



## RAA Group

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24/12/15

Mr Bryan Ruhle  
Transport Engineer  
City of Charles Sturt Council  
PO Box 1  
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### THE CASE FOR REDUCED SPEED LIMITS ON LOCAL ROADS

Dear Mr Ruhle,

We refer to your letter dated 13 October 2015 and would like to firstly apologise for the delay in our response. RAA would like to thank the City of Charles Sturt for the opportunity to provide comment for the Council's discussion paper and would offer the following comments on the subject of 50km/h to 40km/h speed reductions.

#### Appropriateness of the default urban speed limit of 40km/h for local streets

RAA do not support blanket approaches to speed limit reductions and believe that when speed limit reductions are considered, each road should be considered on a case by case basis that examines the risk factors along the road. The factors should include but are not limited to:

- 85<sup>th</sup> percentile speed of the road;
- Current infrastructure and level of safety built into the road; and
- Road geometry and road environment.

The latter is particularly important since these factors influence the motorists perception of an appropriate speed along a road, ultimately determining the 85<sup>th</sup> percentile speed. We cite some of the research in this field in our 2014 AITPM Conference Paper – [Developing an Approach to Speed Management on the Rural Road Network](#). In terms of 40km/h zones, we only support such reductions in heavily pedestrianised areas, where there are a high number of vulnerable road users and there is clear definition of the risks by way of the road environment, for example shared zones, dense shopping centre or café precinct.

#### Risks of Introducing Lower Speed Limits on Local Streets

If speed limits are not consistent with the road geometry and environment, they will not be self-enforcing. Speed limits are then only as good as the level of police enforcement available, or the Local Area Traffic Management (LATM) installed. Simply erecting speed limit signs in isolation is unlikely to achieve the desired outcome. Since police enforcement only provides benefit for defined and usually short periods of time, it is recommended that if speed limits are to be lowered, the road environment is altered, either by LATM, or other means, to achieve self-enforcement.

Further research can be found on the following AITPM conference paper:

Presenter(s): **Brett McClurg**  
Organisation: Cardno  
State: QLD

Paper: [Residential Street Cross Sections - How Wide?](#)

## **Educational Tools**

In a study undertaken by Brisbane City Council, radar activated speed signs were proven to reduce speeds on residential streets. The signs have optimal effect when rotated around sites and they can also collect valuable data for analysis. For further information, please refer to the following 2015 AITPM conference paper:

Presenter(s): **Anthony Burke**  
Organisation: Brisbane City Council  
State: QLD

2015 Paper: [Effectives of Portable Speed Warning Signs](#)

## **General Comments**

RAA understand from your letter that there have been 32 serious injury and 226 minor injury crashes in the study area, a number of which occur on streets that already have LATM installed. We have undertaken an analysis in the Department for Planning, Transport and Infrastructure's (DPTI) crash database of the serious injury crashes that have occurred in the study area over the past 5 years and have noted the following:

- 6 of the serious injury crashes occurred on roads on which the speed limit is already 40 km/h, in such cases a speed reduction on other streets would not have prevented these from occurring;
- A further 6 crashes involved a vehicle entering or leaving a private driveway and hitting a pedestrian and would not have been avoided by lowering the speed limit;
- Of the 32 crashes that occurred, we estimate that approximately 5 crashes might have been prevented if the speed limit had been reduced and all motorists strictly adhered to the limit; and
- For 9 of the crashes, there is insufficient data to determine whether speed was a factor in the crash.

Based on RAA's analysis of the crash data, we do not believe that there is sufficient evidence to warrant a reduction of speed limits in the area. The crash statistics suggest that it would be more appropriate to review the current arrangement of intersections at which crashes have occurred and also focus on driver education to address the pedestrian driveway crashes. It is also recommended that the council consider an assessment of footpaths to determine if roadside vegetation or furniture could be restricting sight distance and resulting in the relatively high number of driveway crashes.

Traffic calming can be effective at reducing speed in residential streets however the devices must be tailored to the individual road environment. RAA understand however that some measures may reduce parking and are therefore unable to be adopted due to opposition. There are a number of traffic calming measures which have proven to be effective in Europe and have only started to be trialed in South Australia. One example is the raised table at the intersection of Rundle Street and The Parade West in Kent Town. RAA has undertaken preliminary speed measurements before and after construction which have indicated very encouraging results. Further details on this project may be sought from DPTI. We would not recommend completely discounting LATM as a tool to assist in reducing speeds where there is a proven speed problem and would recommend that Council conduct further assessment into the various LATM options available.

Should you have any queries about our comments, please feel free to contact me on 8202 4703.



Ian Bishop  
**Traffic Engineer**