

# Road Safety Plan

Warren Shire Council 2023

Adopted: 24th August 2023 Minute No. 211.8.23

### **Warren Road Safety Plan**

#### **Mayor's Foreword**

Warren Shire Council in developing this Road Safety Management Plan is committed to reducing road trauma on the local road network throughout the Shire. This will be achieved by adopting Safe System principles and by accepting that people will always make mistakes on our roads, but that fatalities or serious injuries should not occur as a consequence and acknowledging that there are known limits to the forces the human body can tolerate without incurring serious injury. Council agrees that our local road transport system should be designed and maintained so that people are not exposed to potential crash forces beyond the limits of their physical tolerance.

The aim of our Road Safety Management Plan is to understand the road safety risk on the local road network throughout the Shire and to set out both reactive and proactive actions to address the risks. Council with support from our partners aim to implement the actions outlined in this plan and monitor the road safety outcomes of these actions over the term of the plan.

The delivery of the actions set out in the plan are to be achieved as the result of Council and our partners working collaboratively to achieve good road safety outcomes for the people who live, work and travel on the local road network in the Shire.

#### At a glance

Warren Shire Council supports Australian Government's National Road Safety Strategy 2021-2030 and NSW Government's 2026 Road Safety Action Plan. Both plans are underpinned by the quest for zero deaths and serious injury on our roads. The quest for zero is achieved by implementing the Safe Systems approach.

Council is responsible for construction, maintenance, and renewal of its local and regional road network. In addition, 70km of Oxley Highway and 60km of Mitchell Highway pass through the Shire. While we acknowledge that our revenue base is not sufficient to effectively fulfill our obligations, we continue to prudently allocate the available revenue while seeking additional funding from applicable grant programs. We also collaborate with Transport for New South Wales in the maintenance of the 70km of Oxley Highway through the Road Maintenance Council Contract, while advocating for the maintenance of the section of Mitchell Highway.

Each year, 65% of fatalities on NSW roads occur in country areas. Of these, 60% occur on roads with speeds of 100km/h or more. Since over 80% of our road network are made of roads with such high speeds, reducing risks on high-speed rural roads remains our key challenge and priority.

In regional and remote areas there were 10 and 25 road deaths per 100,000 respectively in 2019.

Over the last decade, 12,061 people were killed and 375,000 were seriously injured on Australian roads. The overall cost of road crashes to the Australian economy over the period is estimated at \$300 billion.

#### **Safe Systems Approach**

The approach was pioneered in Sweden and acknowledges the physiological and psychological limitations of humans and puts ultimate responsibility on the designers and operators of the road system to accommodate these human limitations.

**Safe System** philosophy is founded on:

- Ethics no one should be killed on our road network;
- **Crash Force** understanding the survivable forces of the human body in relation to crash types; and
- **Human Error** accepting that humans are fallible and will continue to make mistakes.

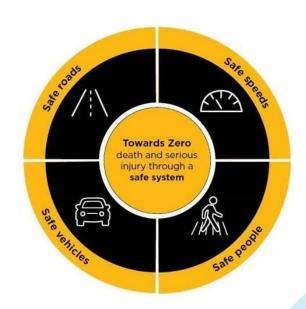
**Safe System** is a road safety approach adopted by Federal and State Government that is promoted to Local Governments to generate improvements in road safety. The Safe System approach is underpinned by three guiding principles:

- people will always make mistakes on our roads but should not be killed or seriously injured as a consequence;
- there are known limits to the forces the human body can tolerate without being seriously injured; and
- the road transport system should be designed and maintained so that people are not exposed to crash forces beyond the limits of their physical tolerance.

Safe System principles require a holistic view of the road transport system and the interactions among roads and roadsides, travel speeds, vehicles and road users. This is an inclusive approach that caters for all groups using the road system, including drivers, motorcyclists, passengers, pedestrians, bicyclists, and commercial and heavy vehicle drivers. Consistent with a long-term road safety vision, it recognises that people will always make mistakes and may have road crashes, but the road system should be forgiving and those crashes should not result in death or serious injury.

Central to the Safe System approach is human tolerance to crash impacts and the management of kinetic energy transfer so these are within survivable limits. The Safe System approach is based on the following four Safe System pillars:

- Safe Roads and Roadsides roads and roadsides are designed and maintained to reduce the risk of crashes occurring, and to lessen the severity of injury if a crash does occur.
- Safe Speeds speeds are managed to complement the road environment and ensure crash impact forces are within human tolerances.
- Safe Vehicles vehicles that lessen the likelihood of a crash and protect occupants and other road users.
- Safe People (road use) road users that are skilled, competent, alert and unimpaired.



**Survivability of Crashes** – the chances of surviving a crash decreases rapidly above certain impact speeds, dependant on the nature of the collision:

Car/pedestrian (vulnerable road users): 30 km/h
Car/motorcyclist (vulnerable road users): 30 km/h
Car/tree or pole (run off road impact object): 40 km/h
Car/car (side impact – right angle): 50 km/h
Car/car (head-on): 70 km/h



Council acknowledges in the assessment of crash risk throughout the local road network in the Shire that any recorded crash of the types listed above that occur in a location that is likely to exceed the associated speed threshold has the potential to result in a higher severity outcome. Therefore, in accordance with Safe System principles all locations identified that demonstrate the risk of a high severity crash outcome will be evaluated and treated on that basis.

#### **Road action plan**

Our strategic actions will be geared towards the safe systems approach to road safety.

Being a remote regional council, we have limited revenue base. We therefore rely on State and Federal governments grant programs to subsidize our available funds. Our action plan identifies focus areas which will be implemented by prudently allocating these funds.

Road safety requires action from all tiers of government, industry and community organizations. Everyone has a responsibility in delivering safer roads, safer vehicles, safer speeds, and safer people.

#### **National government context**

Australian Government has prepared the National Road Safety Strategy 2021-30. The long-term goal of the strategy if zero fatalities by 2050 and zero serious injuries by 2050. By 2030, the strategy aims to reduce fatalities and serious injury by 50% and 30% respectively.

1200 people die on Australia's roads every year. Almost 40,000 people were hospitalized in 2018, which represents an increase of 3.3% per annum from 2013. Of the hospitalized, 25% had high threat to life injuries.

In regional and remote areas, there were 10 and 25 deaths respectively per 100,000 people. In addition, there were 171 and 244 serious injuries respectively per 100,000 people in the same areas.

The overall cost of road crashes to the Australian economy is estimated at \$300 billion.

Through the National Road Safety Strategy 2021-30, the National Government has identified nine priorities towards Vision Zero as follows.

- Governments will focus on designing a Safe System that is future focused
- Governments at all levels will plan and implement network-wide safety improvements
- Better transport options and assistance
- Pursue technological improvements and uptake of safer vehicles
- Support safe movement of freight and passengers and reduce harm to all road users
- Enable safety culture in organisations to take responsibility for vehicles and roads as a workplace.
- Address the over-representation of Aboriginal and Torres Strait Islander people in road trauma
- Provide safe access to all road users
- Increase community understanding of risky road use through education and enforcement

#### **State government context**

Someone is killed or hospitalised every 46 minutes because of a crash on NSW roads. In **2017**, 270 people were killed and 10,412 were seriously injured while using roads in NSW. Trauma from NSW road crashes cost the community over \$9 billion each year.

NSW has been successful over the long term in reducing fatalities. The 2021 annual road toll of 270 deaths was the lowest since 1923. That's more than 1,000 fewer lives lost compared to 1978 when 1,384 people died on NSW roads.

Two-thirds of NSW road fatalities happen on country roads where the fatality rate is approximately four times higher than on urban roads. In contrast, almost two-thirds of serious injuries happen on metropolitan roads.

The challenge for road safety is also that some road users are more vulnerable than others. For example, road users such as pedestrians and cyclists are particularly at-risk because they are less physically protected compared to motor vehicle occupants.

People make mistakes, and unsafe behaviour by some road users also remains a complex challenge including speeding, drink and drug driving, driving whilst fatigued and not using appropriate restraints.

Under the Road Safety Action Plan, NSW Government has identified five priority areas as follows.

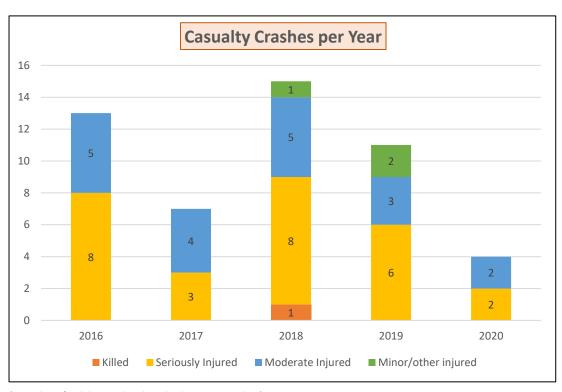
- Creating safer country roads and urban places
- Enhancing road safety in local communities
- Increasing the safety of light vehicles, heavy vehicles and protective equipment
- Making safer choices on our roads
- Ensuring the safety of vulnerable and other at-risk road users

#### **Warren Shire Council Road Safety Risk**

The purpose of the following charts and tables is to provide an understanding of the existing crash risk in the Warren LGA based on the recorded crash history that has occurred on the local road network. This information outlines the key crash severity and crash nature statistics as well as an individual summary of crashes involving vulnerable road users.

The Council acknowledges that this plan is based on a reactive road safety approach. However, proactive road safety approaches are progressively being used such as: AusRAP, utilising the <u>Austroads Infrastructure Risk Rating Tool (IRR)</u> in combination with the Route and Intersection Risk Assessment Tools in <u>Crash Map</u>; working towards developing a '<u>Network Safety Plan</u>' to identify suitable road stereotypes (cross-section and intersection designs) to provide consistent and improved safety outcomes on road networks and corridors; conducting <u>Road Safety Audits</u> on proposed changes to local roads; undertaking Road Safety Inspections at locations of concern; and taking a risk based approach to crash analysis. The long-term aim of the Shire is to work with our partners to develop personal and collective risk crash maps for the Shire to work towards taking a more proactive approach to addressing crash risk.

#### Casualty Crashes per Year

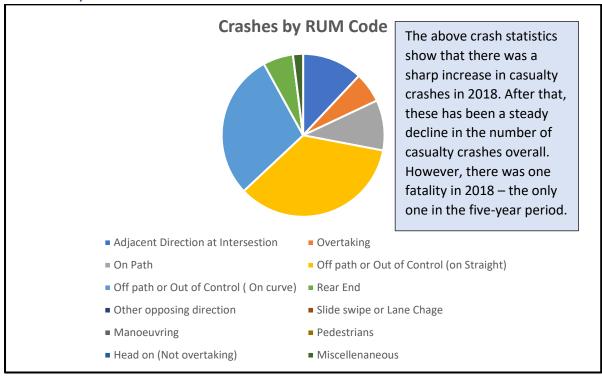


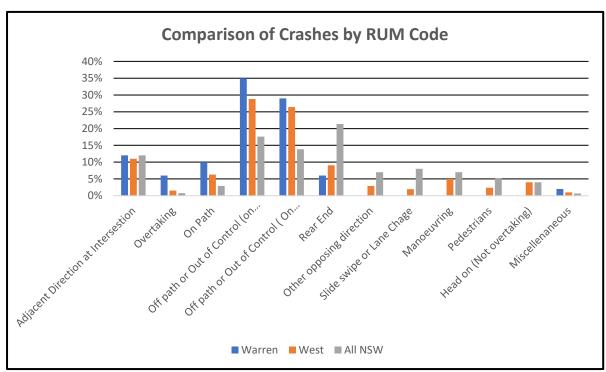
(Casualty – fatal, hospital and medical severity crashes)

#### **All Casualty Crashes by Year**

Degree of Casualty	2016	2017	2018	2019	2020	Total
Killed			1			1
Injured	13	7	14	11	4	49
Seriously Injured	8	3	8	6	2	27
Moderate Injured	5	4	5	3	2	19
Minor/other injured			1	2		3
Total	13	7	15	11	4	50

#### Crashes by RUM Code



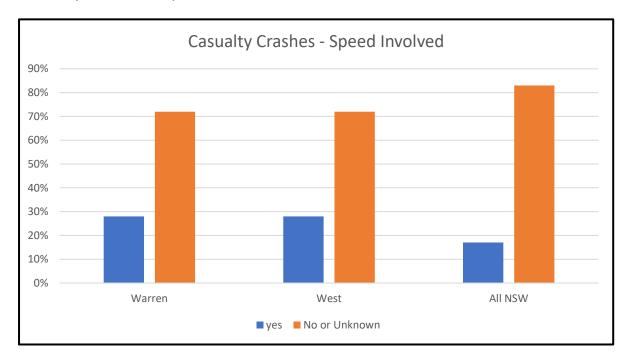


(RUM Code - Road User Movement Code)

The information above shows that the predominant casualty crash nature on the local road network in the Warren LGA are off path or out of control (on straight), followed by off path or out of control (on curve), and adjacent direction at intersection.

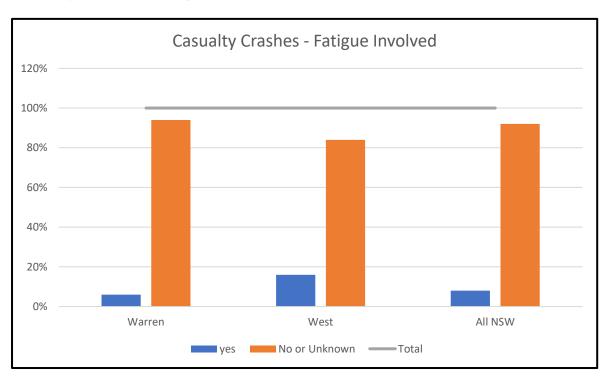
In comparison with West NSW and all NSW, the out of control and on path crash types are disproportionately represented.

#### Casualty Crashes - Speed Involved



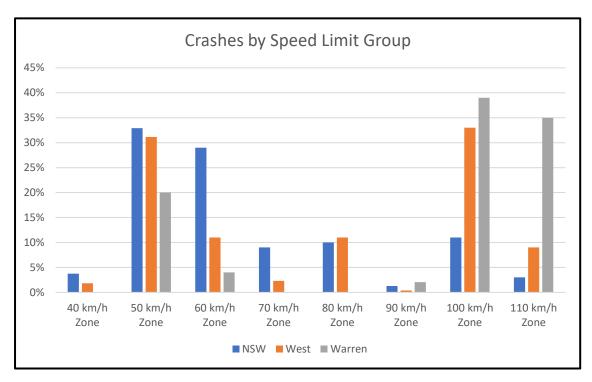
Warren LGA and West NSW have recorded more than state average casualty crashes in which speed was involved.

#### Casualty Crashes – Fatigue Involved



Warren LGA and West NSW have recorded more than state average casualty crashes in which fatigue was involved.

#### Crashes by Speed Limit Group



Majority of crashes in Warren LGA are within 100km/h and 110km/h speed zone.

## **Key Areas of Focus**

#### **Predominant Crash Types**

The review of the recorded crash history on the local road network in the Warren LGA has found that off path or out of control on straights and curves are over-represented when compared to all other casualty crash types. It has been noted also that these crashes occur predominantly in 100km/h and 110km/h speed zones.

The Council plans to focus its efforts on the above predominant crash types when prioritising improvements and conducting maintenance activities on the local road network.

The Council aims to develop a better understanding of the road safety risks on the local road network using available training, tools, and resources.



## **Safe System Actions Implementation**

Safe Roads and Roadsides					
Item	Action	Shire/Partner Commitment	Target		
1.1	Redesign dangerous curve on Tottenham Road, at Tony Quigley Channel Crossing	Warren Shire Council			
1.2	Improve road pavement widths on sealed roads.	Warren Shire Council			
1.3	Remove or isolate trees within clear zones	Warren Shire Council			
1.4	Regularly monitor road condition and take appropriate action including repairs, and installation of warning signs, other forms of community information about dangerous spots etc.	Warren Shire Council			
1.5	Source grant funding for pavement condition improvements.	Warren Shire Council			
1.6	Batter improvements for controlled runoff.	Warren Shire Council			
1.7	Source grant funding for delineation improvements.	Warren Shire Council			
1.8	Conduct road safety assessments to identify potential locations for Black Spot and Safer Roads funding submissions (reactive and proactive site selection)	Warren Shire Council	State Road Safety Strategy Target		
1.9	Conduct high risk route and intersection assessments at known sites of concern	Warren Shire Council / TfNSW	State Road Safety Strategy Target		

Safe Speeds				
Item	Action	Shire/ Partner Commitment	Target	
2.1	Conduct speed monitoring to identify locations or in response to public concern to request potential speed enforcement by NSW Police	NSW Police	Ongoing	



Safe Vehicles				
Item	Action	Shire / Partner Commitment	Target	
3.1	Commitment to purchase five-star ANCAP rated vehicles for the Shire fleet	Warren Shire Council	Entire Vehicle Fleet by December 2023	
3.2	Introduce contractual arrangements to the works tender process to ensure contactors employed by the Shire have vehicles with a minimum ANCAP Star rating	Warren Shire Council	December 2023	
3.3	Introduce daytime running headlights to the Shire vehicle fleet	Warren Shire Council	Entire Vehicle Fleet by December 2023	
3.4	Assist to promote, support and cascade vehicle child car restraint information.	Warren Shire Council / NSW Centre for Road Safety	Biannually	
3.5	Assist to promote, support and cascade safe vehicle information to the public when purchasing a vehicle	Warren Shire Council / Road Safety Commission	Biannually	

Safe People					
Item	Action	Shire / Partner Commitment	Target		
4.1	Assist to promote, support and cascade young driver training.	Warren Shire Council / NSW Centre for Road Safety	Biannually		

