



2011-2012  
VICTORIAN  
SPEED LIMIT  
REVIEW



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## INTRODUCTION

VicRoads was asked to undertake the Victorian Speed Limit Review by the Minister for Roads Terry Mulder in August 2011.

The Review was designed to simplify Victoria's speed limit system by making speed limits clear, consistent, logical and easy to comply with.

Victorians were urged to have their say about how they would like their roads to be managed and to identify specific locations where speed limits needed to be simplified or altered.

VicRoads received more than 600 submissions from individuals, community organisations, local government and lobby groups.

Using the insights and knowledge provided by the public, VicRoads undertook an extensive consultation process to ensure the final recommendations provided a balance between safety and mobility.

The end result will be a smarter, more consistent speed limit regime for all road users.





## AIMS OF THE REVIEW

### TERMS OF REFERENCE

The Victorian Speed Limit Review investigated:

- routes with large numbers of speed zone changes
- opportunities to reduce the number of speed limit changes
- school speed zones
- strip shopping centre speed zone times
- speed limits in town centres
- use and application of advisory speed signs
- minimum length of speed zones
- consistency of speed limits under similar conditions.

The Review also included an assessment of whether there was a need to change the current guidelines for setting speed limits or how they are used.

The Review did not investigate or question the general philosophy of raising or lowering speed limits, but focused on the application of the rules within the current speed zoning guidelines.<sup>1</sup>



### THE REVIEW PROCESS

Submissions to the Review opened on 30 August 2011 and closed on 11 October 2011.

VicRoads received 614 submissions from individuals, schools, community groups, local councils and lobby groups. (Submissions can be viewed on the VicRoads website: [vicroads.vic.gov.au](http://vicroads.vic.gov.au))

They gave feedback about the speed limit system and identified many sites where speed limits needed to be changed.

VicRoads analysed each submission and visited each location nominated by the public to assess if changes were needed.

This was done in consultation with Victoria Police and local councils.

Further feedback was received from key stakeholders, including the Victorian Government's Speed Limit Advisory Group (SLAG).

SLAG meets regularly to discuss speed limit policy and strategy, and includes representatives from VicRoads, RACV (Royal Automobile Club of Victoria), Victoria Police, the Department of Justice, TAC (Transport Accident Commission), ARRB Group (Australian Road Research Board), MAV (Municipal Association of Victoria), and MUARC (the Monash University Accident Research Centre).

VICTORIA'S  
SPEED LIMITS  
ARE BECOMING  
SMARTER,  
SIMPLER,  
AND EASIER  
TO FOLLOW

## SUBMISSIONS

VICROADS RECEIVED SUBMISSIONS FROM A BROAD RANGE OF STAKEHOLDERS INCLUDING ADVOCACY GROUPS, COMMUNITY GROUPS, SCHOOLS, LOCAL COUNCILS AND THE GENERAL PUBLIC.



OF THE **614** SUBMISSIONS:

**165**

SUGGESTED LOWERING THE SPEED LIMIT AT A SPECIFIC LOCATION

**75**

SUGGESTED THAT PERMANENT 40 KM/H ZONES AROUND SCHOOLS WERE UNNECESSARY

**64**

SUGGESTED RAISING THE SPEED LIMIT AT A SPECIFIC LOCATION

**56**

IDENTIFIED OPPORTUNITIES FOR A REDUCTION IN THE NUMBER OF SPEED LIMIT CHANGES

**51**

SUGGESTED LOWERING SPEED LIMITS IN GENERAL

**50**

ASKED FOR MORE ELECTRONIC SPEED LIMIT SIGNS

**37**

ASKED FOR A FEWER NUMBER OF SPEED LIMITS

**23**

SUGGESTED RAISING SPEED LIMITS IN GENERAL



## SMARTROADS VISION FOR VICTORIAN ROADS

### SMARTROADS

VicRoads is changing the way we use and manage our road network through a unique plan called SmartRoads.

Under SmartRoads, certain routes are managed to give priority to cars and trucks, while others are managed to prioritise public transport, pedestrians and cyclists.

SmartRoads will enable drivers, cyclists, pedestrians and public transport users to avoid pockets of congestion and help with the smooth flow of traffic movement.

SmartRoads is not just about where people are travelling, but also the different times of day that different people are using Victoria's roads.

The SmartRoads philosophy means:

- Trams and buses are given priority on key public transport routes during morning and afternoon peak periods
- Walking is encouraged by providing better pedestrian access at locations and in times of high demand
- Cars are given priority on key routes, and at some locations this will mean travelling around a busy area (rather than through the busy area) so that there is less congestion and better traffic flow
- Bike riding is encouraged through development of the cycling network



- Trucks will have access to the arterial road network but given priority on major transport links during times of lower demand for cars and public transport.

Other changes to the road network are being gradually implemented, such as adjustments to traffic lights to allow extra time for trams and buses, to reduce delays for pedestrians and to assist traffic flow.

WE ARE  
ENSURING  
VICTORIA'S  
ROADS  
CONTINUE  
TO OPERATE  
EFFECTIVELY



## SMARTROADS SMARTER SPEEDS

### SMARTER SPEEDS

VicRoads has included the SmartRoads thinking as part of this Review. The better we understand the function of a road throughout the day, the smarter the speed limit outcomes we can get for the whole community.

The changes that are being made to speed limits in Victoria as a result of this Review focus on simplicity without compromising safety.

These changes are about improving the way that everyone understands speed limits. Most of all, they're about trying to find that balance between ease of movement for traffic, and safety for all road users.

The vision involves smoothing out travel speeds along common routes and allowing road users to choose the rate at which they slow down on the approach to a new speed zone.

It includes fewer options for speed limits, to make the system simpler and easier for drivers to comply with.

It means helping traffic to flow efficiently on arterial and main roads, while maintaining road safety for the community.



We've simplified the speed limit system:

<b>40</b> km/h	Areas with significant pedestrian activity like schools, urban activity hubs (like a busy restaurant strip) and residential areas. Where traffic is often travelling faster than the speed limit, VicRoads will look at physical measures like speed humps, slow points and road markings to encourage drivers to comply with the speed limit.
<b>60</b> km/h	Undivided roads with little or no pedestrian activity and divided roads with a high number of access points.
<b>80</b> km/h	Divided arterial roads with few access points and little or no pedestrian activity. On freeways in some circumstances, such as when there is no emergency lane and on undivided rural roads in circumstances such as where there is a history of crashes or sparse abutting development.
<b>100</b> km/h	Freeways and rural roads. Some high standard freeways will be signposted at 110 km/h.

#### DEFAULT SPEED LIMITS

When a road doesn't have a speed sign, road users are required to travel at the default speed limit. In built-up areas the default is 50 km/h. On the open road the default speed limit is 100 km/h.

Many road users have driven with default speed limits for decades, so it is important to retain this system. Often, the 50 km/h speed limit is not only the default, but it's the most appropriate speed limit for country towns and some metropolitan streets.

The vision sees Victorian speed limits becoming smarter, simpler and easier to follow. This in turn will see better safety outcomes on Victorian roads.



# OUTCOMES

VICROADS USED THE KNOWLEDGE AND EXPERIENCE OF ROAD USERS TO FORM THESE OUTCOMES



# THE PRIORITY WILL BE SITES IDENTIFIED BY THE COMMUNITY

## SIMPLIFY SPEED ZONING IN VICTORIA

**Outcome 1:** Change speed zones at locations identified by the community.

**Outcome 2:** Remove 80 km/h buffer zones and replace with '60 Ahead' signs on the approaches to rural towns.

**Outcome 3:** Review the 90 km/h speed limits on Victorian roads.

**Outcome 4:** Review the 70 km/h speed limits on Victorian roads.

## MAKE SPEED LIMIT SIGNS EASIER TO SEE AND UNDERSTAND

**Outcome 5:** Reduce sign clutter.

**Outcome 6:** Remove or relocate regulatory speed limit signs that are close to advisory speed signs.

**Outcome 7:** Remove 'End Limit' signs and replace with regulatory speed limit signs.

## IMPROVE SPEED LIMITS IN PEDESTRIAN ACTIVITY AREAS

**Outcome 8:** Develop guidelines for 40 km/h pedestrian zones across the state, where and when the risk of a pedestrian crash is high, including school speed zones, strip shopping centres and residential streets.

## HELP ROAD USERS TO UNDERSTAND AND COMPLY WITH SPEED LIMITS

**Outcome 9:** Increase the speed limit on some collector roads to 60 km/h.

**Outcome 10:** Develop awareness campaigns to help Victorians understand how and why speed limits are set.

**Outcome 11:** Increase awareness of Intelligent Speed Assist (ISA) and develop an ISA strategy.

**Outcome 12:** Provide information at locations with speed limits that are unexpected.

## TIMING

The outcomes of the Review will be implemented over four years starting in the 2012/13 financial year. VicRoads will give priority to sites that the community submitted for review.



## OUTCOMES 1 to 4

### WE WILL SIMPLIFY SPEED ZONING IN VICTORIA.

#### OUTCOME 1

CHANGE SPEED ZONES AT LOCATIONS IDENTIFIED BY THE COMMUNITY.

More than 400 specific speed limit locations were reviewed by VicRoads in submissions by local councils, advocacy groups and individuals.

A number of submissions suggested that specific speed limits were too high or too low. Submissions also identified routes with a high quantity of speed zone changes and opportunities to reduce those changes by combining or removing step changes on some routes.

VicRoads has reviewed each of these requests in detail.

We will be making changes to speed limits (in consultation with the local council, Police and TAC) at appropriate locations that were nominated by the community and stakeholders.

Making speed limits consistent and easier to understand will assist road users in their daily journeys.

#### OUTCOME 2

REMOVE 80 KM/H BUFFER ZONES AND REPLACE WITH '60 AHEAD' SIGNS ON THE APPROACHES TO RURAL TOWNS.

As part of the vision for Victorian speed limits, VicRoads will be reducing the number of speed zone changes throughout the state.



Typically, a road user approaching a rural town travels in a 100 km/h zone, which then becomes an 80 km/h regulatory buffer zone (transition zone) before entering the town and its 60 km/h zone.

80 km/h buffer zones were originally designed to help road users gradually slow to 60 km/h or less.

VicRoads believes that replacing the 80km/h zones with advisory "60 Ahead" signs will let drivers know of the upcoming speed zone, without specifying the rate at which they must slow down.

### OUTCOME 3

#### REVIEW THE 90 KM/H SPEED LIMITS ON VICTORIAN ROADS.

In line with the vision for Victorian speed limits, VicRoads will be reviewing all 90 km/h speed limits on Victorian roads.

Having fewer numerical speed limits will make it easier for motorists to comply with speed limits without compromising safety.

There are 220 locations with 90 km/h speed limits in Victoria. Each will be reviewed and gradually replaced with either 80 km/h or 100 km/h, depending on the location. In many cases this will mean removing a 90 km/h speed zone so that a 100 km/h zone can continue unchanged.

In other cases this will mean removing a 90 km/h zone between a 100 km/h zone and an 80 km/h zone, which will allow road users to slow down to 80 km/h at their own rate rather than at the prescribed step-down speed.

This will occur over the long term and, for now, many 90 km/h speed limits will remain on the road network.

### OUTCOME 4

#### REVIEW THE 70 KM/H SPEED LIMITS ON VICTORIAN ROADS.

70 km/h signs will also be reviewed at all 1,872 locations where they are located.

VicRoads aims to replace them with 60km/h or 80km/h on a case-by-case basis after assessing the area where they are operating.

This action will occur over the long term and, for now, many 70km/h speed limits will stay in place.



## OUTCOMES 5 to 7

### WE ARE MAKING SPEED LIMIT SIGNS EASIER TO SEE AND UNDERSTAND.

#### OUTCOME 5

##### REDUCE SIGN CLUTTER.

Many of those who responded to the review suggested there were too many signs on the road network.

Some of these are confusing or unsightly, while others are redundant, the wrong size for their location or give contradictory messages

VicRoads will reduce this sign clutter by reviewing areas where signs are competing with each other and distracting drivers.

#### OUTCOME 6

REMOVE OR RELOCATE REGULATORY SPEED LIMIT SIGNS THAT ARE CLOSE TO ADVISORY SPEED SIGNS.

VicRoads installs advisory speed signs (black numbers on yellow signs) where a lower speed is advised, such as around a tight corner or a series of bends.

It can be confusing where a regulatory speed limit sign that applies along a length of road is installed close to an advisory speed sign.

VicRoads will make speed limits easier to understand by relocating regulatory speed limit signs and advisory speed signs that are too close together.



### OUTCOME 7

REMOVE 'END LIMIT' SIGNS AND REPLACE WITH REGULATORY SPEED LIMIT SIGNS.

On the outskirts of some rural towns there are 'End Limit' signs installed, while the sealed road continues through rural areas. These signs indicate that the speed limit has returned to the default 100 km/h speed limit.

The intention of these signs is to encourage drivers to adopt a safe driving speed and drive to the conditions of the road, up to the default 100 km/h. However submissions and stakeholder feedback has identified confusion around the use of 'End Limit' signs.

VicRoads believes that clearly stating the speed limit to road users is essential to improve the understanding of speed limits.

Where these 'End Limit' signs are located on sealed roads, we will be replacing them with regulatory speed limit signs.

WE ARE  
REDUCING  
SIGN CLUTTER  
ON OUR ROADS.



## OUTCOME 8

### WE ARE IMPROVING SPEED LIMITS IN PEDESTRIAN ACTIVITY AREAS.

#### OUTCOME 8

DEVELOP GUIDELINES FOR 40 KM/H PEDESTRIAN ZONES ACROSS THE STATE, WHERE AND WHEN THE RISK OF A PEDESTRIAN CRASH IS HIGH.

Some locations experience high levels of pedestrian activity at regular and specific times of day. These pedestrians could be school children, elderly people, business people, families or people having a night out.

Pedestrians are more vulnerable to injuries than most other road users; the risk of serious injury to pedestrians significantly increases at vehicle speeds above 40 km/h.

VicRoads believes that where and when the risk of a pedestrian crash is high, a 40 km/h speed zone should be in place. However, once pedestrian activity at these locations decreases, the speed limit can be increased.

This way, road users can be confident that they are slowing down for the safety of pedestrians when necessary.

A number of different types of pedestrian zones already exist on Victorian roads. These include school speed zones, 40 km/h strip shopping centre speed zones, 40 km/h areas in residential precincts and 50 km/h town centre speed limits.

VicRoads is keen to consolidate these different zones to create a consistent set of pedestrian zone guidelines.

#### SCHOOL SPEED ZONES

School speed zones are extremely well accepted and compliance is generally good. When placed near school gates, most road users can easily see the reasons to travel at reduced speeds.

Currently, schools that have a gate on a 50 km/h road have a permanent 40 km/h limit. This means that road users on local roads, even in the early hours of the morning when the school is empty, are required to slow to 40 km/h as they pass the school area.

VicRoads will allow local governments to change permanent 40 km/h school speed zones to time-based 40 km/h zones.



This will allow drivers to travel at 50 km/h at times when there is no pedestrian activity at the school.

VicRoads considers that this approach to the provision of school speed zones provides an appropriate balance between the safety of school children and traffic mobility.

VicRoads will continue to work with schools to educate students about traffic safety and to provide alternate road safety treatments where appropriate.

There are some locations where school children cross major roads that are located some distance away from the school. These new pedestrian zone guidelines will allow 40 km/h pedestrian speed limits to be installed to improve pedestrian safety at these locations.

#### **STRIP SHOPPING CENTRES**

At present, 40 km/h strip shopping centre speed zones are installed across metropolitan Melbourne. VicRoads is keen to create equity between the metropolitan and rural areas and enable 40 km/h speed limits at areas with high pedestrian activity in rural Victoria.

The 40 km/h strip shopping centre speed zones generally operate in one of three standard times. A number of submissions to the Review identified that at some locations these times do not reflect the times of high pedestrian activity.

In the new pedestrian zone guidelines, the hours of operation will be tailored to the operating hours, activity and crash history of each location.

#### **RESIDENTIAL STREETS**

VicRoads will encourage local councils to identify residential areas where pedestrian activity warrants a 40 km/h speed limit.

The new 40 km/h pedestrian zone guidelines will allow local councils to determine where they need to reduce speed limits to protect pedestrians.

THE RISK  
OF SERIOUS  
INJURY TO  
PEDESTRIANS  
SIGNIFICANTLY  
INCREASES AT  
SPEEDS ABOVE  
40 KM/H.



## OUTCOMES 9 to 12

### WE ARE HELPING ROAD USERS TO UNDERSTAND AND COMPLY WITH SPEED LIMITS.

#### OUTCOME 9

INCREASE THE SPEED LIMIT ON COLLECTOR ROADS TO 60 KM/H.

Collector roads provide the link between local residential areas and the arterial road network.

On most collector roads across Victoria, the default urban speed limit of 50 km/h currently applies.

Some collector roads carry a significant volume of traffic and are critical access routes to local areas and supplement the arterial road network.

Where the road infrastructure provides safe conditions and pedestrian and cyclist activity is low, collector roads may be signposted at 60 km/h.

VicRoads will work with local councils to identify these routes to improve mobility to and from local areas.

#### OUTCOME 10

DEVELOP AWARENESS CAMPAIGNS TO HELP VICTORIANS UNDERSTAND HOW AND WHY SPEED LIMITS ARE SET.

The submissions to the Review revealed that many members of the community are confused about the meaning of certain speed signs and the intentions of speed limits.

The submissions suggested that road users would be more comfortable with speed limits if they better understood how speed limits are set and why it is important to comply with them.

VicRoads will undertake an education campaign to help road users understand how speed limits are decided and what they mean.

This includes making drivers aware that speed limits are not necessarily the speed at which they should travel.

Wet roads, congestion and other traffic hazards mean drivers should adjust their speeds to suit the conditions.



### OUTCOME 11

INCREASE AWARENESS OF INTELLIGENT SPEED ASSIST (ISA) AND DEVELOP AN ISA STRATEGY.

ISA is an in-car unit with advanced GPS technology that provides drivers with the speed limit on the road along which they are driving.

The ISA unit links the vehicle's location to a speed limit database and identifies the applicable speed limit. The unit then informs the road user through visual and audio cues.

As ISA technology continues to develop, VicRoads will increase awareness and encourage uptake of the units as an added method of providing simple, accurate speed limit information.

### OUTCOME 12

PROVIDE INFORMATION AT LOCATIONS WITH SPEED LIMITS THAT ARE UNEXPECTED.

The submissions to the Review highlighted that road users are more tolerant of lower speed limits when they understand the reasons for the lower limit.

There are robust scientific and engineering reasons for why we set the speed limits we set. We also understand that road users often have firm ideas about the speed at which they can safely drive in certain road environments.

At locations where reasons for lowering a speed limit may not be immediately obvious to road users, VicRoads will do more to inform road users of the reason for the change.

For example, a number of submissions to the Review suggested that the current 80 km/h speed limit on parts of the Monash Freeway should be higher. In this case, the lack of emergency lanes and the limited sight distance means that 80 km/h is the appropriate speed limit.

VicRoads will place information plates at locations such as these to inform road users of the reasons why exceeding the speed limit is unsafe.

WE WILL  
IMPROVE  
AWARENESS AND  
UNDERSTANDING  
OF WHY WE SET  
THE SPEED  
LIMITS WE SET.



## ISSUES IDENTIFIED OUTSIDE THE SCOPE OF THE REVIEW

A significant number of requests and comments made during the submission period fell outside the scope of the Review. The most common were:

### **SPEED LIMITS AT ROADWORK ZONES**

FOR EXAMPLE, “WHY ARE THERE LOWER SPEED LIMITS WHEN PEOPLE DON'T SEEM TO BE WORKING ON THE ROAD?”

Reduced speed limits and associated signs at roadwork zones are installed to advise road users of changed conditions and to alert them to potential hazards. More importantly, they protect the safety of road workers.

VicRoads continuously improves traffic management practices and compliance with worksite speed limits through its own surveillance activities and via stakeholders including Victoria Police, unions, local councils, Worksafe, the Traffic Management Industry of Victoria and the Civil Contractors Federation.

To make changes in speed limits around roadworks easier to understand and comply with, VicRoads has introduced signs such as '40 Ahead' signs, rather than a series of buffer zones. Any company undertaking traffic management works for VicRoads must be 'prequalified' with VicRoads. This means that staff managing the roadworks are trained to install signs that meet the safety needs of roadworkers while ensuring smooth traffic flow.



If you have a concern about a particular site, please call VicRoads Customer Service at any time on 13 11 71.

#### **RAISING FREEWAY SPEEDS**

FOR EXAMPLE, "WHY CAN'T WE HAVE HIGHER SPEED LIMITS ON OUR FREEWAYS LIKE THE GERMAN AUTOBAHN?"

If we were to increase the speed limits on our roads, we would increase the risk of crashes, add to transport costs through increased fuel consumption and produce higher levels of emissions into the environment.

Meanwhile, the benefits of increasing speed limits on freeways would result in only modest reductions in travel time. For example, increasing the speed limit on a rural freeway from 110 km/h to 120 km/h over a 200 km journey would only reduce the journey time by approximately nine minutes.

Contrary to popular belief, there are speed limits for all traffic on certain sections of Germany's autobahns. German authorities have been changing their approach to speed limits to improve road safety and part of this approach has involved implementing speed limits where previously there were no speed limit restrictions. Most German roads are speed limited under the same principles as Victorian roads, with a 50 km/h urban default speed limit and a 100 km/h rural default speed limits.

#### **SPEED CAMERA TOLERANCES**

FOR EXAMPLE, "WHY IS THERE MORE VARIABILITY IN OUR SPEEDOMETERS THAN IN OUR SPEED CAMERAS?"

To avoid complaints from customers, it is normal for vehicle manufacturers to ensure that vehicle speedometers read higher than the actual speed of the vehicle. Research shows that, in practice, from the early 1990s it is unlikely that the speedometers on new vehicles have an error that will lead to a road user being unfairly accused of exceeding the speed limit.

Since July 2006, the Australian Design Rules for new vehicles have required that speedometers must not display a speed that is lower than the actual speed of the vehicle.

To assist motorists to check their speedometers many councils are now using portable trailer mounted speed advisory devices on local streets. These advisory devices are intended to let motorists know if there are any major discrepancies with their speedometer readings.

There is clear evidence that even a small increase in speed can increase crash risk. For example, a one per cent increase in speed is associated with a three per cent higher risk of a crash involving an injury. In a 60 km/h zone, research shows that for every 5 km/h increase in travel speed above the 60 km/h limit, the risk of being involved in a crash doubles. The magnitude of this problem provides ample evidence for police to set their speed enforcement tolerance at current levels.

THERE  
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THAT EVEN  
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