

Transport Futures: The Changing Face of Transport – 12-14 August 2015

ACTIVE MODES INFRASTRUCTURE GROUP

RCA FORUM WORKING GROUP



**ROAD CONTROLLING
AUTHORITIES FORUM (NZ) INC**

Objectives of AMIG:

- Identify best practice and make this available to practitioners;
- develop and promote sector agreement;
- develop or steer development of guideline documents; and
- promote consistent implementation of best practice.



TCD Rule (2004)

- 11.2(1) If defining a part of a road as a special vehicle lane, a road controlling authority must, at the start of the special vehicle lane and [after each intersection, along its length:]
 - (a) mark on the road surface a white symbol, that complies with Schedule 2, defining the class or classes of vehicle for which the lane has been reserved;

Cycling symbols– local responses



2010 - review ordered

- *“to review the current signs and markings of cycle facilities in NZ and make recommendations to the TCD Steering Group on options for control devices, and/or the legal framework and rules that that will enable a clearer understanding to all road users on the meaning and application of cycle facility signs and markings (TCDs)”.*

Review recommendations

- **Not allow driving in a cycle lane for making a turn**
- **Designate cycle lanes by road markings only**
- **Define a shared path by pavement markings only**
- **Turning traffic should give way to cyclists proceeding straight ahead**
- **Test coloured surfacing materials for cycle lanes**
- **Adopt a pavement marking for the cycle detector loop**
- **Determine whether shared lane markings should be trialled in New Zealand**

National Cycling Signs & Markings Working Group

NORTH ISLAND

SOUTH ISLAND

STEWART ISLAND

Cycle symbol issues

- Legal meaning of cycle symbol is not understood by most road users;
- Cycle lanes require added signage at 50-70m intervals and extra markings in yellow or green to convey the message of the current marking;
- limited toolbox of markings and signs leads to a lack of understanding of markings.

Adding to the toolbox

Markings needed for:

- Defining a cycle lane
- Defining a lane to be shared by motorists
- Defining a safe line for cyclists

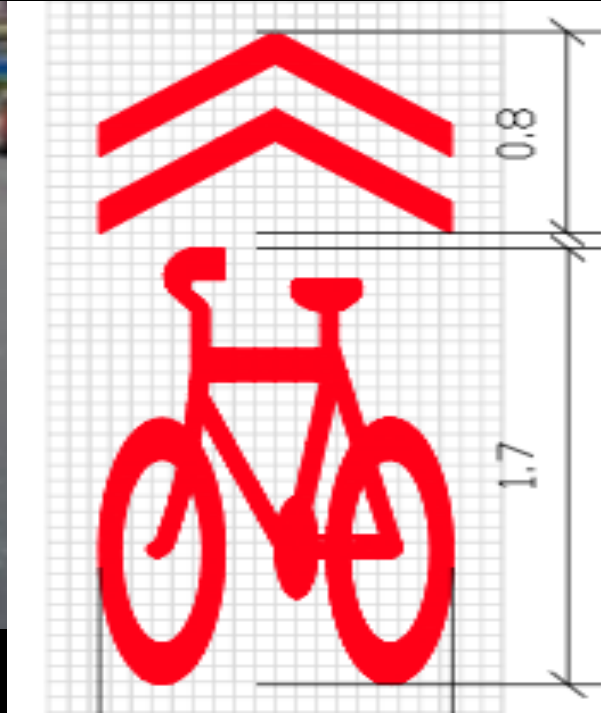
Options for markings: existing symbol



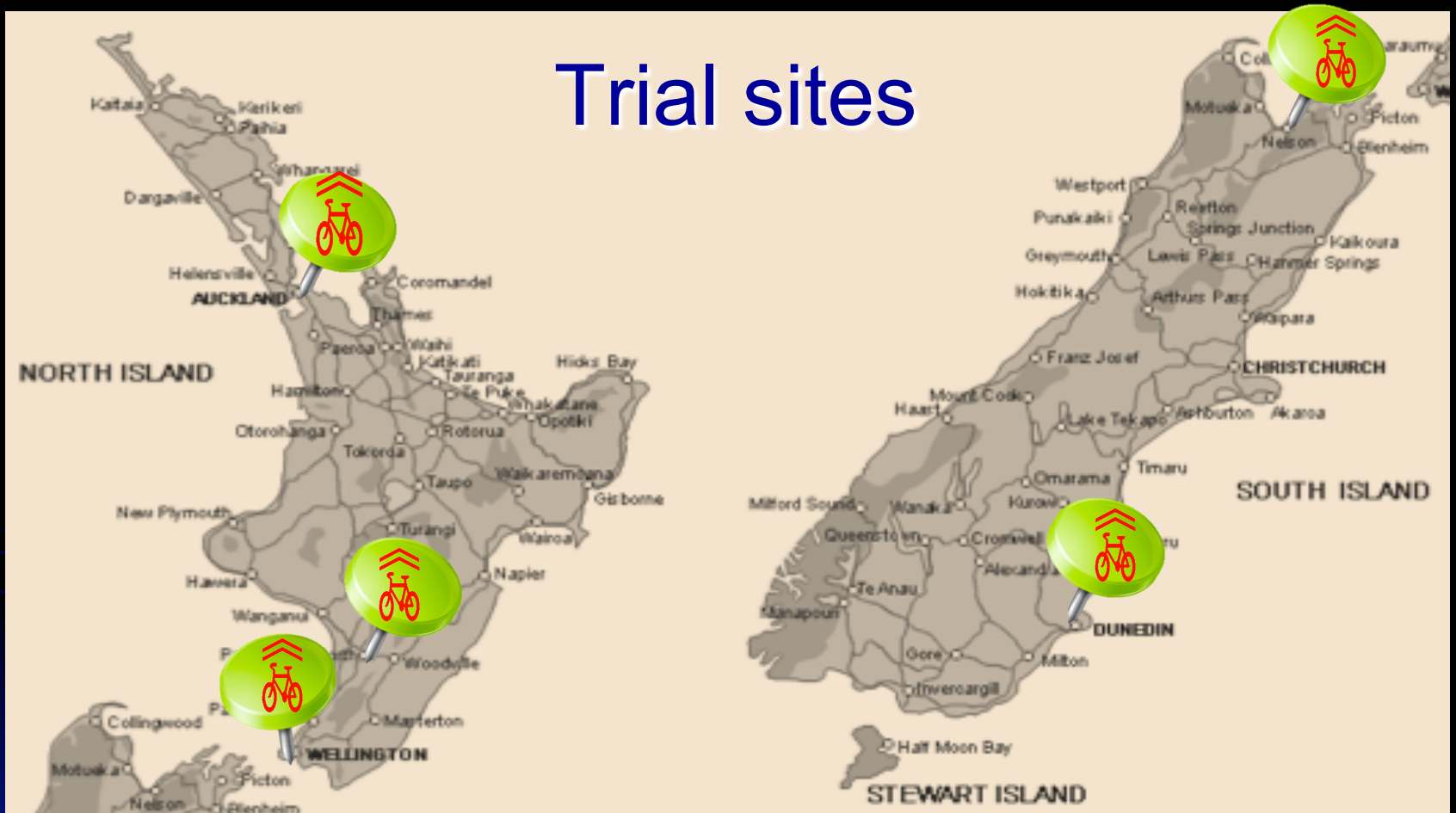
Adopt new cyclist symbol marking?

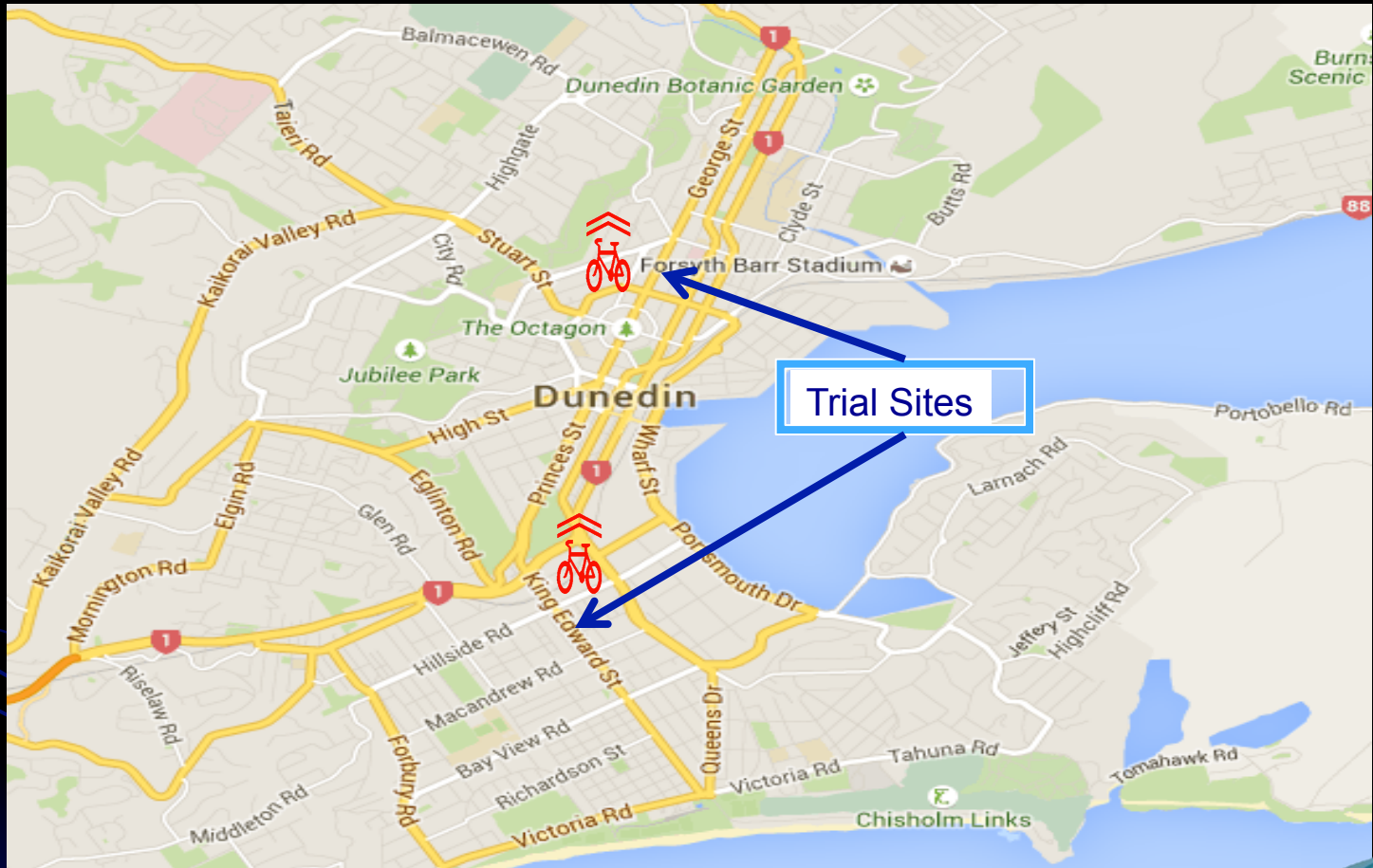


Advisory marking adopted for trials



Trial sites





Cycle lane markings for trials



LANE



Lessons from sharrow trials

- Needed to increase chevrons by 25%
 - from 0.8 m x 1.0 m to 1.0 m x 1.0 m
- Needed to increase frequency of markings
- Needed to keep markings clear of other markings – directional arrows especially
- Needed to understand parking patterns

Placement in the lane

- Mid-lane with no parking and no marked lane edge = in door zone when parking is present



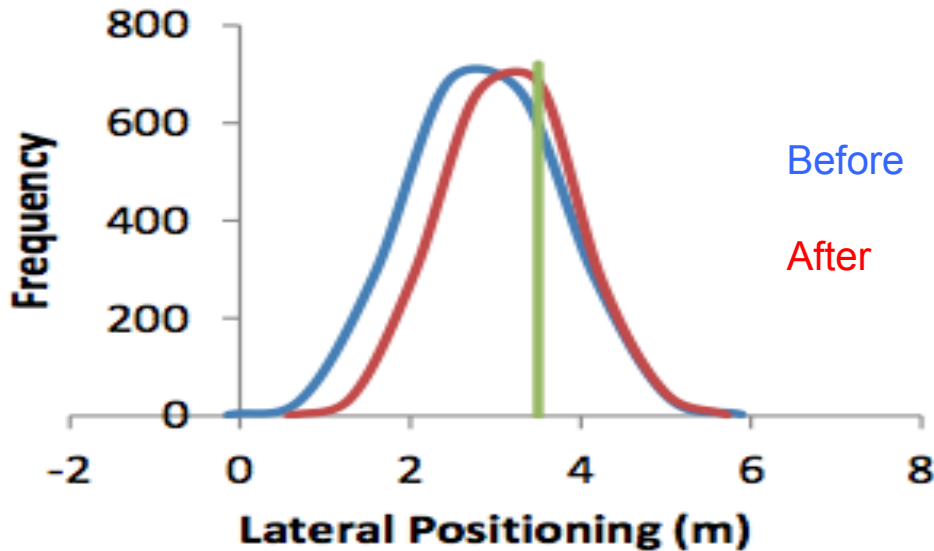
Measuring lateral shift



Results: some lateral shift

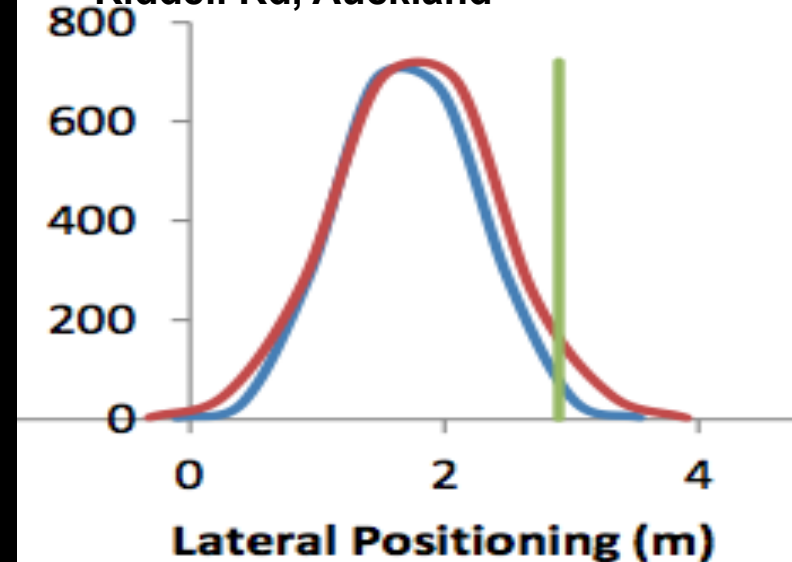
Weekend : Single Cyclist

Elstree Ave, Auckland

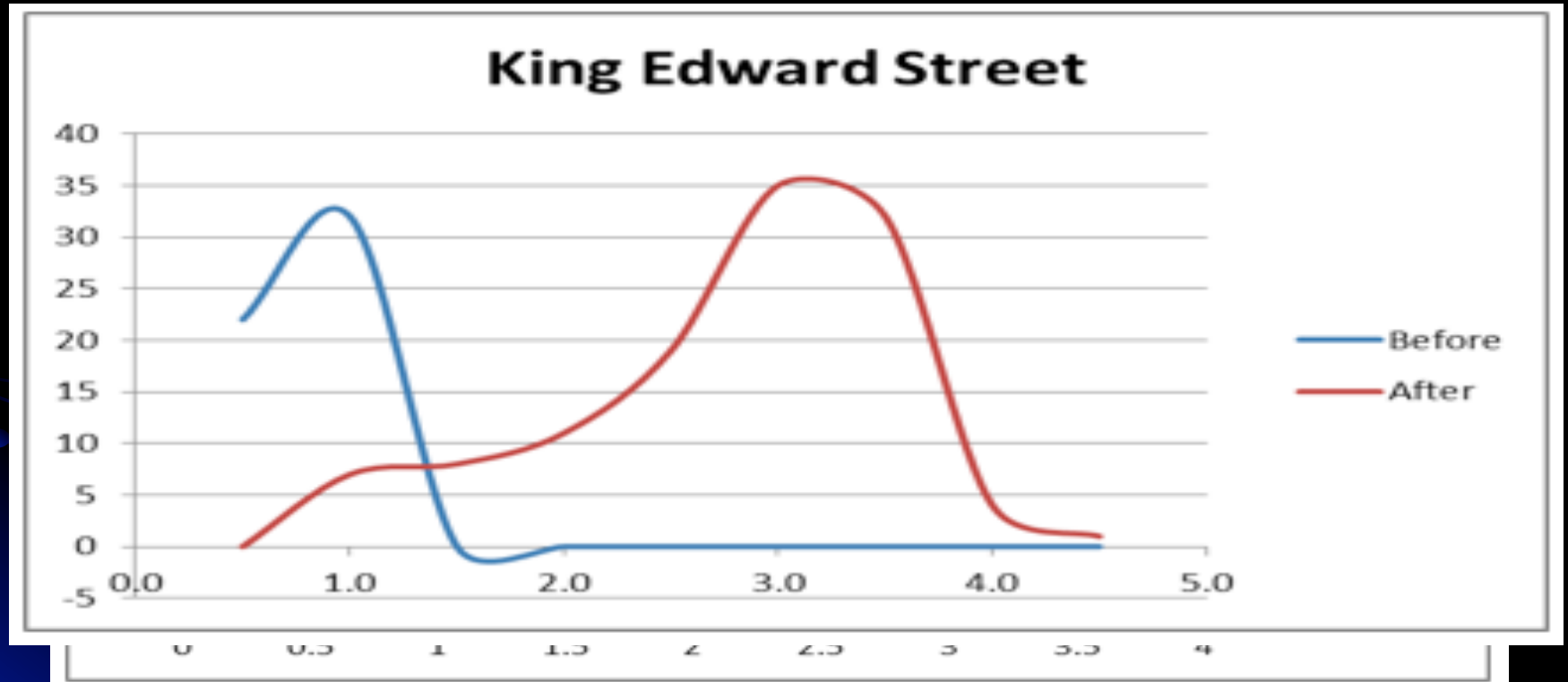


Weekend : Single Cyclist

Riddell Rd, Auckland

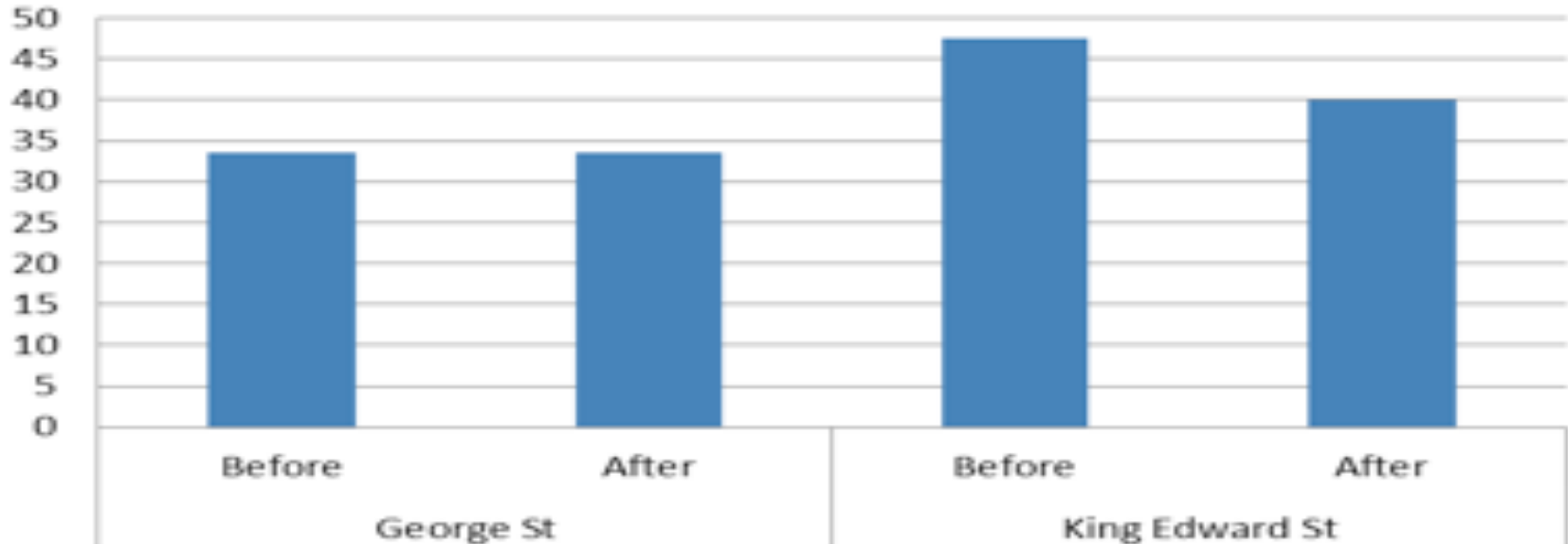


Response to parking

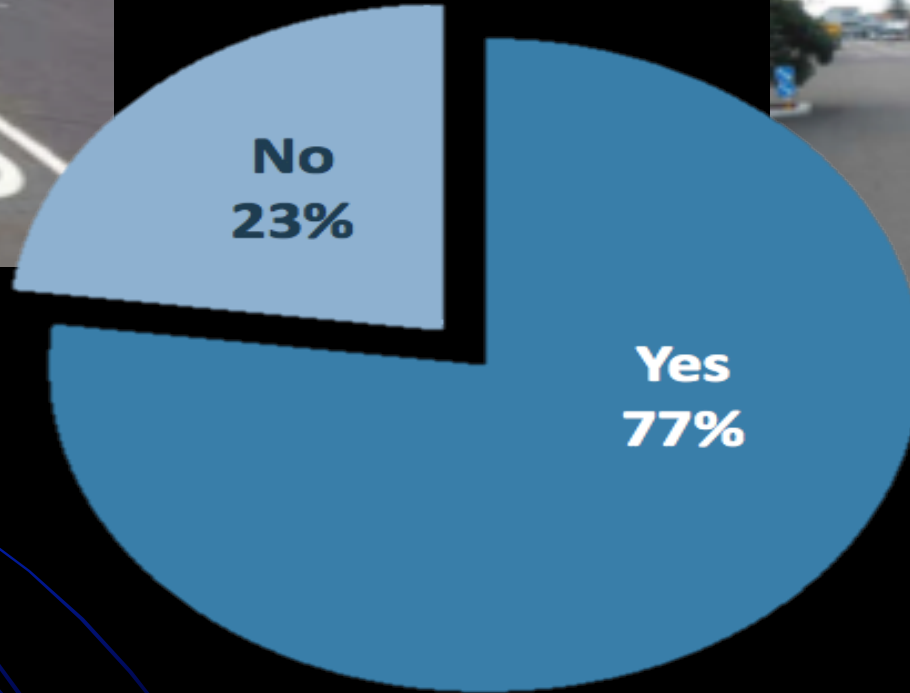


Effects on traffic speed

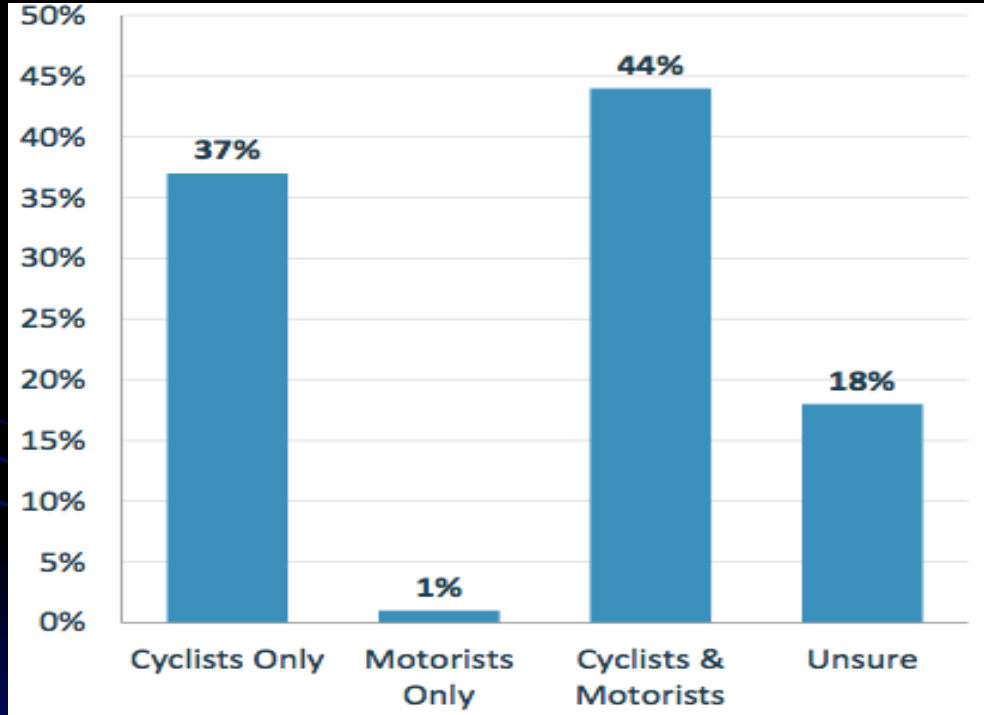
85th percentile vehicle speed



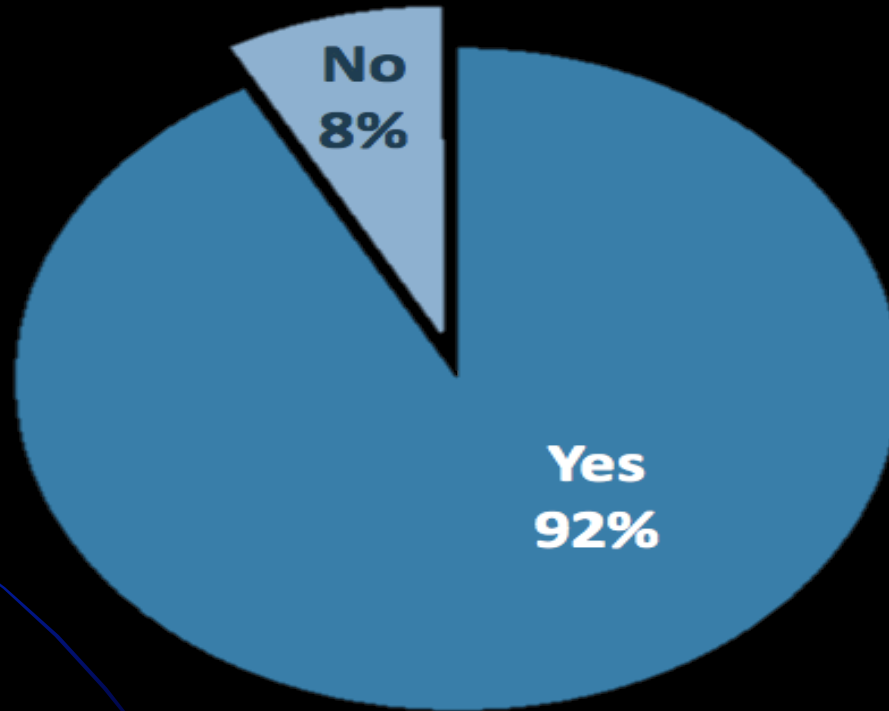
Can you tell the difference?



Do you know what it means?



Public education needed?



Cycle Lane marking results



Which of these markings is clearest and easiest to understand?

Which of these markings is clearest and easiest to understand?

■ M 2-3 ■ Green ■ "LANE"

M 2-3, 2.9%

Green, 74.1%

"LANE", 23.0%

Next steps

- Trials will inform a package of changes to the RUR on cycling issues
- Consequential changes to TCD Rule
- New advisory marking currently expected to become available in 2016

Meanwhile . . .

- National cycling signs and markings working group has become Active Modes Infrastructure Group
- AMIG is technical reference group for TCD Steering Group on walking and cycling infrastructure and
- Technical forum for asset managers to share challenges and solutions

National cycling design guidelines

- Urgent need for best practice guidelines for cycling infrastructure design
- National cycling design guidelines being developed with AMIG input
- Stage 1: gap analysis – 39 priority tasks
- Need to deliver best practice solutions quickly; will require trials of innovative solutions and assessing what works

Questions?

