

**MEETING: Thursday, 22 September 2022 9:00 AM.**

**Majestic 7.06 and Microsoft Teams Meeting Conference**

**All AMIG meetings minutes, summaries and presented material are available at:**

- <https://nzta.govt.nz/walking-cycling-and-public-transport/active-modes-infrastructure-group/>

### **Attending**

- Shane Binder, Transport Engineer, Waimakariri District
- Michael Bridge, Activity Manager Active Transport, Palmerston North City
- Daniel Cairncross, City design and place planning, Wellington City
- Gerry Dance, Team Leader Multi-Modal, WK/NZTA
- Steve Dejong, Senior Engineer, Regulatory Services, WK/NZTA
- Twan van Duivenbooden, Principal Specialist Active & Shared Modes Design, AT
- Mark Edwards, Multi-modal Senior Advisor, WK/NZTA
- Mike van Enter, Senior Transportation Engineer, Tasman District Council
- Hilary Fowler, Senior Transport Planner/Engineer, Wellington City
- Karen Hay, Cycle Plan Implementation Lead, Tauranga City
- Will Hyde, Senior Transportation Engineer, Tauranga City
- Simon Kennett, Principal Multi-modal Advisor, WK/NZTA
- Glen Koorey, Director, ViaStrada, representing Transportation Group NZ
- Malcolm McAulay, Senior Multi-modal Advisor, WK/NZTA
- Peter McGlashan, Lead Advisor, Urban Mobility, WK/NZTA
- Nick Marshall, Road Safety & Traffic Engineering Lead, Northland Transport Alliance
- Ian Martin, Principal Advisor, Road Safety, Transport Engineering & Road Safety, Dunedin
- Wayne Newman, (secretary)
- Martin Parkes, Urban Mobility Programme Delivery Lead, Hamilton City
- Mitra Prasad, Technical Lead – Active Modes, AT
- Claire Sharland, Asset Manager Transportation, Taupo District
- Erik Teekman, Principal Transport Planner, WK/NZTA
- James Wratt, Multi-modal Advisor, WK/NZTA
- Honor Young, Senior Active & Sustainable Transport Engineer, Hamilton City
- Jocelyn Zhang, Transport Project Manager, Hutt City

### **Apologies**

- Niki Carling, Safe& Sustainable Journeys Manager, Rotorua Lakes District
- Rachel Doelman, Rotorua Lakes District
- Bob Hu, Traffic Engineering Manager, Hutt City
- Tony Mills, Senior Transport Engineer, Napier City
- Eynon Phillips, Strategic Transport Engineer, Hastings District
- Bill Rice, Senior Transport Engineer, Nelson City

# A G E N D A

## 1. WELCOME, INTRODUCTIONS, APOLOGIES

## 2. MINUTES AND ACTIONS FROM PREVIOUS MEETING

2.1 Actions from the meeting on 28 July 2022

## 3. TRIAL REPORTS and ISSUES

3.1 Size of M2-4 Pedestrian symbol marking - Simon Kennett

3.2 AT's pop-up cycle lane protection programme – Mitra Prasad

3.3 Maintenance specification and LOS for major cycleways - Simon Kennett

## 4. UPDATES

4.1 Symbols for Cycling Wayfinding Signage – feedback - Mark Edwards

4.2 Symbols for Pedestrian Wayfinding Signage – feedback - Mark Edwards

4.3 CNG – guidance development – Glen Koorey

4.4 Pedestrian and cycle mid-block crossings Webinar 20/09/22 - Glen Koorey/Gerry Dance

4.5 General update on regulatory or other changes - Simon Kennett

4.6 AMIG-6 November meeting – Gerry Dance

## 5. OTHER BUSINESS

# NOTES

## 1. WELCOME, INTRODUCTIONS, APOLOGIES

Gerry Dance welcomed Daniel Cairncross, Bob Hu and Jocelyn Zhang to the group and invited Daniel and Jocelyn to introduce themselves. The apologies of Tony Mills, Bill Rice, Eynon Phillips, Rachel Doelman and Niki Carling were accepted.

## 2. MINUTES AND ACTIONS FROM PREVIOUS MEETING

2.1 Actions from the meeting on 28 July 2022

The minutes of 28 July were confirmed with no actions arising.

## 3. TRIAL REPORTS and ISSUES

3.1 Size of M2-4 Pedestrian symbol marking

Simon Kennett explained that the lack of a minimum specification for the pedestrian symbol marking was allowing excessive variability in the application of the markings relative to bicycle symbol marking scales. He showed an example with the grid for the pedestrian marking applied at 20mm placed beside a cycle symbol marking with the grid applied at 60mm. It was recognised that an acceptable minimum size would not represent the recommended size in most situations, where a comparable scale for both markings was agreed to be optimal, so better guidance on application of recommended sizes would need to support any regulatory minimum size for the marking.

3.2 AT's pop-up cycle lane protection programme

Mitra Prasad presented the background to the decision to install concrete separators to protect bike lanes along 3.7km of Upper Harbour Drive as the first of 60 existing routes planned for such protection by 2024. Upper Harbour Drive was a 70kmph semi-rural road bounded by numerous life-style property accesses. It was a bus route and carried 6300 VPD.

The crash history for the road showed excessive speed, loss of control, distraction and failure to keep within the lane were common causes.

300mm wide and 150mm high concrete separators were installed at 4-5m spacing on a 30mm grout base. Installation began in March, laying about 250m overnight. It was intended that painting and fitting of visibility aids would be done post installation. This approach needed to be reversed immediately. The driver behaviour revealed by the crash history did not change. The wide gaps between separators combined with their 170-180mm height and very blunt end profile resulted in serious damage being done to vehicles striking the separator end-on.

The separators were then painted pre-installation and the speed limit was lowered, initially from 70kmph to 60kmph (which reduced mean traffic speed to 67.5kmph) and then to 50kmph (which delivered a mean traffic speed of 60kmph). These interventions reduced the frequency of impacts but have not significantly reduced the severity of the damage resulting when they occur.

It was agreed that the height and profile of the chosen separator design combined with the wide spacing to deliver a very unforgiving edge to the traffic lane. A tapered end facing the direction of traffic greatly reduces the severity of an end-on impact.

It was suggested that a finished height of no more than 140mm was the optimum for trucks needing to straddle separators to collect households' waste and recycling, but some trucks are able to straddle no higher than 120mm.

### 3.3 Maintenance specification and LOS for major cycleways

Simon Kennett noted the investment in constructing cycleways to a high level of service was not matched by specifications for their maintenance to a similar LOS. The current specification permitted stones up to 50mm, tree branches as long as not "large" and surface variation up to +/- 20mm. It was agreed that the risk to cyclists was such that nothing with a dimension, depth or height greater than 15mm should be an acceptable LOS.

While the height, intrusion and effect on visibility of vegetation were agreed to be important points to consider, the risk posed by fallen leaves was frequently greater than from gravel and needed to be addressed in any specification by a different measure. Similarly, poorly designed placement of separators trapping run-off frequently resulted in dangerous growths of moss.

Further input on maintenance specifications and LOS for major cycleways would be sought from members.

## 4. UPDATES

### 4.1 Symbols for Cycling Wayfinding Signage – feedback

Mark Edwards reported back on feedback received on potential A51.4 symbols, which were alluded to in the Rule but not specified. The preference was to approve all (or as many as possible) of the proposed options, rather than return with more later, but it will be necessary to confirm that some existing A20 and A30 symbols remain functional at the reduced scale of cycle wayfinding signage. For some services it will be necessary to design a new symbol, as none now exists, while it was now recognised that the current "Park and ride" symbol needed to be changed.

### 4.2 Symbols for Pedestrian Wayfinding Signage – feedback

Mark Edwards also reported on the opportunity provided by potential bi-lingual signage for adopting nationally consistent pedestrian signage. Melbourne and London provided examples of best practice for design, particularly in use of colour to identify specific routes. Members of the group were invited to join a small working group to progress this project.

### 4.3 CNG – guidance development

Glen Koorey reported on research done on the effect of gradient on cycle facilities. Current Austroads GTRD Part 3 guidance appears based on very old data, whereas Customs data reveals the rapid increase in e-bike and e-scooter numbers entering NZ. Their popularity did seem to be

influenced by topography: e-bikes were visibly more popular in Wellington than Christchurch. Speed graphs derived from the new research gave 15<sup>th</sup>, mean and 85<sup>th</sup> percentile distributions and showed minimal difference between powered and unpowered bikes on downhill gradients, but a widening divergence in speeds as gradient increased for uphill gradients.

Work was also being progressed on cycle wayfinding signage, rural cycling infrastructure and directional signage.

#### 4.4 Pedestrian and cycle mid-block crossings Webinar 20/09/22

Glen Koorey reported on this webinar, attended by 170 practitioners, which was now on the PNG site. The next in the series was likely to focus on a walking topic and was scheduled for 3 November.

#### 4.5 General update on regulatory or other changes

Simon Kennett reported that submissions on Reshaping Streets closed on 19 September. This facilitates street changes and strengthens powers to filter traffic and designate 'school' or 'community streets'. Directional signals were now expected to be included in the 2023 Omnibus Rule Change. Changes to the PTD Guidance were integrating bus stop designs with cycling facilities design.

#### 4.6 AMIG-6 November meeting

Wayne Newman outlined a possible schedule for the November meeting:

Wed. 16 Nov.

9:00 For anyone arriving early take a bus or van for a tour around Napier - Atea A Rangi Star Compass, Marine Parade, and another Innovating Streets project in Ahuriri.

11:30 Walk around the Havelock North village centre, recently converted to a 30km/h zone, with a mix of threshold treatments and courtesy crossings.

12:30 Lunch at a top Havelock North eatery

2:00 Cycle tour of Hastings following a loop from Havelock and back, traversing a range of cycle facilities old and new, including on road cycle lanes, shared paths, and limestone tracks, and a few roundabouts. Highlights of the tour: Innovating Streets projects showing school slow zones and street upgrades in the CBD, distinctive cycle lane markings and use of dragon's teeth. There will also be a chance to cycle along a possible future green street.

5:00 Move on to a nearby watering hole for some top-notch craft beer, then to an award winning restaurant for a delicious dinner.

Thu. 17 Nov.

8:30 Meet at Porter's Boutique Hotel, right in the centre of Havelock North, to start at 9am with tea and coffee beforehand.

12:30 Lunch to be provided by the hotel.

2:00 Finally, back to the airport to drop off those flying out, or back to Napier CBD for those staying on for a long weekend in The Bay.

## 5. OTHER BUSINESS

No other business was taken.

Meeting closed at 11:45