

Township Entry Treatments

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Abstract

A pilot project was undertaken to determine the benefits of Township Entry Treatments (TET) for use in Queensland. The overall intention was to introduce TETs using a pilot and subsequently expanding the pilot using a mass action program (MAP). The pilot gauged stakeholder expectations and assessed the resultant speed changes. The methodology included site identification, data analysis, ranking and prioritisation using benefit cost ratio. The TET included signage and pavement marking at six towns to gain an initial assessment of its effectiveness in reducing vehicle speeds. Lessons learnt from the pilot were considered in the implementation of a MAP.

Background

The paper discusses a project undertaken by Queensland Department of Transport and Main Roads to determine the benefits of a Township Entry Treatment (TET), through a researched pilot study. The project also involved development of technical guidelines for use in Queensland and the pilot was undertaken to gauge stakeholder and community acceptance and expectations of this new treatment and to assess the speed limit changes that resulted. A review was undertaken of TET “Before-After” Studies in United Kingdom and New Zealand. Evaluation of crashes before and after treatment showed a 26% reduction in crashes as a result of entry treatment implementation at 102 sites across New Zealand.

Method

A process of introducing a new road safety initiative from research phase followed by implementation of a pilot project and eventual MAP was adopted. Lessons learnt and suggestions for improvement when running a road safety initiative project were considered. Especially the importance of “before and after” evidence based approach that is defensible on a number of different levels. Stakeholder (including political), community and road user considerations were factors explored in the implementation of TETs. A methodology was developed for the pilot that included: site identification, site data analysis, site ranking and site prioritisation using BCR. The treatment composed of signage and pavement marking and was applied to a pilot program of six towns to establish the treatment and to gain an initial assessment of the effectiveness of TETs in reducing vehicle speeds, and to assess community views.

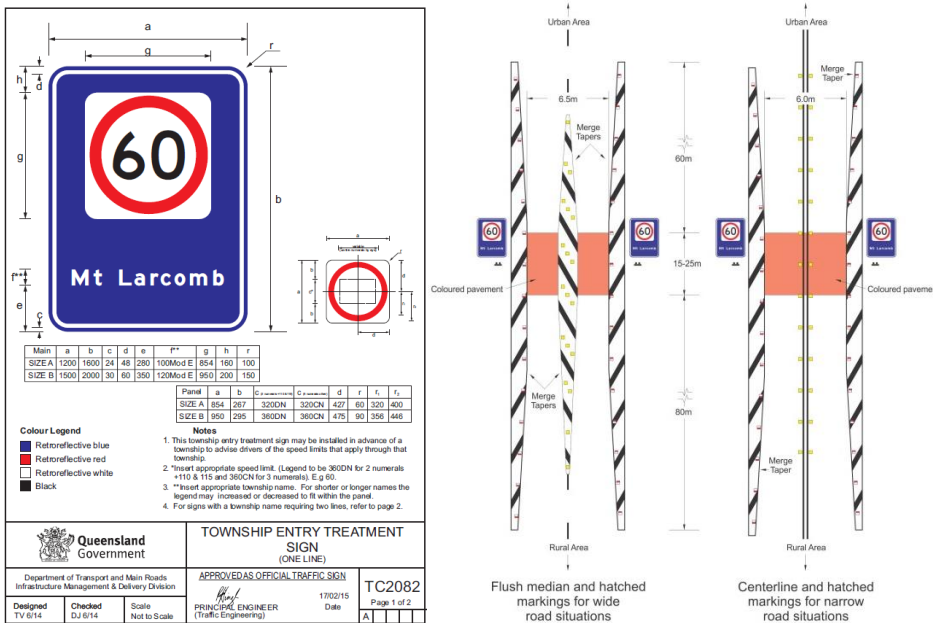
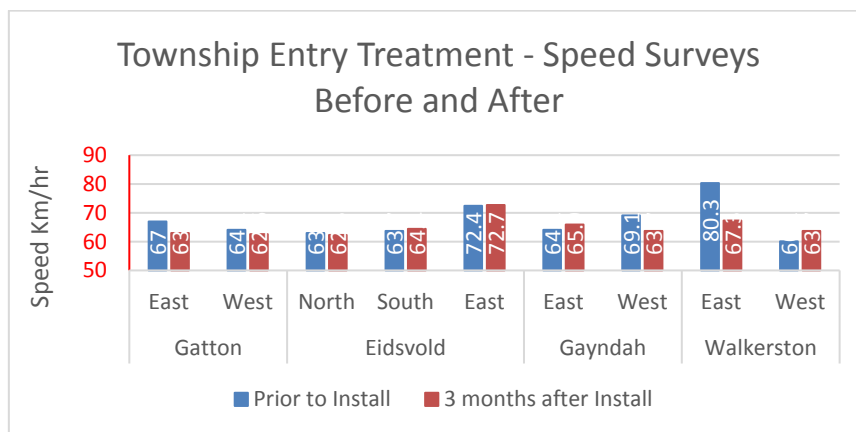


Figure 1. TET Signage and Pavement Markings

Results

As part of the pilot project four towns have completed their implementation and speed survey comparisons were made with the average speed reduction of 2.0km/h across the nine test sites. Feedback was also received about the entry treatment design for future implementation. The pilots need to be evaluated for crash analysis over 1, 3 and 5 year periods.

Table 1. TET – Speed Surveys Before and After



Conclusions

As with any road safety initiatives, it is important to consider lessons learnt and the effectiveness of TETs from past projects and to run a pilot program prior to any extended implementation via a MAP. TETs have proven to be working in UK and NZ and their introduction in Queensland at regional towns are seen as a good road safety initiative from the community and road user perspective. Future directions received from the pilot feedback included potential redesign of the physical signage and introduction of complementary projects such as the use of ‘Speed limit AHEAD’ sign, undertaking speed limit review of Township Entry Treatment and the introduction of 50 km/h speed limit through townships.