



Traffic Calming Policy

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Responsible officer:	Manager Engineering Services
Policy owner	Traffic & Transport Coordinator

1. Purpose

The objective of this policy is to maintain amenity in local, residential access streets, and to specify a consistent, transparent, and formal process for evaluating traffic conditions on Council roads and traffic calming requests.

Traffic calming involves a variety of treatments that reduce and control vehicle speeds, alter driver behaviour and improve conditions for other users including pedestrians and cyclists.

The Traffic Calming Policy also seeks to establish a balance in policy and resourcing between engineering solutions (applying the safe system approach), education and law enforcement interventions.

2. Scope

This policy applies to Engineering Services staff when assessing requests for traffic calming devices.

This policy is concerned with the provision of traffic calming treatments on Council's local road network. The road types subject to this policy are classified local and collector roads, and exclude the arterial road network.

3. Definitions

Word / Term	Definition
Traffic Calming Device	An engineering device used to reduce vehicle speed. These includes speed humps, raised pedestrian crossing, modified T-intersection, roundabout etc.
Irresponsible Driving	An activity of careless and improper driving, which includes burnouts, tire screeching, street racing and drifting. Often referred to as Hooning.
Vulnerable Road User	Road users who are most vulnerable to serious injury in the event of a crash, typically pedestrians, cyclists and the disabled
Activity Generator	Activity land use generators such as retail/activity centres, schools, parks, residential area are considered in relation to the likely presence of vulnerable road users (pedestrians and cyclists).
Road Authority	The governing body that owns, maintains and manages the road infrastructure asset.

Word / Term	Definition
Local Road	A road that is primarily used to gain access to the property bordering it.
Collector Road	A road of a low-to-moderate capacity that is primarily used to collect traffic from Local Roads and distribute it to Arterial Roads.
Arterial Road	A road of a moderate-to-high capacity that is primarily used to collect traffic from Local Roads or Collector Roads and distribute it to freeways.
85 th Percentile Speed	The 85 th percentile speed is the speed at which 85% of traffic travel at or below, alternative it can be described as the speed at which 15% of traffic exceeds. For example, if a street has a daily volume of 200 vehicles and an 85th percentile speed of 57km/h, then 30 vehicles per day are exceeding 57km/h.
Risk	Involves the calculation of the likelihood of occurrence and the severity of the consequence. i.e. Risk = Likelihood x Consequence
Warrant	A warrant is a statement of those condition at which intervention is considered to be required

4. Identifying the need for Traffic Calming

Resources are best directed to those activities that will alter a proven and serious crash history and lead to fewer deaths and injuries in the future. The Traffic Calming Policy seeks to establish a balance in policy and resourcing between engineering, education and law enforcement interventions in road safety.

Council has an objective method of assessing and prioritising traffic calming requests. The need for traffic calming is evaluated based on the following criteria¹;

1. Road type - whether the road is a Local road or Collector road. Traffic calming devices such as speed humps are generally deemed inappropriate for higher order Collector as the function of these roads in the road network is to move traffic between local and arterial roads at a moderate capacity.
2. Traffic speed - a traffic survey is conducted over a seven-day period to determine the 85th percentile traffic speeds along a length of road.
3. Traffic volume - a traffic survey is conducted over a seven-day period to determine the average number of vehicles travelling on a road per day.
4. Accident history – based reported accident in the last 5 years. This can be sourced from VicRoads and/or the Victoria Police database.
5. Road geometry - whether the road alignment is straight road, on a crest, or has curves and whether sight lines are restricted etc.
6. Vulnerable Road Users – whether there are vulnerable road users such as pedestrians and cyclists.
7. Activity Generators – takes into consideration the location, proximity to retail/activity centres, schools, parks etc.
8. Heavy Vehicles – the percentage of heavy vehicles travelling along the road.
9. 'Rat Running' – Consideration as to whether this a known route where 'rat running' occurs.
10. Length of road – The shorter the length of the road segment, the less likelihood that there are vehicles to generate adequate speed to be of a concern. Traffic calming devices would not be considered for road segments which are less than 200m in length.

¹ It is not mandatory to meet any more than 1 criteria of the 10 criteria listed.

Based on the assessment criteria above, the investigation will derive a total score. The total score in conjunction with the traffic engineer's judgement will determine if the traffic calming devices are warranted. In the event a device is warranted, a business case will be prepared for funding consideration within Council's long term Capital Works Program.

This methodology is recognised by AustRoads as best practice and is being used increasingly by Local Government authorities nationally.

It should be noted that traffic calming measures cannot be implemented in all locations to counter speeding vehicles. The ultimate solution lies in educating motorists about the implications of speeding and effective law enforcement. Uncontrolled implementation of traffic calming can also have widespread implications and negative side effects that lead to additional problems including;

- potential loss of street parking
- increase in noise and fumes adjacent to traffic calming structures due to braking and acceleration of vehicles.
- may adversely affect access for buses, commercial vehicles and emergency vehicles
- uncomfortable for vehicle passengers and cyclists
- increase in traffic volume in neighbouring streets
- increased glare at night from car lights and additional street lighting
- increased maintenance costs to council

It is therefore necessary to consider all implications associated with the implementation of traffic calming measures.

5. Traffic Calming Principles

5.1 Risk

Risk identification is required to determine when Council may consider intervening with the application of traffic calming measures.

Risk is defined as Likelihood x Consequence. An example of the risk rating matrix is shown in the diagram below.

CONSEQUENCE	Insignificant	Minor	Moderate	Major	Catastrophic
LIKELIHOOD					
<i>Almost certain</i>	MODERATE	HIGH	HIGH	EXTREME	EXTREME
<i>Likely</i>	LOW	MODERATE	HIGH	EXTREME	EXTREME
<i>Possible</i>	LOW	MODERATE	MODERATE	HIGH	EXTREME
<i>Unlikely</i>	LOW	LOW	MODERATE	MODERATE	HIGH
<i>Rare</i>	LOW	LOW	LOW	MODERATE	HIGH

Figure 1: Risk Matrix

Example 1: In a residential street, the investigation indicates that the 85th percentile speed along the street is 55km/h (5km/h over the speed limit) and the traffic volume is 500 vehicles per day. It is a straight road segment with clear sightlines and very low pedestrian volumes. The 'likelihood' of a vehicle losing control on a straight resident street (excluding other influences such as drugs or alcohol) is considered "unlikely" and if the vehicle was to lose control, the consequence would be "minor", therefore the risk would be considered as a "low" risk.

Example 2: In a residential street abutting a school, investigation indicates that the 85th percentile speed along the street is 60km/h (20km/h over the 40km/h school speed limit) and the traffic volume is 3,000 vehicles per day. The road segment has a bend with obstructed sightlines. The ‘likelihood’ of a vehicle losing control along this street with obstructed sightlines (excluding other influences such as drugs or alcohol) is considered “possible” and if the vehicle was to lose control, the consequence would be “major” given the locality near/at a school with a high pedestrian volume, therefore the risk would be considered as a “High” risk.

5.2 Applying the Safe System Assessment.

The National Road Safety Strategy is based on the Safe System approach to improving road safety. The Safe System is a road safety philosophy that requires roads to be designed and managed so that death and serious injury are avoidable. The basic principles are;

- Humans are fallible and will inevitably make mistakes when driving, riding or walking.
- Despite this, road trauma should not be accepted as inevitable. No one should be killed or seriously injured on our roads.
- To prevent serious trauma, the road system must be forgiving, so that the forces of collisions do not exceed the limits that the human body can tolerate.

The Safe System philosophy underpins Victoria’s strategic approach to road safety. It is commonly divided into four core interrelated pillars – safer roads, safer speeds, safer vehicles and safer road users. A fifth pillar, post-crash response, has been identified by the World Health Organisation (2011).

Council plays significant role in ensuring that we have safer roads and safer speeds (two of the four core pillars).



Figure 2: The pillars of the Safe System

(Source: Towards Zero 2016/2020 Victoria’s Road Safety Strategy & Action Plan)

Further information VicRoads Safe System Assessment Guidelines can be found on VicRoads website.

5.3 Enforcement

It is widely believed that traffic calming methods, such as speed humps, roundabouts or lower speed limits will reduce hooning. Extensive research and experience across Australia shows that this is not the case. Law enforcement is the single most meaningful method of controlling anti-social behaviour.

Enforcement is defined as a police presence to monitor speeds and issue tickets for violations. It is often used to regulate behaviour and is proven to be quite effective in reducing anti-social behaviours and safer travel speeds (provided the enforcement measures are consistent).

6. Consultation

If a street is deemed to require the implementation of traffic calming devices as determined by this policy, the Engineering Services team will compile a shortlist of appropriate treatments that would be suitable for implementation at the specified location. This list will be derived from those provided in the AustRoads Guide to Traffic Management – Part 8: Local Area Traffic Management. Concept plans and engineering estimates relating to each proposal will be prepared, with consultation to then occur with affected residents.

All residents within the street will be surveyed to determine the preferred traffic calming device. If there is general agreement regarding the proposal, officers will refer the project to Council's long term Capital Works Program for funding consideration into the future.

In the event the proposal is not supported by a majority of residents, the proposal is then further assessed by the Engineering Services team. Consideration may be given to minor treatment such as signage and linemarking as a form to educate the public.

If proposed treatments are located on a bus route, Public Transport Victoria (PTV) and the bus operator will be consulted. Emergency Services operators including Victoria Police, CFA, Ambulance and SES will also be advised of the proposal.

7. Responsibility

The Engineering Services team is responsible for administering and ensuring this policy is complied with.

8. References and links to other documents

- Austroads Guide to Traffic Management – Part 8: Local Area Traffic Management
- VicRoads Supplements to AustRoads Guide to Traffic Management – Part 8: Local Area Traffic Management
- VicRoads Safe System Assessment Guidelines
- Towards Zero 2016/2020