DRAFT Minutes of the CoPTTM Governance Group (CGG) meeting on 7 June 2017

Meeting details

Start	Finish	Venue
9.00am	4.00pm	NZTA National Office Board Room
	·	Chews Lane, Wellington

Meeting attendees

Person	Representing	
Fergus Tate	NZTA (Chairperson)	
Stuart Fraser	NZTA	
Ray Edwards	Higgins Contractors	
Alan Gardiner	HEB Construction	
Neil Greaves	CoPTTM trainers	
Tom Kiddle	Auckland Transport	
George Boyd	GHD Hamilton	

Person	Representing
Simon Harty	СТОС
Sean O'Neill	Downer NZ
Dave Rendall	Fulton Hogan and AMA
Alan Stevens	Civil Contractors NZ
Doris Stroh	Beca
Andrew McLeod	MWH
David Arrowsmith (representing Mike Darnell)	Opus International Consultants

Meeting support

Tony Stella	Meeting support
-------------	-----------------

Unable to attend

Michael Bradford (representing Brett North)	WCC
Matt Anderson	Broadspectrum
Darcy Prendergast	New Zealand Road Markers Federation
Andrea Williamson	Fletcher Infrastructure

Welcome

The meeting was opened by Fergus Tate who welcomed CGG members to Wellington.

Transmission Gully Project

Craig Nicholson (Principal Project Manager) presented on the Transmission Gully (TG) project. The presentation provided a background to the project and the challenges faced with meeting environmental requirements within a long-term project site.

Approval of minutes from last meeting

Minutes of the meeting of 6 October 2016 were adopted.

Actions required for projects and BAU tasks

Fergus Tate and the CoPTTM edit team reported on progress on the priority projects and BAU tasks.

Workers riding on the back of work vehicles

Progress report

The initial research was inconclusive regarding the best practices and legal requirements for riding on the back of work vehicles.

NZTA is awaiting a reply from NZ Road Markers Federation regarding their suggestions for riding on the back of work vehicles.

Feedback from CGG members:

- Fulton Hogan require workers to be harnessed while on the back of a moving work vehicle
- Downers, Higgins and HEB require workers to travel in the cab if the work vehicle is moving over 20km/h an hour
- Worksafe have asked some companies for their procedures for workers riding on the back of vehicles
- Some companies are considering managing the risk of approaching vehicles by installing proximity warning systems
- Shadow vehicles are not always used when workers are on the back of vehicles

Note: D2.1.2 of CoPTTM states 'workers on the back of a working vehicle must be protected by a shadow vehicle at all times'

Actions	Person responsible
Await reply from NZ Road Markers Federation	Fergus Tate
Circulate legal opinion re. workers riding on the back of work vehicles	Fergus Tate

Review traffic crashes at worksites - Develop a central reporting procedure for fatal and injury crashes at worksites and TMA strikes

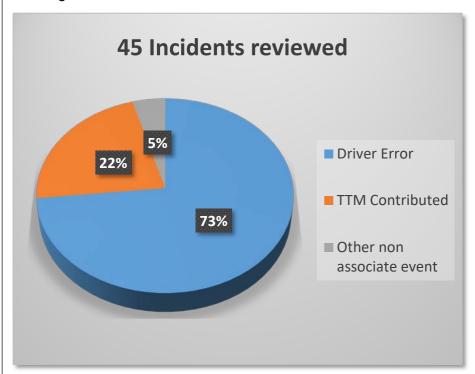
Progress report

The CoPTTM incident report is available on the CoPTTM pages of the NZTA website. Completed incident reports are added to a database which allows NZTA to analyse data

There are three advantages of the CoPTTM incident reports:

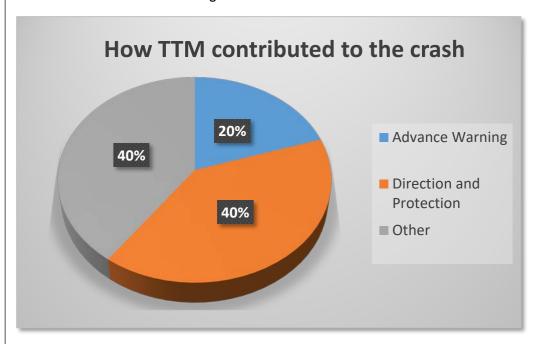
- We are receiving more reports
 (but we are aware that some crashes occur and we have not been sent a report)
- 2. The report provides an easy format for us to send to appropriate people when we hear of a crash
- 3. The report provides enough information for us to identify trends.

45 Incident reports have been received so far. Analysis of the information shows the following:



Auckland Transport's crash statistics show similar levels to the national figures.

When looking at the crashes where TTM was a contributing factor, an analysis of the information shows the following:



Ways TTM contributed to crashes include:

- Queues formed no advance warning
- Impacts at intersection MTCs not in place to give direction
- TMP not followed or missing information

A high percentage of crashes where TTM was a contributing factor occurred on level 1 roads

We need to take a safe systems approach when reviewing crash data – look for what can we learn from this.

Zero Harm

Zero Harm have commissioned a new group to deal with safety at roadworks sites. Terms of reference for this group will be available shortly.

Fergus is one of the members of the new group. His involvement should ensure there is no overlap of resources / initiatives between Zero Harm and CoPTTM.

Austroads

Austroads has a working party completing a review aimed at harmonising the TTM requirements for each of the Australian states.

The working party has identified the CoPTTM as being the leading best practice guideline for TTM and are modelling their new standard on this approach.

General discussion related to reducing speed at worksites

Some contractors are using speed radar cameras at worksites to determine the actual speed of passing vehicles. Some also have automated systems to alert the STMS when speeds are above a particular threshold.

Since 2014 the Christchurch RCA (CTOC) and industry have worked on achieving appropriate operating speeds through worksites. This has helped contractors to manage vehicle speeds, improved road user reaction, and improved TSL credibility, which has in turn improved NZ Police support for enforcement.

Refer: http://tmpforchch.co.nz/wp-content/uploads/2014/07/Best-Practice-for-Speed-Management_v2-FINAL_20140717.pdf

Civil Contractors are partnering with NZTA to develop a set of guidelines for how to use positive traffic management at worksites to reduce speed of passing vehicles. The finalised guidelines will be posted to section I.

There is an opportunity to use point to point speed cameras as a means of enforcing speed limits at roadwork sites. However, this will require a law change before it can be utilised.

CGG backed the initiative to change legislation to allow the use of point to point speed cameras and requested that a letter supporting this initiative be submitted by 16 June 2017.

Actions	Person responsible
Add AT's crashes to the CoPTTM incident database	Neil Greaves
Need to promote the use of the CoPTTM incident form	Neil Greaves
Revise the incident form to include additional information about the role of TTM in the crash	Neil Greaves
Develop instructions on how to complete the CoPTTM incident form	Neil Greaves
Consider introducing an electronic CoPTTM incident form completed on either a smart phone or tablet	Fergus Tate
Draft a letter expressing CGG's support for the use of point to point speed cameras. Submit this by 16 June 2017 Note: On-line submission completed on behalf of CGG on 14 June 2017	Fergus Tate

Undertake a Value for Money assessment of CoPTTM

Progress report

As reported last meeting, the research shows that our approach was comparable to that of overseas countries (European and American).

NZTA has launched a research project to look at 'site clutter' at worksites.

It is recommended that this research project be included in the list of potential projects for the 2017/2018 financial year.

Actions		Person responsible
•	Develop question(s) to be answered by the research and circulate to CGG for comment	Fergus Tate
•	Include the research project into site clutter in the list of potential projects for the 2017/2018 financial year.	Fergus Tate

Develop model for CoPTTM training and competencies

Progress report

The Training and Competencies working party has met twice and so far have identified:

- Key TTM roles
- Broad blocks of learning.

Industry consultation will be completed once the working party has developed the draft model for training and competencies.

Set out on the following pages is some of the initial work completed by the working party.

Key TTM roles

The working party has identified the following key roles which require some form of CoPTTM knowledge (and where necessary other knowledge):

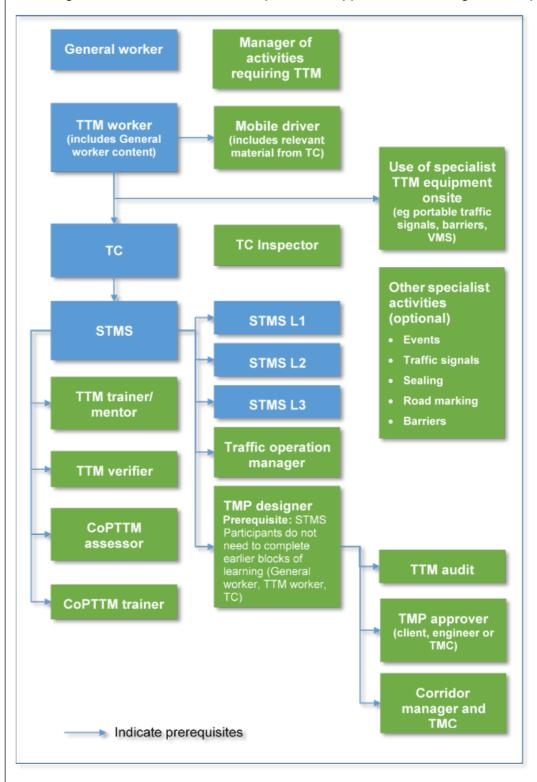
- General worker (site personnel)
- TTM worker
- Deputy STMS (TC)
- Onsite supervisor (STMS)
- TMP designer
- Corridor manager (includes TMC)
- Auditor
- TTM trainer / TTM mentor
- CoPTTM trainer
- TTM verifier
- TTM assessor
- Manager of activities requiring TTM
- Traffic operations manager
- Approving Engineer (optional)

Learning blocks

The working party has also identified the learning blocks.

Each learning block could include formal training, on-job training, briefing, online learning, on-job assessment or a combination of any of these options.

In the diagram below the blue blocks indicate the main stream for training and competencies and the green blocks indicate a more specialised approach for training and competencies.



At their next meeting the working party will develop detailed outlines for each learning block.

The learning block outlines identify:

- Who is it for?
- What's covered during formal learning
- What's covered on the job
- Competency to be assessed
- Assessment approach
- Is a refresher required?

Actions	Person responsible
Issue the document to be used for industry consultation on the Training and Competency model to CGG once it has been developed	Tony Stella

Pedestrians / Cyclists / Parking

Progress report

The Pedestrians, Cyclists and Parking working party has met twice and a trial on pedestrian walkways has also been completed.

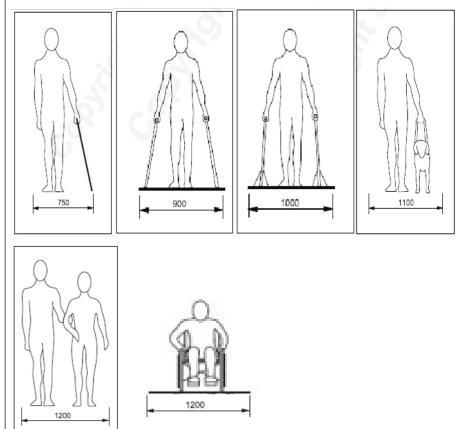
A discussion document is being prepared for industry consultation.

The working party has considered the needs of differently abled people.

Set out on the following pages are some of their considerations and initial recommendations.

Footpath widths

People with mobility issues require a wider footpath.



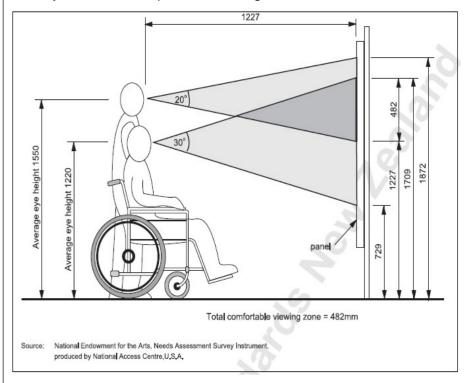
Initial recommendation (prior to industry consultation):

Change CoPTTM to show a minimum of 1.2m for temporary footpath widths.

If the existing footpath width is less than 1.2m, then the temporary footpath width may be reduced to at least the width of the existing footpath.

Height of signs

Research shows that the comfortable viewing height of a sign for a person in a wheelchair, mobility scooter and a person standing is between 1227mm and 1709mm.



Initial recommendation (prior to industry consultation): Install pedestrian signs at a readable height of between **1227mm and 1709mm**.

The level 1 sign stand could be used in front of a fence if:

- the potential trip hazard was managed
- · the sign was secured to the stand.

The sign can be fixed to a safety fence providing:

- the top of the sign is sited at or between 1m and 1.75m above the ground
- the sign does not protrude above the top of the safety fence.

Colour of signs

Black on orange pedestrian signs are difficult for sight impaired pedestrians to see and read.

Recommendations:

Complete a submission to the TCD Advisory Group recommending:

Changing colour of pedestrian signs to white on a blue background



 Using icons instead of words (eg replace FOOTPATH CLOSED PLEASE USE OTHER SIDE with icons)

Permeable walkway

Pedestrians must use a designated crossing point if they are available within 20 metres.

Where a temporary footpath is installed, pedestrians will often take the most direct route to reach their destination.

CoPTTM requires the traffic side of temporary footpaths to either have barriers, fences or cones with cone bars. This approach can trap pedestrians in the live lane.

The working party agreed that some measure of permeability is needed on the traffic side of a temporary walkway.

A trial of different options for permeability has been completed.

Initial recommendation (prior to industry consultation):Require a permeable walkway or sanctuary/escape route for pedestrians where the temporary walkway is adjacent to a live lane.





Temporary towaway zone sign

The working party discussed the need for an additional sign to support the PN11 No Stopping signs.

Initial recommendation (prior to industry consultation):

New TEMPORARY TOW AWAY ZONE sign to be submitted to TCD Advisory Committee.



Cyclists

Use a T2 sign with a CYCLIST MERGING supplementary plate instead of the proposed CYCLE LANE CLOSED sign.

Also produce a sign with icons for discussion.



Actions	Person responsible
Add additional information to the working party recommendations on when it is appropriate to require cyclists to dismount and walk around a closure	Neil Greaves
Working party to discuss the use of Blue signs for cyclists as well as pedestrians	Neil Greaves
Keep the Cycling Action Network (CAN) informed of changes to TTM for cyclists at worksites	Stuart Fraser
Add additional information to the working party recommendations about when it is safe to require cyclists to merge with other traffic	Neil Greaves

Audit

Progress report

The electronic audit system is now able to be customised for individual RCAs.

A list of customisable fields along with instructions on how to make amendments has been developed.

RCA strategies to improve audit results have also been developed.

A technical note itemising changes to CoPTTM will be posted.

A roadshow will be held in August/September to brief auditors on the new audit system.

Actions	Person responsible
 Complete a road show in August 2017 for the electronic audit system 	Tony Stella

Advanced planning workshop for TMP designers, reviewers and approvers

Progress report

The advanced traffic management planning (ATMP) workshop has been amended following feedback.

The ATMP workshops are advertised on the website under NZTA Training Calendar.

Workshops are delivered by a specialist team and are arranged when an area can commit to having 7 or more participants attend.

There have been requests for the ATMP workshop to be run in Wellington and Dunedin later this year.

BAU Tasks

Guidelines for mowing activities

Progress report

A set of guidelines has been prepared and is being trialled by Waipa DC and Hamilton CC.

Despite scoring low on CGG project priority list, it would be counter-productive and unfair to Hamilton and Waipa councils to stop the trial now as they have put a lot of time and effort into this. As the trial is 3 quarters complete it makes sense to finish the trial as it represents a huge potential saving to road controlling authorities.

Once the trials are complete, the Edit team will:

- Make any necessary amendments
- Refer the guidelines to CGG for comment
- Post the finalised guidelines on the website under section I.

Actions	Person responsible
Complete review of trials	Stuart Fraser
Make amendments and submit to CGG for comment	Stuart Fraser

Review of STMS-NP 2-day workshop material and assessment documents

Progress report

Review of STMS-NP training material has been put on-hold pending the outcome of recommendations from the Training and Competencies working party.

The level 2/3 trainers will continue running their current level 2/3 workshops until further notice.

Amendments have been agreed to streamline the L2/3 practical assessment material and to make it easier to use by both candidate and assessor.

These changes will be made within the next month.

Actions	Person responsible
Complete amendments to the assessment documentation and post to the website	Neil Greaves

Register of equipment approved for use on NZ roading network

Progress report

A register of new TTM equipment is now online as section I-19.

New items of TTM equipment are assessed and if suitable, are approved for use on NZ roading network.

Each item on the register has a user guide including operating procedures and any training requirements.

Actions	Person responsible
Add the Register of traffic signals to the Register of equipment approved for use on NZ roading network	Tony Stella

Regional centres of excellence for trainers

Progress report

Currently we have centres of excellence (COE) operating in Wellington, Hamilton and Auckland.

There is considerable interest in extending this to other areas.

Napier COE will launch in August. COEs in Dunedin and Palmerston North will be launched later this year.

Actions	Person responsible
 Consider making it mandatory for CoPTTM trainers to attend at least one COE meeting a year 	Stuart Fraser

Moderation / Audit of trainers and assessors

Progress report

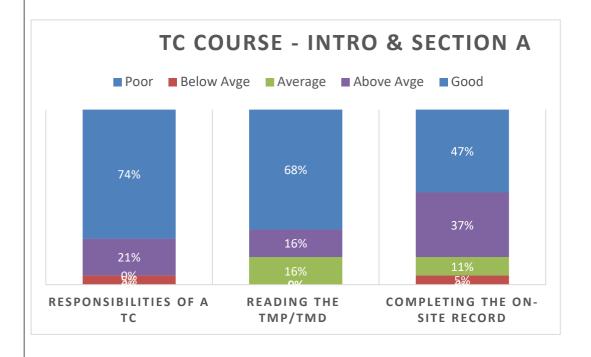
Moderation of the CoPTTM trainers remains an ongoing focus for NZTA.

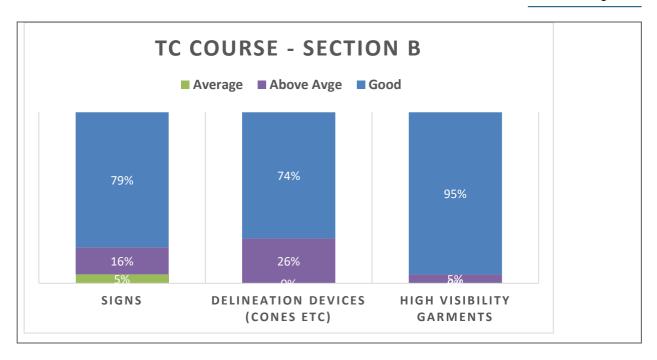
Trainers are now required to submit evaluation forms completed by participants for each level 1 CoPTTM workshop that they deliver.

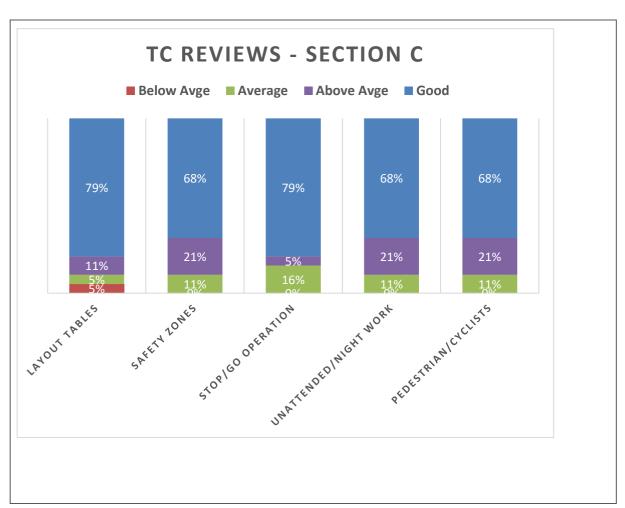
NZTA randomly selects 15 trainers each quarter and reviews the evaluations from one of their workshops.

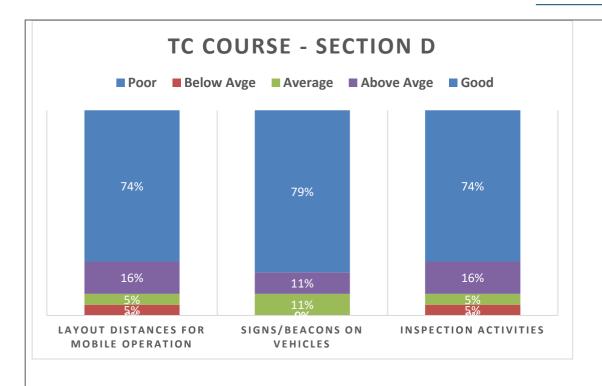
Trainers are provided with feedback on the results of the review.

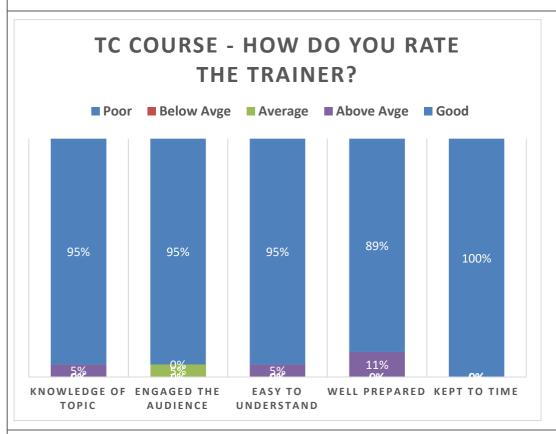
Set out on the following pages are the consolidated results for the TC training workshops that were included in the last sample of evaluations.











Completing reviews of the evaluations is helpful in identifying areas:

- That need to be adjusted in the training material
- · Where individual trainers need to undertake further development

The data from the first review of the evaluations indicates that participants do not understand how to complete the on-site record. The TC training package will be amended to include practice at completing an on-site record.

Build an online registration product and migrate database

Progress report

We are currently stalled after receiving pushback from the NZTA group managing IT expenditure. The group are insisting that we use one of the systems currently owned by NZTA. None of these systems are suitable.

We have an opportunity to carry out limited modifications to the database to meet the outcomes of the Training and Competency review.

Train KCTL trainers for the waste industry

Progress report

17 KCTL trainers have successfully completed their Train the Trainer workshop. There has been a request for at least 2 more train the trainer workshops to be completed in 2017 for the waste industry.

Submission to TCD advisory group for new signs and changes to existing signs

Progress report

This is an ongoing task – we are always getting new requests to consider new signs.

As batches of these submissions are completed we will send to CGG for their consideration and endorsement.

Orange reflectorised temporary lines have not been approved as they appear yellow at night.

Submissions will be made to the TCD advisory group for the following:

- NO ENTRY sign
- Single / double RD6L/R
- Smaller cyclist/pedestrian signs
- Smaller LAS without the TMA (for use on 2LS and L1 roads)
- CYCLE LANE CLOSED / CYCLISTS MERGING
- STOCK EMERGENCY
- MOBILITY SCOOTERS
- FOOTPATH CLOSED PLEASE WAIT TO BE ESCORTED

A	ctions	Person responsible
•	Submit the use of RRPM and non-reflectorised tape to TCD Advisory Group for marking of temporary lanes	Fergus Tate
•	Pedestrians, cyclists and parking working party to discuss the impact of having the CYCLE LANE CLOSED sign as well as the CYCLISTS MERGING signs – consider having just one of the signs	Neil Greaves

TMC workshops

Progress report

11 workshops have been completed. The last workshop in this round of training is scheduled for New Plymouth on 4 & 5 July 2017.

Decisions need to be made about whether:

- TMC workshops will continue to be delivered
- A TMC refresher will be delivered.

The Training and Competencies working party will recommend the nature of the competencies required of TMCs.

Actions	Person responsible
 Await recommendations from the Training and Competency working party before deciding the future of the TMC training 	Stuart Fraser

Include consideration of a conceptual master TMP in NZTA contracts documentation

Progress report

A week has been put aside in July to develop a TMP aide memoire for use with construction projects.

Actions	Person responsible
Develop a TMP aide memoire for use with construction projects	Edit team

Review traffic signal requirement

Progress report

No action has been completed on this project at this stage.

CGG have set this as one of the high priority projects.

A	ctions	Person responsible
•	Contract Opus Labs to extend testing of portable traffic signals to include 3 and 4-way operation if requested by the company submitting portable traffic signals for testing	

Revise work programme for 2017 / 2018 financial year

The following existing projects (underway but not yet completed) will be rolled over as priorities for the 2017 / 2018 financial year.

Priority projects	Team leader
Develop a training and competency model	Stuart Fraser
Develop guidelines for workers riding on the back of vehicles	Fergus Tate
Review of pedestrian, cyclist and parking management	Neil Greaves
Review of audit procedures	Tony Stella
Build an online registration product and migrate database	Stuart Fraser

CGG members prioritised 7 further projects to be commenced in the 2017 / 2018 financial year. A team leader has been identified for each priority project and in some cases others have been identified to assist.

Priority projects	CGG consolidated score	Team leader & others
Use of ITS for TTM	9	Dave Rendall
Clean up of CoPTTM inconsistencies	9	Stuart Fraser
Managing delays on the network (this may break into several sub projects)	8	Simon Harty Sean O'Neill Dave Rendall
P37 VMS standard (possibly including P35/6)	7	Dave Rendall Simon Harty
Review traffic signal requirement to include 3-way and 4-way portable traffic signals	6	Stuart Fraser Alan Gardiner
Worksite clutter/excess TTM	5	Fergus Tate
Effectiveness of electronic speed signs	5	Ray Edwards Fergus Tate

The following projects were identified as lower priority.

Lower priority projects	Consolidated score
TTM Conference	4
Temporary lane markings	4
Use of special vehicle lanes	4
Risk assessment	3
Maintenance and repairs to wire rope barriers	3
Balance decision making	3
Crash and breakdown recovery	2
Develop a database and mail out system for CoPTTM specific communications	2
Review of TMP form	2
Review of 2LS requirements	2
Include requirement for an initial conceptual TMP in all NZTA contracts documentation	2
Combine delineation with safety fence	2
Unattended loose chip	2
Delivery/uplift of goods/materials/furniture and buildings	1
Guidelines for mowing activities	1
Section I example plans / road markers to update	1
Definition of adequate light C10 MTC night-time work adequate light	1
Update website	1
NZUAG review and interactions	1
Investigate availability of signals to control pedestrians	0
Fire service GTMP and training	0
Use of drones at worksites	0
Stock Control Officers	0

Minutes of CGG meeting – 7 June 2017

General business

Level 2 low speed (2LS)

Progress report

At the last CGG meeting it was decided to trial 2LS for 12 months.

Auckland Transport were the first to designate 2LS roads which became effective on **1 September 2016.**

The review of 2LS will therefore be scheduled for **September / October 2017.**

Civil Contractors have stated their opposition to level 2LS in a submission to NZTA (attached as appendix A).

The main issue raised by contractors at the CGG meeting were:

• The requirement for smaller signs making it harder to price a job on 2LS roads.

Note: The 2LS technical note states:

- **5.1** Level 1 or level 2 signs and stands to be used **as directed by the RCA**.
- 2LS is only used in Auckland and Hamilton. It is not used in Christchurch but they have they own requirements similar to the 2LS requirements.

The contractors suggested that, as there are only 2 RCAs using level 2LS, the requirements detailing the use of smaller or larger signage could be incorporated into a local operating procedure under a Level 1 road classification.

Ac	ctions	Person responsible
•	Produce a comparison of TTM requirements at level 1, level 2LS and level 2 (attached as appendix B)	Stuart Fraser
•	CGG to comment on comparison of TTM requirements by 30 June 2017	CGG members
•	Request RCAs to supply information on any local variations to CoPTTM for level 1 and level 2 roads	Stuart Fraser

Other general business items	
Actions	Person responsible
Inspection TMP	
Develop an inspection TMP to be included in section I	Tony Stella
Frequency of CGG meetings	
Continue 6 monthly meetings of CGG	Fergus Tate
Working parties to meet more regularly to progress issues as quickly as possible	Stuart Fraser
Develop a long-term plan for CoPTTM	Simon Harty
Develop a document for discussion at the next CGG meeting on a long-term plan for CoPTTM.	
Austroads	
NZTA to stay in the loop with developers of the new standard	Fergus Tate
Technical Advice Notices (TAN)	
Major changes to CoPTTM to be notified to the industry via the TAN system	Tony Stella
Smaller changes to CoPTTM will be advised via notification on the CoPTTM website	Tony Stella
Project leaders for prioritised projects	
Team leaders for each project to develop project plans and submit to Tony Stella for co-ordination	Team leader for each project
Send out a project plan template to the team leader for each project	Tony Stella

Next CGG meeting

The next meeting of CGG is suggested for 13 December 2017. A meeting invite will be issued shortly for this date.

Appendix A Letter from Civil Contractors regarding level 2LS



NATIONAL OFFICE

PO Box 12 013, Wellington 6144 21 Fitzherbert Terrace, Thorndon, Wellington 6011 Ph 0800 692 376, Fax 04 496 3272 info@civilcontractors.co.nz

02 June 2017

Mr F Tate National Traffic and Safety Manager New Zealand Transport Agency Private Bag 6995 **Wellington 6141**

Dear Fergus

CoPTTM Level 2 Low Speed Road Classification

The Civil Contractors New Zealand Traffic Committee recently held a routine meeting to discuss industry matters, one of which was the introduction of the new Level 2 Low Speed (L2LS) road designation.

This new L2LS road classification has been available for some time now, which has allowed the sector participants where it has been introduced to experience and understand its operational viability and implications to the wider industry.

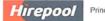
Initially, it was understood that it was proposed to incorporate the L2LS model into the Code of Practice for Temporary Traffic Management (CoPTTM) documentation at the time of the next upcoming update, so we are heartened to learn that the intention now is to trial the concept for up to twelve months and then review the regime in April or May of 2018.

Further to the above, it is believed that under the NZTA One Network Road Classification (ONRC) system, there are some recommended changes being suggested to allow up to 15 000 vehicles per day to operate on a Level 1 category road.

While it is early days and the new L2LS has only been implemented in limited areas, Auckland being the most notable, the wider industry is already experiencing operational difficulties with the added complexities the new scheme introduces. Additionally, no notable benefits or improvements have been observed in traffic behaviour - rather, the converse has been witnessed, with instances of road user confusion and traffic / work space congestion, which in turn translates into a drop in safety and protection for workers.

The industry has always been concerned about the introduction of this new road classification, and with the new proposal to allow greater vehicle volumes on Level 1 roads we now renew our call to use the existing road classification tools to manage the temporary traffic management (TTM) signage and layout requirements.

To this end, we reiterate that the Industry strongly opposes the L2LS road classification. By default then, its incorporation into the CoPTTM documentation so that it may be available for general use is also strongly opposed.



Principal Business Partner

If particular areas desire something specific to meet perceived specialised needs, requirements detailing the use of smaller or larger signage could be incorporated into a local operating procedure under a Level 1 road classification, as is already done in many areas. This is a much simpler, efficient and cost effective methodology to follow.

The Industry would like an opportunity to further discuss the L2LS regime and wish to raise their concerns at the upcoming CoPTTM Governance Group meeting scheduled for Wednesday 07 June 2017.

Yours sincerely

of .

Alan Stevens Technical Manager

Appendix B – Comparison of TTM requirements

Install and remove TTM

TTM requirements	Level 1 (under 65km/h)	Level 2LS (under 65km/h)	Level 2 (under 65km/h)
Tail pilot	Tail pilot not required	Tail pilot not required	Tail pilot not required
Shadow vehicle	Shadow vehicle not required unless personnel are on foot behind the work vehicle Signage either: PASS WITH CARE and RD6L/R or horizontal arrowboard, red and white chevron and PASS WITH CARE	Non-TMA shadow vehicle required if work vehicle on live lane Signage either: PASS WITH CARE and RD6L/R or (if permitted by RCA) horizontal arrowboard, red and white chevron and PASS WITH CARE	TMA shadow vehicle required (unless work vehicle 2m or more from edgeline) Signage: State highway R3-13.3 required Local roads R3-13.3 or (if permitted by RCA) horizontal arrowboard, red and white chevron and PASS WITH CARE
Work vehicle	TMA not required Signage either: PASS WITH CARE and RD6L/R or horizontal arrowboard, red and white chevron and PASS WITH CARE	TMA not required Signage either: PASS WITH CARE and RD6L/R or horizontal arrowboard, red and white chevron and PASS WITH CARE	TMA not required Signage either: PASS WITH CARE and RD6L/R or horizontal arrowboard, red and white chevron and PASS WITH CARE
Training level for STMS	STMS L1	STMS L2/3 Practicing	STMS L2/3 Practicing

Minutes of CGG meeting – 7 June 2017

Static site

TTM requirements	Level 1 (under 65km/h)	Level 2LS (under 65km/h)	Level 2 (under 65km/h)
Layout distances	Use level 1 layout distances	Use level 1 layout distances (reductions for road environment constraints not allowed)	Use level 2 layout distances
10m tapers on the lane	Use of 10m taper allowed when there are road environment constraints (eg intersections and commercial accesses)	10m taper may be used if permitted by the RCA when there are road environment constraints (eg intersections and commercial accesses)	Use of 10m tapers is not allowed on the lane
Sign size	Level 1 signs and stands to be used (unless directed by the RCA to use level 2 signs and stands)	Level 1 or level 2 signs and stands to be used as directed by the RCA	Level 2 signs and stands to be used
Gated signs	No difference between levels	No difference between levels	No difference between levels
Lane merges	'Distance to' notification not required on lane drops RD6L/R sign required at narrowest point of taper	'Distance to' notification not required on lane drops RD6L/R sign required at narrowest point of	'Distance to' notification is required for lane drops RD6L/R sign required at narrowest point of taper
	tapei	taper May have RD6L/R at widest point of taper	Must have RD6L/R sign at widest point of taper

TTM	Level 1	Level 2LS	Level 2
requirements	(under 65km/h)	(under 65km/h)	(under 65km/h)
Site entry requirement	Maintaining the safety of the site access is the responsibility of the STMS	Maintaining the safety of the site access is the responsibility of the STMS	Maintaining the safety of the site access is the responsibility of the STMS
	Marked worksite	Marked worksite	Marked worksite
	access usually only	access usually only	access usually only
	found in longer	found in longer	found in longer
	working spaces	working spaces	working spaces