




**Macedon
Ranges**
Shire Council

2023–2032 **Mobility and Road Safety Strategy**





Macedon Ranges Shire Council acknowledges the Dja Dja Wurrung, Taungurung and Wurundjeri Woi Wurrung Peoples as the Traditional Owners and Custodians of this land and waterways. Council recognises their living cultures and ongoing connection to Country and pays respect to their Elders past, present and emerging. Council also acknowledges local Aboriginal and/or Torres Strait Islander residents of Macedon Ranges for their ongoing contribution to the diverse culture of our community.

Artwork: Taungurung artist Maddi Moser
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Message from the Mayor



Macedon Ranges Shire Council believes that keeping our community safe while interacting with the road network is paramount. With the support of its road safety partners, Council will strive to eliminate death and serious injury from its roads by adopting the philosophy and principles of the globally recognised Safe System road safety vision.

The Safe System will be progressively applied across the municipality and prioritised according to problems and places, to reduce severe trauma significantly. This will align with the Victorian Government's Towards Zero Strategy, which aims for zero road trauma. It will take time; however, there are many things that we can do in the short term to reduce the number of deaths and the number of serious injuries on our network.

Providing safe access to all destinations within our towns ensures we look after all community members. Moreover, our many places of natural beauty and cultural significance are extremely important to us, and we want residents and visitors to be able to see them, appreciate them, and be protected from road crashes while they do so.

The Movement and Place Framework has been adopted at a state level and categorises different road and roadside environments. This is a useful tool for selecting appropriate road treatments and speed limits that match and support the surrounding land use and function. We will work with the Department of Transport and Planning in applying this framework when planning road modifications and upgrades.

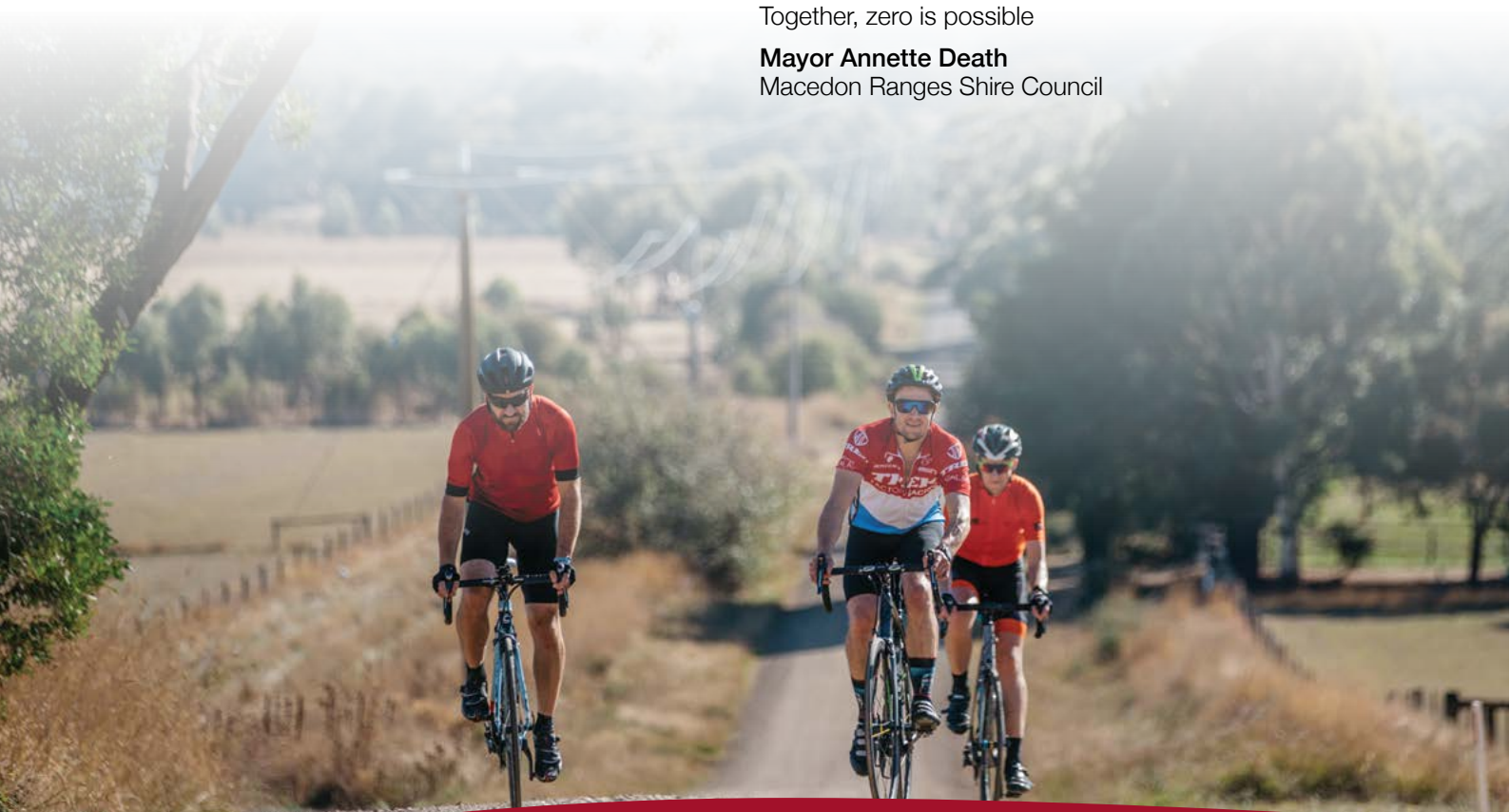
Active forms of travel, such as walking, cycling and public transport, can improve community health and reduce congestion. Investing in high-quality infrastructure that supports and encourages people to engage in active transport forms will have environmental, health and wellbeing benefits, as well as social benefits.

This Strategy has been developed with extensive community engagement and leading road safety expertise. It acknowledges road safety is a shared responsibility that requires the dedication of everyone in the community. We must strive to be safe road users and drive safe vehicles. We must also work to implement road safety solutions that provide forgiving environments, allowing for human error and reduce the risk of death or serious injury when a crash occurs.

I urge you to work with us on this task and do what you can to reduce road trauma in the Macedon Ranges Shire. Zero is the only acceptable number of deaths and serious injuries on our roads.

Together, zero is possible

Mayor Annette Death
Macedon Ranges Shire Council



Vision and purpose

Our vision for mobility and road safety in Macedon Ranges

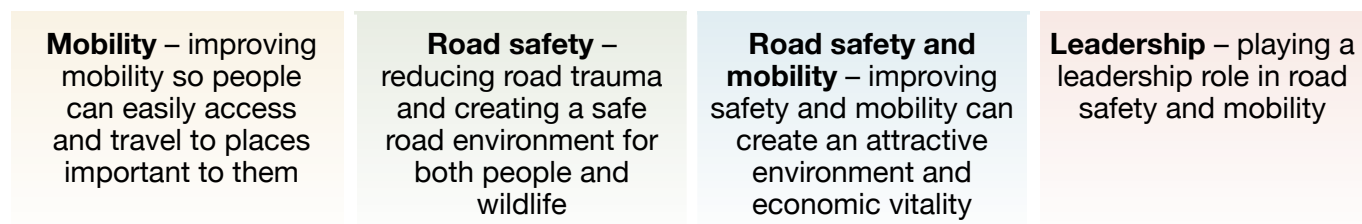
Our Council Plan 2021-2031 sets our strategic direction for the future of Macedon Ranges Shire. It outlines our key priorities for the next ten years, covering the term of the current elected Council, and supports the achievement of the Community Vision through planned objectives and strategies. The Council Plan has identified four main strategic objectives that align perfectly with our vision for road safety and mobility in the municipality.

Our strategic objectives

Council Plan 2021-2031



Road Safety and Mobility Strategy 2022-2032



Through this Strategy, we are aiming to raise the safety and protective quality of our mobility networks for the benefit of all people, our environment and wildlife.

This will be achieved through the implementation of various road infrastructure interventions to retrofit improved safety to existing networks, road infrastructure assessment and improved safety-conscious planning, design, construction and operation of our roads.

Road users do have a responsibility for safe crash outcomes but designers or providers of elements of the system have a greater responsibility. This is a key message of change inherent to Safe System¹ thinking.



¹ National Road Safety Strategy 2021-2030 (<https://www.roadsafety.gov.au/nrss>)

Strategic themes for mobility and road safety

Best practice

At a local level

We are committed to reducing road trauma and improving mobility by applying best practice guidelines and frameworks. We will embrace the Safe System model for road safety and the Movement and Place model for mobility.

At a state level

We will play our part in delivering the objectives of the State Government's Victorian Road Safety Strategy 2021-2030, including the target of halving road deaths by 2030. And we will improve journeys for road users and encourage active transport, such as walking and cycling. We also support Vision Zero as an aspirational target to be achieved by 2050 to eliminate any human fatalities, which is in line also with the Australian National Road Safety Strategy.

At a global level

Our Strategy is consistent with the UN General Assembly adopted resolution 74/299, "Improving global road safety", proclaiming the Decade of Action for Road Safety 2021-2030, with the ambitious target of preventing at least 50 per cent of road traffic deaths and injuries by 2030.

We will lead by example whilst working closely with our community and road safety partners. Our decisions will be evidence-based and our actions will be prioritised to get the best value from investments.

TOWARDS VISION ZERO

ASPIRATIONAL
TARGET

Zero road death by

2050

Our guiding principles

We consulted with road safety and mobility experts, including those with local knowledge and those with knowledge of international best practices, including

Australia, have adopted best-practice road safety and mobility approaches. These are at the heart of our Strategy and guide our actions.

The three key approaches are:



Vision Zero

Vision Zero is a worldwide initiative aimed at eliminating traffic-related fatalities and severe injuries through a comprehensive and systematic approach to road safety. The fundamental road safety principles that effectively reduce fatalities have been implemented in various Australian states and territories. Moreover, numerous countries around the globe, such as Sweden, Canada, the United Kingdom, France, Norway, New Zealand, and several major cities in the United States, have embraced these principles as well.

Vision Zero planning envisages a future city free of death and serious injury on the roads. It compares that vision with the current transport system to identify what needs to change. The transformation could include changes to road user behaviour, vehicles, roads and travel speeds.

As we plan, design, build, maintain and manage our road system, we analyse the existing transport system and its performance to find areas that do not fit our vision.

We strive to achieve zero deaths and serious injuries on our roads to people in line with the Vision Zero global movement. Macedon Ranges Shire Council's Vision Zero has special consideration for reducing fatalities for native wildlife living in a rural environment. The safe movement of people from one location to the other promptly is our

primary transport aim; however, we also continue to explore and learn how to design our road network to minimise road trauma for both people and wildlife. Our strategy has outlined actions and commitment to improve the movement and safety of improving travelling in rural road corridors and sharing the road with native wildlife so that both can move from one place to another in a safer manner. An example is installing creative wildlife signs on rural roads where wildlife exists.



The Safe System

The Safe System approach (see Figure 2), originating from Sweden, is an internationally recognised framework for reducing human road trauma. It is recognised in many other countries, including Australia, as best practice in encouraging a better understanding of the interaction

between the fundamental components of the road system. Macedon Ranges Shire Council is committed to applying the Safe System in our mobility and road safety projects and practices.

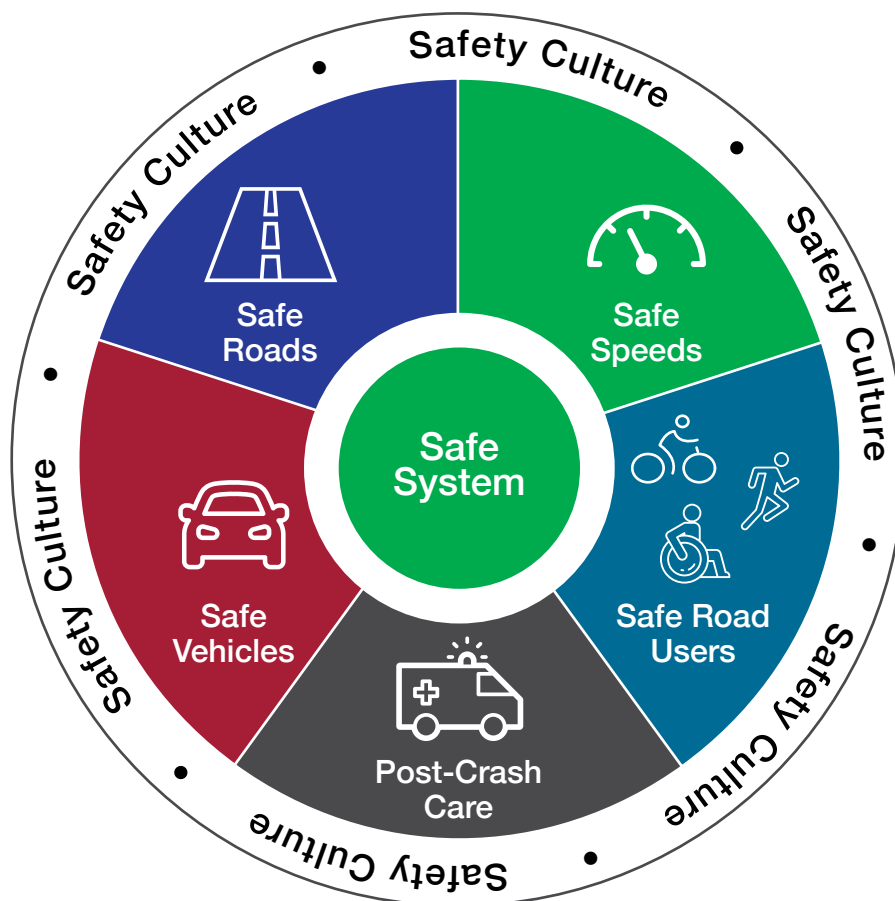


Figure 2: Safe System (Source: VicRoads and TAC)

- **Safer Roads and Roadsides** – the infrastructure is predictable and forgiving of mistakes – their design should encourage appropriate road user behaviour and speeds.
- **Safer Speeds** – adopt speed limits that suit the road’s function and level of safety; the road user understands and complies with those speed limits and drives to the conditions.
- **Safer Vehicles** – help prevent crashes and protect road users from crash forces that cause death and serious injury.
- **Safer People** – ensure road users are competent, alert, and unimpaired, and people comply with road rules and choose safer vehicles.
- **Post-Crash Care** – ensure that how persons injured in road traffic crashes are dealt with following a crash determines their chances and the quality of survival.

Note: In the Macedon Ranges, we acknowledge the value of our wildlife and seek to reduce their road trauma. We plan to reduce the potential for injury when planning and designing roads.

Movement and Place

The Victorian Government adopted the Movement and Place framework to translate broad strategic outcomes into priority changes improving community transport outcomes. Recognising that transport corridors perform multiple functions is fundamental to thinking about movement and place. Transport links not only move people from A to B but also serve key places and destinations in their own right. This way of thinking means that when we plan and develop the transport network, we must consider the breadth of community needs, expectations and aspirations for the places they live and the roads and streets they pass through.

A location or transport link is mapped against a movement and a place axis according to the significance of its future aspirational movement and place functions to determine its classification. Transport links are mapped considering the mix and balance of transport modes, the built environment, the aesthetic quality and character of the place and the types of modes appropriate to the place.

Six general road and street types define the various roads and streets on the rural transport network.

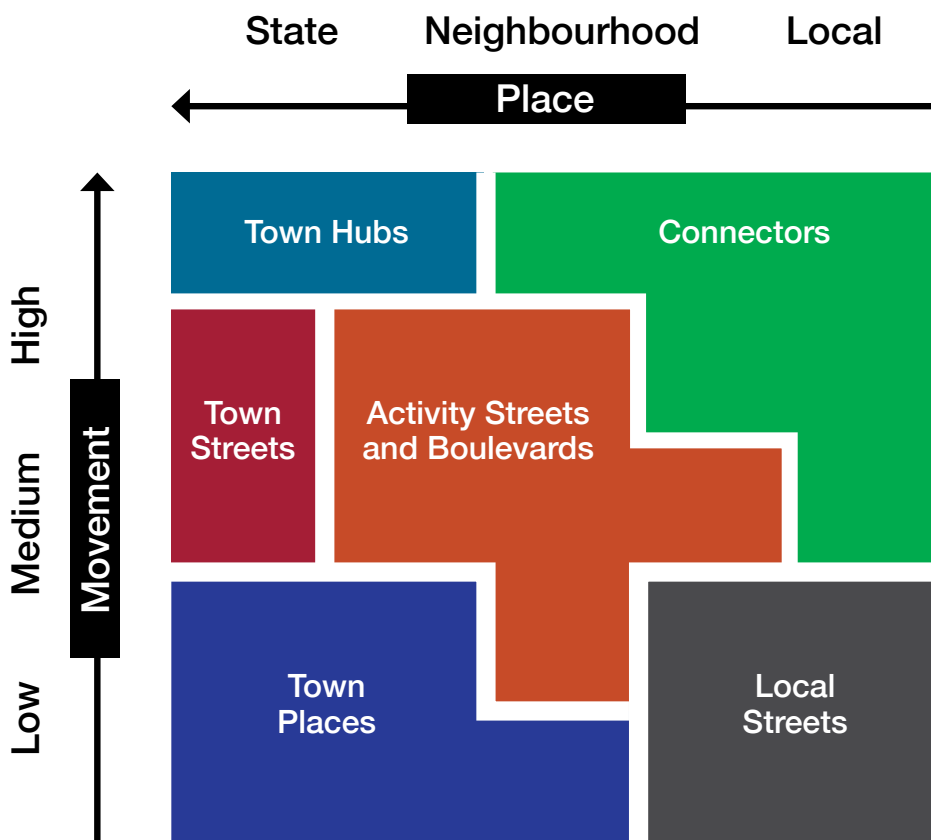


Figure 3: Movement and Place Framework

Note: The Victorian Movement and Place Framework is heavily focused on the movements of people and vehicles in townships. However, noting our rural environment, our Mobility and Road Safety Strategy has included special considerations for driving conditions and how this would impact people and wildlife safety.

Typical street types in Macedon Ranges



Town hubs

- Dense, vibrant places
- High demand for movement

E.g. Aitken Street Service lane - Gisborne, High Street Service lane - Woodend



Town streets

- Pedestrian friendly environment
- Pedestrian-friendly transport

E.g. Station Street, Riddells Creek



Town places

- High community value
- Lower levels of vehicle movement

E.g. Anslow Street, Woodend



Activity streets and boulevards

- High-quality public realm
- Access is provided for all transport modes, such as walking, cycling, public transport and vehicles

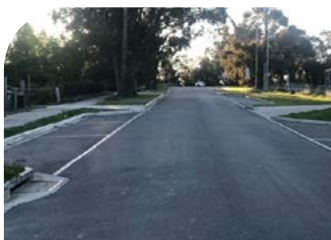
E.g. Piper Street, Kyneton



Local streets

- Local community access
- Quiet, safe and desirable for all ages and abilities
- Includes rural environs outside of townships

E.g. Honour Avenue, Macedon



Connectors

- Safe, reliable and efficient movement of people and goods
- Includes rural environs outside of townships

E.g. Willowbank Road, Gisborne

Typical street elements

Movement



Walking

Clear space on footpaths for all to pass



Cycling

Protected lanes for bike riders separated from other modes, including parked cars



Vehicle

Dedicated space for motorised vehicles to move people and goods



Parking

Space for vehicle parking, stopping and loading and unloading people and goods



Public transport

Street design to cater for safe public bus movement including facilities

Place



Outdoor dining

Permitted space for outdoor dining



Public place

Hard-paved public areas that can be used for events and activities



Street furniture

Physical objects in the street, including light poles, bins, parking machines, seats and new technology



Green space

Trees, planting beds, nature strips, vertical planting and water-sensitive urban design



Footpath trading

Permitted space for business signs, goods displays and food vendors

The bigger picture

Macedon Ranges Shire Council's Mobility & Road Safety Strategy addresses the ongoing and emerging road safety issues for the Shire over the next 10 years.

The Strategy aligns with the Council Plan 2021-2031 and the State Government's Victorian Road Safety Strategy 2021-2031 to reduce the road toll by 50 per cent by 2030.

As shown in Figure 4, this is not a standalone document but is informed by various plans and strategies by regional, state and national plans and strategies, as well as how it is linked to other Council plans.

It is also an overarching strategic document, providing directions and guidance on implementing specific transport modes, action plans and operational policy matters, as illustrated in Figure 5.

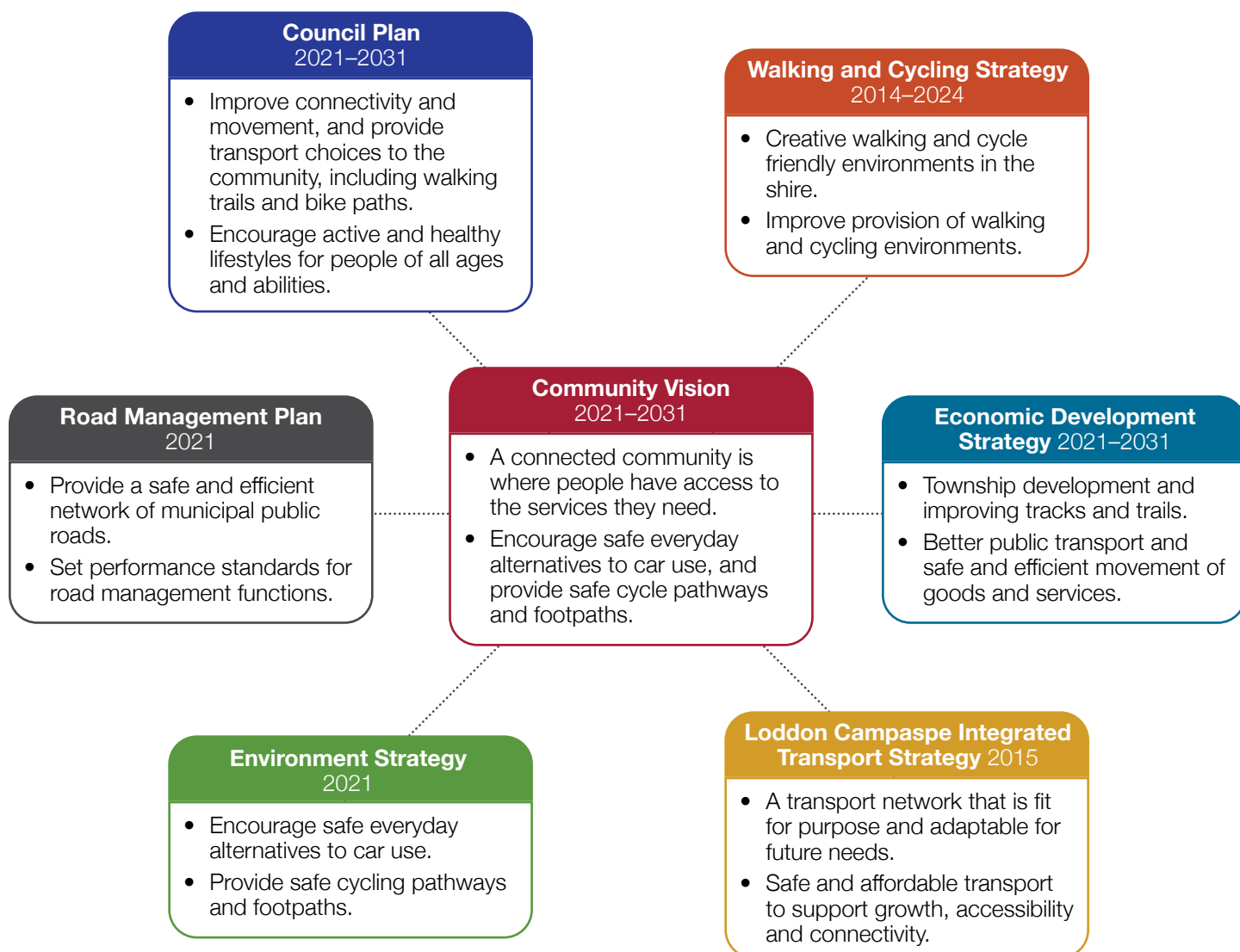


Figure 4: The Bigger Strategies

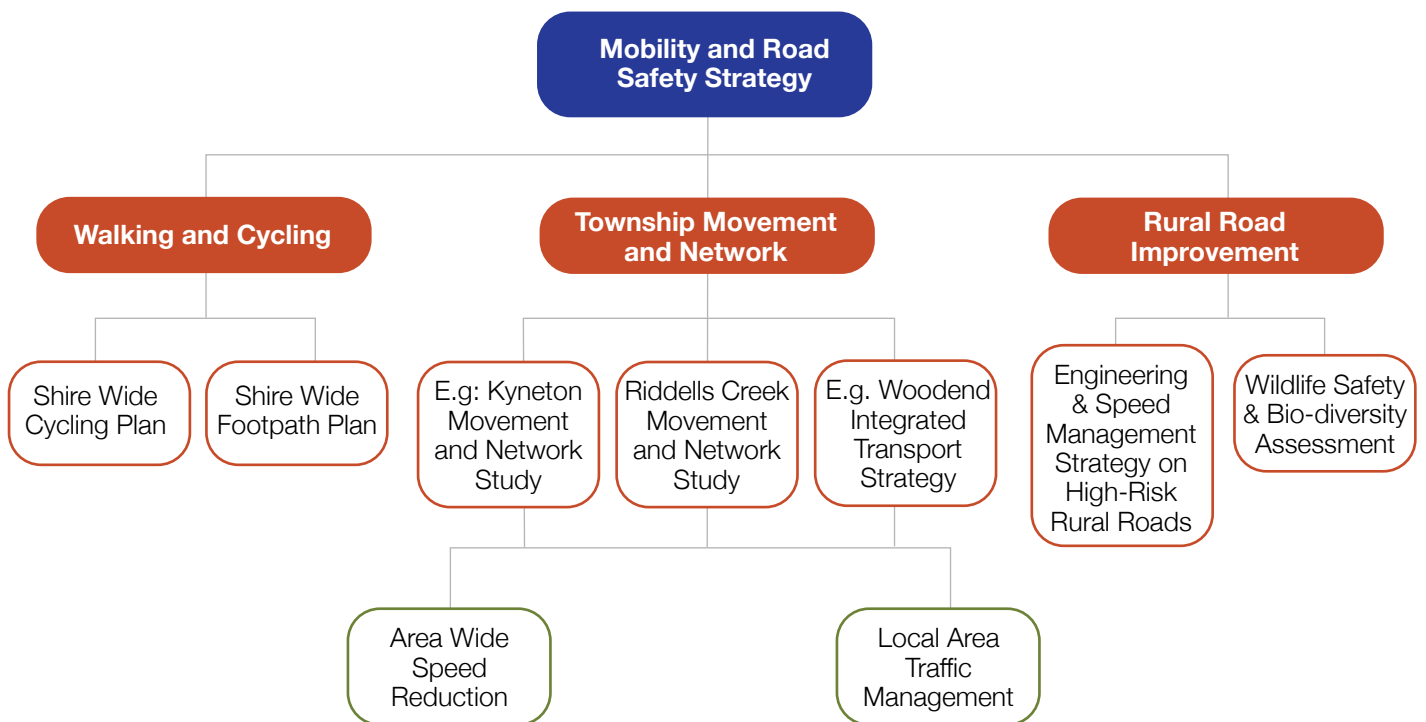


Figure 5: Hierarchy of Transport-related Documents



Council responsibilities

Macedon Ranges Shire Council has several important roles in shaping our community and its environment. Our functions relating to the transport network, service and assets include:

Road Authority – responsible for planning, construction, maintenance and operation of the local municipal roads.

Planning Authority – making decisions about land use and development.

Advocate – advocating to the Victorian and Commonwealth Governments for funding to improve transport infrastructure and provision of services and changes to legislation that provide community benefit.

Community education – informing, engaging and empowering our community to contribute to travel and transport issues.

Place making – planning and building places for people to congregate, visit and enjoy (both within townships and in the natural environment).



About the Macedon Ranges

Macedon Ranges Shire Council is located in central Victoria, about one hour's drive northwest of Melbourne. With an area of about 1,750 square kilometres, we are a semi-rural municipality known for our beautiful natural landscapes.

The shire consists of nine main towns and several smaller settlements. The largest towns are Gisborne, Kyneton, Romsey and Woodend. About 35 per cent of people in Macedon Ranges live outside a town boundary in a rural setting.

The Calder Freeway and northern rail line run the length of the west side of the shire. More than 50 per cent of our working residents travel outside of the shire to work, with most travelling to metropolitan Melbourne.



Figure 6: Map of Macedon Ranges Shire (Source: MRSC Annual Plan 2021-2022)

As of December 2022, the key transport infrastructure managed by Council includes:

867 km
of Sealed Roads

811 km
of Unsealed Roads

209 km
of footpaths/shared paths

149 Bridges
and Culverts

64 Footbridges

Population

In June 2021, our resident population was 51,020 people and is projected to increase to just over 60,000 by 2031. The southern townships of Gisborne and Riddells Creek expect the largest population growth.

In 2021, the largest age group in the Macedon Ranges was 50 to 54-year-olds. The group that changed the most since 2016 was 70 to 74-year-olds, increasing by 795 people. Although this may indicate an aging population, in 2021 the Macedon Ranges also had a higher proportion of children (under 18) and a lower proportion of persons aged 60 or older compared to regional Victoria more broadly.

In 2021, 2,614 people (or 5.1 per cent of the population) in Macedon Ranges Shire reported needing help in their day-to-day lives due to disability. This was a percentage increase from 2016 and compares to 6.9 per cent for Regional Victoria.

In Macedon Ranges Shire in 2021, 5,878 carers were providing unpaid assistance to a person with a disability, long term illness or old age in 2021, an increase of 1.9 per cent since 2016. This represents 14.3 per cent of the population aged 15+ compared to 14.1 per cent for Regional Victoria.¹

Environment

The shire is rich in native flora and wildlife, many of which are threatened or endangered. Native animals move through the landscape for breeding, foraging and migration. Rural roadsides provide food, refuge and protection from predators, and these areas can often present a high risk to our native wildlife. Council supports wildlife safety around our roads through warning signage at 'hot spot' locations and providing contact information in the event of injured or dead wildlife.

Through the declaration of climate emergency, Council also seeks to support our natural environment by de-carbonisation through transport. As part of the Central Victorian Greenhouse Alliance's (CVGA) 'Charging the Regions' Project, as of June 2023 only there were 4 EV charge points publicly and 3 council fleet vehicle EV change points in the shire, located in Kyneton, Gisborne and Woodend.

¹<https://profile.id.com.au/macedon-ranges/five-year-age-groups>

Developing the Mobility and Road Safety Strategy

To gain insight into the mobility and road safety challenges faced by the municipality, we conducted a comprehensive analysis using data on road crashes, feedback from the community, and input from transportation and road safety experts.

These three elements have helped us to create a best practice strategy and an action plan tailored to address our most pressing safety and mobility concerns.

Strategic themes and priority measures

We consulted with various experts and knowledgeable stakeholders, especially those with local knowledge, to identify issues and potential solutions. We also identified the best ways of tackling issues and improving mobility and safety in our transport system.

Community engagement and road user concerns

We conducted an online public survey to get a snapshot of community views. We also collected feedback through our website and other communication channels during our day-to-day operations. This feedback gives us an insight into issues that matter to the community.

For a high-level summary of community feedback, please refer to Appendix A.

Data analysis and evidence base

We conducted an extensive analysis of road safety crash data³ for the past five years in which a complete data set was available (2015-19). This provided insights into crash types, incident time, location and conditions, and the type of road user involved.

For high-level crash data, please refer to Appendix B.



³ <https://www.vicroads.vic.gov.au/safety-and-road-rules/safety-statistics/crash-statistics>

Strategic themes and priority measures

What Macedon Ranges Shire Council will do

Designing and planning initiatives to reduce road deaths now and get to zero road deaths by 2050 requires a good understanding of the road travelling complexity and agility to adapt to current and future trends and changes.

Based on our crash data analysis, community engagement, consultations with experts and application of best practice in road safety practices, we have identified the five strategic themes which will help us in shaping this plan and actions.

Below, we describe the five key strategic themes and the priority issues within those themes.



Strategic theme 1: Improving safety on high risk rural roads

- Speed management
- Motorcycle safety
- Infrastructure improvements



Strategic theme 2: Improving safety and mobility in and around towns

- Speed management
- Cycling and pedestrians
- Intersection safety
- People of all abilities



Strategic theme 3: Implementing movement and place

- Infrastructure planning or strategic planning
- Road space allocation



Strategic theme 4: Improving road user preference

- Safe behaviour
- Advocacy for enforcement; speed
- Sustainability (modal shift)



Strategic theme 5: Improving wildlife safety and outcomes

- Work with stakeholders
- Vegetation management
- Infrastructure improvements
- Adaptation measures



What can Macedon Ranges Shire Council do?

Under this Strategy, Macedon Ranges Shire Council will work with focused road safety authorities to adopt the Safe System and Movement and Place Framework approach. The strategy aims to create a road transport system that makes allowance for errors and minimises the consequences by considering all factors and their combined effects on road safety.

The Safe System

The Safe System approach encourages understanding the interaction between fundamental components of road safety.

Safe roads and paths

Our roads and paths should be designed, built and maintained to minimise the risk and severity of a crash. Crash history helps us to identify high-risk locations so that we can focus our attention on where it is most likely to show benefits. We will also take a more proactive, forward-looking approach and apply the latest techniques to assess risks on different network parts. This will enable us to improve road safety before crashes can happen.

Our commitment

- Better quality connected footpaths and crossing facilities
- Safer cycling facilities (such as separation, or protection, from vehicular traffic)
- Consider reducing speed limit and install advisory signs in areas identified as high risks for any road user (pedestrians, cyclists, motorists, on-road horse riders etc)
- Addressing poor-quality school journeys with difficulties around safety, congestion and parking
- Minimising common crash types, including run-off-road run-off road crashes and animal strikes
- Address motorcycle road safety through education campaigns and road safety audits
- Better and more inclusive town planning and development

Safe people

Road safety is a shared responsibility, and we should all exercise care, attention and awareness of others for our safety. We will work with the community to raise awareness of important road safety issues and encourage safe travel behaviours.

Our commitment

- Encouraging young drivers to access resources that help them to become safe drivers
- Raising awareness of road rules and support measures to reduce distraction
- Encouraging riders to wear full safety gear and be visible

Safe vehicles

Modern vehicles with best-in-class safety features are much safer for drivers, passengers, and others. These safety features can assist in preventing crashes by automatically detecting dangerous situations and reacting appropriately or, when a crash is unavoidable, by reducing the impact forces in the crash. Increasingly safe vehicles are essential in improving personal safety and reducing road trauma.

Our commitment

- Promotion of modern vehicles with five-star safety ratings
- Promoting the use of motorcycles equipped with the latest safety technology
- Encouraging people to use in-car safety features such as intelligent speed assist and lane guidance
- Encourage company policies, including ours, that promote the safest vehicles and safe driving

Safe speed

Travel speed is a critical factor influencing crashes' likelihood and severity. Traffic speeds also play an important role in people's perceptions of the road and its surrounding environment. We will ensure that speed limits reflect the intended operating environment and are consistent across the network. We also recognise that the road environment can affect vehicle speeds by influencing a driver's perception of the speed at which they travel and what they feel is appropriate for the road.

Speed management can be crucial in addressing road safety and mobility concerns. Safe speeds on local streets help to protect vulnerable road users, encourage sustainable transport and make our streets enjoyable places to be in, rather than just thoroughfares for traffic. Safe speeds on arterial roads help to reduce the likelihood and severity of run-off road crashes (the most common crash type).

The Department of Transport and Planning sets speed limits for all roads in Victoria; however, Macedon Ranges Shire Council can undertake speed zone reviews and advocate for speed limit changes.

Our commitment

- Safer speeds around places that are more important for people rather than vehicles, such as schools, local residential streets, activity centres and transport hubs
- Safer speeds where crash risks are high and cannot be addressed through infrastructure changes
- Advocating for any necessary speed limit changes at a Victorian Government level and supporting implementation



Movement and Place Movement

The Movement and Place Framework takes a future-focused, multi-modal approach to network planning (intra-township, inter-township and travel outside the Macedon Ranges).

We will work closely with the Department of Transport and Planning in applying and referencing the Movement and Place Framework to ensure consistency with state-wide objectives as stipulated in our Action Plan.

Our commitment

- Set our aspirations and vision for an integrated and sustainable transport system
- Classify the transport network and assign future vision for roads and streets
- Translate the experience and requirements of different users during their journey within a street
- Provide design guidance for the development of project options and solutions
- Preference / encourage active transport modes where appropriate (to suit surrounding land use)

Walking

As the Macedon Ranges grows, we will have an increased demand to create safe, connected pedestrian journeys. We are committed to progressively improving the provision of pedestrian facilities and constructing new facilities where needed.

About 90 per cent of our community walks daily, with most activity occurring within our towns. We will collaborate with relevant agencies and community groups to prioritise and implement improvement initiatives to reflect community needs.

In addition to new infrastructure, we will investigate missing links in our current pedestrian network and identify sub-standard existing footpaths.

Our commitment

- Identify and address sections of missing or disconnected pedestrian facilities
- Deliver improved crossing facilities in high-priority areas (schools, activity centres, public transport etc.)
- Include pedestrian connectivity and safety planning with all new developments
- Reviewing the benefits of active transport and connectivity against any potential impacts to the natural environment (requires consideration on a case by case)
- Promote Active Paths Program to schools, with a particular focus on primary schools
- Referencing the MRSC Shire Wide Footpath Plan to prioritise investment

Cycling

People cycle within the Macedon Ranges for various reasons, including recreational, social, fitness and transport. The health, economic and environmental benefits of cycling are well documented. We will continue to encourage residents and visitors alike to engage in active transport modes and ensure those safe facilities are in place to serve these road users. We manage long sections of high-speed environments where on-road cycling is generally only viable for very confident cyclists. Providing segregated cycling paths adjacent to these roads would be beyond our financial capacity. Instead, we will focus on routes within towns that pass major attraction points (railway stations, shopping districts, schools, etc.).

Strategic Cycling Corridors (SCCs) and the Principal Bicycle Network (PBN) are bicycle “highways” that generally see the highest cycling volumes compared to other routes (typically a mixture of off-road and separate bike paths). We will prioritise investment for routes that form part of the SCCs and PBNs and investigate implementing treatments that offer cyclists protected spaces such as Copenhagen bicycle lanes, protected bicycle lanes, off-road paths, etc.

Treating these priority routes with best-practice infrastructure will make cycling more attractive and safer and cater to a greater variety of cyclists – skill levels, experience and confidence. Treatment option analysis needs to be undertaken on a case-by-case basis.

Our commitment

- Explore and implement cycling facilities protected from motor vehicles, where feasible
- Reference and update our cycling network maps within townships
- Identify locations for bicycle repair stations to encourage active transport further
- Support the development of tracks and trails throughout the Macedon Ranges and connections to regional networks
- Explore opportunities to integrate cycling corridors into any future road reconstruction projects, contributing to an enhanced overall connectivity
- Engage with our community to discuss treatment options

Micro-mobility

Micro-mobility devices such as e-scooters and e-bikes are becoming a more prevalent choice. Yarra City Council, City of Melbourne, Frankston City Council, and others are trialling the hiring of micro-mobility modes within their jurisdictions. Once these trial periods are complete, evaluation reports will examine the success/ community response towards these trials. We will review these evaluation reports to learn from other jurisdictions' experiences.

The uptake in these devices needs to be considered, and any transport network challenges evaluated.

Our commitment

- Conducting community survey(s) to gauge the perception of micro-mobility modes
- Updating strategic transport plans to incorporate this novel mode
- Preparing and/or updating design guidance
- Monitor the uptake in micro-mobility modes and their effects

Public transport

Access to reliable, convenient and accessible public transport options dramatically improves the users' likelihood of opting for this mode. We want our community to view public transport as a viable and safe means to get from 'A' to 'B'. Providing better connections inter-town, intra-town, and beyond the Council boundaries will encourage more users to consider this more sustainable mode of transport (compared to travel via passenger vehicles). We plan to implement local transport options for towns not currently serviced, similar to Gisbus and Woodend Flexi ride services. Improving our public transport network starts with listening to our community and identifying gaps in the network. Council will advocate to the Victorian Government for bus and rail public transport services improvements.

Our commitment

- Listening to our community and recording their experiences with public transport
- Advocating for improved public transport travel options for people to access work and study
- Reviewing the capacity of public transport services
- Identifying gaps in public transport needs including working with other stakeholders on prioritising feasible locations for bus shelters

Connectivity

We aim to balance the mobility, safety, efficiency and convenience of mechanised and non-mechanised transport options tailored to the non-mechanised. As a part of this strategy, we will look at the connectivity of the following:

- Intra-Township
- Inter-Township
- Regional

Our commitment

- Advocating for more public transport such as Demand Responsive Transits (DRT) Example: GisBus in Gisborne and Flexi Ride in Woodend
- Improved rail service and quality of train connections.
- Connecting the missing footpaths links with townships
- Improved bicycle links
- Safe routes to school for primary and secondary students
- A shared trail connecting Inter-Township or Regional Township
- Commitment to a sustainable Shire-wide Footpath Plan



Accessibility / Disability

We aim to provide access for people of all abilities and safely enable individual mobility in our public areas. We will address issues, including footpath width, quality and gradients, and lack of connectivity. We will continue to work with the community to identify these barriers to accessibility and rectify them. In addition, we plan to review and improve our adherence to Disability Discrimination Act (DDA) requirements and implement an action plan to address issues where need is assessed.

We want everyone with a disability to feel like they can travel and feel safe in the same way as everyone else. Under this strategy, we aim to work and develop an action plan focusing on Council's adopted Disability Action Plan 2021-2025, such as joining and safe access to the buildings and key places.

We want to create equitable areas for all community members to interact with each other.

Our commitment

- Actively support a clear capital works program for all township's public infrastructure (ensuring our townships, major activity centres, and attractions are accessible by all community members)
- Support the implementation of township structure plan recommendations
- Upgrade current infrastructure to meet current accessibility/disability requirements, including improving pram crossing, which can be accessible by all road users
- Increase the number of accessible parking spaces in townships and key locations
- Work closely with disability groups in the shire.

Sustainability

We want to cultivate and promote healthier and more sustainable communities. We aspire to provide the opportunity for all to live a fulfilling life while continuing to protect our heritage, environment and sense of community through our shared commitment to a sustainable Macedon Ranges for the current generation and generations to come. Fundamental to achieving this goal is reliable and convenient access to sustainable transport modes, specifically active transport and public transport. Attractive alternatives to personal car travel will improve our communities in a myriad of ways:

- Improved environmental outcomes through less congestion and reduced air pollution)
- Improved physical and mental health outcomes through active road users
- Maintaining and supporting our flora and fauna
- Managing our impact on climate change
- Strengthening the intrinsic value of our towns and natural reserves; and creating areas where people want to congregate, visit and enjoy.

Our commitment

- Promoting ride-share possibilities (such as carpooling to schools or communal car rental programs)
- Developing networks that cater for and encourage active transport modes
- Investigate infrastructure support for electric vehicles within our townships
- Improving pram crossings, which can be accessible by all road users
- Increasing the number of accessible parking spaces in townships and key locations
- Working along with disability groups in the shire.
- Ensure that we protect and conserve our flora and fauna, especially along the roadside.



Wildlife safety

Roads attract wildlife because they traverse their natural habitats and give animals a clear travel corridor, easy access to food, and a source of salt in the winter. Many species are active at dawn and dusk when visibility is poor and traffic volume is high. To mitigate the loss of iconic native Australian marsupials, we commit to undertake the following actions:

- Maintaining vegetation control along busy Council roads
- Cutting back bushes and trees to ensure you see animals on either side of the road
- Reducing speed on Council roads where a heavy presence of wildlife is present
- Working closely with the environment and wildlife working groups such as Wildlife Victoria and Koala Rescue
- **Trialing wildlife innovative technologies**
- Working with motor insurance companies to obtain key hotspot locations of wildlife tolls
- Educating the community about wildlife safety by installing variable message board and other warning signs.

Working together

Mobility and road safety is a shared responsibility. Therefore it has to be based on cooperation and coordination by all the agencies, the general public and the private/business sector, working together at every level — national, regional, local and community — to develop effective and innovative road safety initiatives and interventions. It is also the responsibility of every road user to ensure their safety on the roads and contribute to the safety of others through responsible road use.

We cannot work in isolation to deliver our roads' best possible safety outcomes. We will work with various groups and individuals to ensure that we understand the diversity of our road users' needs and deliver the most effective and inclusive road safety and mobility improvements.

We will be proactive, responsive and supportive as we engage with groups, organisations, and individuals, including:

Department of Transport and Planning

Managing the arterial road network. Working collaboratively to ensure seamless interaction between the Council road network and the arterial road network.

Victoria Police

Enforcing high-risk driving behaviour that compromises road safety and adversely affects the safety of the general community.

Transport Accident Commission

Promoting road safety, improving the state's trauma system and supporting those who have been injured on our roads.

Wildlife Victoria

Promoting community knowledge and care of wildlife and advocating for the protection and welfare of wildlife.

Community groups & residents

Meet community expectations, engage and encourage alternative modes of transport to vehicles and help us understand perceptions, priorities and desired outcomes.

We will implement road safety and mobility improvements on the local road network. We will also proactively advocate and support improvements that are the responsibility of other levels of government.

Local business

Contributing to our local economies and boosting place values.

Schools

Ensuring our kids can have safe, efficient, and sustainable access to their places of education.

Neighbouring municipalities

Work with neighboring municipalities to ensure an integrated transport response to regional needs.

10 Year Action Plan

What will we do?



Strategic Theme 1: Improving safety on high risk rural roads

Action	Objective	Performance measure	Lead	Partners	Time Frame	Indicative Cost/ Resource
1. Undertake Safe System Assessment for road infrastructure upgrades as part of Capital Works Program	Ensure the option that best align with the Safe System Principles is implemented	Undertake 3 SSA for each project that has at least two options	Engineering	DTP	Ongoing	Low-Medium
2. Conduct Road Safety Audits (RSA) on local roads, where any high safety risks have been identified and/ or where there are any changes made to the road environment	Making the local roads safer, where speeding issues or other high safety risks have been identified that need to be addressed	Undertake at least 2 RSA per year where high safety risks are identified or when a new speed zone is implemented - resulting in risk reduction	Engineering	DTP Victoria Police TAC	Ongoing	Low External Funding
3. Develop a multi-year program for area-wide speed zoning. To be consistent with the Victorian Speed Zoning Guideline and implement them with Local Area Traffic Management plans to achieve safer and more consistent speed limits across all roads	Consistent with the Victorian Speed Zoning Guidelines apply the Movement and Place Framework and Safe System Principles deliver speed zoning areas	Develop an area-wide speed-zoning program	Engineering	DTP Victoria Police	Year 2	External Funding Internal Staff
		Deliver a minimum of 1 area-wide speed zoning per year as funded following the multi-year program	Engineering	DTP Victoria Police Social Media	Beginning Year 3	High
4. Undertake motorcycle audits on select local roads	Undertake road safety audits targeting areas with high motorcycling crash statistics	1 Audit per year completed in accordance with a program and associated budget	Engineering	Motorcycle Groups	Ongoing	Low



Strategic Theme 2: Improving Safety and Mobility in and around towns

Action	Objective	Performance measure	Lead	Partners	Time Frame	Indicative Cost/ Resource
5. Develop a list of funding sources and register to online mailing lists for the TAC Grants Program and Community Road Safety Grants, as well as State e.g Department of Transport and Planning (DTP) and Federal Government Grants	Establish a funding applications program and supporting procedures	Develop and submit 2 applications to TAC grants per year	Engineering	TAC DTP	Ongoing	External Funding Internal Staff
6. Deliver pedestrian crossing facilities and improve cycling accessibility in high-priority areas, including areas of high active transport usage, schools, key activity and commercial centres and public transport locations	Increased pedestrian and cyclist safety and mobility	The number of kilometres and/ or locations of pedestrian and cycle path projects delivered each financial year	Engineering	Community Wellbeing PTV DTP	Ongoing	Internal Staff
7. Develop (or update) a Walking and Cycling Strategy 2030	The Walking and Cycling Strategy is intended to complement the overarching Mobility and Road Safety Strategy by focusing specifically on walking and cycling	Develop the Strategy by 2025 and successful full implementation of the strategy by 2035	Open Space and Recreation	Strategic Planning Department Community Wellbeing Engineering DTP	Year 2	Medium External Funding Internal Staff
8. Conduct Road Safety Audits for schools precincts noting conditions during drop off and pick up times	Work with schools to understand their perceptions of risk and assess school precincts on a prioritised program	As funded, undertake safety audits of 3 school precincts per year	Engineering	TAC Schools	Ongoing	Medium External Funding Internal Staff

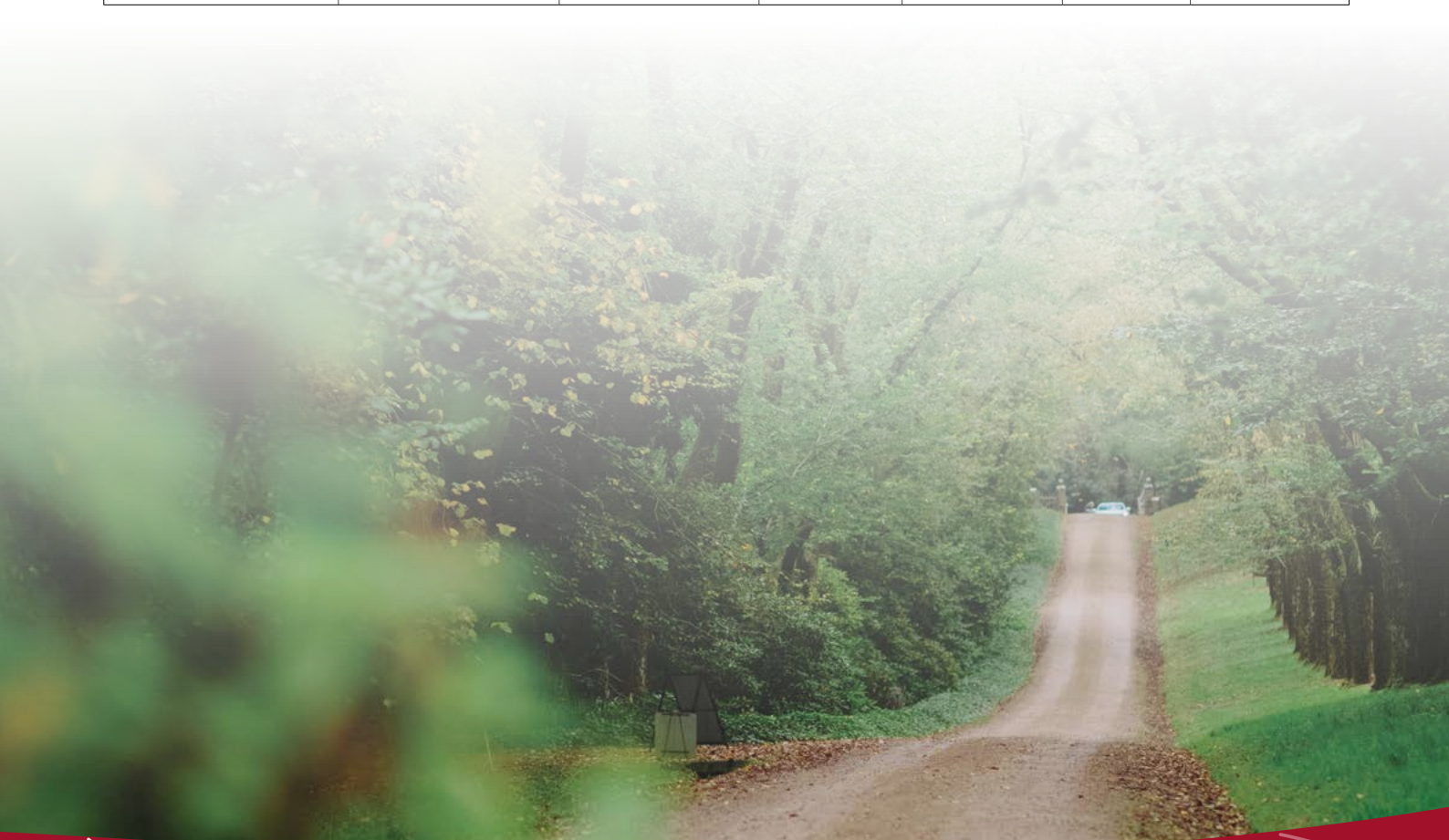


Strategic Theme 3: Implementing movement and place

Action	Objective	Performance measure	Lead	Partners	Time Frame	Indicative Cost/ Resource
9. Support delivery of Council's Disability Action Plan 2021-2025	Develop a program to deliver 10 footpath and parking improvements to existing elements to improve mobility experiences for people with disabilities	Undertake audit of parking bays within one township per year for accessibility compliance	Engineering	Disability Community Wellbeing	Year 3 to Year 10	Low Internal Staff
		Present a Business Case each year for implementing required upgrades	Engineering	Community Wellbeing	Year 3	Low Internal Staff
10. Assess opportunities to improve safety and amenity of walking environments in conjunction with other planned works, particularly within activity centres	Integrate the Safe System principles to improve amenity, pedestrian and cyclist safety	Engineering Design and Development Referral Process	Engineering	Statuary Planning Department Open Space and Recreation DTP	Ongoing	Internal Staff
11. Continue to participate in the Safe Routes to School (SRTS) Program: - identify schools suitable for SRTS support - apply for grants - implement actions/ improvements	Attract funding for improved SRTS	Complete 1 grant application per year and act on the improvement recommendations	Community Wellbeing	Engineering Children, Youth and Family Services TAC DTP	Ongoing	External Funding Internal Staff

40 Strategic Theme 4: Improving road user preference

Action	Objective	Performance measure	Lead	Partners	Time Frame	Indicative Cost/ Resource
12. Provide information to the community on the relationship between speed, safety and liveability	Community education in relation to speed and liveability	2 promotional campaigns per year and change in community perception about the speed	Engineering	Community Engagement TAC	Ongoing	Internal Staff
13. Continue working with Police for enforcement for confirmed high speed locations/ areas	Meet with police to identify locations for enforcement (speed, distraction etc.) together with any potential improvements at key crash locations	Meeting 2 per year	Engineering	DTP Victoria Police	Ongoing	External Staff Internal Staff



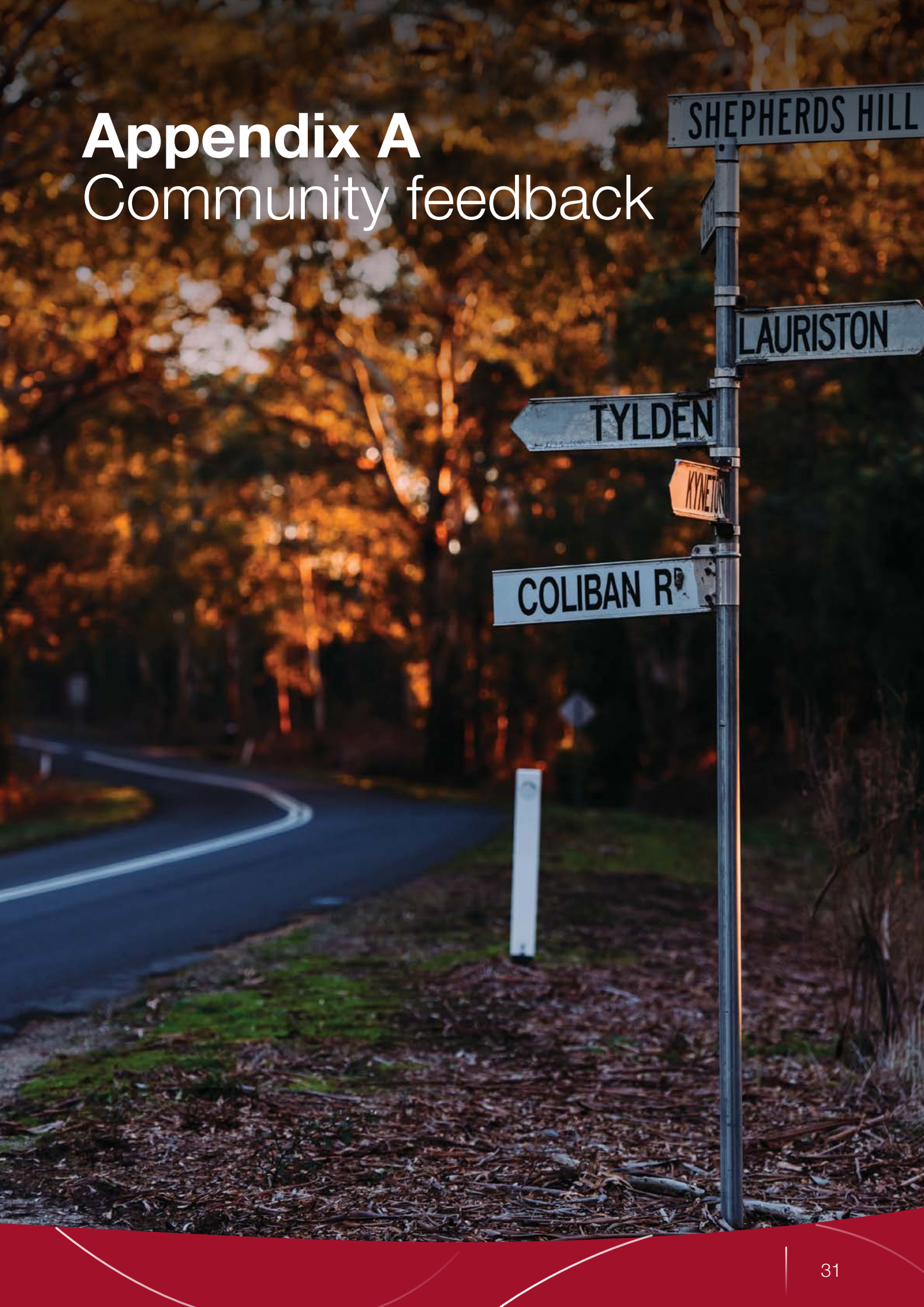


Strategic Theme 5: Improving wildlife safety and outcomes

Action	Objective	Performance measure	Lead	Partners	Time Frame	Indicative Cost/Resource
14. Link the implementation of the Roadside Conservation Management Plan to reduce the risk of animal strike incidents.	Include clauses in road project specifications requiring assessment of wildlife trauma risk and mitigations.	Install roadside signage and communication campaigns, advocating for lower speed limits in high-risk locations and exploring new technologies.	Engineering	Environment Community DTP	Ongoing	Internal Staff
15. Advocate for reducing default 100 km/h speed limit to 80 km/h on unsealed roads with the intention to reduce wildlife trauma, vehicle damage and personal injury	Advocate in multiple forums for undeclared speed reduction for unsealed roads	Advocacy to three entities per year with the ability to influence the required changes.	Engineering	DTP Victoria Police	Year 1	Low Internal Funding
	Identify opportunity for reducing wildlife trauma, vehicle damage and personal injury on all roads. This will include using Customer Service data on wildlife incidents.	Implement 2 projects per year including options such as narrowing the road, lowering speed limits (on sealed road), and adding wildlife warning signs. Noting a Business Case is required and will require adoption in Council's budget	Engineering	DTP Victoria Police	Year 2	Low Internal Funding

Appendix A

Community feedback



Community feedback and road user concerns—what you told us

We invited our community to complete an online survey to express their views on road safety and mobility in Macedon Ranges Shire. We received excellent responses from more than 500 people, most of whom are Macedon Ranges residents.

We received lots of valuable information, which gives us a good idea of the issues that matter to you. Here is a summary of some of the things you told us.

Travelling in the municipality

Macedon Ranges has a very diverse range of road users. Whilst car use is very high, many people walk, cycle and use non-motorised vehicles (such as skateboards and scooters). Horse riding is also a significant activity, with 8 per cent of survey respondents identifying as equestrians and 10 per cent as horse floats drivers. We also received responses from wheelchair and mobility scooter users and truck drivers. The community tend to use public transport infrequently. Figure 7 provides a high-level summary of the most prominent transport modes.

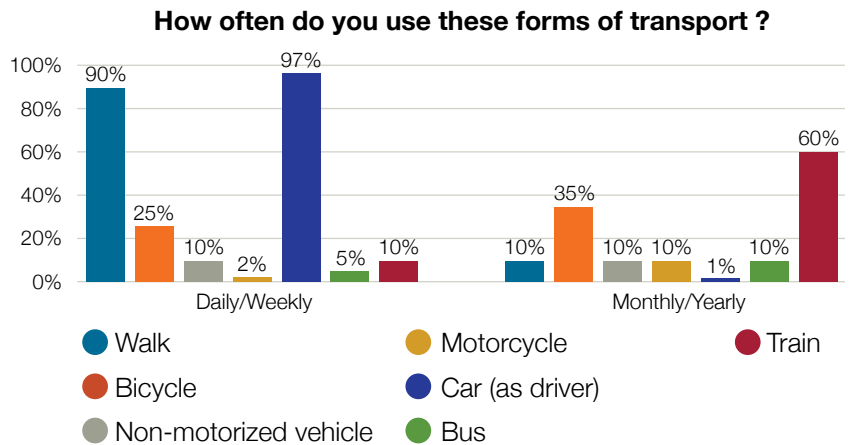


Figure 7: Prominent transport modes

Perceptions of safety

Many people are unsatisfied with the safety of roads, footpaths and cycling facilities. Cyclists and motorcyclists are the least satisfied with the road network, with the majority feeling unsafe. The outlook from pedestrians and drivers was better, however, still identified concerns.

Figure 8: provides a high-level summary of perceptions of safety by road users.

Why the community feels unsafe based on the quality of infrastructure?

- Lack of footpaths and pedestrian crossings and poor footpath surface conditions
- Drivers and cyclists identified poor-quality roads and a lack of cycling facilities as key issues
- School journeys Issues related to safety, congestion and parking

Figure 9 provides a high-level summary of the cause of concern for the community feeling unsafe related to the quality of infrastructure.

How safe do you feel when you use these forms of transport?

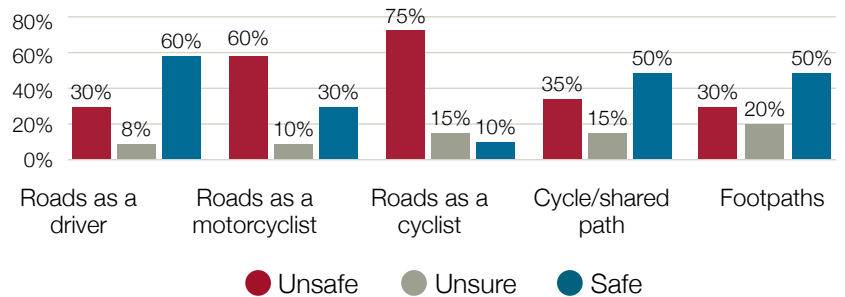


Figure 8: Perceptions of road safety by road users

Reason for feeling unsafe

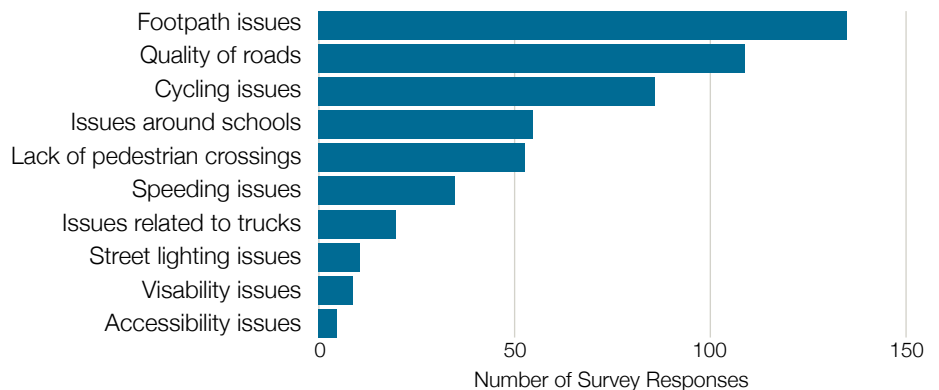


Figure 9: Causes of concern

Perceptions of journeys

Feedback indicated that many people are not satisfied when considering the quality of journeys. Safety is a cause of concern for 45 per cent of survey respondents, and 35 per cent felt that it was not easy to access important locations.

Figure 10 provides a high-level summary of perceptions of satisfaction by road users.

What are the gaps and issues in the related infrastructure quality?

- Poor roads and paths
- Lack of cycling facilities
- Poor connectivity for walking and cycling
- The safety of the school journey and safe movement around schools.

**How safe do you feel when you use these forms of transport?
How satisfied are you with your journey to services/locations in terms of safety and ease of access?**

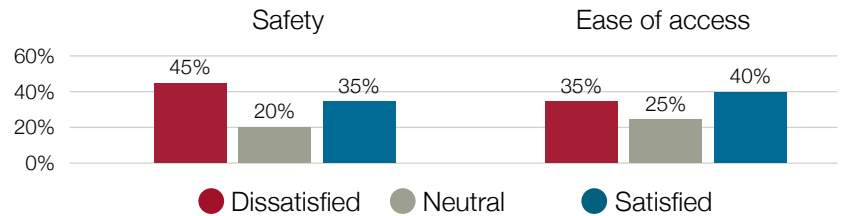


Figure 10: Perceptions of satisfaction by road users

Reason for feeling unsatisfied

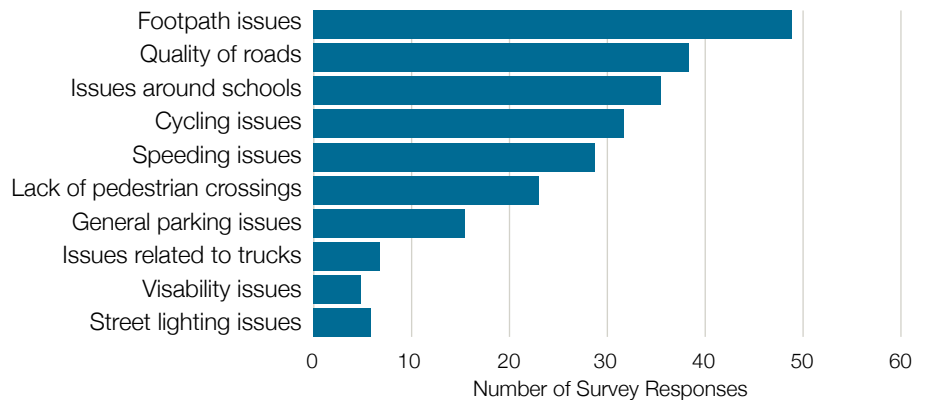


Figure 11: Causes of concern





Appendix B

Data analysis and evidence

Data analysis and evidence base

What's happening on our roads?

To understand the risks on our roads and paths, we look at the crash history and the parts of the road network where there is an elevated crash risk. This is a proactive approach – we don't need to wait for crashes before we act.

We are in the early stages of developing a risk-based approach to managing our network. We have conducted an extensive analysis of road safety data for the most recent five years in which a complete data set is available (July 2014 to June 2019).

What happened in past 5 years?

Over the five years, there were 312 serious injury crashes and 22 fatal crashes, resulting in 388 serious injuries and 25 lives lost.

What does the crash data show?

Crash history

Fatal and serious injuries are on a slight downward trend, but figures for lives lost have plateaued.

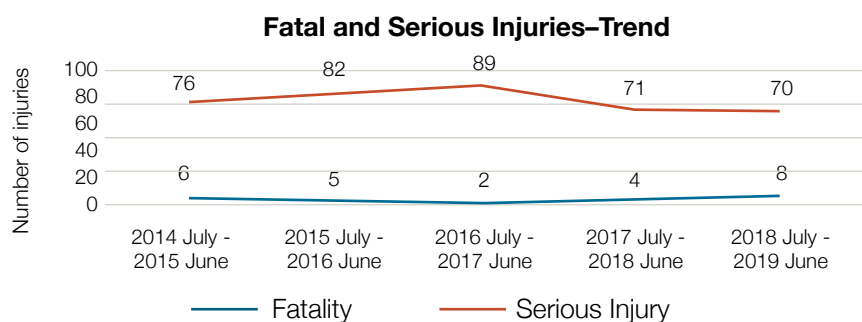


Figure 12: Fatal and serious injuries trend (July 2014 to June 2019)

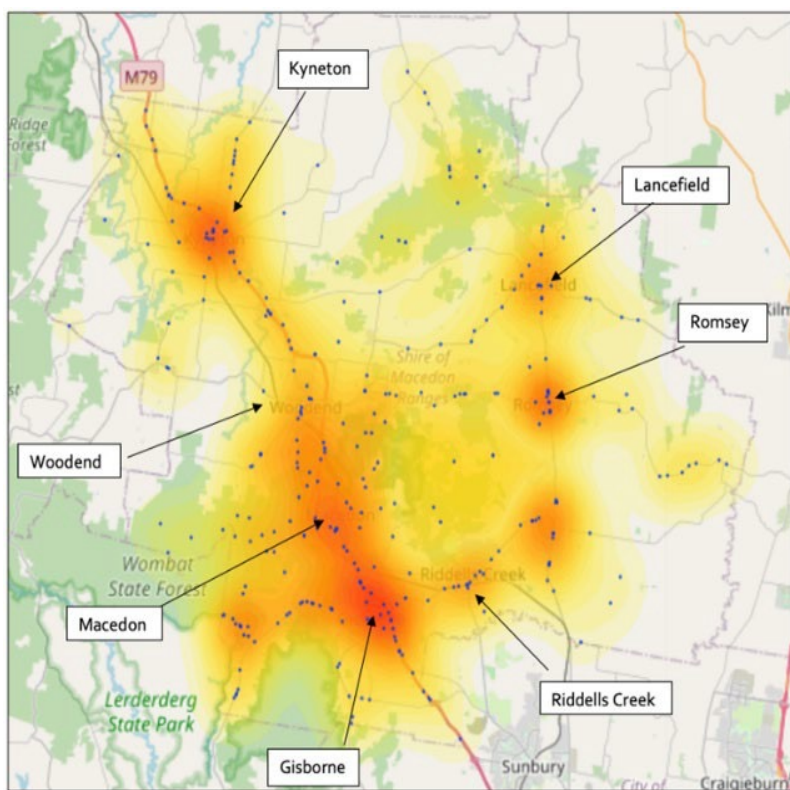


Crash locations—where are the crashes happening?

Figure 13 shows crash hotspots in Macedon Ranges Shire and prominent roads. It shows that fatal and serious injury crashes cluster around the main centres of population, along the Calder Freeway (M79) and roads linking population centres. There is also a relatively high concentration of crashes running east-west from Bolinda to Lerderberg State Park.

Other high-level fatal and serious crash data (between July 2014 and June 2019) shows:

- 56 per cent of crashes are on 100+ km/h roads
- 54 per cent of crashes are on freeways/arterial roads (Regional Roads Victoria)
- 8 per cent of crashes are in parks
- 35 per cent of crashes occur over the weekend
- Over 50 per cent of people involved in crashes are from outside the municipality
- Motorcycle crashes tend to concentrate in the south-west between Macedon and Wombat State Forest
- Road and weather conditions are generally unexceptional



Road Name	No. of crashes
Calder Freeway	39
Romsey Road	19
Bacchus Marsh Road	15
Melbourne-Lancefield Road	13
Kilmore Road	12
Main Street	9
Black Forest Drive	8
Mount Macedon Road	7
Ashbourne Road	6
Edgecombe Road	6

Figure 13 : Crash hotspots in the Macedon Ranges

Road users—who is involved in crashes?

Figure 13 shows crash hotspots in Macedon Ranges
Figure 14 shows how the total number of fatal and serious injuries (between July 2014 and June 2019) are distributed. Proportions are broadly similar to state averages, however, there are a few points worth highlighting:

- Motorcycle crashes at 22 per cent is higher than the 16 per cent state average (refer to motorcycle crashes heatmap)
- Pedestrian and cyclist crash numbers are relatively low (refer to Pedestrian and Cycling crashes heatmap)
- Heavy vehicle crash numbers are relatively low and trending down, but a crash is more likely to have serious consequences.

Road users involved in fatal and serious injury crashes

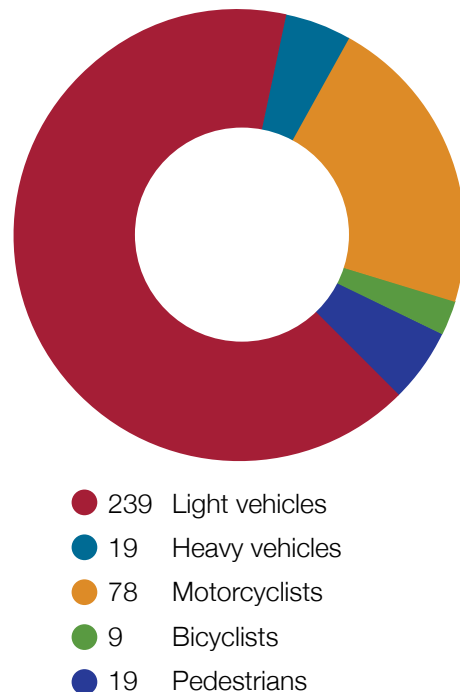


Figure 14: Road users involved in fatal and serious injury crashes (between July 2014 and June 2019)

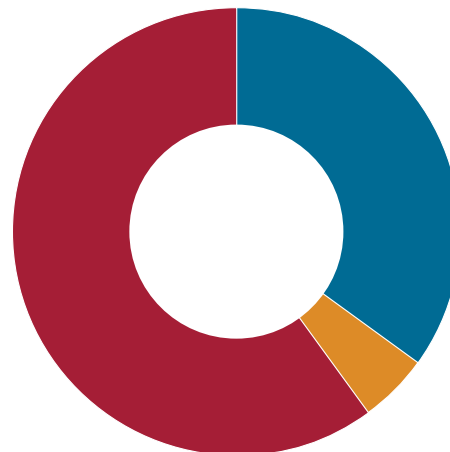


Crash types—what are the most common types of crashes?

Figure 13 shows crash hotspots in Macedon Ranges Shire and prominent roads. It shows that fatal and serious injury crashes cluster around the main centres of population, along the Calder Freeway (M79) and roads linking population centres. There is also a relatively high concentration of crashes running east-west from Bolinda to Lerderberg State Park.

More than 80 per cent of these animal strikes occur on with arterial roads with a speed limit of 100 km/h (refer to Wildlife crashes heatmap).

The Most Common Types of Crashes



- 60% Run off road crash
- 35% Others
- 5% Animal strike

Fatal and Serious Injury Crashes—Prominent Crash Types

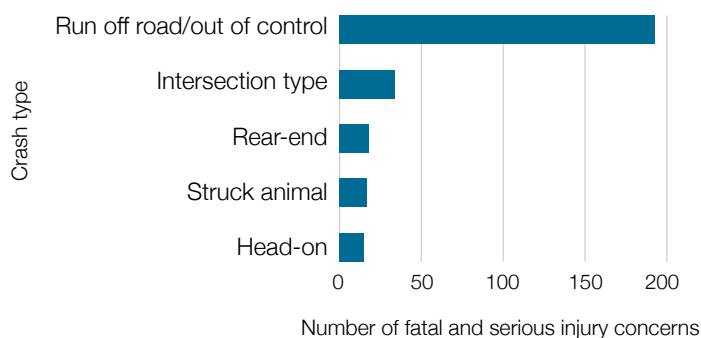


Figure 15 : Prominent crash types (between July 2014 and June 2019)

Heatmap of crashes

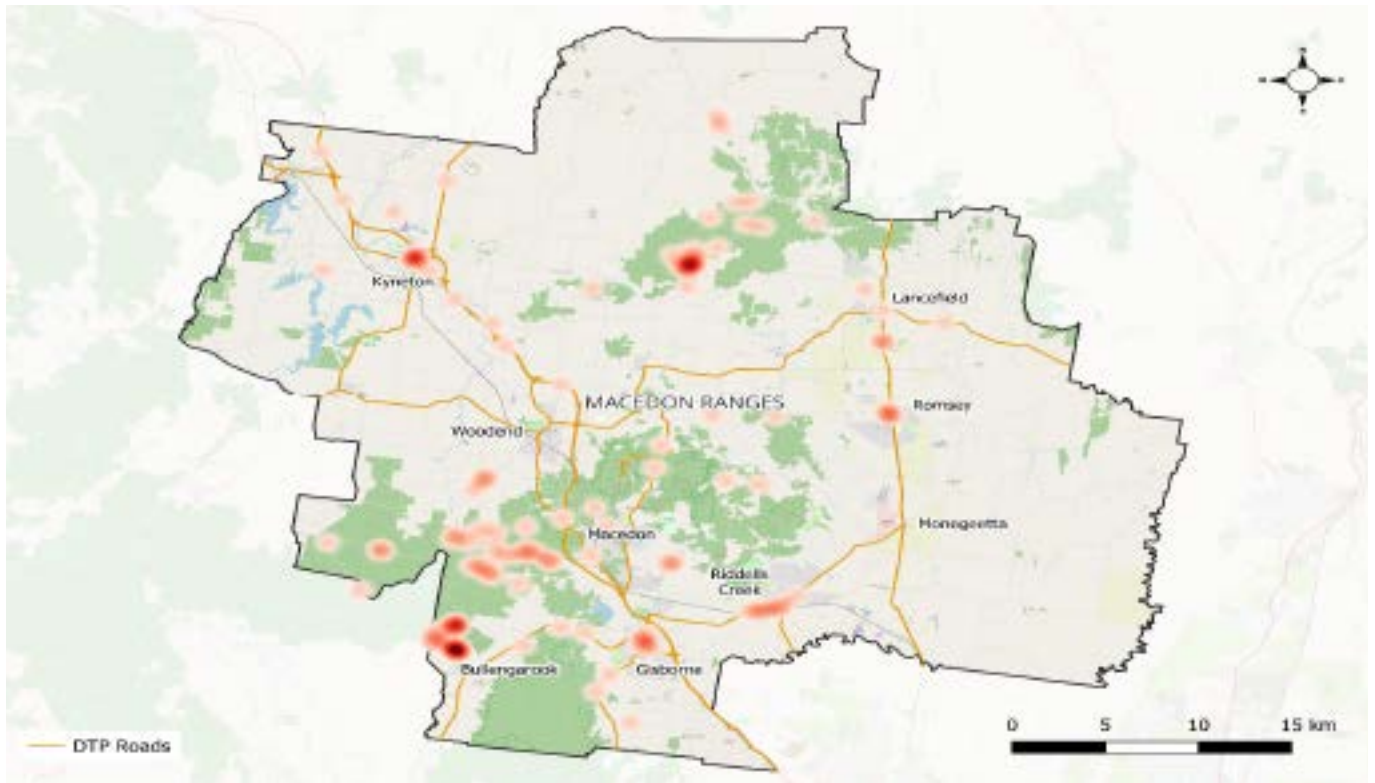


Figure16: Heatmap of motorcycle crashes

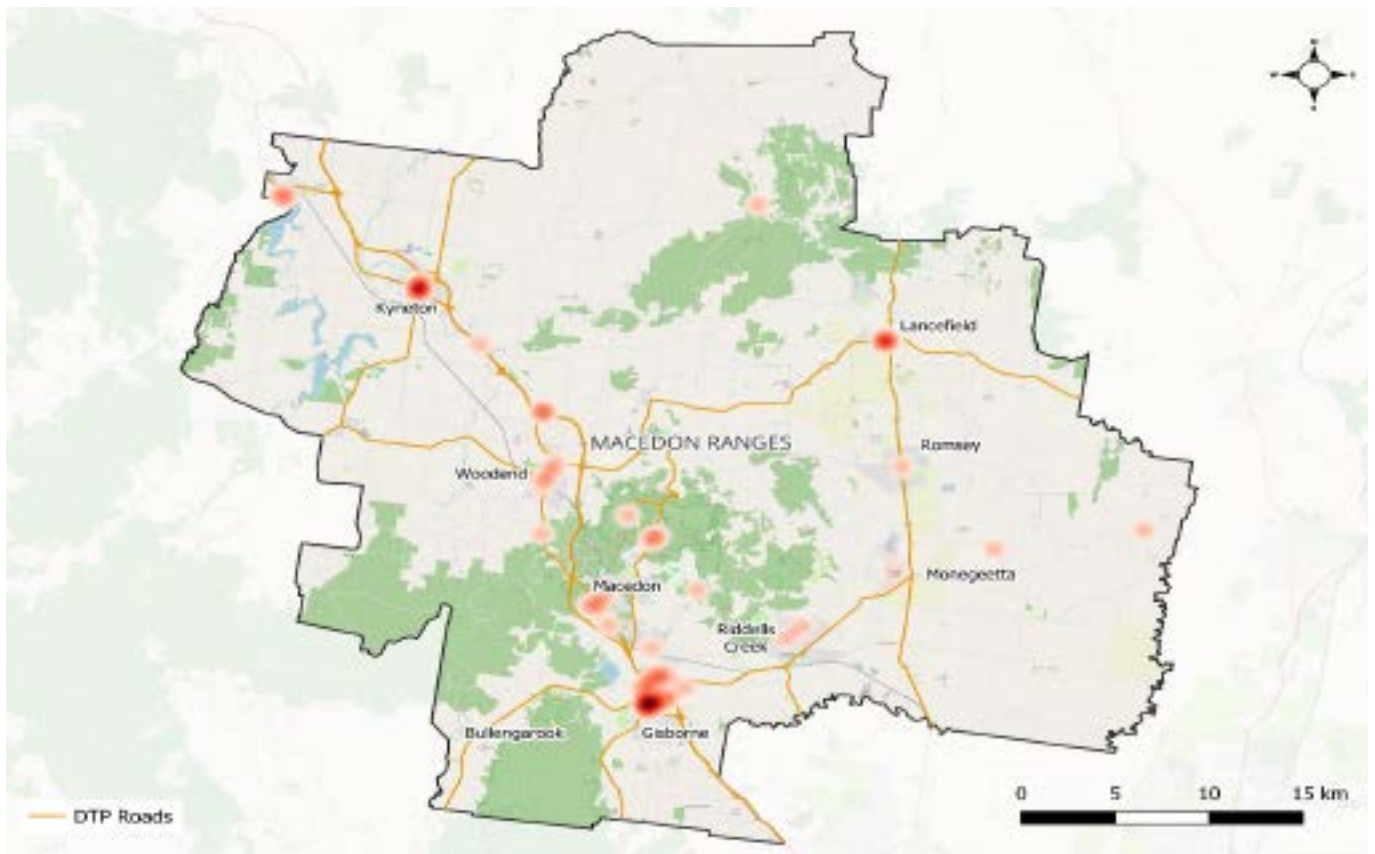


Figure 17: Heatmap of pedestrian and cycling crashes

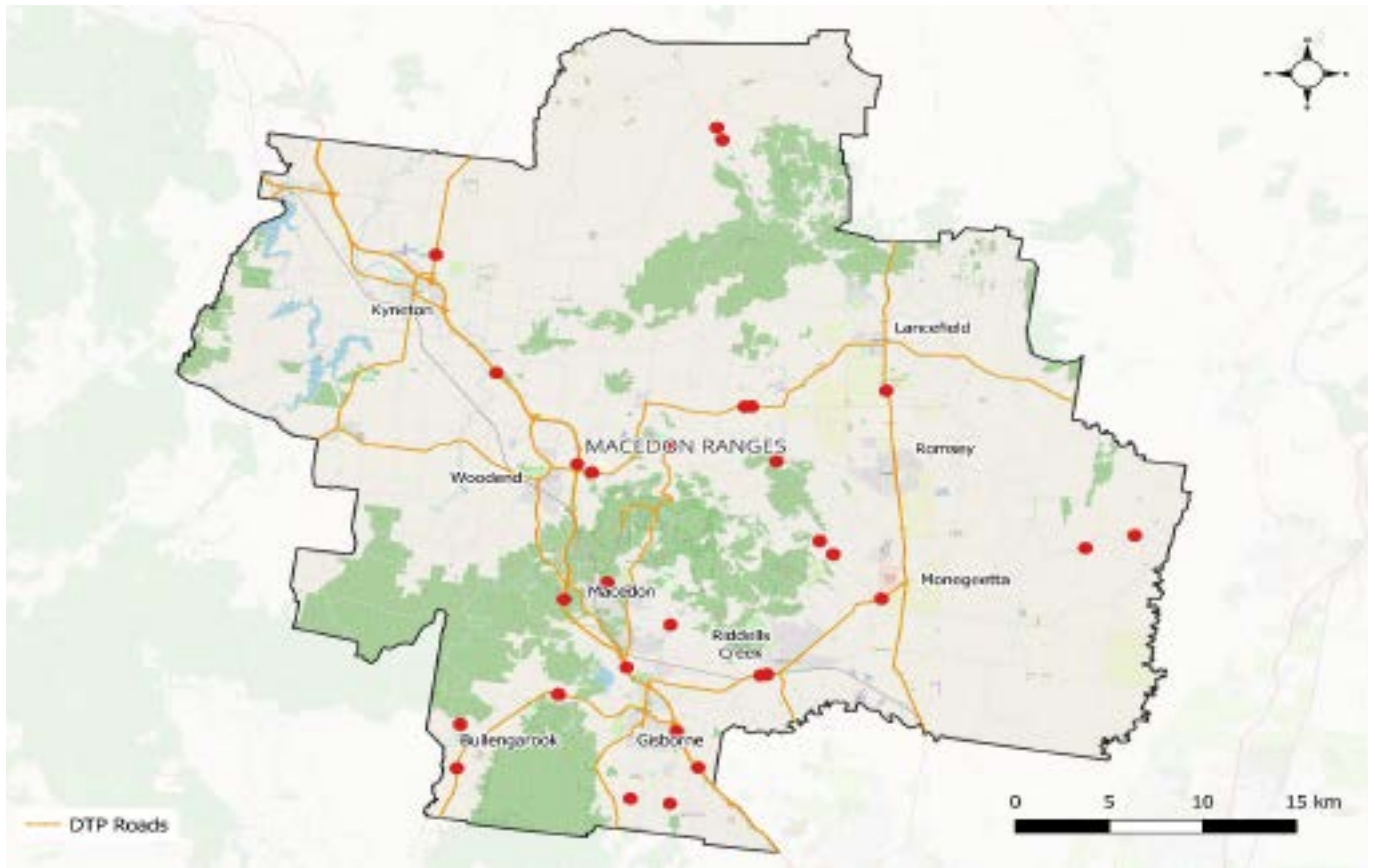


Figure 18: Heatmap of Wildlife crashes



