

# Hepburn

SHIRE COUNCIL



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	Name	Date	Signature
PREPARED BY	Caitlyn Mulvogue-Pasquali Trenton Johnson-Boe Rick Williams	1 November 2023	
REVIEWED BY	William McDougall	1 November 2023	
APPROVED BY	Knowles Tivendale	1 November 2023	

#### Addressee:

Bronwyn Southee Manager Strategic Planning Hepburn Shire Council PO Box 21 DAYLESFORD VIC 3460 AUSTRALIA

#### Another project by:

Movement & Place Pty Ltd ACN: 625 377 595

Trading as:

**Movement & Place Consulting** 

ABN: 85 375 284 892

PO BOX 8101, DANDENONG VIC 3175 info@movementandplace.com.au www.movementandplace.com.au

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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**

As a part of the Future Hepburn project, Hepburn Shire Council is preparing an Integrated Transport Strategy (ITS), with help from Movement & Place Consulting. This Background Paper provides the evidence base on travel and transport in Hepburn Shire, highlighting key issues, presenting analyses of available data and outlining the opportunities for improvement, prior to the development of the ITS.

Good transport systems are critical to liveability, a high-quality environment and vibrant community life. They make it easier for people and goods to move and connect; can improve health and well-being; and cater for the needs of people of all abilities and attributes. A transport strategy for Hepburn will need to consider transport at an integrated level.

#### **Context**

Hepburn Shire is in Central Victoria. Main towns include Clunes, Creswick, Daylesford, Hepburn Springs and Trentham. The Dja Dja Warrung people are the traditional owners of the land, with their land extending north past Wedderburn and Rochester. During the mid-1800s, gold was discovered in Hepburn Springs and Daylesford, and mining continued until the 1960s. Some places originated as gold mining towns, and their streetscapes have significant heritage value. Today, the Shire is known as one of Victoria's most popular tourist destinations, with scenic natural sites and mineral springs.

Hepburn Shire has a population of approximately 16,600 residents as of 2021 and a median age of 52 years old, significantly higher than the Victoria's median (38 years old). Most locals and visitors use private cars for travel, and there is a lack of public transport availability.

According to the 2021 Census, 38% of Hepburn Shire workers worked from home or did not work, 56% travelled to work by car, less than 1% used public transport and 4% walked or rode a bicycle. These figures were affected by COVID; in 2016 there were fewer people working from home and more people using public transport. Post-COVID, working from home has gone down in general, and public transport use is increasing slowly (bolstered by significant regional fare reductions in 2023).

Rates of tourism in Hepburn Shire have been increasing in recent years. The Shire's tourism industry attracted 1.2 million domestic visitor nights and another 884,000 domestic day trips in the year ending March 2023. During most Saturdays and Sundays, the "daytime population" of the Shire is probably double that of the resident population, producing a lot of extra traffic and demand for parking.

The majority of transport to and around the Shire is made by private vehicle, likely due to the significant distances travelled and the lack of convenient alternatives. Key challenges identified for each mode of transport are discussed below.

## Walking

There is a lack of high-quality pedestrian infrastructure across Shire towns. This includes footpaths, safe mid-block crossing points, crossing ramps and wayfinding and signage (particularly in tourist centres and on tracks and trails). This impacts pedestrian safety, with pedestrians forced to walk on streets and roads. However, in some areas there is very little vehicle traffic, and there is concern that the rural 'feel' of many town streets could be compromised by adding extra infrastructure. Despite towns being a walkable size for most local trips, the lack of safe and high-quality infrastructure can influence people's choice to walk and can also impact negatively on people with disabilities.

#### Wheeling

Despite mountain bike riding and cycling being strong attractors to the region, there is limited wheeling infrastructure. This has caused concerns for the safety of those who wheel, particularly



longer-distance bicycle riders. Roads such as Midland Highway are a common route for bicycle riders to travel within the Shire, however, community consultation has revealed a desire for separated facilities to improve their safety.

#### **Public transport**

There is a lack of convenient and frequent public transport in the Shire, with most buses, coaches and trains only running a few services a day. In addition, Clunes and Creswick Stations see very low boardings for the V/Line train, both being within the ten least-used V/Line stations in the State.

Many towns across the Shire have limited to no public transport access. For example, the only public transport in Trentham is a V/Line coach which runs four times a day Monday to Friday, three times on a Saturday and twice on a Sunday. Service frequencies like this aren't sufficient to provide a convenient and reliable travel choice for users.

Community consultation shows that there is a demand for better services to higher order centres like Ballarat, Kyneton and Woodend. This would also improve connectivity to other destinations via these places.

Physical accessibility of public transport is also an issue. A number of coach/bus stops in the Shire are not DDA compliant. People with reduced mobility that rely on transport other than driving may not feel comfortable or safe using public transport.

#### Roads, freight and parking

Due to the large number of vehicles which travel in the Shire, including heavy vehicles, the condition of roads is a significant issue, impacting safety of road users and Council's budget. Damage such as potholes and cracks in the road can be seen throughout the Shire and are a concern to the community. This damage can impact the safety of road users by affecting drivers' control over vehicles, as well as causing more wear and tear on the vehicles themselves. Damage to roads also is a significant cost to Council, which is responsible for maintaining 612km of sealed roads in the Shire according to Council's Road Management Plan 2021.

The Midland Highway, the primary highway through the Shire, runs through Daylesford and Creswick town centres, bringing significant traffic volumes to the main activity centres. Residents of these communities are concerned about this traffic mixing with local users, such as pedestrians and wheelers. High through traffic volumes also impact the attractiveness of the public realm in these centres.

High tourist numbers at all times of year generate significant levels of traffic, particularly in Daylesford and Hepburn Springs on weekends. It is common for traffic to be banked up along the primary streets in these town centres, and there is high competition for parking.

Freight travels to and through the Shire by road in heavy vehicles. Rail freight from the north of Victoria, such as Merbein, bypasses Hepburn by travelling to Ballarat via Ararat, being an over 100km detour. Road freight emits significantly more carbon than rail freight, producing 16 times for emissions than rail per kilometre travelled (VAGO 2023). However, the cost and convenience of road freight often outweighs this factor.

#### **Future growth**

Hepburn Shire's population is expected to grow steadily, but slowly. According to Victoria in Future 2023 data released in September, Hepburn Shire's population is expected to increase from 16,500 in 2021, to 18,700 in 2036 (14% overall increase in population). Structure Plans currently in development by Hepburn Shire will allow this growth to be planned and managed appropriately. The community



has identified a lack of housing, and particularly housing variety, across the Shire. This is exacerbated by the significant number of short-stay rentals in the Shire, reducing housing stock. Increasing population will make it even more important to plan for increased housing and improve access to services across the Shire.

Ballarat is a significant area of growth in the State. It has grown from 95,200 residents in 2011 to 113,500 residents in 2021, a 19% growth. The City of Ballarat is projected to grow to 144,700 residents in 2036, a 28% growth from 2021. Many of these residents will live in growth areas on the northern outskirts of Ballarat, like Miners Rest and Mount Rowan. This will likely increase traffic between Ballarat and Hepburn Shire.

#### **Community engagement**

A community survey was prepared for the ITS and posted on the Future Hepburn website during October 2023. The survey attracted 88 respondents.

Car driver, car passenger and walking were the top three transport modes used by respondents in the last month.

Using public transport more was by far the biggest preference for those wanting to use other modes, followed by bike/e-bike.

When asked about using different transport modes more, respondents' main concerns were:

- Walking: distance
- Wheeling: safety
- Train or bus: destination not served, waiting time.

There was a strong desire for walking and wheeling more often, mainly for recreational and/or health reasons. A lack of appropriate paths was the key issue preventing this.

Findings from this and other recent community engagements have found common needs and wants in the Hepburn Shire community. These include:

- Extending a number of tracks and trails within the Shire, for example the Domino Trail to Woodend and Daylesford/Creswick
- Extending the Daylesford Spa Country Railway to Trentham and perhaps onto Woodend/Hanging Rock
- Need for safer and separated bicycle riding and walking infrastructure along busy, fast-moving roads such as Midland Highway, to increase connectivity for walkers and wheelers
- Concern for increasing traffic in town centres, particularly due to the impact of through traffic along main streets
- Significant value attached to the wide roads and nature strips in Shire townships
- Need to better manage parking, particularly in Daylesford town centre
- Desire for better connectivity for walkers and wheelers within towns and to key destinations such as tracks and trails and open space.

The community's wishes will help shape the ITS and guide future development of transport in Hepburn.



#### Opportunities to explore

The Shire has a number of opportunities that should be explored and leveraged in the ITS. These include:

- **Size of towns:** Towns across the Shire are generally of a walkable size for most local trips. However, currently due to the lack of footpath provision, many choose not to walk. Increasing footpath provision, and other local pedestrian infrastructure improvements could significantly impact the take up of walking in towns. Improvements to wheeling infrastructure, such as painting of sharrows, increasing signage to improve awareness of bicycles on local streets, and installing separate wheeling lanes on key streets will also facilitate local wheeling trips.
- Mountain bike riding: Creswick Trails were identified to host the 2026 Commonwealth Games
  mountain biking competition prior to its cancellation in July 2023. Despite the cancellation, the
  Creswick Trails project is continuing construction, with completion expected in late 2024. This is a
  significant project to further cement Hepburn as a primary tourist destination in the State and
  could bring in increased tourism from around the country or internationally.
- Past investment in public transport: Despite being high-quality and well-maintained public assets, use of Clunes and Creswick Stations is very low. In 2010, the Victorian Government, invested \$6 million to upgrade Clunes and Creswick Stations. This investment is currently underutilised due to the lack of use of these stations. Increasing V/Line services, and then likely boardings from these stations, will increase the returns from this significant investment.
- Local transport: In 2019, the Shire undertook a study to assess local transport services and needs of Hepburn. It found that there is significant demand for local transport services across the Shire due to the lack of convenient public transport services. Investing in local and community transport services will allow for increased mobility of residents, greater use of Council assets, and could make the case for State investment if seeing significant use.

#### ITS development and next steps

The ITS will set future long-term (20-30 year) directions and aspirations for transport in Hepburn Shire. It will establish key desired outcomes and links with State and regional planning. It will also be clearly linked to Council's broader future vision, the town structure plans and rural area settlement strategy, and other elements of the Future Hepburn initiative of which it is a key part.

Rather than just an isolated, high-level document, the ITS should be seen as a continuous process working towards achieving the long-term goals for transport and travel in Hepburn. As such it will be accompanied by a rolling, short term (3-5 year) Implementation Plan that will include actions where Council will play a number of roles.

Actions developed for the ITS will fall under three types, being:

- Actions to be incorporated in Council's capital works and maintenance programmes: this
  includes initiatives such as infrastructure maintenance and upgrades, new facilities, parking
  regimes, community and visitor information
- Advocacy activities with stakeholders: liaison with key agencies and stakeholders to promote Council and community needs (for example, DTP, V/Line, RPV, tourism bodies, industry bodies, neighbouring Councils)



 Mechanisms to make the ITS effective: Councilor/ committee responsibilities, officer buy-in and resourcing, relationship to other plans and strategies, developing new or updated actions (for example, developing a new walking and cycling plan).

Key steps for development of the ITS are shown in the diagram below.





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## 1 Background

Hepburn Shire Council is preparing an Integrated Transport Strategy (ITS), with help from Movement & Place Consulting.

The ITS will guide the continued improvement of transport in the Shire. It will shape Council'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 ITS will plan for a local transport system that can efficiently and safely connect people to their everyday needs, catering for residents, workers and visitors alike. It will recognise the need for better transport connections within and between townships in Hepburn Shire, and to places beyond.

As well as covering motorised private and public transport, the ITS will encompass active transport needs for the Shire and set in place key directions for improved connections for the community. It will also cover recreational infrastructure such as walking and cycling trails and will address how good transport can promote economic prosperity and environmental sustainability.

The ITS is part of Council'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.

The Hepburn Shire Walking and Cycling Strategy is also part of the ITS.

## 1.1 This paper

This Background Paper provides the evidence base on travel and transport in Hepburn Shire, highlighting key issues, presenting analyses of available data and outlining the opportunities for improvement.

It is an extension of the Discussion Paper that was released for public information and comment in September 2023.



## 2 Developing an Integrated Transport Strategy

Transport is a key issue throughout Hepburn Shire. This was clear from the local transport forum held in Trentham (2018), which prompted Council's Local Transport Benchmarking Study in 2019. Further feedback in 2023 has come from Future Hepburn township surveys.

## 2.1 Why does integrated transport matter?

Good transport systems are critical to liveability, a high-quality environment and vibrant community life. They make it easier for people and goods to move and connect; can improve health and well-being; and cater for the needs of people of all abilities and attributes.

An integrated approach understands the places that people need to go, and the transport options required to reach them. It also considers all transport users, putting the most vulnerable first. A key element of this is to reduce car dependency wherever possible and provide better and more affordable choices, especially for short local journeys. Another key element is to cater for new more sustainable transport technologies, such as electric vehicles, and emerging transport trends such as ride sharing and micro-transport solutions like e-scooters.

Transport issues are best understood and tackled as a whole, which is why an integrated approach is so important. Victoria's *Transport Integration Act* 2010 requires Council to use a comprehensive, integrated approach to transport.

Integrated planning puts the most vulnerable – and sustainable – methods of travel first. Figure 2.1 below depicts the modal hierarchy that will be used to influence the development of the ITS.

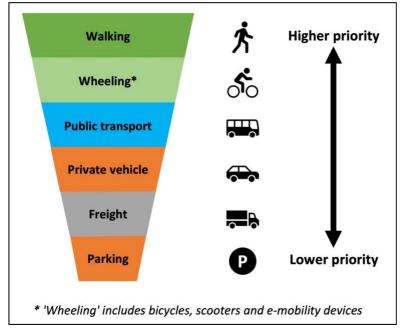


Figure 2.1: Modal hierarchy for integrated planning

Source: M&PC (2023)

## 2.2 Council's role in transport planning

An integrated approach also ensures that transport system changes account for and benefit all areas that Council is responsible for. It will recognise and build on other plans and strategies, including those depicted in Figure 2.2 overleaf.



Figure 2.2: What transport impacts and related Council strategies

DOMAINS THAT INFLUENCE TRANSPORT PLANNING	COUNCIL PLANS AND STRATEGIES
HEALTH AND WELLBEING Providing access to sustainable transport options (walking, wheeling and public transport) that encourage active lifestyles, connection to community and access to essential daily needs has a profound impact on physical, mental and social health	Municipal Public Health and Wellbeing Plan 2021-2025 Council Plan 2021-2025
LAND USE  Transport and land uses are interdependent. For example, if the location of housing, employment, education and essential services is strategically connected to the transport network, Hepburn Shire can continue to be an attractive place to live in the future	Hepburn Planning Scheme  Rural Hepburn: Agricultural land study and rural settlement strategy (emerging)  Township structure plans for Clunes, Creswick, Daylesford & Hepburn Springs, Glenlyon and Trentham (emerging)
SUSTAINABILITY  Planning for an environmentally sustainable transport network can support a clean energy transition, emissions reduction and benefit socio-economic outcomes	Sustainable Hepburn 2022 - 2026
ECONOMIC  Sustainable transport should support the efficient movement of goods and people, enhance economic productivity and reduce housing stress and financial burden associated with car travel	Economic development strategy 2016-2021
EQUALITY  An integrated transport network should prioritise access for vulnerable users, ensuring that the network is safe and inviting. Catching public transport, walking or wheeling should be embraced as an attractive way to travel without any access barriers	Disability Action Plan 2023-2026 Inclusive Victoria: State disability plan 2022-2026 Positive ageing strategy 2022-2030 Victorian Charter of Human Rights and Responsibilities Act 2006
CHARACTER  Transport outcomes should leverage the character and strengths of any given community. Hepburn has a wide range or walking and bicycle tracks that are used for recreational purposes by residents and tourists, which widens the scope of the transport network and influence on travel behaviours	Rural Hepburn: Agricultural land study and rural settlement strategy (emerging)  Township structure plans for Clunes, Creswick, Daylesford & Hepburn Springs, Glenlyon and Trentham (emerging)  Council Plan 2021-2025  'Walks and Rides' Information document

Source: M&PC (2023)

Council plays a number of roles in planning for transport and some with differing levels of influence and involvement. These roles generally include:

- Advocate: Limited direct influence and involvement. Representing the community's interests and needs to external bodies such as the State Government and private sector.
- Facilitator: Assisting a group or provider with an action, policy, or initiative Council has some influence over
- **Partner:** Shared influence and involvement with another body or provider, to deliver a service or policy
- Provider: Direct influence and involvement, where Council is the body supplying the service or policy.



These roles cover areas that it can influence directly, through its planning and service delivery activities, and indirectly through advocacy and partnerships with other responsible agencies. Types of influence Council has over transport are outlined in Figure 2.3 below.

Direct influence Service and infrastructure delivery Strategic policies and planning **Engagement and behavioural** change Developing strategic plans and policies to Maintaining transport assets (including create a sustainable transport future while local roads, walking and wheeling Engaging communities and businesses to integrating actions with other policy areas infrastructure and public amenities) to understand key transport issues and opportunities available to Council, high standards, and delivering costeffective infrastructure to enhance communicating changes to the network network reliability and efficiency and encouraging behavioural change Indirect influence Advocacy and funding **Partnerships** 

Figure 2.3: Influence of Council on transport

Source: M&PC (2023)

Various strategies, plans and policies will interact with the ITS. These will include:

- Council Plan
- Various Council strategies
- Township structure plans
- State Government strategies and policies.

Advocating for support from State and

Federal governments for funding,

influencing the outcomes of infrastructure

development, changes to public transport

and general governance

Development of the ITS will ensure there is alignment across the various levels of policy and strategies to support a unified vision for Council.

Developing strong partnerships and

collaboration with diverse stakeholders

who influence the transport system at

local, regional and state levels

## 2.3 A note on 'wheeling'

We use the term 'wheeling' instead of 'cycling' or 'bicycle riding' throughout this paper. 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').

## 2.4 A note on 'active transport'

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.



## 3 Travel in and around Hepburn Shire

Planning for transport is about understanding the needs of people and the economy. It's important to recognise the unique character of Hepburn Shire when planning any changes. As well as local people's needs, the large number of visitors to the Shire must also be considered. Limited transport choice means that car travel dominates the Shire, resulting in high transport costs for households in an area with an older population with relatively low income.

## 3.1 Location and population

Hepburn Shire has a resident population of about 16,600 people according to the 2021 ABS census. The Shire's largest town of Creswick is located approximately 15km from the centre of Ballarat, and 105km from the Melbourne CBD. The main towns (Clunes, Creswick, Daylesford/Hepburn Springs, Glenlyon and Trentham) house two-thirds of the Shire's total population, shown in Figure 3.1 below.

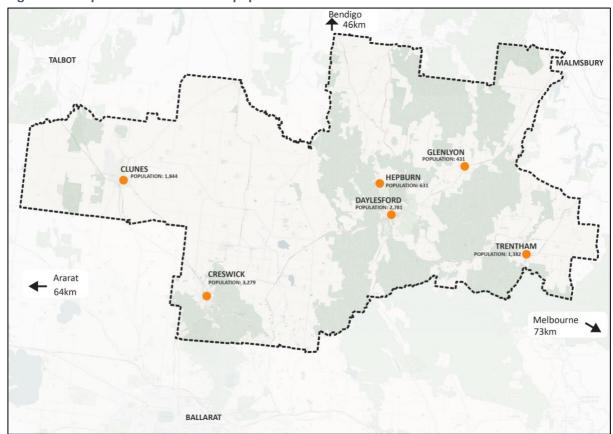


Figure 3.1: Hepburn Shire towns and populations

Source: M&PC (2023)

Much of the Shire, particularly in the east, is made up of significant parks and forests, such as Creswick Regional Park, Lerderderg State Park, and Wombat State Forest. The west of the Shire is primarily made up of productive agricultural land for cropping and grazing.

The towns are generally made up of low-density neighbourhoods, supported by a main-street style town centre. Towns across Hepburn are known for their unique heritage character, as this area of Victoria was the centre of Victoria's gold rush in the 1850's. Due to the small size Hepburn towns,



many residents within the Shire's larger towns live within walking distance (approximately 1.2km) to existing services such as groceries or a general store.

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 another 884,000 domestic day trips in the year ending March 2023. Hepburn Shire had 80% growth in overnight visitation between December 2021 and December 2022, the highest of all tourism regions in Victoria. Furthermore, overnight visitors spend 20% more in Hepburn than the Victorian average (\$198 a night compared to \$165) (National Visitor Survey 2022).

Data taken from Tourism Research Australia, under the Australian Trade and Investment Commission, found that spending in Hepburn Shire by overnight domestic tourists was significantly higher than in the neighbouring Macedon Ranges Shire. Hepburn Shire had 416,000 domestic overnight visitors, compared to Macedon Ranges Shire's 255,000.

Visitors to Hepburn Shire are primarily on weekends, with 66% of overnight trips and 62% of day trips including a Saturday or Sunday (Tourism Research Australia, 2023). Tourist information centres are set up across the Shire, including in Creswick, Clunes, Daylesford, and Trentham.

During most Saturdays and Sundays, the "daytime population" of the Shire is double that of the resident population, producing a lot of extra traffic and demand for parking. This particularly affects key tourism centres, like Daylesford.

One in nine houses in Hepburn are listed on short-term rental platforms such as Stayz and Airbnb (AirDNA, 2023), further highlighting the significant visitor population.



Figure 3.2: Midland Highway entering Hepburn Shire from Ballarat

Source: M&PC (2023)

## 3.2 Travel patterns and demand

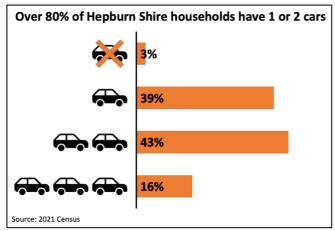
Most travel in Hepburn Shire uses private cars. For many, this is the only practical choice. Limited local facilities, long distances between key destinations, low public transport service frequencies, poor connections and limited coverage mean that local people and visitors are highly car dependent.



#### Car ownership

Only 3% of households in Hepburn Shire are without a car, and nearly 60% have two cars or more, as shown in Figure 3.3 below.

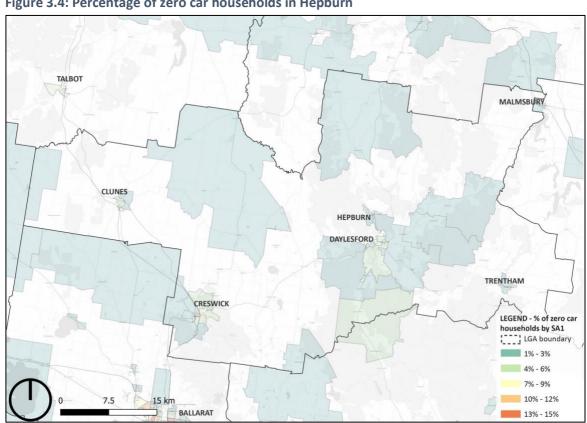
Figure 3.3: Number of cars per household in Hepburn, 2021



Source: ABS with M&PC analysis (2023)

Zero-car households are spread throughout the Shire. Figure 3.4 overleaf shows these zero car households based on 2021 census data. Figure 3.5 and Figure 3.6 show the zero car ownership percentages across Clunes, Creswick, Daylesford, Hepburn and Trentham.

Figure 3.4: Percentage of zero car households in Hepburn



Source: M&PC (2023)



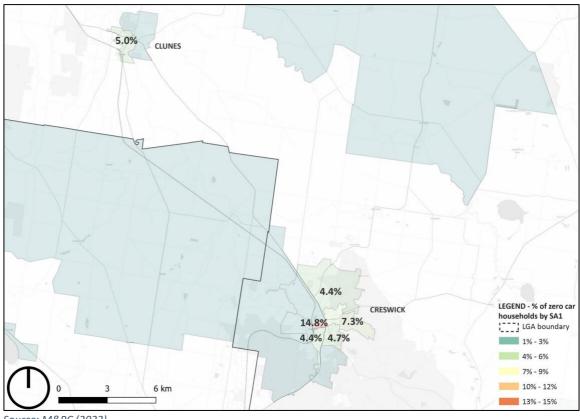


Figure 3.5: Clunes and Creswick zero car ownership percentage

Source: M&PC (2023)

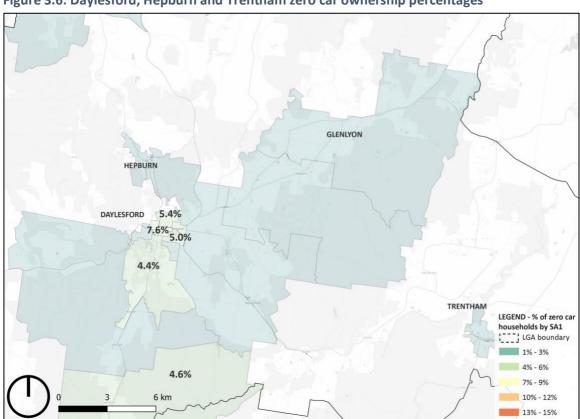


Figure 3.6: Daylesford, Hepburn and Trentham zero car ownership percentages

Source: M&PC (2023)

Many of these zero-car households are located within or close to existing townships. The highest levels of zero-car households are found close to the centre of existing townships. Creswick and Daylesford have the highest levels of zero car ownership, with 5-10% of households not owning a car. These households are generally located close to the centres of activity in these towns.

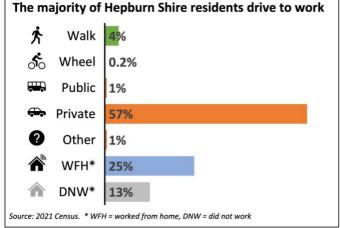
Residents close to the centre of these towns can walk to complete most of their everyday tasks. However, residents without cars have to rely on other modes of transport to access needed services elsewhere. As public transport services are limited (see sections 4.2 and 5.3), accessibility of goods and services is impacted for the households that do not have access to a car.

## Journeys to work

In common with much of regional Victoria, data on travel in Hepburn Shire is limited but the evidence confirms the large amounts of car use. For example, in the 2021 Census, 38% of Shire workers worked from home or did not work and 57% drove to work, while only 4% walked and very small numbers wheeled or used public transport, as shown in Figure 3.7 below.

Figure 3.7: Methods of travel to work, 2021

The majority of Hepburn Shire residents driv



Source: ABS with M&PC analysis (2023)

On Census Day in 2021, about 1,700 Hepburn residents worked from home, and 2,200 travelled to work in the Shire, and another 2,200 travelled to work outside the Shire. Figure 3.8 overleaf depicts the location of the workplaces of Hepburn Shire residents. It excludes a small number of people who reported their places of employment as being outside Victoria.



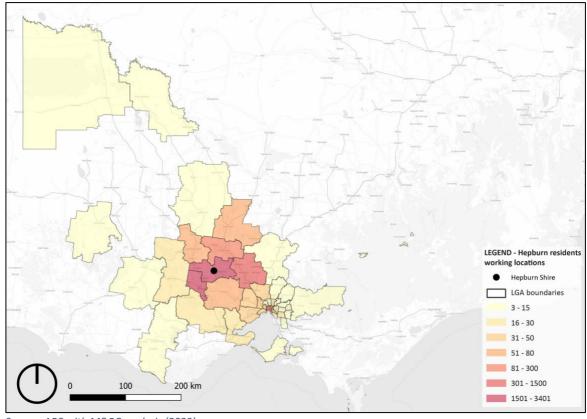


Figure 3.8: Location of work of Hepburn residents, Victoria

Source: ABS with M&PC analysis (2023)

Figure 3.9 below shows the number of Hepburn Shire residents travelling to work on Census day 2021, as well as those working from home. It also shows the number pf people that entered Hepburn Shire for work, from places outside.

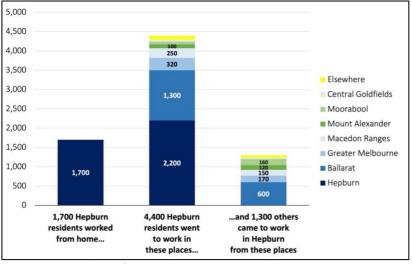


Figure 3.9: Journeys to work to and from Hepburn Shire

Source: M&PC analysis of ABS 2021 Census

1,700 Shire residents worked from home on Census day in 2021. The top five areas that Hepburn Shire residents travelled to work in were:



Hepburn Shire: 2,200 people

City of Ballarat: 1,300

Greater Melbourne (as a whole): 320

Macedon Ranges Shire: 250

Mount Alexander Shire: 100.

Of those that travelled to work in Hepburn Shire from outside, the top five areas of usual residence were:

• City of Ballarat: 600 people

Greater Melbourne (as a whole): 170

Macedon Ranges: 150

Mount Alexander: 120

Moorabool: 160.

Travel times to/from places outside the Shire vary by mode and location. For example, estimated morning peak travel times from Daylesford to the top areas of employment are:

- Ballarat: 40 minutes by car, 100 minutes by public transport
- Inner Melbourne: 110 minutes by car, 140 minutes by public transport
- Mount Alexander (Castlemaine): 30 minutes by car, 110 minutes by public transport
- Macedon Ranges (Gisborne): 50 minutes by car, 170 minutes by public transport.

Despite being significantly cheaper (especially since regional fares were reduced) public transport takes significantly longer than car and the very low service frequencies significantly reduce its use as a regular mode of travel to work.

#### Other journeys

Significant numbers of school students travel within and in/out of Hepburn every day. As of the 2021 Census, 2,400 people were of school age (5-19 years old) in Hepburn Shire, accounting for 14.5% of the Shire's population. The Victorian Government provides a school bus for students who live more than 4.5km from their closest government or non-government denominational school, and do not have public transport access to a school less than 1.6km from their home. Many Shire students are eligible for this, especially those travelling to schools in Ballarat, Daylesford, Kyneton or Maryborough, for example. School bus routes are determined by the residential locations of the students that use them. Hepburn Shire residents are zoned to one of three government secondary schools, being Daylesford Secondary College, Kyneton Secondary College, and Mount Rowan Secondary College. These schools provide bus access for students in the Shire. A number of schools in Ballarat, Maryborough, Mount Macedon, and Woodend also provide private bus transport from towns in Hepburn Shire including Clunes, Creswick, and Trentham.

There have been issues in the past with Government-provided school buses not being appropriate for the students living and studying in the Shire. According to a submission from 2021 to the Inquiry into the Use of School Buses in Rural and Regional Victoria, students from Creswick attending Daylesford Secondary College were not dropped off in Creswick, but at a stop in Springmount (4km from Creswick town centre).

Key services, such as groceries, healthcare, and banking are spread throughout the Shire. Many towns lack all key services, limiting access for residents. Services such as chemists, major anchor chain



grocery stores, post offices, and medical centres/facilities, vary in provision across each of the major towns.

Daylesford has one major supermarket (Coles), and one smaller grocer (Blake Family Grocers). The supermarket and its parking area are very busy, especially at peak visitor times; Google reviews often discuss the parking area and wait times in the store due to the number of shoppers. Clunes, Creswick and Trentham have smaller (IGA) grocery stores, and smaller settlements such as Glenlyon have local general stores. Many Shire residents have to travel elsewhere to access a wider range of goods, which significantly increases the kilometres travelled.

In 2019, Hepburn Shire undertook a Local Transport Benchmarking Study. The study found that there are significant local transport gaps across the Shire for a number of trip types and users, including:

- A need for transport options for night-time workers, particularly between Daylesford, Hepburn, and Hepburn Springs, outside the hours of operation of courtesy buses
- Existing community buses have significant down time and a limited user base, with substantial potential to serve a larger portion of the community if optimised
- A need for a community bus in Clunes and Glenlyon
- A need for a community bus to service young people accessing after-school activities, social events, and returning home after late night work to reduce social isolation
- A need to educate the community on what local transport opportunities are available.

## 3.3 Transport cost burdens

Car dependency comes at a high cost to households. First, there is the upfront cost of a car, which has been steadily increasing over the years. Next is the need to register the car, pay for insurance, and then pay for ongoing fuel costs. Following that, the car needs regular maintenance and users might get parking or other fines. For most households in Hepburn, transport costs can account for 27% of their household budget (See Figure 3.10 below). The high cost of buying and running a car, especially where other transport choices are extremely limited, can mean that people have to make hard choices between other essential costs, such as groceries, dental care, or costs related to education.

For example, a two-adult, one-student household with median income in Hepburn Shire may only have about \$300 a week left after covering their housing and transport costs. Figure 3.10 below outlines the typical costs of car ownership compared to median household income in the Shire.

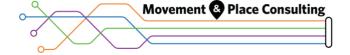


Figure 3.10: Costs of car ownership



Source: ABS with M&PC analysis (2023)

Low-income households in the Shire in particular may find it difficult to get around easily and costeffectively, given the high reliance on car ownership and use. They may have to rely on older, cheaper cars (vehicles are generally older in regional areas than in capital cities), which lack modern safety features and are less fuel-efficient.

## 3.4 Vulnerable transport users

Understanding the key needs of different groups of people is essential to health and wellbeing, especially in relation to travel, access and mobility. The Integrated Transport Strategy will use a person-centred approach to ensure that the most vulnerable users of transport are prioritised, this includes people living with a disability, the young and old, and different genders.

## 24% of Hepburn Shire's population live with a disability

People with a disability have particular challenges with travel. They often rely on others, or on special services such as the Multi-Purpose (Maxi) Taxi Program. Access to public transport – and also getting around local areas – can be difficult, especially where the facilities are below par. The Disability Discrimination Act sets standards for design of public places, including footpaths and public transport systems (like bus stops and vehicles), but many facilities fall well short of these standards, and can be poorly maintained.

#### 18% of the population are over 70 years old

Hepburn Shire's population has a median age of 52, significantly older than the Victorian average of 38. Older people, especially when fully or partially retired, may have less mobility and tend to drive less than people of working age. From 75 years, people have to self-test for driving ability and can only keep a driving licence for three years at a time. Many would like to walk or cycle more but are often deterred by poor facilities and safety concerns.

Many streets across the Shire do not have a footpath on either side of the road. This severely limits accessibility for people who choose to, or are required to, walk, such as older people who cannot drive. Without access to a footpath these people may be forced to use the road space, which can be a significant safety risk.



In addition, many people over 70 rely on public transport to access local services if they cannot drive. As public transport is not currently accessible and convenient in the Shire, it isolates a large proportion of the population.

#### 51% of the population are women

Women ride bicycles and use public transport less than men do. They also have different needs and transport use patterns to men. For example, in Hepburn Shire, 44% of people travelling to work in the 2021 Census are women, but they are only 30% of people cycling to work, and 40% of those using public transport. This is a common pattern in many places. Women are deterred by concern for their safety and security, especially if travelling alone. Public transport services can also be unsuitable to their transport usage patterns (for example smaller more frequent local trips throughout the day).

According to research, women are more likely to fear for their personal safety in public areas than men. This difference is particularly stark at night. The Australia Institute has found that 40% of Australian women do not feel safe when walking alone at night, compared to 17% of men.

#### 23% of the population are obese

In 2020, almost one in four Hepburn residents were obese, above the Victorian average. Car use has a significant correlation with physical health, weight in particular. A longitudinal study published in the American Journal of Preventive Medicine (2013) demonstrated that those who consistently travel distances of over 20,000km annually are 40% more likely to become overweight or obese than people who travelled less than 10,000km each year<sup>1</sup>.

Improving access to other modes of transport, such as high-quality walking and wheeling trails, will give residents the chance to move around Hepburn and their community in a different way, and also improve their physical health.

## 3.5 Environmental impacts of transport

The global climate crisis is a vital issue for local governments to tackle. Hepburn Shire Council has been proactive in their approach to climate action by supporting Z-NET Hepburn Shire, a community partnership working toward net-zero emissions, as well as through Council plans and strategies.

Hepburn Shire's transport emissions by industry are shown in Figure 3.11 below. Emissions from transport in Hepburn Shire make up 33% of total baseline emissions, attributed mostly to high levels of private motor vehicle travel throughout the Shire. On top of this, visitors to the Shire produce a similar proportion of transport emissions.

<sup>&</sup>lt;sup>1</sup>), Núñez-Córdoba et. al., 2013, Annual Motor Vehicle Travel Distance and Incident Obesity A Prospective Cohort Study, American Journal of Preventative Medicine, 44(3): p.254–259



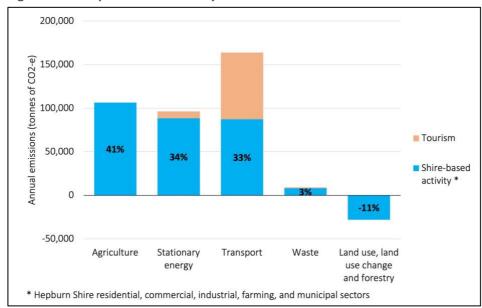


Figure 3.11: Hepburn emissions by sector

Source: ZNET Hepburn Shire Community Plan (2018)

Transport emissions across Australia have been rising steadily since 1990. Road transport accounted for 85% of Australia's transport emissions, approximately 16% of Australia's total emissions) (Climate Change Authority 2021). Private vehicles are inefficient in regard to space and emissions. Figure 3.12 below shows average transport emissions by mode, according to the Climate Council.

Figure 3.12: Transport emissions by mode

Source: Climate Council (2017)

According to this analysis, cars produce significantly more carbon emissions per person compared to other motorised transport options. Although individual car fuel efficiency has increased (and tailpipe



emissions reduced) in recent years, Australia does not currently have fuel efficiency standards for vehicles, and larger, thirstier vehicles are increasingly popular; the increase in SUVs and dual-cab utes, for example, illustrates this. On average, Australian passenger cars emit 40% more carbon than cars in the European Union, 20% more than cars in the United States, and 15% more than cars in New Zealand (Department of Infrastructure, Transport, Regional Development, Communications and the Arts, 2023).

In terms of space efficiency, cars also perform below most other modes of transport. According to the Draft Urban Road and Street Design Guide developed by the Department of Transport in 2020, private vehicles are the least space efficient mode of transport. Figure 3.13 below shows the amount of space required to transport 50 people by car, bicycle, walking, and bus.

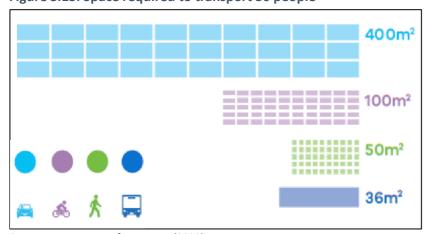


Figure 3.13: Space required to transport 50 people

Source: Department of Transport (2020)

Not only are cars inefficient in regard to carbon emissions, but they take up more space than other modes of transport to carry the same number of people.

#### 3.6 Costs to Council

Hepburn Shire Council is responsible for maintaining transport infrastructure assets. This includes approximately 612km of sealed roads, 844km of unsealed roads, 45km of footpaths, 82km of kerb and channelling, 165 bridges and 34km of drains. Council's maintenance budget for these assets is about \$2.9 million per year according to the Road Maintenance Strategy 2021.

Despite the Midland Highway being removed from the Primary Freight Network, removing all Hepburn Shire roads from the PFN, a significant number of trucks still travel through the Shire (for more detail see section 4.4). This exacerbates wear and tear of Hepburn's roads, increasing the budget required for general road maintenance by Council. Figure 3.14 below shows damage to a street commonly used by freight vehicles, being the intersection of Bridport Street and Central Springs Road in Daylesford in October 2022. According to traffic volume data, approximately 160 – 180 trucks use this route a day (on average), which would contribute significantly to the creation of this pothole and the road damage.



Figure 3.14: Road damage Bridport Street and Central Springs Road, Daylesford



Source: Google Maps (2022)

V/Line coaches, which travel through the municipality also impact the road surfacing due to the weight of the vehicles. Figure 3.15 below shows significant road damage in front of a V/Line coach stop in Daylesford on Bridport Street (taken in July 2023).

Figure 3.15: Damage to road surfacing, Bridport Street



Source: M&PC

The impacts of steadily increasing traffic (especially heavy vehicles) and weather extremes from climate change (such as stormwater flows and flash flooding) are significantly affecting the condition of roads, which in turn affects user safety, fuel consumption and wear and tear on vehicles. More preventative maintenance, and more frequent monitoring of road and path condition, will be needed to ensure that maintenance funding is used as efficiently as possible, while being responsive to changing circumstances.



## 4 Hepburn's transport system today

Hepburn Shire's transport system is almost exclusively road-based, apart from a single rail line with a very limited passenger service. Bus and coach services are also limited, apart from Creswick, which is served by relatively frequent buses to and from Ballarat. Walking and wheeling facilities are concentrated in the townships, where there are also connections into a growing network of recreational trails in surrounding forest areas.

## 4.1 Walking and wheeling

Dedicated walking and wheeling facilities are concentrated in and around the main townships. Footpaths are generally located along local streets and, in some cases, next to arterial roads, often displaying outdated and low-quality designs that create unsafe environments for users. The Shire contains less of a traditional 'active transport' network configuration and is more of a recreational network, including walking tracks and on and off-road bicycle tracks. Figure 4.1 below illustrates the existing walking and wheeling network in the Shire.

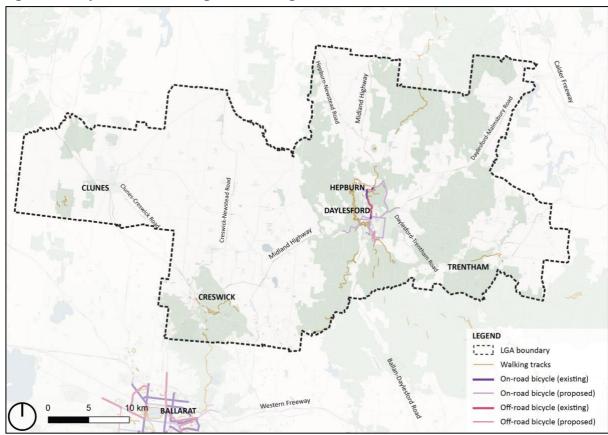


Figure 4.1: Hepburn Shire walking and wheeling network

Source: M&PC (2023)

As shown above, the majority of the walking and wheeling infrastructure can be found surrounding Daylesford and Hepburn, including walking tracks. This map, however, does not show footpath provision across the Shire. This varies from street to street. Figure 4.2 overleaf is an example of a residential street in the Shire (Purcell Street in Clunes), which lacks footpaths on either side of the street.



Figure 4.2: Streetscape of Purcell Street, Clunes



Source: M&PC (2023)

Council has been steadily increasing the quality of the pedestrian network across the Shire over recent years. For example, a number of sections of footpath have been constructed or upgraded in Clunes and Creswick since 2017. In addition, several continuous footpaths have been installed across intersections along Main Road in Hepburn Springs as shown in Figure 4.3 below.

Figure 4.3: Continuous footpath, Hepburn Springs



Source: M&PC (2023)

Much of the street space in townships is allocated to car traffic and parking. While important for local businesses, this can make things more difficult for people walking and wheeling. The busiest area is Vincent Street in the middle of Daylesford, where conflicts between cars and walkers or wheelers are



common, and footpaths get very crowded. Creswick has an increasingly busy centre along Midland Highway, where wide traffic lanes, angle parking and high truck volumes also compete with walkers and wheelers. Elsewhere, especially in Hepburn Springs, Clunes and Trentham, there is much less through traffic in the main streets, but they still get very busy at weekends.

Away from the main streets in towns there is much less car traffic, but in many places, walkers have to use the road carriageway where there are no footpaths (such as in Figure 4.2). Solutions are needed that provide safer streets while also protecting the heritage and rural feel that residents treasure.

The tourist economy brings substantial weekend and holiday congestion for Daylesford, Hepburn Springs in particular, and to a lesser extent Trentham and Clunes. Due to the large number of tourists, the pedestrian realm of the centre of Daylesford and Hepburn is important to increase the comfort of pedestrians and their safety as they explore the towns. Footpaths in town centres, particularly Creswick, Clunes, Daylesford and Hepburn are wide and largely shaded to allow for leisurely browsing and exploring of the town. Figure 4.4 below shows Daylesford's main street along Vincent Street in July 2023.



Figure 4.4: Crowded footpaths in Vincent Street, Daylesford

Source: M&PC (2023)

Mid-block crossing opportunities are provided within Daylesford's town centre, with one raised zebra (wombat) crossing provided across Vincent Street. The island at this crossing is vegetated with colourful flowers, improving both crossing safety and the attractiveness of the public realm.

Residents and visitors alike enjoy recreational walking and bicycle tracks in and around the main townships. There are some good off-road paths and trails which provide recreational walking and wheeling opportunities. These are located across the Shire; however, the majority are located in the main tourist areas of Daylesford and Hepburn. These trails vary in difficulty and length, some suitable for families, and some only for experienced hikers. Some trails are also appropriate to be used by bicycle riders, commonly being the longer trails. Community engagement regarding Hepburn tracks and trails was undertaken in 2021, and the findings are summarised in section 6.

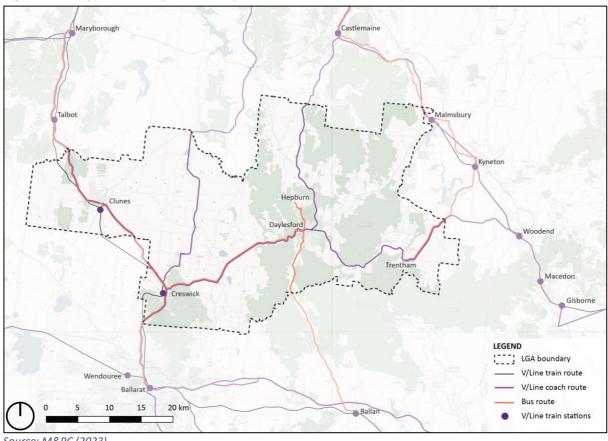


## 4.2 Public transport

Public transport in Hepburn Shire, shown in Figure 4.5 overleaf, include:

- Melbourne Maryborough V/Line train service, with stations at Clunes and Creswick
- V/Line coach routes
- Regional bus routes.

Figure 4.5: Hepburn Shire public transport network



Source: M&PC (2023)

Service frequencies are relatively low. The Melbourne-Maryborough V/Line train service in the west of the Shire has only two services a day in each direction, while most of the regional and coach bus services that provide connections between the townships and beyond the Shire operate infrequently. An extra weekend return service was added to the Maryborough line in December 2022 between Maryborough and Ballarat, to facilitate easier weekend travel.

The Ballan-Hepburn via Daylesford service operates once a day in each direction on Monday to Friday, with no weekend service. The Creswick-Hepburn service runs twice daily to Creswick on weekdays and weekends, and once daily to Hepburn on weekdays and once on weekends. The Daylesford-Hepburn loop timetable is complex. It runs at standard times twice in the morning, but the service differs between days of the week. An express service runs between Hepburn and Hepburn Springs on Monday, Wednesday, Thursday and weekends, whereas on Tuesdays and Fridays it also stops at the Old Hepburn Hotel.

The most frequent bus services in the Shire are between Creswick and Ballarat; this also enables Creswick residents to access trains at Ballarat Station. This route operates fifteen services in each direction on weekdays, and about half that amount on weekends.



Regional V/Line coach services provide connections to the north, including Bendigo and Castlemaine. They also make connections between Daylesford and Woodend, providing the only public transport for Trentham residents. Despite being infrequent, these services connect to important facilities (such as health services in Kyneton), as well as train services on the Bendigo line. This provides residents with access to Melbourne CBD in under two hours, which is competitive with car journey times when traffic is congested.

Fares on regional public transport in Victoria have recently been capped to a maximum of \$10 per day (\$5 concession). Demand has increased substantially on regional train services. After capped \$10 daily fares were introduced in March 2023, patronage of V/Line trains increased by 31% from approximately 1.4 million trips in February to 1.9 million trips in March. Regional bus and coach services have not increased by the same amount, with coach and bus patronage both increasing by approximately 14%. This reduced growth compared to regional train services is likely due to the infrequency of bus and coach services.

Clunes and Creswick Stations have low patronage, with around 950 and 650 annual station entries respectively in 2021-2022. Patronage was actually higher pre-COVID (2,200 and 1,350 entries in 2018-19), even though there was then only one train a day each way. Low patronage can be assumed to be affected by the low frequency of services on the Maryborough line, as well as a slow recovery from the effects of COVID.

At present, most bus and train services in the Shire use paper tickets rather than the myki system. The State Government recently awarded a 15-year contract to a new ticketing operator, who will run and upgrade myki to include use by mobile phones and credit cards. It is understood that the upgraded system will be rolled out throughout Victoria.

Hepburn Shire public transport is not a part of the Principal Public Transport Network (PPTN). The PPTN is a network where high-quality public transport services are or will be provided. It encourages integrated transport and land use planning by encouraging more diverse and dense development near high-quality public transport to support public transport usage. The Hepburn Planning scheme (clause 18.02-3S) states that the PPTN should facilitate:

- High quality public transport services that support increased diversity and density of development, particularly at interchanges, activity centres and where Principal Public Transport Network routes intersect.
- Modern commuter-style public transport services that link Melbourne with the regional growth areas of Geelong, Bendigo, Ballarat, Seymour and Traralgon.
- Service improvements to other regional and rural areas.
- A metro-style rail system that provides a very high frequency of service in the Melbourne metropolitan area.
- A new high quality orbital rail (Suburban Rail Loop) through Melbourne's middle suburbs.
- A balance between the rail usage needs of public transport and freight.

While not all of these outcomes are appropriate for Hepburn, focusing on service improvements to regional and rural areas is integral to increasing public transport use in Hepburn and increasing Hepburn resident's accessibility with the greater region and state. In order to focus on public transport improvements, routes that require service improvements should be advocated for inclusion in the PPTN. In addition, this will support the objective of a modern commuter-style public transport service to Ballarat and Bendigo, as higher-quality services to these cities will increase catchment for these commuter services.



#### 4.3 Road network

Hepburn Shire is serviced by an extensive road network, shown in Figure 4.6 below. The Calder and Western Freeways connect the Shire to Metropolitan Melbourne, Ballarat and Bendigo, while the Midland Highway serves as an important north east-south west route through the Shire.

Arterial and local roads provide links between the larger towns of Daylesford and Creswick, and smaller towns like Clunes, Hepburn Springs and Trentham. There are also many smaller settlements between these towns. Distances between townships are anywhere from 15km to 65km, meaning that return journey times can range from 30 minutes to well over an hour and a half.

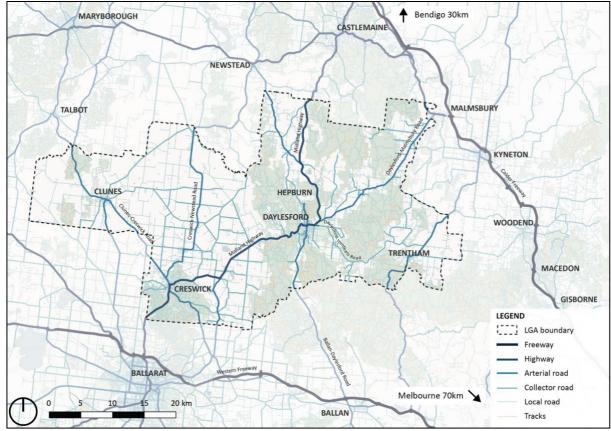


Figure 4.6: Hepburn Shire road network

Source: M&PC (2023)

Local roads have a typical country character, being generally wide with wide verges and varied provision of kerbing throughout town residential areas. There is one set of traffic lights in the Shire, located on Albert Street in Creswick, providing safe crossing for pedestrians in the Creswick town centre. Major intersections, such as the intersection at Albert Street, Howe Street, and Vincent Street, are managed as roundabouts, which supports the country character of the Shire.

As stated in section 3, Council manages and maintains 612km of sealed roads and 844km of unsealed roads. These figures do not include State-controlled roads. The following roads are under the control of Regional Roads Victoria (RRV):

- Vincent St North/Main Road Hepburn Springs
- Midland Highway
- Daylesford Trentham Road



- Ballan Daylesford Road
- Daylesford Newstead Road (from Franklinford)
- Creswick Newstead Road (to Campbelltown)
- Clunes Creswick Road
- Ballarat Maryborough Road
- Trentham Kyneton Road
- Myrniong Trentham Road (Blackwood Road)
- Daylesford Malmsbury Road
- Daylesford Ballarat Road (Dean Road from Newlyn)
- Clunes Talbot Road
- Bungaree Creswick Road
- · King Street, Daylesford
- Main Road, Hepburn Springs.

Hepburn Shire has no jurisdiction or ability to undertake works on these roads, however, it advocates for improvements on behalf of the community.

#### **Traffic volumes**

Traffic volumes are shown in Figure 4.7 overleaf. The busiest roads 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. As the main routes to access Daylesford from the Melbourne is through Woodend to the east, or Ballan to the south, the traffic between Daylesford and Creswick is likely local traffic travelling between the two towns. In addition, this traffic is likely also traffic from the east of the Shire travelling to Ballarat.



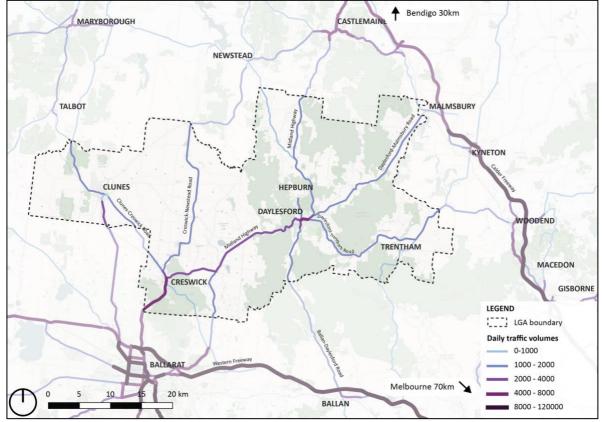


Figure 4.7: Hepburn Shire traffic volumes

Observation shows that there are significant commuter peak flows on major roads, particularly to and from Ballarat, Ballan, Kyneton and Woodend (partly for access to Melbourne train services).

Due to the substantial number of weekend visitors, significant congestion can be seen in towns such as Daylesford and Hepburn outside of typical commuter peak periods. During weekends, traffic can queue throughout Daylesford as visitors search for parking to visit local restaurants, shops or tourist attractions. Figure 4.8 and Figure 4.9 overleaf were taken on a Sunday in late July around lunchtime, showing the typical congestion in Daylesford at weekends. Traffic can be seen to be backed up a significant distance along Howe Street/Midland Highway, with congestion continuing up Vincent Street. These levels of tourism also impact the availability of parking within the Shire, particularly Daylesford (see Figure 4.9 overleaf).

Other towns in the Shire do not experience the same levels of visitor congestion as Daylesford and Hepburn Springs. However, Midland Highway is the primary route to Ballarat, and runs through the centre of Creswick. Through consultation for the Creswick Structure Plan, residents have noted that through traffic in Creswick impacts on the amenity of Albert Street and the town centre.





Figure 4.8: Midland Highway, Daylesford (1pm, Sunday 30 July 2023)





Source: M&PC (2023)

# 4.4 Freight

## **Principal Freight Network**

Victoria's Principal Freight Network (PFN) is the State Government-defined primary network of roads and rail lines that carry freight throughout the State. Figure 4.10 overleaf shows the PFN in Hepburn Shire and the surrounding area.



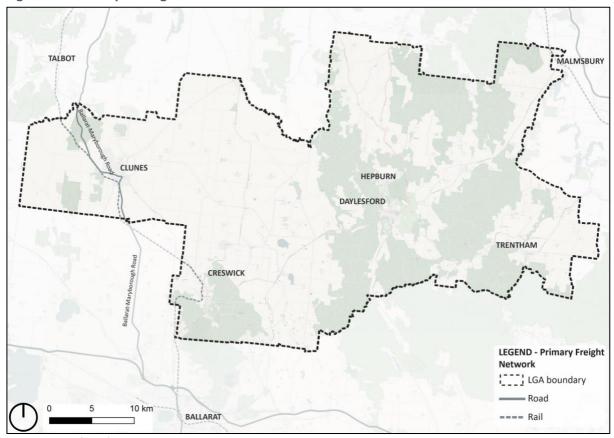


Figure 4.10: Principal Freight Network

The Ballarat-Maryborough road through Creswick and Clunes, and the Maryborough rail line alongside it, are both part of the PFN, and the only such links in the Shire. the Shire is part of the Victorian Principal Freight Network (PFN). In addition, rail freight uses the Maryborough line through Creswick and Clunes; it carries significant rail freight, especially grain, to the Port of Geelong via Ballarat

The Midland Highway between Ballarat and Castlemaine (via Daylesford) used to be part of the PFN, but it was removed following a review in 2020. The Ballarat-Maryborough Road was added to the PFN at the same time. Removing the Midland Highway may have been prompted by the high proportion of tourist traffic and the convoluted alignment of the Midland Highway (particularly around Daylesford), due to the topography and surrounding protected bushland.

#### **Truck traffic**

Despite this change to the PFN, truck volumes remain high on the Midland Highway, particularly between Ballarat and Daylesford. Figure 4.11 overleaf shows the daily truck flows on State roads in the Shire.



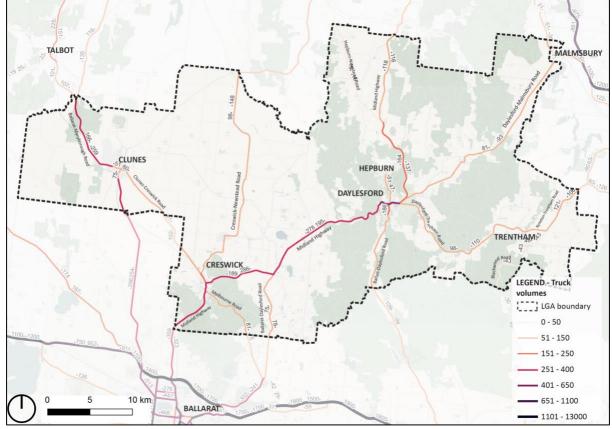


Figure 4.11: Average daily truck traffic volumes in Hepburn Shire

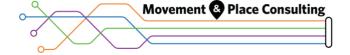
Source: VicRoads with M&PC analysis (2023)

Truck traffic is concentrated along Midland Highway (nearly 500 trucks a day west of Daylesford, reducing to 300 to the north) and Ballan-Daylesford Road (200 trucks a day), both passing through Daylesford. Ballarat-Maryborough Road carries just over 300 trucks a day north of Clunes. In Daylesford itself, the Midland Highway (Raglan Steet) has about 1,200 trucks a day, due to convergence of trucks on other roads in and out of the town (e.g., Daylesford-Trentham Road and Daylesford-Malmsbury Road) as well as internal town truck traffic.

Designated truck routes are signposted in Clunes (via Victoria Street) and Daylesford (via Bridport Street) to divert heavy vehicles away from the town centres, but in Creswick the Midland Highway carries trucks through the town centre along Alfred Street, creating added safety concerns for pedestrians there as well as increased noise and fumes.

## Rail freight

Rail freight travels through Hepburn; the rail corridor through Clunes and Creswick is a key route for rail freight between north-west Victoria and Geelong/Melbourne, through Ballarat. The tracks on this route are currently broad gauge, but standard gauge will be added as part of the Murray Basin Rail Project. This will provide a more direct route for standard gauge freight which currently has to travel via Ararat between Maryborough and Ballarat, adding around 100km to the journey. However, the Murray Basin Rail Project is unfinished, has experienced large cost overruns, and (at the time of writing) is on hold pending the Commonwealth Government's Infrastructure Program Review, according to the 2023-24 Victorian State Budget.



## 4.5 State Government transport plans and commitments

As of 2023 there is no defined State Government plan for regional transport or traffic in or around Hepburn, nor indeed for Victoria as a whole. Furthermore, many of the projects and programs mentioned in the 2023-24 State Budget are subject to the Commonwealth Government's 90-day Infrastructure Program Review, which was supposed to have been completed in July but has not been released as yet, nor have any funding decisions been announced. Items affected by this include any major project or program that attracts Commonwealth funds; in Hepburn Shire this means:

- Some but by no means all of the road safety budget
- the Murray Basin Rail Project, which will affect the Maryborough-Ballarat Rail Line.

Funded projects that may affect Hepburn include:

- The Melton line upgrade, and more VLocity trains, could deliver more trains and improved reliability for Hepburn's train users to and from Melbourne
- Public transport ticketing renewal will extend myki to regional areas, and enable payment by phone or credit/debit card, enabling cashless public transport use for the first time in the Shire
- State road safety, restoration and maintenance programs are largely intact and ongoing.

RPV's website does not list any specific, funded projects in Hepburn. Planning and consultation were done:

- in 2018 for 'planned' upgrades to Midland Highway (Ballarat to Castlemaine)
- in 2020 for road safety initiatives in Albert Street, Creswick also part of Midland Highway.

No information is given on the results or status of these planning investigations, or any actions that may arise from them. Consultation with RPV may provide more insight.



# 5 Key transport challenges

Hepburn Shire's transport network has a range of challenges that the Integrated Transport Strategy will need to address. This section summarises these challenges and provides some case studies to show how they are tackled elsewhere.

## 5.1 Future growth and change

Hepburn Shire has grown by 2,200 residents (or approximately 16%) from 14,400 to 16,600 residents between 2011 and 2021 according to ABS census data. Growth is expected to continue to 18,700 residents by 2036 (Victoria in Future 2023, Department of Transport and Planning). This projection is higher than the previous (2019) Victoria in Future estimate, which predicted a 2036 population of 17,800. The Hepburn Shire Affordable Housing Strategy uses these 2019 figures to inform the strategy.

Between 2011 and 2021, growth in the Shire has varied between towns. Due to the differences in data collection boundaries between 2011 and 2021, it is difficult to compare data for all towns, however, the boundaries for Creswick, Clunes, and Daylesford/Hepburn Springs remained the same. Table 5.1 below shows the growth from 2011 to 2021, including growth percentage for the three areas listed above.

Table 5.1: Growth between 2011 and 2021 in Creswick, Clunes and Daylesford/Hepburn Springs

	2011 population	2021 population	Growth %
Creswick	2,600	2,800	9%
Clunes	1,700	1,800	11%
Daylesford/Hepburn Springs	3,300	3,700	14%

Source: ABS with M&PC analysis (2023)

Table 5.2 below shows the projected populations of Creswick, Clunes, and Daylesford/Hepburn Springs if their 2011-2021 growth trends are maintained between 2021 and 2031.

Table 5.2: 2031 population estimates for Creswick, Clunes and Daylesford/Hepburn Springs

	2021 population	2031 population	Change
Creswick	2,800	3,000	+200
Clunes	1,800	2,100	+300
Daylesford/Hepburn Springs	3,700	4,300	+600

Source: Department of Transport and Planning with M&PC analysis (2023)

With a growth of population, additional housing will be needed. Average people per households are measured in the census, which allows approximate estimates of the number of additional households from estimated growth in 2031, should trends continue. This analysis is shown in Table 5.3 overleaf.



Table 5.3: Estimated 2031 households based on average people per household trends

	Ave	erage people per hou	usehold	Estimated additional
	2011	2021	2031 estimated	households
Creswick	2.3	2.1	1.9	+129
Clunes	2.3	2.2	2.1	+102
Daylesford/Hepburn Springs	2	2	2	+267

Source: ABS census with M&PC analysis (2023)

The demand for additional housing is exacerbated by the significant proportion of properties being used for short term accommodation, particularly in Daylesford/Hepburn Springs. In 2022, 21% of dwellings in Hepburn Shire were unoccupied (roughly 2,200), which was double the Victorian average. Approximately 1,000 dwellings in Hepburn Shire are listed on Airbnb, and half of those are located in the Daylesford area. Structure plans currently under development by Hepburn Shire will plan for where this additional housing would be best constructed.

Ballarat is experiencing significant growth. According to Victoria in Future 2023, the City of Ballarat's population is expected to increase by 31,300 people between 2021 and 2036, a 28% increase. A significant proportion of this growth is in the north-west of the city (Miners Rest and Mount Rowan). Ballarat's Northern Growth Area at Mount Rowan is expected to accommodate 6,000 houses and approximately 15,000 residents. This area, bordered by Burrumbeet Creek, Cummins Road, Midland Highway and the Western Highway, is about 8km from the centre of Ballarat and 10km from the centre of Creswick. Its growth will increase traffic on Midland Highway, not only towards Ballarat but also towards Creswick, but Creswick will remain separated from Ballarat by the Creswick Plantation and Creswick Regional Park. It is possible that some residents of this growth area will choose Creswick for everyday services, although Ballarat's Wendouree activity centre is also close. Facilities in the growth area itself may also attract people from Creswick.

## 5.2 Poor quality walking and wheeling infrastructure

#### Walking

Car-centric streets reduce the quality of walking and wheeling environments. This makes it more difficult for walkers, wheelers and people who are mobility impaired. In many places there is a need to retain the heritage character of township streetscapes, but it is also important to provide better and safer infrastructure for vulnerable road and street users, safely separated from general vehicle traffic where there is a need to do so.

In many of the towns, there are posted 60km/h speed limits except in the very centre, where 50 or 40km/h limits are provided. Reducing these limits, as is being done elsewhere, would make things much safer for everyone (see section 5.8).

People will be more likely to walk if their route is:

- **Useful** where the path takes them directly and intuitively to their destination with helpful wayfinding and without significant detours or difficult crossings
- Safe where the path provides protection from vehicles, but also is designed in a way which promotes activity and reduces perceptions of personal insecurity
- **Comfortable** where the path is well shaded (particularly by tree canopies), temperate and provided with several seating opportunities



• **Interesting** – the path is punctuated with active frontages, quality open spaces and other points of interest.

Footpath provision is varied across the major settlements. Most areas in close proximity to town centres ware provided with footpaths on at least one side of the road. Smaller settlements like Allendale, Broomfield, Glenlyon, Newlyn North and Smeaton have limited or no pedestrian infrastructure. Where there are no footpaths, people have to walk on grass verges or on the road. People with prams or reduced mobility would probably only use the road, and verges can be more difficult during wet weather when the ground is muddy. Figure 5.1 below shows a person forced to travel along the road due to the lack of a footpath.



Figure 5.1: Mobility scooter user using the road in Clunes

Source: M&PC (2023)

Lacking footpaths across towns reduces the amount of people who may walk to everyday services, such as children walking to school, families walking to the park, or individuals walking to the local shops such as post office or grocery store. It is understood that the typical distance the majority of people are willing to walk to access everyday services is 1.2km. As these towns are small in size, should footpaths be provided along strategic routes, the number of people able to walk to these everyday services would likely increase significantly.

### Wheeling

Wheeling is a significant pastime in the Shire, however, there is limited infrastructure provided outside of dedicated recreational bicycle tracks. Where wheeling facilities are provided, such as along Main Road in Hepburn Springs, they often have limited separation from traffic and are of inconsistent width and surface quality. Figure 5.2 overleaf shows an example of poor-quality wheeling infrastructure in Hepburn Springs.



Figure 5.2: Narrow, uneven and incomplete bicycle lane in Hepburn Springs

Despite wheeling being encouraged recreationally within and nearby the tourist centres of the Shire, such as Daylesford, wheelers are generally not provided for in town centres. This limits the experience of wheeling locals and visitors, who have to ride on potentially busy roads or choose another mode of transport.

Research in Portland, Oregon<sup>2</sup> has categorised types of people who may be willing to wheel as a mode of transport, and what type of infrastructure is needed to encourage them to ride. The types, based on their confidence in riding, are:

- **Strong and fearless (1% of people):** people who will ride regardless of road or infrastructure conditions and are willing to mix with traffic
- **Enthused and confident (7% of people):** people who are comfortable in most conditions when riding, but prefer to use bicycle specific infrastructure such as on-road lanes
- Interested but concerned (60% of people): people who are curious about bicycle riding, but they are afraid to ride unless they can use protected lanes or off-road paths
- No-way, no how (33% of people): people who are not interested in riding at all.

Providing better wheeling infrastructure will likely attract a significant increase in 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.

## 5.3 Infrequent and limited public transport

Public transport services are infrequent and do not connect well with each another. For example, regional bus and coach services only run a few times a day, and don't always link up with other services

<sup>&</sup>lt;sup>2</sup> Geller R., 2006, Four Types of Cyclists. Portland Bureau of Transportation, Portland, Ore., http://www.portlandoregon.gov/transportation/article/264746.



like V/Line trains. This results in long waits, lengthy journey times, and limits choice and means that car use is the only practical option in most places.

The significant number of short stay rental properties in tourism centres means that workers in these towns have difficulty finding local housing, particularly in Daylesford and Hepburn Springs. This forces them to travel into the Shire from elsewhere. The lack of affordable and effective public transport can be an issue in attracting additional workers.

Usage of Creswick and Clunes stations is low, at 1,350 and 2,200 respectively in 2018-2019. Creswick had the fourth least, and Creswick the eighth least station entries in the State. These stations are only serviced by two services each way a day (one in the morning and one in the evening).

By way of comparison, Table 5.4 below lists annual station passenger entries in 2018-19 and 2021-22, the number of train services a day (Monday to Friday) and the population, for a selection of V/Line rail-served towns.

Table 5.4: Examples of V/Line train services and patronage

Town	Population	Trains/day	Station en	tries/year	Station entrie	s/head of pop
TOWIT	(2021)	(2023)	2018/19	2021/22	2018/19	2021/22
Ballan	2,800	64	105,500	50,100	37.7	17.9
Bunyip	3,200	34	14,750	9,900	4.6	3.1
Malmsbury	900	33	18,150	9,100	20.2	10.1
Yarragoon	1,900	33	12,450	9,050	6.6	4.8
Nar Nar Goon	1,000	33	9,350	4,550	9.4	4.6
Epsom	7,500	14	8,150	2.450	1.1	0.3
Ararat	7,000	13	42,750	21,050	6.1	3.0
Beaufort	1,700	10	9,200	5,650	5.4	3.3
Birregurra	900	10	3,300	1,250	3.7	1.4
Rochester	3,200	6	3,900	1,250	1.2	0.4
Pyramid Hill	600	4	2,800	1,300	4.7	2.2
Talbot	300	4	1,000	400	3.3	1.3
Maryborough	7,800	4	9,350	4,900	1.2	0.6
Clunes	1,800	4	2,200	950	1.2	0.5
Creswick	2,800	4	1,350	650	0.5	0.2

Source: M&PC analysis of V/Line station patronage data

Not surprisingly, station usage clearly correlates with the number of train services. A higher level of service, even where the catchment population is lower, results in higher station patronage. Examples that have similar or lower catchment population to Creswick or Clunes, but higher station usage, include Beaufort, Birregurra, Malmsbury, Pyramid Hill and Yarragon.

Beaufort in particular is a good comparison to Creswick and Clunes. It has a similar population to Clunes and is about halfway between Ararat and Ballarat (about 44km away from each); Clunes is



halfway between Ballarat and Maryborough (about 30km away from each). Beaufort has ten services a day each way on weekdays, more than double the service of Creswick or Clunes. This is clearly more flexible and convenient for travellers and is reflected in the station usage. Beaufort has four times the patronage of Clunes, and seven times the patronage of Creswick. However, it should be noted that Creswick is also well-served by buses to Ballarat, as mentioned previously.

The data also shows that patronage everywhere was significantly lower in 2021-22 than 2018-19, due to the after-effects of COVID-19. More recent data will probably show continued increases, accelerated further by the recent reductions in regional train fares.

Figure 5.3 below depicts Clunes Station, which despite low patronage, has good user facilities and well-maintained.



Figure 5.3: Well-preserved and maintained Clunes Station

Source: M&PC (2023)

V/Line coaches travel through Hepburn Shire, but like the train services they are also infrequent. The Mildura-Ballarat coach provides access between Creswick, Daylesford and Castlemaine. Despite connecting Shire residents to larger centres, this service only runs twice a day in each direction, once express between Creswick and Daylesford, and once stopping at towns such as Allendale and Smeaton, then express from Daylesford to Castlemaine.

The Daylesford-Melbourne (via Woodend) coach provides the only public transport for places such as Bullarto, Lyonville, Musk and Trentham, allowing access to goods and services at Woodend or to connect with other modes of public transport there. This service runs:

- Five times a weekday to Daylesford (seven on a Friday, three on a Saturday, and four on a Sunday)
- Six times a weekday from Daylesford (eight on a Friday, three on a Saturday, and four on a Sunday)
- Four times through Trentham and surrounds on a weekday, three on a Saturday, and two on a Sunday.



While this service does provide residents of smaller towns access to higher order centres, such as Woodend, and additional public transport, four services daily does not provide much flexibility of choice for travellers.

The V/Line Geelong-Bendigo coach runs via Creswick and Daylesford and also has limited service (only one service a day in each direction). Figure 5.4 below shows this service stopping at Creswick station.



Figure 5.4: Geelong - Bendigo via Daylesford V/Line coach at Creswick Station

Source: M&PC (2023)

Regional bus services such as the Ballan-Hepburn route are also infrequent, only catering to small numbers of travellers. The relatively frequent bus service between Creswick and Ballarat compensates for the lack of train services.

Low service levels for public transport in the Shire reduces its attractiveness, making it a last resort for residents. They also reduce the flexibility for visitors to the Shire travelling by coach or train. The lack of public transport affects the 'social licence' or community acceptance of public transport investment in general. Low investment leads to poorer quality services which further dampens social licence and patronage. This creates a vicious circle that deteriorates the quality and support for public transport operations; it characterised regional public transport in Victoria for many years. After years of neglect, regional rail has been revived in the last decade or so to larger regional centres like Ballarat and Bendigo. It is time to extend this revival to secondary places like those in Hepburn Shire.



### 5.4 Environmental issues

#### **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. Australia's per capita transport emissions are 45% higher than the OECD average (IEA 2016). In addition, according to Climate Council, Australia is the second worst for transport energy efficiency out of the top 23 energy-using countries, above only Saudi Arabia. This is likely due to high emitting cars, high distances travelled, low public transport usage, and low spending on public transport compared to road spending.

Electric vehicles are a key method of working towards Hepburn Shire's goal of 'Beyond Zero Emissions'. A key objective in the Sustainable Hepburn 2022-2026 Strategy is to reduce Council transport emissions and encourage electric vehicle uptake in the Shire to help achieve this goal.

While electric vehicle uptake has been behind the rest of the world in Australia, it has increased rapidly over recent months in 2023. According to the Electric Vehicle Council, sales of EVs in the first half of 2023 were higher than all sales in 2022. At the end of June 2023, over 46,600 EVs had been sold in Australia; three times more than the same period in 2022. EVs are now 8.4% of all new vehicles sold in Australia (they were 3.8% in June 2022). Ownership of electric vehicles will continue to increase at a rapid rate in Australia and Victoria. As a sign of this, Volvo announced in 2022 that they would stop selling internal combustion engine vehicles in Australia in 2026, switching to electric vehicle only sales. Most of the other major car brands have made similar commitments, and Tesla's electric Model Y has become one of the highest-selling models in the Australian market.

Charging infrastructure will continue to increase in importance as EV ownership increases. Hepburn Shire has already begun installing chargers as a part of the Hepburn Z-Net program. Public electric vehicle charging stations are located at:

- Creswick Visitor Information Centre (50kW fast charger)
- Daylesford Town Hall (25kW fast charger)
- Mineral Springs Reserve, Hepburn Springs.

Additional public charging stations are planned for Clunes and Trentham. Other (non-public) chargers are located in Creswick, Daylesford, Hepburn, Lyonville, and Musk.

A public charging station, located outside Daylesford Town Hall, is shown in Figure 5.5 below.





Figure 5.5: EV charging infrastructure on Vincent Street, Daylesford

## Air quality and other impacts

Local air quality is heavily influenced by large trucks, especially diesel ones. Whilst this may not be a serious problem in Hepburn Shire, the other impacts of heavy trucks — noise, visual bulk and safety concerns — are significant, especially where they pass through residential areas and town centres (see Figure 5.6 below). As shown in Figure 4.11 previously, the busiest freight routes through the Shire pass through town centres or residential areas, severely impacting the amenity of these areas.



Figure 5.6: Heavy truck passing through Daylesford

Source: M&PC (2023)

## Climate change

The effects of climate change are continuing to increase in severity. Hepburn Shire is vulnerable to increasingly severe extreme weather events such as flooding and bushfire. During the major flooding



event of October 2022, a number of roads in the Shire were closed, including arterial roads in and out of Daylesford (Ballan-Daylesford Road, Daylesford-Malmsbury Road and Daylesford-Trentham Road). More recently, in January 2022, a significant storm resulted in flooding in Creswick and damage in the town surrounds, resulting in:

- 180 primary residences damaged
- 45 primary residents severely damaged/ uninhabitable
- 55 residents displaced (as of late February 2022 seven weeks after the flood event)
- \$25m+ direct cost losses to the agricultural sector
- \$10m+ damage and losses to the business sector.

Hepburn Shire is also vulnerable to bushfires. Since the mid-1990's, fire events have become more dangerous, fire seasons have commenced earlier and lasted longer. As the climate continues to change, these trends are expected to continue. For example, there are high levels of confidence that the number of fire days where the Forest Fire Danger index is greater than the 95<sup>th</sup> percentile for 1986-2005 will increase in Ballarat by an average of 12.4 days a year by the 2050s, under a high emissions scenario (a 68% increase) (see the Sustainable Hepburn 2022 – 2026 Strategy for further information).

As well as reducing emissions to mitigate the longer-term effects of climate change, it will be important to ensure that the transport system is protected from the effects of extreme weather or fires. Ensuring emergency access and escape routes for extreme events, as well as keeping transport systems working safely for regular and routine users to avoid disruptions, will be increasingly important.

## 5.5 Public safety

People should feel safe when travelling. Feeling otherwise reduces mobility, engagement in civic life and access to services. Traditional approaches to transport planning have often overlooked the 'place making' aspect of transport provision. For example, streets should be designed for people not just vehicles so that they facilitate walking, wheeling, social interaction, and access to public transport. Transport should embody 'safer by design' principles to improve public safety and perceptions of vulnerably. By doing this, places become more attractive, vibrant and inviting.

#### Road trauma

Table 5.5 below summarises 20 years (2000-2020) of road crash data for the Shire. More recent data is not yet available, but it is well known that road trauma has increased significantly in 2022 and 2023 throughout Victoria.

<sup>&</sup>lt;sup>3</sup> urban-design-guidelines-1-introduction.pdf (planning.vic.gov.au)



Table 5.5: Summary of road crashes in Hepburn Shire 2000-2020

			Annual	Annua	l average pe	r thousand res	idents
	Total	%	Annual average	Shire of Hepburn	Victoria	Greater Melbourne	Regional Victoria
Recorded road crashes	922		44	3.0	2.7	2.6	2.9
Crash consequences							
Fatalities	40	2%	2	0.13	0.06	0.04	0.11
Serious injuries	370	20%	18	1.2	1.1	1.0	1.3
Other injuries	837	46%	40	2.7	2.5	2.5	2.6
No injuries	586	32%	28	1.9	3.1	3.3	2.5
Total consequences	1,833	100%	87	5.9	6.7	6.8	6.5
Fatalities and injuries by	road user						
Pedestrians	32	3%	2	0.1	0.3	0.3	0.2
Bicycle users	26	2%	1	0.1	0.2	0.3	0.2
Motorcycle users	167	13%	8	0.5	0.4	0.3	0.5
Motor vehicle users	1,018	82%	48	3.3	2.7	2.6	3.2
Unknown	4	0%	0	0.0	0.0	0.0	0.0
Total	1,247	100%	59	4.0	3.6	3.5	4.0

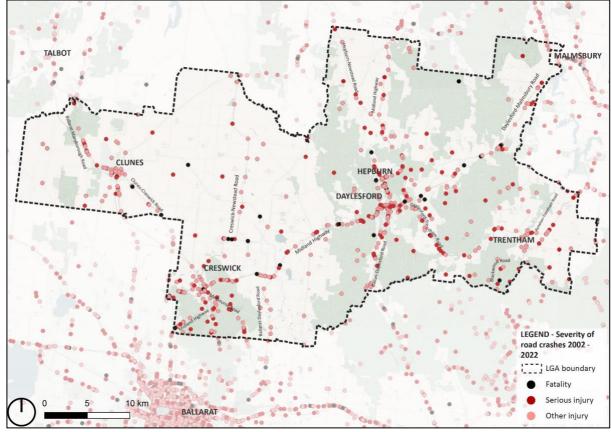
Source: VicRoads with M&PC analysis (2023)

Figure 5.7: Road crash locations in Hepburn Shire

Between 2000 and 2020, there were 920 reported road crashes in Hepburn Shire, resulting in about 40 deaths, 370 serious injuries and over 800 other injuries reported in crashes on roads in Hepburn Shire. The distribution of crash severity was similar to that for regional Victoria as a whole.

82% of fatalities and injuries were motor vehicle users, 13% were motorcyclists and 5% were pedestrians or bicycle users. This distribution was also similar to that of regional Victoria.

Figure 5.7 shows the distribution and severity of road crashes around Hepburn Shire.



Source: VicRoads with M&PC analysis (2023)

Crashes are generally concentrated around urban areas and on main arterial roads. Fatal and serious injury accidents are more evident in less populated areas (where speed limits are higher), while less serious and no-injury accidents are concentrated in towns, particularly Daylesford, Hepburn Springs, Creswick and Clunes.

Figure 5.8 illustrates the impact of road trauma (fatalities and injuries) on different road users.

Figure 5.8: Causes of death and injuries in road crashes in Hepburn Shire (2000-2020)

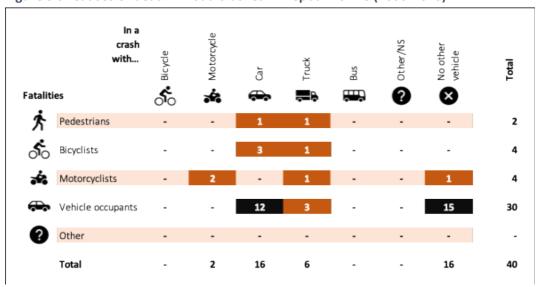
Fataliti	In a crash with es and injuries	S. Bicycle	Motorcycle	Car	Truck	Bus	• Other/NS	No other vehicle	Total
序	Pedestrians	-	-	26	3		3		32
<b>્</b>	Bicyclists		-	18	3	-	2	3	26
÷	Motorcyclists	-	29	12	2		1	123	167
<del></del> -	Vehicle occupants	-	4	426	53	1	6	528	1,018
?	Other	-					-	4	4
	Total	-	33	482	61	1	12	658	1,247

Source: VicRoads with M&PC analysis (2023)

About half of the fatalities and injuries were in single motor vehicle crashes, and 40% were in crashes involving multiple motor vehicles. Pedestrians were affected by about 30 crashes, most of which involved motor vehicles. Bicycle riders were involved in 26 crashes, also mostly with motor vehicles.

Figure 5.9 below shows fatalities in the Shire by road user type.

Figure 5.9: Causes of death in road crashes in Hepburn Shire (2000-2020)



Source: VicRoads with M&PC analysis (2023)

Of the 40 fatalities in crashes on Shire roads between 2000 and 2020, 34 were vehicle occupants or motorcyclists (of which, 16 were in single-vehicle crashes).



Vehicle occupants have an inherently greater chance of surviving a crash. Pedestrians and wheelers do not have the same protection. Pedestrians and bicyclists are 12% of fatalities, but they are only 4% of road users involved in crashes. About 10% of pedestrians or bicycle riders involved in crashes did not survive, compared to 3% of vehicle occupants.

Figure 5.10 below show the trends of road crashes in Hepburn Shire between 2000 and 2020.

70 60 50 40 30 20 10 2010 2016 2009 2011 2012 2013 2014 2015 2018 2017 Fatalities Serious injuries Other injuries · · · · Crashes ·

Figure 5.10: Annual road crash trends in Hepburn Shire (2000-2020)

Source: VicRoads with M&PC analysis (2023)

There was significant year-by-year variation of road crashes in the Shire, and no obvious long-term trends upwards or downwards. However, there was a notable reduction in crashes in 2020, due to significant reductions in traffic during the COVID-19 pandemic.

Figure 5.11 below breaks down annual fatalities and injuries by road user type.

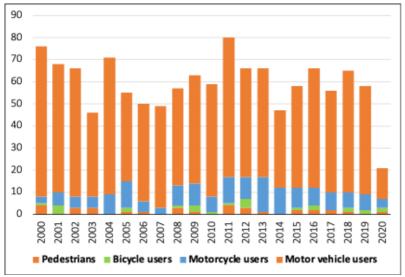


Figure 5.11: Annual injuries and fatalities by road user type in Hepburn Shire (2000-2020)

Source: VicRoads with M&PC analysis (2023)

While the majority of fatalities and injuries are to motor vehicle users, motorcycle users are also commonly involved in crashes. Motorcycle users are more vulnerable than enclosed vehicle users and are killed and injured at a much higher rate than their mode share of travel.



Figure 5.12 below shows fatalities and injuries by road type in the Shire.

Figure 5.12: Road fatalities and injuries by road type, Shire of Hepburn 2000-2020

ataliti	es and injuries	Arterial Roads (named Highways)	Arterial Roads	All State Roads	Local Roads	Total
ķ	Pedestrians	10	9	19	13	32
0	Bicyclists	6	13	19	7	26
•	Motorcyclists	30	41	71	96	167
÷	Vehicle occupants	239	420	659	359	1,018
	Other		2	2	2	4
	Total	285	485	770	477	1,247
	Km of road in area	59	171	230	2,043	2,273

Source: VicRoads with M&PC analysis (2023)

Fatalities and injuries occur mostly on State roads (60% of the total, of which 37% were on the Midland Highway). State roads are only 10% of total road length in the Shire, so the fatalities and injuries per km is much higher than it is for local roads. This is mainly because of the higher traffic volumes on State roads, but it clearly demonstrates that this is where road safety improvements should be concentrated.

477 fatalities and injuries (40% of the total) occurred on local roads. These make up most of the streets in townships, and the extensive network of smaller rural roads; they thus account for 90% of road length in the Shire, where the fatality and injury rate per km of road is much lower than for State roads.

Two-thirds of pedestrian and cyclist fatalities and injuries are on State roads, showing that the most vulnerable road users are affected most on the higher-order roads in the network.

Figure 5.13 below shows fatalities and injuries by speed zone for each road user type in Hepburn Shire.



or less Total (40) (50) (60 80 Fatalities and injuries Pedestrians 32 Bicyclists 1 5 10 2 26 Motorcyclists 14 28 19 63 167 Vehicle occupants 1,018 Other 2 1 1 Total 12 90 287 1 208 576 62 1,247 Km of road in area 207 0 110 1,895 0 0 2,273 Total per rd km 2.2 0.4 1.9 0.3 0.5 Ped/cyc per rd km 0.36 0.09 0.03 0.01 0.03

Figure 5.13: Fatalities and injuries by speed zone in Hepburn Shire (2000-2020)

Source: VicRoads with M&PC analysis (2023)

Vehicle speeds are closely linked with the risk of fatality or injury for those involved in a crash. In towns, main streets in the outer parts are often 60km/h, with residential streets and main streets in town centres (such as Vincent Street in the centre of Daylesford) set at 50km/h. Outside the main towns most roads are set at 100km/h, and there are significant 80km/h sections, particularly through smaller settlements (e.g. Dean or Newlyn) or where road alignments are hazardous (e.g. Daylesford-Malmsbury Road between Daylesford and Glenlyon, and Midland Highway between Eganstown and Daylesford).

60km/h roads have the highest number of fatalities and injuries per km (5.2) in the Shire, followed by 40km/h roads at 2.2, and 80km/h roads at 1.9. 60 km/h roads also have the highest pedestrian and cyclist fatalities/injuries per km (0.38).

Pedestrian fatalities and injuries are concentrated in speed zones of 60km/h or less, mainly because those are the areas that have more pedestrians.

Bicycle rider fatalities and injuries are few, but the majority (16 out of 26) are in speed zones of 60km/h or less.

Speed limits have a significant impact on crash severity, as shown in Table 5.6.

Table 5.6: Injury severity by speed zone in Hepburn Shire 2000-2020

		Serious	Other	No		Fatalities -	Fatalit	ies and serious injuries % of total			
Speed zone	Fatalities	injuries	injuries	injuries	Total	% of total	Shire of Hepburn	Victoria	Greater Melbourne	Regional Victoria	
40 or less	0	2	10	4	16	0.0%	13%	13%	13%	13%	
50	2	26	62	74	164	1.2%	17%	16%	16%	14%	
60	7	63	217	194	481	1.5%	15%	14%	14%	13%	
70-90	7	62	150	86	305	2.3%	23%	16%	15%	19%	
100 or more	23	196	358	218	795	2.9%	28%	27%	19%	32%	
Unknown	1	21	40	10	72	1.4%	31%	13%	10%	25%	
Total	40	370	837	586	1,833	2.2%	22%	17%	15%	22%	

Source: VicRoads with M&PC analysis (2023)



In Hepburn the risk of death or serious injury was clearly higher in crashes on faster roads and reduced significantly on roads of 60km/h or less. It is notable that, in common with Victoria as a whole, the incidence of death or serious injury changed little between roads of 60km/h and 50km/h (it actually increased by a couple of percentage points) but was significantly lower for roads of 40km/h or less.

Table 5.7 shows injury severity by road user type.

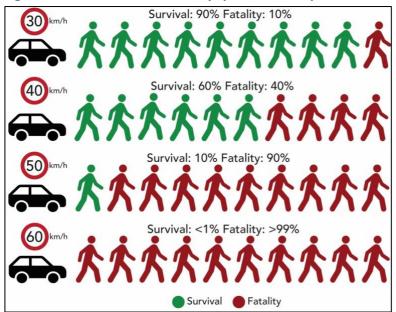
Table 5.7: Injury severity by road user type, in Hepburn Shire 2000-2020

		Serious	Other	Fatalities and					serious injuries % of total		
Road user type	Fatalities	injuries	injuries	No injuries	Total	Fatalities – % of total	Shire of Hepburn	Victoria	Greater Melbourne	Regional Victoria	
Pedestrians	2	12	18	0	32	6%	44%	42%	42%	43%	
Bicycle users	4	9	13	0	26	15%	50%	28%	27%	30%	
Motorcycle users	4	73	90	5	172	2%	45%	43%	42%	45%	
Motor vehicle users	30	275	713	569	1,587	2%	19%	13%	11%	18%	
Unknown	0	1	3	12	16	0%	6%	3%	2%	7%	
Total	40	370	837	586	1,833	2.2%	22%	17%	15%	22%	

Source: VicRoads with M&PC analysis (2023)

Crash participants with the highest proportions of fatalities were bicyclists (15%) and pedestrians (6%). The likelihood of death or serious injury was 2-2.5 times higher for pedestrians, cyclists and motorcyclists than it was for motor vehicle occupants. Figure 5.14 below outlines the chances of survival and fatality for pedestrians, according to statistics from the NSW Government.

Figure 5.14: Chances of survival by speed zone for pedestrians



Source: NSW Government with M&PC analysis (2023)

Research from the Road Accident Research Unit of the University of Adelaide has found that the risk of casualty for drivers in a crash doubles with each 5km/h increase in speed above 60km/h. Likewise, a decrease in speed of 5km/h can lead to at least a 15% reduction in crashes (Kloeden, Ponte & McLean, 1997). Reducing speed limits in areas with pedestrian activity, such as residential areas and town centres, would greatly reduce the risk to pedestrians. This is particularly important due to the lack of footpaths in many residential areas in towns across Hepburn Shire.



### 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 individual factors, including:

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

People experience places differently depending on any of the above factors. For example, a woman who is above the age of 80, who has reduced physical mobility, and whose first language is a language other than English will have different requirements from the public realm than an 18-year-old man who is physically fit. The 80-year-old woman will likely not feel safe walking to the shops if there is not an accessible way of getting to the shops such as a high-quality footpath, or a community bus.

In shared public areas, women and gender diverse individuals often feel less secure compared to their male counterparts. According to the OECD Better Life Index, while 77% of men feel safe when walking alone at night in their neighborhood, only 61% of Australian women feel the same. In addition, women with disability experience violence at almost double the rate of women without a disability. Rates of physical violence by any perpetrator grow from 2.9% for women without disability, to 4.8% for women with disability (ABS, 2021).

These differences in identities should be reflected in an accessible and inclusive transport system which allows people of all identities, backgrounds, abilities, and ages to travel safely. Some people will only feel safe walking and wheeling on paths with good sightlines, or after dark on paths with lighting. In addition, some people will not feel safe waiting for a bus on a grassy verge next to fast moving traffic or feel safe riding a bicycle on the road.

Through wholistic and truly integrated transport planning, all people in Hepburn should be able to move around the Shire without feeling unsafe.

## 5.6 Traffic and demand for parking

The Shire has a strong tourist economy, meaning that the townships experience peak demands for parking. This can result in congested streetscapes which reduce the attractiveness and safety for walking and wheeling. Figure 5.15 below illustrates typical traffic congestion and demand for parking in Daylesford during busy periods.



Figure 5.15: Busy parking in Daylesford



The high demand for parking could be managed by incentivising active travel, which can be achieved through traffic calming, well connected walking and wheeling links and more end-of-trip facilities such as secure bicycle parking. Charging a price for parking could be considered at peak times, and/or designation of parking areas just outside the main streets.

On-street parking can have several negative impacts on its surroundings. The search for parking causes many cars to circle the area, thereby increasing the likelihood of high-impact collisions with pedestrians and cyclists. Additionally, crossing the road between parked cars can be dangerous due to reduced visibility for both the driver and pedestrian.

The current situation results in a space that is primarily dominated by cars. The presence of parking spots directly in front of various destinations can lead to blocked views of Hepburn Shire's beautiful heritage buildings and facilities, particularly with the increasing size of modern vehicles. This can ultimately lead to an unappealing aesthetic and poor wayfinding.

Furthermore, as motorists tend to park their vehicles near their destination, they are less inclined to wander and explore beyond the immediate surrounding areas. In contrast, individuals who walk or ride are more prone to spontaneous visits to nearby businesses while en route to their destination due to their intimate interaction with their surroundings. According to research by Transport for London (TfL), investing in cycling and walking infrastructure can result in a significant increase in shop spending – up to 30%. The same study found that individuals who use public transportation, walk, or cycle spend 40% more per month than their driving counterparts<sup>4</sup>.

In addition, as Hepburn has a large cohort of older residents, there are many residents who have disability parking permits and required disability permit parking. Members of the Hepburn community have identified that disability permit parking at the Coles Daylesford car park is insufficient at only three spaces and are often full. New on-street disability permit parking was installed between 2018 and 2022 throughout the centre of Daylesford, however, this appears to be lacking in other town centres to the same extent.

<sup>&</sup>lt;sup>4</sup> Transport for London, 2023, Cycling Action Plan 2. Transport for London, London, UK.



## 5.7 Wayfinding

Wayfinding signage in many Shire towns appears to have grown organically over many years. Different colours, typefaces, sizes and types of signs are confusing and distracting, and can contradict each other. Figure 5.16 below shows an example of wayfinding signage in Trentham.

Figure 5.16: Wayfinding signage in Trentham



Source: M&PC (2023)

This signage is confusing for users. There are multiple signs, many pointing in the same direction, but not giving any indication of distance or time to their destination. In addition, many are the same design as the street sign, reducing clarity for drivers who need to be able to quickly recognise their route.

There is limited wayfinding and signage through many of the towns. As Hepburn Shire is one of the biggest tourism destinations in Regional Victoria, this impacts the visitor experience and their ease in moving around the Shire. Wayfinding in areas with significant tourism should identify the key tourist destinations within the area, or any other key destinations in the town. These signs should show the direction and distance to destinations, and the travel time to the destinations by primary modes of transport. This could include, walking and wheeling. Wayfinding signs may also include a map of the area, with walking catchments by particular time periods.

High-quality wayfinding is also particularly important for walking trails throughout the Shire. Walking trails require signs that show the distance of the trail, directions back to key townships, the difficulty grading of the trails, and a map of the trail. Throughout the trail, there should be signage to reduce the likelihood of people getting lost. Typical trail signage is shown in Figure 5.17 overleaf.



Figure 5.17: Trail signage, Creswick



Source: Visit Hepburn Shire (2023)

## 5.8 Case study examples – opportunities

#### **Movement and Place Framework - Victoria**

Victoria's Movement and Place Framework is highly relevant. It is an approach that analyses roads and streets to determine their 'movement' functions (throughput of vehicles, use by public transport, etc.) and recognise their 'place' functions (gathering places for people, shopping, etc.). The process then determines the changes needed to provide better streets. Applying the framework to places in Hepburn Shire would be a good way to provide more balance between 'place' and 'movement': protecting and supporting vulnerable users, increasing health and well-being, as well as improving townscapes.

In 2018, DELWP undertook three pilot 20-minute neighbourhood programs, with one taking place in Sunshine West, in the outer-west of Melbourne. DELWP, through community consultation, identified Glengala Village shopping strip a number of improvements to boost liveability and attractiveness of the strip that should be undertaken, including:

- Prioritising pedestrian movement, through shared zones, speed restrictions, signal phasing, and reviewing existing roundabouts
- Considering road safety art to improve pedestrian safety
- Upgrading street lighting
- Improving cycle links and facilities
- Relocating nearby bus stop and co-locate with public open space
- Supporting increased housing diversity
- Encouraging pop-up shops
- Considering streetscape improvements such as drinking fountains and seating



- Planting trees and creating green streets
- Supporting public art installations
- Upgrading playground infrastructure
- Investigating improvements to the community centre.

A number of improvements were installed, such as road-safety painting, a 20km/h speed limit, upgraded pedestrian crossing facilities at the roundabout, pop-up parks and increased seating, which can be seen in Figure 5.18 below.

Figure 5.18: Glengala Village, Sunshine West 20-minute neighbourhood pilot

Source: Google Maps (2023)

Link: <a href="https://dtp.vic.gov.au/about/planning/transport-strategies-and-plans/movement-and-place-in-victoria">https://dtp.vic.gov.au/about/planning/transport-strategies-and-plans/movement-and-place-in-victoria</a>

#### 50km/h speed limits in New South Wales (NSW) rural towns

Many rural towns in NSW have 50km/h speed limits throughout, including on their main through roads. In Victoria there has been a reluctance to do this; despite the 'default' speed in built-up metropolitan areas being 50km/h, many towns retain 60km/h speeds on built-up roads. <u>Victoria Walks, RACV</u> and other organisations support further speed reductions to protect the safety of walkers and wheelers, especially in residential areas and town centres.

Links: <a href="https://www.victoriawalks.org.au/Assets/Files/Speed-Limits-Position-1.3.pdf">https://www.victoriawalks.org.au/Assets/Files/Speed-Limits-Position-1.3.pdf</a><a href="https://www.racv.com.au/on-the-road/driving-maintenance/road-safety.html">https://www.racv.com.au/on-the-road/driving-maintenance/road-safety.html</a>

#### 30km/h Mildura CBD trial

In April 2023, Mildura implemented a 30km/h speed limit trial for all CBD streets. This was to increase safety for all road users and make the CBD more economically vibrant and safer for everyone, particularly children, older people and people with disabilities. The trial will run for one year, with parking management to remain unchanged for the length of the trial. The project highlighted that the survival rate of a person hit by a car improves from 50% at 40km/h to 90% at 30km/h.

Link: Mildura 30km/h CBD trial

### Age friendly cities - Ottawa

The <u>age-friendly programme in the City of Ottawa</u> uses the World Health Organisation's <u>Age-Friendly Cities framework</u> to improve conditions for senior residents. The City Council partnered with the



community and charities to create action plans that have delivered age-friendly urban environments. Initiatives include general improvements to public amenity, safety alterations to intersections, accessible bus stops and safe pedestrian crossings. As well as senior residents, the benefits extend to the entire community.

Notable projects that have enhanced the urban environment to be age-friendly include:

- Upgrading bus stops to be fully accessible
- Installing more park benches
- Upgrading intersections to improve pedestrian safety
- Developing more affordable housing.

Links: <a href="https://coaottawa.ca/afo/">https://coaottawa.ca/afo/</a>

https://extranet.who.int/agefriendlyworld/age-friendly-cities-framework/

#### **Legible Sydney**

The City of Sydney recognised the importance of clear and attractive wayfinding, particularly for tourists. The Wayfinding Strategy, Legible Sydney, was released in 2012 and was a comprehensive strategy and implementation plan for the high-quality wayfinding signage. The strategy developed four strategic directions which influenced the development and design of the signage, being:

- Consistency
- Accessibility
- City legibility
- Sustainability.

The signage shows the direction, distance, and travel time by walking to key destinations and public transport. In addition, over 2,100 tactile street signs were also rolled out through this program at every signalised pedestrian crossing.

Figure 5.19 below shows one of the directional signs, located on Margaret Street in Wynyard.

Figure 5.19: Legible Sydney signage example, Margaret Street, Wynyard



Source: City of Sydney (2023)



#### Quality footpaths and property values

Studies have shown that improvements to walking infrastructure correspond with rises in property prices and rent values. One such study, conducted on London high streets in 2007, found that improvements in street quality contributed to an increase of property prices. Improvements identified in the study included the use of high-quality materials, wide footpaths, appropriate number of pedestrian crossing points, good lighting, signage and landmarks, absence of pinch points and obstructions for pedestrians, and appropriate levels of road traffic.

With an increase of street infrastructure by an amount specified by the study, there was a correlated increase of £13,600 in prices for properties on the high street, and £25 per square metre increase in rent per year (2007 prices). This equated to 5% increases in the value of a flat, and in shop rents.

Quality pedestrian infrastructure and footpath improvements not only improve safety and the experience of the public realm, but also increase the value of adjacent properties.

Buchanan C. 2007, Paved with gold: The real value of good street design. Commission for Architecture and the Built Environment, London, UK.

Link: <a href="https://www.designcouncil.org.uk/our-resources/archive/reports-resources/designing-high-street/">https://www.designcouncil.org.uk/our-resources/archive/reports-resources/designing-high-street/</a>

### Shared transport and mobility hubs

As a means of providing more transport choices, especially for the 'last/first mile' of journeys, and for neighbourhood mobility, the concept of mobility hubs is emerging in association with shared transport.

A mobility hub is an adaptation of a transport interchange, focused on providing places where people can interface easily between sustainable forms of transport (public and shared modes, as well as walking and wheeling). They provide focal points for access and are often associated with destinations where they can supplement – and replace – private vehicle parking.

Figure 5.20 below illustrates the essential factors that define a mobility hub, from Collaborative Mobility UK (CoMoUK), a UK charity dedicated to the 'social, economic and environmental benefits of shared transport'.

Visibility and accessibility Safety Hubs need to be part of the clearly The design and facilities should identifiable transport network with ensure traveller safety is a key services which are easily accessible by all **Practical facilities** Choice of sustainable modes These should include public and Clever design will consider what nor shared modes as well as consideration transport practical additions can be included of pedestrians Ease of switching between modes Visual, social, and community appeal This applies in both physical and digital A successful mobility hub will enhance the terms, linking the use of different area visually and provide a contribution to the social and community fabric

Figure 5.20: Six factors that define a mobility hub

Source: CoMoUK: The design process - mobility hubs realised

Link: https://www.como.org.uk/documents/the-design-process-mobility-hubs-realised



#### 5.9 Future trends

As discussed in section 5.1, Hepburn Shire's population is expected to grow steadily. According to Victoria in Future projections released in September 2023, Hepburn Shire's population is expected to increase from 16,470 in 2021 to 18,720 in 2036 (a 14% increase).

Higher growth in Melbourne, Geelong, Ballarat and Bendigo will increase tourism in the Shire, increasing visitor traffic. Victoria in Future 2023 projects the populations of these cities in 2036 as follows:

Greater Melbourne: 6,379,000 (30% increase from 2021)

Ballarat: 144,700 (28% increase from 2021)

Bendigo: 149,500 (23% increase from 2021).

These projections mean that visitor growth will probably be faster than resident growth in the Shire, adding to the need for better and safer roads, more recreational facilities and better conditions for walkers and wheelers in Hepburn Shire's towns.

The steadily ageing resident population will need more alternatives to car use. Public transport services, if they were more frequent, better connected, and more convenient, could play a much greater role for access to surrounding places and train services. Creswick and Clunes would significantly benefit from more train services on the Maryborough line, while improved bus and coach services would cover the rest of the Shire.

As population growth continues, the need for emissions reduction will get even more urgent. In transport, this will produce much faster take-up of electric cars and trucks, and the need for more charging infrastructure. For example, through the Sustainable Hepburn Strategy, the Shire plans to replace its internal vehicle fleet with electric vehicles. Meanwhile, growth will increase in other forms of electric mobility including e-bikes and e-scooters, both individually owned and in shared mobility offerings. Electric vehicles (EVs) will not solve traffic problems, but increased automation and safety systems will improve road safety, and EVs are quieter and cleaner.

Fully automated self-driving vehicles are expected to take a long time to become widespread. Partially autonomous vehicles are currently available on the global market. Audi, Nissan, and Tesla are among automotive manufacturers which have a self-driving technology; however, these all require driver intervention in emergency conditions. Waymo is a driverless taxi service which is currently piloting vehicles in San Francisco, Phoenix, and Los Angeles. These vehicles need no human intervention when driving but need significant continued technical development before they are used on a full-scale basis. They could bring substantial advances to efficient and safe traffic movement.

Long-awaited improvements to north-west Victoria's freight rail network through the Murray Basin Rail Project, could produce significant growth in freight train traffic, and its use of the Maryborough line. If so, its impacts on the Clunes and Creswick area will need to be understood and allowed for.



# 6 Community feedback

## 6.1 Shire tracks and trails

Two surveys were conducted by Hepburn Shire Council between 28 July and 16 August 2021 regarding Council's tracks and trails. One survey was a general survey to collect any opinions and thoughts on any track and trail within the Shire. This survey received 54 responses and was in the form of a social map.

Key findings from this survey are:

- Demand for the continuation of the Domino Trail from Daylesford to Woodend/Hanging Rock
- Better maintenance needed for trails, including surface improvements and drainage
- Want for increased local business due to increased tourism from the rail trail, including local markets and stalls along the trail
- Accommodation which appeals to people using the rail trail
- Lack of public transport between each end of the rail trail
- Need for signage and better wayfinding along walking trails
- Better connections between Daylesford town centre and walking trails in the town
- Need for safer crossing points along walking trails
- Better maintenance of Lake Jubilee loop trail
- Better education along trails of local Indigenous history.

Another survey sought opinions on the Daylesford Spa Country Railway, undertaken in July – August 2021.

Both residents and visitors valued the railway, and a significant majority (558) would prefer to prioritise extending the railway, rather than prioritising the rail trail. Many respondents (346) believed that the most important reason for improving the rail trail was to create an iconic experience for Hepburn Shire.

When asked what Council should focus on regarding the rail trail, 377 respondents said extending the Daylesford Spa Country Rail from Bullarto to Trentham, 179 said creating a rail trail connecting Daylesford to Tylden with connections to Woodend, Kyneton and Hanging Rock, and 191 said both should be equally valued. The top aspect of the rail corridor according to respondents is the opportunity to connect communities along the rail corridor through new tourist train initiatives. Close behind was the opportunity for future tourism activity and community benefit based around tourist trains.

## 6.2 Town structure plan opinion surveys

Council is committed to understanding, protecting and enhancing the values and character of the whole Shire, including its townships and rural areas. To do this, it has launched *Future Hepburn*: a once in a generation platform of major strategic projects. Future Hepburn consists of several projects including township structure plans for Clunes, Creswick, Daylesford & Hepburn Springs, Glenlyon, and Trentham, and Rural Hepburn 2043: Agricultural Land and Rural Settlement Strategy.

As a part of the development of the structure plans, significant community engagement occurred in each township. Responses from each town, and the percentage of the total population are:



- Clunes: 105 responses (5.6% of the population)
- Creswick: 77 (2.3% of population)
- Daylesford/Hepburn Springs: 207 (6.5% of population)
- Glenlyon: 41 (9.1% of population)
- Trentham: 69 (4.9% of population).

The majority of respondents in the past month had used a motor vehicle for transport in the Shire, with walking consistency second most common mode, cycling third, and bus, train and taxi often similar usage by respondents. The most in demand improvement to the transport network was improved road services across all townships, with upgrading unsafe roads or intersections, improving walking and cycling experience, and supporting safety for wildlife second most in demand improvements across towns. Graphs of the findings from these questions are in Appendix A.

Below are the common findings from each township survey.

## Walking and wheeling:

- Better accessibility is needed for people with reduced mobility to move around the town
- Increased footpath provision within towns is needed
- Better maintenance of existing footpath and pedestrian infrastructure is required, specifically the rail trail, Midland Highway, and the Glenlyon Biolink
- Separation of bicycle riders from traffic is needed
- Better maintenance of mountain bike tracks is needed
- Walking and wheeling trails are valued across the townships
- Installing a walking and wheeling trail between Daylesford and Hepburn Springs

#### Public transport:

- Increase frequency of public transport services which operate longer hours during the day is needed throughout the Shire
- More frequent and convenient public transport services to Ballan, Ballarat, Bendigo, Daylesford, Kyneton, Malmsbury, Melbourne, and Woodend are needed
- Increased community transport across the Shire is needed
- Extending the Daylesford Country Spa Railway service to Trentham or onto Woodend/Hanging Rock.

#### Roads and parking:

- Better maintenance of existing roads is needed throughout the Shire to reduce damage to roads such as potholes and increase safety
- Traffic must be better managed as it grows
- Midland Highway travelling through towns is a concern for a number of towns
- Provision of on-and off-street parking is valued across the townships, particularly for their benefit to local businesses
- Increased provision for EV charging stations is wanted across the townships
- Wide streets and wide nature strips are valued across all townships



 Access to existing goods and services, and to Ballarat and Melbourne was valued across a number of towns in the Shire, but smaller towns did not identify this as a primary strength of their local area.

## 6.3 ITS community survey

An online survey was developed for the ITS to sample community needs and opinions on transport in the Shire. The survey was open from September 2023 to 22 October 2023 and 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.

The survey results are in Appendix B hereto, and key findings are in the following paragraphs.

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.

In the following analysis, percentages are expressed relative to the total number of respondents (88).

#### Mode share

Figure 6.1 below shows the transport modes that respondents said they used in the last month.

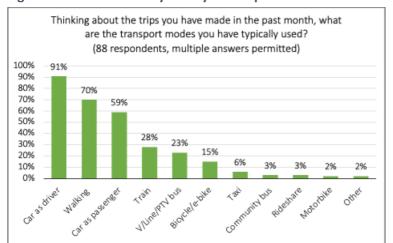


Figure 6.1: ITS community survey – transport modes used in the last month

Source: Hepburn Shire with M&PC analysis (2023)

Multiple answers were permitted, and (on average) respondents chose three different modes.

While most respondents used cars a lot (as driver or passenger), 70% of respondents also mentioned walking, and just over half mentioned using trains or buses, and 15% mentioned bicycles or e-bikes.

Figure 6.2 overleaf shows which transport modes respondents would like to use more.



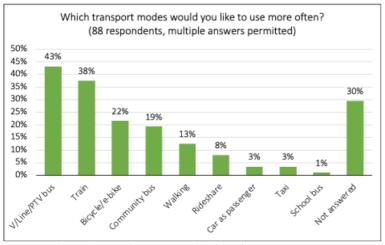


Figure 6.2: ITS community survey - transport modes people would like to use more often

Source: Hepburn Shire with M&PC analysis (2023)

Respondents showed strong desires to use public transport or bicycle/e-bikes more often. Further insights into the reasons for this came from subsequent questions, as discussed below.

### Walking

Eight respondents identified common barriers to walking they experience, the most common being distance, travel time, safety concerns, and climate. Specific locations were discussed which require improvement. Two respondents felt unsafe walking down Luttet Street in Creswick due to the lack of footpaths, expressing concern that children are forced to walk on the road, which is also a key truck access to Creswick Transfer Station. Another specific example quoted was Central Springs Road in Daylesford, where pedestrians have to cross the road multiple times to use the footpath.

In a separate question to that shown in Figure 6.2, 89% of respondents said they were very interested or interested in walking more often, citing the following main reasons:

- Health and fitness (63%)
- Leisure (62%)
- Visiting parks and trails (53%)
- Access local shops (35%)
- Visit cafes, restaurants, bars and entertainment (24%).

The main reasons respondents gave for not walking included a lack of appropriate pathways, weather, distance and time, and traffic safety.

#### Other feedback included:

- Concern over lack of nature strip separating pedestrians and road traffic
- Need for increased provision of walking trails, particularly linking smaller towns with larger nearby towns
- Need for walking infrastructure to be upgraded, specifically in Daylesford and Creswick
- Desire for walking trails connecting to schools
- Concern over poor local walking access to key destinations such as Lake Daylesford.



#### Wheeling

38% of respondents said they were very or moderately interested in wheeling more often, most commonly wanting to ride for leisure, fitness, to visit parks/bike paths, and access local shops. Common motivations were to get healthy and because it was better for the environment.

Respondents generally agreed that the Shire needs more wheeling trails. Concerns over bicycle riding along fast-moving main roads was commonly expressed, often due to the poor quality of road shoulders. 19 respondents said they would like to ride more often, with key barriers being safety concerns, lack of end of trip facilities, topography, climate/weather and distance.

Respondents said they didn't ride more often because they felt it was dangerous to ride on the road, they didn't have a bike, they didn't know where to ride, and distance and time. Common factors discouraging wheeling were:

- Not feeling comfortable riding in shoulder lanes near passing or parked cars
- Lack of dedicated bicycle lanes
- Not enough separated/off-road wheeling tracks and lanes.

#### Other feedback included:

- Strong agreement of the need to govern use of personal mobility devices such as e-scooters and e-bikes
- Desire for e-bike charging stations throughout the Shire, and for e-bikes to become more commonly used/encouraged
- Desire for wheeling trails connecting towns across the Shire, and to Kyneton, Malmsbury and/or Woodend.

#### **Public transport**

Desire for improved public transport services in the Shire was strong amongst respondents. A majority said they would like to use bus or train services more often (43% and 38% respectively), and 19% would like to use community buses more often.

Key barriers to using public transport more often were that it doesn't go where travellers want to go, travel times, waiting times, inconvenient timetables and infrequent services.

Improved public transport services, frequency and connections were desired at:

- Ballan Railway Station
- Ballarat
- Creswick Railway Station
- Daylesford.

Respondents living outside the primary Hepburn towns reported frustration with the lack of public transport services available, with inconvenient and infrequent community bus services. One respondent said the V/Line coach to Castlemaine and Woodend (which also travels through other places such as Lyonville, Musk and Trentham) was poorly timed for Daylesford Secondary College students, because the afternoon service left two minutes before the end of day bell.

There was notable interest in electric buses being used throughout the Shire, particularly in the form of locally managed flexible bus services to support mobility of residents. More frequent train services from Creswick and Clunes were a key priority for many respondents, as was synchronising bus and train timetables to make interchanges between them easier and quicker.



Respondents generally felt that public transport was:

- Difficult to access
- Unsafe
- Difficult to use
- Too infrequent
- Physically inaccessible for people with mobility limitations
- Difficult to use to access higher order centres such as Ballarat, Bendigo and Melbourne.

Respondents also generally agreed that, to improve public transport in the Shire, in the future there should be:

- More options
- Higher frequencies
- Easier connections.

#### Roads and parking

The primary concern regarding roads and parking was the poor condition of many reads across the Shire. Potholes and crumbling road shoulders were the key issues, affecting not only drivers, but bicycle riders. Both drivers and bicycle riders reported safety concerns with sharing the road due to the need to evade potholes and inability to ride along road shoulders.

Table 6.1 below shows respondents' opinions on a number of phrases regarding Hepburn Shire's roads, with the most frequent choices shaded in blue.

Table 6.1: ITS community survey – road and driving opinions

	Strongly disagree	Moderately disagree	Neutral	Moderately agree	Strongly agree
Roads in Hepburn Shire are well connected	9%	19%	26%	30%	15%
Driving around my area is easy	7%	9%	17%	39%	30%
I do not feel safe when driving on roads in Hepburn Shire (e.g. fog, wildlife)	17%	13%	17%	43%	10%
In the future we should aim to use electric cars more	15%	7%	15%	20%	42%

Source: Hepburn Shire Council with M&PC analysis (2023)

Increased provision of electric vehicle charging stations was desired throughout the Shire, as well as improved maintenance of existing charging stations. Some respondents, particularly those residing in smaller towns and Clunes, stated a need for additional flexible transport solutions such as rideshare and increased provision of taxis. Provision of car share vehicles, particularly in Daylesford, was identified as beneficial for both residents and tourists. Concern over other modes mixing with freight and trucks was highlighted by a number of respondents, particularly those travelling through Creswick and Daylesford.



## Other findings

Other findings from the ITS survey are that:

- 62% of respondents strongly or moderately agreed that there should be more transport options around Daylesford and Hepburn Springs during peak tourist season, and 74% agreed that there should also be more transport options between main townships
- Concern was expressed over perceived increases in road crashes, particularly those involving road rage or aggressive driving
- Investment in transport infrastructure and services was needed in growing communities such as Glenlyon.

## 6.4 Other engagement activities

### **Councillor workshops**

As a part of the development of the ITS, two Councillor workshops have been held where findings from the research have been presented to Councillors, and ideas for the ITS discussed. These workshops were in May 2023 and August 2023.

The May 2023 workshop outlined early findings from the project, including:

- Policy and planning context for Hepburn Shire and the ITS
- Travel patterns in the Shire
- Existing walking and cycling facilities
- Public transport network
- Existing road network and safety
- Initial emerging issues, including
  - Priority for improved walking and cycling network in townships
  - Better road maintenance which will require State Government commitment
  - Need to reduce road fatalities and trauma
  - Need to improve public transport frequency, ticketing and access.

The August 2023 workshop outlined recent findings from the project, including:

- Updated project timeline
- Developed modal hierarchy and explanation of 'integrated transport'
- Initial transport use analysis such as zero-car ownership rates, travel to work, and Council
  emissions
- Impacts on transport on personal budgets
- Impacts of tourist transport
- Road safety and crash statistics between 2000 and 2020
- Photo examples of key transport issues throughout the Shire
- Emerging ITS initiative categories, being capital works and programmes, advocacy for improvements, administration and planning.



#### Other community and stakeholder engagement findings

Council receives comments from local residents often; two key items of relevance to the ITS so far are as follows:

- A submission on the need for improved pedestrian access to Lake Daylesford. It identifies that
  there is limited pedestrian access to the Lake from the residential neighbourhoods to the north.
  The only access points to the Lake from these neighbourhoods are approximately 1km away at
  Bleakley Street or Fulcher Street
- A potential Midland Highway bypass of the Creswick town centre to relieve traffic on Albert Street and improve the pedestrian experience and public realm in Creswick town centre. The bypass proposed by this community member included increased traffic calming infrastructure such as raised pedestrian (wombat) crossings across Albert Street, realigning the street to avoid Albert Street and instead use Victoria Street, and the use of landscaping to calm traffic.

#### **Future engagement**

A draft of the ITS will be released to the public for comment and feedback before producing the final ITS for Council consideration and adoption (see Chapter 9 for details of the next steps).



### 7 Opportunities for the future

#### 7.1 Walking

The upcoming Hepburn ITS will plan for the future of walking in the Shire. Improving safety and access and recreational walking will have a significant impact on the comfort and quality of walking trips.

#### Access and safety

Due to the small size of towns, distances for many journeys are quite short, but (apart from recreational walking), few people walk regularly as a means of reaching other places nearby. Improvements to walking access and safety will increase people's likelihood to choose walking over other transport modes. Improvements can include:

- Increasing connectivity of the footpath network in many residential areas of Shire townships, formal footpaths are not provided, and people walk on nature strips or on the road. This may influence people into avoiding walking through towns due to discomfort or reduced safety. For example, parents may not approve of their children walking on roads to school, and may choose instead to drive, despite the school being walking distance away. In addition, older residents may not feel comfortable or stable walking on (a sometimes muddy and slippery) nature strip, or potentially mixing with traffic on the road. This may force some older people to drive to do their everyday tasks, but this may affect the mobility of others who are unable to drive.
- New footpaths new paths have recently been constructed along a number of residential streets in Clunes, focussed on connecting to community facilities such as open space and sporting fields, and the railway station. To create an extensive and accessible network, footpaths could be provided on at least one side of all streets in towns, particularly where they improve access between residential areas and the town centre, open spaces, transport or other community infrastructure.
- Improved footpaths access will also be improved through upgrades to existing footpaths, including kerb access ramps or raised road pavements where they cross traffic lanes. These allow everyone, including for example people with reduced mobility or people with prams, to cross easily and safely. For an accessible network, footpaths with the appropriate infrastructure should be provided consistently throughout.
- Pedestrian crossings at key locations walking safety can be increased significantly through identification and upgrading of key crossing points. There are limited safe and prioritised crossing points for pedestrians in the Shire, even in town centres. The only prioritised pedestrian crossings in the Shire are the pedestrian-operated traffic light on Albert Street in Creswick, a raised pedestrian zebra (wombat) crossing on Vincent Street in Daylesford and raised pedestrian crossings at a number of side road intersections along Main Road in Hepburn Springs. Areas where significant levels of pedestrian and vehicle traffic are seen could have safe and prioritised crossing points to improve safety and comfort, and also the experience of tourists and visitors.

#### **Recreational walking improvements**

The recreational walking trails throughout the Shire are a key resource and should provide simple and comfortable experiences for users.

The ITS is an opportunity to identify extend and inter-connect the recreational walking network in the Shire. For example, the community supports extending the Domino Trail to connect the Shire with Woodend/Hanging Rock, or west to Daylesford. This could then connect to the Wallaby Track, a 52km track between Creswick and Daylesford. Tracks mentioned in community engagement to be constructed/extended include:



- Andersons Rail Trail connecting to Creswick
- Ballarat-Skipton Rail Trail extended to Creswick
- Daylesford-Hepburn Springs walking trail
- Domino Trail to Trentham Falls
- Mount Beckworth Recreational Park connecting to Clunes.

The ITS can also identify trails where maintenance is needed, particularly using findings from community engagement. Maintenance could include providing safe crossing points where walkers must cross streets along the trail. The need for more safe crossing points is mentioned in responses to the track and trails survey of 2021.

There is also an appetite to improve access to local walking trails such as the Lake Daylesford trail for nearby residential areas. Walkers may be forced to walk significant distances to access the trails, rather than being provided with shorter paths provided to access the main trails.

Another popular idea is to extend the Daylesford tourist train from Bullarto to Trentham. If that is done, walking tracks along the rail corridor could be opened up as well – or even done beforehand.

As well as extending and inter-connecting the network, wayfinding for walking trails could be improved. Clear signage could be provided at all walking trails, with signs at the access points indicating the route, difficulty, distance, and walking times. Along each trail, there could be regular direction signs with the distance to key locations and facilities.

#### 7.2 Wheeling

Planning for high-quality wheeling infrastructure is important for recreational riders such as bicycle rider and mountain bike riders, and people who may use other forms of wheeled mobility, such as electric or mobility scooters.

#### Access and safety

Similar to walking, it is important to improve the safety and access of wheeling infrastructure to increase the use and experience of those who wheel. Community engagement for the township Structure Plans highlighted a lack of safe and separated infrastructure for wheelers from traffic. This is needed particularly along roads with fast moving traffic, such as Midland Highway. As bicycle riding is a popular activity in the Shire, safe routes for wheeling around the whole of the Shire are needed. The ITS can identify roads where separating bicycle riders from vehicle traffic is desirable, and also explore alternative routes where possible.

It is also important to improve wheeling access around towns. This may come in the form of signage to make drivers aware of the presence of bicycle riders on local township streets, sharrow line marking along lower traffic residential streets which provide access to key destinations or between bicycle riding trails, and bicycle lanes along higher-traffic roads which are popular for bicycle riders. It would also be possible to map out a wheeling network in each town to identify routes where these infrastructure improvements should occur, such as to key destinations such as shops, schools and recreational facilities or tracks, and key locations for end-of-trip facilities such as bicycle parking and repair/maintenance stations.

Improvements to footpath and walking infrastructure will also work to improve access for non-bicycle wheelers, such as people using e-scooters (subject to future legislation).

#### **Recreational wheeling improvements**

Locations where recreational wheeling could be improved or extended are similar to those identified for recreational walking tracks, such as extending the Domino Trail. Community engagement for tracks



and trails within Hepburn also identify issues with accessing the Domino Trail to and from Daylesford, because there is no public transport that allows bicycles. A bicycle trail between Daylesford and Woodend/Hanging Rock is popular and would provide recreational wheeling as well as an alternative route to Midland Highway and other high-speed roads.

Signage upgrades for walking trails should also include information relevant to bicycle riders to ensure are aware of if the track is suitable for bicycle riders and the grade of the route.

Creswick Trails were earmarked to host the 2026 Commonwealth Games mountain biking competition prior to the recent cancellation of the Games. The Creswick Trails project is continuing construction, with completion expected in late 2024 to provide 60km of world-class mountain bike trails through local plantation, Regional Park, and State Forest lands around Creswick. This is a significant project to further cement Hepburn as a primary tourist destination and will increase tourism from around the country and internationally.

#### 7.3 Mobility hubs and shared transport

As micro-mobility transport modes develop, and as a means of encouraging safer and easier walking and wheeling, mobility hubs (discussed in section 5.8) could be developed at key locations in Shire towns, especially at public transport access points (railway stations and bus stops), shopping areas, community hubs and other central points.

Bicycles and e-bikes are offered for hire in Daylesford, but they are not centrally located or highly visible for visitors or locals. As e-mobility solutions continue to grow in diversity, popularity and use, developing mobility hubs could be an effective means of encouraging people to use them for local movement, allowing them to leave the car at their home or visitor accommodation, and also providing much easier access around the townships for visitors who arrive using regional public transport.

#### 7.4 Public transport

#### Rail

The ITS provides an opportunity to advocate for increased passenger rail services to Creswick and Clunes Stations. As shown in Section 5.3, more frequent regional train services can substantially increase patronage from smaller towns. This will enable more people to travel by public transport and reduce car dependency.

In 2010, the Victorian Government invested approximately \$7 million in upgrading Clunes Station prior to the reopening of the Maryborough line. Clunes Station is currently operating below what it could, due to the limited train services on offer. Increasing V/Line service levels would make better use of the investment. Use of Clunes and Creswick Railway Stations could be improved and encouraged to make better use of them as public assets, and to provide more viable alternatives to car use for regular journeys.

One of the key tourist attractions in the Shire is the Daylesford Spa Country Railway, which runs from Daylesford to Bullarto. There is an opportunity to extend this railway from Bullarto to Trentham, or even beyond Hepburn Shire to Woodend or Hanging Rock. This could bring more tourism to Trentham and provide a return trip for users of the Dominio Trail, should it be extended to Bullarto or Daylesford. A comparable example is the 38km Lilydale-Warburton rail trail, which is very popular to walkers and wheelers; a return trip by bus is available (including bike carriage) to make it more attractive for people who cannot make the full round trip, and there are access points at intermediate villages as well.



#### **Buses**

Buses are the more common mode of public transport across the Shire. However, as discussed in section 5, services are often infrequent or inconvenient for many across the Shire. Some towns have limited or no access to public transport. The ITS will identify improvements to bus timetables and networks to assist with transporting people around the Shire. This will include identifying key public transport corridors, such as from Daylesford to Woodend, via Trentham, which is currently serviced by a V/Line coach which runs once a day in either direction. Community engagement has identified a demand for improved access to Ballan, Ballarat, Kyneton, and Woodend.

An alternative way of providing public transport type services without needing to advocate to the State Government is through local or community transport. There is an opportunity for Hepburn Shire to explore the viability to provide access for people who are unable to drive and have limited access to other modes of transport. These local/community transport services could provide access to shops and medical facilities within or outside the Shire.

Improving bus stop infrastructure to ensure it is compliant with Disability Discrimination Act requirements. Currently there are stops across the Shire which are not DDA-compliant, including some newly constructed stops. Without DDA compliance, people whose mobility is restricted and depend on public transport cannot easily use existing infrastructure.

The Victorian Government recently committed \$5 million to upgrading accessibility to bus stops, with one priority area for upgrade being Ballarat. Under this program, upgrades will occur at bus stops to remove barriers to access at key locations where disabled and aged communities rely on the public transport system to socialise or access essential services. As Hepburn has an older than average residential population and does not have other convenient modes of transport for people with reduced mobility, upgrading public transport accessibility (particularly at bus stops) should be a priority for the Shire and State Government, especially in conjunction with more frequent services.

#### 7.5 Roads and traffic flow

#### **Road quality**

The primary opportunities to improve road safety in Hepburn are to undertake road surface quality improvements, filling potholes, reconstructing deeper damage to road pavements, maintaining and improving road markings and signs, and sealing unsealed roads where possible and necessary. The ITS could identify areas where road safety can be improved through higher quality surfaces, paving and other road improvement works. This can be used to inform capital works programs.

#### **Road safety**

The road safety analysis (section 5.5) highlights some key issues; 60% of injuries and fatalities are on State roads, which make up only 10% of total road length in the Shire. The number of injuries and fatalities per km of road is highest for roads with 60km/h limits. Vulnerable road users (pedestrians, bicycle riders and motorcycle users) are at greater risk of death or serious injury than other road users, when involved in crashes.

Reducing speed limits in built-up areas of the Shire, on both local and State-managed roads, will be an important step in reducing risk to more vulnerable road users, thus helping to encourage more people to walk or wheel. Clear thresholds at the town boundaries could provide strong signals to motor vehicle users (including visitors, who are probably the majority of traffic at weekends) that low speed limits apply for the safety of all.

Better road maintenance, clearer road signs and markings and other safety measures are also vital. Council can action them directly for local roads, and advocate for improvements to State-managed roads.



#### **Freight**

As discussed in Section 4.4, freight vehicles can have significant impact on the amenity of towns, and the safety of all road users, including pedestrians.

A community submission has proposed a truck bypass route through Creswick. This would require significant changes to the road layout and traffic flow in the town, however it would significantly improve safety of pedestrians in the town centre.

Clunes has a signposted truck route for users of the Maryborough-Ballarat road, and Daylesford has a designated truck route via Bridport Street in the centre of town, but it does not provide a solution for trucks using the Midland Highway along Albert and Raglan Streets.

The ITS could explore further opportunities for better segregation of trucks and more vulnerable road users throughout the Shire, especially on the Midland Highway and Principal Freight Network routes.

Freight logistics companies and municipalities have long advocated for more freight to be on rail. This would help reduce the number of trucks on Shire roads and provide another option for local farmers to transport their products to the Port of Melbourne or Geelong.

Shifting freight onto trains also positively impacts the environment. According to the Victorian Auditor General, road freight produces 16 times more carbon emissions than rail, for every tonne-kilometre travelled. While rail transports half of Australia's freight, the Australian Climate Change Authority states that rail produces only 4% of Australia's total transport emissions. Shifting more freight onto rail would support the Shire in reducing its total climate emissions.



### 8 Developing the Integrated Transport Strategy

#### 8.1 Overview

The ITS will set future long-term (20-30 year) directions and aspirations for transport in Hepburn Shire. It will establish key desired outcomes and aligned with State and regional planning. It will also be clearly linked to Council's broader future vision, township structure plans and rural area settlement strategy, and other elements of the Future Hepburn initiative.

Rather than being an isolated, high-level document, the ITS will set a framework for achieving the long-term goals for transport and travel in Hepburn. As such it will be accompanied by a rolling, short term (3-5 year) Implementation Plan that will include actions where Council will play a number of roles, being:

- Provider: Direct influence and involvement, where Council is supplying the service or policy
- Partner: Shared influence and involvement with other bodies or providers to deliver a service or policy
- **Facilitator:** Assisting groups or providers with an action, policy, or initiative Council has some influence over, and interest in
- Advocate: Representing the community's interests and needs to external bodies such as the State Government and the private sector.

The ITS will also provide a blueprint for process arrangements, including administration of the ITS itself, changes to the Planning Scheme and other actions that will keep the ITS moving forward with regular monitoring of outcomes and course-correction when required.

#### 8.2 Draft principles

Based on the existing and expected challenges for Hepburn Shire's transport network, the following Principles are suggested for the ITS. The Principles will guide preparation of the strategy, and actions to address the transport issues outlined here. Community input will further inform the ITS.

#### **People-centred transport**

Looking at transport in a people-centred, integrated sense is important because people move around in many different ways. We share different parts of the transport network with each other, on foot and in vehicles, at different times and parts of our journeys. Developing the transport system in ways that integrate and harmonise these uses, instead of creating conflicts between them, will make it easier and safer for everyone to travel.

#### **Fairer transport**

Car-based transport systems create barriers to mobility that reinforce long term social inequalities. Transport investment must be mindful of and remove these barriers, while also prioritising the needs of vulnerable and marginalised people, different genders, people with low incomes, and people with disabilities. Access to transport should not depend on someone's ability to pay, their age, physical abilities or attributes. Transport investment should establish programs that provide affordably relief for everyone who needs it.

#### **Greener and healthier transport choices**

Greenhouse emissions from transport are causing long term damage to the natural environment. Greener transport options reduce emissions, preserve air quality, improve health outcomes and help



to combat car dependency. Transport is also important for developing the Shire's Circular Economy, to design out waste and pollution, keep products and materials in use and regenerate natural systems.

#### Safer movement and places

Making movement and places safer includes measures to reduce road trauma and improve safety in transport environs.

People should feel safe when travelling for example streets should be designed for people (not just cars) so that they facilitate walking, wheeling, social interaction and access to public transport. By doing this, township and public places will become more attractive, vibrant and inviting.

Better road maintenance supports a safer road network, for all users including those who are walking and wheeling.

Another important aspect is protection of wildlife, including researching and reducing roadkill.

#### A connected Shire

The ITS will seek to create a transport network that maximises access and mobility for people to places within and beyond the Shire. Improving public transport service levels, connections and access will help increase greener transport trips and reduce car-dependency. By improving connectivity, people will have access to more employment opportunities, community services, the local economy and social interactions.

#### Vibrant economy

Future transport networks should facilitate efficient movement of goods and people, which is vital for Hepburn Shire's local and regional economy. Improving transport affordability for households and visitors alike will increase local economic activity and create new development opportunities. There will also be economic benefits from transport initiatives that support the Shire's Circular Economy.

#### 8.3 Types of action

Actions developed for the ITS will fall under three types, being:

- Actions to be incorporated in Council's capital works and maintenance programmes: this
  includes initiatives such as infrastructure maintenance and upgrades, new facilities, parking
  regimes, community and visitor information
- Advocacy activities with stakeholders: liaison with key agencies and stakeholders to promote and advocate for Council and community needs (for example, DTP, V/Line, RPV, tourism bodies, industry bodies, neighbouring Councils, regional associations and partnerships)
- Mechanisms to make the ITS effective: Councilor/committee responsibilities, officer buy-in and
  resourcing, relationship to other plans and strategies, developing new or updated actions (for
  example, a new walking and cycling plan), settings in the Shire of Hepburn Planning Scheme,
  regular monitoring of outcomes and updating or revising the strategy and implementation plan.

Responsibility for implementation of these actions will vary, with advocacy activities relying on outside agencies to implement, whereas capital works actions and internal mechanisms can be implemented by Council.



#### 9 **Next steps**

#### The next stage of the project will be to produce the draft Integrated Transport Strategy.

The aim is to prepare the draft ITS during October and November, in preparation for a public release in early 2024. Following community feedback, the final ITS will be presented to Council for adoption and implementation later in 2024.

Figure 9.1: Timeline for the Hepburn Integrated Transport Strategy



Source: M&PC (2023)

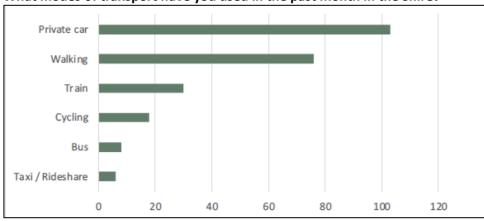


# **Appendix A** Structure Plan Community Surveys: Transport Results

The graphs in this Appendix show the results of transport-related questions in the community surveys undertaken during development of the township structure plans.

#### A.1 Clunes Structure Plan survey transport graphs

What modes of transport have you used in the past month in the Shire?



Source: Wayfarer Consulting (2023)

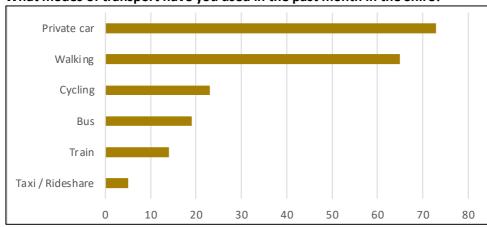
Which of the following could be improved?





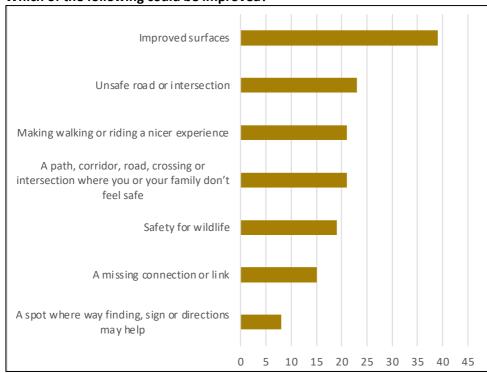
### A.2 Creswick Structure Plan survey transport graphs

What modes of transport have you used in the past month in the Shire?



Source: Wayfarer Consulting (2023)

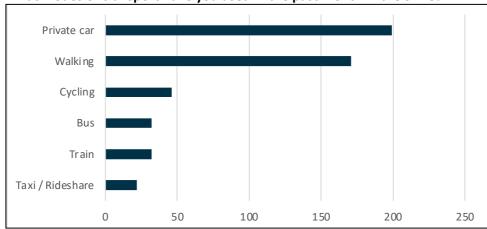
Which of the following could be improved?





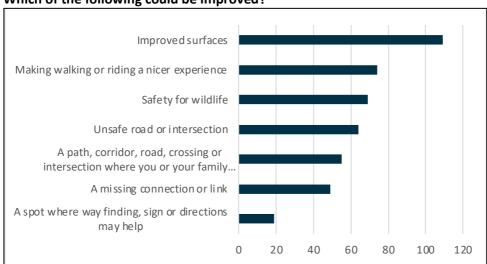
### A.3 Daylesford & Hepburn Springs Structure Plan survey transport graphs

What modes of transport have you used in the past month in the Shire?



Source: Wayfarer Consulting (2023)

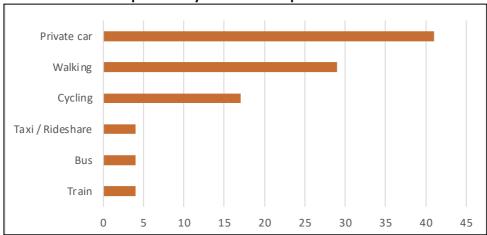
#### Which of the following could be improved?





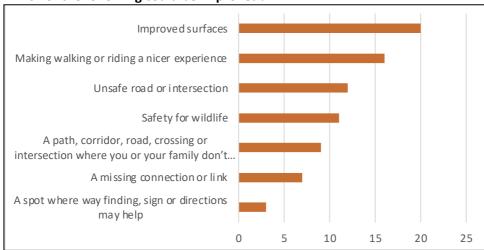
### A.4 Glenlyon Structure Plan survey transport graphs

What modes of transport have you used in the past month in the Shire?



Source: Wayfarer Consulting (2023)

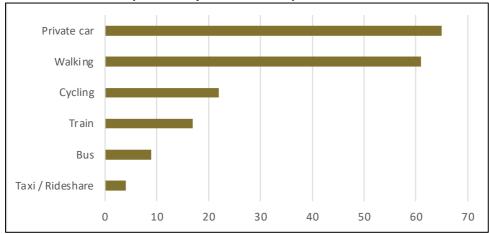
Which of the following could be improved?





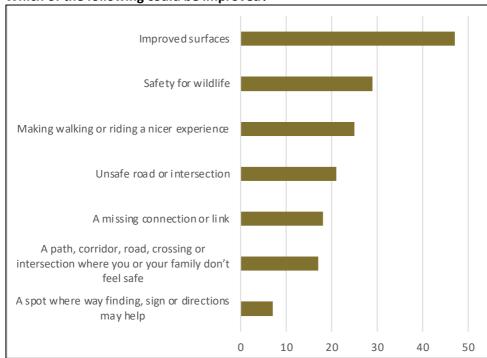
### A.5 Trentham Structure Plan survey transport graphs

#### What modes of transport have you used in the past month in the Shire?



Source: Wayfarer Consulting (2023)

#### Which of the following could be improved?





### **Appendix B** ITS Community Survey Results

Full responses to the ITS community survey are given on the following pages.



### **Participate Hepburn**

Report Type: Form Results Summary Date Range: 18-09-2023 - 22-10-2023 Exported: 24-10-2023 13:07:51

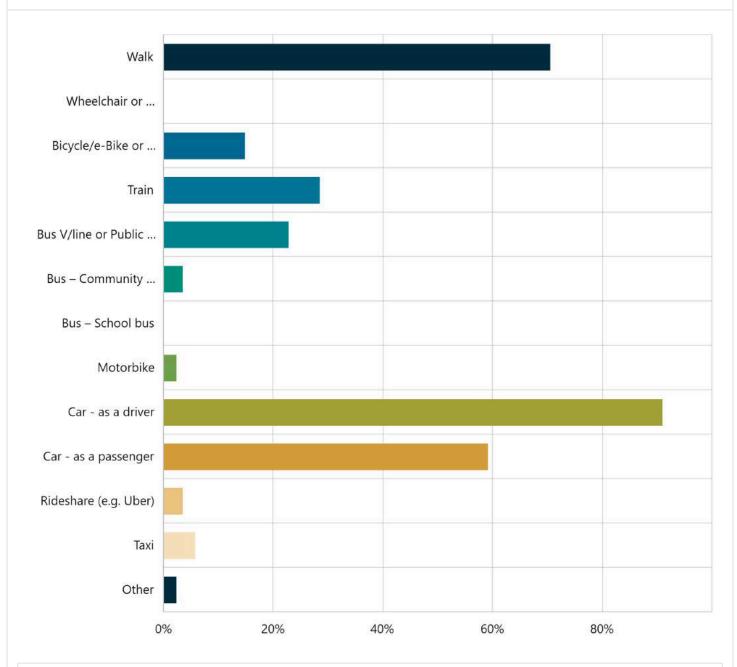
Transport and Trip Behaviour Survey
FUTURE HEPBURN

76
88
Contributors Contributions

#### **Contribution Summary**

1. Thinking about the trips you have made in the past month what are the transport modes you have typically used? (This includes all trips for work, study, shopping and social occasions) Required

Multi Choice | Skipped: 0 | Answered: 88 (100%)

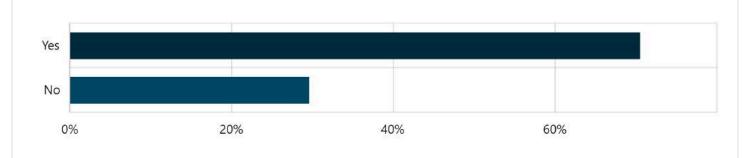


Answer choices Percent Count

Walk	70.45%	62
Wheelchair or mobility device	0%	0
Bicycle/e-Bike or e-scooter	14.77%	13
Train	28.41%	25
Bus V/line or Public Transport Victoria service	22.73%	20
Bus – Community service	3.41%	3
Bus – School bus	0%	0
Motorbike	2.27%	2
Car - as a driver	90.91%	80
Car - as a passenger	59.09%	52
Rideshare (e.g. Uber)	3.41%	3
Taxi	5.68%	5
Other	2.27%	2



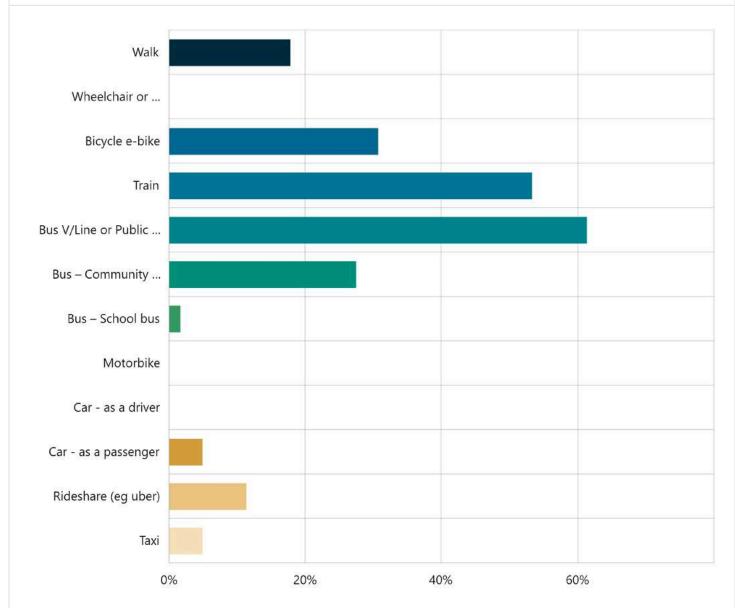
### 2. Thinking about a transport mode you didn't use in the last month, are there any that you would like to use or use more often? Required Multi Choice | Skipped: 0 | Answered: 88 (100%)



Yes 70.45% 62	
No 29.55% 26	
Total 100.00% 88	



## 3. Which transport modes would you like to use more often? Required Multi Choice $\mid$ Skipped: 26 $\mid$ Answered: 62 (70.5%)



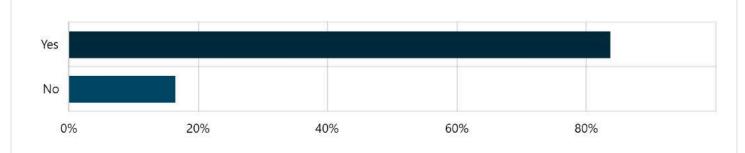
Answer choices	Percent	Count
Walk	17.74%	11
Wheelchair or mobility device	0%	0
Bicycle e-bike	30.65%	19
Train	53.23%	33
Bus V/Line or Public Transport Victoria service	61.29%	38
Bus – Community service	27.42%	17
Bus – School bus	1.61%	1
Motorbike	0%	0



Car - as a driver	0%	0
Car - as a passenger	4.84%	3
Rideshare (eg uber)	11.29%	7
Taxi	4.84%	3



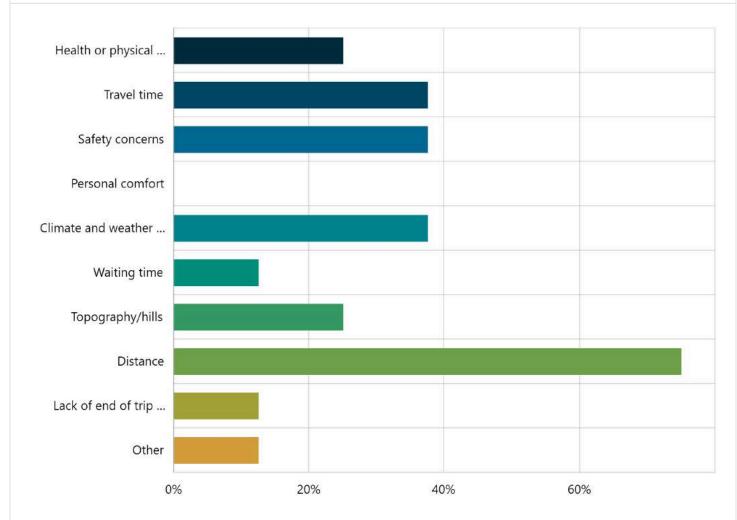
## 4. Are there barriers to you using these transport modes? Required Multi Choice | Skipped: 27 | Answered: 61 (69.3%)



Answer choices	Percent	Count
Yes	83.61%	51
No	16.39%	10
Total	100.00%	61



## **5. What are the barriers to walking?** Required Multi Choice | Skipped: 80 | Answered: 8 (9.1%)



Answer choices	Percent	Count
Health or physical ability	25.00%	2
Travel time	37.50%	3
Safety concerns	37.50%	3
Personal comfort	0%	0
Climate and weather issues	37.50%	3
Waiting time	12.50%	1
Topography/hills	25.00%	2
Distance	75.00%	6
Lack of end of trip facilities (e.g. shelter, toilets, seating)	12.50%	1
Other	12.50%	1



## **6. What are the barriers to using a wheelchair or mobility device?** Required Multi Choice | Skipped: 88 | Answered: 0 (0%)

Health or physical					
Travel time					
Safety concerns					
Personal comfort					
Climate and weather					
Doesn't go where I					
Cost					
Waiting time					
Topography/hills					
Distance					
Lack of end of trip					
Other					
0%	0.2%	0.4%	0.6%	0.8%	

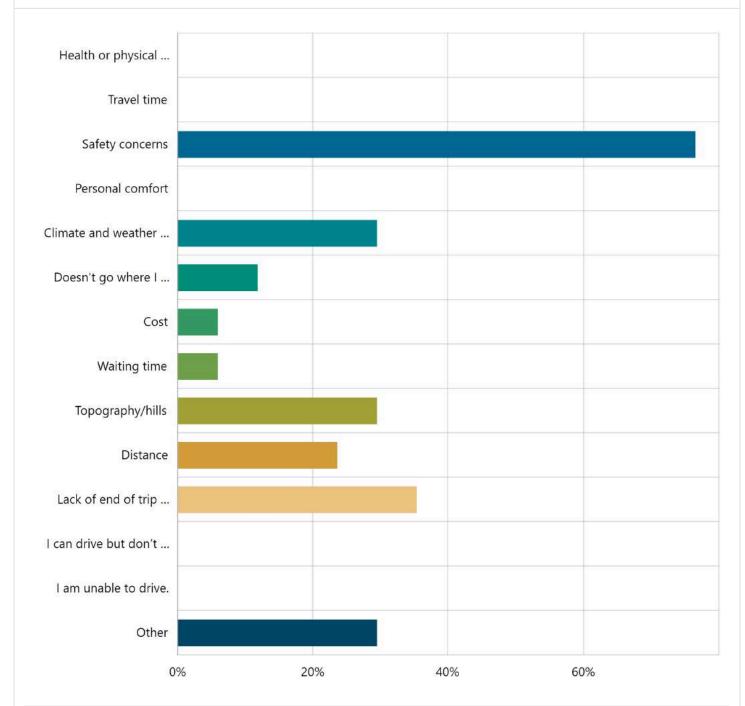
Answer choices	Percent	Count
Health or physical ability	0%	0
Travel time	0%	0
Safety concerns	0%	0
Personal comfort	0%	0
Climate and weather issues	0%	0
Doesn't go where I need it to go	0%	0
Cost	0%	0
Waiting time	0%	0



Topography/hills	0%	0
Distance	0%	0
Lack of end of trip facilities (e.g. shelter, toilets, seating)	0%	0
Other	0%	0



## **7. What are the barriers to using a bicycle or e-bike?** Required Multi Choice | Skipped: 71 | Answered: 17 (19.3%)



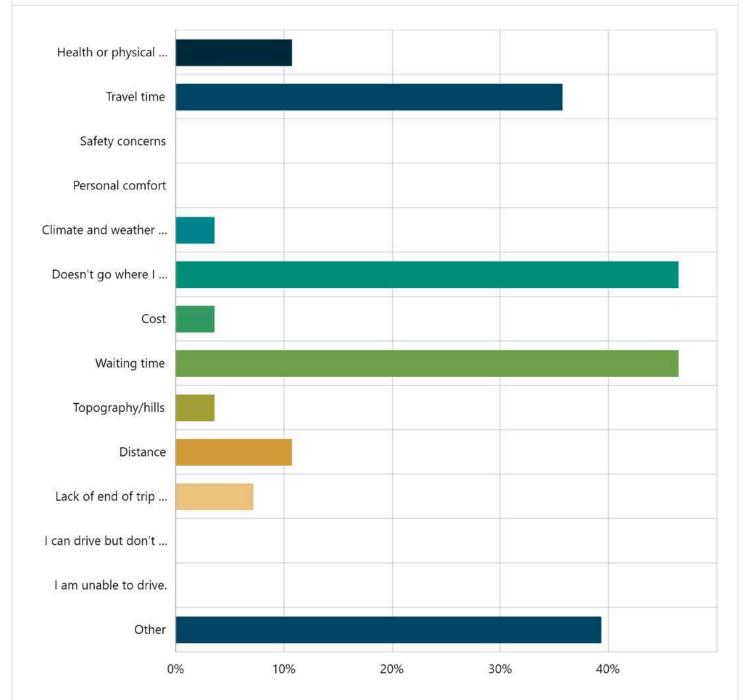
Answer choices	Percent	Count
Health or physical ability	0%	0
Travel time	0%	0
Safety concerns	76.47%	13
Personal comfort	0%	0
Climate and weather issues	29.41%	5



Doesn't go where I need it to go	11.76%	2
Cost	5.88%	1
Waiting time	5.88%	1
Topography/hills	29.41%	5
Distance	23.53%	4
Lack of end of trip facilities (e.g. shelter, toilets, seating)	35.29%	6
I can drive but don't have access to a car	0%	0
I am unable to drive.	0%	0
Other	29.41%	5



## **8. What are the barriers to using the train?** Required Multi Choice | Skipped: 60 | Answered: 28 (31.8%)



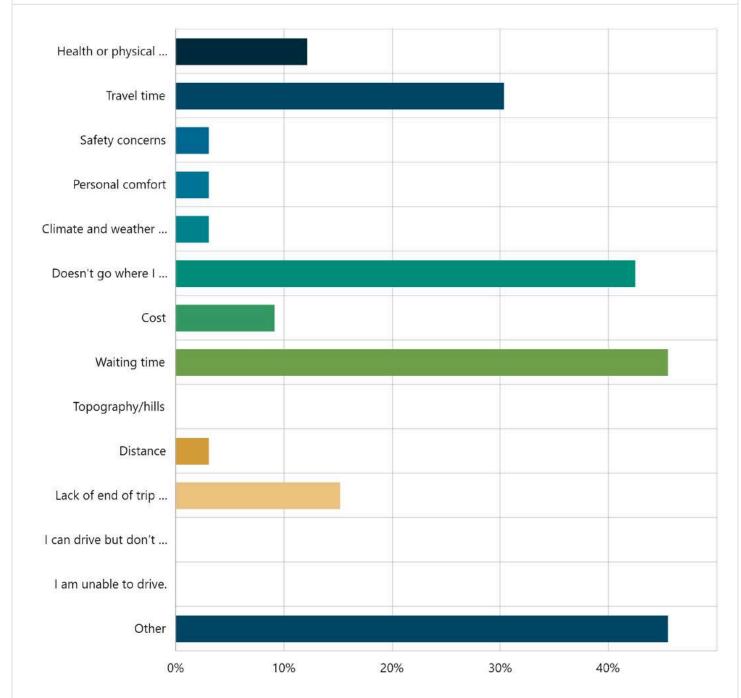
Percent	Count
10.71%	3
35.71%	10
0%	0
0%	0
3.57%	1
	35.71% 0% 0%



Doesn't go where I need it to go	46.43%	13
Cost	3.57%	1
Waiting time	46.43%	13
Topography/hills	3.57%	1
Distance	10.71%	3
Lack of end of trip facilities (e.g. shelter, toilets, seating)	7.14%	2
I can drive but don't have access to a car	0%	0
I am unable to drive.	0%	0
Other	39.29%	11



## 9. What are the barriers to using a V/Line or PTV bus service? Required Multi Choice $\mid$ Skipped: 55 $\mid$ Answered: 33 (37.5%)



Percent	Count
12.12%	4
30.30%	10
3.03%	1
3.03%	1
3.03%	1
	12.12% 30.30% 3.03% 3.03%

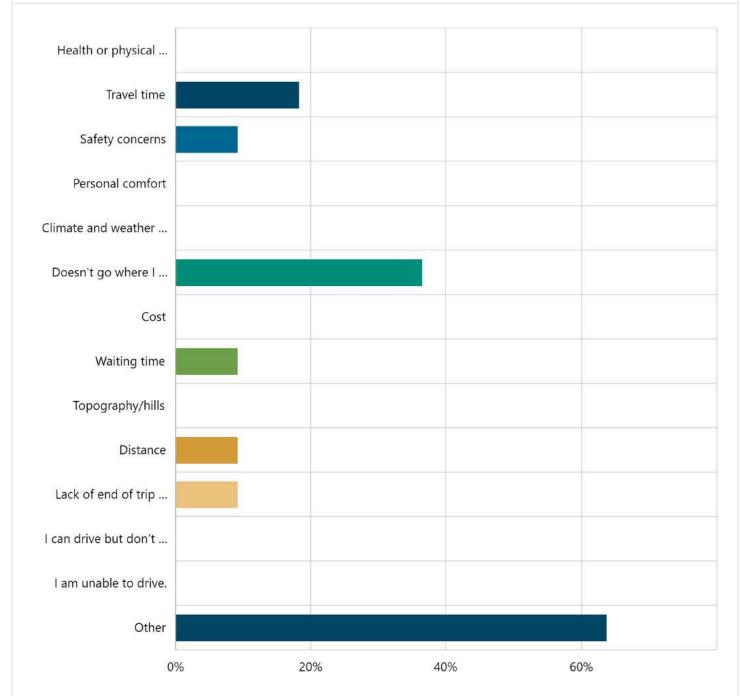


Doesn't go where I need it to go	42.42%	14
Cost	9.09%	3
Waiting time	45.45%	15
Topography/hills	0%	0
Distance	3.03%	1
Lack of end of trip facilities (e.g. shelter, toilets, seating)	15.15%	5
I can drive but don't have access to a car	0%	0
I am unable to drive.	0%	0
Other	45.45%	15



#### 10. What are the barriers to using a community bus service? Required

Multi Choice | Skipped: 77 | Answered: 11 (12.5%)



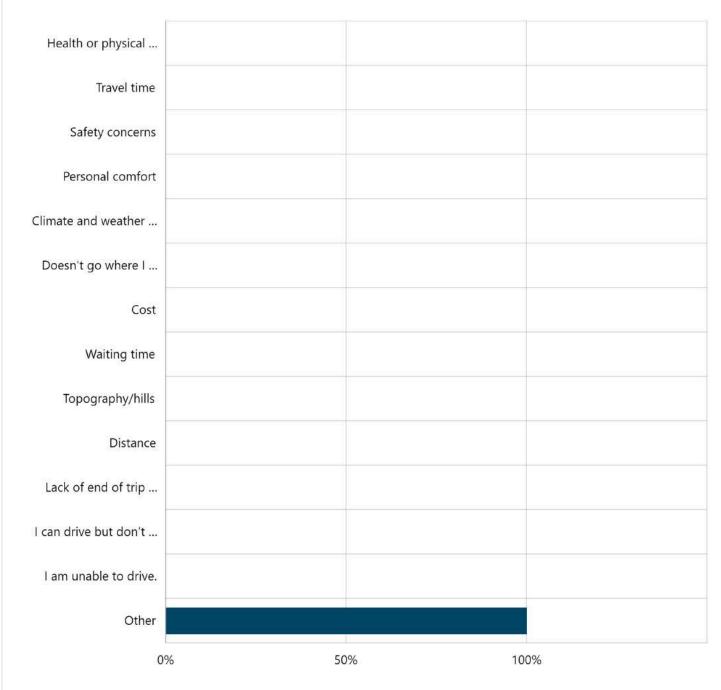
Percent	Count
0%	0
18.18%	2
9.09%	1
0%	0
0%	0
	0% 18.18% 9.09% 0%



Doesn't go where I need it to go	36.36%	4
Cost	0%	0
Waiting time	9.09%	1
Topography/hills	0%	0
Distance	9.09%	1
Lack of end of trip facilities (e.g. shelter, toilets, seating)	9.09%	1
I can drive but don't have access to a car	0%	0
I am unable to drive.	0%	0
Other	63.64%	7



## **11. What are the barriers to using a school bus?** Required Multi Choice | Skipped: 87 | Answered: 1 (1.1%)



Percent	Count
0%	0
0%	0
0%	0
0%	0
0%	0
	0% 0% 0%



Doesn't go where I need it to go	0%	0
Cost	0%	0
Waiting time	0%	0
Topography/hills	0%	0
Distance	0%	0
Lack of end of trip facilities (e.g. shelter, toilets, seating)	0%	0
I can drive but don't have access to a car	0%	0
I am unable to drive.	0%	0
Other	100.00%	1



## **12. What are the barriers to using a motorbike?** Multi Choice | Skipped: 88 | Answered: 0 (0%)

Health or physical					
Travel time					
Safety concerns					
Personal comfort					
Climate and weather					
Doesn't go where I					
Cost					
Waiting time					
Topography/hills					
Distance					
Lack of end of trip					
Other					
0%	0.2%	0.4%	0.6%	0.8%	

Answer choices	Percent	Count
Health or physical ability	0%	0
Travel time	0%	0
Safety concerns	0%	0
Personal comfort	0%	0
Climate and weather issues	0%	0
Doesn't go where I need it to go	0%	0
Cost	0%	0
Waiting time	0%	0



Topography/hills	0%	0
Distance	0%	0
Lack of end of trip facilities (e.g. shelter, toilets, seating)	0%	0
Other	0%	0



# **13. What are the barriers to driving a car?** Multi Choice | Skipped: 88 | Answered: 0 (0%)

W-W-3-5-6					
Health or physical					
Travel time					
Safety concerns					
Personal comfort					
Climate and weather					
Doesn't go where I					
Cost					
Waiting time					
Topography/hills					
Distance					
Lack of end of trip					
I can drive but don't					
I am unable to drive.					
Other					
0%	0.2%	0.4%	0.6%	0.8%	

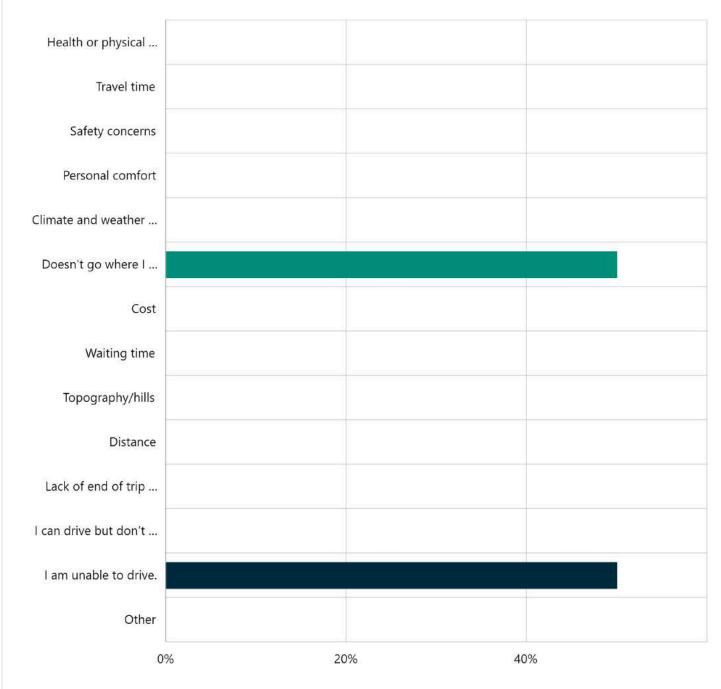
Percent	Count
0%	0
0%	0
0%	0
0%	0
0%	0
	0% 0% 0%



Doesn't go where I need it to go	0%	0
Cost	0%	0
Waiting time	0%	0
Topography/hills	0%	0
Distance	0%	0
Lack of end of trip facilities (e.g. shelter, toilets, seating)	0%	0
I can drive but don't have access to a car	0%	0
I am unable to drive.	0%	0
Other	0%	0



# **14. What are the barriers to being a car passenger?** Required Multi Choice | Skipped: 86 | Answered: 2 (2.3%)



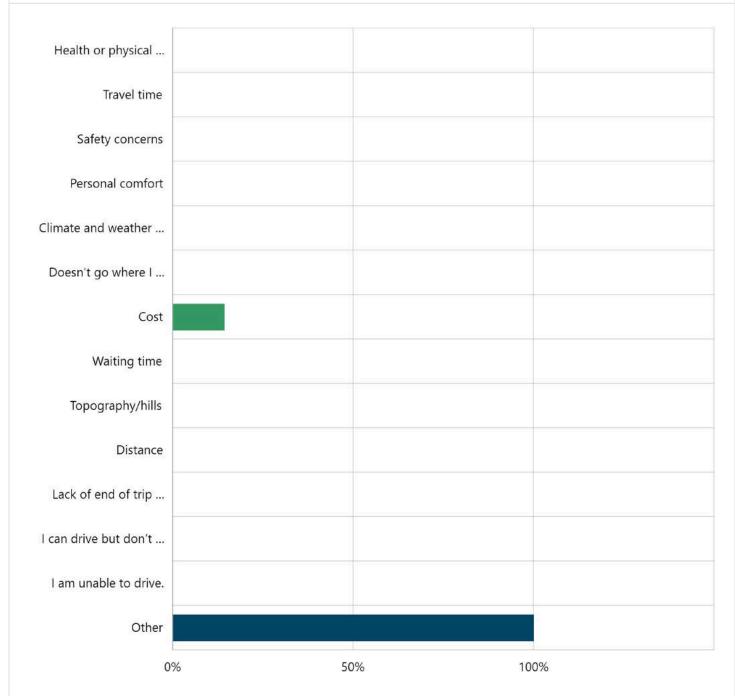
Percent	Count
0%	0
0%	0
0%	0
0%	0
0%	0
	0% 0% 0%



Doesn't go where I need it to go	50.00%	1
Cost	0%	0
Waiting time	0%	0
Topography/hills	0%	0
Distance	0%	0
Lack of end of trip facilities (e.g. shelter, toilets, seating)	0%	0
I can drive but don't have access to a car	0%	0
I am unable to drive.	50.00%	1
Other	0%	0



# **15. What are the barriers to using a rideshare service?** Required Multi Choice | Skipped: 81 | Answered: 7 (8%)



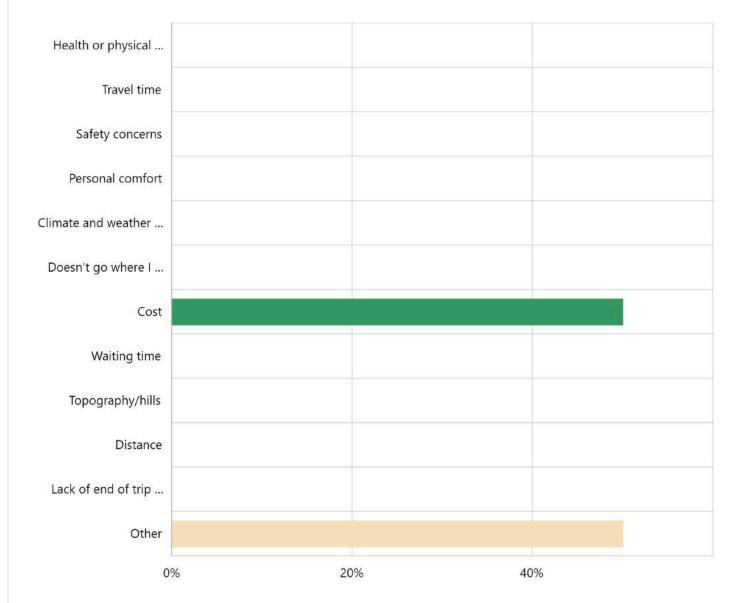
Percent	Count
0%	0
0%	0
0%	0
0%	0
0%	0
	0% 0% 0%



Doesn't go where I need it to go	0%	0
Cost	14.29%	1
Waiting time	0%	0
Topography/hills	0%	0
Distance	0%	0
Lack of end of trip facilities (e.g. shelter, toilets, seating)	0%	0
I can drive but don't have access to a car	0%	0
I am unable to drive.	0%	0
Other	100.00%	7



# **16. What are the barriers to using a taxi?** Required Multi Choice | Skipped: 86 | Answered: 2 (2.3%)



Answer choices	Percent	Count
Health or physical ability	0%	0
Travel time	0%	0
Safety concerns	0%	0
Personal comfort	0%	0
Climate and weather issues	0%	0
Doesn't go where I need it to go	0%	0
Cost	50.00%	1
Waiting time	0%	0

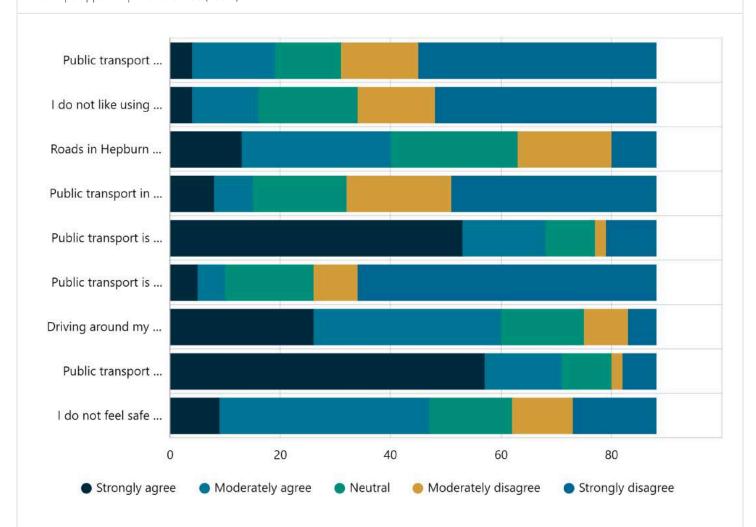


Topography/hills	0%	0
Distance	0%	0
Lack of end of trip facilities (e.g. shelter, toilets, seating)	0%	0
Other	50.00%	1



#### 17. Tell us your thoughts on the following phrases. Required

Matrix | Skipped: 0 | Answered: 88 (100%)



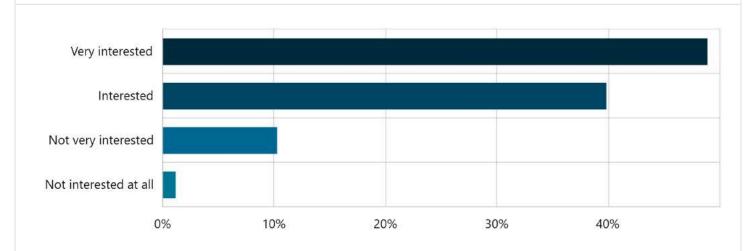
	Strongly disagree	Moderately disagree	Neutral	Moderately agree	Strongly agree	Count	Score
Public transport access is close to the start and end of my regular journeys	48.86% 43	15.91% 14	13.64% 12	17.05% 15	4.55% 4	88	2.13
I do not like using public transport because I feel personally unsafe doing so	45.45% 40	15.91% 14	20.45% 18	13.64% 12	4.55% 4	88	2.16
Roads in Hepburn Shire are well connected	9.09% 8	19.32% 17	26.14% 23	30.68% 27	14.77% 13	88	3.23



Public transport in my area is easy to use	42.05% 37	21.59% 19	19.32% 17	7.95% 7	9.09% 8	88	2.20
Public transport is too infrequent for me, so I avoid using it	10.23% 9	2.27%	10.23% 9	17.05% 15	60.23% 53	88	4.15
Public transport is difficult for me to use because of my physical limitations or disability (eg boarding and disembarkin g public transport)	61.36% 54	9.09% 8	18.18% 16	5.68% 5	5.68% 5	88	1.85
Driving around my area is easy	5.68% 5	9.09% 8	17.05% 15	38.64% 34	29.55% 26	88	3.77
Public transport connections to Ballarat, Bendigo & Melbourne are hard to navigate without a car	6.82% 6	2.27% 2	10.23% 9	15.91% 14	64.77% 57	88	4.30
I do not feel safe when driving on roads in Hepburn Shire (Eg, fog, wildlife)	17.05% 15	12.50% 11	17.05% 15	43.18% 38	10.23% 9	88	3.17



# **18. How interested are you in walking more often?** Required Multi Choice | Skipped: 0 | Answered: 88 (100%)

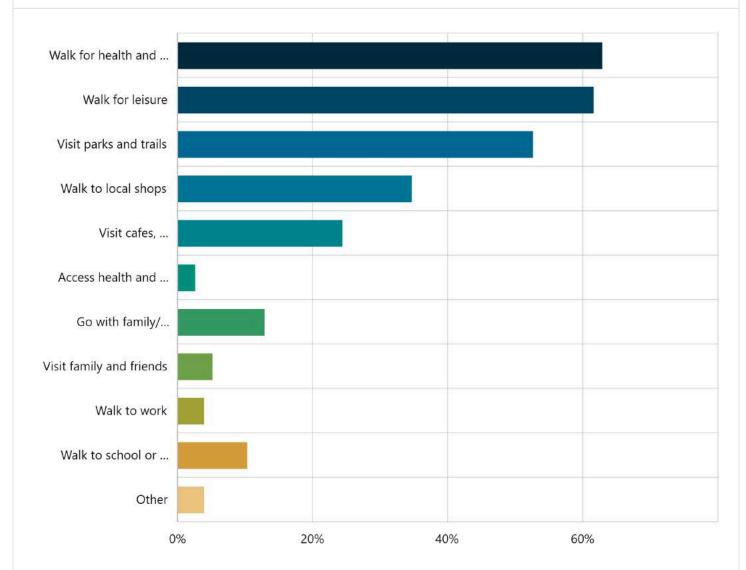


Answer choices	Percent	Count
Very interested	48.86%	43
Interested	39.77%	35
Not very interested	10.23%	9
Not interested at all	1.14%	1
Total	100.00%	88



#### 19. What kind of walking trips would you like to do more often? Required

Multi Choice | Skipped: 10 | Answered: 78 (88.6%)



Answer choices	Percent	Count
Walk for health and fitness	62.82%	49
Walk for leisure	61.54%	48
Visit parks and trails	52.56%	41
Walk to local shops	34.62%	27
Visit cafes, restaurants, bars, entertainment	24.36%	19
Access health and community support services	2.56%	2
Go with family/friends to places nearby	12.82%	10
Visit family and friends	5.13%	4
Walk to work	3.85%	3

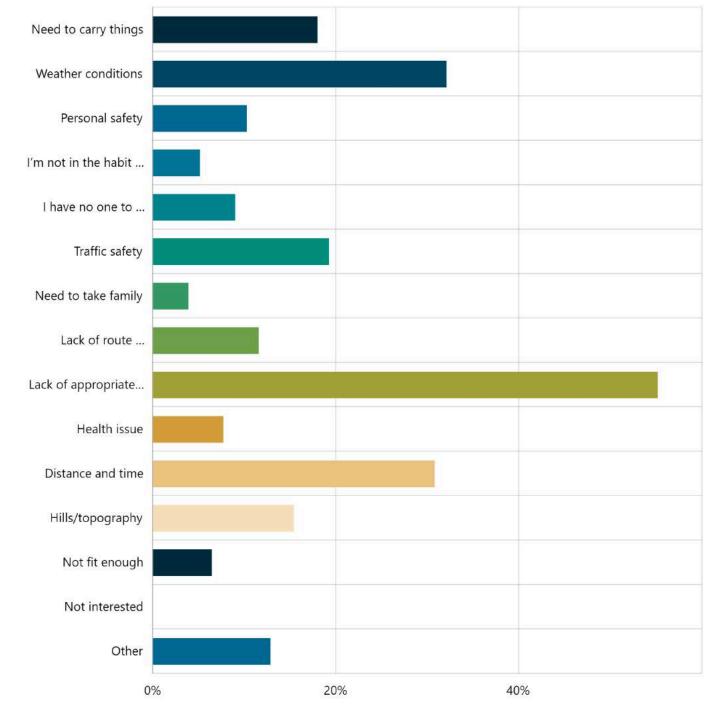


Walk to school or classes	10.26%	8
Other	3.85%	3



#### 20. What are the three main reasons that you don't walk more often? Required





Answer choices	Percent	Count
Need to carry things	17.95%	14
Weather conditions	32.05%	25
Personal safety	10.26%	8
I'm not in the habit of walking	5.13%	4

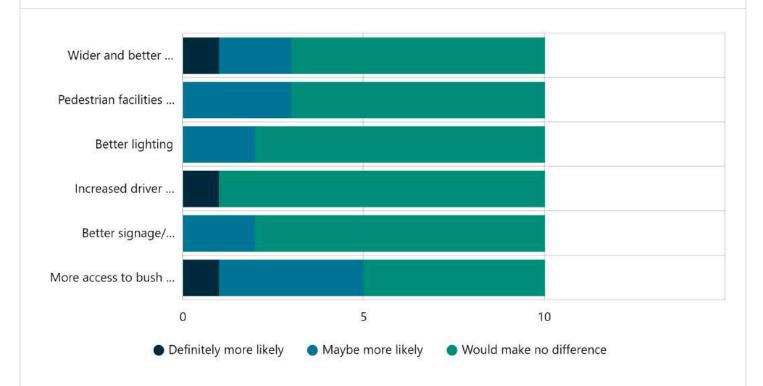


I have no one to walk with me	8.97%	7
Traffic safety	19.23%	15
Need to take family	3.85%	3
Lack of route information/wayfinding	11.54%	9
Lack of appropriate pathways	55.13%	43
Health issue	7.69%	6
Distance and time	30.77%	24
Hills/topography	15.38%	12
Not fit enough	6.41%	5
Not interested	0%	0
Other	12.82%	10



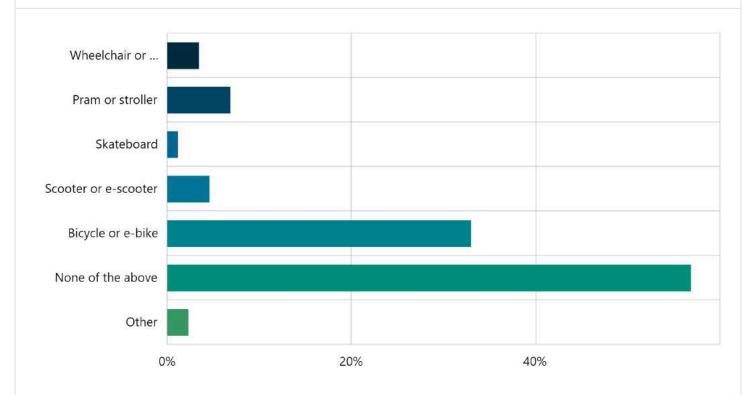
### **21.** For each of the statements below, how would they make you more likely to walk on a regular basis? Required

Matrix | Skipped: 78 | Answered: 10 (11.4%)



	Definitely more likely	Maybe more likely	Would make no difference	Count	Score
Wider and better quality footpaths	10.00% 1	20.00% 2	70.00% 7	10	2.60
Pedestrian facilities eg, seating, shade	0% 0	30.00%	70.00% 7	10	2.70
Better lighting	0% 0	20.00% 2	80.00% 8	10	2.80
Increased driver awareness of pedestrian safety	10.00% 1	0% 0	90.00% 9	10	2.80
Better signage/wayfindin g	0% 0	20.00% 2	80.00% 8	10	2.80
More access to bush walks and nature trails	10.00% 1	40.00% 4	50.00% 5	10	2.40

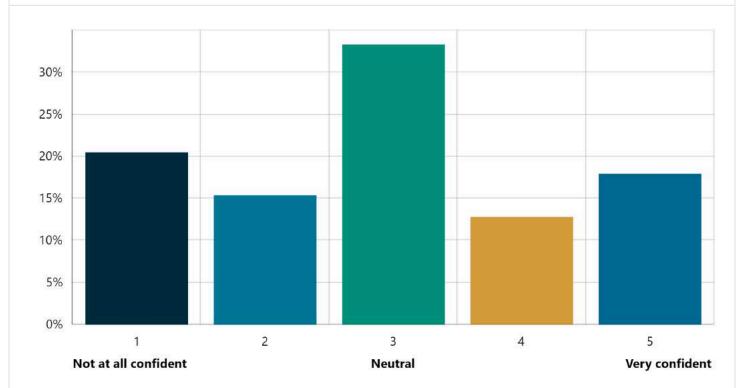
# **22. Do you use any of the following?** Required Multi Choice | Skipped: 0 | Answered: 88 (100%)



Answer choices	Percent	Count
Wheelchair or mobility device	3.41%	3
Pram or stroller	6.82%	6
Skateboard	1.14%	1
Scooter or e-scooter	4.55%	4
Bicycle or e-bike	32.95%	29
None of the above	56.82%	50
Other	2.27%	2

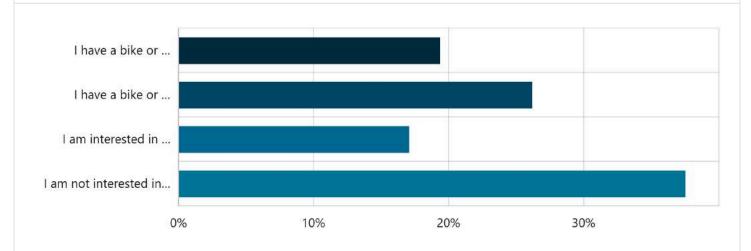


# $\textbf{23. How would you rate your level of confidence when wheeling in your area?} \ \textit{Required Slider} \ | \ \textit{Skipped: 49} \ | \ \textit{Answered: 39 (44.3\%)}$



Count	Average	Median	Min	Max	
39	2.92	3.00	1	5	
1	2	3	4	5	
20.51% 8	15.38% 6	33.33% 13	12.82% 5	17.95% 7	

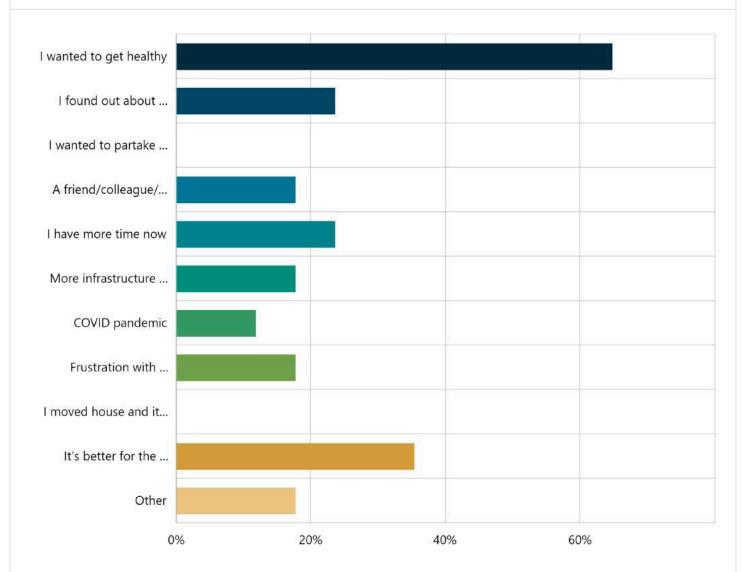
# **24. Which of the following statements best describes you?** Required Multi Choice | Skipped: 0 | Answered: 88 (100%)



Answer choices	Percent	Count
I have a bike or e-bike and use it at least once a month	19.32%	17
I have a bike or e-bike, but I use it less than once a month	26.14%	23
I am interested in riding but do not have a bike or e-bike	17.05%	15
I am not interested in riding a bike or e-bike	37.50%	33
Total	100.00%	88



#### **25.** What changes in your life got you riding regularly? What made you start / ride more regularly? Required Multi Choice | Skipped: 71 | Answered: 17 (19.3%)



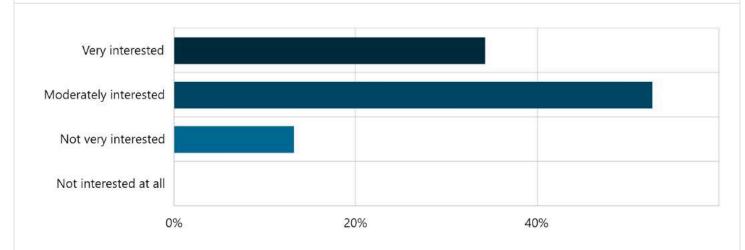
Answer choices	Percent	Count
I wanted to get healthy	64.71%	11
I found out about places/routes where it is good to ride	23.53%	4
I wanted to partake in sporting events, eg cycle races	0%	0
A friend/colleague/family member encouraged me to start	17.65%	3
I have more time now	23.53%	4
More infrastructure has been built	17.65%	3
COVID pandemic	11.76%	2
Frustration with public transport	17.65%	3
I moved house and it is easier now	0%	0



It's better for the environment, no emissions	35.29%	6
Other	17.65%	3

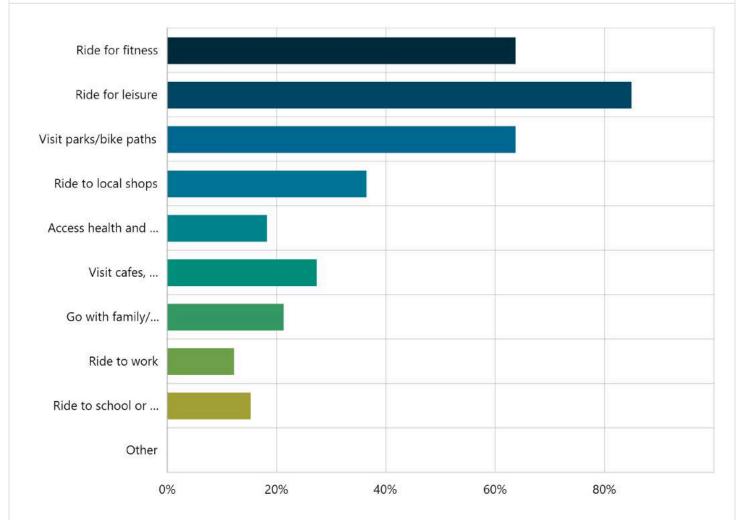


# **26. How interested are you in riding more often?** Required Multi Choice | Skipped: 50 | Answered: 38 (43.2%)



Answer choices	Percent	Count
Very interested	34.21%	13
Moderately interested	52.63%	20
Not very interested	13.16%	5
Not interested at all	0%	0
Total	100.00%	38

# **27. What kind of riding would you like to do more often?** Required Multi Choice | Skipped: 55 | Answered: 33 (37.5%)

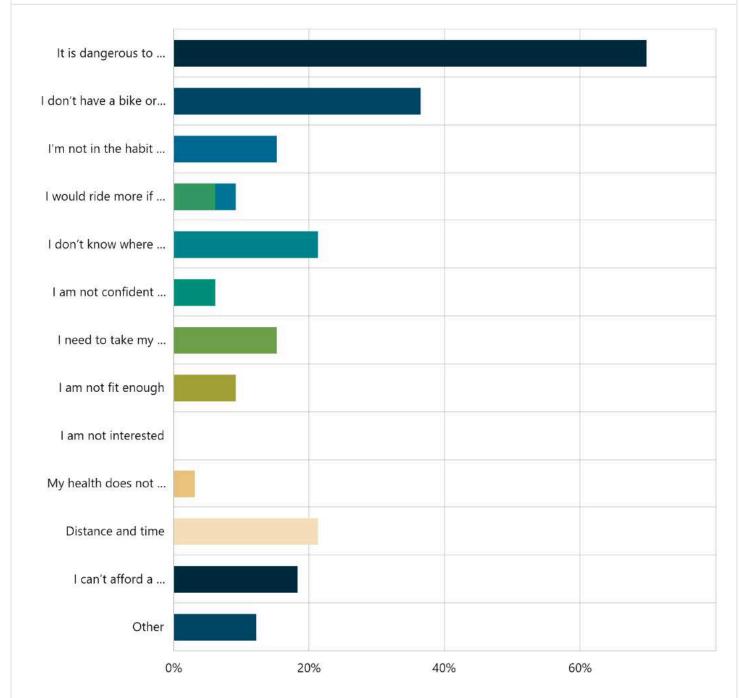


Answer choices	Percent	Count
Ride for fitness	63.64%	21
Ride for leisure	84.85%	28
Visit parks/bike paths	63.64%	21
Ride to local shops	36.36%	12
Access health and community services	18.18%	6
Visit cafes, restaurants, bars or for entertainment	27.27%	9
Go with family/friends to nearby places	21.21%	7
Ride to work	12.12%	4
Ride to school or classes	15.15%	5
Other	0%	0



#### 28. What are the main reasons that you don't ride on a regular basis? Required

Multi Choice | Skipped: 55 | Answered: 33 (37.5%)



	Count
69.70%	23
36.36%	12
15.15%	5
9.09%	3
21.21%	7
	36.36% 15.15% 9.09%

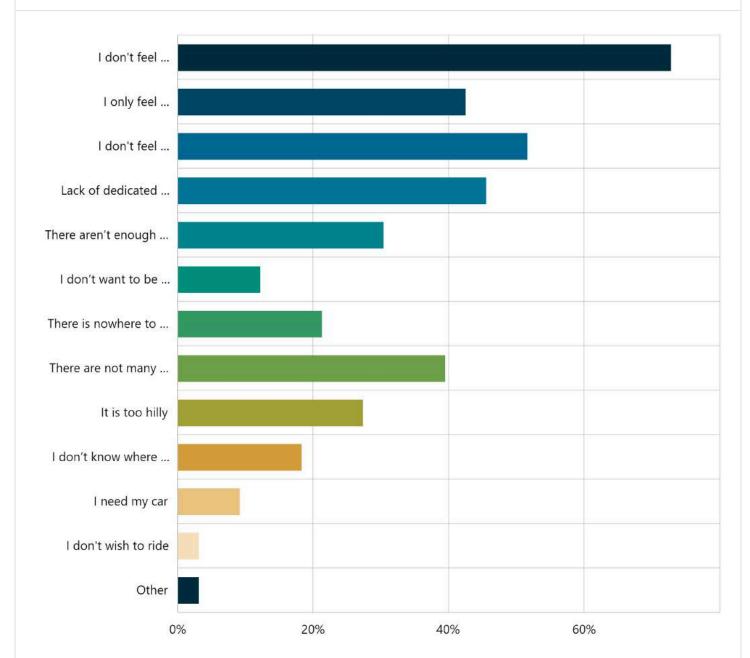


I am not confident enough to ride	6.06%	2
I would ride more if I had someone to ride with	6.06%	2
I need to take my family places and can't do that riding	15.15%	5
I am not fit enough	9.09%	3
I am not interested	0%	0
My health does not permit riding	3.03%	1
Distance and time	21.21%	7
I can't afford a bicycle e-bike	18.18%	6
Other	12.12%	4



#### 29. Thinking about riding in your area which of the below factors discourage you from riding there at all/more often? Required

Multi Choice | Skipped: 55 | Answered: 33 (37.5%)



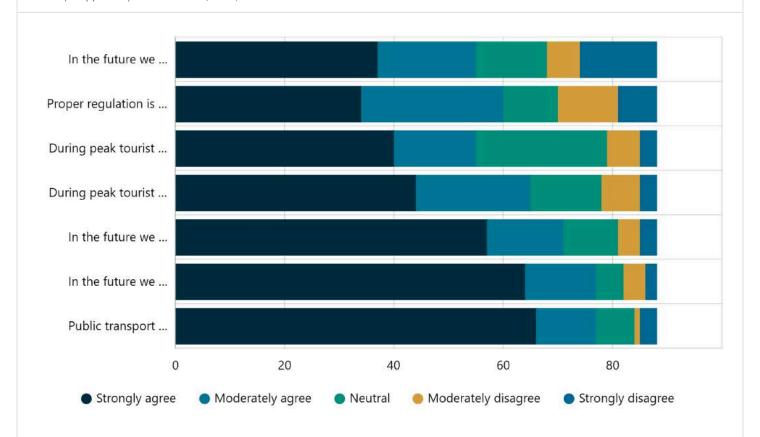
Answer choices	Percent	Count
I don't feel comfortable in shoulder lanes near passing cars making it dangerous	72.73%	24
I only feel comfortable/safe riding on off-road pathways	42.42%	14
I don't feel comfortable in shoulder lanes near parked cars	51.52%	17
Lack of dedicated bike lanes	45.45%	15
There aren't enough provisions for riders	30.30%	10
I don't want to be sweaty when I get to my destination	12.12%	4



There is nowhere to park my bike or e-bike	21.21%	7
There are not many places for pleasant recreation rides	39.39%	13
It is too hilly	27.27%	9
I don't know where to go	18.18%	6
I need my car	9.09%	3
I don't wish to ride	3.03%	1
Other	3.03%	1



# **30. Tell us your thoughts on the following phrases** Required Matrix | Skipped: 0 | Answered: 88 (100%)



	Strongly agree	Moderately agree	Neutral	Moderately disagree	Strongly disagree	Count	Score
In the future we should aim to use electric cars more	42.05% 37	20.45% 18	14.77% 13	6.82% 6	15.91% 14	88	2.34
Proper regulation is needed to govern the use of emerging personal transport options (e.g. e-bikes, e- scooters)	38.64% 34	29.55% 26	11.36% 10	12.50% 11	7.95% 7	88	2.22
During peak tourist times there is a need for more transport options around Daylesford and Hepburn Springs	45.45% 40	17.05% 15	27.27% 24	6.82% 6	3.41% 3	88	2.06



During peak tourist times there is a need for more transport options between the main townships	50.00% 44	23.86% 21	14.77% 13	7.95% 7	3.41% 3	88	1.91
In the future we should have more public transport options for journeys across the shire	64.77% 57	15.91% 14	11.36% 10	4.55% 4	3.41% 3	88	1.66
In the future we should aim to have more frequent public transport services	72.73% 64	14.77% 13	5.68% 5	4.55% 4	2.27% 2	88	1.49
Public transport connections should be made easier to streamline journeys	75.00% 66	12.50% 11	7.95% 7	1.14% 1	3.41% 3	88	1.45



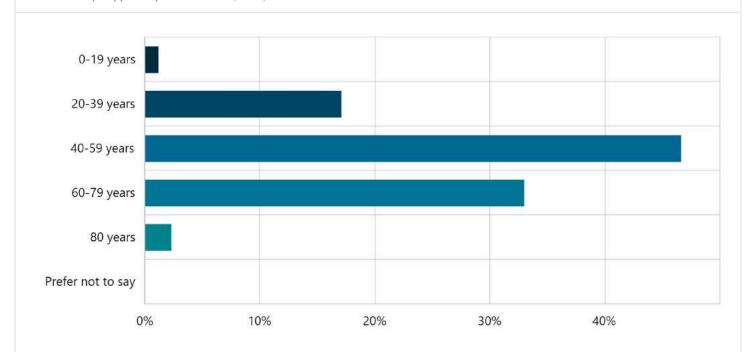
31. Are there new emerging trends or technology that we should prioritise for future transport in Hepburn Shire? (Eg, EV/Bike charging capability, ridesharing, e-bikes, electric buses) Required Long Text   Skipped: 0   Answered: 88 (100%)
Sentiment
No sentiment data
Tags
No tag data
Featured Contributions
No featured contributions



32. Are there transport services lacking that we should prioritise for future transport in Hepburn Shire? (E.g, missing connections, wheeling or walking trails, bus services) Required Long Text   Skipped: 0   Answered: 88 (100%)
Sentiment
No sentiment data
Tags
No tag data
Featured Contributions
No featured contributions



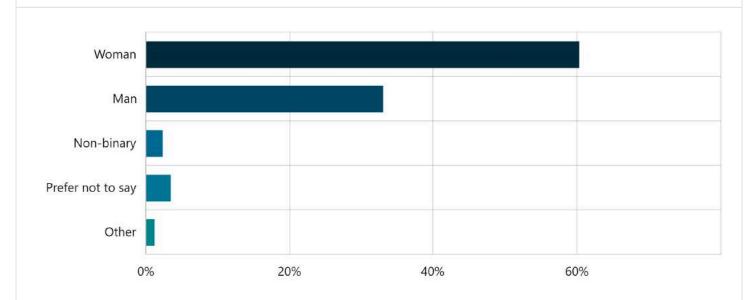
# **33. What is your age?** Required Multi Choice | Skipped: 0 | Answered: 88 (100%)



Answer choices	Percent	Count
0-19 years	1.14%	1
20-39 years	17.05%	15
40-59 years	46.59%	41
60-79 years	32.95%	29
80 years	2.27%	2
Prefer not to say	0%	0
Total	100.00%	88

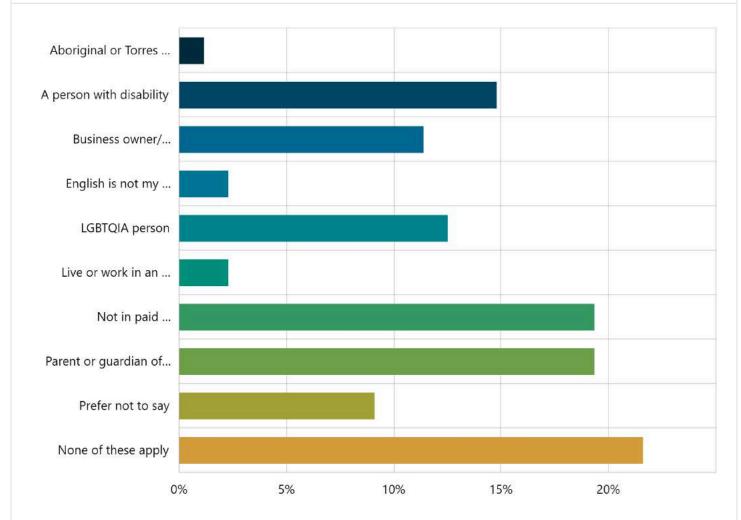


**34. I identify as...** Required Multi Choice | Skipped: 0 | Answered: 88 (100%)



Answer choices	Percent	Count
Woman	60.23%	53
Man	32.95%	29
Non-binary	2.27%	2
Prefer not to say	3.41%	3
Other	1.14%	1
Total	100.00%	88

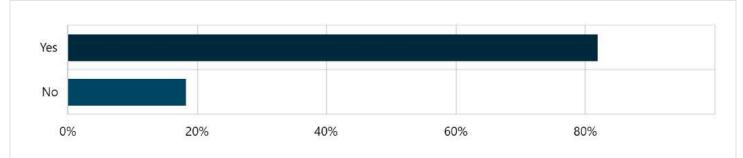
# **35. Do any of the following apply to you?** Required Multi Choice | Skipped: 0 | Answered: 88 (100%)



Answer choices	Percent	Count
Aboriginal or Torres Strait Islander person?	1.14%	1
A person with disability	14.77%	13
Business owner/operator	11.36%	10
English is not my first language.	2.27%	2
LGBTQIA person	12.50%	11
Live or work in an agriculturally based business	2.27%	2
Not in paid employment	19.32%	17
Parent or guardian of child under 18 years	19.32%	17
Prefer not to say	9.09%	8
None of these apply	21.59%	19



# **36. Do you live in Hepburn Shire?** Required Multi Choice | Skipped: 0 | Answered: 88 (100%)

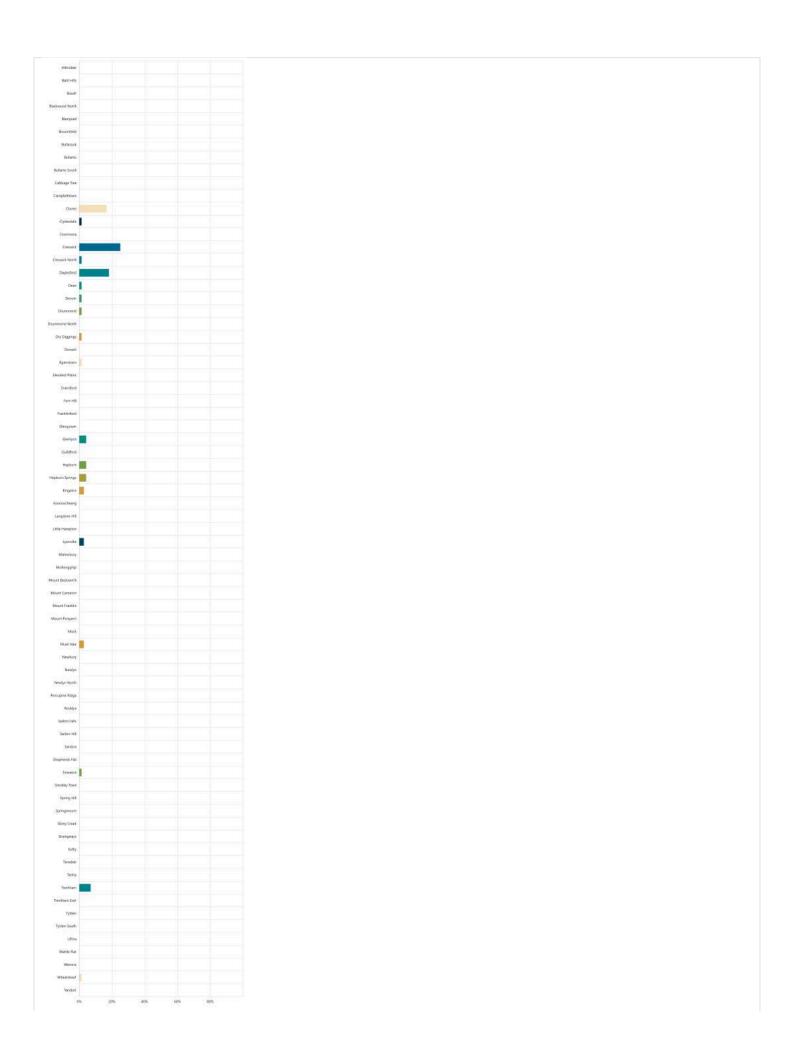


Answer choices	Percent	Count
Yes	81.82%	72
No	18.18%	16
Total	100.00%	88

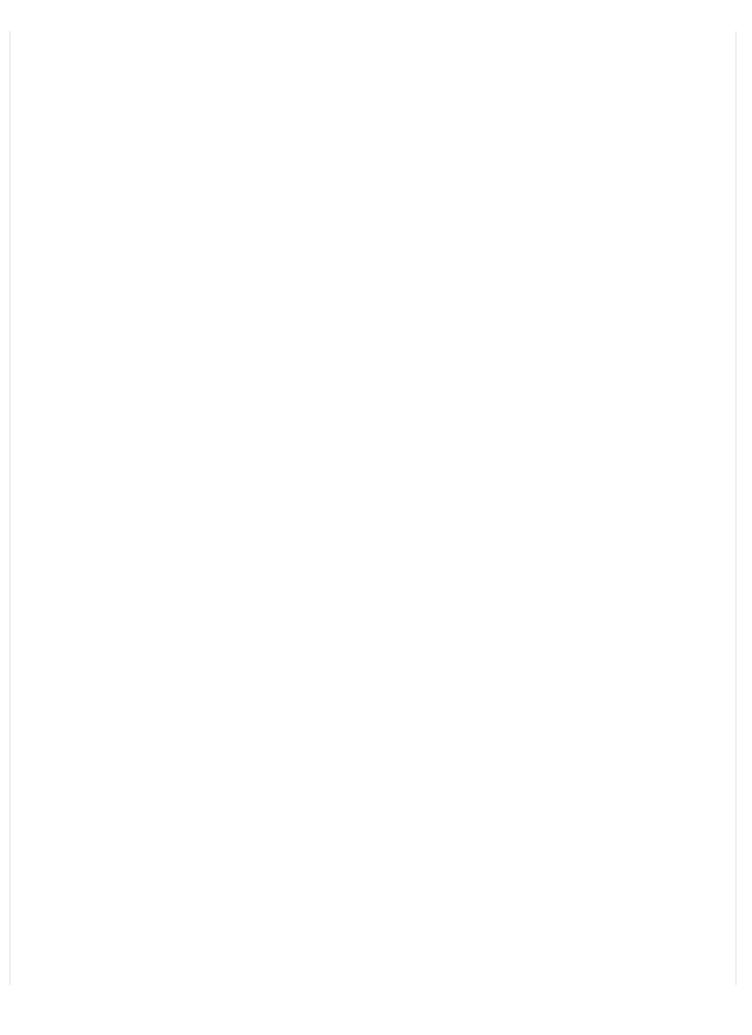


**37. Which town?** Required Select Box | Skipped: 16 | Answered: 72 (81.8%)

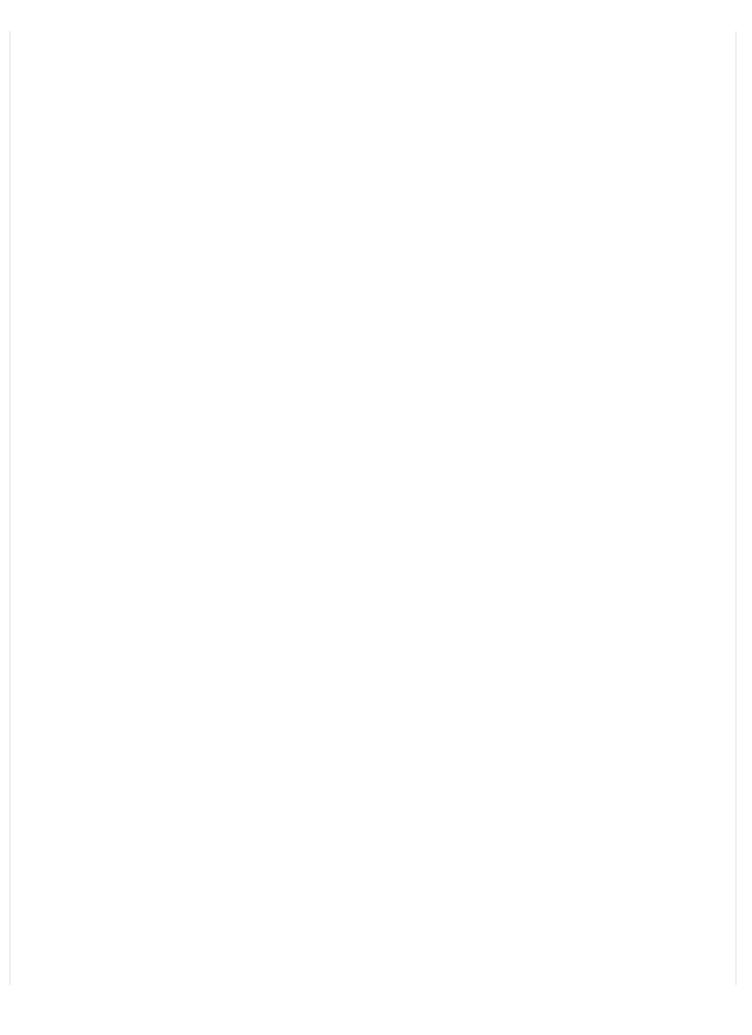














Answer choices	Percent	Count
Allendale	0%	0
Bald Hills	0%	0
Basalt	0%	0
Blackwood North	0%	0
Blampied	0%	0
Broomfield	0%	0
Bullarook	0%	0
Bullarto	0%	0
Bullarto South	0%	0
Cabbage Tree	0%	0
Campbelltown	0%	0
Clunes	16.67%	12
Clydesdale	1.39%	1



Creswick         25,00%         18           Creswick North         1,39%         1           Daylesford         18,06%         13           Dean         1,39%         1           Denver         1,39%         1           Drummond         1,39%         1           Drummond North         0%         0           Dry Diggings         1,39%         1           Dunach         0%         0           Eganstown         1,39%         1           Elevated Plains         0%         0           Evansford         0%         0           Fen Hill         0%         0           Franklinford         0%         0           Glengower         0%         0           Glengower         0%         0           Hepburn         4,17%         3           Heppburn Springs         4,17%         3           Kingston         2,78%         2           Kooroocheang         0%         0           Langdons Hill         0%         0           Lyonville         2,78%         2           Malmsbury         0%         0	Coomoora	0%	0
Daylesford         18.06%         13           Dean         1.39%         1           Deriver         1.39%         1           Drummond         1.39%         1           Drummond North         0%         0           Dry Diggings         1.39%         1           Dunach         0%         0           Eganstown         1.39%         1           Elevated Plains         0%         0           Evansford         0%         0           Fern Hill         0%         0           Franklinford         0%         0           Glengower         0%         0           Glengower         0%         0           Gendyon         4.17%         3           Guildford         0%         0           Hepburn Springs         4.17%         3           Kingston         2.78%         2           Kooroocheang         0%         0           Langdons Hill         0%         0           Lyonville         2.78%         2           Malmsbury         0%         0	Creswick	25.00%	18
Dean         1,39%         1           Deriver         1,39%         1           Drummond         1,39%         1           Drummond North         0%         0           Dry Diggings         1,39%         1           Dunach         0%         0           Eganstown         1,39%         1           Elevated Plains         0%         0           Evansford         0%         0           Fern Hill         0%         0           Franklinford         0%         0           Glengower         0%         0           Glenlyon         4,17%         3           Guildford         0%         0           Hepburn Springs         4,17%         3           Kingston         2,73%         2           Kooroocheang         0%         0           Langdons Hill         0%         0           Little Hampton         0%         0           Lyonville         2,73%         2           Malmsbury         0%         0	Creswick North	1.39%	1
Denver         1,39%         1           Drummond         1,39%         1           Drummond North         0%         0           Dry Diggings         1,39%         1           Dunach         0%         0           Eganstown         1,39%         1           Elevated Plains         0%         0           Evansford         0%         0           Fern Hill         0%         0           Franklinford         0%         0           Glengower         0%         0           Glenlyon         4,17%         3           Guildford         0%         0           Hepburn         4,17%         3           Hepburn Springs         4,17%         3           Kingston         2,78%         2           Koaroocheang         0%         0           Luttle Hampton         0%         0           Lyonville         2,78%         2           Malmsbury         0%         0	Daylesford	18.06%	13
Drummond         1,39%         1           Drummond North         0%         0           Dry Diggings         1,39%         1           Dunach         0%         0           Eganstown         1,39%         1           Elevated Plains         0%         0           Evansford         0%         0           Fern Hill         0%         0           Franklinford         0%         0           Glengower         0%         0           Glenhyon         4,17%         3           Guildford         0%         0           Hepburn         4,17%         3           Hepburn Springs         4,17%         3           Kingston         2,78%         2           Kooroocheang         0%         0           Langdons Hill         0%         0           Little Hampton         0%         0           Lyonville         2,78%         2           Malmsbury         0%         0	Dean	1.39%	1
Drummond North         0%         0           Dry Diggings         1.39%         1           Dunach         0%         0           Eganstown         1.39%         1           Elevated Plains         0%         0           Evansford         0%         0           Fern Hill         0%         0           Franklinford         0%         0           Glengower         0%         0           Glenlyon         4.17%         3           Guildford         0%         0           Hepburn         4.17%         3           Hepburn Springs         4.17%         3           Kingston         2.78%         2           Kooroocheang         0%         0           Langdons Hill         0%         0           Little Hampton         0%         0           Lygowille         2.78%         2           Malmsbury         0%         0	Denver	1.39%	1
Dry Diggings         1.39%         1           Dunach         0%         0           Eganstown         1.39%         1           Elevated Plains         0%         0           Evansford         0%         0           Fern Hill         0%         0           Franklinford         0%         0           Glengower         0%         0           Glenlyon         4.17%         3           Guildford         0%         0           Hepburn         4.17%         3           Kingston         2.78%         2           Kooroocheang         0%         0           Langdons Hill         0%         0           Little Hampton         0%         0           Lyonville         2.78%         2           Malmsbury         0%         0	Drummond	1.39%	1
Dunach         0%         0           Eganstown         1.39%         1           Elevated Plains         0%         0           Evansford         0%         0           Fern Hill         0%         0           Franklinford         0%         0           Glengower         0%         0           Glenlyon         4.17%         3           Guildford         0%         0           Hepburn         4.17%         3           Kingston         2.78%         2           Kooroocheang         0%         0           Langdons Hill         0%         0           Little Hampton         0%         0           Lyonville         2.78%         2           Malmsbury         0%         0	Drummond North	0%	0
Eganstown       1.39%       1         Elevated Plains       0%       0         Evansford       0%       0         Fern Hill       0%       0         Franklinford       0%       0         Glengower       0%       0         Glenlyon       4.17%       3         Guildford       0%       0         Hepburn       4.17%       3         Hepburn Springs       4.17%       3         Kingston       2.78%       2         Kooroocheang       0%       0         Langdons Hill       0%       0         Little Hampton       0%       0         Lyonville       2.78%       2         Malmsbury       0%       0	Dry Diggings	1.39%	1
Elevated Plains         0%         0           Evansford         0%         0           Fern Hill         0%         0           Franklinford         0%         0           Glengower         0%         0           Glenlyon         4.17%         3           Guildford         0%         0           Hepburn         4.17%         3           Hepburn Springs         4.17%         3           Kingston         2.78%         2           Kooroocheang         0%         0           Langdons Hill         0%         0           Little Hampton         0%         0           Lyonville         2.78%         2           Malmsbury         0%         0	Dunach	0%	0
Evansford       0%       0         Fern Hill       0%       0         Franklinford       0%       0         Glengower       0%       0         Glenlyon       4.17%       3         Guildford       0%       0         Hepburn       4.17%       3         Hepburn Springs       4.17%       3         Kingston       2.78%       2         Kooroocheang       0%       0         Langdons Hill       0%       0         Little Hampton       0%       0         Lyonville       2.78%       2         Malmsbury       0%       0	Eganstown	1.39%	1
Fern Hill       0%       0         Franklinford       0%       0         Glengower       0%       0         Glenlyon       4.17%       3         Guildford       0%       0         Hepburn       4.17%       3         Hepburn Springs       4.17%       3         Kingston       2.78%       2         Kooroocheang       0%       0         Langdons Hill       0%       0         Little Hampton       0%       0         Lyonville       2.78%       2         Malmsbury       0%       0	Elevated Plains	0%	0
Franklinford       0%       0         Glengower       0%       0         Glenlyon       4.17%       3         Guildford       0%       0         Hepburn       4.17%       3         Hepburn Springs       4.17%       3         Kingston       2.78%       2         Kooroocheang       0%       0         Langdons Hill       0%       0         Little Hampton       0%       0         Lyonville       2.78%       2         Malmsbury       0%       0	Evansford	0%	0
Glengower       0%       0         Glenlyon       4.17%       3         Guildford       0%       0         Hepburn       4.17%       3         Hepburn Springs       4.17%       3         Kingston       2.78%       2         Kooroocheang       0%       0         Langdons Hill       0%       0         Little Hampton       0%       0         Lyonville       2.78%       2         Malmsbury       0%       0	Fern Hill	0%	0
Glenlyon       4.17%       3         Guildford       0%       0         Hepburn       4.17%       3         Hepburn Springs       4.17%       3         Kingston       2.78%       2         Kooroocheang       0%       0         Langdons Hill       0%       0         Little Hampton       0%       0         Lyonville       2.78%       2         Malmsbury       0%       0	Franklinford	0%	0
Guildford       0%       0         Hepburn       4.17%       3         Hepburn Springs       4.17%       3         Kingston       2.78%       2         Kooroocheang       0%       0         Langdons Hill       0%       0         Little Hampton       0%       0         Lyonville       2.78%       2         Malmsbury       0%       0	Glengower	0%	0
Hepburn       4.17%       3         Hepburn Springs       4.17%       3         Kingston       2.78%       2         Kooroocheang       0%       0         Langdons Hill       0%       0         Little Hampton       0%       0         Lyonville       2.78%       2         Malmsbury       0%       0	Glenlyon	4.17%	3
Hepburn Springs       4.17%       3         Kingston       2.78%       2         Kooroocheang       0%       0         Langdons Hill       0%       0         Little Hampton       0%       0         Lyonville       2.78%       2         Malmsbury       0%       0	Guildford	0%	0
Kingston       2.78%       2         Kooroocheang       0%       0         Langdons Hill       0%       0         Little Hampton       0%       0         Lyonville       2.78%       2         Malmsbury       0%       0	Hepburn	4.17%	3
Kooroocheang0%0Langdons Hill0%0Little Hampton0%0Lyonville2.78%2Malmsbury0%0	Hepburn Springs	4.17%	3
Langdons Hill       0%       0         Little Hampton       0%       0         Lyonville       2.78%       2         Malmsbury       0%       0	Kingston	2.78%	2
Little Hampton         0%         0           Lyonville         2.78%         2           Malmsbury         0%         0	Kooroocheang	0%	0
Lyonville         2.78%         2           Malmsbury         0%         0	Langdons Hill	0%	0
Malmsbury 0% 0	Little Hampton	0%	0
	Lyonville	2.78%	2
Mollongghip 0% 0	Malmsbury	0%	0
	Mollongghip	0%	0



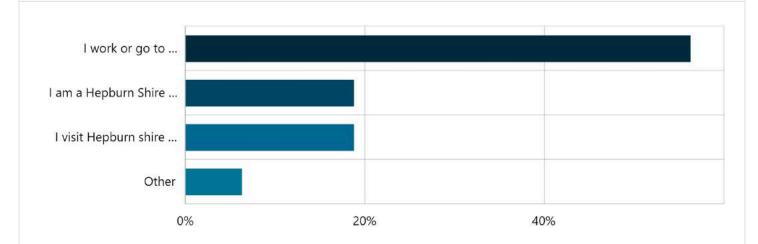
Mount Beckworth	0%	0
Mount Cameron	0%	0
Mount Franklin	0%	0
Mount Prospect	0%	0
Musk	0%	0
Musk Vale	2.78%	2
Newbury	0%	0
Newlyn	0%	0
Newlyn North	0%	0
Porcupine Ridge	0%	0
Rocklyn	0%	0
Sailors Falls	0%	0
Sailors Hill	0%	0
Sandon	0%	0
Shepherds Flat	0%	0
Smeaton	1.39%	1
Smokey Town	0%	0
Spring Hill	0%	0
Springmount	0%	0
Stony Creek	0%	0
Strangways	0%	0
Sulky	0%	0
Taradale	0%	0
Tarilta	0%	0
Trentham	6.94%	5
Trentham East	0%	0
Tylden	0%	0
Tylden South	0%	0



Ullina	0%	0
Wattle Flat	0%	0
Werona	0%	0
Wheatsheaf	1.39%	1
Yandoit	0%	0
Total	100.00%	72



# **38. Which of the following applies to you?** Required Multi Choice | Skipped: 72 | Answered: 16 (18.2%)



Answer choices	Percent	Count
I work or go to school in Hepburn Shire but live outside the Shire.	56.25%	9
I am a Hepburn Shire Council ratepayer but live outside the Shire.	18.75%	3
I visit Hepburn shire regularly.	18.75%	3
Other	6.25%	1
Total	100.00%	16



<b>39. Where do you travel to Hepburn Shire from?</b> Required Short Text   Skipped: 72   Answered: 16 (18.2%)
Sentiment
No sentiment data
Tags
No tag data
Featured Contributions
No featured contributions

