

MINUTES OF MEETING: Friday 17 August 2018
Meeting Room 5.16, NZTA Offices, Majestic Centre, 100 Willis St,

Attending

- Paul Barker, Safe and Sustainable Transport Manager, Wellington
- Richard Bean, Senior Engineer, NZTA
- Adam Beattie, Walking and Cycling, AT
- David Brown, Traffic and Safety Engineer, New Plymouth
- Glenn Bunting, Network Manager, Safety and Environment, NZTA
- Simon Cager, Senior Project Engineer, Hutt City
- Gerry Dance, Principal Advisor, System Design & Delivery, NZTA
- Steve Dejong, Traffic Engineer, Christchurch City
- Mark Edwards, Senior Engineer, NZTA
- Tim Hughes, National Traffic and Safety Engineer, NZTA
- Simon Kennett, Senior Project Manager, System Design & Delivery, NZTA
- Matthew Kilpatrick, Transportation Planner, Palmerston North City
- Glen Koorey, ViaStrada representing IPENZ Transportation Group
- Wayne Newman, RCA Forum Research & Guidelines Group (secretary)
- Claire Pascoe, Lead Advisor – Multi-Modal, System Design & Delivery, NZTA (Item 4.9)
- Ina Stenzel, Principal Specialist – Walking and Cycling, AT
- Andrea Timings, Network Engineer, Hamilton City

Apologies

- Susan Lilley, Transportation Planner, Dunedin City
- Claire Sharland, Asset Manager Transportation, Taupo District
- Andy High, Senior Engineering Officer, Nelson City
- Nick Marshall, Senior Roding Engineer, Whangarei District
- Jodie Lawson, Sustainable Transport Team Leader, Rotorua Lakes

A G E N D A

- 1. WELCOME, INTRODUCTIONS, APOLOGIES AND H&S BRIEFING**
- 2. ACTIONS FROM PREVIOUS MEETINGS**
- 3. UPDATES**
- 4. DESIGN ISSUES**
- 5. OTHER BUSINESS**

ACTIONS AND DECISIONS FROM THE MEETING

Actions from 10 May 2018 remaining open:

1. S. Kennett - incorporate the three heights now being used for Copenhagen kerbs in New Zealand into the guidance.
2. T. Hughes - prepare trials for Copenhagen kerb heights to assess the relative risks of pedestrian and cyclist injury.
3. M. Edwards – investigate establishing a working group to work with the industry and TCD Steering Group to agree on a better specification to define the glass size and hardness and required longevity for skid-resistant Apple Green surfacing. Discuss evidence of problem with S. Dejong, S. Kennett and A. Harlow.
4. S. Dejong – investigate measures to avoid the continuous green lane across the road at a cycle crossing giving visual cues that encourage unsafe behavior and report back.
5. A. Beattie - investigate a possible marking based on a variant of the “pass with care” signage to moderate speed behavior on shared paths and report back.
6. R. Bean - approve the addition of the Albany St intersection to the shared Barnes dance trial to provide a result that would indicate the effect for a higher volume intersection.

Actions from 17 August 2018

1. S. Kennett – circulate the list of approved options to be included in the consultation on the Accessible Pathways Package as soon as it is able to be released.
2. G. Dance – circulate report on review of PPDG and RTS14.
3. S. Dejong – circulate the previously approved plans for a cycle path crossing showing a need to have Belisha beacon discs and zebra poles for reassessment.
4. M. Edwards – draft response to TCD Steering Group on CoPTTM working group’s proposed pedestrian and cyclist signs (Item 4.1).
5. S. Dejong – provide links for Christchurch City Council Cycling Network educational videos (Item 4.2).
6. S. Dejong – provide research on compliance in Christchurch variable 40kmph school zones to G. Bunting and for agenda for next meeting (Item 4.7).
7. S. Kennett – circulate draft definitions of cycle path, cycle lane and shared path for comment (Item 4.8).
8. S. Kennett – redraft the Sharrow User Guide for merging a cycle lane into a traffic lane with sharrows to show the cycle lane extending further and leading into a series of green bands fanning out gradually into the traffic lane (Item 4.10).
9. G. Dance – circulate list of potential gaps in CNDG (Item 5.2).
10. A. Beattie – circulate AT ‘place and movement’ guidance (Item 5.3).
11. M. Edwards – circulate draft PT guidance (Item 5.3).
12. A. Beattie – liaise with G. Dance and W. Newman on arrangements for next meeting.

Decisions: AMIG 17 August 2018

The proposal from the CoPTTM working group to the TCD Steering Group that pedestrian directional signs should be white on blue to be consistent with the permanent pedestrian sign and to provide better contrast at work sites was endorsed. For this reason and for the lack of apparent need for additional pedestrian directional signs beside the approved TU31 and TU32 signs, the group did not support proposals for additional black-on-orange pedestrian directional signs, as the proposed signs were inconsistent with the permanent pedestrian sign, provided poor contrast and would merge into an orange mesh background. AMIG recommends that the current TU31 and TU32 signs should be reviewed to meet the concerns

raised by the CoPTTM working group. AMIG accepted the CoPTTM working group's finding that wider use of icons in place of words in black capital letters on an orange background would be beneficial to groups who find such signs difficult to read and, therefore, could not endorse proposed new pedestrian signs using black capital letters on an orange background. AMIG agreed that a new supplementary "CYCLISTS MERGING" sign, proposed by the CoPTTM working group as a combination with a T2A Other Hazard Advance Warning sign for use where a cycle lane is closed and cyclists are required to merge into the traffic lane, has merit.



NOTES OF MEETING

1. WELCOME, INTRODUCTIONS, APOLOGIES AND H&S BRIEFING

D. Brown and M. Kilpatrick were welcomed to the group. The group was also pleased to hear that Hastings would again join the group, with Eynon Phillips, Strategic Transport Engineer for Hastings District Council asking to join. The apologies were accepted, including one for lateness from M. Edwards. G. Dance gave the H&S briefing. The draft agenda was confirmed.

2. ACTIONS FROM PREVIOUS MEETING

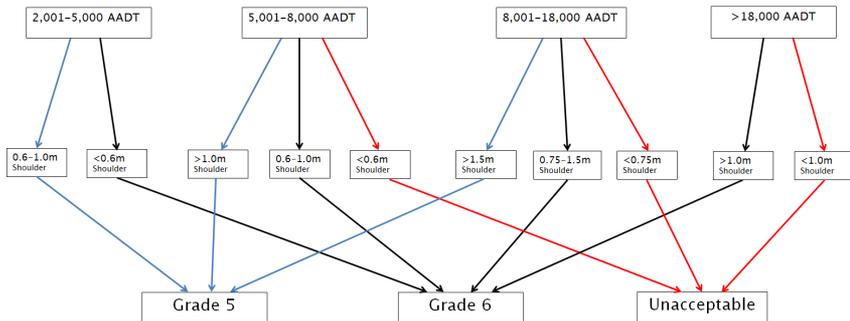
Actions from the 10 May 2018 meeting were reported:

7. S. Kennett - incorporation of the three different heights now being used for Copenhagen kerbs within New Zealand into the national guidance has not yet been done.
8. T. Hughes - trials of the differing Copenhagen kerb heights now installed to assess the relative risks of pedestrian and cyclist injury have not yet been progressed.
9. T. Hughes - discussions with AT will see a trial for a thermoplastic delineator with a low double-edged and ribbed profile that avoids appearing to be only a white line for the visually impaired without becoming a trip hazard. P. Barker expressed an interest in joining the trial for a section of Hutt Road.
10. S. Kennett - noted the report to the 2WalkandCycle conference from the group of mobility device users who access walking and cycling trails and the opportunity to inspect the range of devices brought to the conference. At their maximum, devices could be up to 880mm wide, up to 1650mm high or up to 2700mm long, although no single device would be the maximum size. While the guidance for minimum widths and turning radii for wider and longer cycles and devices using cycling infrastructure will specify a radius of 2.5m as the absolute minimum and 4m as preferred, including for chicanes, even a standard hoop barrier should be 1200mm high and 800mm wide at the minimum to permit access for such users.
11. G. Bunting - M. Edwards had spoken with Alister Harlow regarding the P33 specifications that relate to coloured surfacing. That conversation noted that P33 is only nine months old and appearing to meet the sector's needs. However, it was apparent in discussions at AMIG that P33 fails to fully reflect the glass size and hardness required for skidding resistance. It was also noted that P33 predated the agreement to prefer Apple green over Emerald green.

In response to comments from S. Kennett and S. Dejong that material complying with the specification is nonetheless puncturing tyres and too variable to rely on samples for testing, and specifies the wrong colour, it was agreed that there needs to be a further conversation between Alastair Harlow, S. Dejong, M. Edwards and S. Kennett on the desired outcome required from the specification.

- 12.S. Kennett - reported back on the complexity and potential cost for contractors marking or remarking the road from having the ATP 'move' inside and outside of the edgeline in response to variations in shoulder width with the proposed ATP guidance. The cost/metre to lift and relay the ATP would be prohibitive. The effect on RRPM placement and the effect on both cyclists and motorists remains to be seen.
- 13.S. Kennett - noted that guidance for all crossing, whether pedestrian or cyclist, is likely to be more emphatic in recognising a platform as best practice, so that if the crossing cannot be put on a platform, it should be reconsidered.
- 14.S. Dejong - noted that a trial of a "green and black zebra" cannot be done in those terms, but further investigation of how to avoid the continuous green lane across the road at a cycle crossing giving visual cues that encourage unsafe cyclist approach speeds and assumptions of precedence will be made.
- 15.A. Beattie - reported on investigations of a possible marking based on a variant of the "pass with care" signage to moderate speed behavior on shared paths without recourse to posting speed limits. A constraint encountered so far is that, while a temporary marking is accepted, any suggestion of permanence provokes demands for accompanying signage to meet current requirements. A progress report will be given to the next meeting.
16. S. Kennett - reported that, while work on including the length of narrow shoulder pinch points in additional determinants and marking pinch points on the map with a star to indicate a higher grade at that point (permitting only one grade increase at that point to remain acceptable) is continuing, a factor based on the percentage of HCV traffic has been developed as an additional determinant in assessing the grade at which a section of road might be included within the New Zealand Cycle Trail network. Depending on the relative percentage of heavy vehicle traffic on the road, the grade might be lifted or lowered as a result of the multiplier.

% HV traffic	Multiplier
< 1.0	AADT x 0.7
1.1 - 5.0	AADT x 0.8
5.1 - 9.0	AADT x 0.9
9.1 - 15.0	AADT x 1.0 (i.e. no change)
15.1 - 19.0	AADT x 1.1
19.1 - 22.0	AADT x 1.2
> 22.0	AADT x 1.3



- 17. R. Bean - reported that the addition of the Albany St intersection to the shared Barnes dance trial, to provide a result that would indicate the effect for a higher volume intersection, was to have been approved already, but late requests to join the trial have delayed the approval. A proposed site at Post Office Square in Wellington had since been withdrawn.
- 18. G. Dance - had confirmed the venue for the meeting on 17 August in the Majestic Centre, Wellington.
- 19. A. Beattie - has confirmed hosting the November meeting in Auckland. Discussed under Item 6.

Decisions - AMIG 10 May 2018

Decisions (1) and (2) were confirmed. Decision (3) was discussed and amended:

The “pass with care” cyclist symbol (duplicated at reduced scale to indicate a child cyclist) superimposed on a car beneath a 30 kmph roundel has been recommended to the TCD Steering Group as the threshold sign for any 30 kmph low volume shared road space meeting the criteria for marking Sharrows, as it gives a stronger and clearer visual cue for the desired behavior in terms of low-speed sharing of the road space than the suggested alternatives:



The TCD Steering Group felt that the case for a new sign had not been made and requested more information on why available existing signage does not deliver the message or desired behaviour and whether the sign is nationally applicable, or an application to undertake a trial of the proposed threshold sign in accordance with TN10.

Decision (4) was discussed. As there will be situations where it is not appropriate for the waste

collection truck to block the cycle lane or to divert cyclists into the traffic lane, the decision was amended:

Where waste collection trucks are permitted to occupy or block a cycle lane when engaged in waste collection, an RG-24 sign may not be used to comply with TMP requirements. In locations where it would be safe to divert cyclists into the traffic lane a RD-6R variant might be used. Ideally the sign would be hinged or active to be able to be used only when the truck was actively blocking a cycle lane and engaged in waste collection.



The minutes of the meeting of AMIG on 10 May 2018 were confirmed as a true and proper record.

3. UPDATES

1. *Footpath cycling law change and other RUR changes*

S. Kennett reported that a Ministry of Transport report on the possible options to be included within an Accessible Pathways Package for public consultation has gone to the Minister and will now need sign-off from the coalition partners on what will be presented to the public for submissions.

2. *Pedestrian research - draft gap analysis of PPDG and RTS14*

G. Dance reported on the review of the guidance and the results of the feedback, which had already been circulated to the group. The report will be circulated for feedback from the group.

Discussion reflected the feedback already received. There is not merely a need to revise these documents to recognize the significant shift in legislation and policy since they were drafted, but their continued existence as separate documents should be reconsidered. Not only should RTS14 be revised to better integrate text and images and incorporated into the PPDG, however; there is a need for an encompassing guidance that pulls together the guidance for both pedestrian design and cycling design to emphasise how they fit within delivering multi-modal accessibility and active mobility. The example of the Healthy Streets initiative in London, presented to the 2WalkandCycle conference, was cited.

3. *Bus stop bypass trial results – TfL*

I. Stenzel noted that the TfL trial results, circulated to the group prior to the meeting, confirm the AT and New Zealand trial lessons. S. Dejong commented on the discussion of the use of Belisha Beacons and reminded the group that it had previously agreed that a pedestrian zebra crossing on a cycle path passing behind a bus stop would still require the black-and-white pole and beacon or disc to be a legal crossing. It was agreed that this needs to be reviewed, because several authorities have since installed crossings on cycle paths without the pole and disc. S. Dejong will re-circulate the plans for re-consideration.

4. *E-bike v unassisted cycle speed observations*

T. Hughes commented on the results of the research done by John Lieswyn on relative speeds around Christchurch and circulated prior to the meeting, noting that it corresponded with an observed trend for inexperienced and elderly cyclists to be adopting heavier and faster e-bikes and experiencing falls. Without a governor limiting the speed to 25kmph they tend to have higher speeds. The e-bikes were travelling 31.9% faster than unassisted cyclists on shared paths. This was likely to cause conflict. The rapid update of e-bikes and a consequent increase in average speeds on cycle facilities of 20-25% has implications for infrastructure design, as many facilities being built now are already too narrow.

5. *TCD Manual*

M. Edwards noted that the notice of the release of TCD Manual Part 5 for consultation had been circulated to the group. Public submissions received to date indicate frustration with inconsistent application of signs and markings by practitioners. The TCD Steering Group is looking for informed comment from practitioners. Submissions are expected to be considered by the review group before going to the TCD Steering Group. See Item 5.1 below.

4. DESIGN ISSUES

1. CoPTTM signs for pedestrians and cyclists

R. Bean reported on the background to this item. A working party reviewed submissions for changes to CoPTTM relating to pedestrian, cyclist and parking management last year and, as a result the CoPTTM governance group recommended a series of signs to the TCD Steering Group for approval. The Steering Group referred them to AMIG for comment, but they had failed to be included on the agenda for the previous AMIG meeting. The proposed changes included:

- a) A change to the colours of pedestrian signs to a white symbol on a blue background. Consultation with disability groups indicated that the black on orange signs are difficult for sight impaired pedestrians to see and read against the 'sea of orange' on a site.



- b) Wider use of icons in place of words, such as "FOOTPATH CLOSED PLEASE USE OTHER SIDE" able to be replaced by a combination of R5-2 "No pedestrians beyond the sign" with a white on blue R5-5 pedestrian sign and RD6L or RD6R white on blue arrow to indicate the desired path. A disability group contacted for comment on signs currently in use recommended that signs should not use all capital letters, as these can be difficult for some people with disabilities to read.

- c) A pedestrian directional sign composed of a black M2-4 pedestrian symbol over a pivoting black arrow, able to be fixed pointing left or right, on an orange rectangular background.



- d) A pedestrian directional sign composed of a black M2-4 pedestrian symbol over a black arrow on a 400mm orange disc, with the pedestrian 'walking' in the direction indicated by the arrow.
- e) A new sign, "FOOTPATH CLOSED PLEASE WAIT TO BE ESCORTED THROUGH" in black capital letters on an orange background for use where a temporary footpath is not able to be provided.
- f) A new supplementary "CYCLISTS MERGING" as a combination with a T2A Other Hazard Advance Warning sign for use where a cycle lane is closed and cyclists are required to merge into the traffic lane.



In discussing the proposed signs, the group agreed that a "CYCLISTS MERGING" supplementary sign has merit (including potentially where an RD-6R variant is used on the rear of a waste collection truck), but the majority of the proposed pedestrian signs did not. The argument that pedestrian signs in black on orange are not easily seen amid a large number of orange cones was effectively demonstrated by the images supplied in support of the proposed new pedestrian directional signs:



The group therefore endorsed the proposal that pedestrian directional signs should be white on blue. For this reason and for the lack of apparent need for additional pedestrian directional signs beside the approved TU31 and TU32 signs, the group did not support proposal (c) or (d) as the proposed signs were inconsistent with the permanent pedestrian sign, provide poor contrast and would merge into an orange mesh background. The current TU31 and TU32 signs would need to be changed to meet the concerns raised by proposal (a) as well. Similarly, the group accepted that wider use of icons in place of words in black capital letters on an orange background would be beneficial to groups who find such signs difficult to read and, therefore, could not endorse proposition (e). The use of an R5-2 sign for a TTMP was not supported in the example used in proposition (b), however; the closure can be shown by a barrier, with the directional signs indicating the intended alternative path. It was noted that the signs being proposed for approval all appeared to be in use on work sites.

It was agreed that the TCD Manual Part 8 would need a specific amendment to the guidance and model layout illustrations to indicate these changes and also to authorise the use of a sharrow marking in a TMP.

2. Hook turn education

S. Dejong presented a video of Christchurch City Council Community Travel Adviser, Anne Heins, explaining the use of forward hook-turn boxes, as one of a series created to explain sharrows, the use of shared crossings and riding the city cycle network. He noted that the Gazetted sign for a hook-turn has encountered the same problem found with other signs intended for cyclists: the sign tends to be raised above the cyclists' normal field of vision. A thermoplastic version of the sign to be applied as a marking in the cycle lane is being developed for approval. This will need to be elongated to be legible to an approaching cyclist.

3. e-Scooter sharing schemes and Code of Practice

A. Beattie reported on the development of an AT Code of Practice in response to approaches to introduce dockless e-scooter sharing schemes in Auckland. These scooters have a throttle and are able to travel at 30kmph. D. Brown and P. Barker confirmed that other centres were being approached. P. Barker noted that three levels of geofencing are being incorporated into the dockless bike sharing scheme being approved for Wellington.

4. LED Belisha Beacon discs

S. Dejong proposed that the current reflective orange disc used in place of the illuminated Belisha beacon at pedestrian crossings should be illuminated, using LED technology. T. Hughes reported that at least one example is already operating at Auckland Airport and R. Bean confirmed that any reflective sign may be illuminated if the same outcome is delivered. The sign cannot be a plain disc within a circle of LED lights or a flashing sign, but a LED disc is permitted.

5. Rapid-flashing beacons at pedestrian crossings

G. Koorey reported on interest by Napier City in a trial of US-style rapidly flashing rectangular twin orange beacons at pedestrian crossings following a fatality on a zebra crossing in the city. It was noted that the location lacked already available approved safety improvements, such as being put on a platform or having illuminated studs in the road surface to enhance visibility, and the case for a trial of new features before the currently available interventions have been employed appeared to be weak. P. Barker reported on the use of such lights at a pedestrian crossing in Hutt City at a location where the pedestrian crossing was under an overpass and effectively invisible to approaching vehicles in bright sunlight. They appear to be an effective measure at this specific location.

6. Zebra without Belisha beacon trial for side roads

I. Stenzel reported on an urban design initiative in response to community requests that would replicate an example from the UK where zebra crossings were extended across side roads on platforms, but had none of the "clutter" from the black and white poles and beacons or discs otherwise required for such crossings. T. Hughes noted that the UK road user rules differ. The principal concern, however, was that a zebra painted onto a road creates an illusion of safety for pedestrians while actually providing no protection at all, and it is for this reason that intrusive poles and discs are needed to alert motorists to the potential risk of a pedestrian stepping onto the road. It was agreed that it would be safer and less cluttered for the platforms to be installed without any zebra marking at all.

7. 30km/h School Zone trials

G. Koorey presented a summary of the background to the present 40kmph variable speed limit for school zones and the increasing calls for this now to be lowered to 30kmph. The 2000 trial was based on a standard urban speed of 50kmph, whereas the default suburban speed is now 40kmph. The 25% higher speed permitted for vehicles in the vicinity of young children compared to when in the vicinity of adult construction or maintenance workers is perceived to be illogical.

G. Bunting noted that the Associate Minister has been receiving similar requests and is very interested in this topic, but Agency policy remains opposed to approving a third possible speed limit that might be applied to a school zone, which may currently be 50kmph or 40kmph. As well as this issue of national consistency and the potential for driver confusion, a RCA posting any speed limit must achieve an actual traffic speed of no more than 10% over that limit, which the available research indicates would not be achieved. Overseas surveys have observed speeds in 30kmph school zones tend to be 26-36% above the limit. The practicality of enforcing an effective speed of 33kmph also needs to be addressed. S. Dejong reported that a survey of the 50 variable 40kmph school zones in Christchurch has shown very poor compliance, which could be expected only to become worse at 30kmph. This research to be passed to G. Bunting and reported to the next meeting.

G. Bunting also noted that a “trial” of a variable 30kmph school zone would be problematic, because it would require a bylaw that would be extremely difficult to reverse at the end of any trial period.

T. Hughes commented on the effect of a change in the environment: as soon as cones, flags and orange jackets appear at school times the traffic speed drops immediately. He wondered whether the work being done on variable 30kmph school zones might be more usefully applied to getting permanent 40kmph school zones and a 40kmph urban limit instead.

8. Defining cycle path and cycle lane

I. Stenzel drew the group’s attention to the lack of consistency and clarity in the use of cycle path and cycle lane across regulations and the difficulties this caused in trying to enforce these. As an example, a “cycle path” intended for the exclusive use of cyclists is able to be used by pedestrians under the definition of cycle path within the RUR. The distinction between one facility and another is also ill-defined, so that it becomes uncertain and subjective whether something is a cycle path or a cycle lane.

S. Kennett agreed that ‘cycle path’, ‘cycle lane’ and ‘shared path’ need to be better defined. In the meantime, R. Bean noted, an RCA may make a designation that a path is a cyclists-only path and a sign to this effect is approved and available.

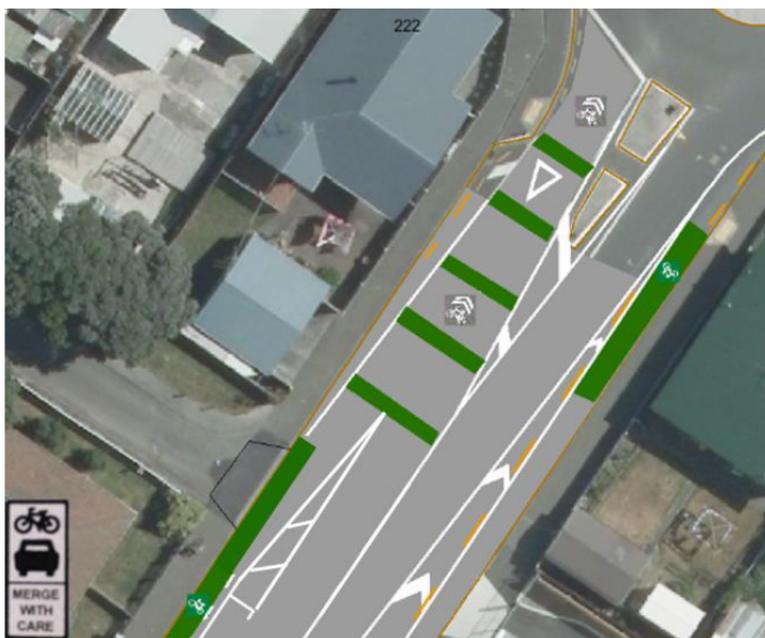
9. Specifications for design, construction and maintenance – walking and cycling

C. Pascoe explained the development of the specifications for the design, construction and maintenance of walking and cycling facilities on State Highways, noting that the principal focus has been on cycling. The intention is that the specifications will be supported by apps showing the key walking and cycling networks, so that at the time of any reseal or rehabilitation work it will be possible to see that the road is part of Te Araroa or the national cycling trail or a popular sports cycling route or major urban commuting route. The specifications will be augmented by a visual audit guide. The Agency wants to know whether other authorities would be likely to use the new specifications.

For the moment the specifications are only for State Highways and G. Bunting queried whether this limitation in the title would prevent RCAs applying the specifications to parts of the local network. The Agency and the Ratification Group have sought to remove references restricting standard, guidelines or specifications only to State Highways in order to reflect and reinforce Agency leadership of the sector as a whole.

10. Use of green in merging from cycle path/lane to sharrow

S. Kennett presented an example that had been used in the Sharrow User Guide to show a means of providing a transition from a cycle lane to a traffic lane containing sharrow. An unapproved sign had been shown in the example and it had been withdrawn, but this now provided an opportunity to reconsider the recommended layout.



It was agreed that the sudden appearance of a green band across the traffic lane would startle and confuse a motorist, suggesting a cycle lane crossing the road. As the green marking is primarily intended to guide the cyclist and alert the motorist not to intrude into this space, it should be marked to bring the cyclist into the traffic lane by having the 'bars' continue from the end of the cycle lane and lengthen gradually with each successive bar until the 'bars' extend across the width of the traffic lane. Placing the first sharrow in the traffic lane before the termination of the cycle lane would alert motorists to the impending merger while reducing the risk that cyclists would attempt to immediately move into the traffic lane to track along the sharrows. As the sharrow is a traffic marking and was never intended to be used by cyclists for tracking, it could be better to mark the cycle symbol on each bar as a tracking guide. S. Kennett will redraft the guidance.

11. Bus Lane and Bus Only Lane colours

M. Edwards reported that the TCD Steering Group has queried the scale of the problem and whether there is a genuine problem shown by findings that the use of green for both cycle lanes and bus only lanes is confusing for both cyclists and motorists, and suggested that, even if so, the issue is one of education rather than of changing markings.

S. Kennett noted that research indicates that 5% of cyclists believe that they can use a 'bus only' lane, while only 25% of cyclists are aware that they may use a 'bus lane'. P. Barker and S. Dejong reported that a sharrow marking may be used in a bus lane where the speed and volume criteria are appropriate. Nevertheless, the use of the same coloured surfacing for contradictory purposes and a need for education to explain this would suggest that the object of self-explanatory roads has not been achieved with these lanes.

12. Delineator posts

M. Edwards noted the continuing use of a wide variety of vertical posts to delineate cycle lanes and, while the TCD Manual Part 5 describes the use of delineator posts of the safety hit type, there is a clear need to identify an agreed best design for a vertical post to delineate a cycle lane.

T. Hughes commented that an attractive, durable and intuitively cycling friendly delineator has so far not been delivered to the market. S. Dejong repeated his complaint that the safe-hit posts being commonly used as delineators have all been developed for use on North American concrete roads and cannot be securely mounted on New Zealand pavements. R. Bean observed that one of the few positive features of the 'armadillo' style of delineator has been that it appears to offer a more durable footing for vertical posts.

5. OTHER BUSINESS

1. TCD Manual Part 5 review – signs and markings between intersections

The Agency is consulting on the *Traffic control devices manual part 5 – traffic control devices for general use – between intersections*. The draft has been developed by the Traffic Control Devices Working Group. Feedback to tcdpart5@nzta.govt.nz is sought by 5pm, Friday 14 September 2018. A copy of the draft document and an online consultation feedback form are available at: www.nzta.govt.nz/tcd-manual-part-5-consultation

2. Gaps in cycling design guidance

G. Dance explained that the Cycling Design Guide is being reviewed to identify potential gaps and the priority to be accorded to filling those, recognising that a number of trials currently proceeding will produce results that are likely to influence the need for guidance. The list of potential gaps will be circulated to the group.

3. Gaps in multimodal design guidance

G. Dance commented on the shift in approach and the implications this has for providing guidance. The integration of public transport considerations into providing for accessibility, for example, means that transport proposals need to integrate pedestrian, cyclist and motorist planning into corridor and network solutions. For most of this there is very little guidance readily to hand for local practitioners. A. Beattie noted the work done by AT on defining place and movement and offered to share the AT guidance. M. Edwards similarly noted the existence of PT guidance in draft that can be circulated.

4. Best "home" for AMIG

W. Newman asked if the group felt that the RCA Forum was the appropriate 'home' for AMIG in light of the number of members who had not found the minutes from the previous meeting on the website and whether this suggested that others might have even more difficulty in finding the group and its activities. The consensus was that the RCA Forum remains the most suitable home for the group for the moment.

5. Cycling LoS research

T. Hughes reported on the continuing work on cycling levels of service. The research report has been found to be quite useful, but it contains some gaps, such as LoS for greenways and at intersections. As there is budget for more work, further research will be progressed over the next six months. The results so far indicate that, while a SBF gets an A, a painted lane can get a B, so the level of service delivered with just a painted lane can be rated as 'good'.

6. Vote of thanks to Richard Bean

G. Bunting noted that this meeting is likely to be the last AMIG meeting attended by Richard Bean and he moved a vote of thanks to Richard for his contribution to the group over many years. This was roundly endorsed by all members who have enjoyed his advice, guidance, good humour and patience both during and outside of AMIG meetings.

6. NEXT MEETING

It was agreed that the next meeting will be in Auckland on 29 November and 30 November 2018, with site visits/tour, a dinner for the evening of 29 November and aiming to finish by 3pm on Friday 30 November to allow people to get to the airport and home at a reasonable hour.

Meeting closed at 3.35.