

National Cycling Signs and Markings Working Group
Meeting at 9:30am on Friday, 22 March 2013
NZTA, National Office, 44 Victoria Street, Wellington

Notes of Meeting

Attending:

- | | |
|----------------------|---------------------------------------|
| • Bruce Galloway | Tauranga City |
| • Carl Whittleston | New Plymouth City |
| • Ron Minnema | Dunedin City |
| • Rhys Palmer | Nelson City |
| • Paul Barker | Wellington City |
| • Sandi Morris | Palmerston North City |
| • Matthew Rednall | Auckland Transport |
| • Amit Patel | Auckland Transport |
| • Michael Brown | Auckland Transport |
| • Stephen Carruthers | NZTA |
| • Tim Hughes | NZTA |
| • Gerry Dance | NZTA |
| • Glenn Bunting | NZTA |
| • Wayne Newman | RCA Forum Research & Guidelines Group |

Apologies:

- | | |
|-------------------|--------------------|
| • Michael Ferigo | Christchurch City |
| • Owen Mata | Hastings District |
| • Claire Sharland | Taupo District |
| • Adam Moller | Auckland Transport |

1. Introduction and recap from 23 November 2012 meeting

The meeting confirmed the minutes of the previous meeting.

2. Identify combinations using the existing symbol

3. Identify potential alternative or additional symbols

Items 2 and 3 were taken together.

Agreed markings are required to address three different situations:

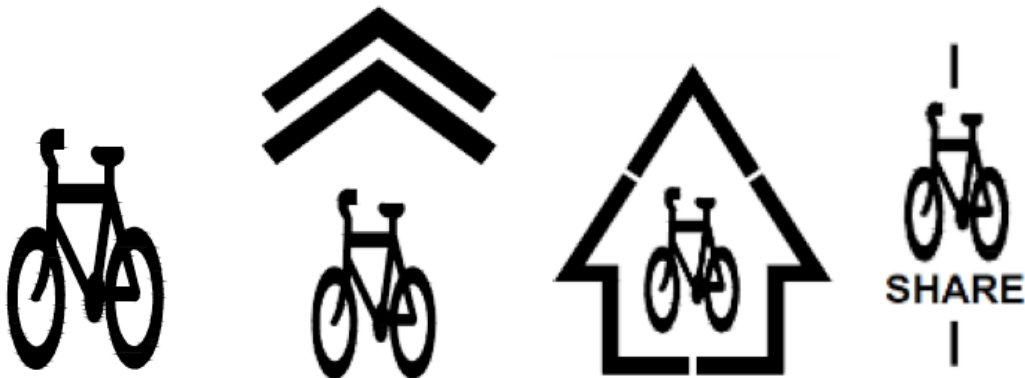
- Defining a cycle lane
- Defining a lane to be shared by motorists and cyclists
- Defining a safe line for cyclists

These equate to the three purposes of markings specified by 5.1 of the Traffic Control Devices Rule 2004 requiring a marking to have a regulatory, warning or advisory function.

Gerry Dance presented an overview of the alternatives using the existing symbol or alternative or additional symbols for provision of adequate information for both cyclists and fellow road users.

Amit Patel presented a report by Flow Transportation Specialists on symbol use and type, and international best practice, in a review of shared lane markings prepared for Auckland Transport.

The existing symbol can be used alone or with a single or double chevron (the “sharrow”) or arrow, or inside an arrow (“bike in house”), or in association with a word. Examples include:



Use of the existing symbol for purposes other than defining an exclusive cycle lane would require amendment of the current legal status of the symbol.

The principal alternative to the existing symbol would involve adopting the cyclist symbol, showing a rider on a bicycle with more or less detail. Examples include:



The meeting agreed that adding a rider to the bicycle did not offer a new tool.

Adding a rider raised numerous distracting considerations regarding the depiction of the cyclist: posture racing or relaxed; with or without helmet; with or without bicycle frame; with or without basket. A complex new painting template would be needed by roading authorities.

If a cyclist symbol were to be introduced, it would ideally need to be adopted for all cycling markings to avoid confusion and then be distinguished by additional symbols to indicate the function it was serving in different situations. This would deliver no benefit over the existing symbol, but involve considerable expense for authorities in re-marking existing facilities.

While the cyclist symbol is also used in Europe and North America in addition to the existing cycle symbol, the cycle symbol is consistent with Australian usage and, more to the point, with Austroads guidance .

For these reasons the meeting agreed:

- a) potential alternative symbols should not be pursued further; and**
- b) combinations using the existing symbol should be investigated for focus group assessment and monitored trials.**

- 4. Identify changes to the TCD Manual, the process and likely timeline**
- 5. Identify changes to the RUR, the process and likely timeline**

Items 4 and 5 were taken together.

Stephen Carruthers presented an overview of changes required to the Traffic Control Devices Rule (not Manual) to extend the application of the existing symbol.

Minor changes to the TCD Rule can be introduced through the “omnibus” rule change process, which is undertaken each year from April to come into force in November. This process would involve providing a diagram and description of the proposed change to the Ministry of Transport, consulting with the Ministry and putting the proposed changes out for public consultation, usually during May, with the intention to finalise the changes during August and September.

Introducing an advisory symbol for sharing a lane would require unlocking the regulatory connotations of the existing symbol by introducing a new system of marking a cycle lane, by edge lines, pavement colour or adding words or no stopping lines to the existing symbol to give it a regulatory meaning. This has implications for several sections of the TCD Rule.

TCD Rule 7.12 says:

- (1) A lane, including a cycle lane, may be indicated to road users by one or more traffic control devices used singly or in combination, including:
 - (a) traffic control devices in *7.1(3)(a) to (i)*; or
 - (b) other markings that comply with *Section 5*.
- (2) If the use of a lane is restricted to a specific class or classes of vehicle, the traffic control devices that indicate the restriction must comply with *Section 11*.

It is unclear why 7.12(1)(a) does not include 7.1(3)(j) and (k), but 7.1(3)(j) provides for the use of lane lines. Regarding these, Rule 7.11 says:

A lane line may be:

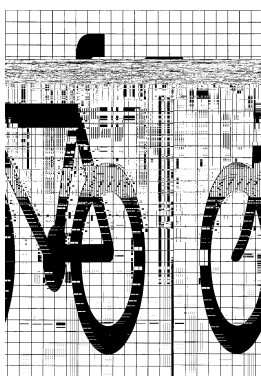
- (a) marked or indicated by one or more traffic control devices in 7.1(3)(a) to (i); or
- (b) marked with: (i) a white broken or continuous single line that is not less than 100 mm wide; or (ii) a regular pattern of raised white pavement markers.

TCD Rule 11.2(1) says:

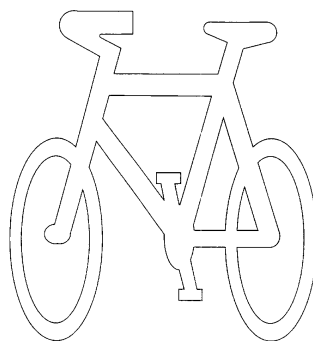
If defining a part of a road as a special vehicle lane, a road controlling authority must, at the start of the special vehicle lane and [after each intersection, along its length:]

- (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;

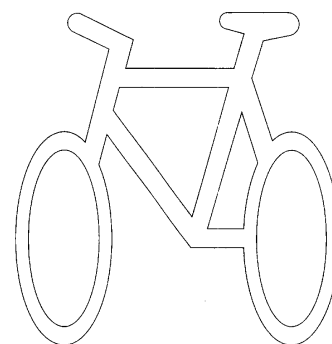
Schedule 2 defines three road-marking symbols for bicycles: M2-3 and two variations of M2-3A. All new marking after 30 June 2009 should use M2-3:



M2-3



M2-3A



M2-3A

TCD Rule 11.2(2) says (regarding lane markings):

A road controlling authority may provide the following traffic control devices to discourage use of a special vehicle lane by other vehicles, or to draw attention to the likely presence of vehicles entitled to the use of the lane:

- (a) additional white special vehicle lane symbols described in 11.2(1)(a) or signs described in 11.2(1)(b) along the length of the lane; or
- (c) a surface treatment that provides a contrasting colour or texture to that of adjacent lanes used by other vehicles: (i) at locations along the length of the lane; or (ii) along the length of the lane.

The meeting noted that potential use of the Queensland yellow BAZ symbol as a warning marking was not excluded by the TCD Rule, but the distinction between white and yellow was likely to be insufficient, especially in full sun or under street lighting after dark. Use of yellow for other than regulatory markings would also be inconsistent with other usage for road markings.

The meeting compared the marking for a cycle lane with the marking for a bus lane and noted that a special vehicle lane for the use of buses is marked by M2-2 or M2-2.1 and noted that these do not say only “BUS”, but either “BUS LANE” or “BUS ONLY”. For consistency and ease of retrofitting existing cycle lanes to comply with an amended rule, adding “LANE” or “ONLY” to the existing symbol was preferred. See Appendix 1.

The meeting agreed:

- a) **amending M2-3 to include “LANE” or “ONLY” with the existing symbol for marking a cycle lane would potentially allow the cycle symbol to be combined with other markings to fill warning and advisory functions without a need for any consequential changes within the TCD Rule; and**
- b) **combining the cycle symbol with other markings to fill warning and advisory functions would trigger a need for consequential changes within the TCD Rule.**

The meeting noted a potential need for amendment of the Road User Rule. Introducing markings to encourage cyclists into the traffic lane and to encourage cyclists to ride further to the right in both cycle lanes and other lanes to be safer from hazards on the left, particularly opening doors on parked cars, would be contrary to section 2.1, which says:

- (1) A driver, when driving, must at all times drive as near as practicable to the left side of the roadway unless this rule otherwise provides.
- (2) If a driver’s speed, when driving, is such as to impede the normal and reasonable flow of traffic, that driver must, as soon as is reasonably practicable, move the vehicle as far as practicable to the left side of the roadway when this is necessary to allow following traffic to pass.

The meeting noted the implication for this rule of NZS4404, which specifically encourages the cyclist to be in the lane and not as far as practicable to the left. Markings giving traffic warning of a situation in which potentially slower vehicles might be wholly in the lane and not as near as practicable to the left side would have a legitimate function in responding to 2.1(2), but advisory markings for cyclists setting an alignment within the roadway contrary to 2.1(1) could necessitate a specific amendment to the rule.

6. Identify process for engagement with other road user representatives

Members of the working group had already begun the process of engagement with other stakeholders and expected this to expand as proposals were developed to go to focus groups and trials.

The meeting agreed to invite Glen Koorey of the Civil and Natural Resources Engineering School at Canterbury University to join the working group.

7. Identify trials, the process, achieving consistency, and funding

Properly monitored trials need to be undertaken to provide the necessary support for a proposal to amend the TCD Rule to be presented to the Ministry of Transport. Without prior trials of the proposal, it is very unlikely to be included within the omnibus amendment. This means that any amendment of the TCD Rule to change the marking of cycle lanes and to introduce new warning and advisory markings would be put forward for the next omnibus amendment process and is not likely to come into effect before November 2014.

The meeting agreed to:

- a) **develop a national package of trials for new markings for cycle lanes and shared traffic lanes to define exclusive or shared use or to advise cyclists of the safest position or alignment within the lane or roadway; and**
- b) **present a proposal for these trials to the next TCD Steering Committee meeting on 21 May 2013.**

8. Identify best-practice guidance needs and options

Numerous recent reports have suggested that the current Austroads guidance used in New Zealand for marking cycle lanes, particularly adjacent to parked vehicles could be improved. As well as clearer guidance on this, if increased sharing of the lane is to be encouraged, it will be critical to identify international best practice on the use of shared lane markings and the situations where these are appropriate.

Guidance on where to use, and where not to use, shared lane markings and advisory alignment markings will need to be developed in close collaboration with all stakeholder groups.

9. Identify actions for working group and funding

Budget provision of \$35,000 for the working group has been proposed in the RCA Forum draft budget.

Auckland Transport will:

- a) develop a set of standard trial protocols and circulate;
- b) obtain and circulate the traffic data used by Flow Transportation Specialists in the Shared Lane Markings Review to inform the criteria set for uses of the markings in trials.

Members proposing to undertake trials will confirm this and begin to prepare proposals for trials based on material circulated.

Ideally trials will be undertaken in the identified in the problem situations and will all follow the agreed trial template to ensure consistency across the country;

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

Gerry and Wayne will coordinate the agreed markings to be proposed for trial and liaise with members on putting potential markings before focus groups for input and feedback.

Preliminary actions to be completed by 20 April.

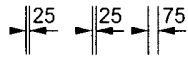
Draft proposal for national package of trials to be completed by 10 May.

Appendix 1

New M2-3.1 Cycle Lane marking

Letter heights: 2400 mm (urban), 3600 mm (rural)

LANE



OR New M2-3.2 Cycle Only marking

Letter heights: 2400 mm (urban), 3600 mm (rural)

ONLY

