

**MINUTES: Thursday 28 February 2019 – 9.00 am**  
**Meeting Room 5.16, NZTA Offices, Majestic Centre, 100 Willis St, Wellington**

**Attending**

- Paul Barker, Network Improvements Manager, Design & Place Planning, Wellington City
- 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, Safety, Health & Environment, NZTA
- Tim Hughes, Principal Safety Engineer, System Design & Delivery, NZTA
- Simon Kennett, Senior Multi-modal Specialist, System Design & Delivery, NZTA
- Glen Koorey, Director, ViaStrada, representing Transportation Group NZ
- Susan Lilley, Transportation Planner, Dunedin City
- Wayne Newman, (secretary)
- Kelera Qaraniqio, Network Engineer, Hamilton City
- Ina Stenzel, Principal Specialist – Walking and Cycling, AT
- Ethan Young, Network Engineer, Hamilton City

**Guests**

- James Wratt, graduate engineer, NZTA
- Claire Pascoe, Lead Adviser, Urban Mobility, NZTA (item 3.2 only)

**Apologies**

- Adam Beattie, Technical Lead, Active Modes, Network Management, AT
- David Brown, Traffic and Safety Engineer, New Plymouth
- Glenn Bunting, Manager Network Safety, Safety and Environment, NZTA
- Claire Sharland, Asset Manager Transportation, Taupo District
- Andy High, Senior Engineering Officer, Nelson City
- Matthew Kilpatrick, Transportation Planner, Palmerston North City
- Jodie Lawson, Sustainable Transport Team Leader, Rotorua Lakes
- Nick Marshall, Team Leader-Road Safety & Traffic Engineering, Northland Transport Alliance
- Eynon Phillips, Strategic Transport Engineer, Hastings District
- Andrea Timings, Network Engineer, Hamilton City

**A G E N D A**

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

## ACTIONS

1. **Gerry Dance** – coordinate with Steve Dejong (others as needed) regarding amendment to the Sharrow Guide to allow for use of the marking in a shared lane from which traffic must turn left while cyclists may proceed straight ahead *where the traffic volumes and vehicle approach speeds are consistent with the Guide*.
2. **Gerry Dance** - coordinate with Paul Barker (others as needed) regarding provision of evaluation data on the use of green bars within the traffic lanes at the cycle/vehicle conflict zones in support of a formal submission to the TCD Steering Group for the use of green bars as an effective intervention to mark transition and conflict zones for cycles and vehicles.
3. **Simon Kennett, Gerry Dance, Steve Dejong, Susan Lilley** – identify draft minimum guidance for cycle lane delineation able to be incorporated into TCD Manual Part 5.
4. **All members** – provide comment on draft technical note on restrictive devices to Simon Kennett by end of 15 March.
5. **All members** – provide comment on draft technical note on bicycle parking planning and design to Simon Kennett by end of 15 March.
6. **Gerry Dance (Simon Kennett or James Wratt)** – ensure that links to the Christchurch City sharrow educational videos are inserted into CNG so that they can be accessed directly from the website and amend the Sharrow Guide so references to the consultancy that produced, Flow, are replaced with the NZTA logo to ensure that the Sharrow Guide is recognised as an official guidance document published by the Agency.
7. **Gerry Dance** – confirm that the final AMIG meeting for 2019 will be on 28 November.

## NOTES

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

Members were welcomed. Ethan Young introduced Kelera Qaranigio and Gerry Dance introduced James Wratt. The meeting noted the resignations of Andrea Timings and Matthew Kilpatrick and received the apologies. Ina Stenzel reported that she believed that Adam Beattie was reconfirmed in his position. Gerry Dance provided the H&S briefing. It was noted that an over-hasty cut-and-paste had resulted in the agenda being headed for 18 May 2018 instead of the correct date.

### 2. MINUTES AND ACTIONS FROM PREVIOUS MEETINGS

The meeting reviewed the actions remaining open from previous meetings and noted:

- The action on Adam Beattie from 10 May 2018 to investigate a possible marking based on a variant of the “pass with care” signage to moderate speed behavior on shared paths can be closed, as AT has not had the resources to pursue this;
- The action on Simon Kennett from 17 August 2018 to 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 remains open, with nothing to report yet;
- Revised draft definitions of ‘path’, ‘cycle path’, ‘shared path’, ‘footpath’ and ‘cycle lane’ had been circulated for comment, as follows:

Footpath – means a path or way principally designed for, and used by, pedestrians.

Cycle lane – a longitudinal strip within a roadway designed for the passage of cyclists.

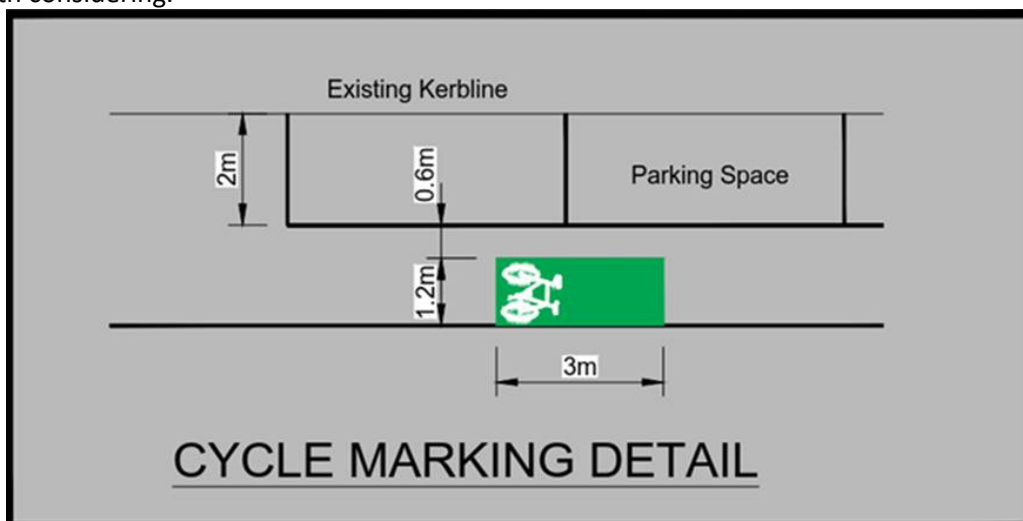
Cycle path – a path that is physically separated from the roadway that is principally designed for, and used by, cyclists.

Shared path – a path that is physically separated from the roadway that is intended for the passage of pedestrians, cyclists, riders of mobility devices, and riders of wheeled recreation devices.

Whether a cycle lane is principally designed for the passage of cyclists or designed for the passage of pedestrians was debated and it was agreed that it would not be appropriate to use “principally designed for the passage of cyclists” as a cycle lane was specifically designed for that use;

- The actions from 30 November 2018 on Simon Kennett, Steve Dejong, Glen Koorey and Gerry Dance could all be closed;
- The action on Simon Kennett from 30 November 2018 to amend Table 1 of the Specification for Design, Construction and Maintenance of Cycling and Shared Path Facilities from “target shoulder seal width” to “Minimum shoulder seal width for state highway cycling network” was closed without completion. Simon reported that he had discussed this with the author of the Specification. The concern was that very narrow targets are set for low volume roads. The view is that any state highway with very low AADT is likely to be gravel (or sealed without edge-lines), hence a 0.0m target for shoulder width (although the situation will be different on many local roads). The problem with changing ‘Target’ to ‘Minimum’ is that the wider shoulders recommended (e.g. 2.0m for a very busy urban road) are quite ambitious (i.e. unrealistic in difficult terrain). At this stage, adding an asterisk to the lowest volume rows is proposed, noting that this applies to roads with no edge-lines, with a note that in certain contexts (e.g. near a school) a road shoulder is not a substitute for a cycling (or walking) facility such as a cycle lane or path.

Simon Kennett clarified a point from the Minutes of 29-30 November under section 4.7, noting that, while research has shown a painted buffer between the parking lane and cycle lane tends to be counter-productive, a ‘virtual’ (i.e. unpainted) buffer between parked cars and the cycle symbol/green paint markings is likely to be useful in steering riders away from the dooring hazard (which is the cause of a significant portion of mid-block urban cycling crashes). The virtual buffer should generally occupy a third of the total width of the cycle lane. This is illustrated in the draft of TCD Part 5 (shown below). If there is plenty of space, then also providing a painted buffer between the cycle lane and moving traffic lane is well worth considering.



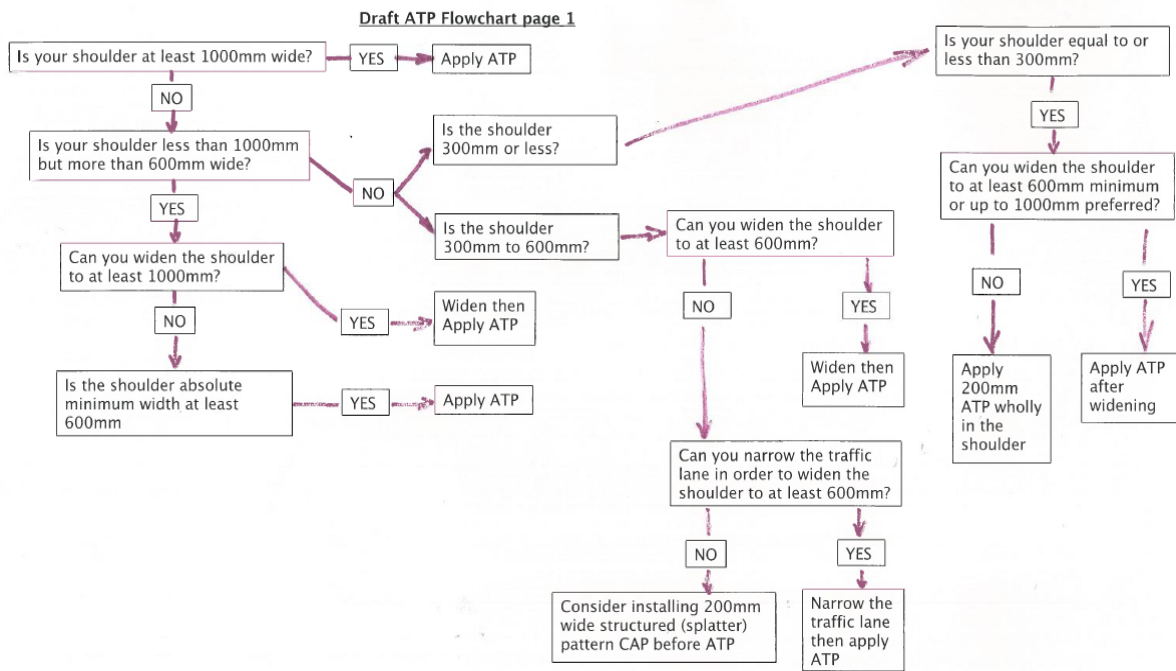
Ethan Young queried the recommended interval between the cycle symbols (100m) and commented that Hamilton City has reduced this to 50m. Hamilton City might also trial the use of a continuous green line on each side of the cycle lane in order to reinforce the need for the lane to be kept clear of parked or stationary vehicles. Tim Hughes noted that it was critical to avoid marking any line within the cycle lane (such as a dashed line between the cycle symbol blocks) that might encourage drivers to park further out from the kerb, thus extending the dooring zone further into the cycle lane.

### 3. UPDATES

#### 3.1. ATP guidance as part of TCD Part 5

Mark Edwards explained that the ATP layouts discussed by AMIG last year were formally consulted on within the consultation process for the draft Part 5 of the TCD Manual. The section on ATP in draft Part 5 attracted significant interest and feedback, and it was felt the level of interest and the nature of the comments deserved immediate attention, if only to enable the BOOST 2 programme to understand how ATP introduction should reflect the feedback. It was determined that a decision support flow chart was

needed to help designers understand what to do and when to do it.



The flowchart demonstrates that the critical question remains whether an adequate shoulder can be provided by either widening the shoulder or narrowing the traffic lanes, before any decision on ATP is made. Mark explained that CAP is an open-weave marking developed originally to remain visible in locations prone to ponding but found to provide a lower audible nuisance and to be far less hazardous for cyclists to negotiate.



Mark repeated that Draft Part 5 is the starting point for ATP layout and specifications. Before then, though, it is vital to use all available data to support decision making (CAS data, AADT, cycle flows), and to consult with local cyclists and cycle groups to determine the best places for ‘crossing’ gaps in the ATP and where the critical pinch points are. Then use the flowchart and the dimensions as the most recent design guide to ensure that the entire decision-making process remains transparent.

### 3.2. “Innovating Streets for People” project

Claire Pascoe joined the meeting to provide an update on this project seeking to create more “livable” communities. The project is looking at means to efficiently combine planning for transport and land use to deliver more vibrant, interactive communities. It will start by examining temporary and short-term interventions and how these might be made easier to implement. There is no intention to diminish the formal trial process provided by the TCD Rule, but the project might explore what is appropriate for temporary interventions in low-speed environments. The project team is looking to release interim guidance by June.

The group saw a need to give regulatory definition to these trials, but also to what might be temporary and what constitutes a low-speed environment. National guidelines would need to be able to reflect interventions appropriate to a range of differing circumstances. Responding to community desires would require effective risk assessment and an ability to present evidence of a problem and of the effectiveness of any proposed solution. Officials would need to be comfortable in giving communities what they asked for. The guidance would need to address risk assessment and trial evaluation procedures. This needs both sound engineering judgement and an awareness of practical outcomes (reduced skid resistance from painted pavements, effects on the movements of goods or emergency vehicles through roads being partially or wholly closed, or effects on maintenance, including the question of who will maintain live plants, for example). Some assessment of the cost-benefit of a ‘trial’ would also be needed, especially for a temporary intervention shown to be effective but required to be

removed at the end of a fixed period, taking into account both the costs of installation and of removal.

### **3.3. E-scooters research**

Simon Kennett responded to the discussion in the Minutes of 29-30 November under 4.8 that suggested a number of reasons why scootering might have a lower risk of serious head injury than cycling. He noted that, while a scooter is easier to learn how to ride, it has a very small front wheel (often not cushioned by a pneumatic tyre) that makes them more susceptible to crashes caused by small stones or pavement defects. Also, the narrow handlebars and long steering column of scooters would make for 'twitchy' steering.

Simon suspected that, for scootering to have a lower risk of head injury than cycling, scooters and e-scooters would need to be ridden relatively slowly. He presented ACC claims data for the 99-day period from 14/10/18 to 20/01/19 showing 888 e-scooter and 3,437 other scooter claims. Loss of balance or control was cited as the cause for 86.7% of e-scooter and 85.9% of other scooter claims, but e-scooters were significantly more likely to have been involved with another vehicle (12.7%) than the other scooters (4.8%).

The primary injury sites for e-scooters and other scooters also showed differences. For e-scooters, injuries to the face or to the head (excluding the face) were roughly equal at 7.4%, whereas for other scooters injuries to the face were 15.8% of the primary injury sites, while the head (excluding the face) accounted for only 4.1% of primary injury sites.

Simon presented ACC data for bicycle injury claims for the same period, showing 11,312 claims, for which the primary cause in 9,385 cases was loss of balance or control (at almost 83%, not significantly different from that for scooters). The data clearly showed that cycling had a lower incidence of head injuries (for face, nose, eye, ear, head or back of head) at 12% than the comparable incidence of injuries on e-scooters (16.4%) or other scooters (21.3%). Lack of data on the percentage of cyclists who were wearing a helmet at the time they sustained these head injuries, or on whether any 'scooterist' was wearing a helmet, make direct comparison hazardous.

Simon then presented a summary of the key findings from the Kantar TNS survey of the public response to shared e-scooter trials in Auckland and Christchurch, which found that 51% of those surveyed wanted the e-scooters to remain after the trial, compared to only 5% described as "very negative" in their reaction to them. The survey found that 53% of residents felt unsafe sharing pedestrian areas with e-scooters, 48% had seen or experienced a safety issue and believed that riders were not using the devices in a safe and responsible manner. The degree of potential conflict was revealed in the e-scooter riders' preferred place to ride: 53% on footpaths; 51% on facilities shared by pedestrians and cyclists; and 46% in separated cycle lanes.

The meeting noted how the introduction and rapid uptake of e-devices had shifted the speed differential in the space conflict. An e-scooter in a cycle lane would be capable of travelling at 15-20 kmph, comparable with the ordinary speeds of older push-bikes but about 10 kmph less than the speeds of modern commuting or racing bikes, while an e-bike was capable of 35-45 kmph. It is likely that demand for access to special vehicle and cycle lanes will be a driver for widening these and potentially for reducing traffic lanes on some routes.

Paul Barker reported on the progress of the approval for e-scooters on Wellington streets, noting that this was the literal outcome of the prohibition on their use on any footpath – e-scooters would be able to travel on any and every street, including the busiest arterials. He noted that there are constraints on restrictions on using the scooters on footpaths. While the Trading in Public Places bylaw allows the operator to be penalised for having one of his devices on a footpath, any privately-owned scooter can be used or left there with relative impunity. The current GPS technology lacks the precision to geofence e-scooters from going onto footpaths, but it is not unlikely that Wi-Fi plugs able to be inserted into the footpath would become available that would slow any e-scooter passing close to one.

In response to Gerry Dance's comment that the e-scooters being on the roads must have the effect of lowering urban traffic speeds to 25-30 kmph within the CBD, potentially increasing the attractiveness of cycling, Paul observed that we were seeing a massive increase in popularity for a device that was not an active mode at all, or

a sustainable one, as a LIME e-scooter is essentially scrapped and replaced after only 80 days.

### 3.4. Cycling Training Courses

Gerry Dance reported on the first refresher training course held in Wellington on 12 February. This was an updated version of the fundamentals course that over 1,000 practitioners have taken over the past decade. It had about 30 attendees. The next course scheduled for 12 March would need to be split into two groups, because over 50 applications had been received to attend it. A second Wellington course had been scheduled for 11 April, a second Hamilton course for 16 April and a Christchurch course was scheduled for 1 May.

Once this round of high-level, introductory courses had been completed, more advanced, possibly single topic specific, courses could be rolled out in the second half of the year.

### 3.5. NZ Cycle Trail Design Guide revision

Glen Koorey presented a summary of the tasks identified for the revision of the Cycle Trail Design Guide. These would incorporate many of the interventions discussed by AMIG, including the introduction of a Grade 6 ride for Heartland Rides, surface guidance, ATP placement and speed management (again for Heartland Rides), links as necessary with the CNG (it is not envisaged that trail design would need to duplicate the CNG, which has little for trail design), new rail crossing guidance, narrow bridge safety improvements, guidance around bollard and restrictive devices, possible guidance around e-bikes on trails, signage and updating links and references.

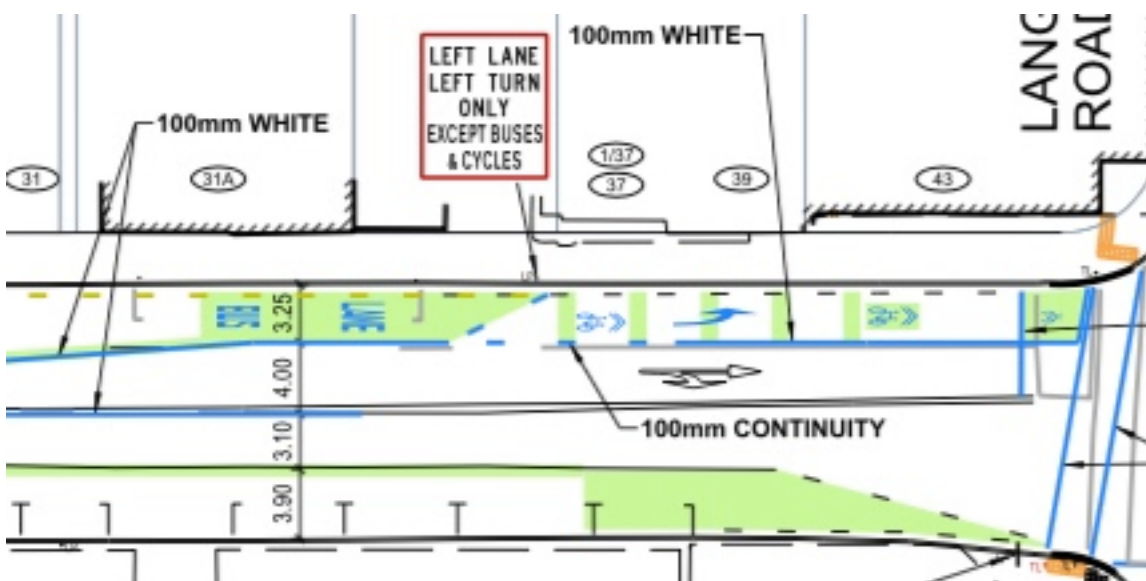
### 3.6. TCD Manual Part 5 and Part 4 reviews

Mark Edwards presented a brief report on the progress of these reviews, noting that System Design are the new “owners” of the TCD Manual within NZTA. The Agency was currently looking at offers of service for completing the review of Part 5, possibly by the end of June 2019. Consultation on a draft Part 4 might also commence before the end of the 2019/20 government financial year, with feedback considered in 2020 and completion of the entire review estimated to require about 18 months.

Mark noted that a slight delay had occurred with the Omnibus Rule change as a result of implications of some of the changes proposed for the *Offences and Penalties Regulations 1999*, which had required “cross-government discussions”. In the meantime, the 2019 Omnibus was being assembled.

### 3.7. Left-turn and transition zone marking

Steve Dejong referred to the two layout re-designs for Main North Road and Greers Road that had been circulated and drew attention to the use in each case of the sharrow marking in a non-approved manner in order to achieve the desired intervention. On Main North Road a bus priority lane disgorged into a shared lane for traffic turning left.



On Greers Road the sharrow marking was used to permit left-turning vehicles to enter what had previously been a cycle lane as a *proposed* safety improvement, as traffic had previously turned left across the cycle lane from the right and it *has been argued that it* is likely to be safer for cyclists to have left-turning traffic in the same lane.



Steve proposed that the guide be updated to allow for such use of the marking. *With regard to the two specific examples, he noted that a shared lane being installed where no prior provision for cycling had been made represented an upgrade in service for cyclists, whereas removing a dedicated cycle lane and replacing it with a shared lane was a downgrade of the facilities for cycling.*

*The group shared concerns raised by Ina Stenzel regarding the amended use of the Sharrow in a shared lane (left-turn and transition zone) where the high number of vehicles and the speed of the vehicles approaching signalised intersections (particularly in the examples discussed) are not in line with a safe system and vision-zero approach to make this a safe environment for people on bikes. Amending the Sharrow Guide without due regard for the critical traffic volume and speed criteria could impinge upon the purpose of the marking and its installation in such situations may lead to adverse outcomes. Sharrows were intended to be used only in low speed and low traffic volume streets. Ina suggested that the use of sharrows in combination with green bars could be more in line with the Sharrow Guide.*

Paul Barker noted the use of green bars within the traffic lanes at the cycle/vehicle conflict zones, *too*. While *they should not be seen as* suggesting that cyclists have priority, the bars are useful for making motorists aware of cyclists in the same space. Green bars have now been introduced separately across multiple local networks and appear to be an effective intervention to mark transition and conflict zones for cycles and vehicles. The meeting agreed that AMIG must formally submit to the TCD Steering Group in support of the use of green bars.

## 4. DESIGN ISSUES

### 4.1. Delineation Channeliser for cycling - specifications

Mark Edwards noted that there were some comments worth noting in the Part 5 feedback in connection with central delineator posts, such as that post colour and road marking colour should be consistent and that the 12m post spacing suggested in the related section was too large. It was agreed that there is currently minimal guidance to achieve consistency or best practice.

The result has been inconsistent and occasionally non-compliant practice. The TCD Manual defines posts and specifies a minimum height of 800 mm and maximum of 1000 mm. These heights, designed for vehicles, can be excessive for cycle lanes and create “shy zones” that reduce the width and capacity of the cycle lanes.

*Mark noted that RTL is looking at designing a cycle lane delineator for semi-permanent installations but is confused about what specifications the product needs to meet, particularly in terms of the post height. There is an opportunity in concluding Part 5 of the TCD Manual to include some guidance on enhancing the perception of safety for on-road cycle lanes.*

It was agreed that guidance on size and on keeping the colour of the post and footing consistent with the road marking were needed, while the inclusion of cycle symbols or "CYCLE LANE" messages might be discretionary. A sub-committee of Steve Dejong, Simon Kennett and Gerry Dance (with James Wratt) would prepare initial draft guidance proposals.

#### **4.2. Restrictive Devices on Facilities Used by Cyclists**

The meeting noted that a draft Technical Note on the requirement for the assessment and regarding the installation and management of restrictive devices on all facilities where cyclists are permitted to be present had been prepared and circulated. This followed from the presentation to the previous meeting and seeks to minimize the hazard and implement the Austroads recommendation that the use of such devices be kept to a minimum. It was agreed that members would provide comments to Simon Kennett by 15 March.

#### **4.3. Bicycle parking planning and design**

Simon Kennett presented a draft Technical Note designed to support provision of sufficient bike parking and end-of-trip facilities to support expected demand from the variety of different users. The key distinction being between short-stay and long-stay parking. Paul Barker endorsed this, noting how a lack of longer-stay parks had driven commuters onto parking intended for shorter stays, leaving an acute shortage of the latter in key locations. It was agreed that members would provide comments to Simon Kennett by 15 March.

### **5. OTHER BUSINESS**

#### **5.1. Education campaign for sharrow marking**

Steve Dejong had noted that the Sharrow Guide states on Page 7 in the second to last paragraph: "Education and information campaigns are recommended at a national, regional and local level to support the introduction of the sharrow markings as a new road marking on New Zealand Roads. The NZ Transport Agency is producing a resource for this purpose".

Steve noted that he was not aware of the Transport Agency producing this resource. Gerry Dance explained that the videos produced for Christchurch City were available. The meeting agreed that links to these directly from the website need to be inserted. It was also noted that, while AMIG and a select group of those involved in the original trials might refer to the Sharrow Guide still as the "Flow Guide", this was not usual practice and risked creating an impression that it was in some way not fully or properly a Transport Agency document. The Sharrow Guide is an official guidance document published by the Agency and the references to the consultancy that produced it now need to be replaced with the NZTA logo.

#### **5.2. Conferences in 2019**

The meeting noted several major conferences with an active modes theme scheduled for 2019, including: ENZ TG 2019 Conference – 3-6 March, Wellington; Velo-City 2019 – 25-28 June, Dublin; International Cycling Safety Conference – 18-20 November, Brisbane; Living Streets Walking Summit, 20-21 June, Auckland; and Walk21, 7-11 October, Rotterdam.

#### **5.3. Brief updates**

Tim Hughes reported that work is continuing with the cycling levels of service project. Ethan Young reported that Hamilton City is considering whether a code of practice for e-scooters could be an effective tool. Paul Barker reported on plans to alter the Onepu Road/Rongotai Road intersection to improve the safety of the pedestrian desire lines by adding crossings while also improving the provision for cyclists crossing the intersection in a right turn by adding a cycle lane flowing around the intersection.

### **6. NEXT MEETING**

The programme of meetings adopted for 2019 is:

- Next – 29 May in Wellington
- Then – 7 August in Wellington



- Last - 21 November – possibly not in Wellington.

Tim Hughes noted that the last meeting would be the next day after the International Cycling Safety Conference in Brisbane, which Simon Kennett and Glen Koorey would be attending and from which they would return at midnight. It was agreed that the November meeting should be set back one week to meet on 28 November. The venue to be set at the meeting in May.

Meeting closed at 4.00