

Review of Default Open Speed Limits within the City of Wanneroo

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Abstract

The City of Wanneroo is one of the fastest growing Local Governments in Western Australia. The increased population means more road users and more vehicles on roads that were not built to a rural standard now performing an urban function resulting in an increased road safety risk. As a result, the City undertook a desktop review of all roads that operated under the state default speed limit of 110km/h. The review identified 20 roads that required a speed limit review which were submitted to Main Roads WA which has approved lower speeds for all 20 roads.

Background

The City of Wanneroo is located 22 km from Perth CBD and has undergone a significant amount of redevelopment and growth in the last 10 years. As a result a large number of roads within the City have undergone significant functional change with the City receiving a significant amount of complaints from residents regarding speeding.

Rather than attempting to answer each complaint individually the City conducted a desktop review of all roads within the City's jurisdiction that do not have a posted speed limit and therefore operate under the state default speed limit of 110km/h.

The goal of the project was to reduce death and serious injury due to speeds inconsistent with safe speed thresholds on the City's rural road network.

Method

The City of Wanneroo undertook a desktop review in 2013 of all rural roads within the City's jurisdiction to identify roads that have undergone significant functional change. The main criteria used was to identify roads that do not have a posted speed limit and operate under the State default speed limit of 110km/h but excluding;

- a. Roads defined as a 'built-up area' in the Road Traffic Code 2000
- b. Roads that are less than 500m in length
- c. Roads that do not have sufficient traffic to warrant speed zoning.

The review identified 20 roads that operated at the state default speed of 110km/h but have undergone significant functional change. A report was tabled with Council to gain community and political support for the review of the roads identified and Council recommended to request speed limit reductions from Main Roads WA as Main Roads WA set all speed limits for WA.

All roads considered in this project operated under the State default speed limit of 110km/h which is above the survivable limit for frontal conflicts of 70km/h. The 40km/h speed difference between the current speed and the survivable speed limit results in a 89% increase in fatality risk (Road Safety Council of Western Australia, 2008).

Results

The review identified 20 roads that required a speed limit review. Correspondence was sent to Main Roads requesting speed limit reviews for these 20 roads with Main Road WA and the City has had all 20 speed limit request approved. Each road was assessed by Main Roads WA with 15 roads reduced to 60km/h, 3 roads reduced to 70km/h, one road to 80km/h and one road to 90km/h. Additionally each of the roads has had pre and post traffic counts collected after the speed limit changes which have recorded significant reductions in the operating speed of the majority of the 20 roads. Further evaluation of the crash data is scheduled to be undertaken 5 years post implementation to assess if the reductions have resulted in a better road safety outcome for these roads.

Conclusions

Safe speeds are an important cornerstone in reducing death and serious injury by reducing the risk of being involved in a crash and the outcomes should a crash occur. The review of default speed limits has not been conducted by any Local Government in Western Australia before but can easily be replicated by reviewing any roads that do not meet the built up area definition and have not been speed zoned. The reduction in speed on these roads is moving the speeds for these roads closer to the survivable limits for the crash types likely to occur on these roads. The decrease in operating speeds for the roads provides a positive indication that the speed limit reductions will likely contribute to a lower killed and serious injury rate for these roads.

References

Road Safety Council of Western Australia (2008), *Towards Zero, Road Safety Strategy to Reduce Road Trauma in Western Australia 2008-2020*. Road Safety Council of Western Australia, Perth.