Speed Management Strategy
CONSULTATION PAPER

ROAD SAFETY ADVISORY COUNCIL
TOWARDS ZERO

CONTENTS

In recognition of the deep history and culture of this island, the Road Safety Advisory Council acknowledges and pays respect to Tasmanian Aboriginal people as the traditional and continuing custodians of lutruwita/Tasmania, and we pay our respects to Elders past and present.

MESSAGE FROM THE RSAC CHAIR

Vehicle speed is a major contributing factor to people being seriously injured or killed on our roads. It is both a cause of these serious casualty crashes, and the key determining factor in how serious the outcomes are for those involved - the faster the vehicle speed, the greater the impact, and resulting trauma.

The importance of addressing speed to improve road safety is reflected in Tasmania and nationally through the Safe System approach. This approach recognises that the speed tolerance of the human body in a crash is low. It also acknowledges that people make mistakes. While we can't change human vulnerability, we can continue to make our road system safer.

Under the *Towards Zero Tasmanian Road Safety Strategy 2017-2026*, we set ourselves the target to reduce serious casualties from 300 in 2017 to fewer than 200 by 2026. The reality is, Tasmania is not on track to achieve that goal. In 2023, 36 people were killed and a further 309 were seriously injured on Tasmanian roads.

We need to do more to reduce the crash forces on the human body, and to account for the inevitable mistakes we all make on the road. This aligns with our vision of a future where no one is seriously injured or killed when using the road network.

To help achieve this vision, and meet our road safety commitments, we are developing a Speed Management Strategy. The purpose of the Strategy is to help reduce the number of people who are seriously injured or killed in crashes on Tasmanian roads, by supporting safe and appropriate vehicle travel speeds.

We know from decades of research in Australia and internationally, that if we can support safer vehicle speeds across the road network, it would significantly reduce road trauma and would save lives. Road safety experts agree that effective speed management is a key to reducing road trauma.

Tasmanians are accustomed to speed limits that sometimes exceed the safety capacity of the road network. We must better match speed limits with the inbuilt safety level of infrastructure, with road function, and with human tolerances for crash forces. Achieving safe vehicle speeds does not mean we have to always lower speed limits. But the reality is, upgrading road infrastructure is the only safe way to maintain or increase speed limits on high-speed, high-risk parts of the network.

The Strategy aims to help make the road environment safer and support road users to make safer choices about their vehicle travel speeds. This includes identifying high-risk parts of the road network and ensuring speed limits are appropriate to manage the risk.

Enforcement efforts are another important way to ensure that vehicle speeds are being managed across the network. The evidence is clear that manual and automated enforcement programs are effective in improving road safety. In addition to the 16 mobile traffic enforcement cameras introduced, we will continue to trial innovative ways to increase compliance with speed limits.

We can all play our part to improve road safety in Tasmania. This includes accepting the overwhelming evidence that better managed vehicle speeds is critical to road safety. The Strategy will work to support community understanding about the need for effective speed management. This, combined with promoting safe vehicle technology, will ensure that we have a holistic approach to improving safety for all road users.

The benefits of safer vehicle speeds across the Tasmanian road network go beyond road safety. The evidence from around the world shows that effective speed management can reduce traffic congestion, increase fuel efficiency, improve health and wellbeing, and reduce pollution and CO_2 emissions. It also shows that traveling at safer speeds has much less impact on journey times than expected.

The Road Safety Advisory Council (RSAC) is pleased to lead consultation on the development of the Speed Management Strategy. This Consultation Paper provides information about speed and road safety, what effective speed management is, and the proposed approach for the development of the Speed Management Strategy.

We need your help to make sure the Strategy will be effective in supporting safe speeds on Tasmanian roads. We hope this Consultation Paper, and opportunities to comment, encourages you to have your say about effective speed management – to help us all arrive home safely.

We look forward to hearing your views and feedback on this important road safety issue.

Scott Tilyard

Chair of the Road Safety Advisory Council

HOW TO HAVE YOUR SAY

You can have your say about the Speed Management Strategy approach by going to:

https://engage.stategrowth.tas.gov.au/speed-management-strategy

The Speed Management Strategy consultation website provides you with information about the role of speed and speed management in road safety, and the proposed approach for the development of the Strategy. It also provides the opportunity to have your say on the Strategy.

Make a submission

To make a submission, first read this Consultation Paper, consider the questions that are included on pages 17-21, and then submit your answers through the Have Your Say page on the consultation website. You can write your answers directly in the space provided or upload your written submission.

To direct any queries about this Consultation Paper or the consultation process, contact

speedmanagement@stategrowth.tas.gov.au or

1800 030 688

Submission Deadline

The closing date for the Speed Management Strategy consultation is **10AM, THURSDAY 21 NOVEMBER, 2024.**

INTRODUCTION

As part of the effort to improve road safety, the Tasmanian Government has tasked the Road Safety Advisory Council (RSAC) to develop a Speed Management Strategy (the Strategy). The Strategy is a commitment under the *Towards Zero Action Plan 2020-2024.*

The aim of the Strategy is to help reduce the number of people seriously injured or killed, by supporting safe and appropriate vehicle travel speeds for the whole Tasmanian road network. Speed management refers to the set of techniques and tools that are designed to help achieve safe speeds.

In 2023, Tasmania experienced 345 serious casualties – including the highest number of serious injuries since 2007. The 2023 results are well outside of Tasmania's target of fewer than 200 serious casualties per year by 2026. Over the last 10 years, more than 3,000 Tasmanians have been seriously injured or killed on our roads - this equates to the entire population of towns like Deloraine or Huonville, every decade.

Despite many years of progress in road safety, Tasmania has been above the national road fatality rate average over the last five years. The reality is that you are almost twice as likely to be killed in a serious road crash in Tasmania, compared to the safest road network in Australia.

We know that most casualty crashes occur on higher speed parts of the Tasmanian road network. The evidence is clear that relatively small reductions in network speeds result in comparatively large reductions in people being seriously injured or killed. Better matching of vehicle speeds with the inbuilt safety capacity of the road infrastructure and crash tolerances, is a key speed management objective.

Speed management is underpinned by the core principles of the Safe System approach. These are that, as humans, our bodies are vulnerable to crash forces, and we make mistakes that result in crashes. Under the Safe System approach, people should not have to pay with their lives, or often lifelong injuries, because of inevitable mistakes.

Unsafe vehicle speeds are not just about drivers making risky choices. As a culture, we are conditioned to think speeding is acceptable – this includes either exceeding the posted speed limit, or driving too fast for the road conditions. We have a road network that was originally designed without safety as a priority, we have speed limits that are sometimes too high for the safety standard of the road, and vehicles that can travel much faster than the highest speed limit. Effective speed management needs to support vehicle drivers and riders by helping create a safe speed environment and culture.

This Consultation Paper sets out the evidence for the role that speed plays in our unacceptably high level of road trauma. It also details best practice speed management, and what the experts have told us we need to do to reduce serious casualty crashes. The answer is not always to lower speed limits - we can maintain and even increase speeds if the infrastructure is safe and vulnerable road users are not at risk.

The Paper also sets out the framework for the Strategy and proposes core principles, a set of Action Areas to guide speed management initiatives, and outcomes that can help reduce the number of people seriously injured or killed. It also asks some questions about the Strategy approach and provides an opportunity to have your say on how to best strengthen speed management in Tasmania.

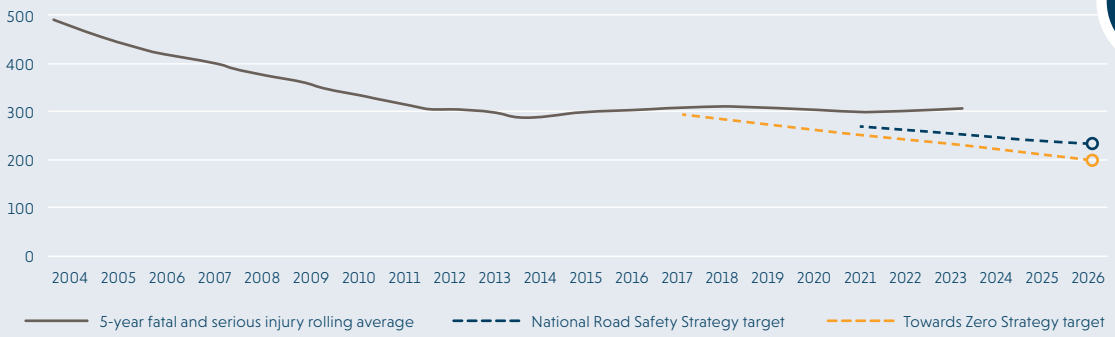
Between 2014 and 2023, more than **3,000 people were seriously injured or killed** on Tasmanian roads.

Vehicle **speed is one of the leading contributors** to people being seriously injured or killed.

Road users are more **likely to be killed on Tasmanian roads** compared to the safest Australian road network.

9 out of 10 serious casualty crashes in Tasmania involve local Tasmanians.

Despite steady reductions over many years, the number of serious casualties on Tasmanian roads has not declined over the last decade.



SPEED MANAGEMENT STRATEGY – PROPOSED APPROACH

The aim of the Speed Management Strategy is to help reduce the number of people seriously injured or killed by supporting safe and appropriate vehicle travel speeds on Tasmanian roads.

Principles

People are at the centre of speed management and our priority is to keep Tasmanians and visitors safe on the road network

Speed limits are set in a way that is clear, easily understood and takes a whole network approach to safe mobility using a Movement and Place framework

Speed management is a holistic approach to improving the safety of the Tasmanian road network

Vehicle speeds are managed to prioritise the health and wellbeing of the community, enabling safe, accessible active transport options, improved public health, and environmental and economic co-benefits

Speed management is a shared responsibility between road managers and road authorities, road users and the whole community

Action Areas

Road and roadside infrastructure that supports safe vehicle speeds

Speed limits that reduce risk and are aligned with the safety level of the network

Enforcement of speed limits to encourage safe road user behaviour

Measures to positively influence community attitudes regarding vehicle speed

Vehicle technology that supports safe travel speeds

Strategy Outcomes

- **Increased guidance** for speed management action on the whole Tasmanian network
- **Increased identification** of safety and speed related risks on the road network
- **Increased alignment** between safety tolerances of network infrastructure and posted speed limits
- **Increased strategic enforcement** of speed limits to reduce network safety risk
- **Increased community support** for safer speeds
- **Increased awareness** of the role of vehicle technology in safe speeds
- **Increased broader benefits** from the implementation of safe speeds

EVIDENCE ABOUT VEHICLE SPEED

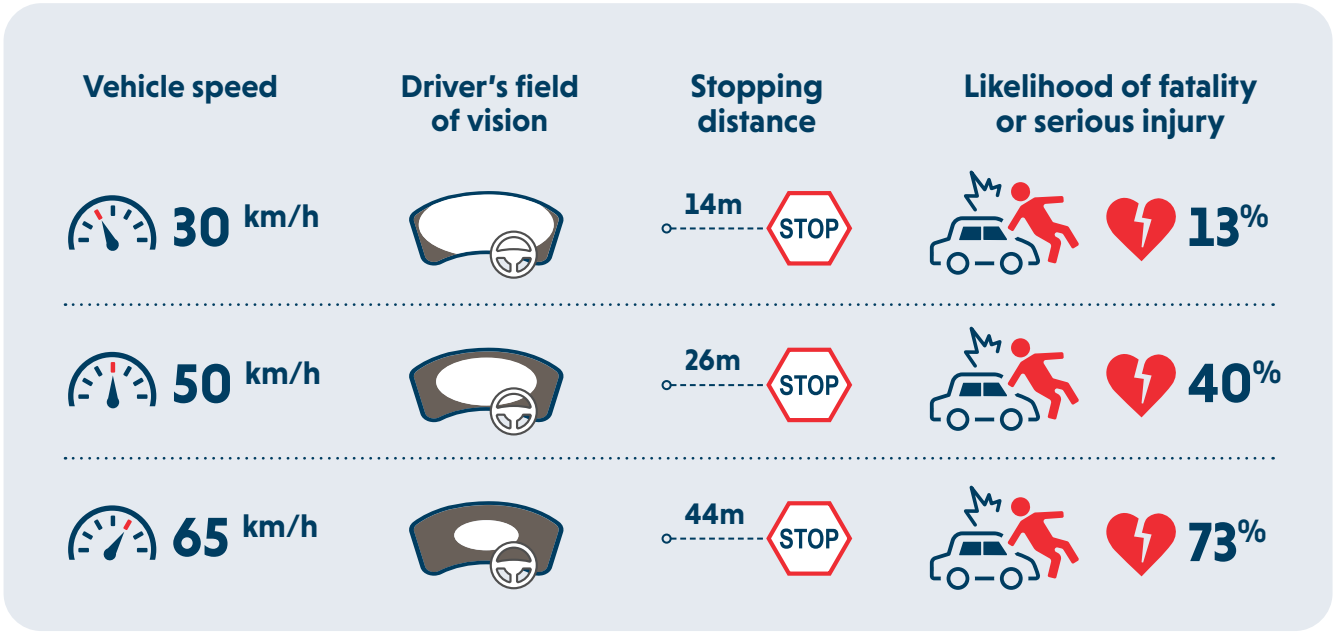
Thanks to decades of research in Australia and internationally, we now understand better than ever, the clear relationship between vehicle speed and road safety outcomes. It increases the chance of being in a crash and it determines how serious a crash will be.

The higher the speed, the greater the time and distance needed to stop. This is because of the reaction time needed to brake and then the braking distance. The stopping distances and potential consequences increase dramatically as speed increases.[1] While stopping distance is influenced by a range of factors, this effect is even greater for wet roads, for heavier vehicles or if a driver is distracted.

At higher speeds it is also more difficult to make safe driving decisions and there is a higher risk of losing control of the vehicle. There is less time to take evasive action due to a decrease in a driver's field of vision and peripheral vision. At 50 km/h, the driver has a field of vision that is less than half that of a driver travelling at 30 km/h.[2] The lower the speed, the more a driver is able to observe the road and environment around them, such as the presence of vulnerable road users.

Survivable speed limits

The effect of speed on driver's field of vision, stopping distance and crash impact.



Source: Guide for Safe Speeds - World Bank 2024

Vehicle speed is the key factor that determines the outcome of a crash, even when speed is not the primary cause. The higher the speed, the more energy and force that is unleashed when a crash occurs. Despite improvements in vehicle safety and road infrastructure, the vulnerability of the human body has not changed. For the vehicle occupants in a serious car crash, for example, fragile organs keep moving inside the body at the same speed as the car until they suddenly stop, causing them to rupture and tear.

Research has been conducted to show the relationship between crash speed and survival. The likelihood of surviving depends on the speed and type of crash. The chance of a pedestrian being killed when hit by a vehicle rises dramatically with increasing speed. An adult pedestrian has a very high chance of survival when hit by a car at 30 km/h.[3] But for every 1 km/h above 30 km/h, the chances of survival drop dramatically. Children and the elderly are even more vulnerable to the impacts of a collision with a vehicle.[3]

Similar estimates have been made for different types of crashes. For a side impact crash between two vehicles, 50 km/h or below is considered to be survivable for vehicle occupants, while for head-on crashes between vehicles, 70 km/h is generally survivable.[4]

Managing speed and the resulting forces released on human bodies in serious crashes is a key to reducing fatalities and serious injuries.

Across a whole road network, research has repeatedly demonstrated the relationship between speed and serious injury crashes. The results of this research show that for every 1 per cent increase in average speed of all vehicles across a road network, there is a 3 per cent increase in the chances of a serious injury crash, and a 4 per cent chance of a fatal crash occurring.[4]

This means that in a typical 60 km/h speed zone, the risk of a serious casualty crash doubles with every 5 km/h increase in speed above 60 km/h.[5] Small changes in speed can result in big differences in road safety at the network level. Reducing speeds on high-risk parts of the network is a key to reducing serious casualty crashes.

Survivable speed limits by crash type

Impact speeds, above which the chances of being seriously injured or killed are more likely.

Crash Type	Impact Speed
Head-on	70 km/h
Side impact	50 km/h

Crash Type	Impact Speed
Side impact with tree	30 km/h
Impact with pedestrian	30 km/h

Wider benefits of Speed Management

The benefits of effective speed management go beyond road safety.[3] Evidence indicates that there are a range of benefits including reducing traffic congestion and increasing fuel efficiency. Travelling at higher speeds – above 80 km/h – increases fuel consumption per distance travelled. While some worry that lower speeds result in more traffic congestion, evidence has shown that reduced speeds, particularly in urban areas, can mean a smoother flow of traffic, allowing for more traffic volume. Less stopping and starting on these reduced speed roads also contributes to reduced fuel consumption.

Speed management can improve public health and wellbeing, and protect environments. Low-speed zones contribute to the liveability of an area, particularly residential locations. This is due to reduced traffic noise from a lower level of vehicle acceleration, which contributes to better physical and mental health.

Reducing vehicle speeds by 10 per cent can cut traffic noise by up to 40 per cent. Speed management promotes safer neighbourhoods, including for children and the elderly. Lower vehicle speeds supports more active living, such as people feeling safer to walk, wheel, and ride. Lower speeds and smoother traffic flow are associated with less pollution and less CO_2 emissions.

Safe vehicle speed can also have an economic benefit. Effective speed management can improve traffic flows, leading to more efficiencies in the movement of people and goods. The research also shows that increases in travel times are often less than expected. On local roads with a reduced speed from 50 km/h to 40 km/h, the travel time over a 10 km section only increases by between 11 to 42 seconds.[3]

Did you know?

Most serious casualty crashes are not due to one cause only.

People often think that if we just eliminate bad driving, we will solve the road safety problem. But the reality is that the vast majority of these crashes involve a chain of events that include multiple failures.

One of the key factors is vehicle speed, which can lead to severe crash outcomes. Speed often combines with other factors, such as driver error, infrastructure risk and unsafe vehicles.

While driver error is an important factor in serious casualty crashes, we know that error is more common at locations where the road infrastructure is less safe. Improving the safety of infrastructure to support current speed limits or matching speed limits to the safety capacity of roads is a core part of speed management.

No driver is perfect, and we all make mistakes. Being killed or seriously injured on our roads should not be the price we pay for human error.

Source: MUARC ECIS Fact Sheet 3: Vehicle safety, speed, and injury severity 2022

WHAT WE KNOW ABOUT SPEED AND ROAD SAFETY IN TASMANIA

Over the last ten years until 2023, there have been more than 3,000 people who were either seriously injured or killed on Tasmanian roads. This includes drivers and riders and their passengers, as well as pedestrians.

We know that the most common crash type is lane departures and that most serious casualty crashes occur in rural locations, including some highways. Rural areas have more of these crashes compared to urban areas, including the majority of those killed – often locals. Most of these types of crashes occur on higher speed parts of the road network – those that are 80 km/h and above.

However, not all roads are the same when it comes to the link between speed and road safety. For example, on the State Road network, roads that have either 90 km/h or 100 km/h speed limits, also have the highest number of serious casualty crashes.

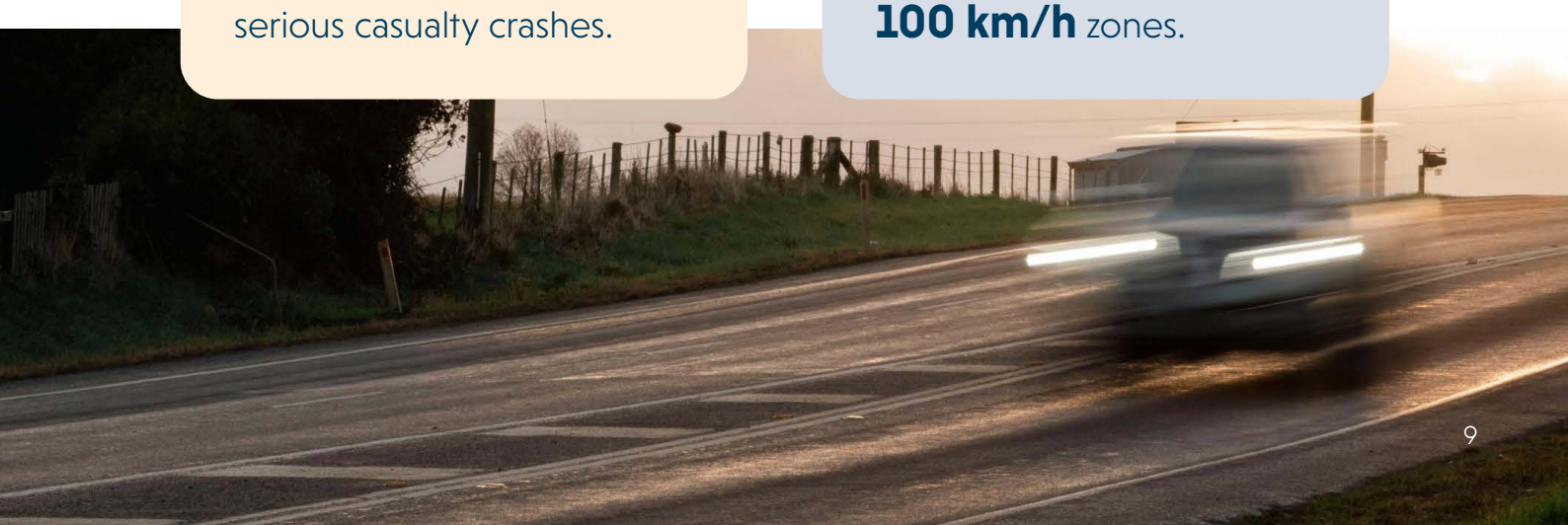
One reason for the high rate of these crashes on certain higher speed roads is likely to be related to infrastructure standards. The roads and highways that have separated lanes have a lower number of serious casualty crashes, whereas three quarters of fatal and serious injuries occur on roads where opposing lanes are not separated.

Almost **two thirds of serious casualty crashes** occur on roads where the speed limits are **80 km/h** and over.

100 km/h speed zones have the highest proportion of **fatal and serious injury crashes.**

Only one in four Tasmanians think that speed is a leading cause of serious casualty crashes.

More than **40% of Tasmanians** think it is acceptable to **speed** in **100 km/h** zones.



Despite the clear evidence for speed's leading role in people being killed or seriously injured, there is a gap between this knowledge and the community's views on speed and speeding.

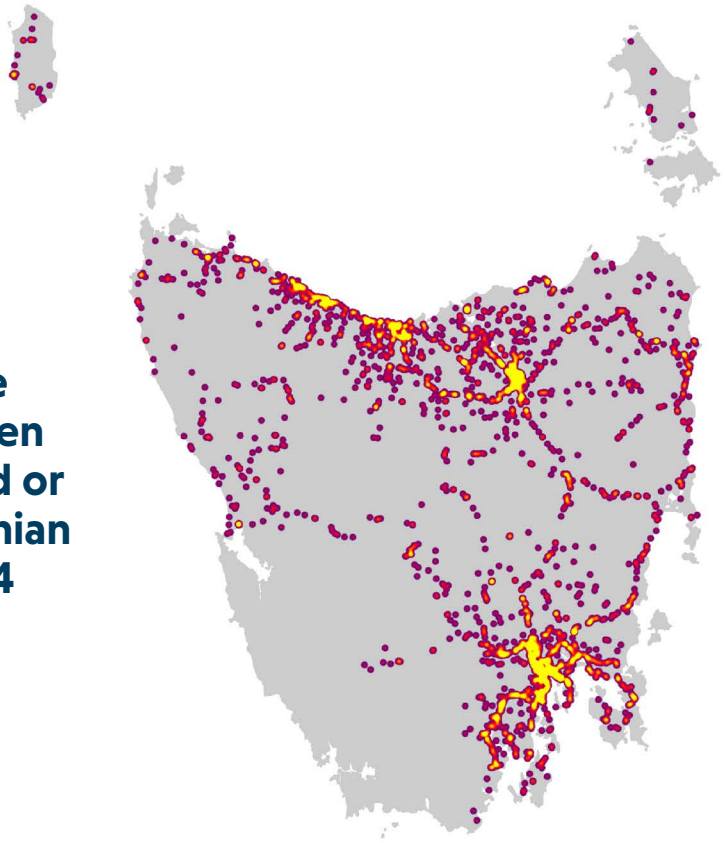
Surveys of the Tasmanian community show that only one in four people think that speed is a leading cause of serious casualty crashes, and most do not consider that driving 10 km/h over the limit is one of the highest risk behaviours.[5]

In terms of acceptability for speeding, 43 per cent of Tasmanians say speeding is justified on familiar roads, 40 per cent that speeding is justified when running late, and 44 per cent think it acceptable to speed in 100 km/h zones.[5]

It can be difficult for many of us to understand the danger we are in on the road. We often overestimate our skill and underestimate the risks involved. Research has suggested that we have an 'optimism bias' that allows us to think that we are less likely than others to be in a road crash. It also means that most people think they are better than average, when this is statistically not possible.[6]

We also know that changing speed limits is a sensitive issue in the community. Survey evidence indicates that community support for lowering speed limits may partly depend on location. Tasmanian respondents to the most recent road safety survey indicated that lowering speed limits was not a high priority to improve their safety. However, a separate survey of Tasmanians showed that around six in ten people (59 per cent) supported lowering speed limits in local neighbourhoods to create safer streets.[7] It is important we understand more about community attitudes to speed and speed management. We must continue to communicate the benefits of a holistic approach to safe speeds, where speed limits are just one part of the overall approach.

Locations where people have been seriously injured or killed on Tasmanian roads 2014-2024



Did you know?

Modern vehicle technology can help people drive safer, not faster.

As speed increases, the likelihood of a crash increases, and the impact becomes more severe - beyond the limit of even the safest vehicle.

Even if drivers feel safe to travel faster due to being in a modern car, it results in a higher risk to pedestrians and other road users.

Safe vehicle speed is a key to reducing road trauma, including for modern vehicles on our roads.

Source Turner et al (2024). Guide for Safe Speeds: Managing traffic speeds to save lives and improve livability. Washington, DC., USA: World Bank & World Resources Institute.

WHAT IS SPEED MANAGEMENT?

Speed management refers to a range of techniques and tools that are designed to achieve safe and appropriate speeds for all road users.

This can include new or upgraded infrastructure, speed limit enforcement, public education campaigns, promoting vehicle technologies, and setting speed limits for safety – that is, limits that are matched to the safety tolerances of infrastructure and people.

Like all jurisdictions in Australia, Tasmania has inherited a road network that was first designed over a century ago. Roads were created to allow for the movement of people and goods, with limited design for safety. Through improvements in our understanding of the safety tolerances of roads and people, we know that some of the Tasmanian road network is not designed for the speed limits that we have become used to over many decades.

Identifying and reducing this mismatch between speed limits and the safety capacity of roads is a key to speed management. While Tasmania is regularly upgrading road infrastructure, the reality is that we cannot improve all of the high-risk roads at the same time. However, infrastructure works are increasingly expensive, and rural roads do not often attract priority funding due to their low traffic volumes. There is a role for the option of reduced speed limits for the high-risk parts of the network that are unlikely to be upgraded.

Some locations, like built up residential and school zones, are important places for vulnerable road users. It is where people walk, wheel and ride, as well as where people live. These locations are not compatible with higher speeds, as the risk of a collision between a vehicle and vulnerable road user is increased, and the result is likely to be much more serious, than at lower speeds.

Speed management is about taking a holistic approach to supporting safe travel speeds on both rural and urban roads. For this to be achieved and supported in our community, we need to use all of the available options that have been recommended by road safety experts, based on years of research. Where one option may not be feasible, we need to use other approaches. Through good speed management, we can help reduce the chance of driver mistakes turning into fatal or serious injury crashes.

While the Strategy will aim to make Tasmanian roads safer, it is one part of the effort to reduce serious casualties on our roads. The Strategy will complement the other key programs that are being delivered under the *Towards Zero Action Plan 2020-2024*.

The Safe System Approach

Our vision for Tasmania's future is where no-one is seriously injured or killed when using the road network.

All Australian jurisdictions have committed to the Safe System approach, developed originally in Europe. The countries with the best road safety records have been using this model for many years and have seen substantial reductions in serious casualties.

The core principles of the Safe System approach are that human bodies are not designed to withstand the crash forces that occur on our roads, and that as road users, we are imperfect and will make mistakes. While safety improvements to road infrastructure and vehicles can help, they do not change the fact - the human body has a low tolerance to crashes at unsafe speeds.

For many years, we have focused on high risk and irresponsible behaviours, like excessive speeding, and drink and drug driving. These are important issues where good progress has been made. The reduction in drink driving behaviour has led to a reduction in serious road crashes. This has been due to high-intensity random breath testing changing the culture around alcohol use and driving. As a community, we now understand the dangers, and drink driving is no longer acceptable as it was many decades ago. We must continue our efforts to limit irresponsible behaviour.

We also know through research evidence that most speeding related serious casualty crashes involve ordinary road users driving less than 10 km/h over the limit.[8] When many thousands of drivers are on the road, each travelling even a few kilometres above a safe speed, it creates a higher risk that crashes will occur. Small increases in driving speed add up across the network.

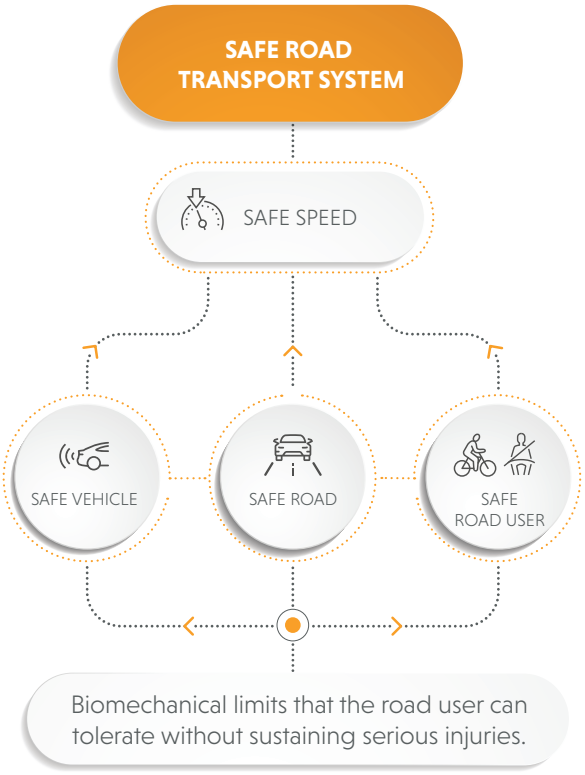
Traditionally, there has been an expectation that if we all just concentrate and do the right thing, we would solve the road safety problem. But the reality is, as humans, we all make mistakes – sometimes driving too fast, losing concentration, or driving when tired. Even the most skilled drivers make mistakes. The cost of this human imperfection should not result in being seriously injured or killed. We all deserve to get to the end of our journey safely.

The Safe System model is a holistic approach where all of the elements – safe road users, safe roads and roadsides, safe vehicles, and being mediated through safe speeds – work together to support safe journeys for all road users. The principles of the Safe System require us to change the way we think about road safety. This includes achieving safe speeds through acknowledging human tolerances, improving the safety features of our roads, strategic speed limit enforcement and community education.

Safe System places people at the centre of road safety and places speed management at the core of a safe and forgiving road network. This means that we must engage with the community to broaden the understanding of the role of speed in serious casualty crashes, and build support for changes to strengthen speed management. We all have a role to play, and the Speed Management Strategy will guide our efforts to keep road users safe.

The Safe System model

Speed is the regulating element of the Safe System approach.



Source: Adapted from Austroads 2024.

Did you know?

Driving at a safe speed matters.

The Enhanced Crash Investigation Study undertook in-depth investigations of 400 people involved in serious vehicle crashes in Victoria.[10] The study found that drivers travelling just 5 km/h above the speed limit were 44 per cent more likely to be involved in a serious casualty crash than those travelling at the speed limit.

It is also important to remember that we have road networks where the posted and default speed limits are sometimes too high for the safety capacity of our roads, our vehicles - and our bodies in the event of a crash.

Achieving safe speeds is part of a holistic approach that includes safe roads, safe road users and safe vehicles.

Source: MUARC ECIS Fact Sheet 3: Vehicle safety, speed, and injury severity 2022

Info Box 1

Infrastructure upgrades to the Midland Highway

- The Midland Highway is a 176 km inter-city highway connecting Hobart and Launceston, and a key part of the national transportation network.
- In 2013, most of the Midland Highway was rated as 1-2 star instead of the 3-star rating that was appropriate for the road on the safety rating scale. The highway had a high crash rate, including loss of control, head-on crashes resulting in serious injuries and fatalities.
- In 2015, work commenced on the Australian and Tasmanian governments' $565 million project to improve safety on the highway through a range of treatments, such as installing safety barriers along the side of the highway and in the middle between opposing lanes, road shoulder sealing, audio-tactile line markings, and overtaking lanes.
- The aim of infrastructure upgrades is to reduce the incidence of serious injury and fatality, and continue to provide a 110 km/h speed limit along much of its length to achieve safe mobility for road users and freight.
- With the upgrade of the Midland Highway to a 3-star national safety rating, the road safety benefits are beginning to emerge. Preliminary crash data shows a significant reduction in serious casualty crashes compared to the number of similar crashes where people were seriously injured or killed in the mid-2000s.
- The Midland Highway project is an important demonstration of the commitment required to keep road users safe and achieve safe mobility on a high-speed road.

Info Box 2

Implementing safer speeds in Hobart

- In 2010, Hobart City Council resolved to apply for safer speed limits on key roads, reducing them from 60 km/h to 50 km/h to improve road safety. This initiative was supported by the State Government as a two-stage initiative. The rationale was based on extensive national and international research showing that reducing speed limits in urban areas results in safer roads for all, including for vehicle users, and vulnerable road users, like pedestrians and cyclists.
- In 2011, Hobart City Council applied to the Transport Commissioner for 14 roads across the municipality to be lowered to 50 km/h. This was approved and implemented in September 2011. Analysis of the speed limit reductions showed that road crashes declined by 15 per cent in the period after their introduction.
- November 2014, the second stage of Hobart City Council's safer speeds project was implemented. Analysis of the speed limit reductions for the second stage showed that road crashes declined by 28 per cent in the period after their introduction.
- A similar improvement in road safety was seen in Glenorchy, when the Council applied for speed limit changes in 2013. The roads that were lowered from 60 km/h to 50 km/h showed a 21 per cent reduction in road crashes.
- The results of implementing safer speeds in Tasmania is in line with similar initiatives and research in Australia showing that better management of vehicle speed is a key to improving road safety for everyone.

WHAT WORKS TO ACHIEVE SAFE SPEEDS

In addition to the role speed plays in serious casualty crashes, we also have extensive evidence for what works in speed management to make our road network safer.

This includes actions that are effective in reducing fatalities and serious injuries, and supporting cultural changes around speed. These are proven actions relevant for inclusion in the Speed Management Strategy. While setting safe speed limits for the high-risk parts of our network is the foundation of speed management, it is just one part of a best practice approach. All of the elements of effective speed management work together to improve road safety.

Setting speed limits that are designed to improve safety

Setting speed limits based on Safe System principles is a proven approach to increasing road safety.[4] A key task is to identify risks on the road network, and then use speed limit setting, among other responses, to reduce the likelihood and severity of crashes. This involves taking a proactive approach to anticipate risk rather than waiting for crashes to occur.

The Safe System approach supports speed limit setting that delivers credible and easily understood changes. Increasingly, countries are considering setting speed limits that reflect the human body's tolerance of crash forces – the 'survivable speed limits'. There are now cities in Australia, Europe, the United Kingdom, and South America either trialling or introducing lower speed limits, including 30 km/h speed limits. These are in high crash risk areas where there are large numbers of pedestrians. Recent evidence shows that these lower speed limits in 40 European cities have resulted in reductions in fatalities and injuries, as well as having broader environmental, and health and wellbeing benefits.[9]

Building or modifying infrastructure to support safer speeds

Safe infrastructure reduces the consequences when a crash does occur. This is especially the case where infrastructure is matched to a safe speed limit.[4] There is a clear role for infrastructure in supporting road users to make safer travel speed choices. This can include lower cost treatments like narrowing lanes, and increased landscaping in neighbourhoods, to let road users know that this is a lower speed area. This is in addition to larger infrastructure initiatives, like median barriers to separate opposing lanes, sealed shoulders and redesigning intersections.

Lowering speed limits is not the only way to support safer speeds on our roads. But the reality is that upgrading road infrastructure is the only safe way to maintain or increase speed limits on high-risk parts of the network.

The challenge for Tasmania, and everywhere else in Australia, is that we cannot upgrade all of the existing network at once.

This is why road managers are focused on analysing road risks, prioritising efforts and delivering infrastructure projects to the parts of the network with the greatest need. But it also means that we must find other ways to address risks and support safer speeds.

Enforcing speed limits

Enforcement efforts are critical to ensuring compliance with speed limits. The evidence is clear that speed limit enforcement saves lives and reduces serious injury crashes.[3] Best practice enforcement includes combining manual enforcement, which involves police officers actively policing speed limits, and automated enforcement, such as mobile speed cameras.

Other automated speed enforcement includes fixed cameras, and either fixed or mobile 'point-to-point' cameras – this measures the average speed of vehicles from one point on the road to another, increasing the coverage area of enforcement. The greater the enforcement effort, the greater the reduction in serious injury crashes.

Communication and public education

Education and communication about safe speeds and speed management approaches helps build public awareness and can address many of the misconceptions about speed. It is important to deliver education on the role of speed in road safety to school aged children, young drivers and the general community. Equally important is best practice guidance for those managing road infrastructure and speed limit setting. We need to promote a shared responsibility to support safe travel speed choices by those using the road network. And this starts with those in charge of managing the roads and roadside environments we all rely on as road users.

We know from the evidence that public education campaigns are most effective when combined with other road safety initiatives, particularly speed limit and other targeted enforcement.[3] Campaigns can be useful in communicating the role of speed in road safety, including that higher speed, relative to the conditions, leads to more serious road crashes. This can help to build community understanding and support for effective and evidence-based speed management measures.

Vehicle technology

Vehicles have become increasingly safer over many years, and there is much potential still for vehicle technology to help improve road safety. Both passive and active safety features in vehicles are important to promote and increase as part of the Tasmanian vehicle fleet.

Passive technologies include airbags and crumple zones, while active vehicle technologies include tools such as intelligent speed assistance and forward collision warning systems, which use sensors and radar to warn the driver or automatically brake to avoid a crash with another vehicle.

While vehicle technologies are rapidly improving, we know that Tasmania has the oldest vehicle fleet of any state in Australia. We can do more to promote the adoption of more modern vehicles, but this will take time, and other speed management measures are required to fill the gap. We must also remember that despite the development of safer vehicles, human vulnerability to crash forces remains the same. Best practice speed management ensures that the road infrastructure and speed limits are designed to match the speed tolerances of human bodies.

Did you know?

Research on lower speeds shows that on arterial roads, in built-up areas, reduced speed limits have little effect on travel times during congestion. It can even help ease congestion by allowing for a better flow of traffic, and reducing the chance of crashes, which cause travel time delays.

Increases in travel times due to reduced speed limits are often less than expected. Increasing driving speed to 65 km/h in a 60 km/h zone only saves 46 seconds over a 10 km journey, but doubles your risk of being involved in a fatal crash. People sometimes worry that reduced speed limits on rural roads will increase fatigue. Crash analysis shows that where speeds have been reduced, there is no increase in fatigue related crashes.

Source: National Road Safety Strategy (2024) Fact Sheet: Evidence to support priority areas. Australian Government.

Source: Austroads (2024) Guide to Road Safety Part 3 – Safe Speed. Austroads Ltd, Sydney

WHAT THE EXPERTS TELL US

In addition to the research on best practice speed management and its benefits, a range of independent, expert recommendations have been provided to the Tasmanian Government on how to improve road safety.

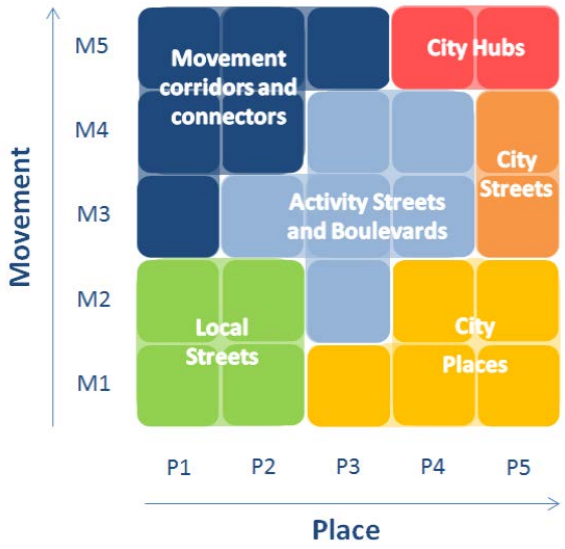
As part of the development of the *Towards Zero Tasmanian Road Safety Strategy 2017-2026*, we received expert advice on improving road safety, including achieving safe speeds across the road network. Of all the interventions modelled, default speed reductions of just 10 km/h would have the biggest effect on reducing road trauma. While the experts recommend this be done across the state, it is acknowledged that blanket lower speed limits are contentious in the community. Alternatives include lowering speeds on specific road corridors and geographical areas, including lowering speed limits to 40 km/h in suburban areas and 30 km/h in high pedestrian areas. Improving road infrastructure is another key recommendation.

In addition to supporting travel speeds that align with best practice road safety, expert recommendations include undertaking assessments to identify the highest risk mismatches between the posted speed limit and the safety capacity of the road. When the option of lowering speed limits is considered, it needs to tackle the high crash risk areas to make change where it counts the most.

Movement and Place

The Movement and Place framework is a key tool in speed management that recognises roads as having dual functions. Some roads, such as highways, are essential for the movement of people and goods, while others are important spaces where people live and work, including vulnerable road users, such as pedestrians and cyclists. The framework aims to balance and integrate these different functions across the road network. It can help identify network risks, as well as guiding speed limit setting and selecting options for infrastructure treatments that deliver a Safe System.

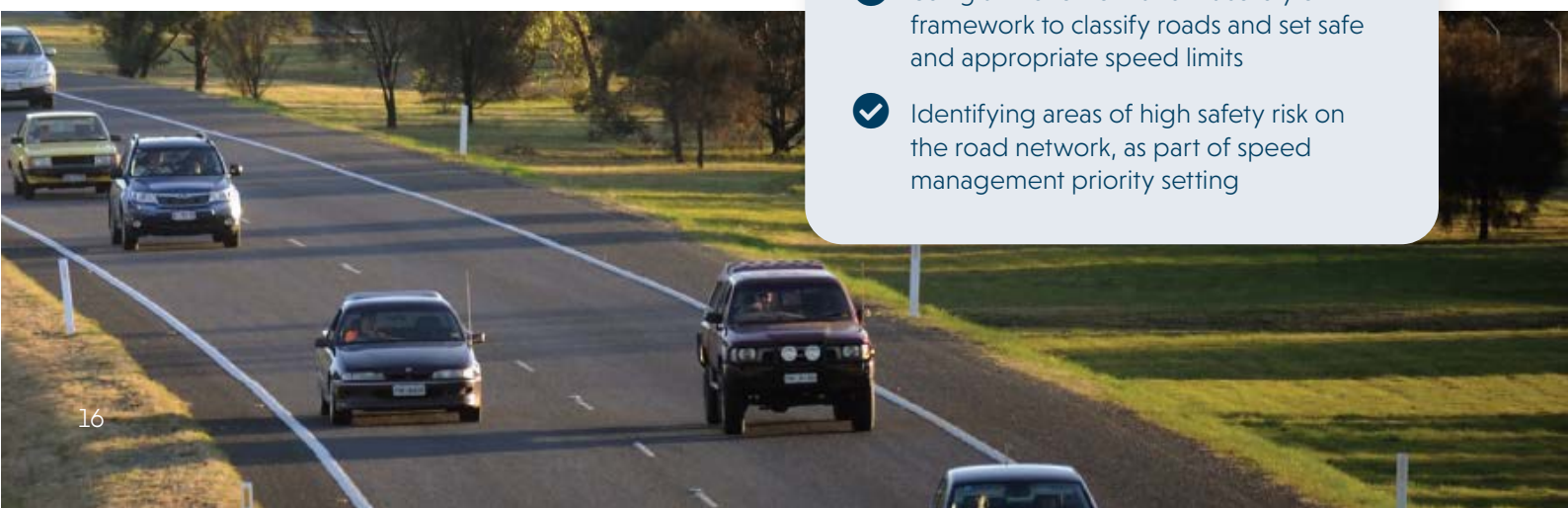
An example of a Movement and Place framework



Source: Austroads 2020

Summary of expert recommendations on speed management

- Building or modifying infrastructure to support safe speeds
- Setting speed limits that are appropriate for the road use and achieve safe mobility for road users
- Enforcing speed limits
- Raising awareness about the role of speed in road safety
- The use of vehicle technology
- Using a 'Movement and Place' style framework to classify roads and set safe and appropriate speed limits
- Identifying areas of high safety risk on the road network, as part of speed management priority setting



SPEED MANAGEMENT STRATEGY – PROPOSED APPROACH

The aim of the Speed Management Strategy is to help reduce the number of people seriously injured or killed by supporting safe and appropriate vehicle travel speeds on Tasmanian roads.

These are speeds that are matched to the safety capacity of our roads and our human tolerances for crash forces. The Safe System approach places the safety of road users at the centre of speed management and is the first priority. At the same time, the Strategy will also recognise that the efficient movement of people and goods is an important priority – this is the goal of safe mobility.

The Strategy will also aim to achieve the wider benefits from effective speed management. This includes reduced traffic congestion, increased fuel efficiency, improved health and wellbeing, and reduced pollution and CO_2 emissions.

At the same time, it is recognised that speed management is only one part of Tasmania's road safety effort. To significantly reduce serious casualties, it requires the whole range of measures that are being delivered under Tasmania's *Towards Zero Action Plan 2020-2024*.

Consultation question 1

What are your thoughts or comments on the aim of the Strategy?

Who is the Strategy for?

The Strategy will be designed for all Tasmanians, providing information about speed, its role in road safety and the actions designed to keep us all safe. It is also designed to support road authorities and road managers in delivering speed management across the Tasmanian road network. Speed management is currently undertaken by both state and local government, and the Strategy will strengthen this effort, particularly supporting local councils to identify risk and implement responses. Tasmania's road safety vision will not be achieved without the engagement and support of road users. This includes identifying potential partners and others who share the vision of safer Tasmanian roads, and who may not have been connected with road safety previously.

How does the Strategy fit into the bigger picture?

The Strategy is one of 42 actions committed to under the *Towards Zero Action Plan 2020-2024* and is designed to support the *Towards Zero Tasmanian Road Safety Strategy 2017-2026* aim of reducing fatalities and serious injuries. The development of a Strategy aligns with the *National Road Safety Strategy 2021-2030* principle of speed management underpinning all other road safety themes. The National Strategy identifies speed management as critical to achieving road safety improvements, and prioritises best practice speed management to address regional road safety, risky road use and to protect vulnerable road users. The Speed Management Strategy is a key priority of the Tasmanian Government and the RSAC.

Strategy scope

The proposed timeframe for the Strategy will be 2025-2030. This aligns with the National Road Safety Strategy 2021-2030 endpoint and provides a sufficient time to track outcomes.

The Strategy will aim to support safer vehicle speeds across the whole Tasmanian road network, including the State Road network managed by the Tasmanian Government, and the local road network, which is the responsibility of each Tasmanian local council. Importantly, almost half of Tasmania's fatal and serious injury crashes (48 per cent) occur on local roads. This is why the Strategy needs to take a statewide collaborative approach to improve road safety.

In Tasmania, speed limit changes for specific road corridors are approved by the Commissioner for Transport pursuant to their statutory role under the *Transport Act 1981*. The Strategy will aim to assist the role of the Commissioner in this independent process. The Strategy will also complement the *Tasmanian Speed Zoning Guidelines* in taking a Safe System approach to managing vehicle speeds across the network.

There are two types of speed limits in Tasmania – default limits and posted limits. Default speed limits are set by legislation and apply where there are no speed limit signs. Default speed limits include 50 km/h in built-up urban areas, 80 km/h on unsealed rural roads, and 100 km/h for sealed roads outside built-up areas. Posted speed limits are determined by the Commissioner for Transport when the default speed limit is considered to be inappropriate. The scope of the Strategy will not include changing Tasmania's default speed limits. The government recognises community sensitivity around default speed limit changes and the need for specific community engagement on this issue if changes were to be considered in the future.

Principles

Under a Safe System approach, people are at the heart of road safety. The goal of speed management is to achieve safe speeds to prevent fatality and serious injury for all road users, while supporting safe and efficient mobility. The wider benefits of speed management are also important.

All parts of speed management are needed and have the greatest benefit when integrated. It also provides a safer approach, so that if one part fails, other elements of speed management will be there to protect road users.

Taking a proactive approach to understanding road safety risks is a key starting point for speed management. A range of data is used to identify speed related risks on our roads to guide speed management action. Examples of data include crash history, road alignment, roadside development, road function and traffic volume. Prioritisation of risk-based action is also informed by need, feasibility, and estimated outcome.

We need safe speed limits so that when inevitable mistakes on our roads do happen, they do not result in people being seriously injured or killed. Safe speed limits also need to be clear and easily understood, as well as providing efficient and functional benefits across the network for all road users.

Individual road users need to obey speed limits and drive with care and to conditions. Those who design, build, manage and regulate roads and vehicles aim to prevent crashes that cause serious casualties. In line with the *National Road Safety Strategy 2021-2030* social model, speed management operates at the systems level and guides engagement across the whole community to influence and support cultural change to achieve safe speeds.

Strategy principles

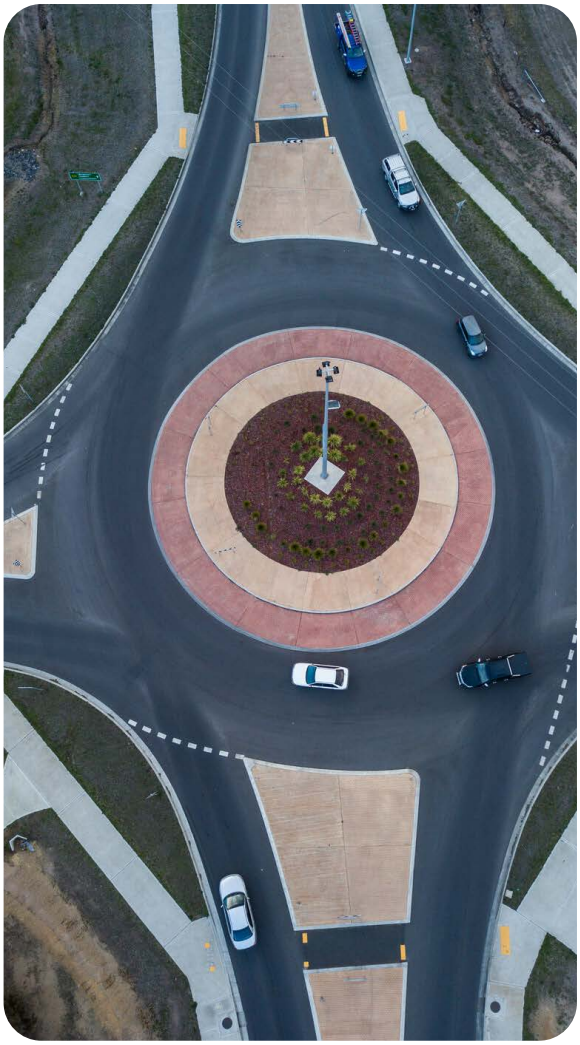
People are at the centre of speed management and our priority is to keep Tasmanians and visitors safe on the road network

Speed limits are set in a way that is clear, easily understood and takes a whole network approach to safe mobility using a Movement and Place framework

Speed management is a holistic approach to improving the safety of the Tasmanian road network

Vehicle speeds are managed to prioritise the health and wellbeing of the community, enabling safe, accessible active transport options, improved public health, and environmental and economic co-benefits

Speed management is a shared responsibility between road managers and road authorities, road users and the whole community



Consultation question 2

Are these principles right or are there other best-practice principles that we should consider in our approach to this Strategy?

ACTION AREAS

There are five key areas of best practice speed management, based on Australian and international evidence. These include infrastructure, speed limits, enforcement, community education and vehicle technology.

The Strategy will aim to include reference to actions currently being delivered within these five areas as well as new initiatives to strengthen safe speed efforts.

Road and roadside infrastructure that supports safe vehicle speeds

The Strategy will ensure that infrastructure design, delivery and maintenance have a strengthened speed management focus. This includes understanding the use of the road, improving identification and management of road safety risks and supporting safe vehicle speeds. It also means identifying opportunities to upgrade infrastructure to support higher speeds where these are needed for the safe and efficient movement of goods.

This action area will also include reference to programs and initiatives that support speed management approaches, such as the Vulnerable Road User Program and the Safer Rural Roads Programs.

A focus will be on improving promotion of infrastructure projects that support safe speeds and reduce crash risks.

Roadside infrastructure includes design measures and modifications located next to the road surface, such as guard rails, barriers and signage.

Consultation question 3

What is your view about this action area?

What else should we be considering in this area to support safe vehicle speeds?

Speed limits that reduce risk and align with the safety level of the road network

It is important that we identify opportunities to implement safer speed limits, particularly in areas to protect vulnerable road users, including children and cyclists. To support this, we aim to use a best practice Movement and Place framework.

Another key area of focus is identifying mismatches between speed limits and the safety capacity of road and roadside infrastructure. This will ensure that speed limits are consistently assessed as being safe and appropriate for the nature, condition and use of roads. For the primary freight and passenger roads, including Tasmania's major highways, in the medium-term, speed limit reductions would only be considered when the mismatch between speed and infrastructure safety represents a substantial risk.

Other priorities include strengthening collaboration with local government to support councils in identifying road safety risk and implementing speed management responses.

Consultation question 4

What is your view about this action area?

What else should we be considering in this area to reduce risk and align speed limits with the safety level of the network?

Enforcement of speed limits to encourage safe road user behaviour

Speed limit enforcement is critical to improving road safety. In Tasmania, automated enforcement, using mobile cameras, complements the ongoing manual speed limit enforcement efforts undertaken by Tasmania Police.

A focus in this area includes ensuring that Tasmania's automated enforcement efforts are guided by best practice speed management, including the priority to reduce network crash risk. This means targeting higher risk locations, with the goal of reducing fatal and serious injury crashes.

Actions will also focus on communicating the importance of speed limit enforcement, and the role played by automated enforcement programs in preventing serious casualty crashes.

Consultation question 5

What is your view about this action area?

What else should we be considering in this area to encourage safe road user behaviour?

Measures to positively influence community attitudes regarding vehicle speed

We need to better understand community attitudes and behaviour around vehicle speed to guide communication and community discussion on speed management. This will include more frequent engagement and collecting views and attitudes towards speed-related issues.

To help the community better understand the role of speed in road safety, there is a place for evidence-informed communication and community education tools.

The Strategy will build on existing community education campaigns around speed, dangers of speeding, and the importance of better managing speed on Tasmanian roads.

Consultation question 6

What is your view about this action area?

What else should we be considering in this area to positively influence community attitudes?

Vehicle technology that supports safe travel speeds

It is important that we continue to monitor the research and ongoing developments in vehicle technology that can support drivers to make safer speed choices. This includes both passive and active vehicle safety technologies.

Opportunities for action in this area include promoting speed-related safety features in vehicles, as well as other technology options to support road users.

Consultation question 7

What is your view about this action area?

What else should we be considering in this area to support safe travel speeds through technology?

Holistic approach to speed management

One of the proposed principles to guide the Strategy focuses on the need to take a holistic approach to speed management. The Action Areas are designed to complement each other as part of an integrated speed management framework. Examples include undertaking risk analysis and using a Movement and Place framework to guide action on both infrastructure and speed limit setting. Effective communication and community engagement is a key part of all Action Areas.

Outcomes

The aim of the Strategy is to help reduce the number of people who are seriously injured or killed, supporting safe vehicle travel speeds on Tasmanian roads – this is the ultimate outcome of best practice speed management. To achieve this, the following outcomes are proposed:

- **Increased guidance** for speed management action on the whole Tasmanian network
- **Increased identification** of safety and speed related risks on the road network
- **Increased alignment** between safety tolerances of network infrastructure, human tolerances and posted speed limits
- **Increased strategic enforcement** of speed limits to reduce network safety risk
- **Increased community support** for safer speeds
- **Increased community awareness** of the role of vehicle technology in safe speeds
- **Increased broader benefits** from the implementation of safe speeds

Consultation question 8

Are these the right outcomes we should be aiming to achieve or are there other outcomes that we should be considering for the Strategy?

These outcomes will be measured through an indicator framework to monitor and evaluate actions and outcomes over the life of the Strategy. They will be developed in line with an implementation plan and with both state and national strategic directions.

A governance structure will guide the development and implementation of the Strategy, and include both government and stakeholder representation.

Consultation question 9

What else should we be including in this Strategy to improve road safety through speed management?

Consultation question 10

Do you have any other views about the approach we are taking in this Strategy?

GLOSSARY OF TERMS

Serious casualty crash	A road crash that results in a fatality and/or a serious injury
Enforcement	Any actions by road authorities directed to road users to achieve compliance with road laws, such as speed limits
Fatal crash (fatality)	A road crash that results in the death of a road user up to 30 days after the crash
Highway	A road, often connecting towns or cities, often with two or more lanes in each direction
Infrastructure treatment	A specific road or roadside design measure or modification to enhance safety, efficiency, and functionality – eg roundabout, line markings, barrier
Lane departure	A type of road crash that is the result of a vehicle leaving the lane it is travelling in
Local road network	The road network that is owned and managed by Tasmanian local councils
Movement and Place	An approach to transport planning, design, and delivery that aims to balance the function of a road between the movement of people and goods, and as a destination in its own right
Road authority	Any organisation or position that has a legal authority to make decisions about a road or road network
Road crash	A crash involving a vehicle on a public road, including motor vehicles, bicycles and trams
Road manager	Any organisation or position that is legally responsible for the management of a road or road network
Road users	Any person who uses the road network, including drivers, riders, and pedestrians
Roadside environment	The land next to the road or shoulder surface that may include public land or the entrances to public or private property
RSAC	Road Safety Advisory Council
Safe and appropriate speeds	Speeds that are best matched to the safety capacity of roads and road users. They are also speeds that are appropriate to a range of factors, including community wellbeing and Movement and Place functions of roads
Safe System	An approach that aims to eliminate fatal and serious injuries for all road users, and has four key areas – Safe Road Users, Safe Roads, Safe Vehicles and Safe Speeds
Serious injury crash	A road crash that involves an injury which results in the person being admitted to hospital, spending at least one night in a hospital bed and subsequently recovering
Shoulder	The area of a road outside the outer line marking or adjoining the sealed edge of the road
Speeding	Driving or riding a motor vehicle at a speed that exceeds the posted speed limit or is too fast for the road conditions
Speed management	A range of actions and tools that are designed to achieve safe speeds for all road users
State road network	The road network that is owned and managed by the Tasmanian State Government
Tasmanian road network	The entire public road network in Tasmania, including both the State road network and local road network
Vulnerable road user	People who use the road network such as pedestrians, including users of mobility devices, cyclists, and motorcyclists, who have little to no protection from the forces released in a crash or collision with a car, bus or truck. Young children and the elderly are particularly vulnerable

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