

# Baw Baw Shire Council

Road Safety Strategy 2023-2027



## CEO Statement

Baw Baw Shire is the largest peri-urban municipality in Victoria covering approximately 4,000 square kilometres. Over the past five years, Baw Baw Shire has transformed into a vibrant place to live, work, and invest. Our population is growing by 3% per year, and by 2041, it is estimated that there will be more than 84,000 people in Baw Baw, making us one of Victoria's fastest growing municipalities.

Our growing population and the influx of visitors and businesses in the area will increase traffic on our roads. While we are thrilled to welcome new members to our community, we must tailor our road safety efforts to address the ongoing and the new conditions and challenges we face. Bearing that in mind, Baw Baw Shire's 2050 community vision is for a *'sustainable, healthy and thriving region'* where people feel safe, connected, included, and are able to access opportunities and live life to the full. In order to achieve this vision, a safe and efficient transport system is required.

In the 5-years from 2015 to 2019, 357 people were seriously injured and 19 people lost their lives on roads in Baw Baw. Even though there has been a recent downward trend in the number of crashes, we averaged around 64 serious injury crashes and 4 fatal crashes every year, which is unacceptable.

Baw Baw Shire is committed to the Victorian Road Safety Strategy (2021-2030) that sets a target of halving road deaths and reducing serious injuries by 2030. We aim to play our part in reaching these targets and making our roads and streets safer.

This strategy has been developed to help us achieve the ultimate target of zero deaths and serious injuries on our roads by 2050. To understand the road safety issues we face, we looked at the engineering data collected for local crashes, we looked at road safety best practice around the world and worked with road safety experts. Using this information, we identified four strategic themes that will drive our road safety program over the next five years:

1. **Leadership and Best Practice** - We will apply road safety best practice and make decisions based on sound evidence. We will continuously build our road safety capability and we will act as an exemplar for road safety.
2. **Safe System Approach** - We will apply the Safe System approach which encompass four main factors that contribute to reducing crashes: Safe Roads, Safe Speeds, Safe People/Safer Road Users, and Safe Vehicles. As a result of adopting Safe System, Baw Baw aligns itself with the federal and state government approach to road safety.
3. **Healthy, Sustainable Transport** – Having a sustainable transportation system and a healthy community requires provisions for walking, cycling, and public transportation systems. Our goal is to ensure all road users are supported by the system.
4. **Working Together** – To shape the future of road safety we will work with our road safety partners and the local community, as safety is everyone's responsibility.

Based on these themes, Baw Baw Road Safety Strategy 2023-2027 sets an ambitious Action Plan, which we will deliver with your support and the support of our road safety partners.

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## Our approach to Road Safety

### OUR VISION

Our aim is to create a community that is ‘*sustainable, healthy and thriving*’, where people feel safe, connected, and included. To achieve this vision, we have the following objectives:

- Sustainable - Encouraging active and sustainable transport which is healthier for people and better for the environment.
- Healthy – Reducing road trauma and keeping the community safe which will positively contribute to the health and wellbeing of our community.
- Thriving – Connected community where people can access and enjoy the many places within our Shire.

Baw Baw Shire Council is fully committed to eliminate death from our roads by 2050 with the first step of halving road deaths and reducing serious injuries by 2030. These objectives are in line with the Victorian Road Safety Strategy 2021-2030 and that of the federal government. Road safety is a shared responsibility, and we are committed to playing our *part*.

### STRATEGIC THEMES

Baw Baw Shire’s Road Safety Strategy 2023-2027 provides a framework for how we will improve safety and mobility for the municipality through four different strategic themes:

#### 1. Leadership and Best Practice

We are committed to reducing road trauma through application of best practice guidelines and frameworks such as Safe System<sup>1</sup> and Movement and Place<sup>2</sup>. Using this rationale to guide our work will allow us to lead by example and encourage others to do the same. We will continuously build our capability and deliver improvements based on sound evidence, and carefully considered prioritisation to get the best value from our investments.

#### 2. Safe System Approach

The Safe System is an internationally recognised framework to reduce road trauma. The system, based on a Swedish framework that reduced their fatal and serious injuries by 40 per cent over 10 years, is recognised in many countries as best practice.

The principle of the Safe System is as follows:

- The only acceptable fatality and serious injury toll on our roads is zero.
- People are vulnerable. When vehicles crash at high speeds, our bodies are subject to forces they cannot withstand.
- People make mistakes. Human error is inevitable, but this should never result in a fatal or serious injury occurring.
- Road safety is a shared responsibility. Businesses, organisations, governments, communities, and individuals all have a role to play in achieving zero fatalities and serious injuries.

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

<sup>2</sup> Movement and Place in Victoria (<https://transport.vic.gov.au/about/planning/transport-strategies-and-plans/movement-and-place-in-victoria>)

We will apply the four interacting elements of the Safe System approach which addresses the main factors that contribute to crashes. This means:

- Safe Roads – our roads and streets should be designed, built, and maintained so that the risk of a crash is minimised and the severity of crashes, when a crash does occur, are reduced.
- Safe Speeds – our roads should have appropriate speed limits and road users should travel at speeds that are safe for the road conditions so that the chances and consequences of a crash, when a crash does occur, are reduced.
- Safe People/Safer Road Users – we should all exercise care, attention, and awareness of others for our safety and the safety of others.
- Safe Vehicles – modern vehicles include features which improve the safety of drivers, passengers, and other road users.

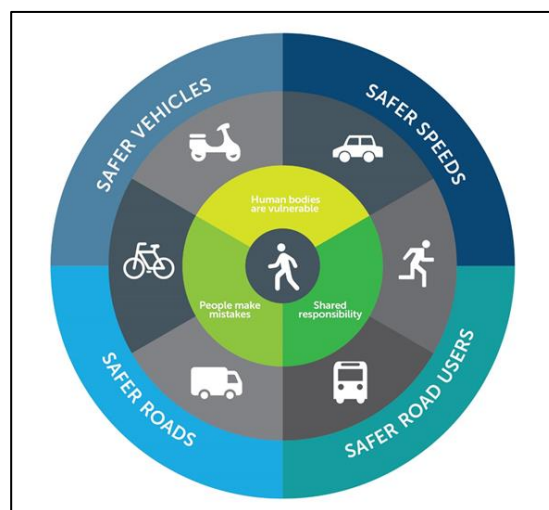


Figure 1: Safe System

### 3. Healthy, Sustainable Transport

We will support and encourage walking, cycling, and the use of public transport which are critical for a sustainable transport system, community wellbeing, and a healthy natural environment. We will reduce risks for active transport users, particularly pedestrians and cyclists, as we recognise how important active transport is for a healthy and sustainable community.

### 4. Working Together

Creating a safe road network is everyone's responsibility. We will work with:

- Road safety partners such as the Department of Transport, TAC, Police, and health services to achieve what we could not achieve alone.
- Stakeholders with specific interests in road safety plans and projects.
- Our community by listening and engaging with you so that you can help to shape the future of road safety in Baw Baw Shire.

This Strategy is not a stand-alone document. It is part of a suite of Council strategies and plans that together help to promote a ‘*sustainable, healthy and thriving*’ community. Below are some of Baw Baw Shire’s plans and strategies, and how they link to this strategy.

### Council Plan (2021-2025)

- Future ready infrastructure and transport options that help the community
- Improving local transport networks and advocating for improvements for roads and public transport for the community.

### Paths and Trails Strategy (2019)

- Promote and encourage walking as a sustainable and preferred mode of transport
- Improve provision of walking environments in the shire
- Improve amenity, accessibility and safety of the footpath network for all users

### Municipal Public Health and Wellbeing Plan (2021-2025)

- Deliver and support environments for active living
- Support initiatives that encourage active and passive physical activity.



### Baw Baw 2050 Community Vision (2011)

- Communities are connected physically through safe roadways, walking and cycling pathways
- Accessible, practical and safe public transport available throughout the Shire

### Economic Development and Visitor Economy Strategy (2022-2025)

- Increasing transport networks between towns to improve connectivity and remove load on local roads and highways.
- Integrating land use/development with transport planning

### Road Management Plan (2021)

- Provide and maintain safe and efficient network of municipal public roads.
- Set performance standards for road management functions.

Figure 2: Road Safety in Baw Baw Shire Council’s Plans and Strategies





Figure 3: Major roads in our municipality

## The Role of Council

Baw Baw Shire Council, like all local government authorities, has important roles to play in improving road safety.

Our roles include:

**Road Authority** – planning, construction, maintenance, and operation of local municipal roads.

**Planning Authority** – making decisions about land use and development.

**Employer** – maintaining a safe fleet of vehicles and making sure our employees drive safely and responsibly on the roads. We also aim to extend these principles to our contractors.

**Lobbyist** – advocating state and federal government for funding to improve transport infrastructure and services, as well as changes to legislation that will benefit the community.

**Community advocate** – engaging and empowering our community to contribute to road safety by supporting community education and coordinating local resources.

**Placemaking** – planning and building places for people to congregate, visit, and enjoy.

We can improve road safety through all these roles, but we are also reliant on other levels of government to fund and provide certain infrastructure, services, policies, legislation, and guidance. Split of responsibilities between different levels of government is shown below.



Table 1: Split of responsibilities between different levels of government

Baw Baw Shire Council	Victorian Government	Australian Government
<ul style="list-style-type: none"> <li>• Planning, building, maintaining, and operating local roads.</li> <li>• Making decisions about land use and development.</li> <li>• Planning, building, maintaining, and operating local bicycle and pedestrian networks.</li> <li>• Advocating and supporting delivery of state infrastructure and services.</li> </ul>	<ul style="list-style-type: none"> <li>• Building and managing freeways and arterial roads and public transport networks.</li> <li>• Provision of train and bus services.</li> <li>• Guidance on planning strategic bike networks</li> <li>• Speed limit policy (for all roads).</li> </ul>	<ul style="list-style-type: none"> <li>• Funding for national highway network.</li> <li>• Funding and delivering major transport projects.</li> <li>• Program funding for local government transport projects.</li> </ul>

## Developing the Road Safety Strategy

To understand road safety issues in the municipality, we looked at crash data for crashes that have occurred on our roads, listened to the community to get the perspective of road users, and worked with road safety experts.

### 1. Crash data

Road safety crash data was analysed for the most recent five-year period for which a full set of data was available (2015-2019). This provided insights into the types of crashes that were occurring, when and where they were happening, the conditions at the time, and what road users were involved.

### 2. Road users and the community

Baw Baw Shire collected feedback through regular forums and knowledgeable stakeholders, especially those with local knowledge, to get a snapshot of community views. This information provided a good insight into road safety issues that matter to the community.

### 3. Working with road safety experts

Baw Baw Shire Council consulted with a range of experts to identify road and transport safety issues and develop solutions for these issues. Through the implementation of these safety interventions, we will improve the safety of our integrated transport system.

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

## What's happening on our roads?

To understand where the risks are on our roads, we first looked at crash history to identify areas where crashes often occur. We also looked for areas of the road network that have elevated risks where crashes have not yet occurred. The latter is a proactive approach to road safety whereby we act before crashes will occur in future.

Whilst we continue to move to a risk-based approach to managing our roads, we have also carried out an extensive analysis of road safety data for the most recent five years in which a full set of data was available (i.e., 2015 to 2019). Over these five years, there have been 18 fatal crashes and 319 serious injury crashes (Figure 4), resulting in 19 fatalities and 357 serious injuries in our municipality (Figure 5). Out of those crashes, 188 serious injury crashes and 6 fatal crashes have occurred on council roads (Figure 6) resulting in 208 serious injuries and 7 fatalities. This means that 59% percent of serious injury crashes and 33% of fatal crashes happened on local and off-road areas managed by the Council. 56% of fatal and serious injuries occurred on council roads (Figure 7).

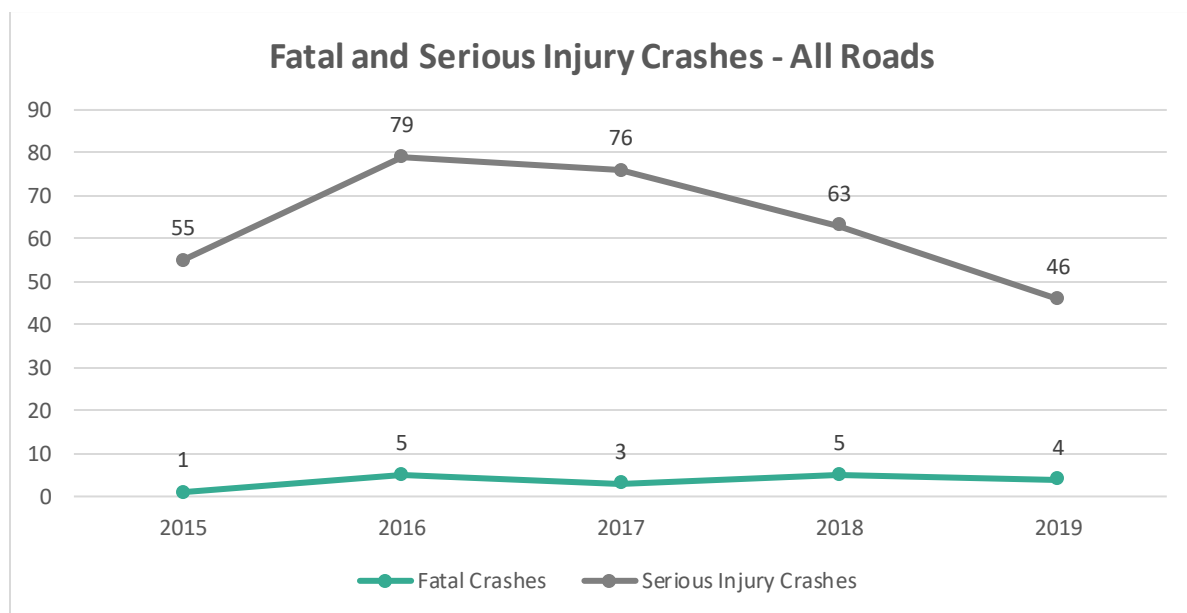


Figure 4: Fatal and Serious Injury Crashes in Baw Baw Shire Council

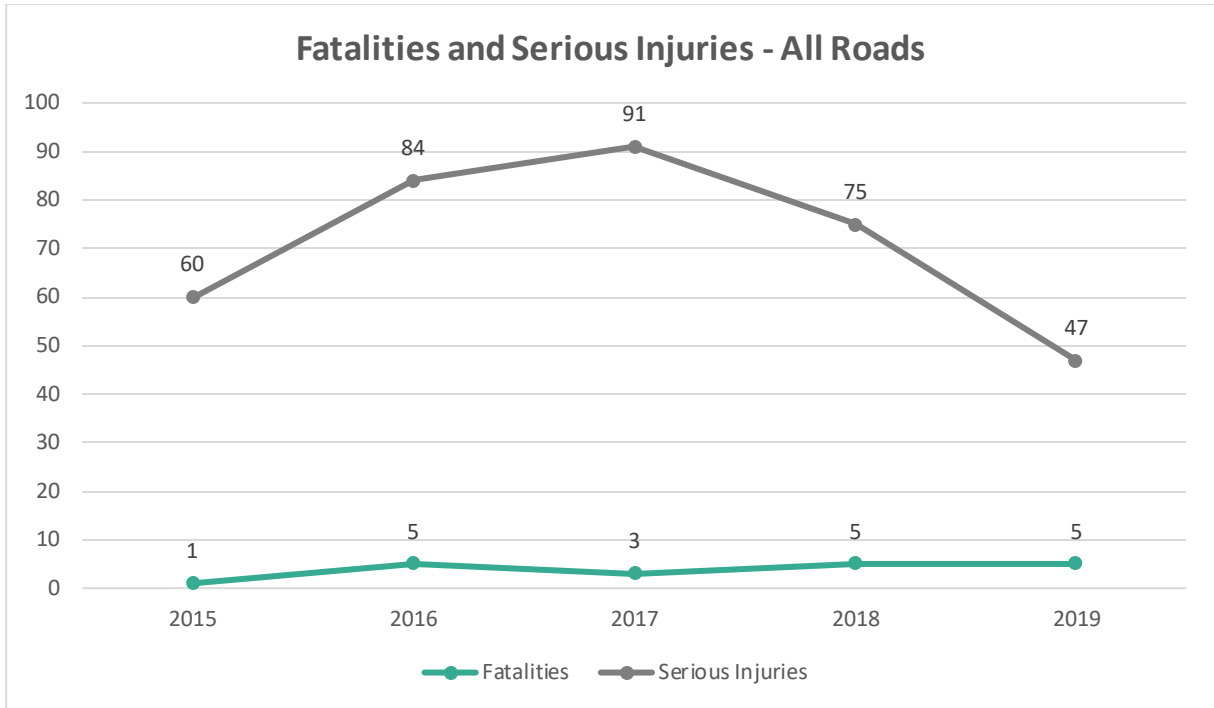


Figure 5: Fatalities and serious injuries in Baw Baw Shire Council

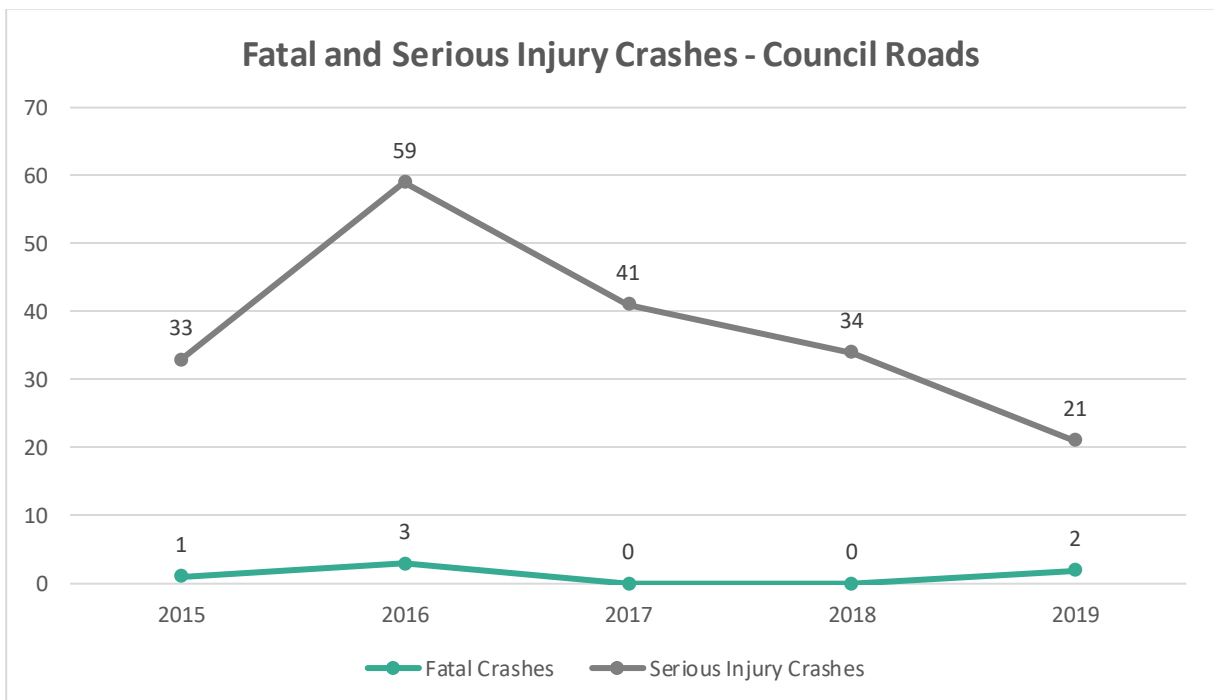


Figure 6: Fatal and Serious injury crashes in roads managed by Baw Baw Shire Council

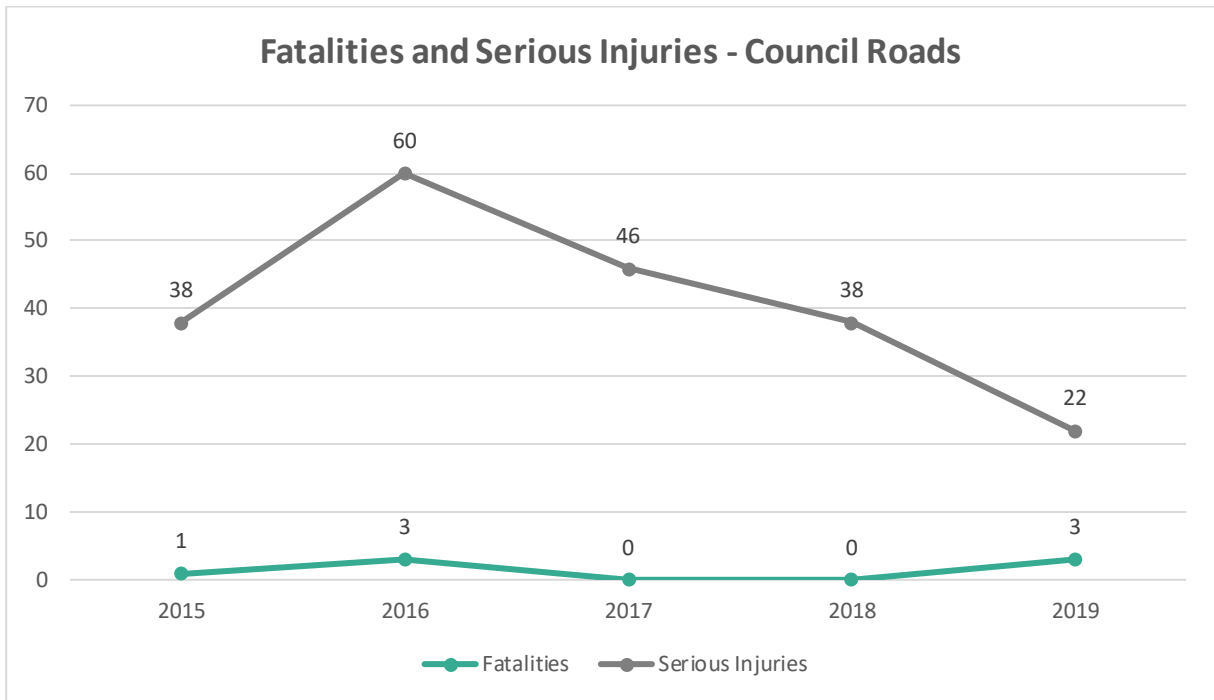


Figure 7: Fatalities and serious injuries in roads managed by Baw Baw Shire Council

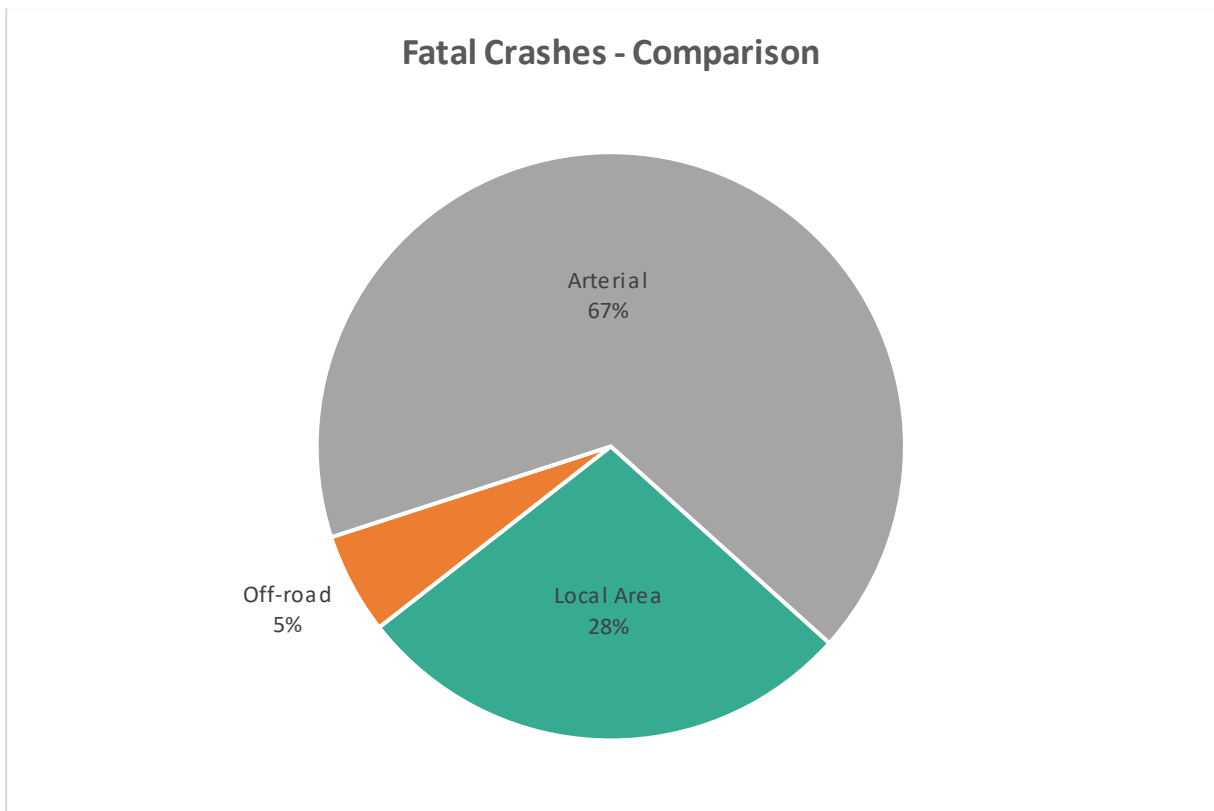


Figure 8: Comparison of fatal crashes in Baw Baw Shire Council

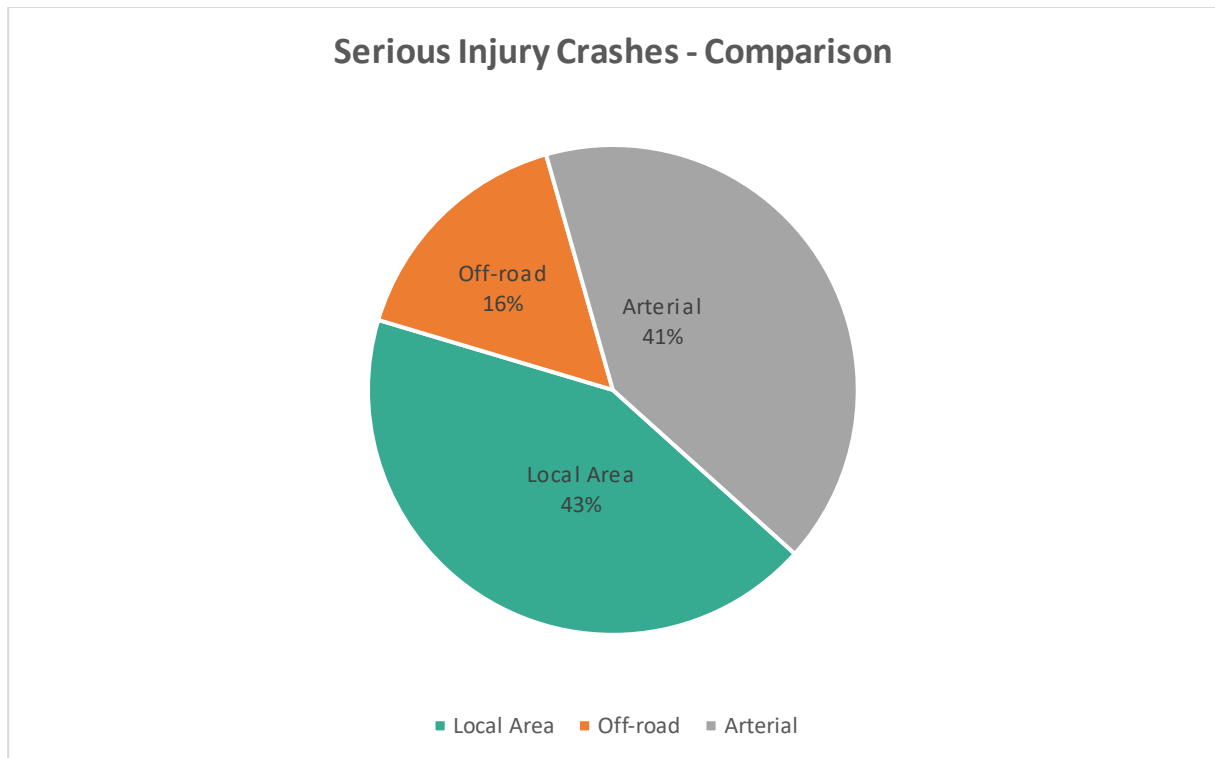


Figure 9: Comparison of serious injury crashes in Baw Baw Shire Council

For the five-year period analysed, 172 (46%) FSIs involved passenger vehicles and 164 (44%) involved motorcyclists (Figure 10). The most prominent crash types for Baw Baw Shire Council were:

- Vehicle losing control on the carriageway on a straight section of road accounting for 34 (10%) crashes.
- Head on crash between two vehicles that were not overtaking accounting for 32 (9%) crashes.

It has also been noted that 17% of crashes occurred due to vehicles leaving the carriageway on a left or right bend and striking an object or parked vehicle (Figure 11).

156 (46%) of fatal and serious injury crashes occurred on the weekend (Figure 12). 122 (36%) of crashes occurred on roads where the speed limit is 100km/h (Figure 13). There were 50 crashes that occurred on roads with a 60km/h speed limit, accounting for almost 15% of crashes.

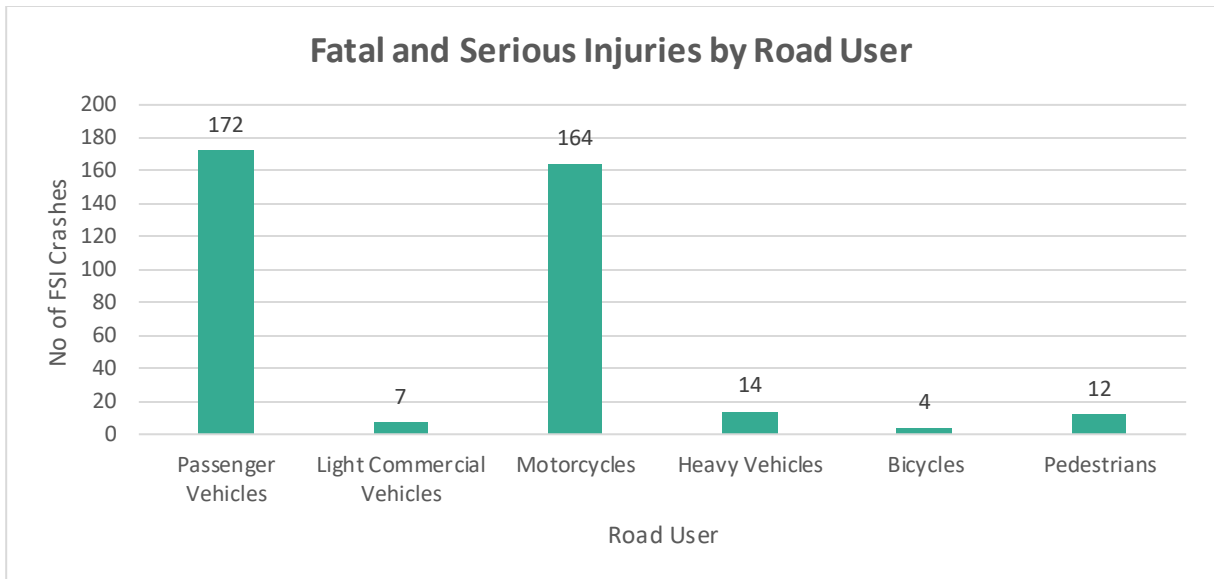


Figure 10: Fatal and Serious Injuries by Road User

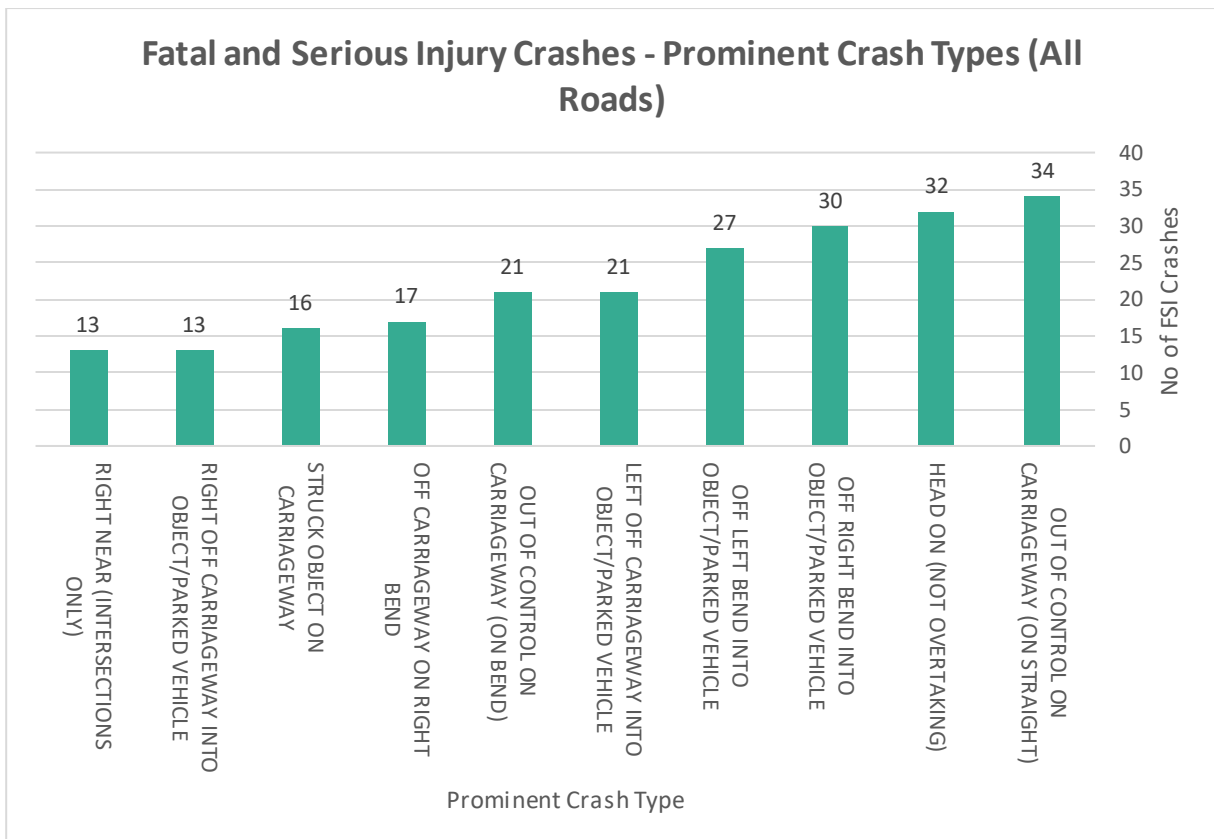


Figure 11: Fatal and Serious Injury Crashes by Prominent Crash Types

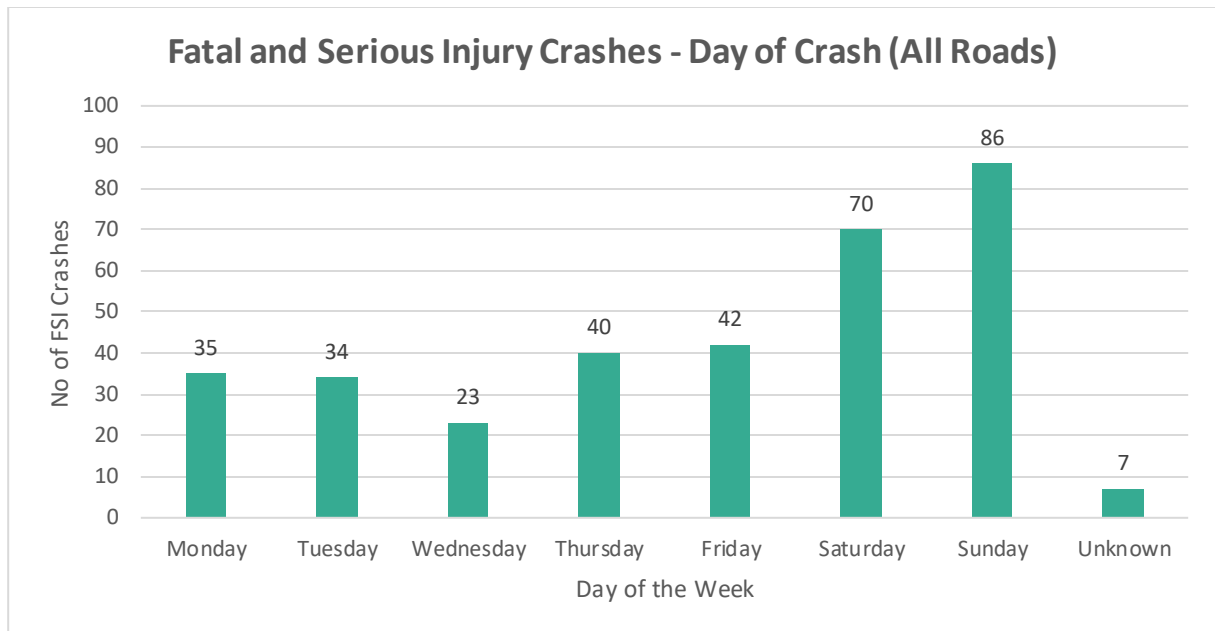


Figure 12: Fatal and Serious Injury Crashes by Day of the Week

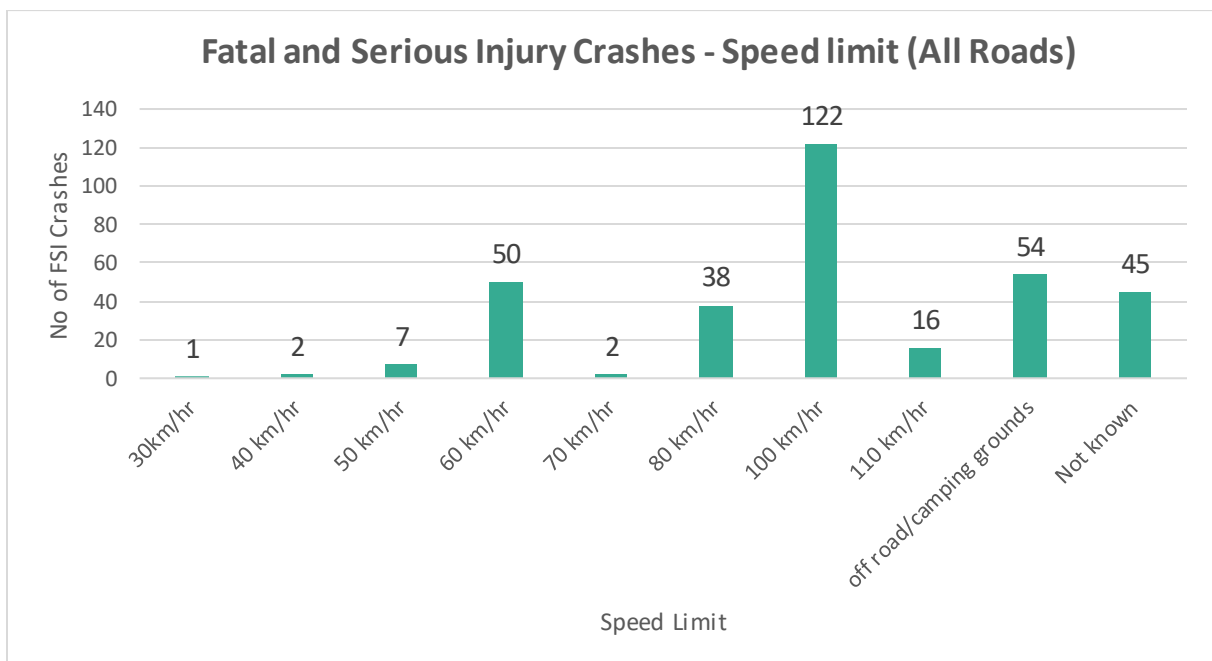


Figure 13: Fatal and Serious Injury Crashes by Speed Limit

#### Crash comparison between Baw Baw and Victoria

Baw Baw had a higher crash rate per 100,000 population than the rate for Victoria; however, this crash rate has been decreasing since 2016. In 2019, there were 94 fatal and serious injury crashes per 100,000 population in Baw Baw, a significant decrease from 171 per 100,000 in 2016 (Figure 14). As a comparison, the state's figure was 48 per 100,000 in 2019 and 84 per 100,000 in 2016.

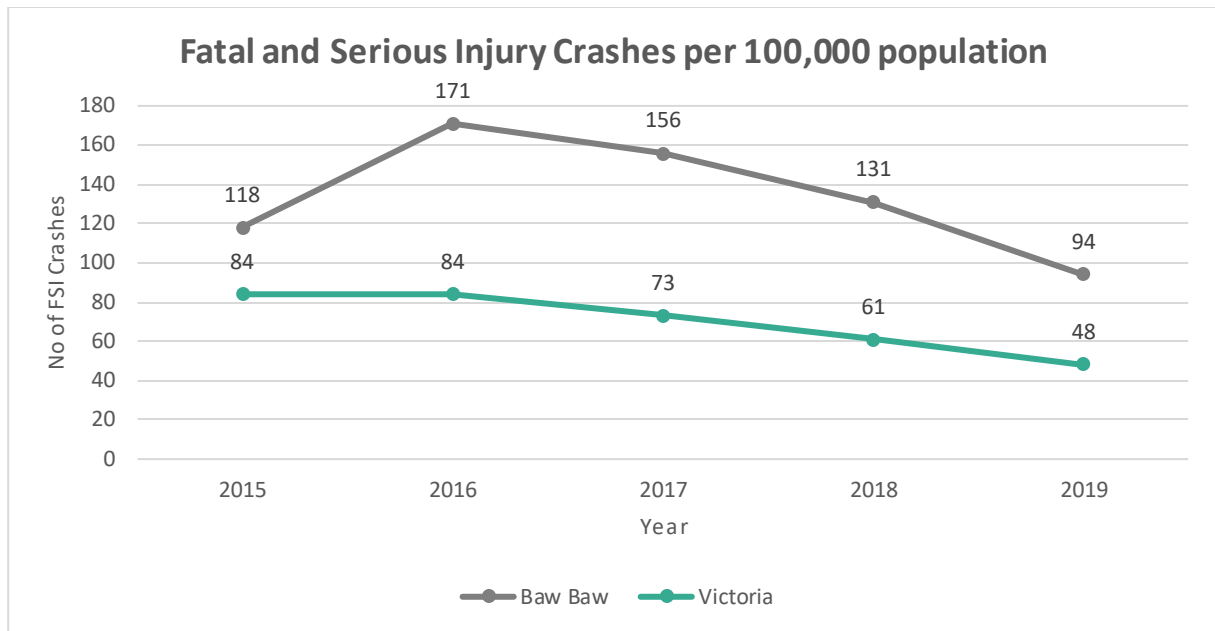


Figure 14: Comparison of crashes per 100,000 population between Baw Baw Shire Council and Victoria

### Where are crashes happening?

Fatal and serious injury crashes are most likely to happen in two types of location:

- Where there are high volumes of traffic with conflict points existing between road users – for example, arterial roads and intersections.
- Where there are significant movements of motor vehicles in close proximity to pedestrians and cyclists – for example, local roads with speed limits up to and including 50km/h.

Figure 15 shows crash hotspots in Baw Baw Shire. The heat map helps us to identify high risk crash locations so that we can focus our attention in areas where there are likely to be the most benefits. The heat map shows a concentration of fatal and serious injury crashes in the populous areas of Warragul, Drouin, Trafalgar, Neerim South, Rawson, and Walhalla. A breakdown of fatal and serious injury crashes is summarised below.



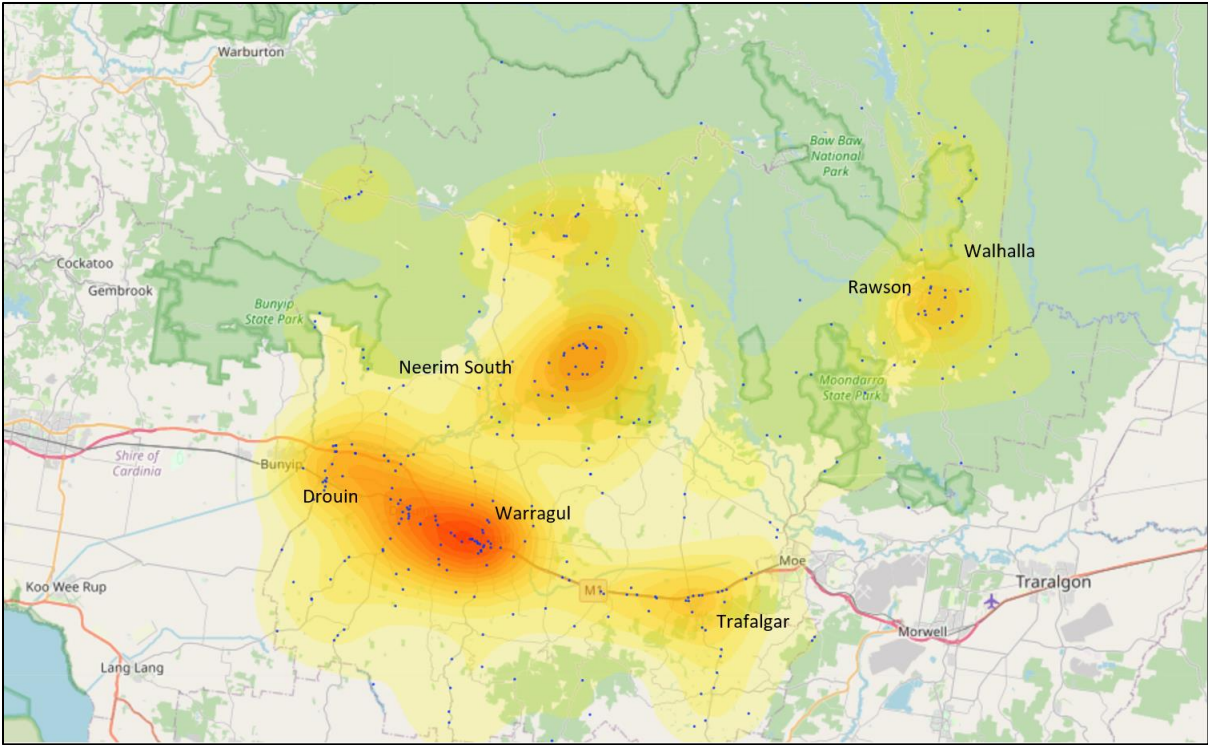







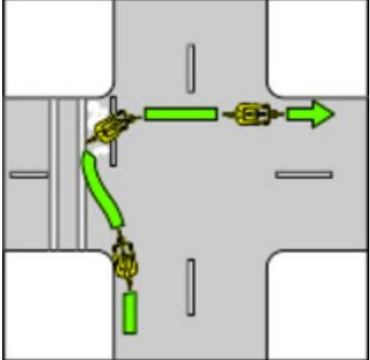
Figure 15: Fatal and serious injury crashes hotspot in Baw Baw Shire Council







Table 2: Overview of fatal and serious injury crashes in roads maintained by Baw Baw Shire Council

Road User	Most common type	Areas of Concern	SSS Comments
Pedestrians	Generally being struck when crossing the road or crossing driveways.	Areas with high pedestrian activity, such as Warragul, Drouin.  Pedestrian crossing points were raised as a concern in the community surveys	Although pedestrian crashes occur more often on roads with lower speed limits, vehicle speeds are still high enough to cause significant trauma when a crash does happen.
Cyclists	Generally being struck at intersections, and while making a right turn.	Crashes occurred at various locations, no areas of concern identified	
Motorcyclists	Loss of control on a carriageway, run-off-road type crashes, struck object on carriageway	Off-road areas of Neerim South, Rawson, Walhalla	44 (36%) loss of control on carriageway crashes 54 (44%) off road crashes 32 (26%) crashes on 100km/h roads
Cars (private vehicles)	Run off-road type crashes, Head-on	Corridor running west-east from Longwarry to Trafalgar.	37 (52%) run-off-road crashes 38 (54%) crashes on 100km/h roads
Heavy vehicles	Crashes at intersections, Rear end crashes and run off-road type crashes	Crashes occurred at various locations, no areas of concern identified	

There are many Safe System treatments that can be used to address different crash types. Typical treatments for the prominent crash types are shown below. These treatments are just a part of our more holistic approach to road safety which is described more fully in the Action Plan

Table 3: Safe System treatments for prominent crash types

Category	Prominent Crash Types	Interventions	
<p>Pedestrian</p>	<p>Pedestrian struck whilst crossing the road</p>	<p><b>Wombat Crossings</b></p> 	<p><b>Pedestrian Refuge Islands</b></p> 
		<p><b>Signals at crossing</b></p> 	<p><b>Speed cushions on approach to crossing</b></p> 
<p>Cyclist</p>	<p>Using intersections and right turns</p>	<p><b>Protected intersection</b></p> 	<p><b>Hook Turns</b></p> 

<p>Motorcyclist</p>	<p>Loss of control on a carriageway, run-off-road type crashes</p>	<p><b>Safety barriers with rub rails</b></p> 	<p><b>Safe Speed Limits</b></p> 
<p>Heavy Vehicles</p>	<p>Travelling through, or turning at intersections, Rear-end</p>	<p><b>Raised intersection</b></p> 	<p><b>Roundabout</b></p> 
		<p><b>Turning lanes</b></p> 	<p><b>Skid resistance (anti-skid) surfacing</b></p> 
<p>Cars</p>	<p>Run off-road, head-on</p>	<p><b>Safety barriers</b></p>	<p><b>Audio tactile line marking</b></p>



## Our Strategy and Action Plan

### Our strategic approach

We are adopting the Vision Zero as our target which has also been adopted by both the state and federal governments. Vision Zero is the aim of eliminating all deaths and serious injuries on the roads. To achieve this aim, we need to create a vision of a future road network with zero death and serious injury - a transformed transport system with evolved road users, vehicles, roads, and travel speeds. As we design the blueprint for our future, we are analysing the existing system and its performance to find areas that do not fit with our vision.

Having a good understanding of what the current system consists of, where the risks and weaknesses are, how the risks are being managed, and how this all fits with our vision is central to the development of strategic actions. From this understanding, we can then identify the gaps between where we are now and where we want to be. We can then develop an understanding as to whether we have the solutions to address these gaps. Where there are gaps which we aren't able to bridge with current solutions, we know we need to innovate, adjust, or reorientate our approach to find new ways to bridge these gaps and, thus, prevent road trauma.

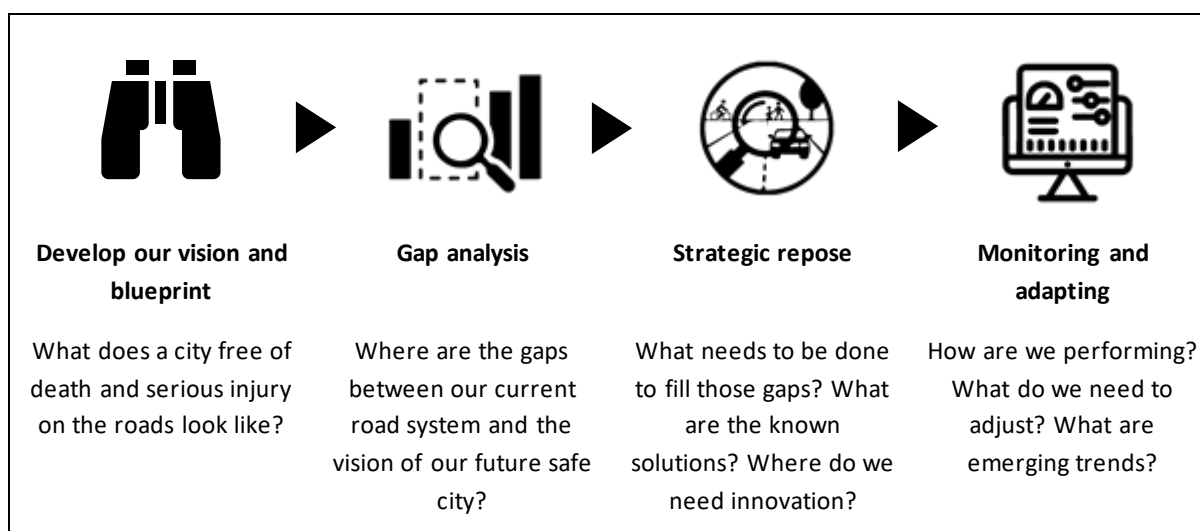


Figure 16: Strategic approach to Road Safety – Vision Zero planning

This is ongoing work. We continually monitor the road safety performance of our roads and check if our blueprint is still appropriate or if we need to adjust our actions.

### Our Action Themes

Based on our research, analysis, consultations, and application of best practice in road safety management, we have identified the following themes to guide our road safety response over the next 5 years:

1. **Leadership and Best Practice** - We are committed to Towards Zero and the Safe System Approach and we will act as an exemplar for road safety.
2. **Working Together** - We will work with our Road Safety Partners and the local community to shape the future of road safety.

3. **Safe System Approach** - We apply the globally recognised Safe System approach, which addresses the four main factors that contribute to a crash:
  - Safe Roads
  - Safe Speeds
  - Safe People/Safer Road Users
  - Safe Vehicles
  
4. **Active, Public, and other modes of Transport** - We will reduce risks for all mode of transport users, recognising how important this is for a healthy and sustainable community.

We have shaped an ambitious action plan around these themes to address road safety issues over the next five years.