Movement & Place Consulting

Hepburn Shire Integrated Transport Strategy 2024-2050

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Acknowledgement of Country

Hepburn Shire Council is on Dja Dja Wurrung Country

Hepburn Shire Council acknowledges the Dja Dja Wurrung as the Traditional Owners of the lands and waters on which we live and work. On these lands, Djaara have performed age-old ceremonies of celebration, initiation and renewal. We recognise their resilience through dispossession and it is a testament to their continuing culture and tradition, which is strong and thriving. We also acknowledge the neighbouring Traditional Owners, the Wurundjeri to our South East and the Wadawurrung to our South West and pay our respect to all Aboriginal peoples, their culture, and lore. We acknowledge their living culture and the unique role they play in the life of this region.

Movement & Place Consulting

Movement & Place Consulting acknowledge the Dja Dja Wurrung people as the traditional owners and custodians of the land now managed by Hepburn Shire Council, and the Bunurong and Wurundjeri people as the traditional owners and custodians of the land on which we work.

There are numerous ways in which Hepburn Shire's current settlement and transport networks have benefitted from and leveraged Dja Dja Wurrung knowledge related to transport routes, the location of gold, water sources and highest quality agricultural land.

The Dja Dja Wurrung refer to much of their Country as upside-down djandak, suffering from the impact of mining and other post-colonial endeavours. When contemplating an Integrated Transport Strategy for the Shire we will be mindful of how Dja Dja Wurrung elders (past and present) would think about transport and the connections made with djandak (Country) while travelling.

This will start with a deep understanding of the Dhelkunya Dja (Healing Country) Plan and engagement with elders about how the Integrated Transport Strategy can be informed by the Dhelkunya Dja Plan. We agree with the Dja Dja Wurrung that healing and protecting Country is essential to enable a sustainable and prosperous future.

Executive Summary

Hepburn Shire is located 90km north-west of Melbourne in Victoria's Central Highlands region, between Ballarat, Bendigo, Maryborough and Woodend. The Shire has 16,640 residents, of which 62% reside within four main townships:

- Daylesford / Hepburn Springs (3,780)
- Creswick (3,279)
- Clunes (1,844)
- Trentham (1,382).

The remaining 38% of the population are spread across the Shire, in various small settlements such as Glenlyon and Smeaton or around localities and villages such as Coomoora and Newlyn.

The Shire's population is ageing, with a median age of 52, which is 14 years older than the Victorian median. Between 2011 and 2021, the median age of the Shire increased significantly (from 46 to 52). This is a significantly larger increase of median age compared to the State average, which grew from 37 to 38 between 2011 and 2021. Between 2016 and 2021 there was a 37.8% increase in population aged 70-79 years. As this cohort ages, an increasing proportion of the population will be (or will feel) unable to drive. These people will need (and everyone will benefit from) a wider range of transport options being available.

Hepburn's population is forecast to grow to approximately 17,700 residents by 2036. Residents and visitors rely heavily on cars for transport. The number of households who do not own a car as of 2021 is just 3.2%, significantly lower than the Victorian average of 7.5%.

The cost of vehicle ownership represents approximately 50% of weekly income for the 23.5% of Hepburn Shire households who earn less than $650 a week. These residents often need to make difficult decisions about cutting back on basic groceries in order to afford petrol.

Improving access to employment, education, and services will be critical to ease financial pressures for Hepburn residents. Finding ways to enable residents to reduce the cost of transport is key to increasing local economic activity and reducing the cost of living generally.

Many tourists come to Hepburn to explore the natural environment, cultural heritage and high quality amenities at all times of the year. The demand for tourist accommodation and holiday homes is also likely to impact on low-cost housing for key workers. This often means that key workers need to travel further to get to employment that is critical to supporting the ageing population and tourist economy.

The Integrated Transport Strategy to deal with these complex situations and emerging needs has been developed around six guiding principles:

1. People centred transport
2. Fairer transport
3. Greener and healthier transport
4. Safer movement and places
5. A connected Shire
6. Vibrant economy

These principles are supported by implementation and monitoring activities and key performance indicators presented in a 'plan on a page' to help guide future decisions.

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1 Introduction

The Hepburn Integrated Transport Strategy guides transport development in Hepburn Shire up to 2050, as a key part of the Future Hepburn project. It sets a vision and targets for improving transport in the Shire, to benefit residents and visitors.

1.1 Overview

The Hepburn Integrated Transport Strategy (2024-2050) will guide the continued improvement of transport in the Shire. It will shape Hepburn Shire's priorities and actions through its own annual works programs, as well as its advocacy to others, especially Victorian and Commonwealth Government agencies and industry bodies.

The Integrated Transport Strategy plans for a local transport system that can efficiently and safely connect people to their everyday needs, catering for residents, workers and visitors alike. Actions developed for this strategy promote better transport connections within and between townships in Hepburn Shire and to places beyond.

The Integrated Transport Strategy addresses active transport (walking and wheeling), public transport and motorised private transport. It also covers recreational transport infrastructure, such as walking and cycling trails, to build on Hepburn's reputation for tourism and events. It is part of Hepburn Shire's Future Hepburn project, which includes:

- Township Structure Plans for Clunes, Creswick, Daylesford and Hepburn Springs, Glenlyon, and Trentham
- Rural Hepburn: Agricultural Land and Rural Settlement Strategy

1.2 What does the ITS contain?

This strategy will set the vision for transport in Hepburn Shire to 2050. Supported by the previously prepared Discussion Paper and Background Report, this report:

- Describes:
  - Local context of Hepburn Shire
  - Key transport related challenges faced by the Shire
- Sets out Hepburn Shire's:
  - Transport vision for Hepburn in 2050
  - Transport vision statements which expand the vision
- Identifies ways to achieve Hepburn Shire's transport vision with:
  - General types of actions and specific actions to achieve the vision
  - Next steps and implementation.

The Hepburn Transport Strategy 2024-2050 is not a just a document, but a process that guides ongoing transport improvements for the Shire. It provides for a major review and re-setting every five years, and annual reviews to track progress and guide investment and resourcing priorities year-by-year.

1.2.1 'Wheeling' and 'active transport'

Throughout this document, the term 'wheeling' instead of 'cycling' or 'bicycle riding' is used. This is to acknowledge that there are many other forms of wheeled personal transport than just bicycles – they include scooters, skateboards and other emerging forms, including electric-powered versions, and also e-mobility share schemes such as those being trialled in Melbourne and Ballarat.

'Bicycle riding' is generally only used when talking about previous data (many surveys do not distinguish other forms of 'wheeling').

Active transport relates to people embracing physical activity as a healthy way to get around for all purposes, including recreation. It covers walking and 'wheeling' as defined above.

1.3 Glossary

Term	Meaning
Active transport	Physical activity as a means of transport, such as walking, riding a bicycle, or riding a skateboard.
Car share	Sharing a private vehicle, often through hourly or daily rental schemes.
Commonwealth Disability Discrimination Act 1992	Commonwealth act which makes it unlawful to discriminate against a person, in public life, including employment, education, getting or using services, renting or buying a house or unit or accessing public places because of their disability.
Community transport	A service for eligible residents who transport is not easily accessible to assist in supporting access to important services such as shopping or medical appointments.
DTP	Department of Transport and Planning.
E-mobility	The use of electrified vehicles, such as cars, bicycles, and scooters.
Fee-based parking restrictions	Requires a fee to be paid for use of a parking bay. These are used to encourage turnover and reliability of parking for everyone. They also increase compliance by providing users with a defined time at which they should move their car from a bay.
Kerb drop	Areas where pavement is gently sloped to the same level as the road.
Kerb outstand	Widening of the footpath and nature strip at an intersection or mid-block to reduce the distance required for crossing the street.
'First/last mile' travel	The first or last leg of a trip, often influential on how people travel and their mode choice.
Micro mobility	The use of lightweight vehicles such as bicycles or scooters, operating at low speeds.
Mobility hub	An adaptation of a transport interchange, focused on providing places where people can transfer easily between sustainable forms of transport (public and shared modes, as well as walking and wheeling).
Mode shift	The change in the proportion of trips made by different modes of transport over time.
Pedestrian permeability	Accessibility and ease of movement for pedestrians in the public realm, particularly across different destinations and routes.
PUDO	Pick up/drop off
Ride share (Taxi)	Travel in a private vehicle usually with the vehicle owner, for free or for a fee. Often arranged by websites or mobile apps which match travellers and drivers. Previously known as a taxi, Uber is an example.

Term	Meaning
Safe Systems design	A road safety approach which recognises that road users will make mistakes, but no one should be killed or seriously injured when a crash occurs. It involves considering the responsibility shared by all, working towards net zero deaths and serious injuries.
Shared zone	A road or network of roads where space is safely shared by all road users, including pedestrians, wheelers, and drivers.
TAC	Transport Accident Commission
Time-based parking restrictions	Limits on the length of stay in a parking bay, used to increase turnover of parking.
Traffic calming	Physical design features of streets used to reduce the speed of vehicles and increase the safety of other road users, such as pedestrians and wheelers.
Turn-off lay-by	A place at the side of the road where a vehicle can stop for a short period of time without interrupting other traffic.
User-based parking restrictions	Any limit on the type of user who can legally use the parking bay. This ensures access to parking bays for a specific user group (for example, people with disability parking permits).
Wayfinding	Signage and other information providing navigational assistance to key destinations and allowing the user to understand their location and surrounds.
Wheeling	All modes of wheeled transport including bicycles, scooters, skateboards, roller-skates, wheelchairs, and mobility scooters.
Wombat crossing	A zebra crossing on a raised platform. This increases pedestrian priority when crossing the street and encourages drivers to slow down.

2 Background

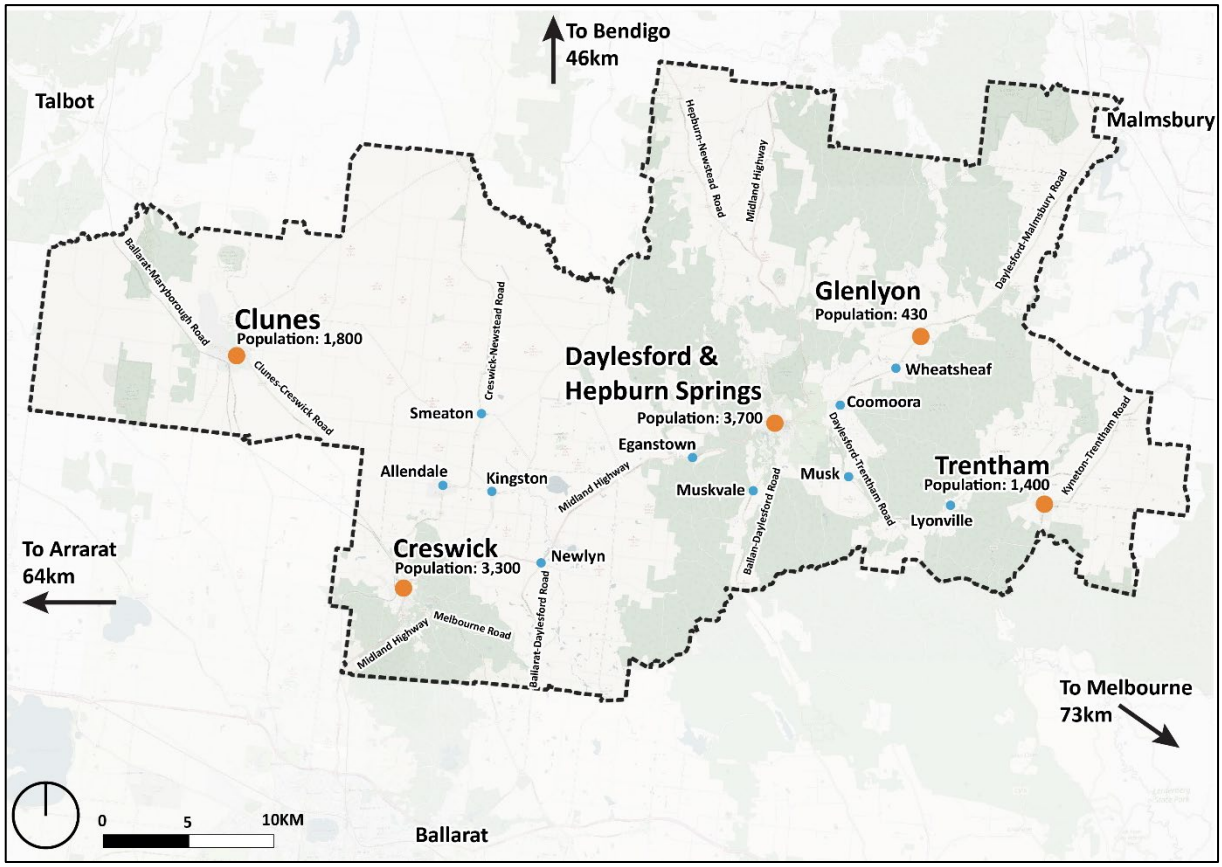
Hepburn Shire is home to a steadily growing – and ageing – community and its tourism assets attract many visitors. Its transport network is car-centric, with limited public transport coverage.

This Chapter highlights some of the key transport issues experienced in Hepburn Shire, that the ITS will address. The accompanying Background Report includes a more detailed analysis.

2.1 Context

In 2021, Hepburn Shire had a resident population of about 16,600 people. The towns (Clunes, Creswick, Daylesford/Hepburn Springs, Glenlyon and Trentham) house two-thirds of the Shire's total population. Towns and smaller settlements are shown in Figure 2-1 below.

Figure 2-1: Hepburn towns and settlements

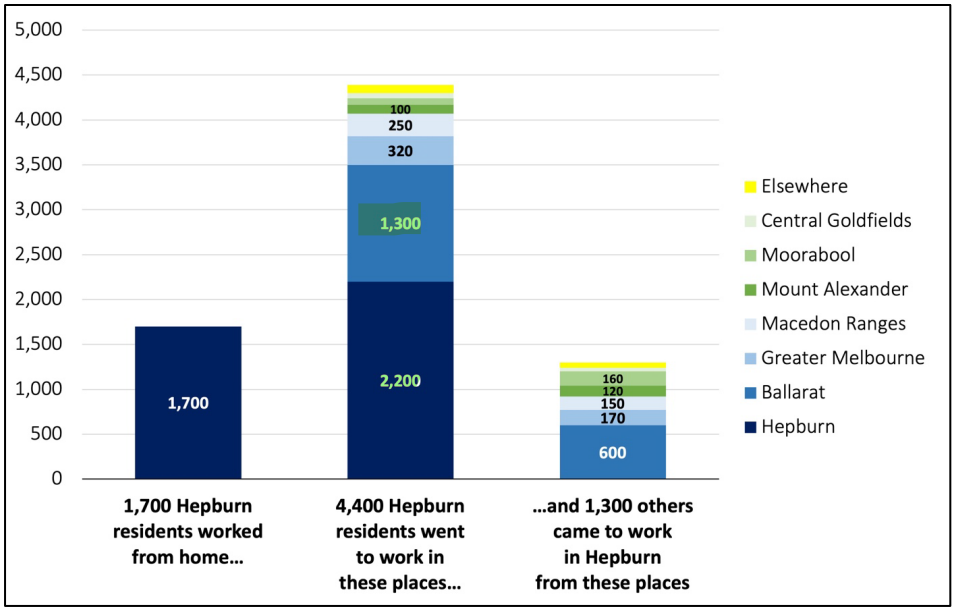


Source: M&PC (2024)

Residents often travel to places outside of Hepburn for work, transport connections, shopping or personal business. These places include Ballarat, Castlemaine, Kyneton, and Woodend, as well as Greater Melbourne.

As shown in Figure 2-2 overleaf, just under 30% of the Shire's 6,000 working population worked from home in 2021, and about 36% travelled to work in places outside the Shire, particularly Ballarat and Greater Melbourne. Jobs within the Shire also attracted workers from outside, especially Ballarat.

Figure 2-2: Journeys to work to and from Hepburn Shire



Source: M&PC analysis of ABS 2021 Census

2.2 Key challenges facing the Shire

Hepburn Shire's transport network has a range of challenges that the Integrated Transport Strategy will address. These include:

- Environment and climate
- Increasing congestion, parking demand, and road maintenance costs
- Infrequent and limited public transport
- Poor quality walking and wheeling infrastructure
- Poor and confusing wayfinding
- Pressure from future growth and change
- Public safety.

2.2.1 Pressure from future growth and change

Future population and housing needs

Hepburn Shire grew from 14,400 to 16,600 residents between the 2011 and 2021 Censuses. Growth is expected to continue to 18,700 residents by 2036, according to Victoria in Future 2023 projections.

Most of the future growth will be concentrated in the larger towns. Hepburn Shire's new town structure plans for Clunes, Creswick, Daylesford, Glenlyon, Hepburn and Trentham will provide clearer guidance and certainty for their future growth and protection.

Ageing population

In the 2021 Census the median age of the Shire's population was 52 years, the seventh highest of Victoria's 79 local government areas. By 2036, Victoria in Future predicts that 30% of Shire residents will be over 70 years old (and 20% will be over 75).

This change will prompt more forward planning and investment in safer transport infrastructure and alternatives to car use. Older people usually have less mobility and they drive less often than people of working age. From 75 years, people have to self-assess their driving ability and notify VicRoads of any issues. Many would like to walk or wheel more but are often deterred by substandard facilities, health and safety concerns.

Tourism and the visitor economy

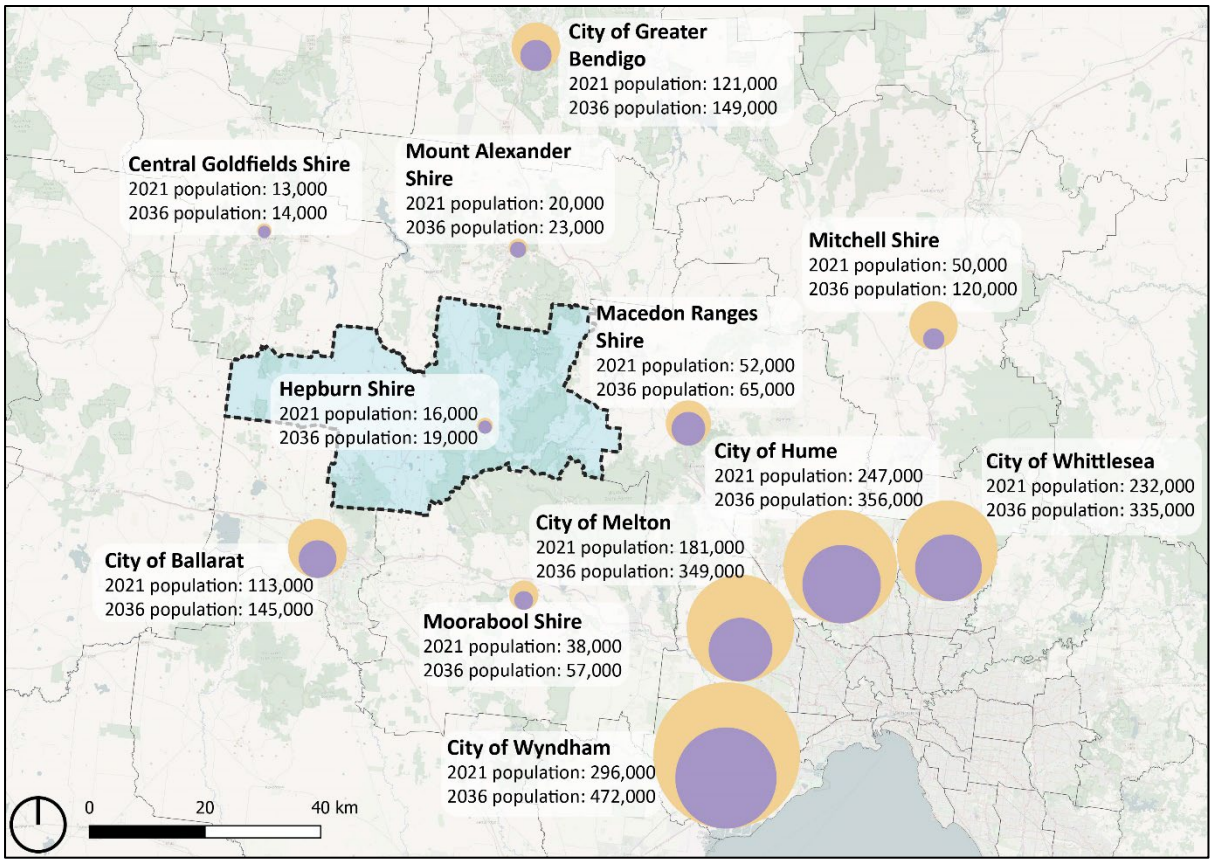
Tourism in Hepburn Shire has been increasing in recent years and has largely recovered from the effects of COVID-19. The Shire's tourism industry attracted 1.2 million domestic visitor nights and nearly 900,000 domestic day trips in the year up to March 2023.

Visitors to Hepburn Shire are primarily on weekends. During most Saturdays and Sundays, the 'daytime population' of the Shire is probably well over double that of the resident population. The majority of visitors come by private car, producing large increases in traffic and demand for parking. This particularly affects key Shire tourism centres like Creswick, Clunes, Daylesford, and Hepburn Springs which take most of the visitors.

Growth in surrounding areas

The population of areas surrounding Hepburn Shire are projected to grow significantly. This will place pressure on Hepburn Shire as a regional tourist destination for the greater region surrounding Hepburn. Figure 2-3 below outlines the growth in population to 2046 of the regions surrounding Hepburn based of Victoria in Future data from 2023.

Figure 2-3: Population growth in local government areas surrounding Hepburn Shire to 2036



Source: M&PC analysis of Department of Transport and Planning data (2024)

Nearby, Ballarat is experiencing significant population growth; it is expected to increase by 31,000 people between 2021 and 2036, a 28% increase. A significant proportion of this growth will be in new land release areas north of the Western Freeway (Miners Rest and Mount Rowan). This will increase traffic on Midland Highway, especially between Ballarat and Creswick.

Growth is also occurring along the Calder Freeway/Bendigo rail line corridor, in towns like Gisborne, Woodend, Kyneton and Castlemaine, which are important service centres for Shire residents.

Melbourne's growth will also continue, with the metropolitan area exceeding 8 million people by 2051. There will be 450,000 more people in the western suburbs by 2036, and another 400,000 more by 2051. Populated areas will grow steadily further west and closer to Hepburn Shire, increasing job and other travel opportunities there for Shire residents, and also generating many more visitor trips to the Shire.

The busiest roads in the Shire are the Midland Highway and Ballan-Daylesford Road in Daylesford, which both serve Daylesford-Hepburn Springs. Traffic volumes show that the Shire does not primarily act as a throughfare for traffic, rather Daylesford and Hepburn/Hepburn Springs are key trip attractors to the region. Therefore, as the population of regions around Hepburn Shire grow, it can be expected that traffic volumes across the Shire will also grow. To manage this growth, active transport networks across the Shire will need investment to improve safety for vehicles, pedestrians, and those wheeling. The growth in investment required is significant, because while road networks serve all properties, there are many streets without safe paths for pedestrians and wheeling. For more information on traffic volumes in Hepburn Shire, please refer to the Hepburn Integrated Transport Strategy Background Paper.

2.2.2 Poor quality walking and wheeling infrastructure

Walking

Footpath provision is varied in the main settlements. In busy areas (like Vincent Street in Daylesford), footpaths get very crowded and conflicts between cars and walkers are common. Creswick has an increasingly busy centre along Midland Highway, where wide traffic lanes, angle parking and high truck volumes make pedestrian crossing difficult and affect the amenity in general.

Most areas close to town centres have footpaths on at least one side of the road. Smaller settlements like Allendale, Broomfield, Glenlyon, Newlyn North and Smeaton have little or no dedicated footpaths, so people have to walk on grass verges or on the road.

Figure 2-4 to Figure 2-7 below depict the existing walking network in Hepburn Shire, with footpaths only found in Clunes, Creswick, Daylesford and Hepburn Springs, and Trentham. There is a small network of footpaths outside of these towns, including on Midland Highway in Newlyn and small sections in Smeaton.

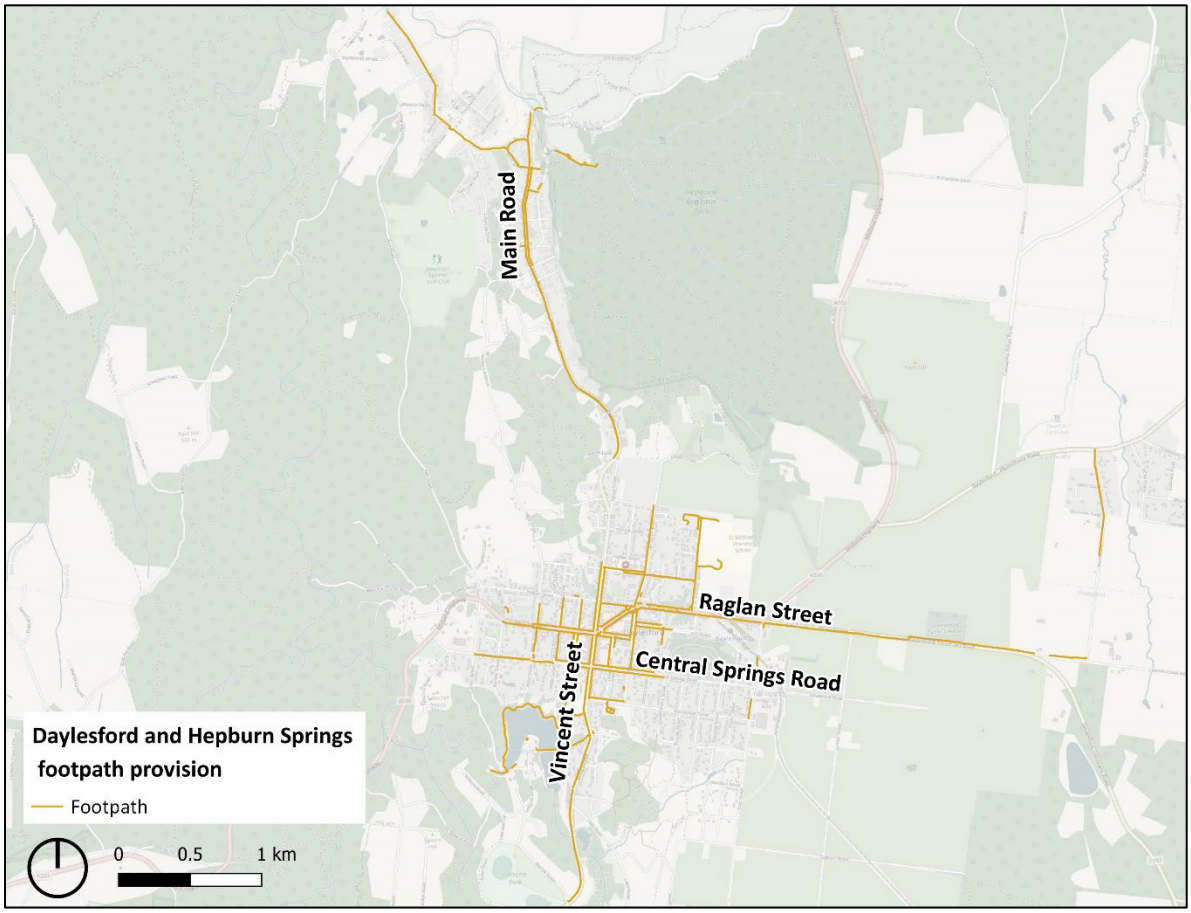
Figure 2-4: Clunes existing footpath network

Source: M&PC (2024)

Figure 2-5: Creswick existing footpath network

Source: M&PC (2024)

Figure 2-6: Daylesford and Hepburn Springs existing footpath network



Source: M&PC (2024)

Figure 2-7: Trentham existing footpath network

Source: M&PC (2024)

The existing footpath network in Hepburn Shire is primarily located within the larger townships. Key streets within these townships are provided with footpaths, with Creswick and Daylesford having a higher provision of footpaths along residential streets.

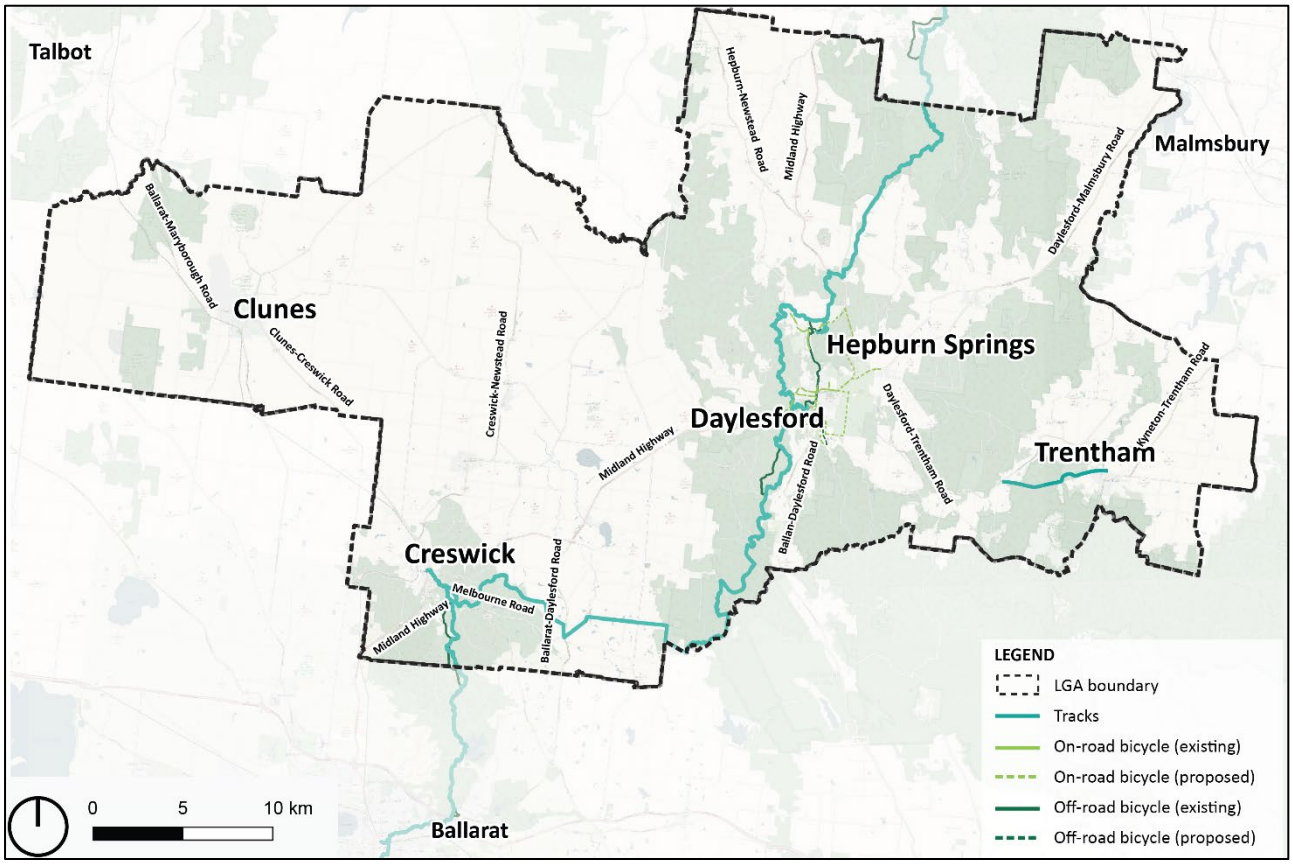
Missing or substandard footpaths discourage people from walking to everyday services, such as children walking to school, families walking to parks, or individuals walking to the local shops. Car-centric streets are more difficult for walkers, wheelers and people who are mobility impaired. Whilst it is important to retain the heritage character of township streetscapes, there is also a need to provide better and safer infrastructure for vulnerable road and street users, safely separated from vehicle traffic.

Wheeling

Wheeling is a significant pastime in the Shire, but bicycle and e-mobility use is not frequent for routine travel needs. Wheeling infrastructure is limited apart from dedicated recreational bicycle tracks. On-road bicycle lanes often have limited separation from traffic and their width and surface quality varies.

Figure 2-8 below depicts the existing wheeling network and tracks around the Shire.

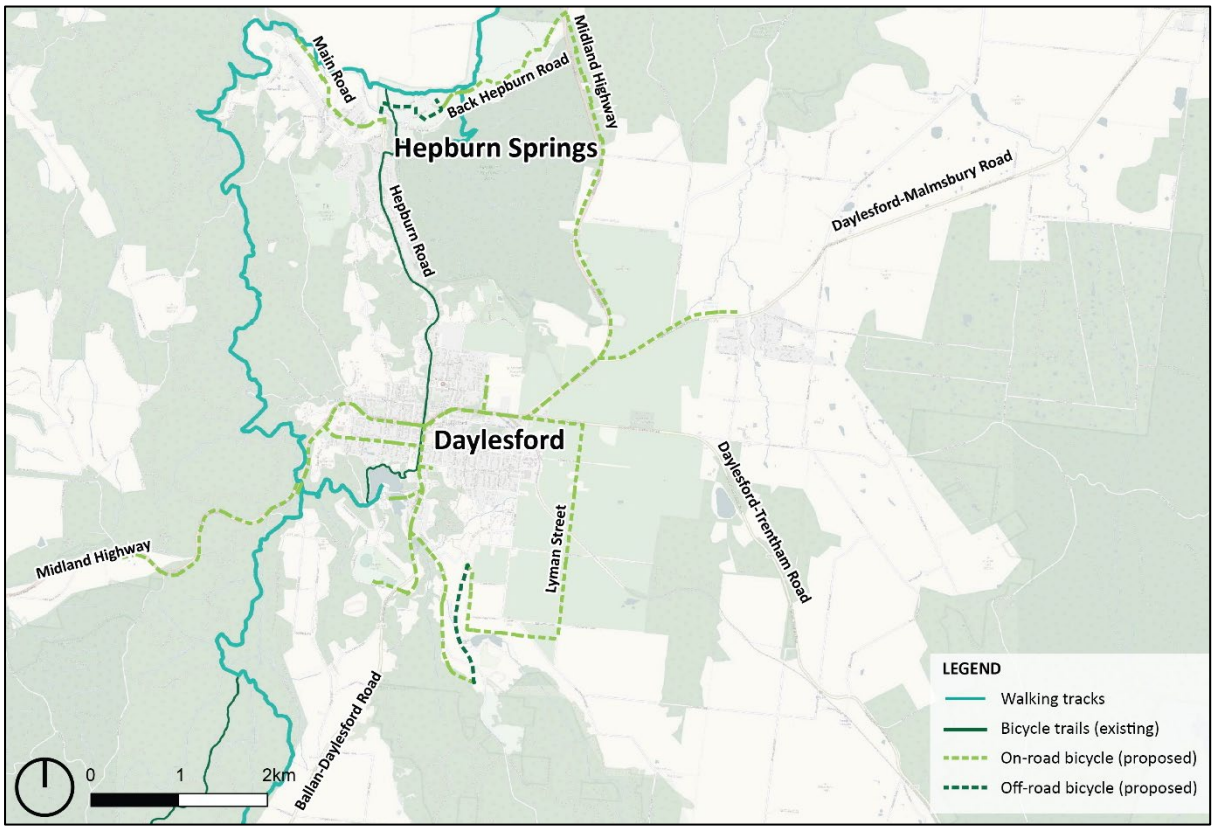
Figure 2-8: Wheeling and trail network in Hepburn Shire



Source: M&PC (2024)

Figure 2-9 overleaf shows Daylesford and Hepburn Springs in more detail.

Figure 2-9: Daylesford and Hepburn Springs wheeling and trail network



Source: M&PC (2024)

Despite being encouraged recreationally around the Shire's tourist centres, wheelers are not generally provided for in town centres. Locals and visitors have to ride on potentially busy roads or choose another mode of transport. Longer-distance wheeling along roads like Midland Highway can be very risky, especially where paved shoulders are absent and vehicle traffic is busy.

Most recreational trails are around Daylesford, Hepburn Springs, and Creswick, with some near Clunes and Trentham. There are opportunities for extended recreational trails throughout the Shire, to connect towns, smaller settlements and regional tourism links.

Improved wheeling infrastructure can increase the number of people who wheel in the Shire. This will probably become even more important as e-bikes and other forms of micro-mobility emerge and are legitimised through new road rules. It is also worth noting that some types of wheeling increase safety risks and have greater impacts on others than traditional bicycle riding. These new risks and impacts need to be understood and addressed through policy, regulation, education and infrastructure changes.

2.2.3 Infrequent and limited public transport

Public transport in the Shire is not convenient for residents and even less convenient for visitors. Services are very infrequent and do not connect well with each other. Regional bus and coach services only run a few times a day and do not always link up with V/Line trains. This results in long waits and extended journey times compared with car use.

Railway stations at Creswick and Clunes are served by the Maryborough line and have only two trains in each direction each day. A higher level of service would attract significantly more passengers; for example, Beaufort on the Ararat Line has a similar population to Clunes but it has five train services a day each way (150% increase). It produces four times the patronage of Clunes (400% increase), and

seven times that of Creswick (700% increase). More services would make trains a much more viable option for people travelling to centres like Ballarat, Maryborough and Melbourne.

The most frequent public transport service in the Shire is the town bus service between Creswick and Ballarat. All other bus and coach services run very infrequently to a variety of destinations including Ballan, Woodend, Kyneton and Castlemaine. These typically connect to train services as well as the towns themselves, but only have services twice a day at most. This makes it very difficult for people to travel by public transport and affects the independence of those who do not own cars, such as young people, older people who do not drive, and people with a disability. It also increases the cost of living and reduces transport safety in the Shire, with motorised transport contributing significantly to these factors.

Most of the Shire's smaller settlements do not have access to any public transport at all. Coaches run through settlements like Allendale, Bullarto, Lyonville, Musk and Smeaton but with very few services a day only serving limited destinations.

As people age, their ability and confidence driving long distances reduces. Having easier access to key facilities such as health services becomes more important at the same time. Good access to public transport services enables more people to live longer and healthier lives in smaller settlements with independence.

Better coach services connecting to trains could also help tourists travel to the Shire without a car, which would reduce visitor vehicle traffic in centres like Daylesford.

2.2.4 Environment and climate

Emissions reduction

Reducing greenhouse gas emissions is vital to limiting climate change. Transport produces about 20% of Australia's annual emissions, and most of this is from cars and light commercial vehicles. In the Shire, transport is 33% of emissions from local activity, with visitors adding a similar amount, mainly due to high levels of motor vehicle use.

Hepburn Shire has been proactive with climate action by supporting Z-NET Hepburn Shire, a community partnership working toward net-zero emissions, as well as through Council plans and strategies.

Electric vehicles are a key component of Hepburn Shire's emissions reduction approach. EV uptake has been slow in Australia, but increased rapidly in 2023. Charging infrastructure will increase in importance as EV ownership increases. Hepburn Shire has already begun installing chargers as a part of the Hepburn Z-NET program, but more will be needed, particularly to support Shire visitors (many residents will have the option of home charging as well).

Research has shown that changing to electric propulsion will not solve the vehicle emissions problem, because a significant amount of emissions come from materials used in the vehicle and road manufacturing and maintenance processes. Research suggests that even with a 100% zero emission vehicle fleet, we would still need to reduce vehicle kilometres travelled per person by 20%. Some of these trips can be reduced by avoiding the travel (such as working from home) but other trips will still be necessary and some of those will need to be completed by other modes in order to reduce emissions.

Climate change impacts

Hepburn Shire is vulnerable to increasingly severe extreme weather effects, particularly bushfires and floods. Since the mid-1990s, bushfires have become more dangerous, fire seasons have commenced earlier and lasted longer, and this is expected to continue. Severe flooding is also expected to increase in frequency. This will cause increased damage to roads and other infrastructure (including houses, businesses and farms) and will displace residents.

As well as reducing emissions to limit climate change, it will be important to protect the transport system from the effects of extreme weather. Ensuring emergency access and escape routes for extreme events, as well as keeping transport systems well-maintained and working safely, will be increasingly important.

2.2.5 Public safety

Road crashes and consequences[1]

Over two decades, between 2000 and 2022, there were 1,027 reported road crashes in the Shire, resulting in 43 deaths, about 420 serious injuries and 920 other injuries. 81% of fatalities and injuries were motor vehicle users, 14% were motorcyclists and 5% were pedestrians or bicycle users.

Crash rates and severity have varied from year to year since 2000. There was a noticeable drop in crashes in the Shire during COVID lockdowns in 2021, but they increased significantly in 2022 and again in 2023, (as they have elsewhere).

Road crash statistics for Hepburn Shire since the year 2000 are summarised in Table 2-1 below.

Table 2-1: Road crashes in Hepburn Shire, 2000-2022

	Total	%	Annual average	Annual average per thousand residents			
				Hepburn Shire	Victoria	Greater Melbourne	Regional Victoria
Recorded road crashes	1,027		45	3.00	*2.64*	*2.56*	*2.85*
Consequences for crash participants							
Fatalities	43	*2%*	2	0.123	*0.053*	*0.034*	*0.107*
Serious injuries	421	*21%*	18	1.23	*1.02*	*0.93*	*1.28*
Other injuries	922	*45%*	40	2.70	*2.42*	*2.36*	*2.58*
No injuries	646	*32%*	28	1.90	*2.99*	*3.19*	*2.42*
Total consequences	**2,032**	***100%***	**88**	**5.95**	***6.48***	***6.52***	***6.39***
Fatalities and injuries by road user							
Pedestrians	35	*3%*	2	0.10	*0.26*	*0.29*	*0.17*
Bicycle users	32	*2%*	1	0.09	*0.23*	*0.26*	*0.16*
Motorcycle users	190	*14%*	8	0.55	*0.36*	*0.30*	*0.51*
Motor vehicle users	1,125	*81%*	49	3.29	*2.63*	*2.46*	*3.11*
Unknown	4	*0%*	0	0.01	*0.01*	*0.01*	*0.01*
Total	**1,386**	***100%***	**60**	**4.05**	***3.49***	***3.33***	***3.97***
Fatalities and injuries by reported speed zone							
40 or less	12	*1%*	1	*0.03*	*0.11*	*0.13*	*0.06*
50	102	*7%*	4	*0.30*	*0.52*	*0.52*	*0.50*
60	315	*23%*	14	*0.93*	*1.28*	*1.40*	*0.96*
70	5	*0%*	0	*0.02*	*0.28*	*0.33*	*0.16*
80-90	241	*17%*	10	*0.70*	*0.53*	*0.58*	*0.40*
100 or more	642	*46%*	28	*1.88*	*0.64*	*0.25*	*1.73*
Unknown	69	*5%*	3	0.20	*0.14*	*0.13*	*0.16*
Total	**1,386**	***100%***	**60**	***4.05***	***3.49***	***3.33***	***3.97***

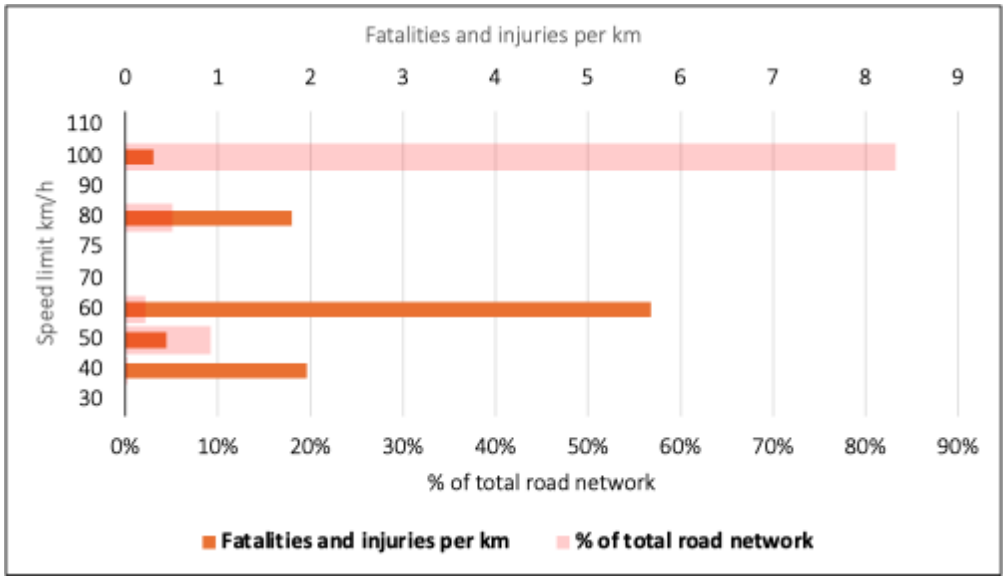
Source: M&PC analysis of CrashStats data, 2000-2023

Road crashes in the Shire are generally concentrated around urban areas and on main arterial roads. 46% of fatalities and injuries were on roads with 100km/h speed limits, and 23% were on 60km/h roads in town areas. By length, over 80% of the Shire's roads are 100km/h, while only 2% are 60km/h

[1] Note that the crash data presented here does not cover 2023, so it does not include the Daylesford incident of November in that year, when five people were tragically killed outside the Royal Daylesford Hotel.

and 9% are 50km/h. This means that fatalities and injuries are far more frequent per kilometre on 60km/h roads as shown in Figure 2-10 below.

Figure 2-10: Fatalities and injuries per km of road, Hepburn Shire 2000-2023



Source: M&PC analysis of CrashStats data, 2000-2023

Despite introduction of a 'blanket' 50km/h urban area speed limit in Victoria in 2001, many urban roads are still set at 60km/h, especially State-managed roads, which are exempt from the 50km/h rule (unlike NSW, where all urban roads are 50km/h maximum). Council could consider a range of actions to make vehicle speeds safer for the community. This could include advocacy to State government or request for lower speed limit trials.

Research clearly shows the risk of death or serious injury in crashes increases substantially with vehicle speed. Likewise, decreases in urban speed limits below 60km/h can reduce the risk of casualty. NSW research shows that the risk of death to a pedestrian in a crash with a vehicle is 10% if the speed zone is 30km/h, but increases to 99% in 60km/h zones. High urban speed limits are particularly dangerous for walkers and wheelers and discourage many people from walking locally.

Personal safety and security

Beyond the reported road crash data, it is also vital to address perceptions of safety and personal security that people experience in public areas. Individual perceptions of personal safety and security when in the community can be influenced by a number of factors, including:

- Age
- Cultural background
- Gender identity
- Health conditions
- Level of physical mobility
- Sexual orientation.

People experience places and travel differently, depending on any of the above factors[2]. Such differences should be reflected in an accessible and inclusive transport system which allows people of all identities, backgrounds, abilities, and ages to travel safely and effectively.

[2] ARUP & University of Westminster 2021, *Queering Public Space: Exploring the relationship between queer communities and public spaces*, ARUP, accessed 22 April 2024.

2.2.6 Increasing congestion, parking demand and road maintenance costs

Impacts of tourism

During visitor peaks, Shire roads carry large volumes of traffic, and townships experience high demand for parking. The presence of so many vehicles produces congested streetscapes, reducing the attractiveness of town centres and safety for walking and wheeling. These effects are worsened by the increasing size of modern vehicles.

During weekends, long traffic queues can build up in and around key Daylesford locations. Traffic is often backed up significant distances along key roads, particularly Howe Street/Midland Highway and Vincent Street. The pictures in Figure 2-11 below were taken around lunchtime on a Sunday in late July, showing congestion that is typical at weekends.

Figure 2-11: Congestion in Daylesford

Source: M&PC (2023)

Freight and road maintenance

The Midland Highway between Ballarat and Castlemaine (via Daylesford) was removed from Victoria's Primary Freight Network, however truck traffic remains high, particularly between Ballarat and Daylesford, and through Daylesford (primarily along Albert Street, Howe Street and Raglan Street), where truck volumes of around 1,200 trucks a day are common. Creswick also has significant truck flows of about 700 a day through the centre of town.

Truck emissions can have significant impacts on air quality. Whilst this is not typically a serious problem outside Australia's largest urban areas, trucks in the centre of towns also impact the comfort, amenity and safety of people in those centres. This is particularly notable in Daylesford and Creswick.

Rail freight travels through the Shire along the Ballarat to Maryborough line. While the Murray Darling Basin Plan once proposed adding standard gauge track to this route, which would bring more rail freight through the Shire, there is no funding left for this in the current plan. Since most of the additional rail freight would be from distant areas to the north and west, it is unlikely that it would have affected truck volumes on Shire roads significantly.

Hepburn Shire has an extensive network of roads that must be maintained, comprising over 600km of sealed roads, 840km of unsealed roads, 45km of footpaths, 80km of kerb and channelling, 165 bridges and 34km of drains. Heavy vehicles exacerbate wear and tear on roads in the Shire. Steadily increasing traffic, increased stormwater and flooding are also significantly affecting the condition of roads, which in turn affects user safety, fuel consumption and wear and tear on vehicles.

The World Bank 2020, *Handbook for Gender-Inclusive Urban Planning and Design*, The World Bank, February 2020, Accessed 22 April 2024.

2.2.7 Poor and confusing wayfinding

Wayfinding signage in many of the Shire's towns appears to have grown in an ad hoc manner over many years. Different colours, typefaces, sizes and types of signs are confusing, and sometimes contradict each other.

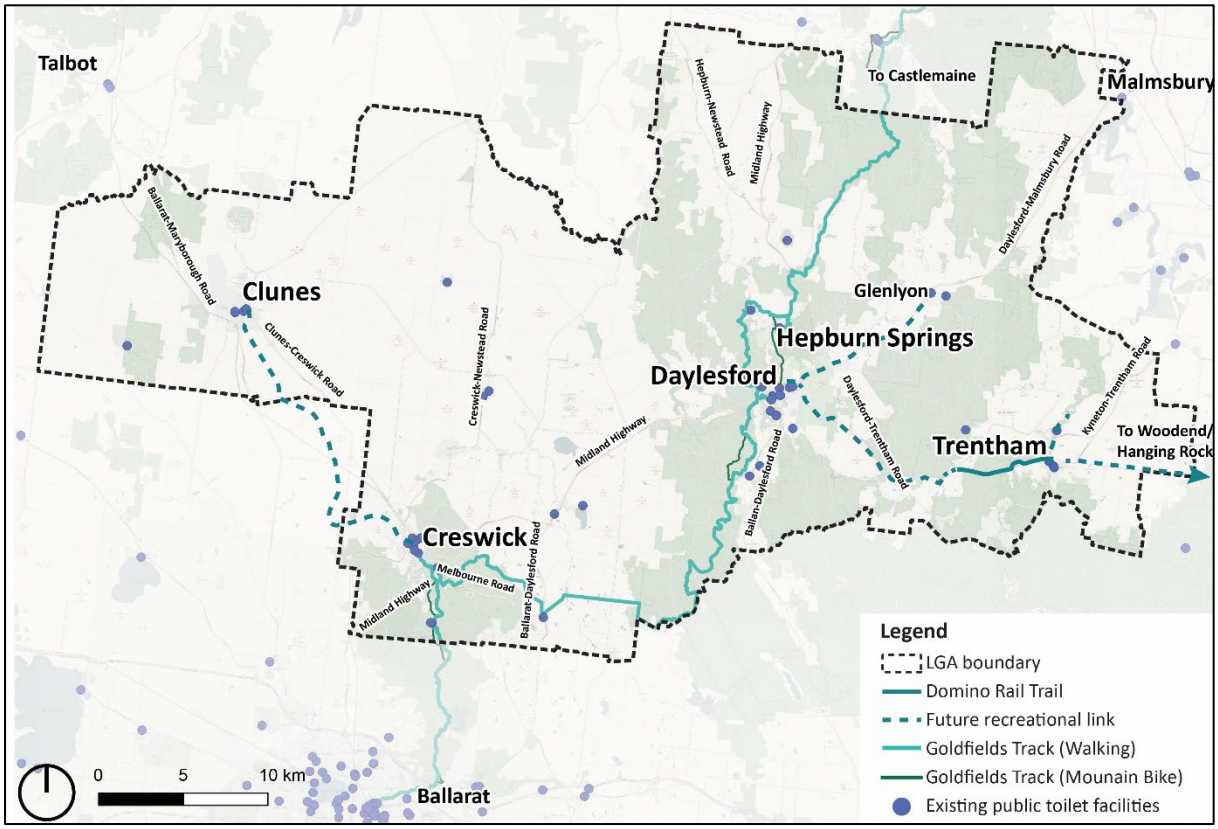
Wayfinding in areas with significant tourism (such as Creswick, Clunes, Daylesford, Hepburn Springs and Trentham) should use consistent, recognisable designs and colours and identify key visitor destinations and amenities in the area with distances and travel times by primary modes of transport, including walking and wheeling. Good signs are also important for walking trails throughout the Shire, showing distances, directions, difficulty grading of the trails, and maps. Currently, signs for recreational trails are variable in terms of provision and design. Some tracks have blue directional signs, some (such as Lake Daylesford) have large maps, some (such as the Goldfields Track) have small branding and arrows and some have no signage at all.

2.2.8 Varied provision of public toilets

Public toilets are vital for all high quality and accessible public spaces, even more important due to Hepburn's status as a tourist destination. Public toilets provide an essential service for some in the community, including parents with young children, people needing to take medication, older people, and women. Additionally, in order to create high quality recreational spaces, public toilet provision is required.

Figure 2-12 below outlines the current provision of public toilets across the Shire in relation to existing and future recreational links. It shows that toilets can be found in all townships, however, provision is varied outside of these areas. See Appendix B for maps of public toilet provision in townships.

Figure 2-12: Public toilets across the Shire with key existing and future recreational links



Source: M&PC (2024)

Along the Goldfields Track within Hepburn, toilets are only available at six locations with the approximate 97km stretch. Three of those toilets can be found within 11km of each other in the Daylesford/Hepburn Springs area, and another three within 6km of each other in the Creswick area. Outside of town centres and excluding the Goldfields Track, there are 13 public toilets through the Shire, located:

- Anderson's Mill, Smeaton
- Coliban River Scenic Reserve, Trentham
- Hogans Lane, Sailors Falls
- Jubilee Lake Reserve, Daylesford
- Lyonville Springs Road, Lyonville
- Mount Franklin
- Newlyn Recreation Reserve, Newlyn
- Newlyn Reservoir, Newlyn North
- Sailors Falls Mineral Spring, Sailors Falls
- Smeaton Football Ground, Smeaton
- Suttons Lane, Glenlyon
- Ullina Recreation Reserve, Ullina.

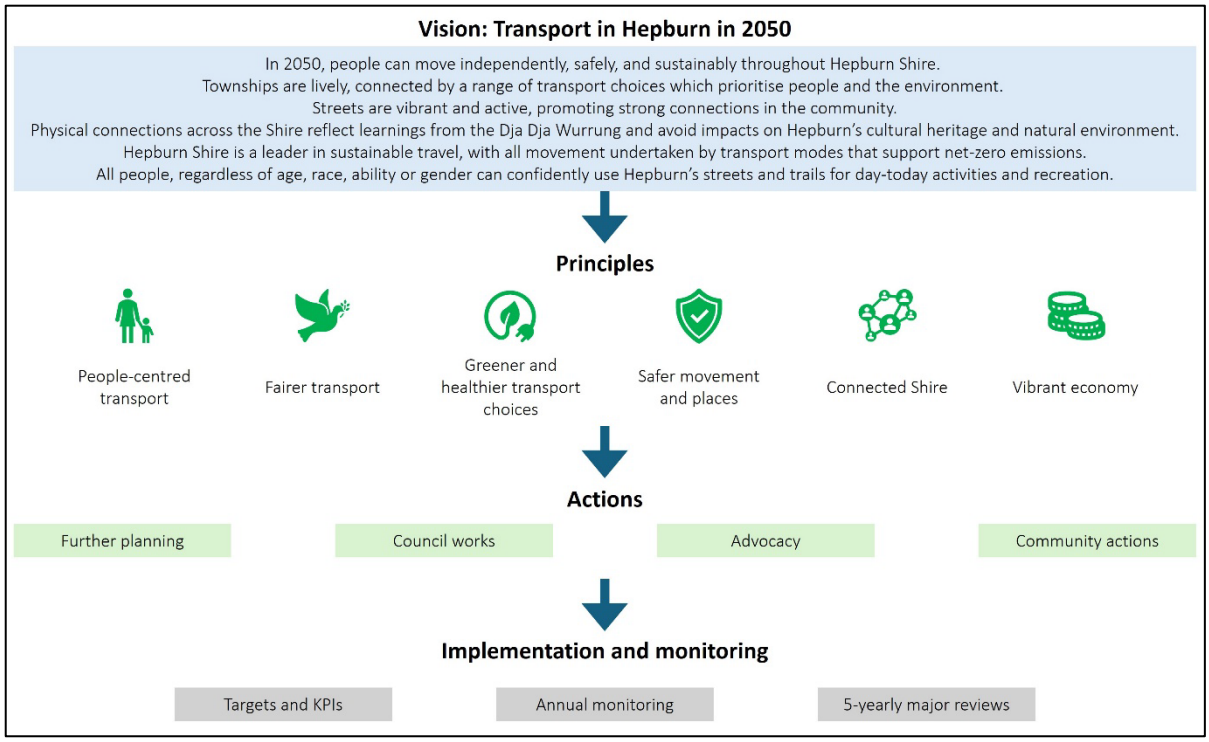
Locations for additional public toilet provision are outlined in Section 5 below.

3 Structure of the ITS

The ITS envisages what transport in Hepburn should ideally be like in thirty years' time, and provides strategic guidance to achieve this. Importantly, it also proposes a process by which priorities can be set, short-term actions determined (capital works, advocacy actions and so on), and progress and outcomes monitored regularly.

The ITS is accompanied by a Going Forward Plan which lists the actions and monitoring for the first ten years (2024-2034). This plan will be updated regularly, with annual monitoring of progress to help inform any changes in directions and priorities. The ITS structure is illustrated in Figure 3-1 below.

Figure 3-1: ITS structure and process



Source: M&PC (2023)

3.1 Types of actions

All actions will be driven by the Shire, but responsibility for their implementation will vary. For example, advocacy activities will promote actions for State Government and other agencies to implement, whereas Council-funded capital works will be implemented by Hepburn Shire.

3.1.1 Further planning

Further planning will be required by Hepburn Shire to develop supporting strategies and plans to deliver ITS strategic actions. This includes developing new or updated actions (for example, a Car Parking Strategy), or amendments to the Planning Scheme. It also covers continued work to ensure consistency between the ITS and the town and rural area development planning currently under way.

3.1.2 Council works

Some actions require physical works (construction or maintenance) to be funded through Hepburn Shire's capital works programme. The implementation plan ensures that they are realistic and fundable, while prioritising projects that support the strategic directions of the ITS such as:

- Infrastructure maintenance and upgrades (ensuring the existing network of roads and paths is fit for purpose)
- Improved walking and wheeling paths, parking, and crossings
- Improved car parking and management including electric vehicle (EV) charging facilities
- Community and visitor information, such as online information and new wayfinding signage.

Prioritising works for Council funding each year will be a key role for the 10-year rolling implementation plan.

3.1.3 Advocacy

Advocacy covers liaison with key agencies and stakeholders to promote and advocate for the community's transport needs. This advocacy will be directed to a range of agencies including:

- Community bodies and groups
- Department of Transport and Planning and reporting agencies including
    - V/Line
    - Regional Roads Victoria
    - Public Transport Victoria
- Industry bodies
- Regional associations and partnerships including neighbouring Councils
- Tourism bodies
- Transport Accident Commission (TAC).

Where advocacy is required, Hepburn Shire will build evidence of the issues and opportunities that external bodies can assist with through new or refocussed actions. Hepburn Shire will build on established relationships (particularly with DTP) to understand the agency priorities, existing funding opportunities and build support for local improvement actions.

Actions that involve advocacy typically include public transport improvements and changes to the State managed road network or safety improvements on both local and State roads.

In particular, Hepburn Shire is currently experiencing a high level of road maintenance requests due to the effects of La Nina and the recent above average seasonal rainfall. Hepburn Shire is working to maintain roads and set appropriate speed limits. However, Hepburn Shire has no jurisdiction or ability to work on State managed roads throughout the Shire. Therefore, Hepburn Shire will continue to advocate for improvements on behalf of the community.

3.1.4 Community actions

Some actions will need community support and involvement. They will be delivered in partnership between Hepburn Shire and the Hepburn community, and could include:

- Community uptake and promotion of local solutions and transport schemes
- Crowd sourced/innovative local transport actions
- Local transport programmes involving community volunteers.

The ITS recognises that the Hepburn community has deep knowledge of the transport issues and ideas for improvements and actions that can assist to meet local needs. An element of the ITS seeks to

support members of the community to solve problems, partly by funding some actions, and through supporting actions such as community walking or wheeling programs.

3.1.5 Implementation and monitoring mechanisms

To ensure the strategy is a successful and ongoing process, it is important to:

- Allocate clear responsibility for action between Councillors, staff and teams
- Confirm funding for all actions, especially those implemented by Hepburn Shire
- Consult and engage with major stakeholders such as DTP, and with the community to track ongoing satisfaction and changing needs
- Plan for regular periods of review, including:
    - Annual tracking of progress against key targets and performance indicators to guide ongoing activities
    - Deeper reviews every five years, to revisit strategic directions and progress towards strategy targets, and update the ITS and implementation plans.

3.2 Community engagement for the ITS

The Hepburn Shire ITS has been developed with an understanding and consideration of community needs. These needs were informed by a community engagement survey open from September 2023 to 22 October 2023 which received 88 responses.

The survey asked questions about transport habits and preferences, and canvassed opinions on transport, barriers to use and potential improvements. It included a social map where respondents could show their ideas for opportunities or improvements to transport.

It is important to note that this survey cannot be extrapolated to the Shire as a whole because it does not represent a statistically valid sample of the population; it was a voluntary online survey. Nonetheless, it does provide some insights into travel and transport attitudes. These insights can be found in the Hepburn Shire Integrated Transport Strategy – Background Paper.

4 Transport vision and principles

Hepburn's transport future is driven by a clear vision of where we'd like it to be by 2050, with a series of underlying principles to guide the journey.

4.1 Vision for transport in Hepburn in 2050

In 2050, people have many options to move independently, safely, and sustainably throughout Hepburn Shire. Townships are lively, connected by a range of transport choices which prioritise local community connections and the environment. Streets are vibrant and active, promoting strong connections in the community. Physical connections across the Shire reflect Dja Dja Wurrung insights and law, minimising negative impacts on cultural heritage and natural environment. Hepburn Shire is a leader in sustainable travel, with all movement undertaken by transport modes that contribute to net-zero emissions. All people, regardless of age, race, ability or gender can confidently use Hepburn's streets and trails for day-to-day activities and recreation.

4.2 Principles for transport in Hepburn

Based on existing and expected challenges for travel and transport, the following principles will guide Hepburn's future transport system.

People-centred transport

The transport system prioritises people instead of creating conflicts between people and movement, making it easier and safer for everyone to travel. Roads are designed and managed to reflect the fact that transport is to move people and goods, rather than vehicles.

Fairer transport

Each transport investment increases transport choices and prioritises the needs of vulnerable and marginalised people, with a particular focus on meeting the transport needs of people with low incomes, people with disabilities, children, older people and diverse gender groups. Transport investment supports affordable access for everyone who needs it.

Greener and healthier transport choices

Greener transport options contribute to net-zero Shire emissions, preserve air quality, improve health outcomes and reduce car dependency. The Shire is a leader in green movement choices, including low and zero emissions vehicle use and higher active and public transport mode use. Town centre intensity reduces the need for motorised travel while creating stronger local economies and communities.

Safer movement and places

People feel safe when travelling throughout Hepburn. Streets are designed for people (not just cars) to facilitate walking, wheeling, social interaction and access to public transport. Public places are attractive, vibrant and inviting. Better road maintenance supports a safer road network for all users. Wildlife is accommodated through infrastructure and protected by appropriate speeds and behaviour.

A connected Shire

Hepburn's transport network provides access and mobility for people to places within and beyond the Shire. Improved public transport services, connections and access help to increase greener transport trips and reduce car dependency. People have easy access to more employment opportunities, community services, business, social and recreational interactions.

Vibrant economy

The Shire's transport networks enable low cost access to local goods and services and facilitate efficient movement of goods and people over longer distances. Local economic activity is supported by low cost transport options that save residents and visitors money which is converted into more local purchases in a wider range of local businesses. People have easy access to more education, employment, community services, business, social and recreational opportunities.

4.3 Future transport networks

To support Hepburn's growth as a major tourist destination, and movement of residents, future transport networks have been identified. These networks have informed actions outlined in the following chapter.

4.3.1 Walking and wheeling

Walking and wheeling safely around the local townships, settlements, the Shire and beyond will be prioritised. Primary and secondary active networks have been identified for each township in the Shire, outlined in Figure 4-1 to Figure 4-4 overleaf.

Primary links are links where there is likely to be the highest active movement in townships, generally along main streets. Secondary links allow connection from primary links to other destinations such as schools, public transport infrastructure, and key open spaces.

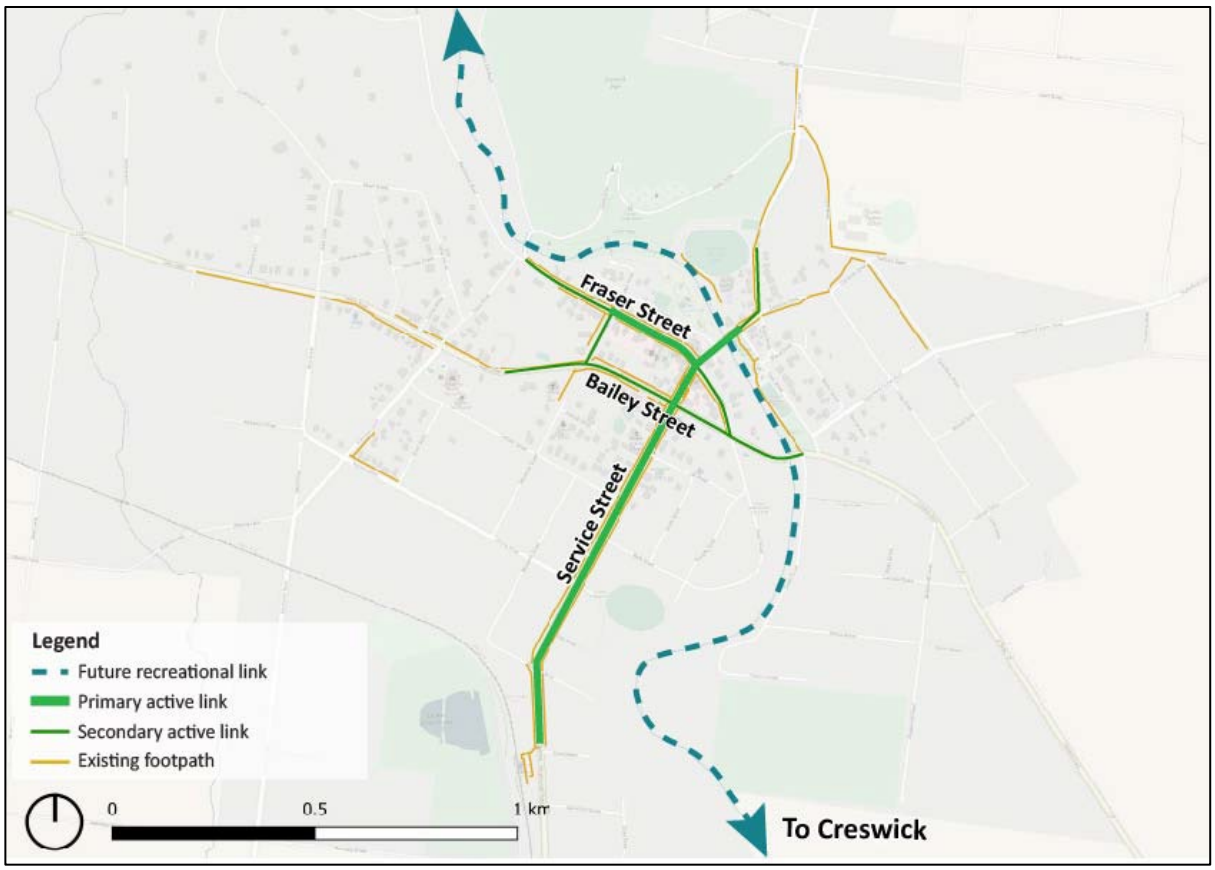
These networks will also be supported by the Shire-wide future recreational network outlined in Figure 4-5 below.

These networks should be provided with the following infrastructure in order to allow for safe and comfortable movement of people of all ages:

- Configured intersections to reduce space dedicated to private vehicles
- Formal footpaths/shared paths
- Increased canopy coverage
- Prioritised pedestrian crossing infrastructure at intersections
- Seating
- Street lighting (where appropriate)
- Wayfinding and signage (along primary route only).

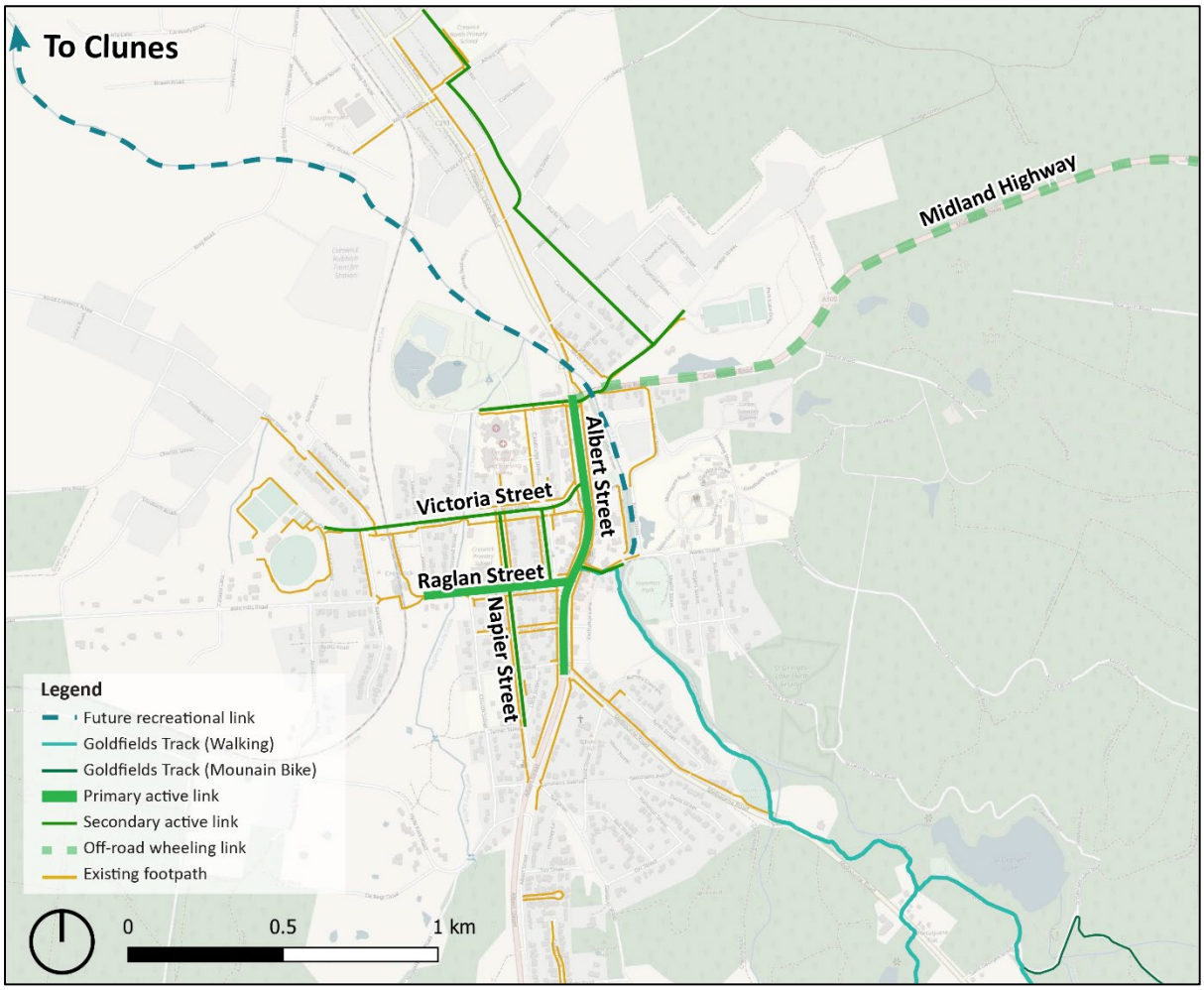
These networks will work to support DDA compliance of Hepburn Shire's streets and allow for movement of people of all ages and abilities.

Figure 4-1: Clunes future active network



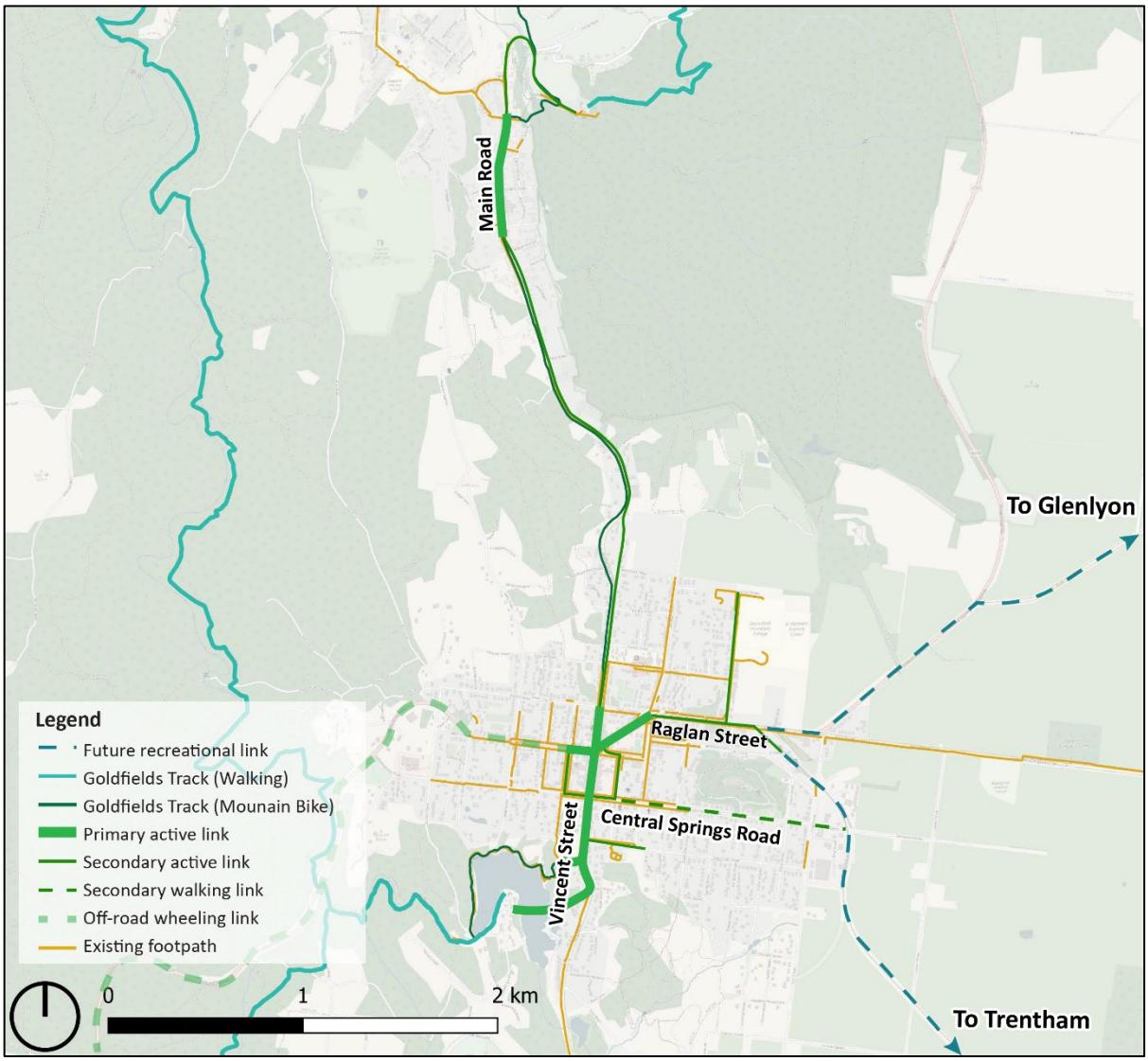
Source: M&PC (2024)

Figure 4-2: Creswick future active network



Source: M&PC (2024)

Figure 4-3: Daylesford and Hepburn Springs future active network



Source: M&PC (2024)

Figure 4-4: Trentham future active network

Source: M&PC (2024)

Case Study: University of the Third Age

The University of the Third Age (U3A) provides recreation and recreation opportunities for retirees. U3A Hepburn Shire (generally based in Daylesford), and U3A Creswick provide opportunities for people of any ability to experience their local area by foot.

These groups provide casual walking opportunities to allow people to stroll around the neighbourhood and have a chat, longer local walks, and bushwalking.

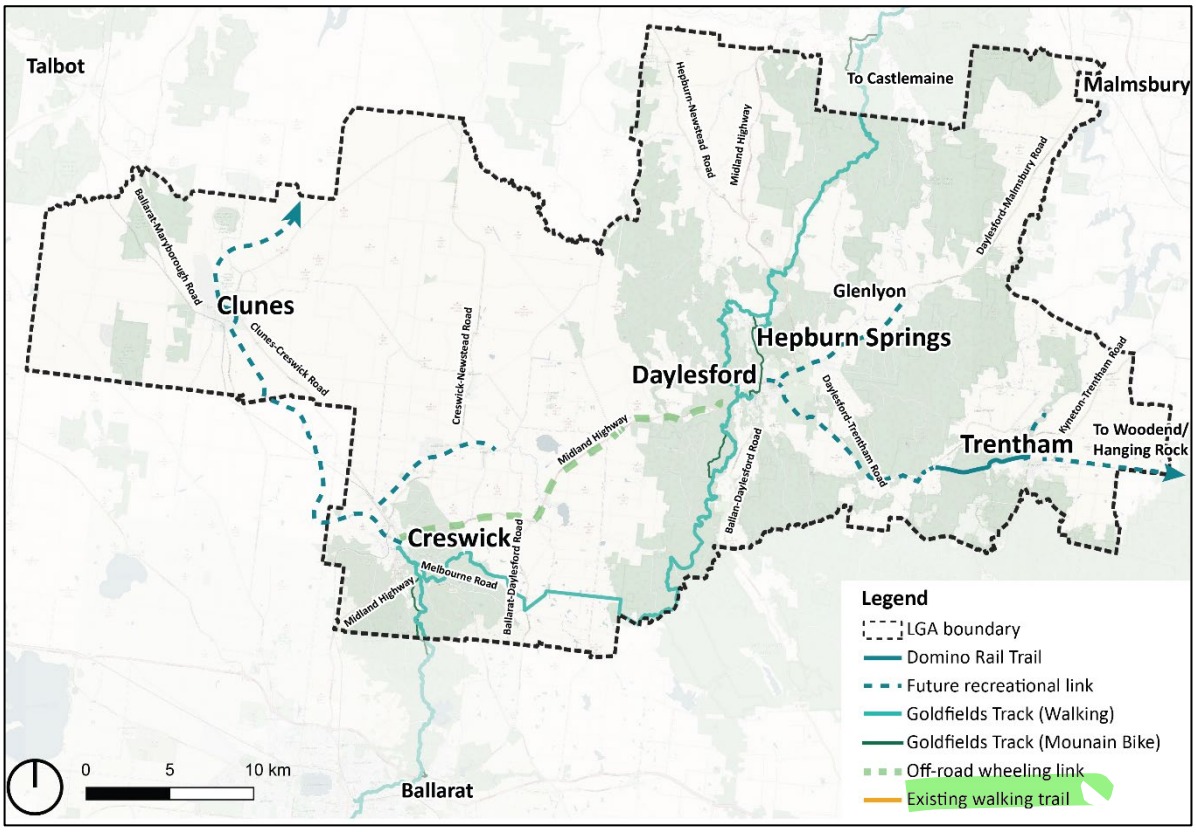
Groups such as U3A are an example of how the community uses transport and the natural environment to improve their health and wellbeing, and why investing in walking is vital for improving Hepburn residents' quality of life. Increasing the coverage of Hepburn's active transport network, and improving its safety and quality, will encourage more Hepburn residents to get active, just like the U3A members.

4.3.2 Recreation

A future primary recreational network has been developed for recreational walking and wheeling across the Shire. This network will guide where the key priorities for investment should be, and will support Hepburn's place as a key tourist destination in Victoria, and Australia. Hepburn's recreational network will support people of all ages and abilities in experiencing Hepburn's natural beauty. People will be able to move between key Hepburn townships on comfortable and safe trails or roadside

wheeling facilities. The future recreational network in Hepburn Shire, including the Dominio Trail, old railway reserves, and the Goldfields Track, is outlined in Figure 4-5 below.

Figure 4-5: Future primary recreational network in Hepburn Shire



Source: M&PC (2024)

Case Study: Ballarat Dementia Walk

In July 2021, the City of Ballarat open the Dementia-Friendly Forest and Sensory Trail in Woowookarung Regional Park. This trail is Australia's first dementia-friendly forest and sensory trail. Accessibility was a key priority of this trail, including physical accessibility for people of all mobility requirements, and consideration of sensory needs of some members of the community. The trail was designed in collaboration with people living with dementia and their carers, the health sector, community groups and the Wadawurrung Traditional Owners.

The trail includes clear and simple wayfinding and informative signage, and art installations, which provide a sense of place, and connects the visitor to their surroundings.

Past success: Wombat Trail, Trentham

In the 2011 Walking and Cycling Strategy, a priority work of the strategy was to provide the first half of the Wombat Trail in Trentham, travelling between Albert Street and Trentham Recreation Reserve via Trentham Public Park and Park Street.

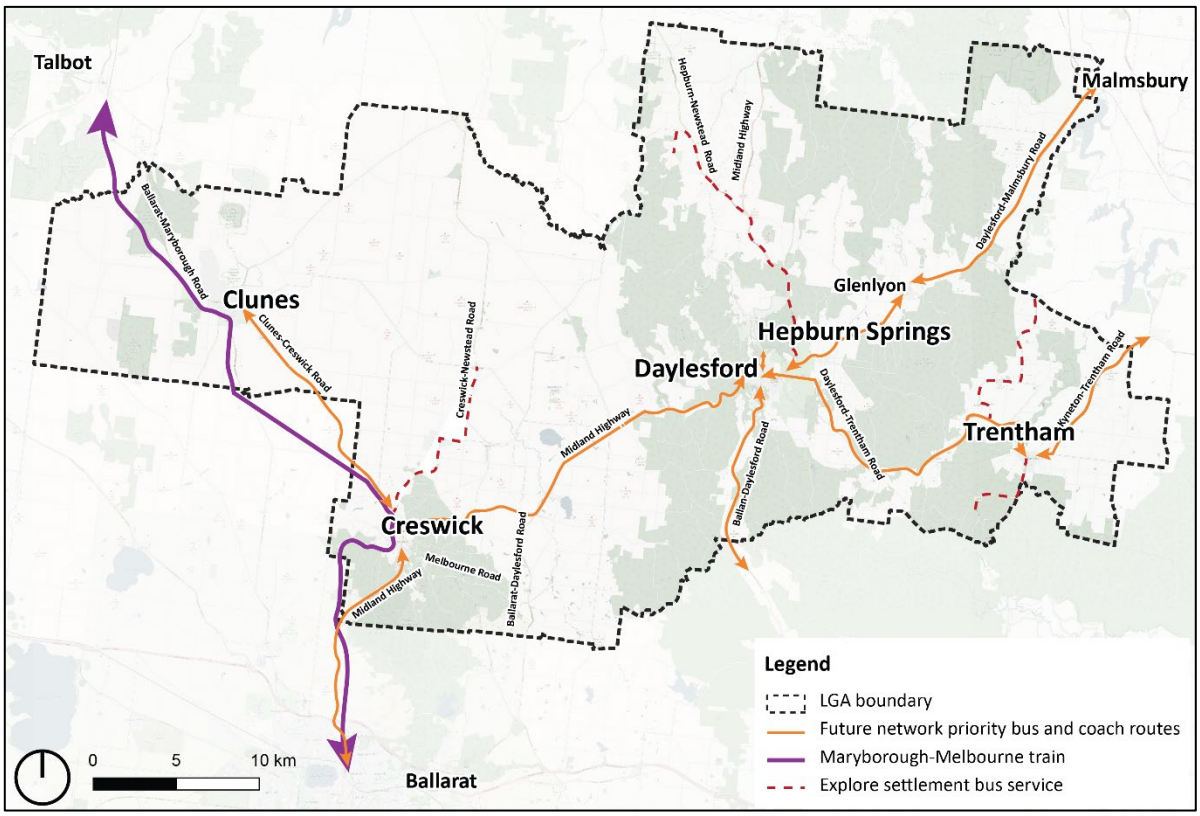
Since the release of this strategy, Hepburn Shire has installed wayfinding signage and mapping for the trail and added gravel to formalise the path.

4.3.3 Public transport

To support sustainable and accessible movement of tourists and residents across the Shire, a future public transport network has been developed. Bus connections between towns and settlements in Hepburn Shire and to key nearby towns will be prioritised. This will allow tourists to leave their car at home and travel to and within the Shire by public transport, support movement of people who are unable to drive such as older people, younger people, and people with a disability, and improve connections for commuters.

Priority routes for a future public transport network within Hepburn Shire is shown in Figure 4-6 below.

Figure 4-6: Hepburn Shire prioritised future public transport network



Source: M&PC (2024)

Community initiative: Community public transport information sessions

A Hepburn Shire community member has set up community information sessions regarding the available public transport services in the Shire for local residents. The information sessions seek to increase community knowledge of the available train, bus and coach services and timetables and how ticketing works in Hepburn Shire. These sessions are an example of the community working together to improve access to fair and sustainable travel around Hepburn Shire. Initiatives such as these require little funding, don't require advocacy to higher bodies, and can still make a significant positive impact.

4.3.4 Community transport

Community transport services enable residents to request chauffeured transport to medical, shopping and recreation activities. A range of community transport services already exist in the Shire such as *Central Highlands Rural Health Transport Assistance* and *Driving Miss Daisy®* both provide this type of

transport assistance at low cost to the user. Users typically include older people and people with reduced mobility who are unable to drive.

The Hepburn Shire Local Transport Benchmarking Study 2019 outlines that existing Hepburn community buses have significant downtime and limited eligibility. Community transport assets should be unlocked to help transport a larger part of the community. This should include young people, who are often not represented in these schemes, but due to the rural location of the Shire, are significantly limited in how they can travel. This can include attending after-school activities, social events and getting home after working late.

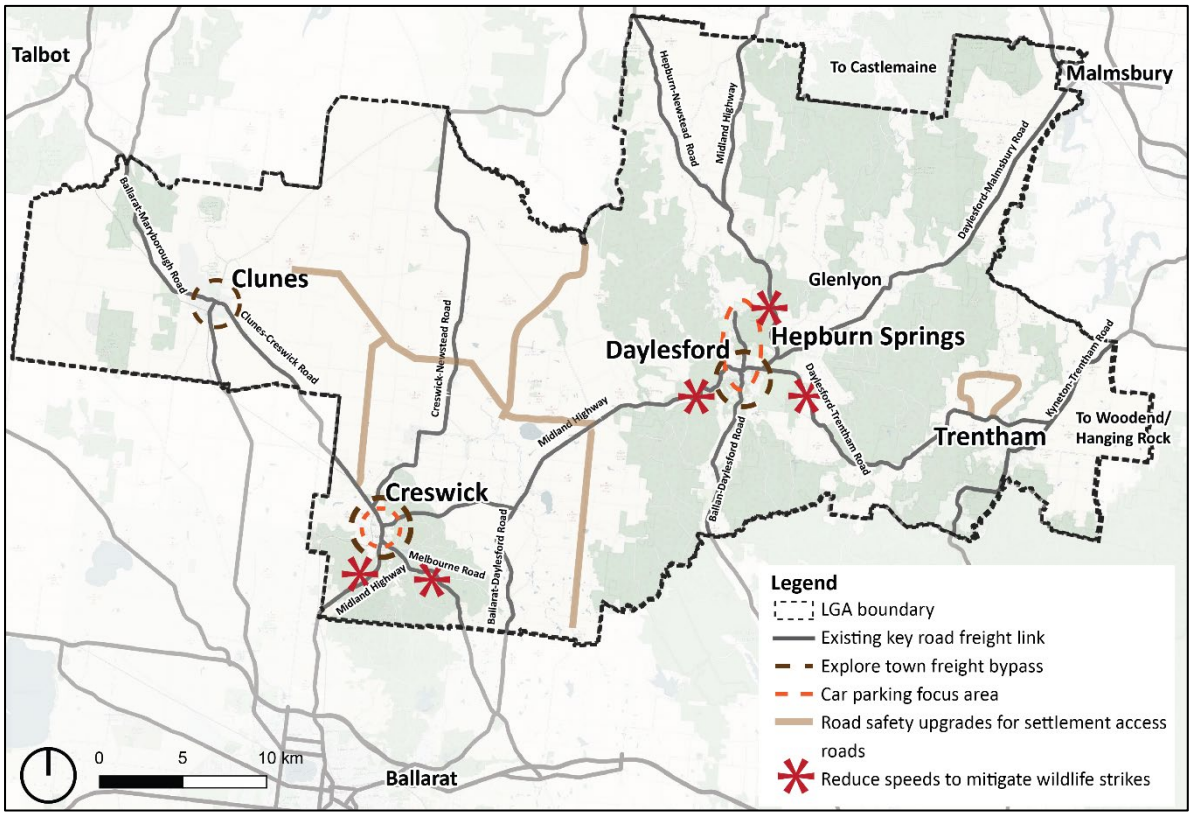
4.3.5 Vehicles and freight

Appropriate planning for vehicle travel and freight movements are vital to ensure safe movement of people and goods throughout the Shire. Planning for alternative parking arrangements in towns will support increased economic growth and safety for all street users. Currently, freight travels through townships which impacts liveability and attractiveness of these town centres. Hepburn Shire will explore the possibility for township freight bypass routes, particularly for Clunes, Creswick, and Daylesford.

Roads should allow people to travel between the Shire's townships and settlements safely, with risk of wildlife strike mitigated through speed reductions in appropriate high-risk locations, and road infrastructure supporting safe travel on less used roads.

Some strategic locations for road and freight actions are outlined in Figure 4-7 below.

Figure 4-7: Road and freight future actions



Source: M&PC (2024)

5 Actions

A series of actions has been developed, grouped under each transport principle. These are actionable tasks which have been identified to support achieving the transport vision.

As well as physical works, the actions include advocacy actions and a process of monitoring and review as the strategy proceeds.

5.1 Types of actions and activities

Actions developed for the ITS fall under five types, being:

- Advocacy activities
- Community actions
- Council works
- Further planning by Council
- Implementation and monitoring.

In the rest of this Chapter, actions are described under each of the principles presented in Chapter 4.1 and discussed briefly in terms of Hepburn Shire's role in implementing the action.

Hepburn Shire will need to complete further planning for infrastructure design and stakeholder engagement to ensure all relevant factors are considered, such as resident and trader views, heritage constraints and accessibility legal requirements. This will also ensure a consistent approach to planning future development of towns and rural areas.

5.1.1 Advocacy and partnerships

Many actions, while important for the Shire, will require significant financial investment. Funding and investment from external sources will be required to help to improve Hepburn's transport network and options.

Hepburn Shire is a member of the Central Highlands Regional Partnership, also including Ararat Rural City, City of Ballarat, Golden Plains Shire, Moorabool Shire and Pyrenees Shire. The Central Highlands Regional Partnership councils work together to create long distance transport networks and improve infrastructure to support comfortable and attractive travel across the region. This can help boost tourism across the entire region and improve the quality of life of residents of these areas.

5.2 People-centred transport

Table 5-1: People-centred transport actions

Action	Mode	Partners	Timeframe	Type of action
Action 1.1: Install pedestrian crossing infrastructure in town centres and around schools	Walking	DTP	Ongoing	Council works
Action 1.2: Upgrade wayfinding and signage	Walking	DTP, Tourism Victoria, Parks Victoria, DEECA, Heritage Victoria, National Trust	Short (0-5 yrs)	Council works
Action 1.3: Explore additional street closures for events and school pick up/drop off	Roads, cars and parking	DTP, DET, local schools & community groups	Short (0-5 yrs)	Community action
Action 1.4: Install wheeling facilities to increase the network around town centres and schools	Wheeling	DTP	Medium (5-10 yrs)	Council works

Action	Mode	Partners	Timeframe	Type of action
Action 1.5: Explore opportunities to reconfigure wide streets	Roads, cars and parking	DTP	Medium (5-10 yrs)	Council works
Action 1.6: Explore opportunities for Shared Zones in townships	Roads, cars and parking	DTP	Medium (5-10 yrs)	Council works

Action 1.1: Install pedestrian crossing infrastructure in town centres and around schools

To increase pedestrian safety and priority in areas with high levels of pedestrian activity, pedestrian crossing infrastructure should be installed where possible, at key street intersections and entrances/exits of roundabouts. Town centres and areas close to primary and secondary schools should be prioritised, particularly in Clunes, Creswick, Daylesford, Hepburn/Hepburn Springs, and Trentham.

It is standard practice for private educational institutions to consider how they will deliver safe and equitable access for student walking and wheeling on adjacent streets when submitting a planning application, however this does not typically occur in Hepburn Shire. On streets around private educational institutions, Hepburn Shire should partner with these institutions to provide walking and wheeling infrastructure to assist with safe and sustainable movement of students.

Preferred treatments to maximise safety for pedestrians are wombat (raised zebra) crossings, particularly in town centres.

Each town centre is the heart of the local community and relies on pedestrians being able to cross the road safety. Many of the town centres are also key through routes for many trucks and other general traffic. This conflicting purpose of the road space is clearly dealt with using the State government's Movement and Place Framework (M+PF) which highlights the need for safe prioritised pedestrian crossings that minimise delay to pedestrians every 50-75 metres in key places such as town centres.

This action would result in a new wombat crossing at the Daylesford Town Hall in Vincent Street, which would improve access for all and increase local economic activity in the area by encouraging pedestrians to explore both sides of the street each time they visit. A pedestrian crossing should also be considered across Central Springs Road to provide safe crossing opportunities for people accessing Daylesford Kindergarten and Daylesford Swimming Pool. Other town centres will also benefit from at least one new wombat crossing, which could be considered in:

- Albert Street, Creswick (near Victoria Street)
- Barkly Street, Glenlyon (near Mostyn Street)
- Fraser Street, Clunes (between Service Street and Templeton Street)
- High Street, Trentham (between Cosmo Road and Market Street).

Further planning will likely be required by Hepburn Shire to ensure crossing infrastructure design and installation is feasible at each location as ensure the full range of factors are considered when prioritising improvement options. This will also help to align priority improvements to the areas with the highest existing need or future development pressure.

Action 1.2: Upgrade wayfinding and signage

Wayfinding signage in towns and along recreational tracks and trails should be upgraded throughout the Shire, prioritising tourist centres. A design suite for wayfinding and signage has been developed for Hepburn Shire. The Background Report illustrates some good examples of wayfinding and signage in tourist areas.

Signs should generally be at eye level and must comply with Disability Discrimination Act requirements by including information for all abilities such as people with vision impairments.

Wayfinding installation should initially be focused in town centres allowing easy navigation to key town destinations (businesses, tourist destinations, accommodation) and transport options, including

recreational routes, wheeling networks, and public transport. Town gateways and key nodes should also be a priority for upgrade where necessary.

Signage along recreational trails should also be standardised across the network. These signs should outline the difficulty and length of the trail are signalled at the start, and regular and clear directional signage is installed along the length of the trail.

Wayfinding installed using the current design suite should replace all existing signs to create a standard wayfinding system.

As technology increases, Hepburn Shire and its partner organisations can explore the use of digital signage infrastructure. This could include development of phone applications which allow place-based wayfinding and assistance with navigation. However, this should not replace physical signage completely, as many members of the community or visitors may not have access to the required technology.

Action 1.3: Explore additional street closures for events and school pick up/drop off

Street closures at particular times already occur in the Shire, during events like Clunes Booktown Festival (which closes Fraser Street). The opportunity to extend this to more events, such as farmers markets, peak tourism days, and for school pick-up/drop off times should be explored. For the latter, the 'Open Streets' initiative is a good example. See the Hepburn Integrated Transport Strategy – Background Paper for more information on street closure for school pick-up and drop off.

Action 1.4: Install wheeling facilities to increase the network around town centres and schools

On-road wheeling lanes should be installed where appropriate. While separated paths provide the most protection, they are significantly more expensive to install. Painted on-road lanes should be installed in townships along routes with significant traffic, particularly heavy vehicles within the existing carriageway.

Where possible, physical separation with kerbs or planting should be considered, and conflicts between wheeling lanes and on-street parking should be minimised. The lanes should be interconnected to form a continuous network without gaps and should provide access to local destinations such as shops, schools, parks and open space and public transport stops.

Initial locations for wheeling lanes are outlined in the primary and secondary active network in each township (see Section 4.3.1).

In some locations it is possible to install physical separation between wheeling facilities and high speed vehicle lanes. For example, in Albert Street, Creswick there is sufficient road space to move the parking spaces closer to the travel lanes, and install low-cost barriers to define wheeling lanes at the kerbside. This design option should be investigated on streets with roadway width greater that 25 metres with a focus on prioritising those streets within town centres or near schools.

While the focus of improvements should be on town centres and schools in the first instance, opportunities to create fully accessible links to sports and recreation facilities should also be considered as part of each project. This links to Action 1.5 of Hepburn Shire's Disability Action Plan, specifically to '*support accessible transport to sport and recreation facilities*'.

Action 1.5: Explore opportunities to reconfigure wide streets

Redesigning wide streets to increase their attractiveness and allow safer movement for walkers and wheelers should be explored, whilst also preserving heritage streetscape character. Design features can include, for example:

- Bicycle lanes (on-road or separated)
- Buffers and separation (bollards or items above) to the public realm
- Kerb outstands at intersections
- Line markings to delineate vehicle lanes more clearly.

- Removal or reduction of vehicle parking
- Tree planting and vegetation along nature strips and on the street
- Vegetated median strips
- Wider footpaths.

'Safe Streets' design principles (as described in the Background Paper) should be applied when developing proposals.

Action 1.6: Explore opportunities for Shared Zones in townships

Selected streets in areas of high pedestrian activity should be piloted as Shared Zones at specific times of the day or week, allowing the entire street space to be used with priority to walkers over all other users. This approach will increase the amount of space available for economic activities along the selected streets, while still facilitating adequate vehicle access. To be effective, Shared Zones need to be signed and have some immediate design changes that reflect their low speed status.

Initially shared zones can be a low cost solution, requiring only signage. Over time the successful pilots should be re-designed with a complete suite of measures, including:

- 10km/h maximum speed for all users
- Improved paving and street surface treatments, including road painting/art and paving
- Removal of kerbing and vehicle lane delineation
- Clear signage
- Additional landscaping including canopy trees, ground cover and shrubs (potentially in planter boxes)
- Improved street furniture and lighting
- Narrowed vehicle entries and exits and distinctive threshold treatments
- Vehicle size restrictions
- More flexible management of vehicle parking to match the needs of the area.

These could also be supported by Action 5.6 which would enable the community to develop their own ideas for Shared Zones and apply for funding from Hepburn Shire and the Transport Accident Commission (TAC). This process would generate a groundswell of support amongst the community for changes that make most sense to them and make the design consultation and implementation processes easier for Hepburn Shire.

Vincent Street in Daylesford often has pedestrian congestion on the footpaths. Installing a temporary Shared Zone during seasonal peak times is an option that could improve pedestrian movement options while also reducing through traffic during those peak times. It is noted however, that a Shared Zone would not be necessary 24 hours per day or every day of the year, and would require careful consideration and management to have it apply only at appropriate times.

5.3 Fairer transport

Table 5-2: Fairer transport actions

Action	Mode	Partners	Timeframe	Type of action
Action 2.1: Encourage greater use of community buses and vehicles where possible	Public transport	DTP	Short (0-5 yrs)	Community actions
Action 2.2: Improve conditions for school buses and their users	Public transport	DTP, local schools	Short (0-5 yrs)	Advocacy, Council works
Action 2.3: Develop a Car Parking Strategy	Roads, cars and parking	N/A	Short (0-5 yrs)	Further planning by Council

Action	Mode	Partners	Timeframe	Type of action
Action 2.4: Explore car share and taxi options to improve mobility for residents and visitors	Roads, cars and parking	Local community	Short (0-5 yrs)	Community actions
Action 2.5: Prioritise installation of footpaths in townships, on one side of all streets with speed limits over in townships on at least one side of the street	Walking	DTP	Long (10+ yrs)	Council works
Action 2.6: Increase installation of public toilets along key recreational links	Walking	N/A	Medium (5-10 yrs)	Council works
Action 2.7: Increase bus and coach service frequencies and coordination	Public transport	DTP	Medium (5-10 yrs)	Advocacy
Action 2.8: Review accessibility and DSAPT compliance of all bus and coach stops and routes across the Shire	Public transport	DTP, bus and coach providers	Short (0-5 yrs)	Advocacy
Action 2.9: Advocate to improve local knowledge of public transport services and use	Public transport	DTP, bus and coach providers	Short (0-5 years)	Advocacy
Action 2.10: Increase train service frequencies and coordination	Public transport	DTP	Medium (5-10 yrs)	Advocacy
Action 2.11: Explore public transport mode shift incentives	Public transport	DTP	Short (0-5 yrs)	Advocacy, Council works

Action 2.1: Encourage greater use of community buses and vehicles where possible

More community bus services should be investigated, for example by working with the State government and industry partners (Australian Community Transport Association) to map local assets (in partnership with community organisations, schools and the like), and understand how those transport assets are currently used and could be put to more use if they were made more widely available. Community buses could provide enhanced access from smaller settlements with limited transport options to larger Shire centres like Creswick and Daylesford.

Community transport services enables residents to request chauffeured transport to medical, shopping and recreation activities. A range of community transport services already exist in the Shire such as *Central Highlands Rural Health Transport Assistance* and *Driving Miss Daisy®* both provide this type of transport assistance at low cost to the user. Working with existing and potential future service providers Hepburn Shire should encourage volunteers to support the service and build community awareness of the services available.

There are a range of potential 'key findings' that might assist with achieving this action listed in the Hepburn Shire Local Transport Benchmarking Study 2019.

Action 2.2: Improve conditions for school buses and their users, including additional school bus services

Community consultation raised concerns over the lack of school bus services for Daylesford College from places like Creswick and Clunes. Hepburn Shire should collaborate with schools, explore the demand and advocate for more State-funded school buses in the Shire where gaps exist.

The quality and safety of school bus infrastructure should be mapped, investigated and improved. For example, in some places such as on the Midland Highway just south of Blampied, there are widened areas of gravel shoulder where school buses stop and parents park to pick up and drop off students. This specific location is next to a high-speed travel lane, and poses significant risk to all road users if a human error occurs.

The design of these facilities should be improved in terms of safety, weather proofing, shade and visibility. All school bus stops should have a shelter and canopy trees that are maintained to safely provide shade at the site. Proper turn-off lay-bys should be developed where possible, with physical separation between the bus bay and car PUDO bays, landscaping and signage. Main school bus stops

that are busier locations should also have physical separation from the roadway, warning signs, and lower 'school-zone' speed limits applied to roads approaching the sites.

Action 2.3: Develop a Car Parking Strategy

A Shire-wide Car Parking Strategy should be prepared to provide a framework for managing parking supply and demand, consistently and transparently across the municipality. This will be particularly relevant in the main townships but should apply to any location at times when car parking availability is low (such as during music festivals or seasonal events). The parking strategy should focus on Hepburn Shire's role with regard to public parking including:

- Enforcement and penalties
- Hierarchy of parking user types that guides allocation of controls
- Parking arrangements for special events, including those involving street closures which may require overflow parking areas to be defined
- Shire parking subsidies and who pays for maintaining existing spaces and expanding supply
- Supply and location of public on- and off-street parking
- Types of controls including user-based, time-based and fee-based restrictions (user-based controls includes loading zones, disability permit spaces and electric vehicle charging)
- Preferred locations for caravan and RV parking.

Guiding principles should be developed to include:

- Balancing demands between Shire residents and visitors at busy times and places
- Ensuring safety to other road/street users (especially walkers and wheelers) and avoiding conflicts between them and vehicles using parking spaces
- Preserving and enhancing streetscapes and heritage character
- Raising awareness of parking options to spread demand at busy times.

Action 2.4: Explore car share and taxi options to improve mobility for residents and visitors

The lack of access to a vehicle is a significant challenge for many residents. This can be due to cost or physical constraints including age. Shared services including car share, rentals and taxis are an important component of the transport system for these people. Car share service providers should be encouraged to establish a base in the Shire. These could be used by residents who need an additional car sometimes (not enough to justify the significant cost of buying a whole car). They could also be used by visitors and businesses that would either go without a car or would have cars that are not used very often.

Installing car share vehicles across the Shire should increase mobility options to and within Hepburn. There is an opportunity to explore the use of car share vehicles internally to the Shire for some fleet trips, reducing Council expenses and imbedded emissions attributed to Hepburn Shire due to vehicle ownership. Hepburn Shire should identify the most appropriate configuration for a car share network in the Shire. This should include installation of car share vehicles in town centres, encouraging peer to peer car share programs for tourists and residents without a car, and Council fleet options to reduce operational costs while getting more community benefit from the fleet.

Taxis and 'ride share' services enable people who cannot drive due to financial, legal or physical mobility issues to be more independent and travel at more convenient times than would be possible with public transport alone. Creswick and Daylesford have taxi services, and both of these are coming under pressure from multi-national, digital based 'ride-share' services that do not typically offer the full range of service of a taxi including access for people with disabilities. Hepburn Shire should monitor the situation and support service providers who are providing the widest possible level of service to meet broad community needs.

Action 2.5: Prioritise installation of footpaths in townships, on one side of all streets with speed limits over 50km/h

To improve walking access, streets with speed limits over 50km/h in townships should have footpaths on at least one side of the street. These footpaths should be fully paved and include appropriate crossing infrastructure (kerb drops in most cases, with raised (wombat) crossings at busier locations).

In some cases, community preference and heritage conditions are strong, and the community may not see the need for footpaths on residential streets within townships. To ensure footpaths are being installed where they are most wanted and required, Hepburn Shire should develop a footpath construction prioritisation framework which considers safety, community preference, and access to destinations. This will generate a list of footpath gaps which will have the greatest impact to the community to be used to prioritise construction. This type of framework has recently been explored by the City of Ballarat.

It is recommended that streets in townships without footpaths be automatically considered for application of a 40km/h speed limit as noted in Action 4.1 below.

Town structure plans and urban design studies should be referred to for more detail.

Action 2.6: Increase installation of public toilets along key recreational links

Provision of additional toilets should be explored within key recreational destinations or reserves, and along key trails to support Hepburn Shire's place as a key area for outdoor recreation. Initial priorities for installation should be:

- Along the Domino Trail between Lyonville and Trentham
- Along the railway line between Daylesford and Lyonville (pending development of trail)
- Between Daylesford and Glenlyon (pending development of trail)
- Between Trentham and the eastern Shire boundary (pending development of trail to Woodend)
- Loddon Falls Reserve.

Toilets should be located generally where there are high traffic volumes of activity and longer visits, such as town centres and parks. There are no standards for the optimal distance between public toilets, but they must be designed to meet disability access standards. Further investigation into locations, cost effective options and environmentally sustainable design should be undertaken as part of a strategy to prioritise future toilet installations and improvements.

Drinking taps including water bottle filling stations should also be provided outside all public toilets throughout the Shire.

Action 2.7: Increase bus and coach service frequencies and coordination

Hepburn Shire should actively and regularly advocate for increased bus and coach services throughout the Shire. This should be done by developing a Shire-wide public transport advocacy report which documents the existing situation and identifies desired longer-term improvements, with priorities for implementation over time. The ITS Background Report and previous work by Hepburn Shire provide baseline information to build on.

The advocacy messages should be simple, consistent and able to be understood and communicated by a broad section of the community – not just Council officers or Councillors. For example:

- Buses must provide a viable alternative to driving, particularly between smaller settlements and larger centres to connect people with essential services.
- Services should be coordinated to intersect in a timely manner, particularly for routes that serve higher order centres or train stations like Ballan, Creswick, Daylesford, Kyneton and Woodend.

As part of the advocacy material, and also to identify areas for Hepburn Shire action, bus and coach routes and stops should be reviewed to:

- Ensure that bus stops are conveniently located in townships, accessible for residents and equipped with mobility hubs to improve 'last mile' travel to and from the stops
- Ensure that bus stops are fully accessible with seating, shelter, signage, information and connections to surrounding footpath networks that are compliant with the Disability Standards for Accessible Public Transport (DSAPT)
- Improve network coverage (for example, changing V/Line coach services that follow historical train routes rather than providing for current day travel needs)
- Provide easier access to a range of destinations of varying sizes, such as from smaller settlements to larger towns, and to higher order centres outside the Shire such as Ballan, Ballarat, Castlemaine, Kyneton, and Woodend.

Action 2.8: Review accessibility and DSAPT compliance of all bus and coach stops and routes across the Shire

Hepburn Shire should review every bus stop across the Shire to rate the level of compliance with the DSAPT. This information can then be used to advocate for funding from DTP for physical infrastructure works to achieve compliance at all bus and coach stops (which was legally required to be achieved by 31 December 2022). The community should also be encouraged to report non-accessible public transport infrastructure directly to the Department and seek urgent action to improve access to services. While the roadside bus stop infrastructure is a Hepburn Shire responsibility, there is State level acceptance that the initial upgrade of stop infrastructure to achieve DDA compliance will be funded by DTP.

Buses and coaches travelling through Hepburn Shire should also be fully accessible for people with reduced mobility. Drivers of these buses and coaches also may require training to understand how best they can assist travellers with additional mobility needs. Both these are State responsibilities to manage (through operator implementation), and the main role for Hepburn Shire is to advocate for improvements if needed.

This links to Hepburn Shire's Disability Action Plan Action 1.2 and Positive Ageing Strategy focus area 5.3, specifically to "*Advocate, promote and investigate solutions to the continual improvement of an accessible transport and mobility system that supports wellbeing of (older people/people with disability).*"

Action 2.9: Advocate to improve local knowledge of public transport services and use

A key barrier to public transport use in the Shire is a lack of knowledge of the available services and how to use them. The local bus services are not on the myki system, which adds a layer of complexity for users, particularly visitors. Hepburn Shire should advocate to the State Government and regional coach providers to increase the availability of information about the public transport services in the Shire. This includes increasing availability of information online, providing informative brochures at regional council offices, and providing local area transport maps for regional areas such as Hepburn.

Action 2.10: Increase train service frequencies and coordination

Hepburn Shire should advocate for substantial increases to train services on the Maryborough line, in collaboration with neighbouring Councils and regional bodies. Service levels on the Maryborough line (serving Creswick and Clunes) should be increased from four trains a day to at least ten services per day (equal to the service provided to Beaufort) in the short to medium term.

As part of this, opportunities should be explored and advocated for faster services on the Maryborough line, to make travel times more competitive with car use.

This advocacy should also include further investigation of reinstating regional passenger services between Geelong and Bendigo via Ballarat and Maryborough, which is already mentioned in transport strategies for Geelong, Ballarat and Bendigo.

There is one tourist railway service in the Shire, operating from Daylesford to Bullarto on Sundays and School Holidays. This railway is maintained, and services provided by volunteers, with funding coming predominantly from ticket sales and government grants. Hepburn Shire should continue to support the Daylesford Spa Country Railway through marketing and encouragement (including financial support where appropriate) to expand services and extend the track to Lyonville and Trentham. This could include actions such as specific local marketing during the low season or free passes for ratepayers to experience the railway and consider volunteer roles to assist with operations and improvements.

Action 2.11: Explore public transport mode shift incentives

Hepburn Shire should explore strategies to further encourage and incentivise use of public transport in the Shire, including:

- Advocate for Community Transport services to be funded by Public Transport Victoria under the $10.60 *Fairer Regional Fares*, fare cap
- Providing better information on public transport options for residents and visitors
- Supporting and promoting the roll out of next generation transit ticketing (Myki and its successor) on Shire public transport services in the Shire
- Trialling specific public transport services in peak times.

A town bus service for Daylesford and Hepburn via Hepburn Springs should be investigated and trialled during peak tourism seasons. If designed and marketed well, this service could ease pressure on traffic congestion and central area parking by reducing the need to use a car for local trips. The initial trial could be operated by a community transport service provider utilising volunteer staff and supported by Hepburn Shire potentially through vehicles and marketing.

All new residents should be provided with information about public transport services in the region and how to advocate for more services most effectively. Visitor information services should be aware and promote public transport services and tourism options that reduce the need for car travel including highlighting businesses located in the centre of main townships that offer walkable access to other tourism destinations.

The next generation public transport ticketing should be deployed throughout Hepburn Shire in order to avoid the clumsy and annoying process of needing to purchase a paper ticket for coach connections onward from train stations like Ballan, Kyneton and Woodend.

5.4 Greener and healthier transport

Table 5-3: Greener and healthier transport actions

Action	Mode	Partners	Timeframe	Type of action
Action 3.1: Continue to develop recreational walking and wheeling networks	Walking, wheeling	Neighbouring Councils	Ongoing	Council works, Advocacy
Action 3.2: Plan for expansion of electric vehicle charging networks (including e-mobility)	Roads, cars and parking	Charging infrastructure providers	Medium (5-10 yrs)	Community actions
Action 3.3: Explore a scheme to promote uptake of electric bicycles	Wheeling	As needed	Short (0-5 yrs)	Community actions
Action 3.4: Increase canopy trees and pedestrian priority	All	Local community	Short (0-5 yrs)	Community actions

Action 3.1: Continue to develop recreational walking and wheeling networks

New shared user paths and accessible trails should be installed to continue strengthening the Shire as a mountain bike riding and recreational wheeling destination. New trails should prioritise connecting to and extending existing trails to create a network which connects places in the Shire and surrounding areas. Key actions should be informed by community consultation, and could include:

- Connecting Ballarat and Creswick and extending/improving trails south and east of Creswick
- Connecting the Domino Trail to Trentham Falls
- Extending the Domino Trail west to Daylesford and Creswick, and east to Woodend/Hanging Rock (in collaboration with Macedon Ranges Shire)
- Improving the Goldfields Track from Castlemaine Diggings National Heritage Park into Daylesford
- Installing a trail around Wombat Creek Dam
- Linking Wombat Trail to Domino Trail, Trentham Falls, and through Wombat State Forest
- Trails south of Daylesford (e.g. Sailors Falls) into Daylesford.

All new shared user paths and trails should be accessible for all in accordance with the Disability Discrimination Act and the level of difficulty for users (including wheelchair users) should be clearly noted on maps and at key decision points along each path segment. This links to Action 1.6 of Hepburn Shire's Disability Action Plan.

Shared user paths also provide opportunities for horse riding and other recreational pursuits. Some paths can connect horse adjustment or stables to venues that are used for competition, gathering and shows. Where these align with the walking and wheeling network, the design will consider the potential for horse riding along that path.

Action 3.2: Plan for expansion of electric vehicle charging networks (including e-mobility)

There is already an existing network of re-charge locations for personal wheelchairs and mobility scooters in Hepburn, but Hepburn Shire's website only lists the Daylesford Visitor Information Centre location. Other locations should be identified and mapped onto Hepburn Shire's website, and included on online mapping applications such as Google Maps. This aligns with Action 1.2 of Hepburn Shire's Disability Action Plan, specifically to '*improve the community's knowledge of existing local accessible transport options*'. Every township should have at least one mobility scooter (wheelchair) charging station located in the main activity centre. Where appropriate Hepburn Shire should work with, encourage and support local businesses to provide this free service.

Building on Hepburn Shire's ZNET Beyond Zero initiative, a network of public and private EV charging stations should be installed throughout the Shire. Each main township should have at least one EV charging station (Clunes, Creswick, Daylesford, Hepburn/Hepburn Springs, Trentham), located in centres of activity, including shopping strips, tourist destinations or at transport interchanges (such as railway stations).

The choice of 'destination' charging points should be determined by need while also being flexible for relocation and/or rationalisation as more private charging facilities develop and the need for/speed of charging changes with continuous development and take-up of EVs. Township structure plans provide more information on specific locations for charging stations.

Once regulations and safety issues are addressed State-wide, this could include broader charging facilities (such as for bicycles and scooters) at the same charging hub locations.

Specific locations in townships to install additional EV chargers are outlined in the township Structure Plans for Clunes, Creswick, Daylesford and Hepburn Springs, Glenlyon, and Trentham.

Action 3.3: Explore a scheme to promote uptake of electric bicycles

To support increased and safe uptake of micro-mobility and e-bicycles, Hepburn Shire should consider a scheme that promotes the benefits of e-mobility offerings, assists people to find the right electric bicycles for them, and advises on grants that may be available now and in future. The scheme could also promote locations for e-mobility parking that could include charging points. This could include working with local bicycle retailers or energy suppliers to subsidise the bicycle, infrastructure or energy with a specific focus on ratepayer benefits and subsidies that equate to the subsidy provided to car drivers through Hepburn Shire's service of providing free parking to those that can drive.

Action 3.4: Increase canopy trees and pedestrian priority along township streets

Hepburn Shire should review township road reserves to identify the locations most suitable for increasing tree canopy cover, in alignment with Hepburn Shire's Street Tree Planting Plan 2022. The type of tree canopy increase would depend on local conditions including community views, heritage elements, cultural needs, biodiversity needs and existing canopy features. Planting of street trees should have the aim of:

- Enhanced attractiveness of streets
- Improved shading and cooling of streets and paths
- Increased habitat for local fauna
- Increased health and wellbeing outcomes including improved air quality and mental health.

For example, some streets in the Shire's townships were deliberately wider in order to provide more space to create majestic boulevards and open space areas such as those in Raglan Street, Daylesford, Barkly Street, Glenlyon and Market Street, Trentham. Properties in streets with canopy trees are cooler and more cost efficient to live in and tend to increase in value more rapidly. The streets they are in also tend to have lower vehicle speeds and fewer severe crashes.

Suitable locations for tree canopy increase have been identified in the Street Tree Planting Plan, and planting should also consider installation of pedestrian infrastructure and safer roadway geometry.

Prioritised locations where this action, and other pedestrian priority infrastructure should be undertaken are along primary and secondary active routes outlined in Section 4.3.1 above, and in main streets of settlements. When identifying locations for increased canopy cover, these outcomes should be balanced with safety and risk to pedestrians, the footpath, and the tree itself.

5.5 Safer movement and places

Table 5-4: Safer movement and places actions

Action	Mode	Partners	Timeframe	Type of action
Action 4.1: Lower speed limits in built-up areas and in school zones	Walking	DTP	Short (0-5 yrs)	Advocacy, community actions
Action 4.2: Explore protective infrastructure where public space may conflict with vehicles	Walking	N/A	Short (0-5 yrs)	Council works
Action 4.3: Advocate to improve main arterial and connector routes where needed	Roads, cars, and parking	DTP	Medium (5-10 yrs)	Advocacy, Council works
Action 4.4: Implement wildlife strike reduction strategies in areas with high numbers of strikes	Roads, cars, and parking	DTP	Medium (5-10 yrs)	Advocacy, Council works
Action 4.5: Advocate for road safety upgrades on narrow or unpaved roads which link settlements	Roads, cars, and parking	DTP, TAC	Long (10+ years)	Advocacy
Action 4.6: Consider bicycle lanes on key segments of rural roads	Roads, cars, and parking, and wheeling	DTP	Short (0-5 yrs)	Further planning by Council
Action 4.7: Install behaviour modification devices at high risk locations	Roads, cars, and parking,	DTP	Short (0-5 yrs)	Further planning by Council

Action	Mode	Partners	Timeframe	Type of action
	pedestrians, and wheeling			
Action 4.8: Install paved shoulders on rural roads where appropriate	Wheeling, and roads, cars and parking	DTP	Long (10+ yrs)	Council works

Action 4.1: Lower speed limits in built-up areas and in school zones

Vehicle speed limits in busy and built-up areas should be lowered to levels that substantially reduce the risk of serious injury, especially to walkers and wheelers. Research shows that this should be 30km/h, with 20km/h in school zones. Whilst this is a long way from current practice, which generally sets main roads to 60km/h, local streets to 50km/h and school zones to 40km/h, it could be implemented gradually over time. A good first step would be to reduce all 60km/h zones in built up areas to have a 50km/h speed limit.

The State Government and some local councils are trialling 30km/h speed limits at a number of locations across Victoria. In April 2023, speed limits were reduced to 30km/h in Mildura CBD. This was done to test the impact of speed reductions on safety and street environment within a regional activity centre. As a busy tourist destination, some key streets in Hepburn Shire could also explore the 30km/h trial in the future, in locations such as Vincent Street, Daylesford.

It is worth noting that the speed limit around schools in South Australia is 25km/h. This is also the maximum speed at which vehicles can pass an emergency service vehicle parked on the roadway with its lights flashing.

Another key factor that should inform speed limit selection and review is the absence of footpaths. In streets without footpaths, it is much more likely that people walk on the edge of the roadway, and for some people with a disability it is essential that they walk on the roadway. For these pedestrians to be safe, it is important that speed limits in streets without footpaths in townships be limited to 40km/h or less.

Action 4.2: Explore protective infrastructure where public space may conflict with vehicles

Conflict between vehicles and people in public spaces is a particular issue in some parts of Hepburn Shire, due in part to the historical road geometry and intersection design applied to the network. In locations where potential for conflict between vehicles and large volumes of people in public spaces is identified additional means of separating and protecting people from vehicles should be explored.

The boulders recently installed at the site of the tragedy in Albert Street, Daylesford in 2023 are an example, although they are a temporary solution. There are many other locations worthy of investigation across the Shire and should be mapped as they become apparent, such as the pedestrian path on Main Road, Hepburn between Golf Links Road and Tenth Street.

'Safe Systems' design approaches should be adopted to ensure that safety risks are eliminated wherever possible, especially in new works and changes to existing facilities and infrastructure. These approaches should also be applied at the network level and through other actions in this ITS. This will identify the intersections that are superfluous to vehicle needs where the safest option would be to create a cul-de-sac, one-way operation or some other form of traffic calming.

Action 4.3: Advocate to improve main arterial and connector routes where needed

Hepburn Shire should advocate for State-controlled arterial roads in the Shire to be improved where needed. The focus of improvements should be on road user safety and making space to protect vulnerable road users through a range of improvements such as road geometry changes, crash barriers, widening of facilities including:

- Bus drop off areas

- Footpaths and pedestrian crossings
- Overtaking lanes
- Wheeling lanes.

All roads should be periodically assessed for their suitability to accommodate changing and growing traffic demands, especially through Shire towns and in areas that are affected by nearby population growth and visitor volumes. Key routes that should be assessed as a priority and on a five yearly review cycle include:

- Back Hepburn Road
- Ballan-Daylesford Road
- Ballarat-Daylesford Road
- Ballarat-Maryborough Road
- Clunes-Creswick Road
- Creswick-Newstead Road
- Daylesford-Malmsbury Road
- Daylesford-Trentham Road
- Kyneton-Trentham Road
- Melbourne Road
- Midland Highway.

Action 4.4: Implement wildlife strike reduction strategies in areas with high numbers of strikes

Due to Hepburn's rural location and proximity to a number of vast bushlands, wildlife strikes are common across Hepburn Shire. This reduces the safety of vehicle drivers and passengers and negatively impacts wildlife and biodiversity. Wildlife Victoria has released a Road Toll Reduction Toolkit, which outlines the strategies which can be used to reduce the number and severity of strikes.

It states that speed limit reductions have been effective across Australia in response to wildlife strikes, including reducing speeds particularly during the primary active times or seasons for the affected species. This increases reaction time for drivers, the risk of a strike and the severity of the strike should it occur. An example of a high strike area that could have the speed limit reduced (either full time or at key times of the day or year) is outside of the RACV Goldfields Resort in Creswick.

The toolkit also suggests:

- Variable message signage to change speeds depending on the time of day or season
- Fauna exclusion fencing (however, this is costly and often ineffective for larger animals like kangaroos)
- Culvert underpasses
- Land-bridge overpasses
- Rope bridges.

Action 4.5: Advocate for road safety upgrades on narrow or unpaved roads which link settlements

Many of Hepburn's roads, particularly those which are outside of the main townships, are narrow and/or unpaved roads. This can lead to reduced safety outcomes, with conflicts occurring between vehicles on narrow roads. Additionally, unpaved roads can make it more likely for drivers to lose control of the car due to reduced traction of gravel and dirt.

Approximately over half of Hepburn Shire's population live within these smaller settlements, and therefore often do not have direct access to the main vehicle routes through the Shire. All Hepburn residents deserve to be safe on Shire roads, no matter where they live. Therefore, Hepburn Shire

should seek funding assistance from road safety bodies, such as the TAC, for these road safety upgrades to ensure all Hepburn Shure residents can travel safely.

Action 4.6: Consider bicycle lanes on key segments of rural roads

There is a growing tourism market for long distance (and often high-speed) bicycle riding in rural areas such as Hepburn that have frequent towns and services that bicycle riders can find assistance if needed and fuel up with coffee, food and inspiration.

Recent changes to road rules make it illegal to pass a bicycle rider without a 1 metre clearance. This is very difficult to achieve on some roads in the Shire particularly those with double lines and narrow shoulders. It is typically expensive to widen these roads with narrow shoulders. One option that has been applied elsewhere in Victoria is to recognise the locations which have several factors occurring at once, specifically:

- Centreline of double lines
- Frequent use by bicycle riders
- Hill which slows bicycle riders down (thereby increasing the likelihood and duration of delay to motorists stuck behind the cyclist while being unable to overtake legally)
- Narrow roadway.

Once these locations have been identified, the line markings on the road can be modified, to move the centreline slightly to the right side on the uphill approach, making space for a bicycle lane and 1 metre wide buffer zone to make it clear to car drivers where they need to be to pass safely. This also has the effect of slowing motorists down as the available lane space reduces and can be accompanied with a speed zone reduction if required.

Action 4.7: Install behaviour modification devices at high risk locations

There are a wide array of devices that can be used to modify road user behaviour at high risk locations, typically intersections. These range from changes in road geometry that ensures a different approach angle to improve sightlines through to subtle cues such as on road markings or canopy trees that influence driver approach speeds.

Hepburn Shire should review intersections and high-risk locations across the Shire, and consider a suite of treatments that could be applied to improve driver behaviour and road user awareness at each site.

A range of well researched treatments are proven to reduce travel speed and increase safety while being relatively cost effective and good at improving other aspects of the transport system including:

- Intersection redesign that reduces 'see through effect' where drivers do not recognise they are approaching an intersection on a rural road
- Kerbing and bollards around formalised crossing points
- Pavement colour, type or painting
- Road geometry changes to increase the approach angle and sightlines for all road users
- Rumble strips
- Tree planting that narrows the field of vision
- Warning signs including flashing signals or temporary speed restrictions.

These treatments and safe system design thinking can then form the basis of funding applications to the TAC and DTP.

Action 4.8: Install paved shoulders on rural roads where appropriate

Many main roads across the Shire lack paved shoulders. This forces a range of other road users to use the travel lanes, which significantly reduces safety for these users and for vehicles making passing

manoeuvres. Typical situations including school bus pick up and drop off areas, pedestrian crossing locations, intersections for right hand turns, high volume bicycle routes and public transport routes.

Roads with the highest potential volume of conflicting road users should be prioritised for these works. This action should be supported by off-road solutions in some locations particularly where roadside vegetation, biodiversity, heritage and cultural concerns can be resolved.

5.6 A connected Shire

Table 5-5: Connected Shire actions

Action	Mode	Partners	Timeframe	Type of action
Action 5.1: Work with Dja Dja Wurrung to Heal Country along the Goldfields Track	Pedestrian & Wheeling	Dja Dja Wurrung & Parks Victoria	Short (0-5 yrs)	Further planning by Council
Action 5.2: Map all wheeling routes in the Shire	Wheeling	N/A	Short (0-5 yrs)	Further planning by Council
Action 5.3: Identify key gaps in the shared user path network and prioritise investment to fill gaps each year	Pedestrian & Wheeling	DTP	Short (0-5 yrs)	Advocacy, Council-funded works
Action 5.4: Install mobility hubs of varying levels at key locations	Other	DTP	Medium (5-10 yrs)	Advocacy, Council-funded works
Action 5.5: Review local intersections to reduce road maintenance cost and prioritise the most important road connections	All	Local community	Short (0-5 yrs)	Further planning by Council
Action 5.6: Foster local ideas generation and assist the community to solve transport problems through local initiatives	All	Local community, TAC	Short (0-5 yrs)	Council funded works

Action 5.1: Work with Dja Dja Wurrung to Heal Country along the Goldfields Track

The Goldfields Track is a significant tourism attractor focused on connecting towns in the Shire and beyond on foot or by wheeling. Many locations along the Goldfields Track are upside-down country, and need significant remediation to be healthy again. Hepburn Shire can provide an exemplar of how to engage and support traditional owners seeking to repair harm done to Country in the past.

Collaborating with the Dja Dja Wurrung to identify the highest priority sites for repair along the Goldfields Track will improve active transport connections across the Shire and present new economic development opportunities for the Dja Dja Wurrung and broader Hepburn community.

This action aligns to Goals 6, 8 and 9 of '*Dhelkunya Dja*', the Dja Dja Wurrung Country Plan.

Action 5.2: Map all wheeling routes in the Shire

To provide accurate information for wheelers and Hepburn Shire internally, all wheeling routes should be mapped. This should include on-road bicycle lanes, off-road bicycle lanes, tracks and trails which are appropriate for bicycles. This should also allow Hepburn Shire to be fully aware of all wheeling assets in the Shire. The mapping should then be uploaded onto aggregated mapping platforms such as OpenStreetMap, Google Maps and Apple Maps. This will make the information available to a very wide set of potential users.

The quality of wheeling routes should be evaluated by Hepburn Shire using a range of tools such as crowdsourced information. Future users of the network should be encouraged to generate user insights and provide these to Hepburn Shire – potentially via third party apps such as '*SnapSendSolve*'. This data can then be used in annual plans for capital improvement and to identify safety issues across the network to prioritise TAC and DTP funding applications crafted to specific funding opportunities.

Action 5.3: Identify key gaps in the shared user path network and prioritise investment to fill gaps each year

The shared user path network was developed thousands of years ago, and rapidly expanded during the gold rush and subsequent periods of township development. Only around 70 years ago did the shared path network start shrinking with the rise of the motor vehicle. This evolution has left many people without transport options or with options that are less convenient, efficient and safe.

As the population ages, Hepburn Shire needs to urgently redress this imbalance and significantly improve the shared user path network. In some cases, this can be done through regulatory controls that force vehicles capable of higher speeds to share the space with other users. In other cases, it will need more costly infrastructure investment to facilitate access for all to shared user paths that link townships and connect to key destinations within each town.

An initial step is for Hepburn Shire to map and categorise the missing links in the shared user path network, noting a minimum requirement that every township property should be safely accessible by foot. Once the missing links are identified and categorised, a suite of approaches can be developed to ensure the existing infrastructure can be shared or improved with new shared facilities. The missing links can be prioritised for action based on Hepburn Shire's budget and the community's needs.

Action 5.4: Install mobility hubs of varying levels at key locations

As a means of providing more transport choices, especially for the 'first and last mile' of journeys, and for neighbourhood mobility, the concept of mobility hubs is emerging and should be explored in the context of Hepburn Shire. The Hepburn ITS Background Paper outlines mobility hubs in more detail and what should be included when planning a mobility hub.

The types of destinations where mobility hubs should be installed are key trip attractors and areas where there is activity, such as train stations and town centres. These would become widely known as locations where many things can be found including transport services (public and shared), community transport, and potentially could have a range of other logistics services such as parcel lockers, container deposit scheme collection points, post boxes and other emerging services that relate to transport and logistics.

Action 5.5: Review local intersections to reduce road maintenance cost and prioritise the most important road connections

Across the Shire the street network was typically established as walking tracks used mainly by pedestrians, bicycles and horses or horse drawn carts and carriages. These low-speed movements were relatively safe at intersections as each person could manoeuvre around the other. The resulting network has lots of intersections and road space, some of which is now confusing and wider than it needs to be. Motorised vehicles travelling at much higher speeds are not as agile at these intersections and as a result we need complex traffic rules to manage the interactions between vehicles.

One way to solve these issues and make the road network safer for everyone is to consider which legs of each intersection is absolutely necessary and which other legs might be superfluous. In many cases some intersecting streets do not provide any improvement to car travellers (they actually make overall travel times longer) and they increase safety risks for all road users including people in outdoor dining areas.

For example the design of the intersection at Bridge Street, North Parade and Castlemaine Road in Creswick dates back to a time prior to the Albert Street bridge being constructed. The intersection area is now much larger than it needs to be while also lacking the basic infrastructure required to protect pedestrians.

The size of this and other intersections makes them more difficult and expensive for the community to maintain, increases rates and reduces the amount available for road maintenance across the Shire.

Hepburn Shire should conduct a holistic review of intersections across the Shire to minimise roadway footprint, reduce complexity, improve safety and reduce the financial burden of future maintenance.

Once suitable locations for road space reduction have been identified and discussed with the community, those areas can be improved with canopy trees, pedestrian infrastructure and safer roadway geometry in line with Action 3.6 above.

Action 5.6: Foster local ideas generation and assist the community to solve transport problems through local initiatives

Hepburn local residents are innovative and often solve their own local problems. Hepburn Energy is a great example of the community banding together to take control of their energy future and create something of lasting value.

By encouraging and potentially part-funding some initiatives that are considered feasible and well supported by the community, Hepburn Shire can inspire the community to think about how to solve transport problems in a simple and meaningful way that builds and deepens community, social and transport connections across the community.

Hepburn Shire should investigate an annual grants program that targets community led transport improvement initiatives and co-funds those that align to the Integrated Transport Strategy, are feasible, will create lasting benefits and have significant community support.

5.7 A vibrant economy

Table 5-6: Vibrant economy actions

Action	Mode	Partners	Timeframe	Type of action
Action 6.1: Consider improving disused alleyways to increase pedestrian permeability	Walking	Local businesses	Short (0-5 yrs)	Council-funded works
Action 6.2: Review and update Freight Strategy	Roads, cars, and parking	N/A	Short (0-5 yrs)	Further planning by Council
Action 6.3: Explore peripheral visitor parking hubs in tourist centres	Roads, cars, and parking	N/A	Medium (5-10 yrs)	Council-funded works
Action 6.4: Review access to commercial businesses in town centres to allow rear access	Roads, cars, and parking	Businesses	Medium (5-10 yrs)	Council-funded works, community actions
Action 6.5: Prepare concept designs and detailed plans to improve Albert Street, Creswick	All	DTP, local businesses & community	Short (0-5 yrs)	Further planning by Council
Action 6.6: Encourage community and visitors to connect with Country through various immersion experiences related to transport particularly walking	All	Dja Dja Wurrung, businesses, tourism bodies	Short (0-5 yrs)	Further planning by Council

Action 6.1: Consider improving disused alleyways to increase pedestrian permeability

There are a number of alleyways in each township which should be better used to increase pedestrian permeability while also increasing vibrancy and attractiveness of the towns. These alleyways could be opened up to pedestrians and renovated to add art, vegetation, seating where appropriate and other design features to increase vibrancy of township public realm.

Towns in Hepburn Shire which have alleyways in their design include Clunes, Creswick, Daylesford, and Trentham which vary in size. Narrower laneways should be made into comfortable walking paths providing additional routes into these township centres. Key next steps in this action include mapping the alleyways and identifying the potential of each. Then working with neighbouring land owners to explore the potential of each location and in particular identify any economic opportunities that might arise from private sector investment to improve the amenity of the alleyway.

Action 6.2: Review and update Freight Strategy

Hepburn Shire should review and revise the Freight Strategy (released in 2012) to address new and changing freight needs and cover a range of issues including:

- Advocating for investigation of truck bypasses on the Midland Highway, especially to remove or reduce truck traffic in the centres of Clunes, Creswick and Daylesford
- Considering freight issues in relation to the township structure plans, the rural settlement strategy and economic development planning
- Developing a local truck connector network to complement the Principal Freight Network
- Exploring low impact freight actions such as improved loading zone locations, trialling shared e-cargo bicycle services in Daylesford
- Managing the impacts of industrial areas while promoting their growth and viability
- Managing the impact of truck traffic through townships
- Supporting increased access to rail freight to and through the Shire with a particular focus on connecting the standard gauge freight network to the Maryborough railway corridor.

This review and update should also consider the freight priorities outlined in the Central Highlands Regional Growth Plan 2014. These seek to improve freight connections throughout the region and into neighbouring key freight destinations.

One specific area to explore includes managing the impact of freight accessing the industrial area in the east of Daylesford. Some freight vehicles use Stanbridge Street to access the area to avoid the centre of Daylesford, however this road is generally intended for local traffic. Interventions to Stanhope Street, and the intersection of East Street such street and intersection narrowing infrastructure, should be explored in the updated Freight Strategy.

Action 6.3: Explore peripheral visitor parking hubs in tourist centres

The viability of parking hubs on the periphery of towns should be explored. Parking areas can include 'mobility hubs' with access to shared transport such as bicycles, scooters, or shuttle buses, and the highest quality walking links connecting to town centres.

These hubs should encourage visitors to park just outside the town centres, and reduce the amount of parking in main streets to give pedestrians a greater share of space, and to improve the streetscapes.

Action 6.4: Review access to commercial businesses in town centres to allow rear access

Roadside servicing and loading can have a significant impact on Hepburn's heritage streetscapes and the pedestrian experience in these streetscapes. Moving access to commercial businesses to the rear of the buildings should support the pedestrian experience in the main streets, and also increase simplicity for vehicles wishing to access these businesses. Rear access reduces the pressure on vehicles to find parking close to the businesses they need to access, as peaks in users and visitors will not affect rear of house access.

Action 6.5: Prepare concept designs and detailed plans to improve Albert Street, Creswick

Albert Street is the main street in Creswick. The road reserve is generally 50 metres wide, though narrows to 40 metres at the centre of the township – more businesses want to locate where pedestrian activity is busier, and this tends to be where the road is narrower and easier for shoppers to cross.

Most of the Albert Street road reserve (over 90% in some places) is covered with asphalt, making the environment hostile, hot and unwelcoming. This surface treatment is not conducive to growing canopy trees that most other parts of Creswick are known for. Much of the asphalt surface is used

solely for traversing cars from the traffic lanes to parking spaces at the edge of the road, up to 11 metres from the traffic lane.

The current design of Albert Street makes some sections 120% more expensive to maintain than they would be if a narrower pavement design was used. It also makes the street less safe, and reduces economic expenditure in the town.

Hepburn Shire should review the current arrangements and prepare concept plans to improve Albert Street over time as resources are available. A smart design will include low cost elements that can be completed quickly and create a business case for more wholesale changes to be part funded by external stakeholders.

Action 6.6: Encourage community and visitors to connect with Country through various immersion experiences related to transport particularly walking

Hepburn Shire attracts a large volume of visitors from a wide array of demographic groups each year. There is a significant opportunity to use transport and particularly walking to connect with these visitors and provide more immersive experiences that showcase the natural environment, cultural heritage and diverse economy that makes the Shire so special.

Walking tours in particular help visitors to 'ground' themselves in Country and combined with the insights from the Dja Dja Wurrung visitors will get a much deeper appreciation of the Shire its natural values and knowledge the Dja Dja Wurrung have about how to live in harmony with the environment enabling them to survive through severe climate change events.

Hepburn Shire should engage with Dja Dja Wurrung Enterprises to understand the breadth of offerings that could be developed over time, encourage their development and incorporate priority shared user path improvements that support the tourism opportunities. Ideas could revolve around the Goldfields Track, railway easements, or other cultural heritage features and paths.

This action links to Goals 3 and 8 of '*Dhelkunya Dja*', the Dja Dja Wurrung Country Plan.

5.8 Implementation and monitoring activities

In order to ensure that the strategy is a living document, and actions listed above are implemented, the following should be undertaken during the life of the strategy.

Table 5-7: Implementation and monitoring actions

Mechanism
Action 7.1: Establish performance indicators and targets for transport in Hepburn
Action 7.2: Allocate responsibility for action clearly between Council staff and teams
Action 7.3: Develop timeframes for and undertake continuous monitoring, review and updates of the strategy
Action 7.4: Prepare a rolling calendar of internal, stakeholder and community engagement activities
Action 7.5: Maintain regular meetings with DTP to discuss projects and issues

Action 7.1: Establish performance indicators and targets for transport in Hepburn

A series of key performance indicators (KPIs) should be developed to enable progress to be monitored. Targets should be set that represent the desired outcomes at the end of the ITS time period (2050), with interim target values set if required. The KPIs should not measure *outputs* (what was produced or accomplished, e.g. extra kilometres of walking paths), but should measure *outcomes* (the effects of outputs on the desired result, e.g. increased numbers of people walking).

Most of the KPIs will require data to be gathered to establish the current situations before clear, realistic (but stretch) targets can be determined. Furthermore, most, if not all, of the targets will need to allow for potential future growth in Shire residents, jobs and visitors.

Where possible the data gathering should be continuous, using camera and automated data recognition technology. The data should also be made available to the public so that the impact of

specific events, programs or infrastructure can be observed and understood by anyone who is interested.

An initial list of KPIs is provided in Table 5-8 overleaf and a more detailed list, with explanatory notes is provided in Appendix A. The KPIs were modelled from Victoria in Future data and developed to be appropriate for Hepburn Shire. The KPIs were then tested and agreed upon by the ITS project team.

Table 5-8: Hepburn Shire transport KPIs and targets

KPI	Frequency	Existing	Targets	
People-centred transport				
1. Walking counts at selected locations	Annual	To be measured	2027 2035 2050	11% increase 29% increase 68% increase
2. Wheeling counts at selected locations	Annual	To be measured	2027 2035 2050	11% increase 29% increase 68% increase
Fairer transport				
3. Public transport patronage on Shire services	Annual	To be measured	2027 2035 2050	16% increase 71% increase 137% increase
4. Traffic growth on Shire roads compared to PJV activity growth	Annual	To be measured	2027 2035 2050	-1% decrease -6% decrease -14% decrease
5. Car ownership (number of vehicles).	Annual (VicRoads) and 5-yearly (Census)	To be measured	2027 2035 2050	-1% decrease -6% decrease -12% decrease
Greener and healthier transport choices				
6. Emissions from transport actiivty in Hepburn Shire (excluding visitors)	Annual	87,330 tCO2-e in 2018 (33% of Shire total)	2027 2035 2050	-16% decrease -54% decrease -100% decrease
7. Percentage of LEVs/EVs in vehicles registered in the Shire	Annual	To be measured	2027 2035 2050	-11% decrease -51% decrease -100% decrease
Safer movement and places				
8. Rolling 5-year average road fatalities and injuries	Annual	57 per year (5 yrs ending 2022)	2027 2035 2050	-11% decrease -24% decrease -55% decrease
9. Roadkill counts and reports to animal welfare agencies	Annual	To be measured	2027 2035 2050	-11% decrease -24% decrease -55% decrease
Vibrant economy				
10. % of Shire jobs filled by Shire residents	5-yearly (Census)	64% (2021 Census)	2027 2035 2050	5% increase 10% increase 20% increase
11. Transport expenditure % of household income	5-yearly (Census)	To be measured	2027 2035 2050	-5% decrease -10% decrease -20% decrease

Source: M&PC. Targets shown are preliminary and subject to baseline measurements. See Appendix A for more detail.

Additional indicators should be developed to report on the internal implementation and monitoring activities, to demonstrate and track how Hepburn Shire is implementing the ITS.

Action 7.2: Allocate responsibility for action clearly between Council staff and teams

Teams and staff responsible for implementation of individual actions should be clearly identified. This will ensure that ownership of the document and its implementation is shared between relevant Council departments.

Action 7.3: Develop timeframes for and undertake continuous monitoring, review and updates of the strategy

Regular periods of review should be planned for the strategy, including minor reviews annually to track implementation progress and update annual budgets, and major reviews every five years to update the forward Implementation Plan and revisit wider strategic directions and targets.

The first Implementation Plan (2024-2029), accompanying this report, outlines actions, actions and works that Hepburn Shire should undertake over the next five years. This includes significant initial further planning to start the strategy, develop further supporting plans and adjust the focus of capital works are required.

Action 7.4: Prepare a rolling calendar of internal, stakeholder and community engagement activities

Engagement and advocacy activities will be required to implement the ITS and communicate its outcomes with stakeholders and the community. Internal engagement should also be done to help track attitudes to the ITS and its implementation.

Action 7.5: Maintain regular meetings with DTP to discuss projects and issues

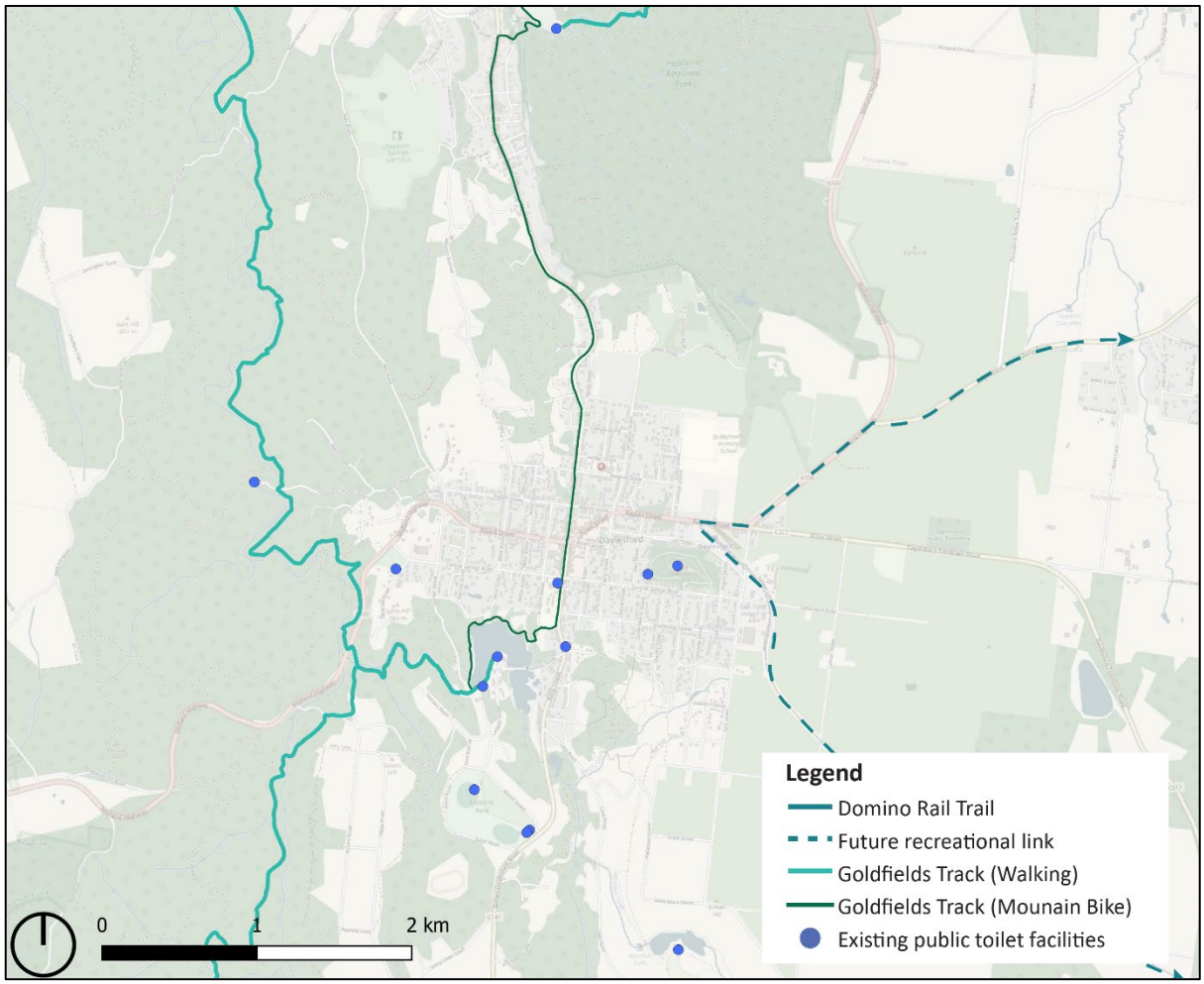
Close collaboration with the Department of Transport and Planning should be maintained throughout the life of the strategy, to enable both parties to share relevant upcoming projects, important issues and opportunities, and manage shared implementation of actions where required.

Appendix A Draft KPIs and targets

Vision	In 2050, people can move independently, safely, and sustainably throughout Hepburn Shire. Townships are lively, connected by a range of transport choices which prioritise people and the environment. Streets are vibrant and active, promoting strong connections in the community. Physical connections across the Shire reflect learnings from the Dja Dja Wurrung and avoid impacts on Hepburn's cultural heritage and natural environment. Hepburn Shire is a leader in sustainable travel, with all movement undertaken by transport modes that contribute to net-zero emissions. The most vulnerable people are at the forefront of decisions on street design and all people, regardless of age or ability, can travel with confidence.										
Principles	**People-centred transport**		**Fairer transport**			**Greener and healthier**		**Safer movement and places**		**Vibrant economy**	
	The transport system prioritises people instead of creating conflicts between people and movement, making it easier and safer for everyone to travel. Roads are designed and managed to reflect that transport is to move people and goods, rather than vehicles.		Transport investment increases transport choice and prioritises the needs of vulnerable and marginalised people, different genders, people with low incomes, and people with disabilities. Transport investment supports affordable access for everyone who needs it. An improved public transport system helps to increase greener travel and reduce car dependency.			Greener transport options contribute to net-zero Shire emissions, preserve air quality, improve health outcomes and reduce car dependency. The Shire is a leader in green movement choices, including low and zero emissions vehicle use and higher active and public transport mode use.		People feel safe when travelling throughout Hepburn. Streets are designed for people (not just cars) to facilitate walking, wheeling, social interaction and access to public transport. Public places are attractive, vibrant and inviting. Better road maintenance supports a safer road network for all users. Wildlife is protected and roadkill is		The Shire's transport networks enable efficient movement of goods and people. Transport is more affordable for households and visitors alike, increasing local economic activity and creating new development opportunities. People have easy access to more employment opportunities, community services, business, social and	
Desired outcomes	Increased walking and wheeling, particularly for short trips in and around townships, and use of Shire tracks and trails		Increased use of public transport	Reduced car use	Reduced vehicle ownership	Reduced annual emissions from transport	Increased use of LEVs/Evs	Improved road safety outcomes throughout the Shire	Reduced impacts on wildlife	Increased local jobs for local people	Reduced transport costs as a proportion of household income
KPIs	**1. Walking counts at selected locations**	**2. Wheeling counts at selected locations**	**3. Public transport patronage on Shire services**	**4. Traffic growth on Shire roads compared to PJV activity growth**	**5. Car ownership (number of vehicles).**	**6. Transport emissions in the Shire (excluding visitors)**	**7. Percentage of LEVs/EVs in vehicles registered in the Shire**	**8. Rolling 5-year average road fatalities and injuries**	**9. Roadkill counts and reports to animal welfare agencies**	**10. % of Shire jobs filled by Shire residents**	**11. Transport expenditure % of household income**
Measurement frequency	Annual	Annual	Annual	Annual	Annual (VicRoads) and 5-yearly (Census)	Annual	Annual	Annual	Annual	5-yearly (Census)	5-yearly (Census)
Notes	*Determine representative locations for regular walking and wheeling counts and establish measurement systems (sufficient to estimate annual average weekday and weekend day activity levels, and possibly seasonal variations). One option could be to install automatic, continuous pedestrian movement monitors such as those used by the City of Melbourne.*	*See notes under KPI 1.*	*Need to confirm with DTP that extending myki to regional areas will enable more detailed and frequent patronage data to be released for regional areas like Hepburn Shire.*	*Sample sites need to be established, and regular counts undertaken sufficient to estimate annual average weekday and weekend day traffic levels, and seasonal variations. Population figures can be obtained annually from ABS and visitor levels from Tourism Monitor*	*Number of vehicle registrations (by vehicle type) paid from Shire addresses each year, from VicRoads. Could also identify EVs, motorcycles, trucks etc., to track trends in different vehicle types. Additionaly, vehicle ownership (vehicles per household) is recorded every Census. Both measures relate to residents only, not visitors.*	*CHECK: The Hepburn Shire ZNET initiative is tracking emission trends using the 2018 baseline year as a starting point. Baseline data includes emissions Shire-wide, and broken down by Ward. It also includes emissions created in the Shire by visitors, but these are not tracked as they are accounted for in visitors' home locations.*	*Number of EV vehicle registrations (by vehicle type) paid from Shire addresses each year, from VicRoads (subset of KPI no 5).Can be expressed per household or per head of population. Relates to residents only, not visitors.*	*Rollling 5-year average annual crashes, fatalities and injuries by road user type*	*Need to define how roadkill and injury to animals is recorded and reported.*	*Background Report gives 2021 Census numbers - need to remember the effect of COVID in that year, also that the Census is in July and may not capture summer tourism effects. Indices to be developed - % of residents working within (or close to) the Shire, and average travel distance to work (in and from the Shire).*	*Can check if inter-Census data is sufficiently detailed and reliable to track this measure on an annual basis. A consistent method is needed to measure transport expenditure in the Shire that will take into account the shifts to active and public transport and their effect on costs.*
EXISTING	To be measured	To be measured	To be measured	To be measured	To be measured	87,330 tCO2-e in 2018 (33% of Shire total)	To be measured	57 per year (5 yrs ending 2022)	To be measured	64% (2021 Census)	To be measured
Notes	*Counts should be made at selected times and places to represent walking activity of visitors and residents.*	*See notes under KPI 1.*	*Existing data does not provide sufficient breakdowns. The shift to myki in regional Victoria should improve this*	*An index (traffic growth relative to population and visitor growth) should be developed.*		*Existing emissions should be updated from 2018 (in the Z-NET report) to a more recent year.*	*Subset of KPI 5.*	*Existing 5-year rolling average includes the drop during COVID.*		*There are currently (2021) about 5,300 jobs in the Shire, of which 3,400 are held by Shire residents.*	*Figures already given in the Background Report may not be sufficiently detailed.*
TARGETS (change from 2021)	To be determined	To be determined	To be determined	To be determined	To be determined	To be determined relative to Z-NET & Vic	To be determined	To be determined	To be determined	To be determined	To be determined
Short term 2027	11% increase	11% increase	16% increase	-1% decrease	-1% decrease	-16% decrease	-11% decrease	-11% decrease	-11% decrease	5% increase	-5% decrease
Medium term 2035	29% increase	29% increase	71% increase	-6% decrease	-6% decrease	-54% decrease	-51% decrease	-24% decrease	-24% decrease	10% increase	-10% decrease
Long term 2050	68% increase	68% increase	137% increase	-14% decrease	-12% decrease	-100% decrease	-100% decrease	-55% decrease	-55% decrease	20% increase	-20% decrease
Notes	*Targets should be expressed relative to existing levels and indexed to PJV growth*	*Targets should be expressed relative to existing levels and indexed to PJV growth*	*Targets should be expressed relative to existing levels and indexed to PJV growth*	*Targets should be expressed relative to existing levels and indexed to PJV growth*	*Targets should be expressed relative to existing levels and indexed to P growth*	*Targets should be expressed relative to existing levels and indexed to P growth*	*Targets should be expressed relative to existing levels and indexed to P growth*	*Targets should be expressed relative to existing levels and indexed to PJV growth*	*Targets should be expressed relative to existing levels and indexed to PJV growth*		

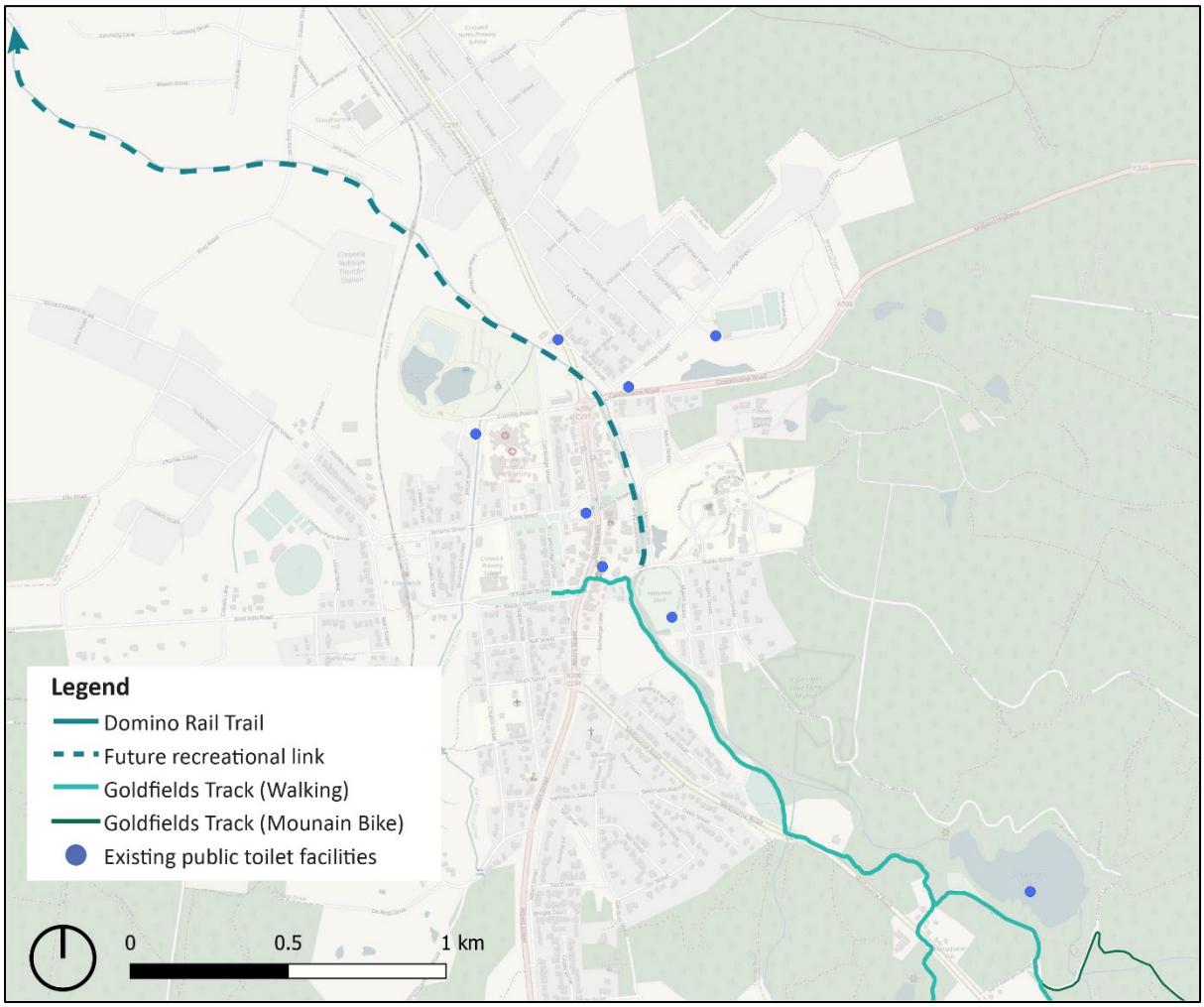
Appendix B Township existing public toilet provision maps

Daylesford existing public toilets



Source: M&PC (2024)

Creswick existing public toilets



Source: M&PC (2024)

Clunes existing public toilets

Source: M&PC (2024)

Trentham existing public toilets

Source: M&PC (2024)