

Appendix 7: Self explaining roundabout trial

Purpose of trial

The purpose of this trial is to evaluate the effectiveness and safety of a self explaining roundabout design where traffic calming devices have been installed on the approach roads so that average traffic speed is less than 30 km/h. These roundabouts are part of wider scheme to reduce speeds and traffic flows on particular residential streets within the suburb of Point England in Auckland City.

Need for approval

An exemption from the requirements of the Land Transport Rule: Traffic Control Devices (TCD Rule) to install signs and markings on roads approaching roundabouts needed to be approved by the Agency to allow these devices to operate:

Condition of Installation

Traffic speeds were measured before (with 50 km/h speed limit) and after traffic calming islands and kerb extensions were installed (with temporary 30 km/h speed limit). Average speeds were shown to have reduced to below 30 km/h. This was required by NZTA before this trial could be approved.

The temporary 30 km/h speed limit then was removed so that the roundabouts operate in a 50 km/h urban speed limit area.

The notice of approval for this trial was published in the *NZ Gazette* on 10 September 2009 (see attached copy for more details).

Operation

These roundabouts operate without the devices specified in subclause 10.4(1) of the TCD Rule, that is: R2-3 "Give-way roundabout" signs or a white limit line or M6-2 "Give way triangle" markings.

Drivers are still required to give way at the entry to roundabouts by subclause 4.6(1) of the Land Transport (Road User) Rule 2004 which states: "A driver on entering a roundabout must give way to traffic on the roundabout and to traffic approaching from the driver's right."

Monitoring

Traffic speeds, driver behaviour at roundabouts, residents' perceptions and crash data are being monitored during the trial.

Results

An evaluation undertaken immediately after the "30 km/h (temporary)" signs were removed indicated that:

- (a) both mean and 85th percentile speeds on roads with traffic calming have decreased, with mean speeds reducing to 30 km/h or less;
- (b) a survey of resident's perceptions showed that 97% of respondents understood that a vehicle entering on a self explaining roundabout must give way to a vehicle already on that roundabout.

Crashes at these roundabouts will be monitored until September 2011.

Self explaining roundabouts have been included as an option in the draft 2010 TCD Amendment Rule.

Contact details

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