeal of riding a bike by creating a network of bicycle infrastructure that appeals to a more diverse set of the community.

Based on research commissioned by the City of Melbourne, Figure 17 shows that to encourage a more casual bike riding environment that is inclusive of all ages, genders, and abilities, cycling infrastructure that is separated from traffic is required. By providing separated facilities along key local routes and safe crossings at intersections, we will encourage more people to consider riding a bicycle for everyday trips while providing safer conditions for those who currently ride.

Neighbourhood Routes

Neighbourhood links will form the majority of bicycle infrastructure across YRC. This will consist of low-speed and low-stress streets in residential areas, with wayfinding signage to direct people to Local and Regional routes and key destinations. Effective neighbourhood routes have a maximum speed limit of 40km/h and restrict through movements for vehicles.

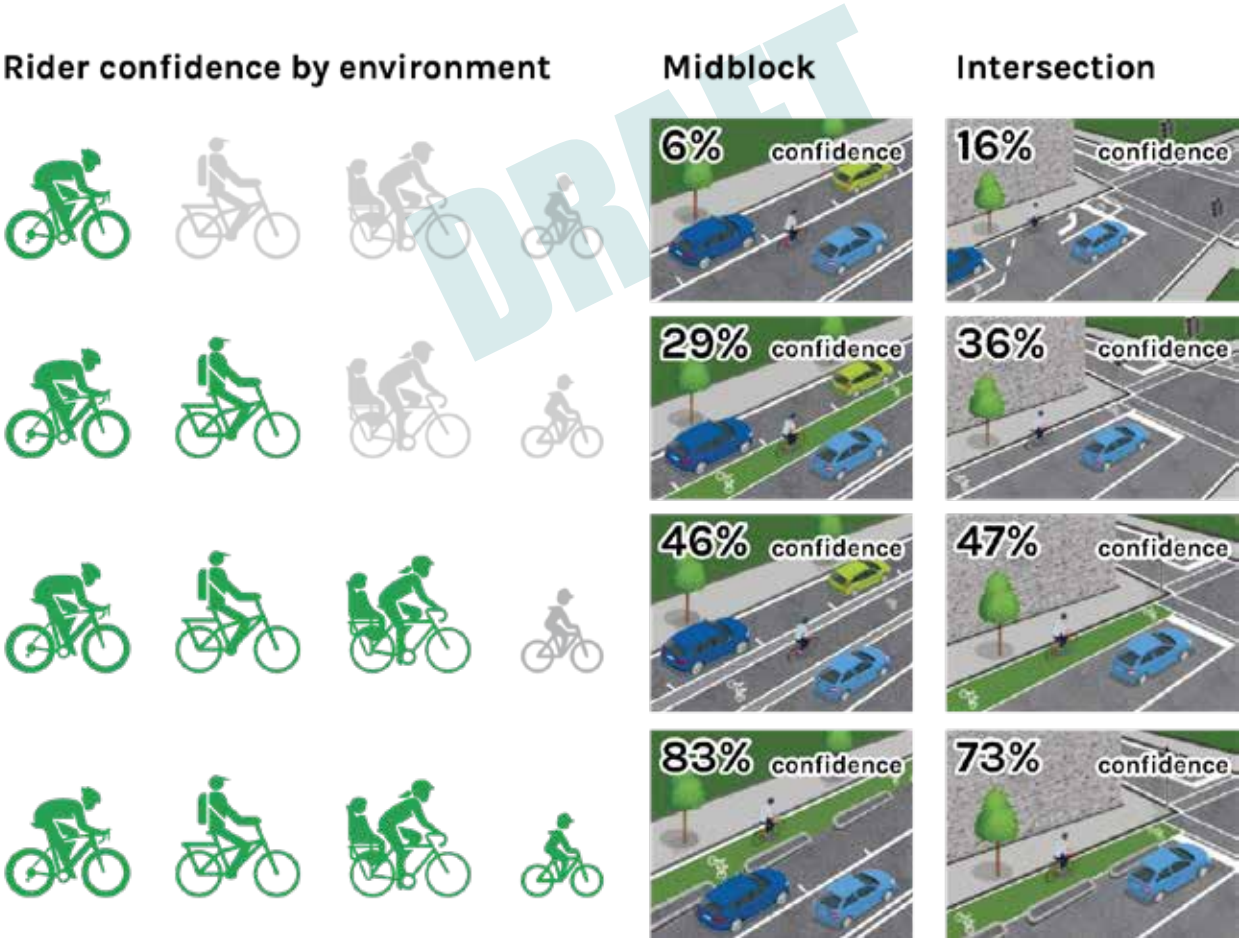


Figure 17 Who is comfortable riding on what type of bicycle infrastructure?
Source: Based on CDM Research and ADSF Research for City of Melbourne (2017)

We will work with residents of Yarra Ranges to identify a suitable street to trial a Safe Active Street in each Council region (Urban, Hills, Valley).

Safe Active Streets

Safe Active Streets are one way to provide neighbourhood cycling routes. The Western Australian Government have begun rolling out Safe Active Streets in Perth to provide safe walking and cycling corridors through residential areas. While they can form part of the neighbourhood cycling network, they are about more than just cycling. They include traffic calming, new trees and other vegetation and priority access for pedestrians and cyclists along the street. These boulevards encourage neighbourhoods to use the streets for play and socialising, while providing safe connections to local cycling routes and key destinations.

More information about the WA programme can be found here: https://www.transport.wa.gov.au/activetransport/safe-active-streets-program.asp

Local Routes

Local routes connect neighbourhoods to local destinations, including shops, schools, train stations, and regional cycling routes. Local routes require separation from other transport modes. This includes separated on-road lanes, shared paths, and off-road paths. They are often the most visible parts of the cycling network and carry the most bicycle traffic. Local routes are designed to connect key destinations together.

Regional Routes

The Warburton Rail Trail is a successful regional cycling route in Yarra Ranges, connecting townships between Lilydale and Warburton to each other, and to key destinations. The regional network is being further expanded to connect Coldstream, Yarra Glen, and eventually Healesville together to Lilydale and the Warburton Rail Trail.

In the Hills region, the Ringwood-Belgrave Rail Trail provides an off-road alternative to Burwood Highway, connecting to shops in Upper Ferntree Gully and further afield. The regional routes are about connecting townships together, for locals to enjoy healthy, safe and sustainable walking and cycling, and as a great tourism drawcard for the region.

Expand the footpath network across Yarra Ranges, using a prioritisation framework

Walking is the most sustainable mode of transport and an activity enjoyed by many people in Yarra Ranges. A legacy of past development phases has meant that some of our streets have been built without footpaths, making it difficult and dangerous to walk. For many people in the community, walking is a vital mode of transport, connecting them to services, shops and schools. It is for this reason that Connected places a high priority on the expansion of the footpath network, and proposes a decision-making framework to ensure the most important gaps in the footpath network are filled in first.

The prioritisation framework is centred on the following principles:

- Safety – Is the current environment unsafe for pedestrians?
- No infrastructure – Are there no existing footpaths?
- Isolation – Does it complete a missing link in the network?
- Connectivity – Does it connect to a school, park, train station, bus stop, and/or activity centre
- Density – How many people would the footpath serve?
- Permeability – Does it improve points of access or reduce distance?
- Inclusivity – Does it support the ageing community and people with mobility needs?

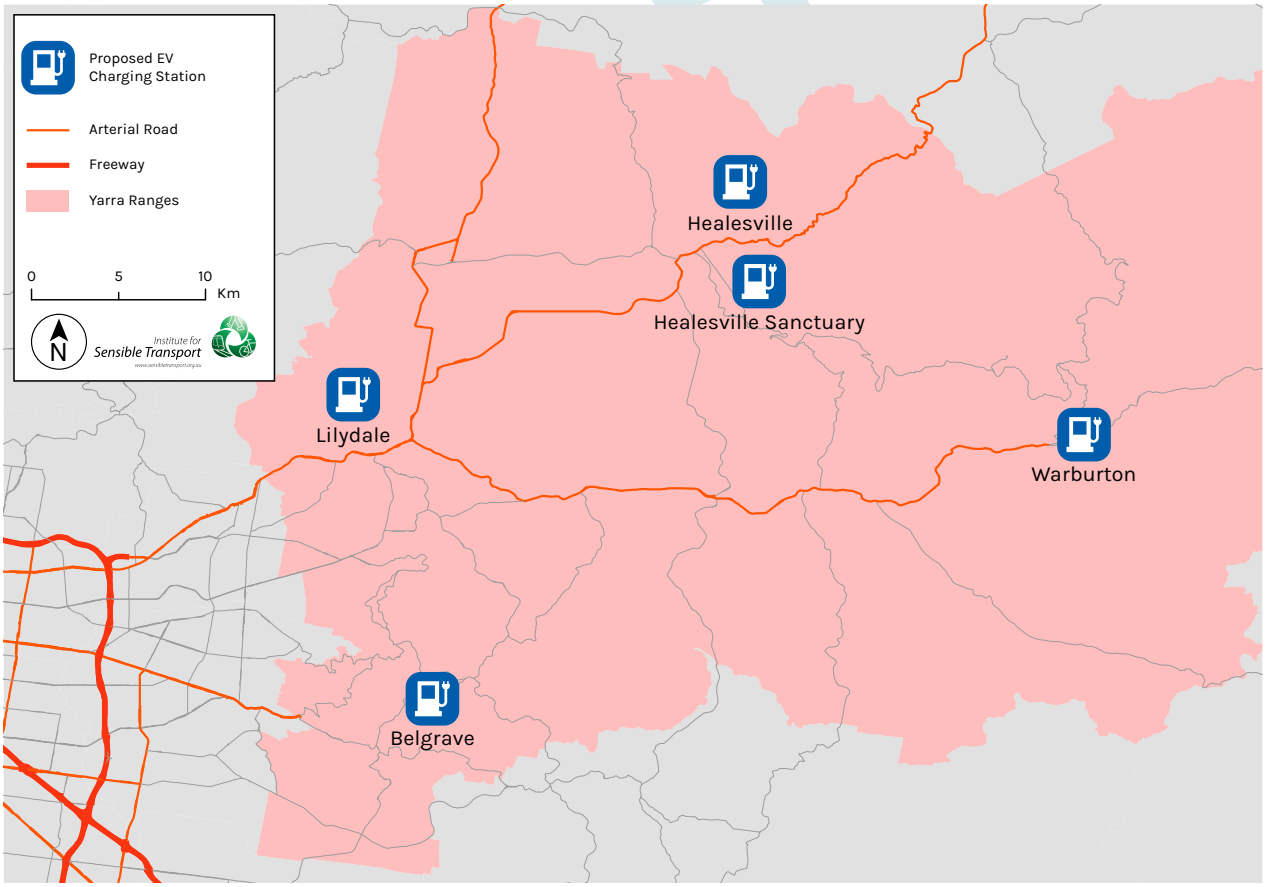


Figure 19 EV charging network (proposed)[2]
Plugshare (https://www.plugshare.com/) is a web-resource to find EV charging locations, some of which already exist in Yarra Ranges.

Create electric vehicle charging hubs

The number of electric vehicles (EVs) in Australia has grown rapidly and this is expected to increase substantially in the coming years. To support people's decision to use EVs, Yarra Ranges will facilitate the development of the network of publicly available charging stations. These will serve to support visitors to the Yarra Ranges, as well as those in Yarra Ranges community with an EV.Real time car parking information displays

Real time car parking information displays

Finding a car park can be difficult and that's why we are going to install smart infrastructure to provide real time information on where available parking bays are. This will help people find a park sooner, and less time circling.

Investigate opportunities to provide safer speeds in priority areas

Safety is at the core of Connected and this is why we will be investigating opportunities to implement safer speeds in residential areas and main shopping strips, where the community supports such a change. Speed is a major factor in approximately 30% of crashes in Victoria. In Yarra Ranges, approximately over 50 crashes occur each year on a local residential street or main shopping strip, with one third of those crashes resulting in a hospitalisation. In these areas, the biggest crash type is a vehicle striking a pedestrian. Introducing safer speed limits save lives and make our neighbourhoods more accessible and welcoming, especially for children and the elderly. As highlighted in Figure 20 when a pedestrian is hit by a car travelling at 50km/h, they only have a 1.5 in 10 chance of surviving, compared to a 5 in 10 survival rate at 40km/h. As only a small proportion of our commute trips are on residential streets, this safe speed limit change will not impact noticeably on travel times. Figure 20 illustrates the chance of survival for different vehicle speeds.

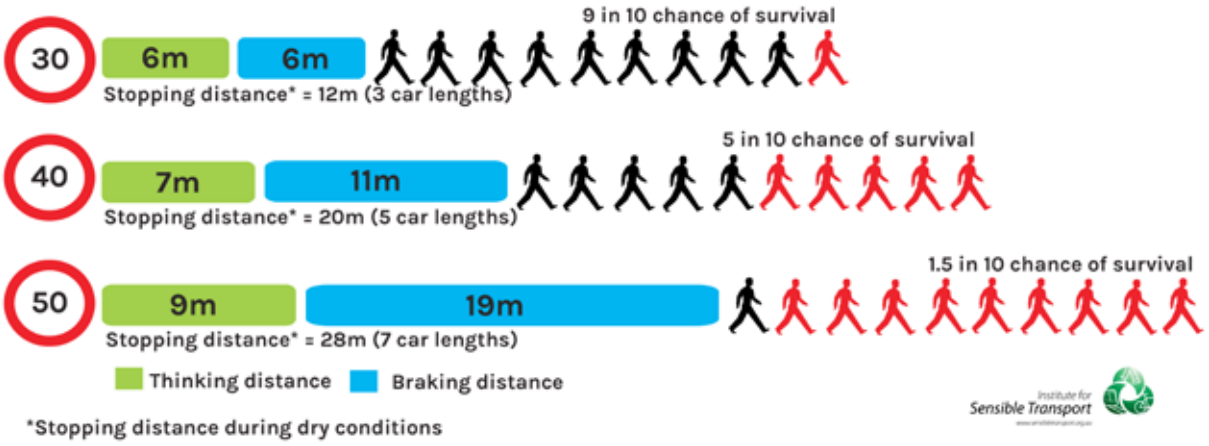


Figure 20 Chance of survival for different vehicle speeds

Transforming Yarra Ranges Council to become a leader in sustainable mobility

There is a great deal that can be done to ensure Council leads by example and makes sustainable mobility a priority for staff travel. Sustainable mobility means the most space efficient, cost effective, and least carbon intensive modes of transport. Moreover, ***Connected*** helps Council build the thinking on active and sustainable travel into our workflow by providing recommended street design for a range of street types. Applying the Movement and Place Framework will help to ensure we maximise the vibrancy and potential of our streets, whether they be shopping strips, a regional road or a residential street.

Additional training and personal development will be provided to Council staff, to ensure they have the skills and capabilities to successfully take-on the transport challenges facing Yarra Ranges. This will keep staff up to date with best-practice and leading transport innovations.

Opportunities will be given to staff to attend transport and planning:

- Conferences
- Seminars
- Workshops
- Training sessions.

We are going to provide our staff with the confidence to experiment and trial innovative solutions to ensure we meet out transport targets.

A Travel Plan will also be developed for Yarra Ranges Council officers, to both monitor the progress of our organisation in shifting towards more sustainable modes of transport and provide the basis of trialling creative method of reducing car use.

We will also undertake work to test the feasibility of 80% of the Council fleet becoming zero emission by 2030.

Residential road 14m

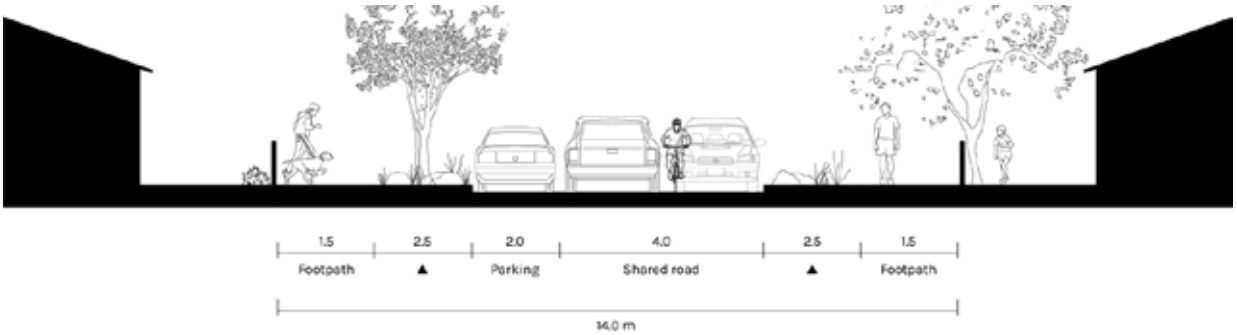


Figure 21 Residential street - preferred design

Street innovation

Many of the streets in Yarra Ranges were designed many decades ago and our transport and liveability challenges have changed markedly since then. It is therefore necessary for our streets to evolve to reflect the changing needs of our community.

Connected delivers a set of preferred street designs for typical types of streets found in Yarra Ranges. These can be used as a starting point when the re-design of a street or a creation of a new street is planned.

Residential streets

Most residential streets are approximately 14m wide between title boundaries. They provide footpaths on each side, with wide nature strips that include trees. Parking is provided on one or both sides of the street with 4m provided for two-way vehicle movements. Council's preferred street layout for residential areas is shown in Figure 21.

All new residential areas should be speed limited to a maximum of 40km/h[3], reflecting the dynamic use these streets have for neighbourhood congregation and high numbers of children. With the slower speeds, people on bicycles are safe to share the road space with other modes. When vehicles are travelling 40km/h it is also easier for elderly people to judge when it is safe to cross.

When residential streets are re-designed, they will include measures to encourage motorists to travel at a safe speed. This includes threshold gating at the beginning of residential streets, road materials such as pavers to provide tactile and audible speed warnings, and traffic calming devices. The residential area layout should be designed to prevent through vehicles, with only local access necessary.

[3] Subject to DoT approval.

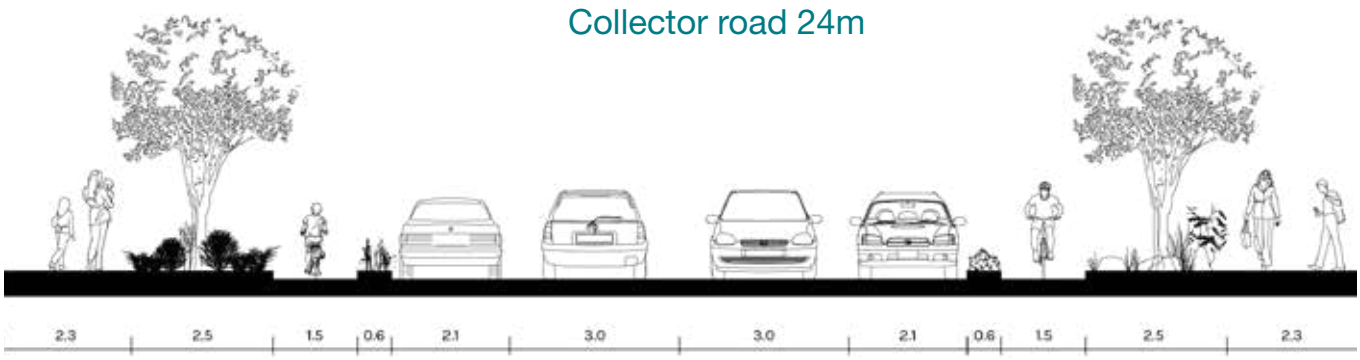


Figure 22 Collector road - preferred design

Collector roads

Collector roads link residential areas to key destinations, including activity centres and arterial and regional roads. Wide footpaths and trees should be provided along both sides of the road, including separated bicycle facilities. They should be speed limited to a maximum of 50km/h. Parking may be provided on both sides of the road. A preferred design for a collector road is shown in Figure 22.

Activity centre streets

Activity Centres are the focal points of economic and civic participation in a township. They include shops, libraries, schools, medical facilities, and public transport hubs. Wide footpaths should be provided on both sides of the street with space for street furniture such as tables, chairs, and wayfinding signage. Trees should be provided throughout the street. Figure 23 shows the preferred cross section. With high pedestrian and vehicle volumes, bicycle facilities should be separated from other modes. Activity Centre streets should be speed limited to a maximum of 40km/h. On-street parking should be prioritised for disabled parking, loading zones, and short-term parking. Additional parking should be sought through off-street parking areas to maximise open space opportunities. The design shown in Figure 23 includes a street tree that can be provided as an alternative to car parking, every six car parks, to enhance the amenity and appeal of the Activity Centre.

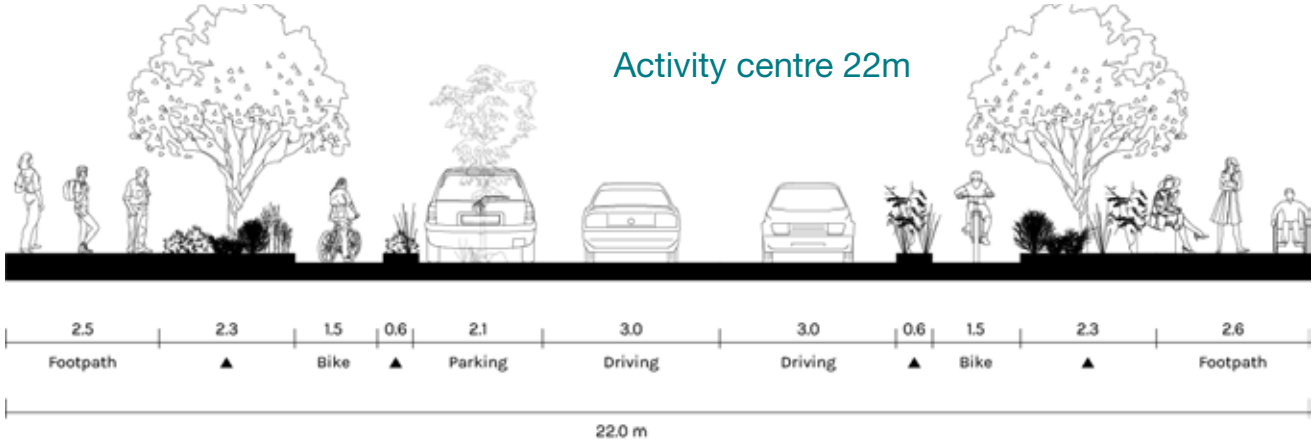


Figure 23 Activity Centre streets - preferred design

Arterial roads

Arterial roads carry the highest vehicle volumes in Yarra Ranges. They range between 1 and 3 lanes in each direction, with a speed limit up to 80km/h. On-street parking is not recommended on these roads but may be provided if space is available. A median strip is provided to separate vehicle directions and can provide space for turning lanes. Pedestrians and bicycle riders should be provided for on both sides and set back and separated from the carriageway. Figure 24 provides an cross section of a preferred design for a 30m arterial road.

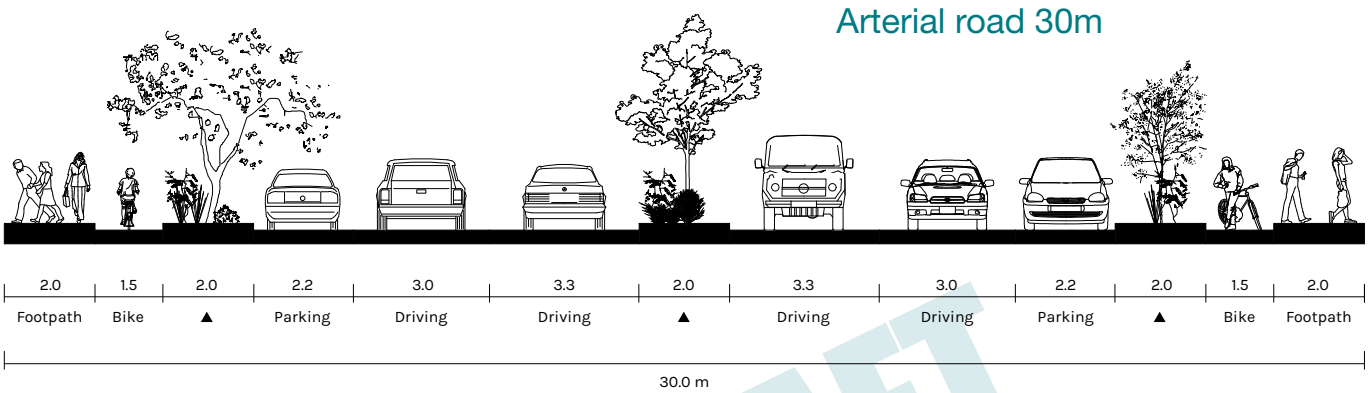


Figure 24 Arterial road 30m - preferred design

Occasionally, for a variety of historical reasons, activity centres can have a very large arterial road, with widths of up to 60m. Figure 25 provides a cross section for a 60m street.

Arterial road 60m

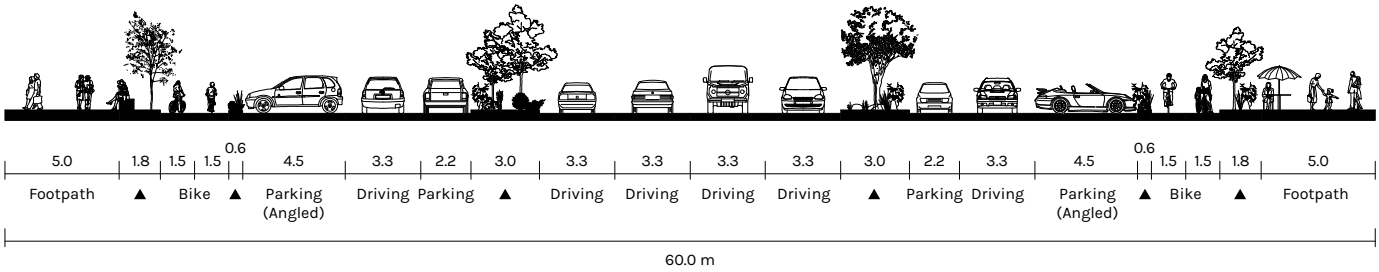


Figure 25 Arterial road 60m - preferred design

Regional roads

Yarra Ranges has many regional roads. These roads form key connections for regional townships and carry freight traffic from agriculture and manufacturing precincts within Yarra Ranges and from further afield. They are speed limited between 80 and 100km/h and provide wide carriageways in each direction. Figure 26 provides an indication of the preferred design for regional roads. Rumble strips should demarcate the edges of each travel lane. Sealed shoulders should be provided on each side to act as emergency stopping lanes and can be used by cyclists, with a low-profile flexible road divider placed 600mm inside the lane from the rumble strip. LED lane lights should be installed on roads with high night-time risk and areas with conflict points. This would provide additional safety benefits without impeding the ability for the shoulder to be used for emergency stopping.

Regional road 12m

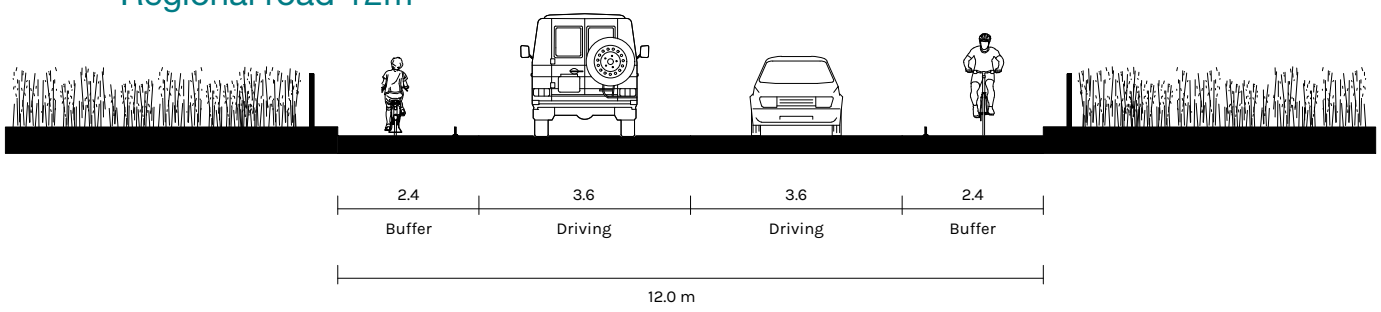


Figure 26 Regional road - preferred design

NB: For regional roads with existing trees, these trees should remain unless there is an overwhelmingly compelling reason to remove them.

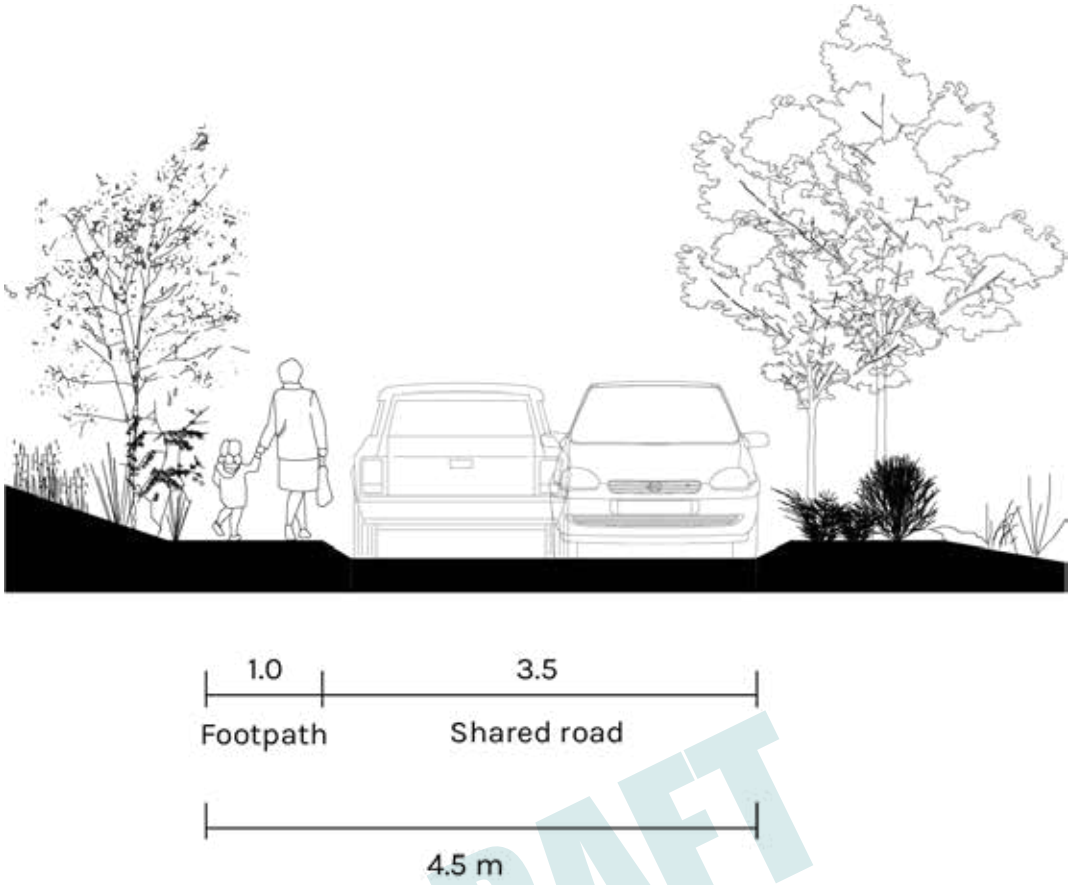


Figure 27 Regional road – preferred design (4.5m width)

NB: The design speed for this road is a maximum of 40km/h and requires users to negotiate. This road design is intended for areas in which there is no possibility of widening the road due to topographical, flora or other reasons. No centre line marking is suggested and drivers would be required to slow and partially mount a rounded kerbside to in order to pass one another.

Install kerb outstand bus stops

Targeted implementation of kerb outstands helps to create DDA Compliant stops and increases the number of car parking bays. The key benefits of kerb outstand bus stops[4] include:

- Better opportunity for DDA Compliance
- Enhanced priority for bus services, reducing delay for buses
- Reduced loss of kerbside parking, as the sweep clearance required for indented bays is no longer required. This increases the availability of kerbside parking.

All access for school bus services

To make better use of scarce resources, Council will lobby for the general public to be able to use school bus services in areas in which the public bus services does not provide a suitable alternative.

[4] See https://www.vicroads.vic.gov.au/-/media/files/technical-documents-new/traffic-engineering-manual-v2/tem-vol-2-part-212--as174212-bus-transit-tram-and-truck-lanes.ashx for more information

What we're not going to do (and why)

Create new residential or large-scale commercial land releases beyond an easy walk from high quality public transport

Yarra Ranges is lucky to have the bulk of its population within defined townships and this makes the planning of an efficient transport system easier. By concentrating development within defined town centres with good public transport and amenities within walking distance, it's easier for people to reduce their reliance on the motor vehicle and live healthier, more sustainable lifestyles.

Research conducted as part of Connected found that of the cars parked at Mooroolbark Train Station, over 40% are registered to an address with the same postcode as the train station itself, indicating a high volume of short distance trips.

Build additional car parking as our first response to concerns regarding parking problems

We know that car parking concerns feature highly on the community's list of concerns regarding transport issues in Yarra Ranges, especially at train stations. Two major expansions to existing car parking at train stations have been committed to by the State Government. The Mooroolbark and Belgrave train stations will receive hundreds more car parking bays each.

When looking at the evidence on other car parking expansions across Melbourne, we know that in most cases, people who previously walked or got public transport to the station are the ones that take up the additional spots. This works against many of the strategic directions of Connected, as well as Council's wider Strategic Objectives.

We understand the community want reliable, low cost and convenient methods of accessing train stations, and it is for this reason that a major thrust in the Actions including in Connected include better bus, walking and cycling integration with transport hubs. This is a more space and energy efficient method of achieving the objective of getting more people to train stations.

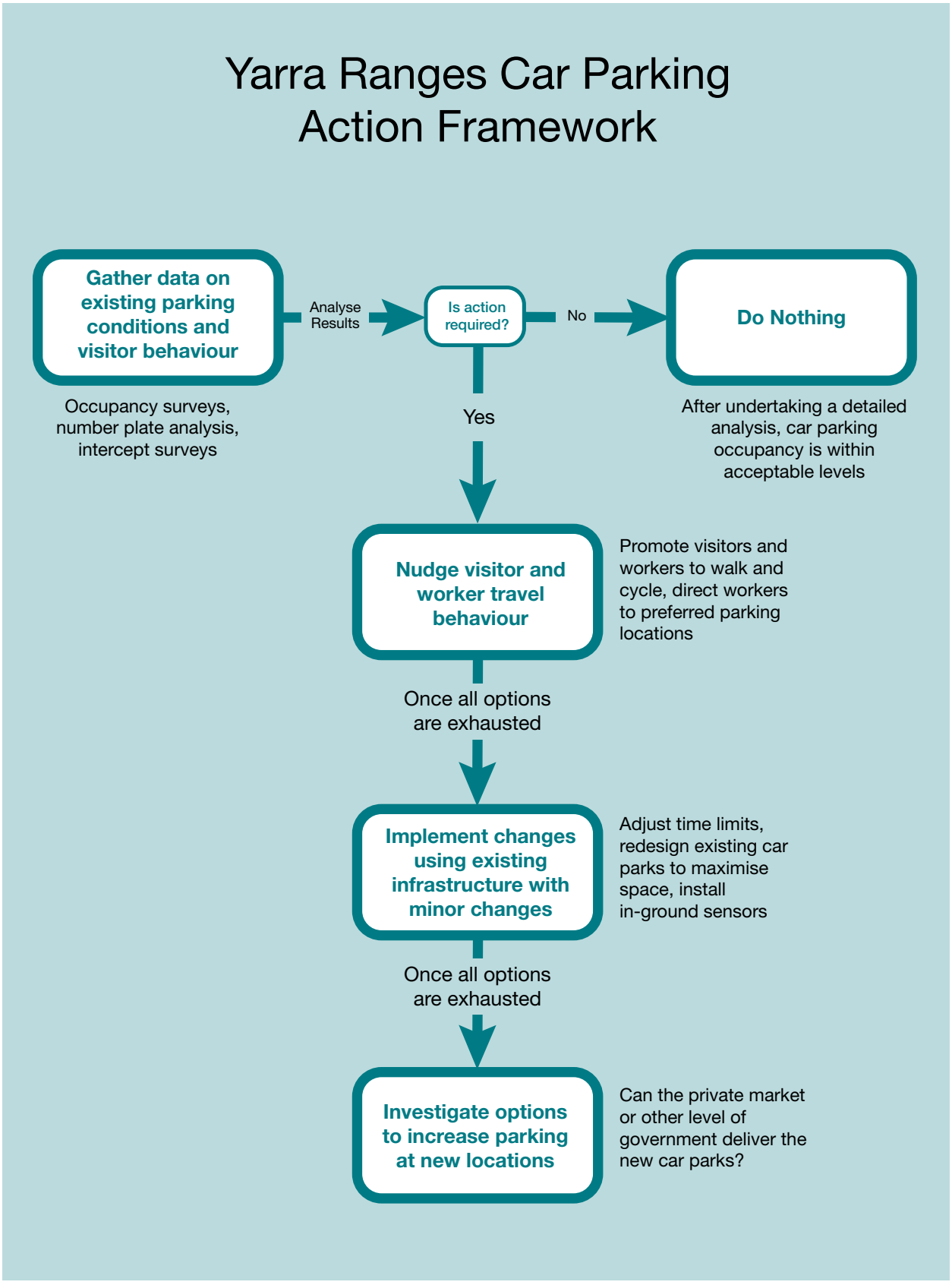


Figure 27 Strategic framework for car parking actions

Implementation

The implementation of Connected is a staged, long term program of work. This includes some low cost initiatives that will be implemented entirely by Council within a short time frame, longer term, more costly projects and advocacy projects, such as much needed improvements to the public transport network.

A list of suggested actions is included within the Action and Implementation Plan in Appendix 2 of this document. Many of the actions that are township specific should be implemented in coordination with the Yarra Ranges Draft Place Plan Prioritisation Schedule.

References

Australian Bureau of Statistics. (2017). Census 2016. from Australian Government http://www.abs.gov.au/websitedbs/censushome.nsf/home/2016

Transport for Victoria. (2017). Victorian Integrated Survey of Travel and Activity Retrieved from Melbourne: https://transport.vic.gov.au/data-and-research/vista/vista-data-and-publications/

Appendix 1: Additional information on car parking

Car parking is one of the most hotly contested issues in Yarra Ranges and was a frequent topic of discussion during the engagement process. Government policies have increased the supply of car parking. The widespread availability of free parking has increased car use, and off-street parking requirements have reduced housing affordability. City governments in other parts of Australia and internationally have begun to align their approach to parking management with their broader policies (e.g. climate change, urban liveability) and this usually results in a reduced requirement for parking, and greater use of pricing as a means of balancing demand with supply. Cities have also begun reallocating space previously used for parking to other purposes, such as urban greening, public transport priority, wider footpaths and protected bicycle lanes.

Most parking in Melbourne, and Yarra Ranges, appears free to the user. This disguises the underlying cost of land and construction ($20,000 plus per parking bay); and broader costs including opportunity costs of land used for parking rather than other land uses or transport modes.

Free ample parking encourages car ownership and use. Circling for free on-street parking (which drivers prefer to off-street parking) is a significant contributor to traffic. Up to 30% of traffic in shopping strips is caused by people in cars looking for a free parking space.

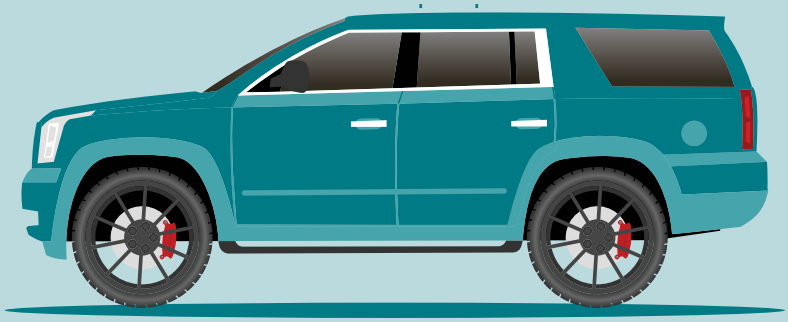
Car parking: fun facts

Cars sit idle for 95% of the day and is the second most expensive item most people will ever buy

Historically, car parking policies have shaped cities into car dominated landscapes

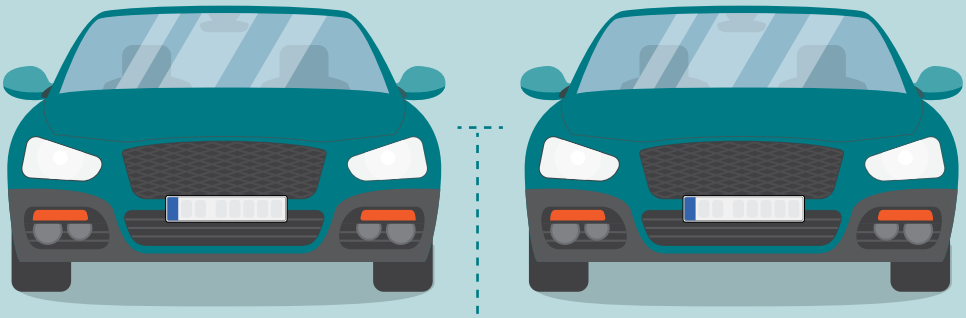
Car parking subsidises car use and can undermine housing affordability

On- and off-street parking can account for 50% of all land use in a city



Free car parking removes an incentive to use sustainable modes

Parking - Key Issues



Car parking impacts negatively on built form outcomes and housing affordability

Increasing need to use space more efficiently as Yarra Ranges' population grows

Generous parking supply reduces the ability to address climate change and sustainable transport

Disability access and creating a diversity of transport mode choice is critical to an equitable Yarra Ranges

Urban vibrancy and quality of the street and public realm is important to the community.

Appendix 2: Action and Implementation Plan

Action number	Problem	Action	Priority Actions
Category 1: Built Form			
1	Built environment limiting opportunities for vibrant townships	Create 20-minute neighborhoods, in which 90% of the population are within a 10-20-minute walk or ride to local shops. This can be done via the use of the Movement and Place Framework, the strategic closing of streets that suffer from high levels of unnecessary through traffic, prioritised pedestrian crossings at key points, the inclusion of bicycle infrastructure, street furniture and shade etc.	H
Category 2: Cycling			
2	Limited opportunities for using the bike for transport	Develop Cycling Transport Network using best practice design principles, including the development of Safe Active Streets. Develop and construct a cycling transport network, centred around encouraging people who currently do not cycle. Focus links to schools, activity centres, and train stations.	H
3	Unacceptably high levels of road injuries	Introduce a *'slow Sundays'* initiative on Mt Dandenong Tourist Road as a pilot. This would involve declaring Mt Dandenong Tourist Road a 'shared zone' between 7am and 11am each Sunday, with a 30km/h speed limit and traffic management staff employed at key entry/exit points. Local residents and businesses would need to be consulted, to raise their level of awareness of the issue this initiative is designed to address.	M
Category 3: Public Transport			
4	Bus routes and frequencies that don't meet peoples needs, and don't integrate well with train services	Advocate to PTV for a Bikes on buses program in Yarra Ranges, to help increase the convenience of both cycling and bus use, and boosting door-to-door travel times.	H
5	Bus routes and frequencies that don't meet peoples needs, and don't integrate well with train services	Develop Train Station Access Plans for every train station in Yarra Ranges, focused on boosting the attractiveness of walking, cycling and bus services.	H
6	Bus routes and frequencies that don't meet peoples needs, and don't integrate well with train services	Advocate to the Department of Transport a pulse timetable to be implemented for the buses that arrive/depart from Belgrave Train Station. Its impact should be monitored by the Department of Transport with the view of rolling it out at Lilydale Station.	H
7	Bus routes and frequencies that don't meet peoples needs, and don't integrate well with train services	Advocate to the Department of Transport for an urgent Bus Review. Poor bus frequencies, a lack of integration with train services and the neeed for additional routes will help make public transport a more attractive choice for more people in the Yarra Ranges.	H

Action number	Problem	Action	Priority Actions
8	Bus routes and frequencies that don't meet peoples needs, and don't integrate well with train services	Adopt a bus shelter community arts program focused on school bus stops to make waiting for the bus more comfortable. While Council is advocating strongly for improved bus services in Yarra Ranges, it is also important to make the stops more comdortable palces in which to wait for a bus, especially when it is raining, very hot or cold.	L
9	Bus routes and frequencies that don't meet peoples needs, and don't integrate well with train services	Work with state government to ensure all public transport stops are DDA compliant by 31 December 2022.	H
10	Bus routes and frequencies that don't meet peoples needs, and don't integrate well with train services	Advocate to State Government for public transport staff to undertake cultural awareness training for working with indigenous passengers and include a recruitment program to ensure indigenous members of the community are employed within the public transport sector.	H
11	Traffic and parking congestion	Advocate to State Government for more disabled car parking bays at train station car parks.	H
12	Bus routes and frequencies that don't meet peoples needs, and don't integrate well with train services	Advocate to the State Government for all members of the community to be able to access school bus services. In some parts of Yarra Ranges, there is very little public transport access, so it makes sense for all members of the community in these areas to be able to catch a school bus.	H
13	Bus routes and frequencies that don't meet peoples needs, and don't integrate well with train services	Targeted implementation of kerb outstands for bus stops. This helps to create DDA Compliant stops and increases the number of car parking bays.	M
14	Bus routes and frequencies that don't meet peoples needs, and don't integrate well with train services	Develop a Request for Quotation with minimum service specification for an App to act as a platform for Peer 2 Peer (P2P) ride sharing. This action capitalises on community based solutions to efficiently match drivers with spare capacity with passengers looking a ride. There are a number of existing providers that would be in a position to respond to a RFQ.	M
Category 4: Walking			
15	Unfriendly pedestrian network	Continue the footpath building program – to provide a complete network of footpaths in the built-up areas of Yarra Ranges, using the Footpath prioritisation framework prepared as part of Connected.	H
Category 5: Travel Demand Management			
16	Built environment limiting opportunities for vibrant townships	Identify Transit Orientated Development (TOD) opportunities with Strategic Planning to reduce demand for car use as the default mode. TOD design principals to encourage active transport and proximity to activity centres.	M

Action number	Problem	Action	Priority Actions
Category 6: Motor Vehicles			
17	Built environment limiting opportunities for vibrant townships	Identify and develop a series of neighbourhood active transport corridors, using local area traffic management to restrict through vehicle movements while maintaining vehicular access to residential properties. Develop and construct a cycling transport network, centred around encouraging people who currently do not cycle. Focus links to schools, activity centres, and train stations.	H
18	Built environment limiting opportunities for vibrant townships	Work with local communities in each of the townships with a regional route through its Activity Centre to create a "Welcome To…" creative or cultural project designed to signal to arriving motorists that they have entered the heart of a township and to slow down to a safe speed. Alternatives could include tree lined streets for both amenity and threshold treatments throughout the townships main street.	H
19	Bus routes and frequencies that don't meet peoples needs, and don't integrate well with train services	Engage with ride sourcing services and *Commercial Passenger Vehicles Victoria* to determine what is required to better meet the needs of residents and visitors via taxi and taxi like services	L
20	Traffic and parking congestion	Implement car parking action framework. This framework should be followed whenever a car parking issue is identified, to help ensure consistency of response and alignment with the vision and objectives of Connected.	H
21	Traffic and parking congestion	In streets around the Mooroolbark and Belgrave Train Station, informal, all day parking will be converted to spaces that are available for local residents and visitors to use during the day. The large increase in commuter parking at both the Mooroolbark and Belgrave Train Station provides an opportunity to convert kerbside bays that are currently available for all day parking to be converted to spaces for residents and shoppers to find a parking spot. This is a continuation of an existing trial at Belgrave.	M
22	Traffic and parking congestion	Install Parking Overstay Detection System (PODs) in car parking bays in high demand areas, in conjunction with real time digital signage to identify the number of available parking bays	M
23	Unacceptably high levels of road injuries	Investigate opportunities to provide safer speeds in local streets and main streets of townships, where there is a clear safety benefit and where the majority of residents support such a change. Investigate potential resitdential areas for 40km/h in defined townships and 30km/h in main street of key townships (e.g Belgrave)	H
24	Unacceptably high levels of road injuries	Implement road sealing program and vigorously advocate for the inclusion of footpaths/shared paths within the design	H
25	Unacceptably high levels of road injuries	Advocate to State Government to conduct a safety audit of Warburton Highway with the view of enhancing safety and harmonising speed zones.	H

Action number	Problem	Action	Priority Actions
26	Unacceptably high levels of transport emissions	Develop a Transport Emissions Inventory in order to track emissions from transport. This is designed to help us understand how we are tracking in reducing our emissions and is similar to what many other councils in Melbourne have begun to do.	M
27	Unacceptably high levels of transport emissions	Develop an Implementation Plan to convert 80% of the Council fleet to zero emission vehicles by 2030.	H
28	Unacceptably high levels of transport emissions	Engage with the private sector to install electric vehicle charging stations in iconic locations within Yarra Ranges, including: Healesville and Healesville Sanctuary, Warburton, and Belgrave.	M
Category 7: Organisational			
29	Limited opportunities for using the bike for transport	Install a bicycle lane whenever a road is resurfaced, unless it is impractical to do so	H
30	Unacceptably high levels of road injuries	Develop a Road Safety Plan.	M
31	Unacceptably high levels of road injuries	Introduce a framework for prioritising areas for Local Area Traffic Management (LATM) and a toolkit of street design initiatives to address local traffic safety and amenity issues. LATMs allow Council and local communities to address traffic and local street concerns at the neighbourhood level	H
32	Organisational capacity to address contemporary transport issues	Include a bi-annual transport satisfaction survey among residents and businesses in YR (Council to investigate best delivery method for survey Eg. mail, online, SMS, etc). This action should also include a Travel Diary Survey, which, when combined with VISTA data, will provide a quantitative picture of distance and minutes of travel by all modes of transport in Yarra Ranges. This can be used to quantify the economic benefits of walking and cycling, and include an analysis of the METS (metabolic equivalents of tasks) to provide a picture of the impact active transport is having on the health of residents.	L
33	Organisational capacity to address contemporary transport issues	Use the data collected bi-annually by Council to prepare reports focused on communicating with the community how Council is tracking with regard to the targets set out in the Integrated Transport Strategy.	M
34	Organisational capacity to address contemporary transport issues	Develop a detailed plan to work with school communities to undertake travel plans focused on increasing the rate of walking, cycling and public transport. This should include a school travel survey, an audit of the walking and cycling environment across the school's catchment and an examination of crash data and speed limits. This will include close collaboration with the Department of Education, Ride2School, and VicHealth.	H

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