

Latrobe*City*

Road Safety Strategy

2019-2024

For more information

Phone Infrastructure Development on 1300 367 700

DOCUMENT CONTROL

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Introduction

Road trauma is a key issue for the Latrobe City Community.

Over the last 10 years there have been 1,621 crashes reported, which have injured 2,210 people, including 53 fatalities.

These crashes not only have an impact on the people involved, they also have an effect on the community as a whole. Crashes affect the first responders, those who care for the injured, as well as family and friends. This has an impact on the social, emotional, physical and financial fabric of the community.

Road safety initiatives have seen a significant reduction in deaths and serious injuries on our roads over the last four decades, and while there have been successes there is still a significant way to go.

Latrobe City Council, as a nominated Road Authority, has a significant role to play.

Council manages an infrastructure network that consists of over 1669 km of road and 685 km of footpaths. This network requires regular review to ensure current standards are maintained, and any significant areas of risk are identified and rectified.

This Strategy provides information on the Injury Crashes and Fatal and Serious Injury Crashes in Latrobe City, identifies potential areas of improvement and nominates an Action Plan to overcome some of these issues.

Attached to this strategy is a report prepared by a Road Safety Consultant which details the statistics for crashes between July 2007 and July 2017. The data presented in this report has been used as the basis for this strategy.

Current Actions

International

The United Nations has declared the years 2011-2020 as the 'Decade of Action for Road Safety'. Globally, 1.25 million people are killed and between 20 and 50 million people are injured on the world's roads every year. Road trauma is among the three

leading causes of death for people between the ages of 5 and 44, and is seen as a threat to economic and human development. The United Nations Decade of Action for Road Safety 2011-2020 aims to stabilise and then reduce road fatalities by 2020, stating that road safety is not a transport issue, but a global health issue.

The World Health Organisation has also placed a focus on road safety, with one of its 17 goals being (goal 11):-

- Make cities and human settlements inclusive, safe, resilient and sustainable:
 - 11.2: By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.

Australia

The National Road Safety Strategy 2011-2020 outlines a vision that ‘no person should be killed or seriously injured on Australia’s roads’. It aims to reduce deaths and serious injuries on Australian roads by at least 30 percent over the lifetime of the strategy.

Following on from the 2001-2010 strategy, which saw Australia become one of the first countries to formally adopt the Safe System approach to road safety, the 2011-2020 strategy embeds the Safe System principles in the road safety efforts.

Victoria

Victoria’s Road Safety Strategy 2013-2022 is also based on the Safe System approach. Recognising that road trauma costs Victoria over \$3 billion every year, it pays particular attention to the 5,500 serious injuries – what it calls the ‘hidden road toll’ – and aims to reduce fatalities to less than 200 per year by 2020.

The strategy and accompanying action plan was updated in the 2016 adoption of Towards Zero, which has started to personalise the road safety message and Safe System principles at a community and individual level to challenge our acceptance of road trauma.

Victoria has highlighted the importance of road safety by formally nominating the Minister of Roads as also being the Minister for Road Safety and TAC.

Gippsland Region

VicRoads Eastern Region, now Regional Roads Victoria, working with their six local government partners, has developed the Gippsland Road Safety Plan. The plan looks at demographics, crash trends, statistics and local issues across the Gippsland area to

gain a better understanding of the factors that affect road safety within the region. It aims for a reduction in deaths by 20% and a 25% reduction in serious injuries.

Latrobe City

In the Latrobe City Council Plan 2017-2021 a key strategy (14) is stated as “provide services, infrastructure and advocacy to support health, wellbeing and safety of our community”.

The Municipal Public Health and Wellbeing Plan under ‘Safe in the Community’ states that a focus is “Address pedestrian and transport safety needs – consider pedestrian crossings, bike and walking paths, hoon behaviour, lighting and community prevention activities”.

Latrobe City Council also has a number of Strategies and Plans to improve the connectedness and safety of our roads such as the Tracks, Trails and Paths Strategy and the Bicycle Plan.

What is a road?

This Strategy is based on Road Safety, and therefore it is important to know what a “road” is within this context.

The *Local Government Act 1989* (Act) describes a road as:-

- A street;
- A right of way;
- Any land reserved or proclaimed as a street or road under the *Crown Land (Reserves) Act 1978* or the *Land Act 1958*;
- A public road under the *Road Management Act 2004*;
- A passage;
- A cul de sac;
- A by-pass;
- A bridge or ford;
- A footpath, bicycle path or nature strip;
- Any culvert or kerbing or other land or works forming part of the road

The definition used in this strategy is that used for the Act, namely everything within a road reserve. This includes the carriageway surface, kerb and channel, footpaths, verges, lighting, furniture and any other on or above ground infrastructure that occupies space between property boundaries and within a Road Reserve.

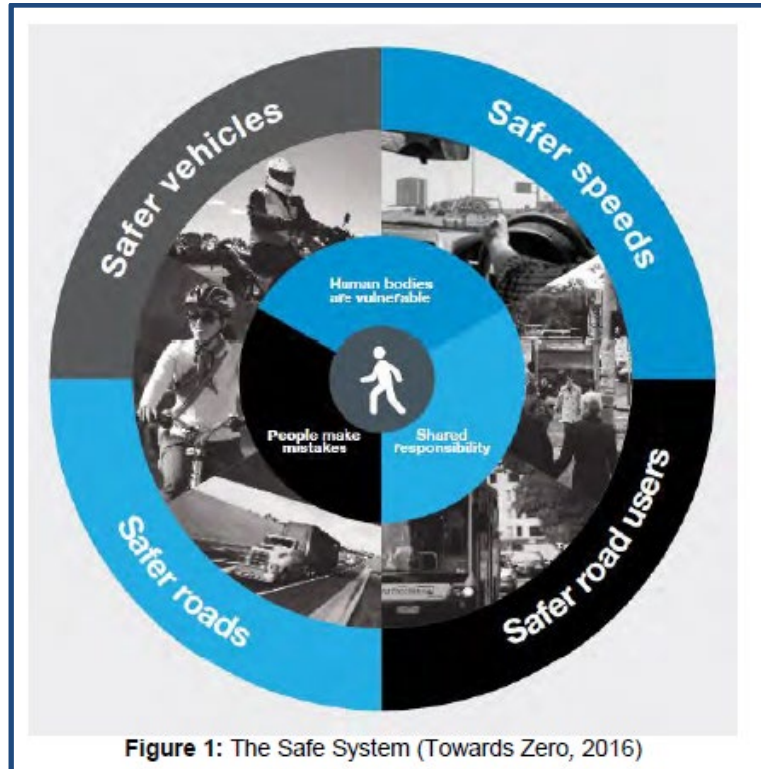
The Safe System Approach

The Safe System approach for road safety is recognised as being best practice in reducing road trauma. The system was developed in Sweden and the Netherlands, and has helped them to provide consistent leadership in road safety, and to reduce fatalities and serious injuries by up to 40% over the last decade.

The Safe System is simplistic in its approach. At its core is the recognition that we are all human and as such our bodies are vulnerable. As humans we will always make mistakes, and as such road crashes are inevitable. Death and serious injury, however, should not be an inevitable result of those mistakes.

Key principles that are built into the Safe System include:-

- The protection of human life and long term health is paramount. This brings with it a realisation that the only goal can be zero deaths and serious injuries;
- People will always make mistakes;
- Four pillars - Safer Roads and Roadsides, Safer Vehicles, Safer People and Safer Speeds – that interact with each other to create a system that is forgiving to human error;
- We have a shared responsibility in achieving Safe System – the system must be designed to accommodate human error and the user has the responsibility to comply with the road rules
- Safe System is achieved when potential crash conflict points are eliminated, or the impact forces are below that at which death and or serious injury could occur.



Safer Roads and Roadsides

Safer roads and roadsides play a major role in stopping certain crashes from occurring, and also the severity of the results of those crashes. Treatments that can assist in providing a safer road system include:-

- Intersection design, such as roundabouts and traffic islands
- Safety barriers
- Sealed shoulders
- Separating pedestrians, cyclists and vehicles
- Maintaining sight lines

Safer Vehicles

Vehicle technology continues to evolve, offering greater protection to road users. Safety technologies include:-

- Airbags
- Seat belts
- Electronic Stability Control
- Lane departure warning
- Collision avoidance warning
- Speed sign warning

- Alcohol interlocks

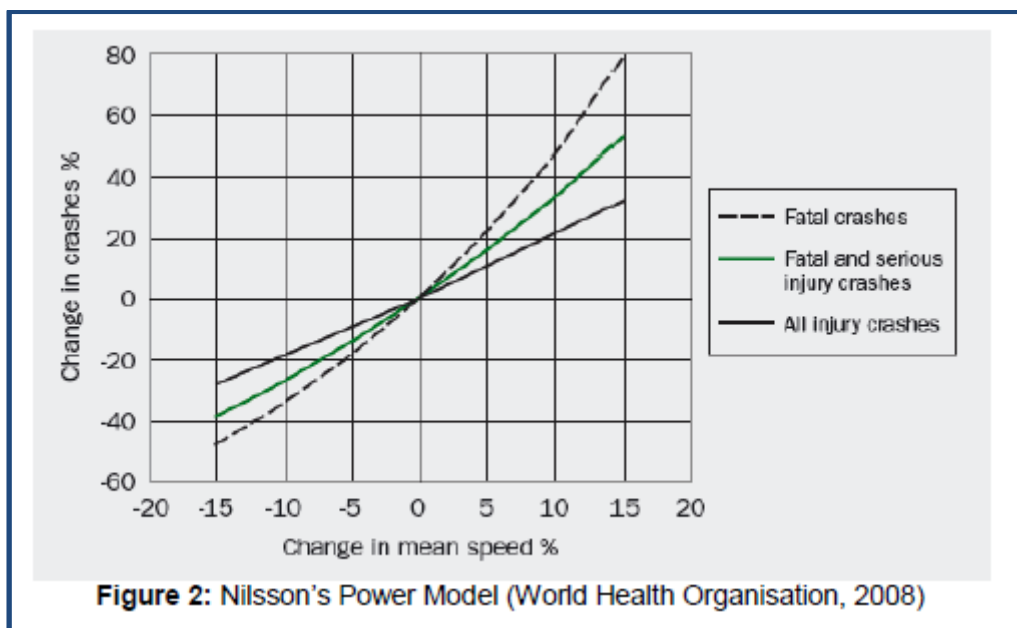
Safer People

We are all road users as pedestrians, cyclists, drivers and riders. Each of these activities has risks, and we all have a responsibility to reduce those risks for ourselves and other users. While people will always make mistakes, however the impact of those mistakes should be minimised. Methods of making safer people include:-





- Education
- Practice
- Accepting responsibility for our actions and the impact they have on others

Safer Speeds

The relationship between speed and road crashes has been studied extensively. The evidence shows that the greater the speed the greater likelihood of being in a crash, the severity of the crash will increase, and the likelihood of death and serious injury will increase.



As in all risk situations, the main aim is to mitigate the risk, or to reduce that risk if it cannot be eliminated. To assist in this, the Safe System states:-

WHERE	Vehicles and vulnerable road users such as pedestrians and cyclists mix	WE CAN	Separate vehicles and vulnerable road users with: <ul style="list-style-type: none"> • Pedestrian fencing / overpass / underpass • Separated bicycle paths 	OR	 <ul style="list-style-type: none"> • Traffic calming measures • Expectations • Regulate / enforce
	There are trees or poles close to the road edge		<ul style="list-style-type: none"> • Remove the hazard • Protect vehicles from the hazard with crash barriers 		 <ul style="list-style-type: none"> • Traffic calming measures • Expectations • Regulate / enforce
	There is potential for a side-impact collision		<ul style="list-style-type: none"> • Install a roundabout • Grade separate 		 <ul style="list-style-type: none"> • Raised intersection platforms • Expectations • Regulate / enforce
	There is potential for a head-on collision		<ul style="list-style-type: none"> • Install centre-line barriers • Duplicate carriageway 		 <ul style="list-style-type: none"> • Expectations • Regulate / enforce
			ELIMINATES IMPACT TYPE		LIMITS IMPACT POTENTIAL
SAFE SYSTEM ACHIEVED – ZERO DEATH AND SERIOUS INJURY					

Statistics

Overview

Latrobe City Council has employed a specialist consultant to analyse the crash data for the period 1 July 2007 to 25 July 2017. This data and the findings were presented to Council in July 2018 and form the basis of this Strategy. Latrobe City Council Road Trauma Analysis Report July 2007 – July 2017 (Attachment 1)

Key findings for the 10 year data:

- 1621 Injury Crashes;
- Involving 2,587 vehicles;
- Involving 3,728 road users;
- Resulting in 567 Serious Injuries;
- 53 Fatalities.

Majority of Injury Crashes

- Involve single or multiple cars;
- Occur during daylight hours, on days that were clear weather with good visibility;
- Occurred on roads with dry surfaces;
- Occurred in 100 km/h speed zones;
- Involve older vehicles.

The most common Injury Crash types were

- Vehicles leaving the carriageway to the left
- Vehicles rear ending other vehicles in the same lane;
- Vehicles leaving the carriageway to the right

Trend in Injury Crashes

There have been 1621 Injury Crashes reported over the 2007 to 2017 period within Latrobe City. While the trend in All Injury Crashes is relatively constant averaging 162 annually, the number of Fatal and Serious Injury (FSI) Crashes has been declining from 66 FSI crashes in 2007/08 to 35 FSI crashes in 2016/17.

Crash Severity (Number of Crashes)

Of the 1,621 Injury Crashes there were 488 Fatal and Serious Injury Crashes, 49 of which resulted in fatalities and 439 resulting in serious injuries.

Thirty Percent (30%) of Injury Crashes in Latrobe City resulted in a Fatality or Serious Injury

Crash Severity (Number of Crashes)

While the three most common Injury Crashes are vehicles leaving the carriageway to the left, vehicles rear-ending other vehicles in the same lane and vehicles leaving the carriageway to the right, in Fatal and Serious Injury Crashes the most common causes are vehicles leaving the carriageway to the left, vehicles leaving the carriageway to the right and off right bend into object/parked vehicle.

Types of vehicles involved in Injury Crashes

There were 2,587 vehicles involved in All Injury Crashes with 716 involved in Fatal and Serious Injury Crashes. Cars are the most common vehicle type to be involved in injury crashes, with motor cycles being the next most frequent vehicle type. These two vehicle types account for 90% of crashes, although motorcycles have a higher representation in Fatal and Serious Injury Crashes.

Age of vehicles involved in injury crashes

The data shows that the majority of crashes involve vehicles which are older than 15 years. All Injury Crashes and Fatal and Serious Crashes show a similar trend in the age of vehicles involved.

Time of day occurrence of injury crashes

The timing of All Injury Crashes tends to peak at commuting times in the morning and evening, however the evening peak has a higher incidence of Fatal and Serious Injury Crashes than the morning.

Speed zone occurrence of injury crashes

The All Injury Crashes are predominately distributed between 100 km/h limited roads and urban 50 and 60 km/h speed zones. This is likely to reflect the higher proportion of these zones. The severity of crashes is higher in the 100 km/h speed zones with a higher proportion of Fatal and Serious Injury Crashes.

Atmospheric Condition Occurrence of Injury Crashes

Most Injury Crashes occur during clear weather conditions. The data is consistent between the All Injury Crashes and Fatal and Serious Injury Crashes.

Road Surface Condition Occurrence of Injury Crashes

Most crashes occur on dry road surfaces, with data being consistent between All Injury Crashes and Fatal and Serious Injury Crashes.

Prevailing Lighting Condition Occurrence of Injury Crashes

Most crashes occur during the day. The data shows a consistency between All Injury Crashes and Fatal and Serious Injury Crashes for dark streets with lights, however the severity is greater on unlit roads and at dawn/dusk.

Casualties by Severity of Injury

Of the 1,621 All Injury Crashes involving 2,587 vehicles there were 3,728 road users involved. This included 53 fatalities, 567 serious injuries, 1,590 non-serious injuries and 1,518 road users were not injured.

Casualties by Age of Road User

The age group most likely to be involved in All Injury Crashes are 18 to 21 year olds. The decade between 18 and 29 years old is over represented in crash statistics. There is very close correlation between the All Injury crash data and the FSI crash data.

Casualties by Gender

Males are more likely to be involved in crashes.

Casualties by Type of Road user

Drivers and passengers make up 86% of individuals involved in All Injury Crashes with the distribution of the type of road user impacted being similar for all All Injury Crashes and FSI Crashes.

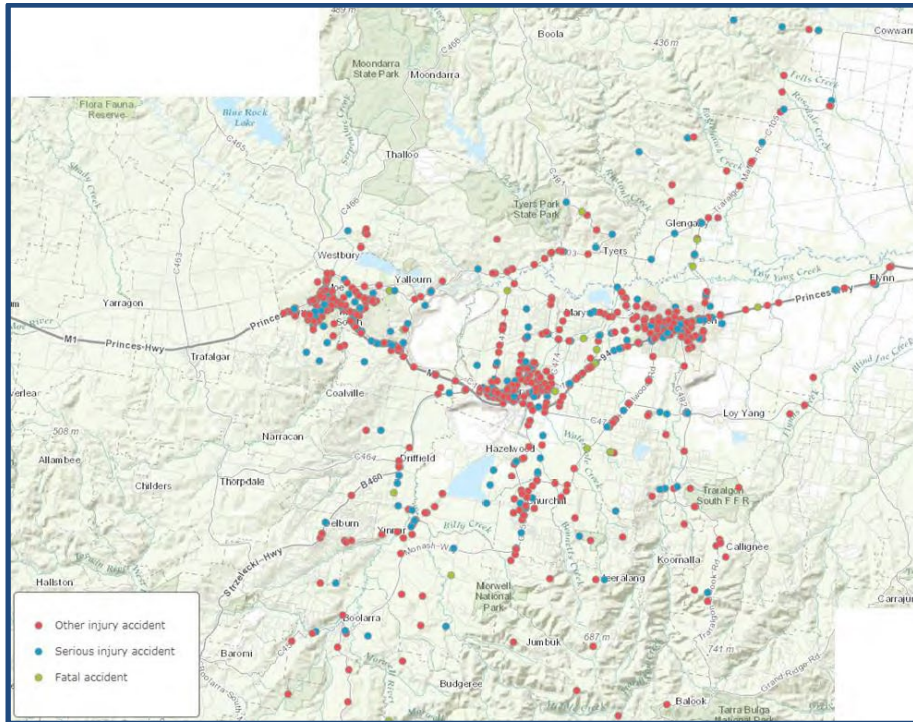
Issues

The statistics portrayed in the Road Trauma Analysis Report show the following for Fatal and Serious Injury Crashes from 2007 to 2017:-

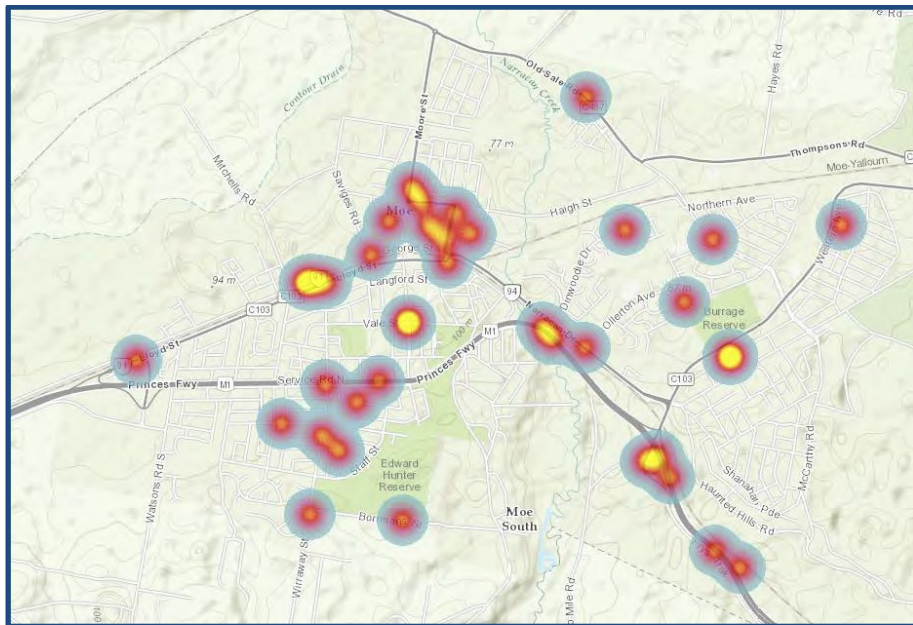
- There were 488 crashes
- The crash rate has been decreasing from 66 per year to 35 per year
- The three highest types of crashes are vehicles leaving the carriageway to the left, vehicles leaving the carriageway to the right and off right bend into object/parked vehicle
- Cars accounted for 76% of crashes, with the second highest being motorcycles with 13% of crashes
- A high proportion of vehicles involved were over 15 years old
- Crashes occurred mostly during peak travel times, with a higher prevalence being in the afternoon peak.
- 100 km/h zones had the highest number of crashes
- Most crashes occurred on clear days, on dry roads and in daylight
- There were 1,098 people involved
- With 53 Fatalities
- And 567 Serious Injuries
- Males between the ages of 18 and 29 are most likely to be involved
- Drivers and passengers make up 81% of those involved

Motor Vehicle Users (Cars, and Commercial Vehicles)

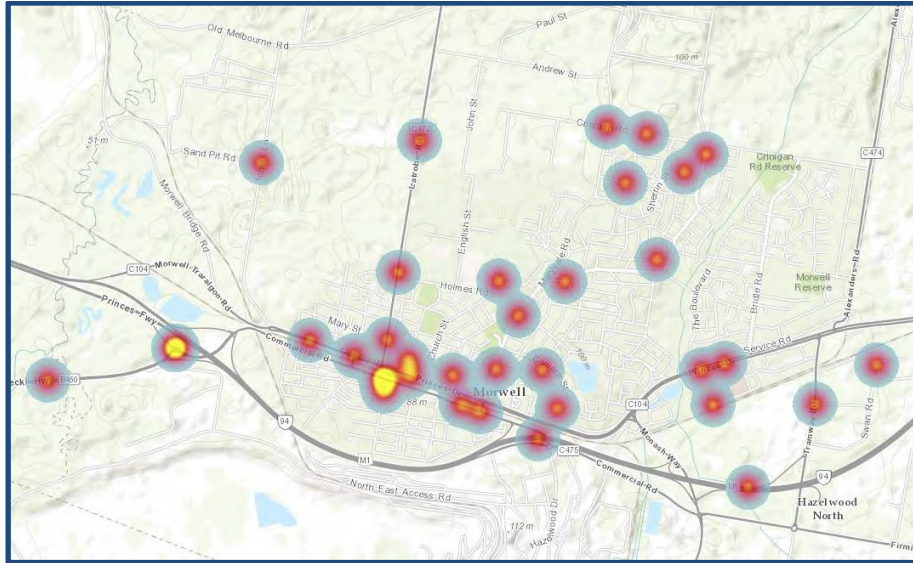
The statistics show that vehicle crashes are the largest group of crashes. This is to be expected as they are the largest group of road users.



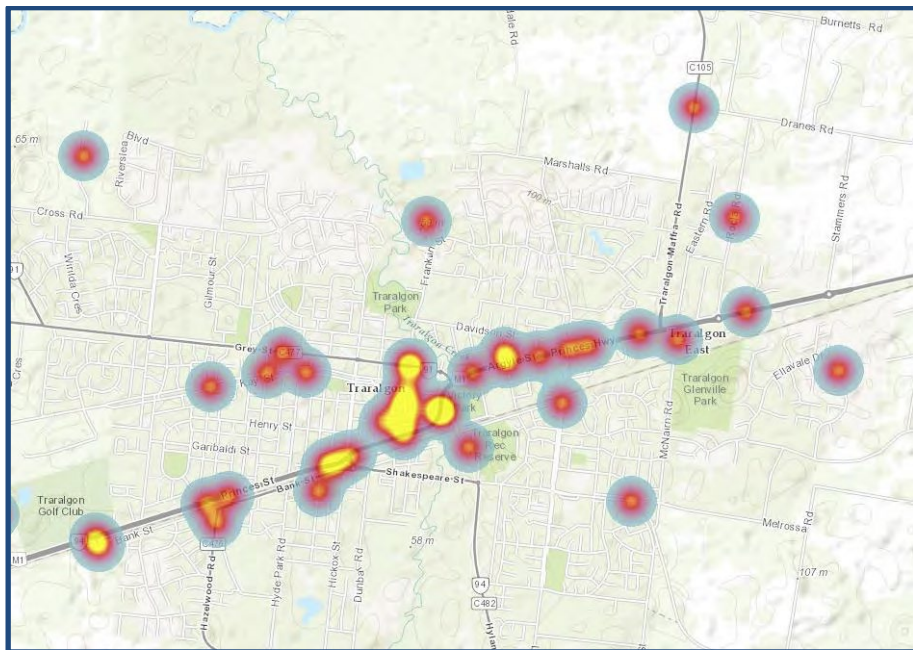
The map above shows that most crashes are evident in the Moe, Morwell and Traralgon areas.



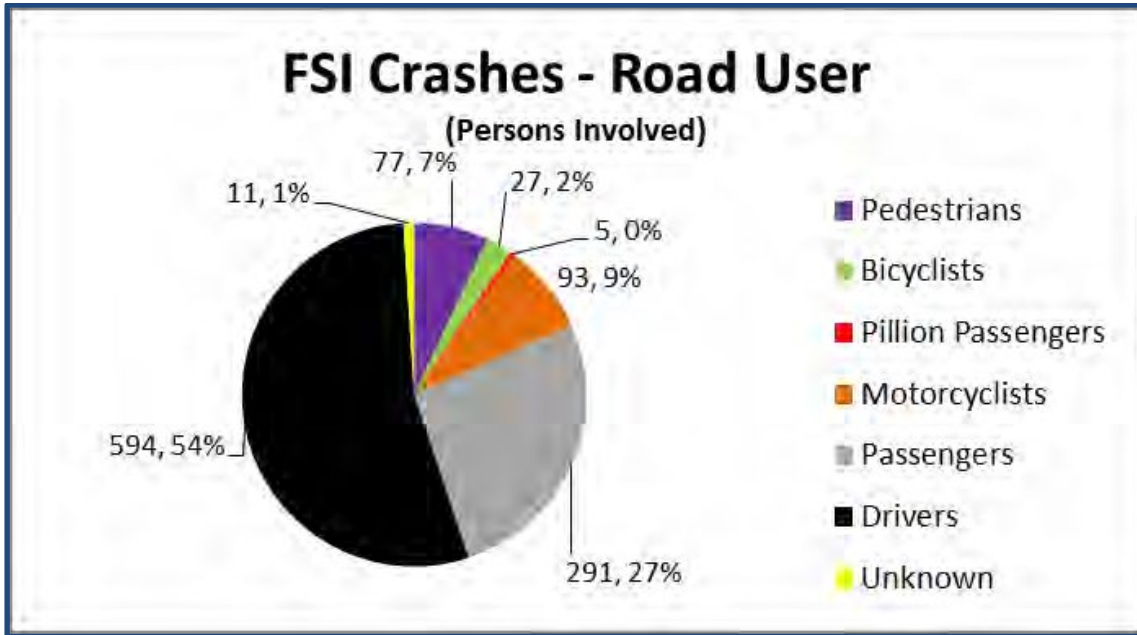
Moe Heat Map for All FSI Crashes



Heat Map for All FSI Crashes – Morwell



Heat map for all FSI crashes in Traralgon



Of those involved in FSI crashes, 54% are drivers, with 27% being passengers.

Road conditions were not identified as playing a part in FSI crashes, with the majority of crashes occurring in light, clear and dry conditions.

Specific Actions for Motor Vehicle Users

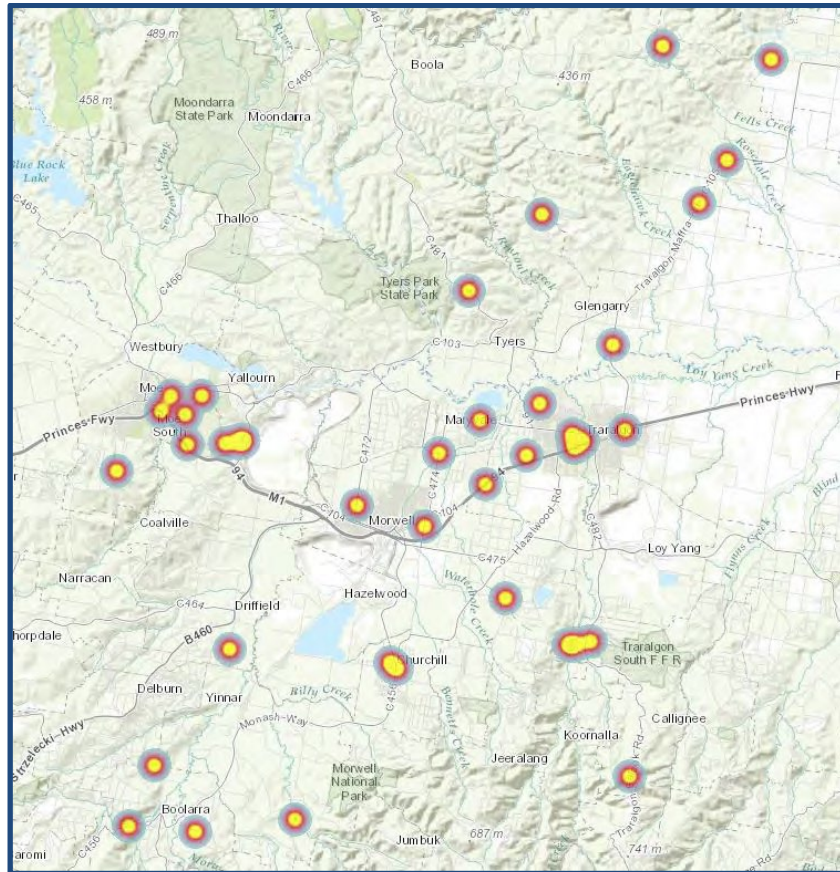
Using the Safe System approach to road safety, there are a number of actions which can be taken to both reduce the number of crashes and also reduce the severity of those crashes.

Action	Comments
Identify areas of significant risk	There are a number of ways that potential risk areas can be identified. The reactive way is to review crash statistics and identify where crashes have occurred and also in response to customer feedback which raises specific locations. The proactive way is to review potential risk locations during regular inspections. In each of these methods, it is then important to review the information and establish what the risks are, and to then identify strategies to reduce or minimise those risks.
Review Speed Limits in Activity Nodes	The severity and likelihood of crashes has been demonstrated to increase as speed increases. It is therefore important to have the appropriate speed limit identified. The first priorities are those areas where there is a mix of pedestrians, cyclists and vehicles, such as areas of education, retail and recreation.
Review Speed Limits in	Areas where residential dwellings are becoming more prevalent in

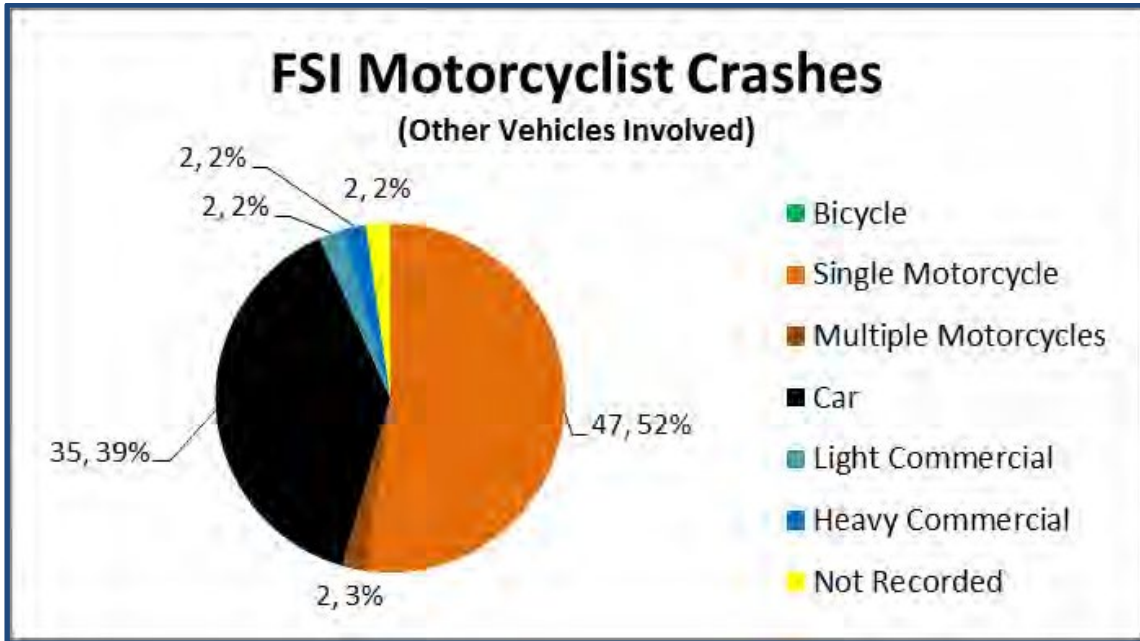
Residential areas in high speed zones	higher speed zones, such as Rural Living Zones and Low Density Residential Zones should be reviewed to ensure that the limits are appropriate.
Review Road Construction Design	Currently designs for road works are reviewed to ensure they comply with all relevant codes. While this ensured that infrastructure meets the required standards, it does not ensure that the Safe System approach is used. All future designs, whether designed as part of Councils works plans or by a subdivision developer, are to be reviewed for compliance with the Safe Systems approach and designs updated where necessary.
Review Construction Traffic Management Plans	When construction works are required within a road reserve a Traffic Management Plan is prepared to ensure the safety of road users during construction. It is equally important to ensure that this plan is implemented correctly to minimise the risk for all users. A process is to be developed and actioned to ensure that Traffic Management Plans are implemented correctly.
Traffic Volume Management	Reducing the amount of traffic on our roads will have a positive effect on the number of crashes. This can be done by encouraging the use of other modes of transport, be it bus, train, cycling or on foot. To ensure this can be achieved the correct infrastructure needs to be put in place.
Improved Signage	It is important that drivers are distracted as little as possible. One of the ways to achieve this is to minimise the amount of signage within road reserves. This will ensure that drivers are not distracted while also ensuring that key information is portrayed. This will also assist in preparing for vehicles that have speed signage detection systems, as well as preparing for more advanced technology as it is developed.
Safe Vehicles	The data shows that older vehicles are represented in a disproportionate way in the crash statistics. This would suggest that they are not necessarily compliant with current ANCAP ratings. Council can influence this by ensuring that it purchases/leases 5 star ANCAP Rated vehicles, which will then trickle down into the community once they are disposed of.
Driver Education	An educated, and practiced, driver will have the skills and knowledge to minimise crashes. While Council Is not the responsible authority for rules and regulations, it can work with other authorities such as Victoria Police, TAC and VicRoads to improve education. It can also assist drivers by providing specific training such as the Traffic School.
Barriers	As a large number of crashes involve vehicles running off the road, methods to prevent this occurring should be investigated. This would include the use of safety barriers, reflective pavement markers or other technologies that would alert to drive to any deviation from the lane.

Motorcycle Users

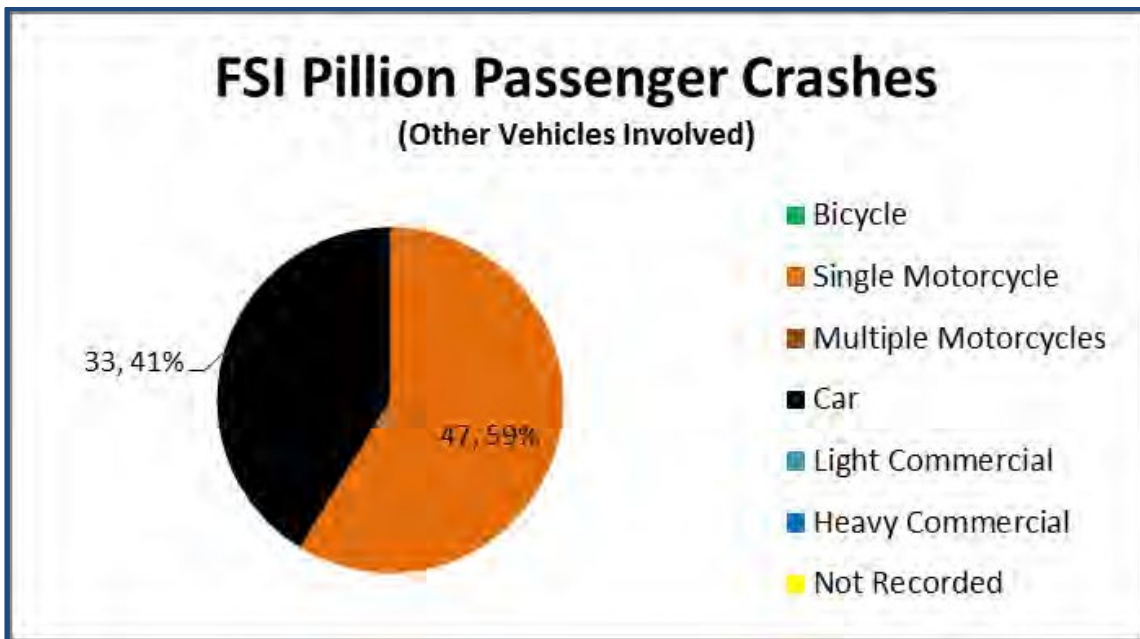
Motorcycles are the second highest category of vehicles in crashes with 93 people involved in Fatal and Serious Injury Crashes.



Crashes are spread across both urban and rural areas.



The majority of crashes (52%) are single motorcycle crashes and the second highest involves cars (39%). Of 90 crashes involving motorcycles, 80 (89%) involve pillion passengers.



Specific Actions for Motor Cycle Users

Specific actions which can be taken to address motorcycle safety are:

Action	Comments
Signage	The installation of signage to warn motorcyclists of upcoming changes in road alignments would be an advantage. This could include warning for turns, intersections etc.
Motorcyclist Education	As all of the single motorcycle crashes involved pillion passengers, education to be provided to motorcyclists on the different riding skills required with pillion passengers. This would involve media campaigns as well as encouraging training with passengers.

Bicycle Users

There were a total of 27 FSI bicycle crashes reported within the study period.

The number of bicycle FSI crashes show a decreasing trend over the ten years with 1 or 2 bicycle FSI crashes recorded in the last four. No fatal crashes recorded during the analysis period. Crashes were most common between 11:00 and 12:00 and in 100 km/h zones followed by 80 km/h zones.

As expected, most FSI Crashes involving Bicycles where impacts with cars, with the next highest being single bicycle crashes.

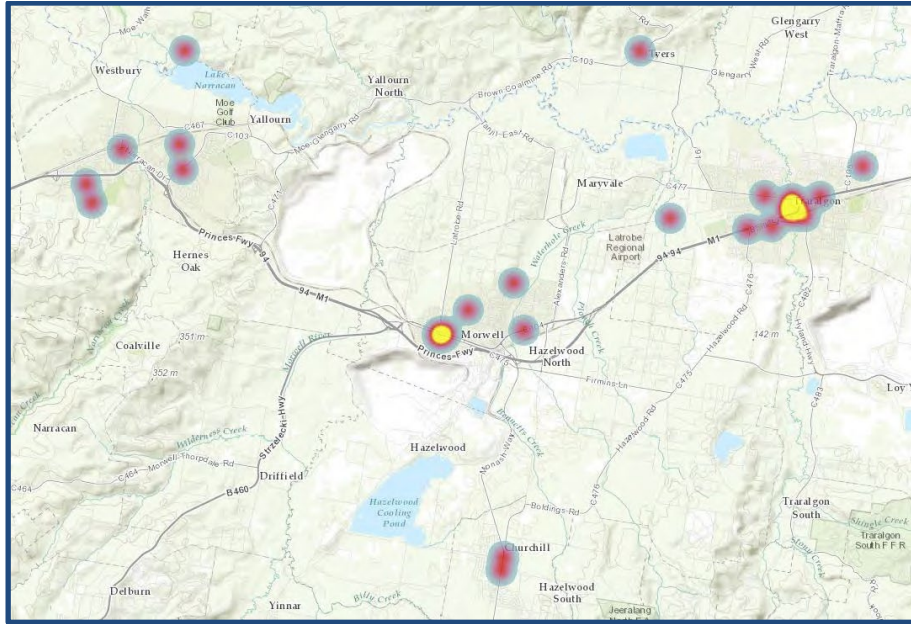
Specific Actions for Bicycle Users

Actions which could reduce the number of bicycle crashes are:-

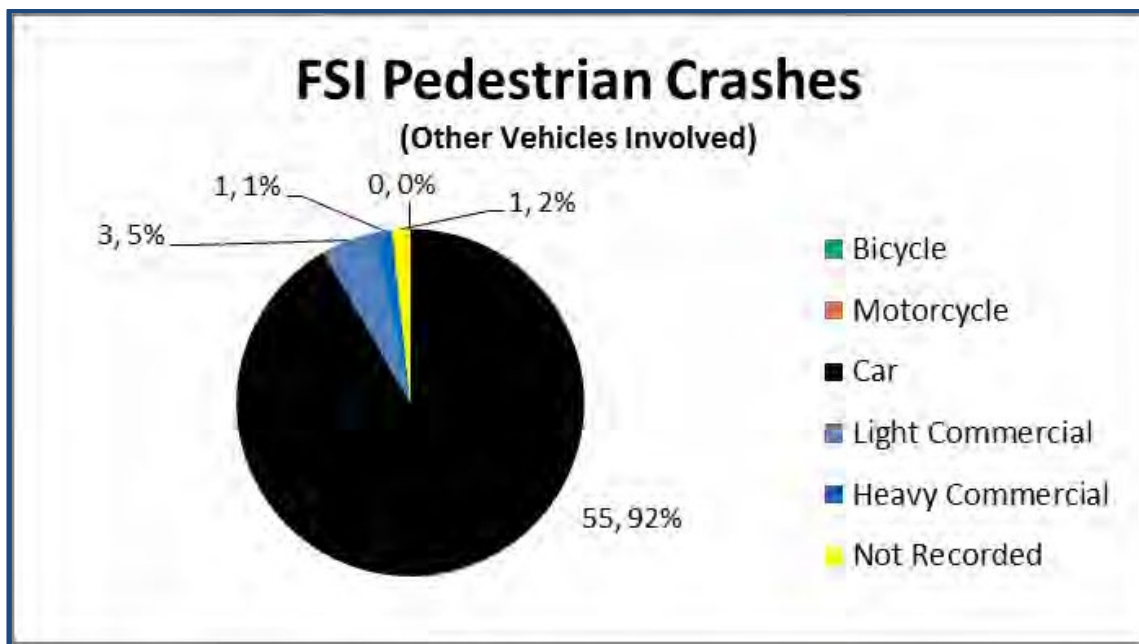
Action	Comments
Bicycle Plan Review	The current Bicycle Plan has expired. The plan needs to be reviewed and updated with current information such as the Traralgon Activity Centre Plan and the Tracks, Trails and Paths Strategy. As part of the review, investigate any pinch points and how they can be alleviated and investigate methods to separate Bicycles and Vehicles.
Encourage Bicycle Use	Encouraging the use of bicycles has a number of benefits, These include reducing the volume of traffic on the road which improves safety for everyone, and also encourages the skill and practice of people who ride.
End of Trail Facilities	An important part of encouraging addition cycle use is to provide facilities at the end of the journey. This would commence with investigating bicycle parks and showering facilities in key locations.
Identify areas of significant risk	There are a number of areas where there is increased risk for cyclists. These include intersections, 100 km/h areas and narrow roads with large volumes of traffic. Areas with a high potential of risk are to be identified, and potential treatments to reduce the risk determined.
Bicycle Riding Education	Educating cyclists on potential dangers can have an impact on safety. An integral part of this is providing information on off road paths, dedicated bicycle infrastructure as well as safe riding habits in high risk areas.

Pedestrians

A total of 77 pedestrians were involved in FSI crashes between 2007 and 2017. The yearly trend of pedestrian FSI crashes is decreasing on average. It was notable that older pedestrians are involved in 20% of all FSI crashes. This indicates improvements with consideration towards older pedestrians may be necessary to reduce pedestrian FSI crashes. The largest number of crashes occurred between 18:00 and 20:00 and pedestrian crashes were most common in 50 km/h zones. The high number of crashes in 60km/h speed zones could indicate that these crashes are likely to occur in areas in townships but out of the towns CBD areas.



The pedestrian FSI crash hot spots are seen around Morwell and Traralgon.



The data also shows that the majority of FSI crashes involving pedestrians were with cars (92%).

Specific Actions for Pedestrians

Actions which could reduce the number of pedestrians involved are:-

Action	Comments
Pedestrian Facilities	Providing separation between pedestrians and vehicles will minimise the number of accidents. This separation can occur by ensuring footpaths are in place in all key areas, and that the paths are fit for purpose. This will include items such as the widths of paths, crossing locations and surface materials.
Identify areas of significant risk	There are areas where the risk of accident increases, such as high traffic volume areas, areas with inadequate or no footpaths, insufficient crossing points or infrastructure which was installed prior to current standards. High risk areas are to be identified and treatments investigated to overcome the risks.
Minimise Traffic on our Roads	Council has a Tracks, Trails and Paths Strategy which identifies strategic walking path systems with Latrobe City. This strategy is to be updated, and funding sought to implement the actions identified. Specific areas of focus will be on completing walking path loops, in areas of high traffic volume and around specific nodes such as education, recreation and Retail precincts.
Senior Pedestrians	The statistics show that seniors have a higher incidence of accidents than other pedestrian age groups. Work with Seniors groups to identify areas of concern, and develop strategies to mitigate those concerns. Develop an education program on crossings, crossing timings and other areas of concern.

Action Plan

An action plan has been developed to address the issues raised. The Council officer responsible for the implementation of this Action Plan is the Manager Infrastructure Development, however specific coordinators have been nominated within the plan as being responsible to ensure individual tasks are completed within the nominated timeframes.

The timing and priority of the works has been nominated, and correlates to:-

- Short - Within 12 months
- Medium - Between 1 year and 5 years
- Long - Greater than 5 years
- Ongoing - The processes to be put in place within 12 months, and then implemented at least once per year

Each year a report will be submitted to the Management Team detailing the progress against the "Measures of Success".

Safer Roads and Roadside infrastructure

Item No	Theme	Action	Timing	Measure of Success	Responsibility
1.01	Identify areas of significant risk	Update Traffic Engineers Position Description to include the review of crash statistics and identify significant areas of risk	Short	PD Revised	Coordinator Infrastructure Planning
		b) Investigate crash statistics	Ongoing	Process documented Crash Statistics reviewed annually	
		c) Investigate customer feedback to identify locations of risk	Ongoing	Process documented Customer feedback investigated within 20 working days of receipt	
		d) Identify area of risk during regular Asset Management inspections	Ongoing	Process documented to identify high risk areas during Asset Management inspections Identify any areas of high risk during Asset Management inspections	
		e) Identify risks at locations identified and recommend actions to reduce those risks	Ongoing	Risk analysis completed for areas of high risk identified through crash statistics and customer feedback, with recommended actions formulated and costed A prioritised list to be maintained of all locations identified with costs allocated.	
		Seek funding sources to implement actions identified to reduce risks	Ongoing	Funding sought from grant providers and through capital and operating budgets Council to provide funding for Auditing	
1.02	Road Construction Design	Develop process to review all designs for Safe Systems principles	Short	Process to be developed Training provided	Coordinator Infrastructure Planning
		All internal designs to be reviewed	Ongoing	All Capital Works projects reviewed prior to design being finalised	
		Subdivision designs reviewed	Ongoing	Discuss the inclusion of Safe Systems inclusion into the IDM with the IDM Committee All designs reviewed prior to permit	

For more information

Including special requirements such as dietary, auslan interpreting, hearing, augmentation or information in alternative formats, phone Abby Hill, Community Development Officer on 5128 5658 or email abby.hill@latrobe.vic.gov.au

				conditions being established	
1.03	Construction Traffic Management Plans	Develop a process to review Traffic Management Plans for large road construction works	Medium	Process to be developed	Coordinator Civil Works Projects
		Implement process	Ongoing	On site monitoring of all construction to ensure Traffic Management Plans have been implemented correctly	
1.04	Traffic Volume Management	Encourage the use of Bicycles, Walking and public transport in lieu of driving	Short	Advertising campaign developed	Coordinator Infrastructure Planning
		Review and update Bicycle Plan	Short	Bicycle Plan to be updated	
		Seek funding to implement key actions within the Bicycle Plan	Ongoing	Funding to be sought from external as well as internal programs	
		Review and update Tracks, Trails and Paths Strategy	Medium	Strategy to be updated	
		Seek funding to implement key actions within the Tracks, Trails and Paths Strategy	Medium	Funding to be sought from external as well as internal programs	
		Offer to salary sacrifice annual bus and train passes (as for vehicles)	Medium	To be discussed at future Enterprise Bargaining Agreement Negotiations	
Offer to salary sacrifice the purchase of bicycles and related safety equipment (as for vehicles)	Medium	To be discussed in future Enterprise Bargaining Agreement discussions			
1.05	Improved Signage	Prepare Road Signage Policy and Action Plan	Short	Policy developed and approved Action plan developed Training provided Signage Asset Management Plan developed	Coordinator Infrastructure Planning,
		Implement Signage Policy and Action Plan	Medium	Action Plan monitored annually	
		Reduce signage clutter by removing low value signs	Medium	Signage usage to be included in the Policy and Action Plan	
		Consolidate signs to simplify messages	Medium	To be included in Policy and Action Plan	
		Review hazard warning and regulatory signage to ensure appropriateness and condition	Medium	Inspections conducted to review locations and condition Asset Management system updated to record sign inspection data and to direct sign replacement program	

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		Review signage at corners and intersections of high risk to motorcyclists and determine if additional signage is required		Identify corners and intersections of High Risk to motorcyclists Review signage at identified locations Change any signage required if funds available Seek funding to change signage if required	
1.06	Barriers	Identify high risk areas	Short	Process to be documented as to the use of barriers High risk areas identified through Crash Statistics, Customer Feedback and Site Inspections	Coordinator Infrastructure Planning
		Design treatments in high risk areas	Medium	Review identified high risk areas against Safe Systems Principles to determine risk mitigation treatments. Locations of risk mitigation locations to be recorded on central database, including priorities	
		Seek funding to install treatments	Medium	Identify internal and external funding sources and apply for funding Priority List to be reviewed each year as part of the Budget Process	
1.07	Pedestrian facilities	Review road crossing points to address safety issues	Medium	Review crossing point locations and DDA compliance of existing crossings in CBD areas Review CBD areas to review if additional crossing are required Review the requirements of controlled verses uncontrolled crossing points in CBD areas.	Coordinator Infrastructure Design
		Review existing crossing infrastructure to ensure it is adequate	Short	Review all pedestrian and traffic signals to ensure compliance with current codes Through attrition, upgrade existing signals to the latest lighting technology Review all regulatory line marking near intersections and pedestrian crossings	

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				annually Update line marking as required	
1.08	Bicycle facilities	Review bicycle routes to identify and address pinch points	Short	Strategic Bicycle Routes to be identified as part of the Bicycle Plan Paths Asset Management Plan and Asset database to be updated to identify Priority Bicycle Routes	
		Develop infrastructure to reduce the potential conflict between vehicles and bicycles.	Medium	Identify high risk areas of potential conflict between vehicles and bicycles Review areas of risk and design methodology to reduce conflict points Maintain a list of identified treatments with priorities Seek funding to carry out priority works	
		Investigate key locations to provide bicycle parking and storage	Short	Locations of parking and storage facilities identified in the Bicycle Plan Seek funding to provide parking and storage infrastructure	

Safer Vehicles

Item No	Theme	Action	Timing	Measure of Success	Responsibility
2.01	Purchase safe council vehicles	Councils Vehicle Policy to be updated to require purchased/leased pool passenger vehicles be 5 star ANCAP rated. Encourage those with a choice of vehicle to choose a 5 star ANCAP rated vehicle.	Med	<ul style="list-style-type: none"> Vehicle Policy to be updated to nominate 5 star ANCAP rated vehicles for passenger pool vehicles, and to encourage those with a choice to choose a 5 star ANCAP vehicle Statistics to be maintained as to the proportion of 5 star ANCAP vehicles verses those that are not 5 star rated. 	Coordinator Procurement

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2.02	Seek further understanding on vehicle age	Understand the age of vehicles in the community and investigate how this can be improved	Med	<ul style="list-style-type: none"> - Gather statistics on age - Develop a strategy of encouraging the use of newer, safer vehicles 	
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Safer People

Item No	Theme	Action	Timing	Measure of Success	Responsibility
3.01	Driver Education	a) Continue to support and promote the Traffic School	Ongoing	- Traffic School is continued to be supported	Coordinator Infrastructure Planning
		b) Work with other Authorities to have a shared voice over Road Safety Messages	Ongoing	<ul style="list-style-type: none"> - Include Road Safety a standard Agenda Item at regular meetings with other Authorities - Work with other Authorities on road messaging 	
		a) Seek funding to provide education to road users	Ongoing	- Seek external funding to deliver messaging on road safety	
3.02	Motorcyclist Education	a) Seek funding to provide an education campaign	Ongoing	<ul style="list-style-type: none"> - Identify grants funding opportunities for motorcyclist education - Apply for grants as they become available 	Coordinator Infrastructure Planning
		b) Provide education and training with an emphasis on riding with a pillion passenger	Medium	<ul style="list-style-type: none"> - Work with Motorcycle rider groups to develop training and education in regards to pillion passengers - Seek funding to implement training 	
		c) Work with other Authorities to provide education and encourage training.	Ongoing	- Have Road Safety as a standard Agenda Item at regular meetings with other Authorities	

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3.03	Pedestrian Education	a) Work with user groups to identify areas of concern	Medium	<ul style="list-style-type: none"> - Meet with Seniors Groups to identify areas of concern in regards pedestrian safety - Meet with schools, recreation clubs etc to identify areas of concern for younger pedestrians - Review all areas of concern and develop strategies to mitigate those concerns - Develop education programs to help mitigate areas of concern 	Coordinator Infrastructure Planning
		b) Develop and deliver education programs	Medium	<ul style="list-style-type: none"> - Investigate potential funding to deliver education programs - Develop education programs for specific age groups 	
3.04	Bicycle Rider Education	a) Develop an education program for adult cyclists	Medium	<ul style="list-style-type: none"> - Work with other agencies to develop a rider safety education program - Liaise with Bicycle Rider groups to develop and deliver training programs 	
		b) Develop material showing key cycle routes and locations of end of trip facilities	Medium	<ul style="list-style-type: none"> - Update Council website to provide information on bicycle paths and end of trip facilities - Provide brochures and posters to schools, workplaces and public notice boards showing locations of bicycle routes and end of trip facilities 	

Safer Speeds

Item	Theme	Action	Timing	Measure of Success	Responsibility
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No					
4.1	Review Speed Limits in Activity Nodes	a) Review limits in Education Nodes	Short	<ul style="list-style-type: none"> - Identify Education Modes and prioritise locations - Discuss issues with Principals - Review limits - Implement any changes 	Coordinator Infrastructure Planning
		b) Review limits in Retail Nodes	Medium	<ul style="list-style-type: none"> - Identify Retail Nodes and Prioritise - Discuss issues with User Groups/Management - Review speed limits - Implement any changes 	
		c) Review limits in Recreation Nodes	Long	<ul style="list-style-type: none"> - Identify Recreation Nodes and Prioritise - Discuss issues with User Groups/Centre Management - Review speed limits - Implement any changes 	
		d) Review limits in Seniors Nodes	Medium	<ul style="list-style-type: none"> - Identify Seniors Nodes and Prioritise - Discuss issues with User Groups/Centre Management - Review speed limits - Implement any changes 	
4.2	Review Speed Limits in Residential areas in high speed zones	a) Review limits in Low Density Residential Zones	Medium	<ul style="list-style-type: none"> - Review speed limits in all existing developments in Low Density Residential Zone - Review speed limits for all new developments in Low Density Residential Zones, including the impact on existing development 	Coordinator Infrastructure Planning
		b) Review limits in Rural Living Zones	Medium	<ul style="list-style-type: none"> - Review speed limits in all existing Rural Living Zones - Review speed limits for all new developments in Rural Living 	

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				Zones including the impact on existing development	
4.3	Driver Education	a) Utilise Council's speed advisory trailer in key locations	Ongoing	- Speed advisory trailer to be located at key locations at least 1 week per month	Coordinator Infrastructure Planning
		b) Advertise key road safety messages and road rules in the media	Short	<ul style="list-style-type: none"> - Develop key safety messages and rules to advertise - Advertise monthly in Council 1 page advertisement in the Express - Place links to safety messages on Council Website - Seek funding for more targeted advertising campaigns 	

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Appendix 1

**Latrobe City Council
Road Trauma Analysis Report
10 Years July 2007 – July 2017
All Injury Crashes**

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