Speed Zoning Guidelines - making NSW roads safer

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Abstract

Safe travel speed is a vital component of implementing a Safe System. Speed zoning is a tool to
determine safe travel speed limits by providing a balance between road safety, land use amenity and
was undertaken in view of improving road safety outcomes. This review identified a number of areas
which could be significantly improved. This paper discusses the procedures and guidelines relating to
precisely reflect road safety risk while maintaining mobility and amenity. Speed zoning is now more
consistent with road safety performance, roadside environment, road types, and is clearly communicated
to all road users. The new approach to speed zoning is a key step in the development of future speed
management strategies such as Speed Zone Management System and Intelligent Speed Adaptation.

Keywords

Speed, Speed Limit, Speed Zone, Road safety, Safe Systems

Introduction

Purpose of speed limits

Speed limits are one of the oldest and proven strategies for controlling driving speeds and reducing the
road toll. It is necessary to regulate driving speeds as:

- Individual driver’s decisions about speed may be made without adequate consideration of the
effect of their choices on the safety of other road users.
- Inability of drivers to judge vehicle capabilities (e.g., stopping) and to adequately anticipate
roadway geometry and roadside conditions to determine appropriate driving speeds.
- Drivers’ misjudgement of the effects of speed on crash probability and severity.

Speed limit, the maximum legal speed permitted, enables vehicles exceeding the limit to be identified and
the drivers prosecuted, providing a measure of control over drivers who might otherwise travel at an
unsafe speed. The Roads and Traffic Authority (RTA) is the only agency authorised to set speed limits in
New South Wales (NSW). NSW Speed Zoning Guidelines contain the procedures and guiding principles
for setting and reviewing speed limits in NSW.

Evolution of Speed Limits in NSW

Speed limits have evolved over time as communities and practitioners have set different priorities for the
road system. Historically, NSW operated a simple speed limit system of urban and rural default limits,
denoted in miles per hour (mph). The urban default, prior to 1964 was 30 mph (48 kilometres per hour –
km/h) and was applied to any ‘built up area’, usually defined by the presence of street lighting. This limit
was increased to 35 mph (56 km/h) on 1 May 1964. Outside of built up areas, a ‘prima facie’ speed limit
(only enforced in cases where a driver’s speed could be demonstrated to be excessive or dangerous in the
context of prevailing road conditions) of 50 mph (80km/h) was applied [1].

With the onset of metric units, speed limits were converted into km/hour on 1 July 1974, rounded to the
nearest 10 km/h. The default urban limits of 35 mph (56 km/h) were converted to 60 km/h, an increase of
4 km/h (2.5 mph). The prima facie 50 mph rural speed limit became a prima facie limit of 80 km/h. On 1
July 1979, the prima facie speed limit was replaced by absolute limits of 100 km/h. The research evidence
[2] strongly supported the claim that a reduced urban speed limit would produce substantial road safety
benefits and in November 2003 the default urban speed limit was reduced to 50 km/h. During the same
year 40 km/h speed limits were introduced in school zones and High Pedestrian Activity Areas (HPAA).

Table 1 summarises the history of speed limits in NSW.
Table 1 - History of Speed Limits in NSW

<table>
<thead>
<tr>
<th>Year</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre 1964</td>
<td>30 mph (48 km/h)</td>
<td>50 mph (80 km/h)</td>
</tr>
<tr>
<td>1964</td>
<td>35 mph (56 km/h)</td>
<td>50 mph (80 km/h)</td>
</tr>
<tr>
<td>1974</td>
<td>60 km/h</td>
<td>80 km/h</td>
</tr>
<tr>
<td>1979</td>
<td>60 km/h</td>
<td>100 km/h</td>
</tr>
<tr>
<td>2003</td>
<td>50 km/h</td>
<td>100 km/h</td>
</tr>
<tr>
<td>2003</td>
<td>40 km/h in school zones and HPAA</td>
<td></td>
</tr>
</tbody>
</table>

Development of Speed Zoning Guidelines in NSW

Prior to the 1970s, one of the main objectives when setting the speed limits was to reduce the number of excessively fast vehicles in the traffic stream, thereby reducing the variance of speeds within the traffic stream. The probability of being involved in a crash per vehicle-mile was considered to follow a U-shaped curve with speed values around the median speed having the lowest probability [3]. Solomon's research focused on speed variance, and not on actual speed, Evans [4] and Kloeden [5], on the other hand concluded that control of absolute driver speed, and not variability, should be the primary focus of traffic safety regulation as the severity of crashes increased steadily with speed.

An effective and systematic speed zoning process was necessary for improving road safety and public perception. The NSW Speed Zoning Guidelines first published in 1995 and revised in 2004 (Version 2.3) contained the engineering approach to setting speed limits in NSW. Speed Limits were recommended to be set largely to reflect road environment, adjoining development, road design factors and used the 85th percentile speed as a guide.

Issue

The Safe System approach [6, 7], has radically changed the way speed limits should be set. The Safe System philosophy advocated for a safe road system, better adapted to the physical vulnerabilities of its users to prevent road death and disabling injuries. The speed management system as a whole must be based on this philosophy so that avoiding death and injury, becomes an absolute priority. Austroads, the association of Australian and New Zealand road transport and traffic authorities, adopted the Safe System approach and recommended it to all Australasian jurisdictions.

RTA adopted the Safe System approach in 2007 and road safety became mainstream in RTA [8] with road safety targets built into all RTA programs and Road Safety Impact Statements developed for every program.

The NSW Centre for Road Safety undertook a comprehensive review of the NSW Speed Zoning Guidelines, Version 2.3 to improve road safety outcomes. The review identified a number of areas which could be substantially improved. One of the key outcomes was the speed zoning process, sensitive to safe systems approach ensuring an appropriate balance between safety and mobility, and amenity on public roads.

Aims of this paper

This paper discusses the procedures and guidelines relating to speed zoning, incorporated in the new Speed Zoning Guidelines, Version 3 [9]. The review of the NSW Speed Zoning Guidelines, Version 2.3 was undertaken through a comprehensive literature review, speed zone reviews and consultation with community and stakeholders. NSW speed zoning guidelines are to be used for determining permanent speed limits. They are generally in accordance with Australian and Austroads standards and principles to provide consistency throughout Australia. The new approach to speed zoning will make NSW roads safer and is key step to developing future speed management strategies such as Speed Zone Management System and Intelligent Speed Adaptation.
Methodology

Literature review

Problem of speeding

Speeding - which encompasses excessive speed (i.e. driving above the speed limits) or inappropriate speed (driving too fast for the prevailing conditions, which relates to the driver, vehicle, road and traffic mix rather than the speed limit) are almost universally recognized as major contributory factors in both the number and severity of traffic crashes [10].

As the speed increases, so does the distance travelled during the driver’s reaction time and the distance needed to stop. High speeds are also associated with extremely high risks of losing control of the vehicle on corners, curves or if evasive action is needed.

The relationship between vehicle speed and crash severity is unequivocal and based on the laws of physics. The higher the speed in a crash, the greater the amount of kinetic energy that must be absorbed by the impact. Because kinetic energy is determined by the square of the vehicle's speed, rather than by speed alone, the probability of injury, and the severity of injuries that occur in a crash, increase exponentially with vehicle speed. For example, a 30-percent increase in speed (e.g., from 80 to 105 km/h) results in a 69-percent increase in the kinetic energy of a vehicle.

Excessive and inappropriate speed is the biggest road safety problem in many countries [10]. Speed is an aggravating factor in the severity of all crashes as well as being identified as a factor in around 40 percent of fatal crashes in NSW [9].

Relationship between speed limit and fatalities

Researchers have demonstrated that lower travel speeds and death tolls usually follow lowering of speed limits [11] and higher travel speeds and death tolls follow increases in speed limits [12]. During the 1970's energy crisis, the maximum speed limit was reduced across the USA from 70 mph (113 km/h) to 55 mph (89 m/h) and the NHTSA issued a report, pointing out that this reduction in maximum speed had resulted in 16.4 percent drop in fatalities. In 1987, USA lifted the speed limit on rural interstates to 65 mph (105 km/h), which led to 17 percent rise in fatalities [13]. Friedman [12] has found a 3.2% increase in road fatalities attributable to the raised speed limits on all road types in the United States, resulting in 12,500 more deaths on U.S. roads between 1995 and 2005.

Relationship between speed limit and mean speeds

Review and analysis or the available literature suggested that a 10 km/h reduction in speed limit will on average cause a 3-4 km/h change in mean speeds [14]. Analysis of speed limit evaluation studies showed that a higher mean speed reduction can be expected on a high speed limit road than a low speed limit road. Even small reductions in mean speeds result in substantial safety benefits to all road users on the affected roads. The greatest gains were observed in reductions in fatalities and fatal crashes. Pedestrians and other vulnerable road users were a group which particularly benefits from reduced mean speeds and speed limits.

In aggregate terms, minor speeding was found to be more dangerous to the community than excessive speeding. The cumulative effect of a small additional risk multiplied by a high number of drivers results in more casualty crashes, than the cumulative effect of a few drivers who speed by a large margin. Combined with the improved understanding of the effects of speed limit changes on mean speeds, the revised Power Model provides a much more accurate tool for the estimation of the safety benefits arising from lower speed limits [15, 16]. Power Model estimates the effects of changes in average speed on traffic crash incidence and severity. It suggests that a 5% increase in average speed leads to an approximate 10% increase in crashes involving injury, and a 20% increase in those involving fatalities (Figure 1)
The Safe System approach

The Safe System approach accepts that humans will make errors and take risks, and so crashes will continue to occur. In addition, humans have a limited biomechanical tolerance serious injury or death occurs. This relationship results both from the laws of physics and the cognitive abilities of the driver to deal with unexpected (but often predictable) circumstances. With higher speeds, the impact speed in crash increases, as do the forces that the vehicle and occupants must absorb. Higher speeds also mean that road users have a lesser opportunity to take preventive actions.

The Safe System approach aims to promote safe traffic speeds so that if a crash occurs, the impact speed remains below the biomechanical tolerance threshold of the road users. Promoting a successful speed management programme following a Safe-System approach clearly has many benefits. The most obvious one is of course the reduction in the number of deaths and injuries resulting from crashes. This is the philosophy of the Safe Systems approach.

The Safe System speeds have been defined for five most severe crash types and range between 30 km/h and 70 km/h. The key aim is to promote these safe impact speeds and thus minimise the chance of fatal or serious injury. Fildes et al. [17] summarised the biomechanical tolerances of humans for different crash types. Table 2 shows the survivable impact speeds for the most severe crash types.

### Table 2 - Bio-mechanical tolerances and impact speed

<table>
<thead>
<tr>
<th>Crash Type</th>
<th>Impact Speed</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car/Pedestrian or Cyclist</td>
<td>30 km/h</td>
<td>Where there is a mix of vulnerable road users and motor vehicle traffic</td>
</tr>
<tr>
<td>Car/motorcyclist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Car/Pole or Tree</td>
<td>40 km/h</td>
<td>Where unprotected road hazards exist within defined clear zone</td>
</tr>
<tr>
<td>Car/Car (Side impact)</td>
<td>50 km/h</td>
<td>It is advisable to limit approach speeds to less than 50 km/h where there is likelihood of side impact crashes (intersections or access points)</td>
</tr>
<tr>
<td>Car/Car (Head-on)</td>
<td>70 km/h</td>
<td>Where there is no separation between opposing traffic streams, median barriers should be used or speed limits should be kept below 70 km/h.</td>
</tr>
</tbody>
</table>

These figures are based on impact energy levels generally associated with survivable crashes in modern cars. Human tolerances need to be considered in the setting of speed limits.

**Speed Zoning Review Process**

**General**
A revised speed zoning guidelines were developed to incorporate the following key factors for setting speed limits:

- The Safe System philosophy (biomechanical tolerances) relevant to setting speed limits for NSW conditions.
- The relationships between road function, road use, roadside development, road characteristics, traffic mix and road safety performance.
- Determine speed zones which would reflect road safety risk more precisely, while maintaining mobility and amenity.

Based on the above principles, a ten-step procedure was established for reviewing and setting of speed zones in NSW.

**Principles**
The following principles shall be followed when reviewing speed limits:

- Speed zoning in NSW is based on a system of default supplemented by sign posted speed limits.
- Speed limits should be set to promote safety and encourage, as far as possible, a uniform travel speed.
- A lower speed limit, that is speed limits less than 50 km/h, can improve amenity for local communities and will often encourage outdoor activities.
- Speed zone changes should be kept to a minimum, balancing the need for a new speed zone with the possible confusion caused by frequent changes.

**Zone length**
To provide reasonable consistency while avoiding excessive variations in speed limits, a balance needs to be achieved between:

- Roadside development
- Road environment
- The number of changes of speed limit

The desirable minimum typical lengths, shown in Table 3, have been developed with these needs in mind. However the speed limit can now also be reduced through lengths of reduced alignment.

<table>
<thead>
<tr>
<th>Speed limit (km/h)</th>
<th>Desirable minimum typical length of zone (km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>0.2</td>
</tr>
<tr>
<td>50 Default urban limit</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>50, 60</td>
<td>0.5</td>
</tr>
<tr>
<td>70, 80, 90</td>
<td>2.0</td>
</tr>
<tr>
<td>100</td>
<td>3.0</td>
</tr>
<tr>
<td>110</td>
<td>10.0</td>
</tr>
</tbody>
</table>

**Road function**
The road network spans a wide range of road types with different transport functions and mixtures of traffic. Roads also have widely differing crash patterns and speed behaviour. Roads often have more than one use and it is important to identify the key use of the length of road under review.

**Roadside development**
The level of roadside development can influence the speed at which drivers travel. Driver acceptance of reduced speed limits is usually higher when the speed limit is appropriate for the level and nature of adjacent roadside development.
Road characteristics
A variety of road characteristics, such as crash rates, horizontal and vertical alignment, clear zones, medians, lane widths etc, are able to influence the choice of a safe speed limit for a length of road.

Crash rates
A thorough crash analysis, especially of casualty crashes, must be undertaken before adjusting the speed limit for any road length, including examination of possible factors associated with casualty crashes. High crash rates or concentrations of crashes along a length of road are indicators of safety deficiencies. Speed limits that are too high may exacerbate crash rates and injury severity.

Alignment
The speed limit for a section of road that is characterised by closely-spaced curves should be set according to the recommended safe speed of the curves rather than straight sections of road. This guideline applies if the section of winding road is more than 2 km.

Road access
Consider the number and type of access points along a length of road and the adequacy of the sight distance.

Road hazards
Speed limits are generally not recommended for isolated road hazards. However, where a number of hazards occur in proximity to each other over a 2 km or more length of road, a reduction of speed limit may be warranted. A reduction in the speed limit may also be appropriate when there is a more generalised hazard such as a steep gradient.

Intersections including merging, diverging and lane changes
Speed limits through isolated intersections are generally not recommended. Improving sight distance, design layout and warning signs should all be considered to improve safety at the site. The effects of cross traffic, including pedestrians, are generally reflected in the crash rate.

Lane width
Lane width and the road surface condition have a substantial influence on the safety and comfort of road users. Depending on lane configuration and road alignment, a reduction in lane width reduces the lateral clearance between vehicles, which will reduce the traffic travel speed and lane capacity. A reduction of lane width requires consideration of speed limits.

Adjacent speed zones
Take into account the limits on adjacent sections of road and the length of the road section that is to be zoned. Speed limit changes should meet the minimum length criterion shown in Table 2. Excessive fluctuations in speed limits are confusing for drivers and create enforcement difficulties.

Traffic characteristics
The presence of vulnerable road users, such as pedestrians and cyclists, should be taken into consideration when determining the speed limit for a length of road. The speed limit shall be compatible with the pedestrian and cyclist activity and facilities on that length of road.

Setting of Speed Zones
The RTA has responsibility for reviewing and setting speed limits on all roads in NSW. A ten-step process has been created for RTA regional practitioners to review speed limits through a transparent, consistent and accountable way. Key features of ten step process are:

- Objectively respond to community views and concerns related to speed zoning policies and practices.
- Identify and correct speed zoning anomalies.
- Ensure that speed limits keep pace with changes in road use and level of roadside activity.
- Keep the number of speed zone changes along a section of road to a practical minimum.
- Use of a standard and consistent methodology between Regions and practitioners to determine speed limits.
- Consistent correlation of road environments with speed limits.
Responsive to safe system philosophy
Standardised documentation, which assists in satisfying accountability, transparency and quality management requirements.

**Ten Step Process**
The key 10 steps to be considered when reviewing and setting a speed limit are outlined in Figure 2

**Step 1: Receive request or identify the need for speed review**
Community requests or other inquiries have prompted a review of a particular speed limit.

**Step 2: Conduct crash analysis**
Conduct a statistical crash analysis of the length of the road under review to identify crash types and clusters. Determine the scale of the problem – prepare crash rate calculations and compare with established benchmark rates given in Table 3.

**Table 3 - Crash rates and road environment**

<table>
<thead>
<tr>
<th>Development / Road category</th>
<th>Typical crash rate (total crashes per 100 MVK)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Freeway</td>
<td>50</td>
</tr>
<tr>
<td>Urban divided road (4 lanes or more)</td>
<td>165</td>
</tr>
<tr>
<td>Urban undivided road (4 lanes or more)</td>
<td>225</td>
</tr>
<tr>
<td>Urban undivided road (less than 4 lanes)</td>
<td>110</td>
</tr>
<tr>
<td>Rural Freeway</td>
<td>20</td>
</tr>
<tr>
<td>Rural divided road (4 lanes or more)</td>
<td>33</td>
</tr>
<tr>
<td>Rural undivided road</td>
<td>35</td>
</tr>
</tbody>
</table>

* Million Vehicle Kilometres

**Step 3: Conduct first site inspection**
Information about the roadway and its characteristics needs to be collected by inspecting the road. Identify uniform lengths along the road that would be suitable for a single speed limit, taking into account minimum lengths of speed limit zones.

**Step 4: Speed survey (Optional)**

**Step 5: Safe System analysis and consider minimum lengths**

Figure 2: Ten-step speed zone review process
Develop a preferred speed limit considering Steps 1 through to 4 and making sure that it is not more than the recommended speed limit, based on Safe System (Table 4).

Table 4 - Speed limits based on Safe System approach

<table>
<thead>
<tr>
<th>Speed Limit</th>
<th>Type of Speed Limit</th>
<th>Typical Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 km/h</td>
<td>Default urban speed limit</td>
<td>• Default urban speed limit in built up areas</td>
</tr>
<tr>
<td>60 km/h</td>
<td>Length</td>
<td>• Significant urban undivided arterial roads (with direct driveway accesses)</td>
</tr>
<tr>
<td>70 km/h</td>
<td>Length</td>
<td>• Significant urban divided arterial roads (with limited direct driveway accesses)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Urban fringe undivided roads</td>
</tr>
<tr>
<td>80 km/h</td>
<td>Length</td>
<td>• Urban high standard divided roads (without driveway access)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Undivided arterial and sub-arterial roads on the fringes of urban areas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Lower quality rural roads</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Undivided rural roads with less than 5.6m wide sealed pavement or no marked dividing line</td>
</tr>
<tr>
<td>90 km/h</td>
<td>Length</td>
<td>• High volume urban Motorways (Freeways/Tollways). Lower quality rural roads</td>
</tr>
<tr>
<td>100 km/h</td>
<td>Default rural speed limit</td>
<td>Default state speed limits for non-built up areas, unless signposted otherwise. Examples are:</td>
</tr>
<tr>
<td></td>
<td>Length</td>
<td>• Urban Freeway/Motorway</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Rural undivided road with sealed pavement greater than 5.6m</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Rural divided roads</td>
</tr>
<tr>
<td>110 km/h</td>
<td>Length</td>
<td>Maximum allowable speed limit in NSW</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Motorways (Freeways/Motorways) in non-built up areas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• High quality rural divided roads</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Undivided rural road with low traffic volume in western part of NSW</td>
</tr>
</tbody>
</table>

Define end and start points as well as any other changes (such as advisory speed signs) that need to be implemented if the speed limit is changed. Consider also the minimum zone lengths as shown in Table 2.

**Step 6: Consult with stakeholders**
Consultations with stakeholders and make a decision giving consideration to comments received.

**Step 7: Conduct second site inspection, location of new signs**

**Step 8: Speed zone authorization**
A Speed Zoning Authorisation (SZA) must be used to authorise the installation and removal of the main speed limit signs. A database (Speed Zone Management System) incorporating a Geographical Information System (GIS) output shall be maintained indicating the location of all authorised speed limit signs and the zones that these signs create.

**Step 9: Notifications, inform key stakeholders**

**Step 10: Post installation check**
Conduct a post-installation check to ensure all signs were installed and removed as per work instruction.
Main features of revised speed zoning guidelines

The new approach to speed zoning, contained in the *NSW Speed Zoning Guidelines, Version 3* (7 2009) has the following salient features:

- **Less discretion** – The *NSW Speed Zoning Guidelines* give more precise and conclusive guidance of setting a particular speed zone. It does not leave room for much speculation.
- **Clear definitions of contentious terms** - For example clearly defines - regularly used driveways, regularly used private accesses, regularly used intersections, urban fringe etc.
- **Increased minimum lengths** - To provide reasonable consistency while avoiding excessive variations in speed limits.
- **Lengths of reduced alignment** - The speed limit for a section of road that is characterised by closely spaced curves should be set according to the recommended safe speed of the curves rather than straight sections of road.
- **Reflect risk to all road users** - The presence of vulnerable road users, such as pedestrians and cyclists, should be taken into consideration when determining the speed limit for a length of road.
- **Enhance signage** – More repeaters signs and bigger signs on high sped roads are recommended.
- **Speed limit on unsealed roads** - The default state speed limit is often inappropriate for unsealed roads. Unsealed roads in a rural environment can be speed limited to 80 km/h.
- **Non use of 85th percentile speed in setting speed limits** - This measure is useful for designing, implementing and evaluating speed management initiatives to address a speeding problem on a length of road. It does not indicate the safe speed limit.
- **Sensitive to safe systems approach** - The Safe System approach aims to promote safe traffic speeds so that if a crash occurs, the impact speed remains below the biomechanical tolerance threshold of the road users
- **NSW Speed Zoning Guidelines** is a public document for everyone to see the basis of setting speed limits in NSW, satisfying accountability, transparency and quality management requirements (http://www.rta.nsw.gov.au/roadsafety/downloads/nsw_szg_dl1.html).
- **Key to developing future speed management strategies** – It is vital document in the development of future speed management strategies such as Speed Zone Management System and Intelligent Speed Adaptation.

Future directions

Speed zoning principles are now more consistent with road safety performance, roadside environments, road types and are clearly communicated to all road users. A number of knowledge gaps have been identified for further research such as speed management strategies for isolated deficiencies/intersections, policy on setting speed limits for heavy vehicles, relationship between speed limits and delineation/perceptual measures etc.

**Speed Zone Management System (SZMS)**

Speed Zoning Guidelines facilitated the development of a database (SZMS) incorporating a Geographical Information System (GIS) output, indicating the location of all authorised speed limit signs and the zones that these signs create. When fully operational this system will be able to identify the speed limit on any section of public road in NSW. SZMS shall be integrated to RTA administration process so that map is always kept up to date. To enable efficient and reliable approach to map and maintain the data, focus areas and milestones are being established, so that activities can be directed where the need is greatest.

**Intelligent Speed Adaptation**

Intelligent Speed Adaptation (ISA) is the generic name for systems where the vehicle ‘knows’ the speed limit and is capable of using that information to give feedback to the driver (advisory systems) or limit the vehicles’ speed (supportive systems). The successful implementation of Intelligent Speed Adaptation technology is dependent on a reliable spatially referenced speed zone database (Speed Zone Management System).
Performance Management

RTA is accountable to NSW government as the lead agency to deliver, measure and report on road safety. Speed Zone Management System allows the production of speed zone maps. Such maps would be of great benefit for providing speed zone reporting capabilities across the RTA and will be used for conducting regular speed zone reviews reflected to address the public concerns or focus areas established using crash data analysis and research conducted by NSW Centre for Road Safety. It will also enable to monitor and report on level of activity remotely.

Conclusion

The new guidelines more precisely reflect road safety risk while maintaining mobility and amenity. Speed zoning is now more consistent with road safety performance, roadside environment, road types, and is clearly communicated to all road users.

The new approach to speed zoning will make NSW roads safer and will be vital in the development of future speed management strategies such as Speed Zone Management System and Intelligent Speed Adaptation

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