How are speed limits set and reviewed and how does reducing speed limits save lives?

1. What are the standardised guidelines?
   Speed limits are set in accordance with the NSW Speed Zoning Guidelines. These guidelines are developed and applied by RTA’s road safety experts and traffic engineers. The guidelines are based on international and evidence-based best practice in speed management, Australian Standards, Austroads Guides, state legislation, government policies and plans. They are kept up-to-date through incorporating the latest advances in research and technology and integrating road safety objectives and traffic management initiatives.

2. How are speed limits set?
   The fundamental principle in setting speed limits for a particular length of road is that the established speed limit should reflect the road safety risk to the road users while maintaining the ability of people to easily get to their destination.

   Key factors considered in the establishment of a speed limit include crash profile, road function, road use, roadside development, road characteristics, traffic mix, crash history and the presence of vulnerable road users, such as pedestrians, motorcyclists and bicycle riders. Other factors may also include the number, type and frequency of driveways and intersections which indicate potential conflict points. These potential conflict points are considered because they allow vehicles to turn across traffic where there is the chance of a severe ‘t-bone’ type crash occurring.

   In setting speed limits the principles of the ‘Safe System’ are taken into account (see Question 4).

3. What is the ‘Safe System’ approach?
   The adoption in 2007 of a national Safe System approach in Australia by all our state governments as well as New Zealand, represented a significant shift in thinking about road safety. The Safe System approach recognises that even with the best efforts of prevention by road users, road crashes will still occur – therefore, the road system must be designed to be more forgiving of human error. Managing speed to keep the crash forces to survivable levels is the key to road safety and the Safe System approach. For more information, see Fact Sheet 6 in this series.

4. Are speed limits ‘set in stone’?
   Speed limits have evolved over time as communities and road experts have set different priorities for the road system. At various times speed limits have been increased and decreased in consideration of the road safety impact of the changes. For example, in 1979 the open road speed limit was increased from 80km/h to 100km/h. In 2003, the default urban speed limit was decreased from 60 km/h to 50 km/h resulting in a 20 per cent reduction in pedestrian injuries.
5. Can the speed zone on a particular length of road be changed?
The NSW road network is a dynamic system. The critical parameters considered in the establishment of a speed zone may change over a period of time, so it is important for speed limits to be periodically reviewed to ensure the adopted speed limits for a particular road reflects the current risk to the road users. The RTA has teams who constantly monitor and review the lengths of NSW road network for correct speed limits.

In 2011, the RTA made it easier for the community to take an active role in providing their feedback on speed limits and speed zones in NSW to help inform road safety practitioners when analysing data and the possible need for change. Visit the Safer Roads NSW web page at www.rta.nsw.gov.au and also see Question 8 for more information.

6. Why do the speed limits seem lower than they could be?
Factors, such as crash history, which greatly influences the setting of a speed limit for a particular length of road may not be immediately apparent to road users who may not appreciate the level of risk associated with speed relative to that road. The RTA has made extensive efforts to ensure that speed zoning is consistent throughout the state and accurately reflects the safety risk on a given length of road.

7. I am not happy with the speed limit in my area. Can I ask for a review?
Yes. Any member of the public, police, the local council, advocacy groups, etc, can make a formal request in writing to the Roads and Traffic Authority (RTA) to review the speed limit.

However, you can now also have ‘Your Say’ and make a submission about a speed limit or speed limit sign by visiting the RTA’s new Safer Roads NSW website at www.rta.nsw.gov.au. This site contains an interactive map and in three easy steps you can let us know where you think there might be issues for speed limits and speed limit signs. The information you provide is directly received and considered by the RTA’s road safety experts and other road practitioners. Combined with other comments, crash data and other road safety engineering information, this feedback will help determine the priority of roads that may require a speed zone review.

8. What difference do small changes to speed limits make?
Extensive research has shown that even modest reductions in travel speed will result in substantial reductions in the incidence and severity of road crashes. A report from Monash University states that lowered average travel speeds brought about by a reduction in speed limits in urban and metropolitan areas will bring about a considerable reduction in road trauma. A study conducted by the Organisation for Economic Co-operation and Development (OECD) and the European Conference of Ministers of Transport (ECMT) has concluded that reductions in average speed of approximately five per cent would yield a reduction in fatalities by as much as 20 per cent.

There was a 26 per cent reduction in casualty crashes on the Great Western Highway when speed limits were reduced from 110 km/h to 100 km/h in 2000 (Bhatnagar et al). Similar reductions in speed limits on Victorian freeways led to an estimated 19 per cent reduction in the casualty rate.

International research (Woolley) has also demonstrated that lower travel speeds and death tolls usually follow the lowering of speed limits. During the 1970’s energy crisis, the maximum speed limit was reduced across the United States of America from 70 miles per hour (113 km/h) to 55 miles per hour (89 km/h). The National Highway Traffic Safety Administration reported that this reduction in maximum speed resulted in a 16.4 per cent drop in fatalities from 54,052 in 1973 to 45,196 in 1974.

9. More information/contact details
For more information on speed zones and to ‘Have Your Say’ on speed limits and speed limit signs, visit the RTA’s new Safer Roads NSW website at www.rta.nsw.gov.au.

References:
