

Evaluation of the Low Cost Urban Road Safety Program Treatments

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This stage 2 WARRIP project continues to evaluate the project outcomes from the Low Cost Urban Road Safety Program (the Program). This evaluation will help to guide the planning and design of future treatments and programs to maximise the safety outcomes for all road users.

Background

As part of a program funded through the Road Trauma Trust Account, Main Roads WA identifies urban areas with road safety concerns based on crash history, and then liaises with and funds local governments to plan, design and install treatments.

The aim of the treatments is to improve road safety primarily through reducing speeds.

Under the program, the local government roads in the suburbs of Cannington, Bayswater and Mt Lawley had speed humps, intersection plateaus and mini roundabouts installed. A total of 52 treatments were installed.

Methodology

The project included a methodology review with the adopted methodology including the elements in the diagram.



Crash data will be included in subsequent stages once a minimum of 3 years have elapsed since installation.

Applied Methodology

Site assessments and observed driving behaviours lead to a number of recommendations on the road environment and design. Some specific

improvements are recommended to account for cyclists and pedestrians.

Comprehensive traffic data analysis using pneumatic tube data included statistical confidence testing for speed distributions, verifying the differences in speed and the magnitude. Separately, Compass data was tested but found to be not suitable for the project.

The local governments were consulted and provided results from consultation they had undertaken before installations. The feedback is that communities have been generally supportive of the intended treatments. Local governments are also supportive of the program with interest expressed in this project.

Resulting Evaluation

Forty eight of the sites were found to be effective in improving road safety. Two sites were not rated as they were under construction, while 2 sites were rated as not effective due to statistically significant increases in speeds in adjacent road sections.



The Program has proven to be effective with lessons learned that can benefit the program in future years



As the program continues, there are more sites to assess. Also the sites assessed in stage 1 can be reviewed with viable crash data as 3 years will have elapsed.

How does this research change the way we think?

There needs to be better information sourced prior to and after installations to enable viable evaluations, while a number of small design improvements can deliver better results.