

Meeting at 9:00 on 19 August 2016
NZ Transport Agency Wellington Regional Office
Majestic Centre, 100 Willis St, Wellington

Present:

- Gerry Dance Principal Advisor Cycling, National Cycling Team, NZTA
- Kirsty Horridge Network Engineer, Hamilton City
- Tim Hughes National Traffic and Safety Engineer, NZTA
- Simon Kennett Senior Project Manager, National Cycling Team, NZTA
- Glenn Bunting Network Manager, NZTA
- Marni Ratzel Team Leader, walking and Cycling, AT
- Ina Stenzel Principal Specialist – Walking and Cycling, AT
- Steve Dejong Traffic Engineer, Christchurch City
- Susan Lilley Senior Transportation Planner, Dunedin City
- Richard Bean Senior Engineer, NZTA
- Paul Barker Safe and Sustainable Transport Manager, Wellington
- Glen Koorey ViaStrada Ltd (from 10.20)
- Jeanette Ward Abley Transportation Consultants (from 1.20)
- Wayne Newman RCA Forum Research & Guidelines Group (secretary)

Apologies:

- Claire Sharland Asset Manager Transportation, Taupo District
- Jodie Lawson Sustainable Transport Team Leader, Rotorua Lakes
- Sandi Morris Transportation Planner, Palmerston North City
- Kylie Huard Senior Transportation Planner, Dunedin City
- Kathryn King Walking & Cycling Manager, Auckland Transport
- Claire Graham Senior Specialist – Walking and Cycling, AT
- Nick Marshall Senior Rooding Engineer, Whangarei District
- Clare Cassidy Planning Engineer, Transport, Tauranga City
- Nathaniel Benefield Lets Go Project Manager, New Plymouth District
- Simon Cager Senior Project Engineer, Hutt City

ACTIONS

1. G. Dance, S. Kennett and R. Bean – two options for markings at vehicle entrances crossing cycle paths to be mocked-up and circulated for the chosen option to be signed off at our next meeting.
2. G. Dance, W. Newman, S. Dejong – investigate a submission from AMIG on electric vehicles in Bus Lanes.
3. G. Dance, W. Newman – discuss proposing IPENZ Transportation Group sub-group on walking and cycling.
4. S. Dejong – will circulate spec used for Hook Turn sign.
5. G. Dance, S. Kennett and R. Bean – two options for “Share the Road” sign in black and white, both with “Pass Safely”, but larger one with “1.5m” and smaller without “1.5m”, to be mocked-up.
6. G. Dance, S. Kennett, Dr G. Koorey – include investigation of appropriate marking for a cyclist crossing in the RUR research, to define the problem and what response might be most effective.
7. EVERYONE – provide suggestions or examples of easy improvements for cycling that do not need formal Council resolution or bylaw to implement.
8. G. Dance, W. Newman, G. Bunting – discuss referring road-rail interface issues to new group being established by RCA Forum.
9. G. Dance, S. Kennett – discuss with Jeanette Ward and Hamish Mackie possible need for speed limits on cycle and shared paths to be included in research.
10. S. Dejong – will provide example of Supplementary for Give Way at cycle path intersection.

AGENDA

1. Introductions, apologies and emergency briefing
2. Actions from last meeting
3. Cycling Network Guidance
 - TN002, including vehicle entrances on cycle paths
 - Stage 3
 - Sector training
4. Signage
 - “Cyclists may use full lane”
5. Share the road - 1.5m signs
6. Give-way Rules research
7. Markings
 - Sharrow consultation
 - Pavement markings trials
 - Cycle lanes – broken yellow line by kerb
 - Crossings
 - Cycle only – signalised
 - Cycle only – unsignalised
 - Pedestrian - unsignalised
8. Omnibus update
9. Wayfinding signs
10. 2WalkandCycle conference report
11. Shared footpaths
12. Safety and Network Functionality Guidelines
13. Short-term cycle-friendly infrastructure trial options
14. Schedules to Bylaws
15. Work Programme
16. Other business
 - Electric and low-powered vehicle research
 - Kiwirail requirements for crossings
 - Speed limits for cycling facilities
 - Tactile warnings for cycle crossings
 - Supplementary sign for GW at cycle path
 - Stop sign requirements at cycle paths
 - Intersection treatments for SBF
 - “Sharrow flowers”

NOTES

1. Introductions, apologies and emergency briefing

Marni Ratzel was welcomed and Susan Lilley was welcomed back. Apologies were noted. Gerry Dance welcomed the group and provided the emergency briefing.

2. Actions from last meeting

(a) Claire Graham - AT pavement marking designs trials must proceed without inclusion of the chevron directional element.

Taken under Item 7.

(b) Kathryn King - arrange a special AMIG workshop within the 2WalkandCycle Conference with Tyler Golly and Ryan Martinson.

Taken under Item 10.

(c) Tim Hughes - report to the next meeting on use of schedules with bylaws.

Taken under Item 14.

(d) Tim Hughes - report to the next meeting on amending TCD Manual to recommend marking all cycle lanes with broken yellow lines beside the kerb.

Taken under Item 7.

(e) Gerry Dance - follow up invitations to Hutt, Whangarei, Whanganui, Napier and Gisborne. Noted apologies from Simon Cager and Nick Marshall for this meeting. No response has been received from Whanganui, Napier and Gisborne. No further action in the meantime.

(f) Gerry Dance - send invite to Alec Finn at Thames Coromandel District Council to join the group. Changes at TCDC mean this action has been superseded.

(g) Gerry Dance to confirm venue and date for August meeting. Completed.

(h) Gerry Dance - confirm if it might be possible for the AMIG Dunedin meeting in November to be held back-to-back with UCP group meeting. Changes at DCC mean the Dunedin meeting will no longer be appropriate. No further action to be taken.

(i) Wayne Newman - invite IPENZ to nominate representative. An initial informal discussion indicated that IPENZ did not favour this means of giving the consulting sector a presence. No further action to be taken.

(j) Wayne Newman - put feedback on the guidelines on the framework and input on what has worked well as a standing item for the agenda of future meetings.

Item 3.

(k) Wayne Newman - propose to Shared Footpaths group that Dr Shane Turner should become engaged in the group's activities. Open.

(l) Wayne Newman - put on the agenda for the next meeting consideration of markings for signalised and unsignalised cycle-only crossings and unsignalised pedestrian-only crossings.

Item 7.

3. Cycling Network Guidance

a. TN002 – vehicle entrances on cycle paths

Commercial vehicle entrances create high traffic-volume intersections on cycle paths in some instances and drivers exiting across the cycle path are normally looking to their right, rather than left for approaching cyclists. Cyclists on the path have priority, but an effective marking is needed to alert drivers to look both ways.

The orientation of the bike symbol and position of arrows in a marking on the cycle path would need to be marked to alert drivers to cyclists coming from both directions. The critical location for these markings will be at exits. They will encounter far heavier wear than markings only subject to cycling traffic, however.

Continuing the green across the entrance/exit has the potential to increase the risk to cyclists by giving a false sense of safety as they approach an effective intersection with crossing vehicular traffic. There is a need for a marking pattern that is distinctive and specific to cyclists that can be used in all situations where cycle paths or lanes cross the path of motor traffic. Any such pattern would possibly need to be able to be marked in different colours on cyclist-only and on shared paths.

A chequer or block pattern needs to be trialled.

In many cases a private property owner might want to use a sign to warn drivers. There are very few single sign designs that might be adopted. The Canadian WC-43 (TAC) is one. An alternative design might be to put arrows into the corners on either side of the bike symbol.

Two options will be mocked-up and circulated for feedback to allow the agreed selection to be fully designed and signed off at the next meeting. Gerry, Simon and Richard to action.

b. TCD Manual review

Material from the CNG is now incorporated into the drafts of Part 4 and Part 5. Part 5 (between intersections) is in the final review before going to consultation and the ratification process. Part 4 (intersections) will be next.

c. CNG Stage 2

There is still a need for feedback on the material already up. The new SCOT (Separated Cycleways Options Tool) compares the risks for a specific section of road. There is also interim intersection and driveways separated cycleways guidance and the new section on cycling friendly roundabouts is leading Austroads on this issue.

d. CNG Stage 3

The website will need more case studies, photos and diagrams from all members. The AT guidance under preparation will need to be linked when

completed and better links to Christchurch guidance still need to be inserted. Work still to be programmed includes: an agreed means to rate level of service and also to assess demand; getting the social licence for road space reallocation; integrating facilities selection and design between and at intersections; and effective scaling of user counts.

e. **Sector Training**

Training needs differ across locations. For some it is in options selection and for others it is in detailed planning. Route selection remains critical before any detailed planning should begin. The Business Case process can assist this by showing the level of detail needed to tell the story. The current one-day fundamentals course has been criticised as too long and lacking enough practical content. Perhaps it could be reduced to a half-day fundamentals introduction with half-day workshops on specific topics (such as roundabouts or intersections), case studies and brain-storming sessions.

f. **Industry practitioner involvement**

An alternative mechanism to including a representative of IPENZ on AMIG for improving the interaction between the group and industry practitioners might be a walking and cycling special interest subgroup of the IPENZ Transportation Group.

4. Signage

a. **“Cyclists may use full lane”**

Three versions of such a sign had been mocked up (with supplementary signage). Two of these were clearly directed towards motorists, while the third was directed to cyclists. It was noted that the signs did not accord with the current rules and addressed the same need that has been addressed by the Sharrow. It was agreed that the Sharrow is to be used to indicate situations where it is appropriate for cyclists to use the lane.

b. **Hook Turn Sign**

These have been installed on all SBF intersections across Christchurch. A monitoring programme will be the next stage.

5. Share the road – 1.5m signs

Three versions of such a sign had been mocked-up showing:

- (a) “1.5 m” over arrows between a cyclist and car, over the words “Slow Down”;
- (b) “1.5 m” over arrows between a cyclist and car, over no words; and
- (c) “Space matters” between arrows between a cyclist and car.

All three options were rejected. It was agreed that a black and white format was preferred, but the words under the symbols should be “Pass Safely”. It was agreed that the 1200 x 900 sign would be suitable for roads where the traffic speed made the separation critical, but a smaller 900 x 900 sign without the “1.5 m” over the arrows could be useful for urban roads and narrow rural roads.

6. Give-way Rule research

Dr Glen Koorey reported on the research to support the second tranche of possible Rule changes. MWH (Dr Shane Turner) and ViaStrada are undertaking research on give-way rules including:

- I. giving cyclists priority over turning traffic where separated cycling facilities cross side roads;
- II. giving pedestrians priority over turning traffic when crossing side roads;
- III. allowing cyclists to use a left turning lane while riding straight ahead;
- IV. allowing cyclists to undertake slow moving traffic;
- V. allowing cyclists to lane split when filtering to the front of a queue of traffic;
- VI. allowing cyclists to turn left and/or ride across the top of a T-junction despite being faced with a red light.

A key complication is the definition of “roadway”, which appears to limit it to the portion of the road used or able to be used by vehicular traffic in general. This interpretation suggests any exclusive vehicle lane would not be able to be used by vehicular traffic in general and not be a portion of the roadway. Nevertheless, an “intersection” is only where two or more “roadways” intersect or meet, and appears to exclude intersections with footpaths or cycle paths. The research indicates the definitions need to be amended to ensure effective recognition of these other paths.

I. Giving cyclists on a SBF or shared path priority over turning traffic would extend the current priority for a cycle lane in the roadway to paths outside the roadway. This would be less intuitive for motorists and the crossing would probably need to be marked (or put on a platform). The reduced LOS for each mode from changing or not changing needs to be modelled using predicted cyclist and traffic numbers before this change can be assessed.

II. Giving pedestrians priority over turning traffic would reverse the current priority for motorists on the roadway. This would be in accord with the priority in many North American and European jurisdictions, but would need to be a highly publicised change here. Localised reversal of priority is likely to increase motorist confusion, non-compliance and risk to pedestrians. The crossing would probably need to be marked (or put on a platform). The effect on pedestrian safety needs to be modelled, especially looking at footpath sight-lines and vulnerable users, including children, before this change can be assessed.

III. Allowing cyclists to continue straight ahead from a left turn lane reflects current practice and has minimal effect. For dual turn lanes and situations where it would be inappropriate, exception signage should be installed. A change to the Rule for universal application is supported.

IV. Allowing cyclists to pass on the left reflects current practice and all risks already exist. A change to the Rule for universal application is

supported.

V. Allowing cyclists to pass on the left would automatically permit cyclists to “lane split” where traffic is stationary. A change to the Rule for universal application is supported.

VI. Allowing cyclists to proceed when faced with a red signal would be likely to increase negative perceptions of cyclists among pedestrians and motorists. Where pedestrians are crossing, it would allow an all-modes Barnes dance. The risks for vulnerable pedestrians would be increased. The effect on pedestrian LOS needs to be modelled from the predicted behaviour of all users (including avoidance by vulnerable users).

7. Markings

a. Sharrow consultation

The use of the sharrow marking was discussed under Item 4; no further discussion was taken.

b. Pavement marking trials

The interim report on the trials in Auckland is expected to be available by November. The Christchurch trials indicate markings have an initial cost less than 20% of signs.

c. Cycle lanes – broken yellow line by kerb

This has been included in the consultation on Part 5 of the TCD Manual and is recommended.

d. Crossings

The critical consideration for cyclist crossings is the speed of entry; a cyclist is able to enter a crossing too quickly for the average reaction time of motorists. Giving cyclists priority at crossings would exacerbate this risk. A distinctive marking for cycle crossings that required both cyclists and motorists to slow down as they approached it needs to be considered. Given the similarity of crossings and vehicle entrances, the same marking discussed under Item 3 should be used. The Review of Road User Rules for People Walking and Cycling needs to be extended to establish the extent and nature of the problem, and potential solutions.

8. Omnibus update

The consultation on the proposed changes included in the Omnibus Rule Amendment has been completed and the changes are drafted. Ministerial sign-off is expected in September and the amendments are expected to come into force in November. Changes will be Gazetted one month prior to coming into effect, allowing an opportunity for publicity.

9. Way-finding signs

The Manual of Cycling Signage (based on Austroads) was developed by Christchurch and has been adopted as the national standard. This is now being adapted to match NZ best practice regarding fonts and layout, so

Clearview is replaced with Transport Medium, and arrows are consistent with NZ practice.

Two distinct types of signage are provided for: directional and destination descriptor. These are described as “primary route” and “secondary route”. Guidance on the use of such signage in Part 2 of the TCD Manual will need to be clear that the distinction is primarily to give the signs clear names for contractors. There will be locations on primary routes where a local destination descriptor is appropriate.

10. 2Walkand Cycle Conference report

A special AMIG workshop within the 2WalkandCycle Conference with Tyler Golly and Ryan Martinson did not occur.

11. Shared footpaths

Jeanette Ward reported on the workshops with stakeholders on footpath cycling. The group noted the experience of Japan, which had reversed its decision to put all cyclists on to the footpath. A small survey has been done on local children for this research project, showing a high number have ridden on the footpath and over 70% claim not to have known it was illegal. This needs to be augmented with a survey of adults that also identifies whether any did not know it was illegal. The research needs to show what benefit would be delivered, and at what costs.

12. Safety and Network Functionality Guidelines

The SANF Guidelines have been developed and are being trialled by the Major Cycle Routes Peleton and Velos Delivery teams in Christchurch. In considering only safety in any scheme assessment, other equally essential factors, such as parking, access to commercial or residential properties and network impacts for all road users can be overlooked. In including these network functionality elements when assessing or auditing schemes, a more effective assessment and comparison of the issues within corridors can be achieved.

The Guidelines can be applied at four stages within a proposed scheme, but early application will identify ‘social licence’ issues in making the proposed change. Although developed for walking and cycling projects, the Guidelines would be useful for all proposed transport projects.

13. Short-term cycle-friendly infrastructure trial options

Following a request from Wellington for suggestions for easy improvements, such as marking a wider uphill shoulder, ideas are invited for improvements that can be made without requiring formal Council resolutions or a bylaw to put into place.

14. Schedules to Bylaws

All matters that may be regulated by bylaw relating to the use of roads were consolidated and listed in Section 22AB of the Land Transport Act.

The critical test for such a bylaw is whether it is unreasonable or undesirable in so far as it relates to or may affect traffic. A bylaw is needed where a proposal affects the ability of persons to pass along a road, but is frequently needed for effective enforcement.

15. Work Programme

The agreed priorities for the work programme remain:

- delineators and separators, including vertical posts and appropriate spacings;
- determining a maximum number of private access crossings of a bike facility or the maximum number of entries off a shared path before the levels of service become unacceptable;
- understanding the priorities at work within intersections;
- resolving the conflict at bus stops to determine whether the pedestrian is crossing a cyclist facility or a cyclist is crossing a pedestrian facility must be a priority; and
- developing guidelines on good practice in designing or adopting shared paths.

16. Other business - Technical workshop

a. E-bikes and low-powered vehicles

Simon Kennett reported that this research project was due to be signed off very soon, with a reporting date likely to be in November.

b. Treatment at crossings of rail lines

Steve Dejong presented a situation where KiwiRail is insisting on mazes on shared paths at level crossings of rail tracks, but cyclists are avoiding the mazes. Furthermore, for agreement to an extension of a rail-side shared path, KiwiRail is requiring mazes to be fitted to all existing level crossings. Ina Stenzel reported a similar demand for an existing shared path level crossing to be replaced with a bridge or underpass elsewhere.

Part 9 of the TCD Manual is due for review this year and the number of road-rail interaction issues being reported generally suggests that it would be timely to reconvene the RCA Forum Level Crossings Group.

c. Speed limits for cycle paths

Steve Dejong reported on a high-speed impact of a cyclist with a rain garden in which the cyclist is estimated to have been travelling at about 50km/h and asked whether cycle paths and shared paths need posted speed limits. At present there is a very real risk that the design speed for a path could be substantially less than its posted speed limit, as in most situations the path will not be separately posted from the road it is adjacent to.

The take-up of e-bikes can be expected to introduce significantly greater speed differentials between users on cycle and shared paths. As the issue of appropriate speeds for cyclists on footpaths has already been identified as a consideration in the footpath cycling research, it was agreed that

appropriate speed limits for shared paths and cycle paths be added to the current research being progressed.

d. Cycle paths crossing footpaths

Steve Dejong noted that too many designs were being presented where the cycle path crossed a footpath and excessive use is made of TGSi tiles. TGSi is being used to mitigate design effects. This is the opposite of the SANF approach which should seek to minimise the need for TGSi.

e. Supplementary signage at Stop and Give Way signs

Steve Dejong reported on the success of supplementary signs at cycle paths, where motorists were failing to give way to cyclists on the path, and proposed getting agreement on designs for supplementary signs to be approved for national use. Designs used in Christchurch will be provided for approval.

f. Guidance on use of Stop signs on cycle paths

Steve Dejong reported that many designs are being presented where every intersection of a cycle path with a street is requiring a “Stop” even where this is not appropriate for the levels of use. There appears to be a need for better guidance or training, as the current guidelines do not call for this approach or suggest that it is necessarily safer.

g. Mixing zone before intersection

Ina Stenzel raised a concern around the designs proposed within the CNG that bring cyclists off SBF into a mixing zone before they reach an intersection. It was agreed that the volume of left-turning traffic was critical to the success of this design, but it is regarded as current best practice in the USA. It is being trialled in Wellington.

i. “Sharrow Flowers”

Marni Ratzel reported that “sharrow flowers” are used overseas as branding and way-finding markings. It was agreed that the sharrow adopted for use in NZ has neither function and it would be inappropriate to use a combination of sharrows in a situation where their legal meaning would not make sense.

17. Next meeting

The next meeting will be on 24 November in Wellington. Gerry Dance to confirm venue.