Trials of traffic control devices - Guidelines

Introduction
This note sets out the information required for an application under the Land Transport Rule: Traffic Control Devices (TCD Rule) to the NZ Transport Agency (NZTA) for the trial of a traffic control device.

Where a road controlling authority (RCA) is considering the trial of a new device, a change to an existing one or the application of an existing device outside general policy or practice but is not prohibited by the TCD Rule, the NZTA believes the principles of careful assessment of need and evaluation of effectiveness described in this note should be applied. The NZTA and the Traffic Control Devices Steering Group (described below) would be keen to assist by providing advice and, as appropriate, support to any such trial being considered.

In considering an application under the TCD Rule for a trial of the non-conforming device the NZTA must assume it will eventually result in a change to rules or policy. The NZTA does not change policies and cannot recommend variations to rules without the undertaking of appropriate analysis and consultation. Costs, benefits, safety effects, resource consumption and implication for all road users and road providers must be fully understood.

Background
It is important road users travelling through various RCA areas receive a consistent set of messages about the environment which delivers safety for road users and efficient use of resources. This consistency is provided by the application of legislation, policies and guidelines which dictate the safe and efficient use of traffic control devices.

The Land Transport Rule: Traffic Control Devices 2004 (the TCD Rule) sets out rules for the installation of traffic control devices by RCAs. Section 3 of the TCD Rule describes general requirements for traffic control devices and requires RCAs to install only those devices described in the rule. Clause 3.4, however, provides for the NZTA to approve alternative traffic control devices for trial purposes. This power has been delegated to the Network Manager.

Application
An application for a trial must provide sufficient information to allow an informed decision to be made and the level of detail required will vary depending on the nature of the device. The scope of the trial, the likely impact of the proposal on safety or efficiency and the significance of any change to existing policy or legislation should be included in the proposal.
The application should contain at least the following sections:
- outline of issues
- development background
- technical analysis
- impacts and risks assessment
- expected safety and efficiency gains
- consultation (undertaken and proposed)
- proposed assessment method.

The type of information provided in these sections is detailed at Appendix A. The appendix is a guide only. It may not be necessary to complete each category if it is not relevant to the device being proposed but more information may also be required. Relevant, additional information supporting the application should also be provided.

**Consideration of approval**
To ensure the application is given a complete and fair assessment the NZTA will seek comment and support for the proposal from the Traffic Control Devices Steering Group. This group represents the NZTA, Ministry of Transport, local road controlling authorities, NZ Automobile Association, roading contractors, and the traffic sign and road marking industry. It was originally convened to oversee the development and maintenance of the Traffic control devices manual and Traffic control devices specifications to ensure these documents reflect industry needs and expectations and is, therefore, well placed to consider any application for a trial.

The Traffic Control Devices Steering Group meets every three months and, under normal circumstances, any application for a trial would be forwarded for their consideration at one of these meetings. However, if circumstances warrant, earlier consideration by the group could be arranged as could any subsequent application amended as a result of an earlier submission to the group. The group forwards their recommendation, including any conditions they believe appropriate, to the Network Manager for their consideration.

**Approval**
The Network Manager, in reaching a decision on an application for a traffic control device trial, will study the details provided by the applicant and in addition will consider:
- the recommendations made by the Traffic Control Devices Steering Group
- policy, regulatory and legislative effects of implementing the proposal including any effect on existing policy and whether there is a reasonable possibility of the TCD Rule being amended to include and implement the outcomes of a successful trial
- any communication, education, publicity and enforcement requirements at a local and, if appropriate, national level
- resource requirements for implementation and evaluation and ensure they have been identified and are available to both the applicant and within the NZTA
- priority of the project against other safety initiatives and opportunities.

It is recommended the applicant discuss the issue with the NZTA at an early stage in the development of a proposal. This could, for example, help identify sources of information, the level and type of information likely to be needed for the application and will facilitate the progress of any application.

**Conditions**
Where a trial is proposed, the applicant must comply with the conditions described in clause 3.4 of the TCD Rule. This clause also allows the NZTA to identify any terms and conditions considered necessary.
**Funding/assistance**
Funding of any trial is the responsibility of the proposing authority. The NZTA may be able to assist in designing, implementing and evaluating a trial and might be able to assist in identifying possible funding sources. However, unless prior agreement has been reached, approval of the trial does not impose any obligation on the NZTA to provide such assistance.

**Publication of approval**
If the application has been approved and satisfactory agreement reached on conditions relating to the use of the device, appropriate legal documentation, including the required notice in the *New Zealand Gazette*, will be prepared and promulgated. An outline of the trial, contact details of those involved in the trial and a copy of the Gazette notice will be published as an appendix to *Traffic note 14* and be available on the NZTA website.

**Declining approval**
If the application is declined, the NZTA is required (clause 3.4(2) of the TCD Rule) to advise the applicant of the grounds for doing so.

**Termination of trial**
If the NZTA considers it unsafe to continue the trial, it may be terminated by formal notice and the RCA must remove the device immediately (clause 3.4(7) and clause 3.4(8) of the TCD Rule).

**Outcome of trials**
If the trial is successful and the NZTA is satisfied the results justify a change to policy appropriate steps will be taken to allow all RCAs to use the device.

This may, however, require a change to the TCD Rule. If this is required the continued use of the device will be authorised at the trial site or sites until the change is made. The authority will be published in the *New Zealand Gazette* (clause 3.4(11) of the TCD Rule).

If the device can be adopted without a rule change the NZTA will take the necessary steps to formalise the use of the device (eg notification in the *New Zealand Gazette*).

In either case, notification of the outcome will be made through publishing an amendment to *Traffic note 14* and other appropriate mechanisms.

**Extension of a trial to additional sites**
Before an amendment to the TCD Rule the NZTA may (from 1 April 2011, the effective date of the TCD Rule Amendment 2010) authorise, subject to conditions, the installation of the device at further trial sites by notice in the *New Zealand Gazette* (clause 3.4(11) of the TCD Rule). Additional sites will only be approved where this can be justified in terms of establishing, with greater clarity, the effectiveness of the device and to assist in providing clearer guidance for its use.
**Appendix A**

Information that could be provided to support an application to the NZTA for a trial of a traffic control device in terms of clause 3.4 of the Land Transport Rule: Traffic Control Devices 2004. Necessary information is denoted by (*).

**1 Outline of the issues**

1.1 The traffic control device being proposed  
1.2 The nature of the problem the proposal seeks to overcome  
1.3 Where the proposed trial will be located  
1.4 The time frames involved  
1.5 How the problem can only be addressed by non-standard treatment rather than existing practice  
1.6 List those who need the change  
1.7 Whether the proposal is a one-off local solution or will lead to a national policy

**2 Development background**

2.1 Information on the stage of development the proposal has reached and details of any outcomes including options considered and reasons why any have been discarded or preferred  
2.2 Literature or investigation summaries from New Zealand or overseas  
2.3 Outcomes of any previous trials or investigations  
2.4 Any relevant overseas legislation, policies or guidelines investigated or referenced

**3 Technical analysis**

3.1 Detailed drawings of the proposed device  
3.2 Details of any materials of components used  
3.3 Theoretical analyses and considerations supporting the proposal  
3.4 Any computer or other technical analyses used in deriving the proposal  
3.5 Details of any back-up safety systems where these might be required

**4 Impacts and risks**

The assessment should demonstrate that the proposal:

4.1 Does not create any new safety or other problems  
4.2 Is a potential solution to the identified problem  
4.3 Addresses the relevant issues  
4.4 Will be easily understood by road users  

It may also include:

4.5 Information regarding the likely level of up-take of the proposal  
4.6 Details of any impact on the uniformity or consistency of standards for such devices if the proposed change is implemented  
4.7 Effects on harmonisation of standards and international agreements (eg Australian standards)

**5 Safety and efficiency gains**

5.1 How the proposal effects each class of road user  
5.2 What the benefits and costs of implementing the proposal are likely to be with appropriate levels of detail supporting their derivation

**6 Consultation**

6.1 List all interested parties
6.2 Information on consultation undertaken and/or proposed
6.3 How views of interested parties have been, or will be, considered

7 Proposed assessment
The application should detail how the performance of the device will be assessed. The methodology proposed for the assessment should:

7.1 Ensure information sought is well defined and appropriate
7.2 Address all relevant issues including the suitability of any site suggested for the evaluation
7.3 Provide all information necessary to support any analysis required to determine whether value for money will be achieved if the proposal is implemented nationally
7.4 Ensure appropriate levels of understanding of the proposed device and its use have been obtained from road users through observation, interview or questionnaire
7.5 Include a detailed research or evaluation plan that must have a realistic time period for the assessment and provide for close monitoring of any trial especially in the early stages of field implementation
7.6 Demonstrate a sound scientific design with appropriate controls so that any conclusions reached can be supported by robust statistical analysis