

**National Cycling Signs and Markings Working Group**  
Meeting at 9:30am on Thursday, 10 April 2014  
NZTA, National Office, 44 Victoria Street, Wellington

**Attending:**

- Carl Whittleston                      Lets Go Project Manager, New Plymouth District
- Ron Minnema                            Senior Traffic Engineer, Dunedin City
- Rhys Palmer                             Senior Asset Engineer, Nelson City
- Steve Dejong                           Traffic Engineer, Christchurch City
- Paul Barker                             Safe and Sustainable Transport Manager, Wellington City
- Sandi Morris                            Transportation Planner, Palmerston North City
- Heather Liew                            Palmerston North City
- Matthew Rednall                       Manager-Community Transport, Auckland Transport
- Claire Sharland                        Team Leader Transportation Strategy, Taupo District
- Glen Koorey                            Civil and Natural Resources Engineering School, Cant.
- Richard Bean                           Senior Engineer, NZTA
- Tim Hughes                             National Traffic and Safety Engineer, NZTA
- Gerry Dance                            Principal Advisor, Network Optimisation, NZTA
- Glenn Bunting                         Network Manager, NZTA
- Wayne Newman                        RCA Forum Research & Guidelines Group (secretary)

**Apologies:**

- Amit Patel                                Auckland Transport
- Owen Mata                               Hastings District
- Martin Parkes                            Tauranga City

**Actions:**

A) Proposals for trials in Dunedin, Nelson, Palmerston North and Wellington to be completed in accordance with gazetted notice to allow for trials to begin in May.

- Ron, Rhys, Sandi and Paul to action or facilitate as appropriate

B) A guidance note will be prepared for the trials, covering spacing and placement of markings, presence of other markings, parking, speed and volume environment, and other relevant considerations.

- all suggestions to Amit and Matt to circulate note by end of April

C) The group will seek approval to expand its present remit to form the technical expert reference group on active modes for road controlling authorities, meeting up to four times per annum and combining fact-finding visits with meetings.

- Gerry and Wayne to draft ToR and letters to members' CEOs

## NOTES OF MEETING

### 1. Introduction and apologies

The meeting welcomed Richard Bean and Heather Liew. Apologies were noted from Amit, Martin and Owen. Apologies for lateness were received from Sandi, Heather and Steve.

### 2. Recap from 22 March 2013 meeting

Wayne summarised the decisions of the last meeting and events over the ensuing year, noting the previous meeting agreed markings are required to address three different situations:

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

The meeting had agreed that adding a rider to the bicycle did not offer a new tool and resolved that combinations using the existing symbol should be investigated for trials.

The meeting had agreed to develop a package of trials for new markings for cycle lanes and shared traffic lanes and present a proposal for these trials to the next TCD Steering Committee on 21 May 2013.

To meet this deadline a proposal had to be ready by 10 May, and it was not. Instead, the TCD Steering Committee agreed in principle to unlock the legal meaning of the M2-3 symbol.

A sub-group was convened to progress the preparation of the trial proposal and worked on identifying sites and methodology from June through October. A proposal was presented to the TCD Steering Group on 21 November for trials at five sites in Auckland.

Proposals for trials in other centres were sought for consideration by the TCD Steering Group on 12 March 2014.

### 3. TCD Steering Group update

Glenn and Richard discussed the four conceptual proposals for trials received from Palmerston North, Dunedin, Nelson and Wellington. Trials need to replicate the procedures and markings already gazetted for the trials in Auckland. They also need to commence before the end of May and to run for at least three months to contribute any useful additional data to the markings trials.

They noted that both sharrow and LANE markings need to be included, and some care is needed in selecting sites with both appropriate speed environments and traffic volumes. Aspects of the initial proposals from Palmerston North, Nelson and Dunedin had needed to resolve details around these issues. The proposal from Wellington was less advanced, but offers an excellent concept and potentially very robust trial data.

The chevrons for the sharrow marking gazetted for the trials were increased 25% to fit into a square 1m x 1m from 0.8m x 1m to be more legible to all road users.

#### **4. Markings trials updates**

##### **a) Auckland**

Matt reported on the progress of trials of sharrow markings at five sites: Seacliffe Ave, Belmont; Riddell Road, Glendowie; Point Chevalier Road, Point Chevalier; and Riverside Ave, Dunkirk Road and Elstree Ave, Point England; and cycle lane markings on Mt Albert Road, Point England Road, Carrington Road, Lake Road and St Lukes Road.

Initial feedback from cyclists suggests that sharrow placement needs to be considered carefully. More frequent marking than 100m spacing has been requested and some markings have been too close to the kerb/parked cars. Generally, however the cycling community is satisfied.

The need to avoid an education campaign for the new markings to avoid distorting the trial survey data has been understood. An initial survey of 715 residents (including 288 cyclists) suggests that adding LANE to the cycle lane will increase understanding. The current M2-3 symbol had the poorest understanding, while symbols on a green background had the highest recognition.

Only 25% of the survey properly understood the intent of sharrows, with 50% misunderstanding their message completely. Further surveys will be done after six months and after nine months.

##### **b) Palmerston North**

Sandi and Heather discussed the challenges of finding suitable trial sites and assessed four potential candidates considering connectivity and shared use. They noted that PN has established cycle networks, well-used cycle lanes on arterial roads, relatively wide roads and relatively low parking numbers (with a high expectation of roadside parking being available).

The initial proposal for sharrow trials in Park Road, Russell Street and Grey Street, and LANE markings in Ruahine Street had been reconsidered. Grey St has cycle lanes from Ward St to Albert St, with nothing beyond Albert St, so sharrow markings could offer an appropriate interim solution, but the pattern of irregular, dispersed or occasional parking makes this a less attractive candidate for a trial.

Broadway Ave, College St and Freyburg St have been identified as better potential sites. Although Broadway Ave is a CBD street with angled parking, it offers a low speed environment that is not posted at 30kph or as a shared zone. College St is relatively narrow, with 1.9m parking on either side of a 6.5m carriageway. Freyburg St has two parking environments, with two 4m traffic lanes and a 2.1m parking lane on one side in the southern section and a narrower carriageway with angled parking in the northern section.

LANE markings will be added to the cycle lane along Fitzherbert Ave as part of the trials.

**c) Nelson**

Rhys reported on the proposal to trial sharrow markings on Tasman St from Bridge St to Weka St northwards, and Tasman St-Brook St-Westbrook Tce from Nile St to Robinson Rd southwards, and Hardy St across the CBD. The initial proposal had not provided for marking LANE in cycle lanes as part of the trial, but this will now be done along Rutherford Rd.

Hardy St between Domett St and Rutherford Road ranges from 7,800 vpd in the CBD to about 1,400 vpd at the eastern end, and carries about 250 cyclists per diem.

**d) Dunedin**

Ron reported on the five sites proposed for sharrow trials. Three of these are very quiet streets: Bellona St has 187 vpd, New St has 438 vpd and Tedder St has 555 vpd; George St has 11,300 vpd and King Edward St has 11,000 vpd.

The type of parking on New St and Tedder St could prove to be an issue for the trials. There was also concern that changes to the street layouts proposed to be done during winter as part of the Quiet Streets project, if undertaken on streets within the trials, would invalidate data from the trials.

**e) Wellington**

Paul outlined a proposal to mark sharrows along Featherston St and Victoria St in both lanes on every block. This is a southbound arterial through the CBD carrying 20,000 vpd and 2,000 cyclists. It is already a relatively low-speed environment and implementation of a 30kph limit across the CBD would formalise this.

The challenge is identifying the optimum location for the markings in an already busy environment. Placement in zone 1 at the beginning of each block seems the most effective marking. Location within the lane is less straightforward, because about 20% of cyclists use the right lane while 80% keep to the left side of the left lane.

A trial of the LANE marking in a cycle lane is proposed for Evans Bay Rd.

The working group noted the progress of trials being undertaken by AT and the four proposals for additional trials, and agreed that final proposals for trials in Dunedin, Nelson, Palmerston North and Wellington are to be presented in accordance with the gazetted notice before the end of April to allow for trials to begin in May.

**5. National sharrow trial implementation**

The group noted the complexities surrounding best placement of these markings that had already been revealed by the proposals for trials and initial trials. More frequent spacing has been requested. Position in relation to other markings also

needs to be considered; centrelines and directional arrows should not be retained near the sharrows where they would confuse the message to share the lane.

Careful assessment of the traffic volume and speed environment is also needed to ensure that the markings are appropriate and give value. The type of parking environment is also a consideration, with a slightly counter-intuitive suggestion that streets with high turnover and angle parking are potentially better suited to sharrow marking than those with discontinuous, occasional parking. Proposals have also identified the need to consider not just traffic volume and speed, but logical connectivity within the cycling networks.

The most problematic consideration, however, is the lateral position of the marking in the lane. Central to this is understanding the function of the marking and whether cyclists will track within the markings. The marking must be placed so that motorists drive over them to reinforce the message that cyclists belong in the lane, rather than on the edge, and so that cyclists tracking along the markings are travelling beyond the door-zone of parked cars.

Figure 3 from the AT proposal (reproduced in the Dunedin proposal on page 1) highlights the difficulties of locating the marking so that it is appropriate in an environment of occasional parking without a line marking the edge of the parking lane. A sharrow marked midway between the kerb and centreline places the cyclist in the traffic lane unnecessarily if no cars are parked along the kerb, but in the door-zone as soon as a car is parked there.

The group agreed that guidance based on the lessons learned to date should be provided to the four members preparing trials and a guidance note will be prepared by AT, with support from Glen and Tim, covering spacing and placement of markings, presence of other markings, parking, speed and volume environment, and other relevant considerations.

## **6. Wayfinding signage**

Gerry Dance presented an overview of the alternatives being presented by various cycling organisations and road controlling authorities. There is no consistent use of symbol, style, format or content, in some cases even within districts. Multiple signage on the same route being erected by different bodies has the potential to become confusing clutter for all users.

The group agreed that best practice for providing wayfinding signage needs to be identified and encouraged nationally, without limiting local aspirations, or opportunities, for separate branding. Auckland NZCT wayfinding signage needs to be resolved in the near future. Glenn and Richard offered to work with AT, as they have with DCC, to develop sign formats that meet local requirements and Rule requirements. This will inform further discussion on wayfinding signage at the next meeting.

## **7. Christchurch major cycle network design concepts**

Steve Dejong presented a report on the wayfinding signage design concepts for the separate, bi-directional major cycleways network being developed around Christchurch, and for the City to University route in particular.

The group noted that the concepts had been modified, with less use of colour and a less aggressive cyclist symbol now being considered, but was concerned that the signs did not meet best practice for conveying wayfinding information. The signs contain relatively small symbols and text, and potentially redundant information (such as the route name), but no time or distance to destinations.

The group agreed that the design concepts could be improved to yield both better local branding and more effective wayfinding content. Glenn and Richard offered to work with CCC, as they have with DCC, to develop sign formats that meet local requirements and Rule requirements.

**8. Flush pavement signs – Kaiapoi, Waimakariri District**

**9. Future Streets project – Auckland**

**10. Upcoming activities on cycling safety**

**11. National guidance update**

The group deferred detailed discussion of items 8 to 11. It noted the Future Streets project and Cycle Safety Summit, and the increased likelihood of legislative changes being proposed this year.

**12. Active Modes Steering Group**

The group discussed its role within the rapidly changing environment for all active modes and agreed that a group with a wider and more strategic focus than nationally consistent markings for cycling infrastructure was needed. The group noted the existence of expert panels, leadership forums and stakeholder bodies, but agreed that it was best placed to provide road-controlling authorities with best practice guidance as an active modes technical reference group.

The group agreed that such a group would require liaison with, and input from, a variety of bodies or groups representing differing aspects of active mode mobility and transport, but that attempting to have all representatives of all these bodies present as members would diminish the group's likely effectiveness.

The group agreed that the most effective means to enhance engagement with the sector and awareness of local initiatives would be to convene regularly and to travel around the country, spending a day and a half at a host location and taking the opportunity to inspect facilities and discuss these.

The group agreed to terms of reference being prepared for the group to meet approximately every three months for effectively two days, and to remain composed of practitioners and experts.

In recognition of the significantly increased commitment being sought from members of the group, a formal request will be sent to the CEO of each organisation represented on the group, explaining its purpose and terms of

reference, and requesting the continued support of the group by continuing to make available their current representative.

The group will next meet in Auckland on 17/18 or 18/19 June.

**13. Other business**

The group reviewed the design concept of a “protected intersection” and noted the complexities and delays consequent on introducing a separate set of signal phasing devoted to cycling facilities in addition to those for vehicular traffic and for pedestrians.