

Minutes of the CoPTTM Governance Group (CGG) meeting on 11 December 2108

Meeting details

Start	Finish	Venue
9.00am	3.40pm	Cliftons Conference Centre, Level 28, Majestic Centre, 100 Willis Street, Wellington

Meeting attendees

Person	Representing	Person	Representing
Stuart Fraser	NZTA (Chairperson)	Bruce Goodall	New Zealand Road Markers Federation
Tim Barry	NZTA - Zero Harm	Neil Greaves	CoPTTM trainers
George Boyd	GHD Hamilton	Simon Harty	CTOC
Mike Darnell	Opus International Consultants	Damien Houlahan (representing Dave Rendall)	Fulton Hogan and AMA
Chris Edsall	Downer NZ	Tom Kiddle	Auckland Transport
Ray Edwards	Higgins Contractors	Brett North	WCC
Stacy Goldsworthy	Civil Contractors NZ	Doris Stroh	Aurecon

Unable to attend

Angie Crafer	FlowNZ	Matt Anderson	Broadspectrum
Alan Gardiner	HEB Construction	Andrew McLeod	Stantec
Andrea Williamson	Fletcher Infrastructure	Fergus Tate	Opus International Consultants

Meeting support

Tony Stella	Meeting support
Kim Laurenson	NZTA

NOTE: Refer to the 'Actions list' at the back of this document for a specific list of actions for each person.

Welcome

The meeting was opened by Stuart Fraser who welcomed everyone to the meeting. Apologies were announced from those who could not attend the meeting.

Approval of minutes from last meeting

Minutes of the meeting of 11 July 2018 were adopted.

Matters arising

There were no matters arising.

Buffer zones at worksites

Jared Thomas – WSP Opus

Jared provided overviews of the 2 TTM related projects that he has been involved in:

- Transport Agency and Safety at Road Works Advisory Group
- TSL buffer zones at worksites.

Transport Agency and Safety at Road Works Advisory Group

This project took a novel approach by gaining industry-led insights around issues and solutions from the field. It used a highly valuable (but rarely used) approach of conducting four interactive workshop sessions in Hamilton, Auckland, Christchurch, Wellington.

Industry led insights to TTM sites

From the workshops, the top 5 key focus areas were:

- Training
- Constructive auditing
- Knowledge sharing
- Public education
- Balancing site consistency vs flexibility

The following high value solutions were also identified:

Speed threshold treatments	Investigate approaches to effective speed reduction for high speed zone sites (e.g. graduated speed reduction, speed compliance etc).
Body cameras	Consider and pilot use of body cameras to reduce abuse from members of the public and improve staff wellbeing. Review effectiveness and fit-for-purpose based on worker role and conditions.
Mobile application and CoPTTM Search Functionality	Review mobile application platform for site-specific safety data to inform site setups based on the history of the site and known design-specific safety considerations. Enhance the usability of CoPTTM through an improved search function, including allowance of a web-based search via multiple platforms and usability testing.

Multi-modal sites	<p>Run workshops with all key stakeholder groups to:</p> <ul style="list-style-type: none"> • Overcome inefficiency and safety issues • Improve communications • Understand the perspective of other groups • Find improved, agreed solutions on site setup • Confirm Communications procedures. <p>Get real life users, disability groups, wheelchair users, low vision, bus drivers together to talk through solutions and suggestions.</p> <p>Auditing against guidance as well as talking to STMS about why they've set up sites the way they have.</p>
Cyclist/Pedestrian approved products	<p>Industry review of physical solutions for pedestrians and cyclists to identify existing setup materials to allow an improved range of fit-for-purpose tools that enable safer sites.</p> <p>Consider using eye tracking glasses to establish where people are looking as they navigate through temporary paths.</p> <p>Also use video to record which paths they are taking through sites.</p>

TSL buffer zones at worksites

Buffer zones background

The TTM industry has called for better information around speed threshold treatments and positive traffic management setups/tools.

We wanted to test:

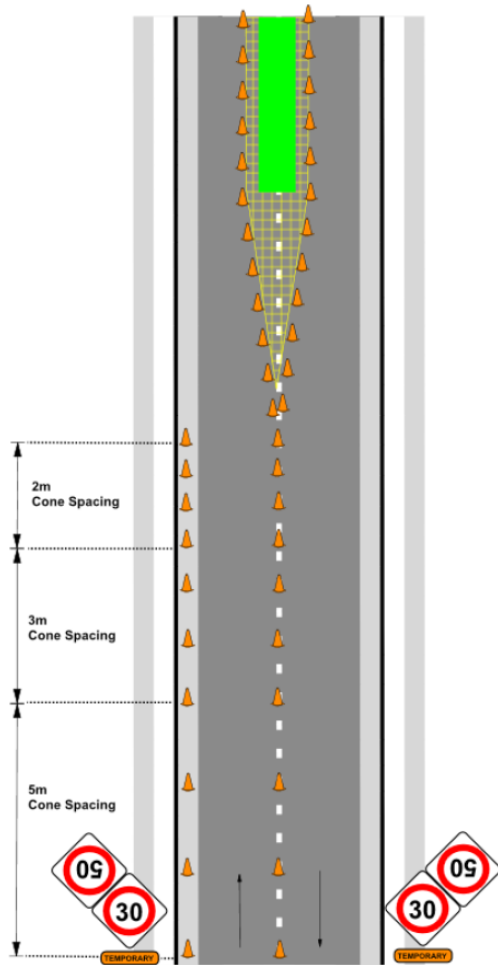
- **Phase 1:** Basic threshold setups
- **Phase 2:** Additive setups – to test compounding effects

Perceptual countermeasures

Reduced cone spacing

CoPTTM C5.2

Used to make drivers feel that they are driving faster through the site as they are passing cones faster than they are used to.

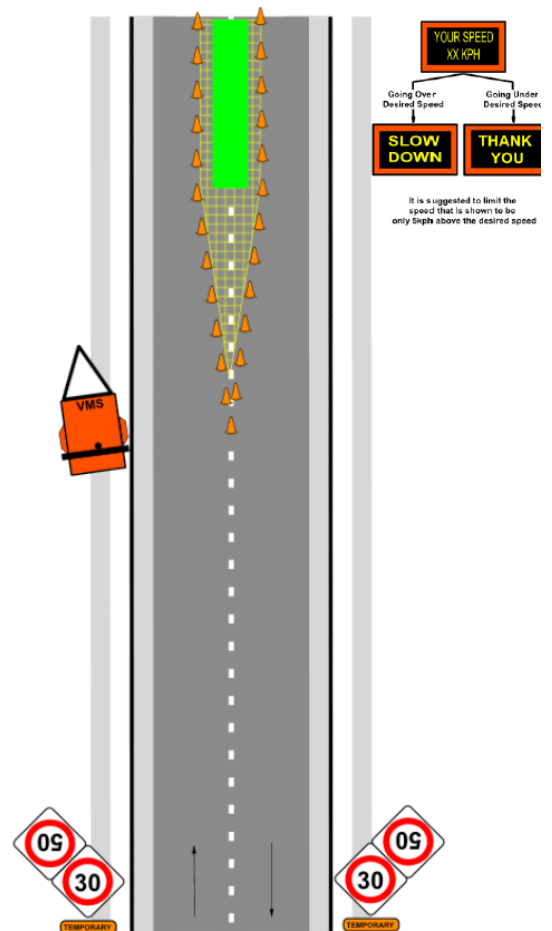


ITS solutions

Speed feedback signs

CoPTTM C10.1.1

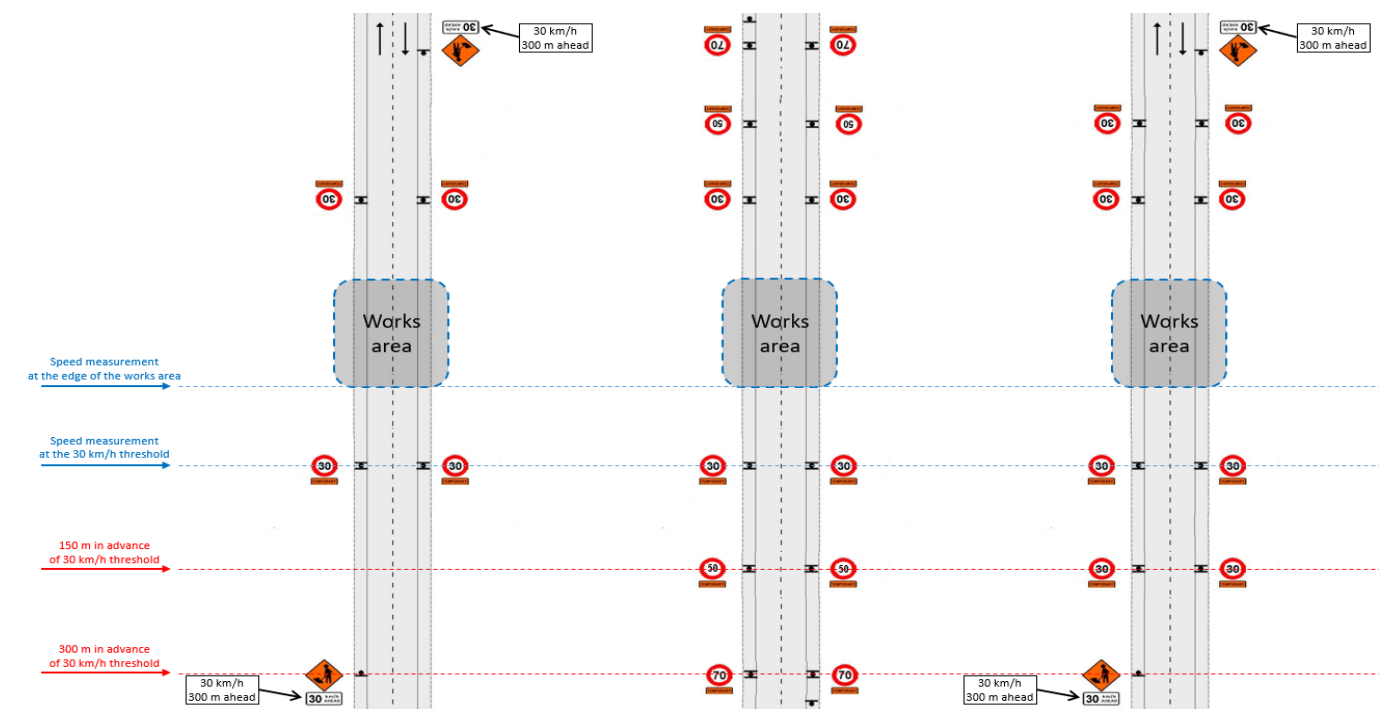
These have a radar inside them that can tell how fast a car is travelling. When used as part of a TTM operation, these signs can display vehicle speeds up to the highest value of the TSL. The VMS boards can be programmed to flash "SLOW DOWN" to any vehicles going above the TSL while vehicles obeying the TSL will get a "THANK YOU" message.



Insights across the sites in initial trials

1. Signage signalling advance warning or graduated speed buffer zones had mixed findings.
 - o Potential for minor speed benefits (~ 5km/h) but across our sites these were inconsistent
2. Major speed drops – Between the threshold and the live work site (~ 30km/h drop)
 - o Can attribute this to people responding to the work site
 - o Supported by a physical chicane cone layout
3. Use of multiple signs to reinforce the speed change may be beneficial
4. Optimising the gap between the live site and signage may also be beneficial (i.e. speed credibility)
5. There is room to improve speeds at the threshold to work sites

Where to next - Improved single sites



Where to next - Trial sites

- We are looking for shorter term sites (between 3 and 5 days duration) - preferable 100km/h permanent speed with a 50km/h TSL
- We are especially interested in a site where we can test a Buffer Zone Alone (no advanced warning)
- We will look at an additive approach, looking at:
 - Best static signage (best of Phase 1)
 - Perceptual countermeasures (Cone placements)
 - ITS Solution (Speed feedback)

Report back on TCD Steering Group meeting

Tony Stella reported back on the TCD Steering Group meeting held on 7 November 2018.

There were several items that related to temporary traffic management:

- Use of ballasted cones as a stand for RD6 (twin disc)
- Pedestrian signage
- Hand controlled stop/go sign.

Use of ballasted cones as a stand for RD6

TCD Steering Group had previously decided:

- Use of RD6 single disc (300mm) not approved – use RD6 twin disc
- Use of 400mm RD6 not approved
- Practice of mounting signs on cones not endorsed

After reviewing the Edit team resubmission the TCD Steering Group supported the principle of the sandbag ballasted cone or stabilised cone to support an RD6 double disc but reiterated that CGG need to approve this.

Resounding “yes” endorsement from CGG for use of RD6 double arrow to be installed on ballasted or stabilised cones on the centre line. Single disc is not to be used on the centre line

Edit team will need to decide:

- *Do these ballasted/stabilised cones count as delineation? **CGG suggested that the ballasted/stabilised cones be treated as a stand and not be counted as delineation***
- *Do we still require the full size sign when the RD6 is used in non-centreline installations (eg in a taper)?*

Request made to ask sign manufacturers to stop producing non-legal signs (double right arrows)

CGG asked the Edit Team to go back to the TCD Steering Group to request the 300mm single disk be approved for use as this an effective directional arrow and is easy to install

Actions agreed	Person responsible	Timeframe
<ul style="list-style-type: none"> • Go back to TCD Steering Group to request a 300mm single arrow be approved 	Tony Stella	Feb 2019
<ul style="list-style-type: none"> • Request sign manufacturers to stop producing non-legal signs (eg double right arrows) 	Neil Greaves	Feb 2019
<ul style="list-style-type: none"> • Amend CoPTTM and training material to show RD6 can be mounted on ballasted or stabilised delineator 	Tony Stella	Feb 2019

Pedestrian signage

The TCD Steering Group accepted the recommendation from the Active Modes Infrastructure Group (AMIG) that the colour of temporary pedestrian signage be changed to blue. This will help visually impaired pedestrians see the directional signs.

The TCD Steering Group also accepted the AMIG recommendation for the use of symbols rather than words on pedestrian signage (eg FOOTPATH CLOSED PLEASE USE OTHER SIDE).

Actions agreed	Person responsible	Timeframe
<ul style="list-style-type: none"> Follow up with AMIG and then have signs amended 	CoPTTM Edit Team	February 2019

Stop paddle as a Stop sign

The TCD Rule currently states that this sign is **Hand-held**. The TCD rule is to be changed to show that the sign is **Hand-controlled**. This is likely to be signed off by Select Committee before Xmas.

Training and competency model

A costing and a risk ratification was developed for consideration by the Ratification committee.

The Ratification committee requested a review of the process to date.

Following the review a business case is now being included for the Training and Competency model.

Actions agreed	Person responsible	Timeframe
<ul style="list-style-type: none"> Business case to be completed 	Tony/Neil/Kim	30 Jan 2019

CoPTTM update November 2018

The November 2017 version of CoPTTM is available on the website. Print versions of the latest version will be available shortly.

The effective date for the changes is 1 February 2019 (but they can be applied from date of issue).

In preparing for the update the Edit team reviewed 32 CoPTTM Consult Policy submissions and 141 CoPTTM Consult Minor submissions (including Working party recommendations).

An Update Note is available on the website which details all of the changes to CoPTTM since February 2017.

Section J has not been revised. It will be reviewed when the Training and Competency model is implemented and will likely become a resource targeted directly at TC training rather than a summary of level 1 CoPTTM information.

The training material has been revised and is being issued to the CoPTTM trainers.

CoPTTM Notify

CoPTTM Notify is now live and our first notification was sent out on 30 November 2018. Set out below are some statistics from our first notification:

- 763 subscribers
- 69% of all recipients opened email
- 48% clicked a link
- 3% unsubscribed
- 212 people have yet to open the notification.

A Technical advice notice (TAN) will be issued notifying of the November update of CoPTTM. The TAN will also include a link to subscribe to CoPTTM Notify.

Actions agreed	Person responsible	Timeframe
<ul style="list-style-type: none"> • Issue TAN requesting interested parties subscribe to CoPTTM.Notify 	Tony Stella	21 Dec 2018

Zero Harm - TTM safety improvements

Tim Barry, Senior Manager Safety and Wellness

Tim explained that this project involved looking at TTM from a HSWA perspective rather than a CoPTTM perspective.

Where this came from

This project originated from the industry Zero Harm Leadership Forum (ZHLF). The aim was to enable cooperation and consultation between organisations with overlapping / interacted HSWA duties.

This resulted in the formation of the Road Workers Safety Advisory Group which delivered a report to ZHLF and NZTA.

At the same time, NZTA were completing duty holder reviews and independent investigations into worker fatalities.

The NZTA Board requested taking recommendations into action.

We ran a design sprint in Feb 2018 to capture any other “out of industry” ideas. This validated a number of existing recommendations and developed a long list that was then tested for certainty and practicality to implement. Customers were a key input to this information gathering.

The resulting list / collection of improvement opportunities were related to:

Improving driver behaviour by:

- Reducing driver frustration by providing better understanding and knowledge within the system of the why TTM is in place
- Reducing driver confusion by providing consistent, clear, clean, intuitive sites
- Introducing physical controls that assist / modify driver behaviour (eg pace lights, autonomous pilot vehicles, judder bars)

Improve worker health and safety by:

- Creating a “safe to fail” work area (this is the HSWA element) through engineering controls, such as physical barriers, remote controlled barriers, etc.

What does this look like?

It is a programme of work to identify, prioritise and progress identified improvements. It includes reporting on progress to NZTA Board, ZHLF and CGG. In conjunction with our supply chain partners, it also includes managing the overlapping duties to progress pilots to a point of proof of effectiveness.

The focus is on both physical safety and health as well as psychological health. The programme will also be completed in line with the recommendations in the CoPTTM strategic direction document.

Example of innovations being progressed currently:

- Informing drivers and humanising the workers (eg my father works here) - *Marlborough Roads & Tasman District*
- TTM as separable package of work to roadworks - *Safe Roads and Tasman District*
- Developing a “Type of Site” identification system – based on why TSL is here:
 - Harm to you or our workers
 - Harm to your car
 - Harm to the road
- CoPTTM and guidance material availability “In the field” - *NZTA ITC and CJS*

- Tackling the “Sea of Orange” - clean sites, ghost markings, other colours for workers - *FH @ Central Otago and Tasman District.*

Testing and evaluation

Qualitative and quantitative assessment methodologies (worker perception and driver behaviour / speed measurement) will be used to assess effectiveness of the improvements.

Reporting and progression for inclusion in CoPTTM

Proven improvements will be included into CoPTTM via technical notes which will be issued progressively as changes are approved.

Austrroads Harmonisation

The last Austrroads meeting was held on the 25th to 27th of September 2018. The meeting focused on governance around RTOs and Trainers for the future model. A position paper was distributed for review and comment.

NZTA has replied to this paper outlining the existing NZ training policy and procedure.

NZTA has objected to polytechnics being the only certifiers for qualifications as access is difficult and not all polytechnics will want to run these courses.

Polytechnic trainers don't have practical experience, so we would be going back to textbook training.

However, Austrroads is still quite fixed on using registered training organisations.

We do still have the option of only partially adopting the recommendations that will come out in 2019.

It is likely that each state and NZ will have supplements to any standardised document.

Austrroads wants a governance group like NZTA's with subgroups.

NZTA representation on working group now has to be filled as Fergus Tate has left NZTA.

Training update

Train the Trainer

The Train the Trainer workshop was held in Taupo on 20, 21 and 22 Nov 2018.

There were 18 participants. A high number had practical experience although some struggled with presenting and CoPTTM knowledge.

9 participants were warranted as STMS trainers.

4 participants were warranted as TC trainers (with follow-up before being considered for STMS Trainer).

The rest of the participants have plans in place for their future development.

Trainer Refresher

The Trainer Refresher workshop was held in Taupo on 26 and 27 November 2018.

21 people attended the Refresher workshop. There were some very high standards demonstrated.

Some participants did struggle with presenting information and CoPTTM knowledge. Not all participants were refreshed as STMS trainers and some were refreshed as TC trainers with follow-up required before a final decision is made.

Moderation - L1 CoPTTM Trainers

6 CoPTTM trainers have been moderated since the last CGG meeting. 3 of the trainers met the standards. 1 trainer has resigned since their moderation meeting. 2 of the trainers have development programmes in place before final decisions are made.

Training calendar

The NZTA training calendar through to June 2019 is as follows:

Workshop	Dates	Location
TMC	12 & 13 February 2019	Christchurch
TMC	26 & 27 February 2019	Wellington
TMC	12 & 13 March 2019	Rotorua
TMC	26 & 27 March 2019	Nelson
IMI	12 to 14 February 2019	Hamilton
IMI	9 to 11 April 2019	Christchurch
IMI	May 2019	Hamilton
IMI	August 2019	Hamilton
Barrier design	30 April to 2 May 2019	Auckland
Barrier design	September 2019	Auckland
TRSB	25 to 26 June 2019	Auckland
TRSB	November 2019	Hamilton
SSEW	March 2019	Auckland
SSEW	October 2019	Auckland

Actions agreed	Person responsible	Timeframe
<ul style="list-style-type: none"> Send training schedule to Stacy Goldsworthy to advertise to CCNZ members 	Tony Stella	30 January 2019

Farewell to Fergus Tate and thank you for 7 and a half years of service

Stuart Fraser thanked Fergus for his service to CGG and the TTM industry. Fergus' evidence-based philosophy and research-based approach has raised the standard of knowledge and practice in the TTM industry. Stuart especially thanked him for his leadership of the CGG.

Positive traffic management at worksites - speed display units with data logging and traffic signals

Akshay and Rashmi Gupte, Peter Gough from Peter Berghaus

0800 728 723 rashmi@isptraffic.co.nz




Akshay provided an introduction to the Peter Berghaus operation in NZ. He explained that they offer 3 models of NZTA compliant traffic lights.

They also offer a range of safety accessories including:

- Remote control for portable traffic signals
- Countdown timers
- An App to control Portable traffic signals
- Speed display units.

Akshay overviewed two case studies that highlighted the effectiveness of speed display units in slowing traffic speed.

He also explained the characteristics of each of the speed display units that they offer (*see table over page*).

			
MODEL	BASIC	DELUXE	PREMIUM
LED	Yes.	Yes. With a flick of a switch, the Deluxe speed signs can also be used as just data collection units. The data is collected in "Stealth Mode", i.e. the speed sign will collect data without showing the speed to the vehicles drivers.	Yes. Bottom panel is Full Matrix LED offering capability to input text of your choice (up to 12 characters) with capability to alternate between two messages, for example, Message 1: SLOW Message 2: DOWN Stealth mode is also possible.
DATA LOGGING AND WEB ANALYSIS	No.	Yes. Data is presented in CSV format and downloaded using a USB stick. CSV file can also be uploaded to a web based tool, which can analyse data from the previous day.	Yes. Data is uploaded to the cloud every two hours from 8 am to 8 pm. Data analysis is done on the web interface as the data gets uploaded.
CONFIGURATION VIA WEB INTERFACE	No. The speed limit can be changed manually on the unit.	No. The speed limit can be changed manually on the unit.	Yes. The unit can be configured using web interface. The unit is updated every two hours from 8am to 8 pm, i.e, 8 am, 10am, 12pm, with last update at 8pm.



We then proceeded outside to see a demonstration of two of the speed display units in operation.

As Akshay processed data from the speed display units, Rashmi and Peter provided more explanation about the products they offer and examples of where the products have been used.

Akshay then presented the data gathered from the speed display units and answered questions from the group.

There was overall support from the group for the use of speed display units at worksites where speed is (or is likely to be) an issue.

Future proofing CoPTTM – working through the discussion document

Simon Harty - CTOC

Simon began this session by reviewing the responses to the survey which addressed each of the recommendations in the CoPTTM Strategic Direction discussion document which was issued to CGG members to stimulate discussion about the future direction of CoPTTM.

At the time of the meeting there had been 10 responses to the survey. However, Simon noted that there was no close off to the survey, and asked CGG members to complete the survey if they had not already done so.

There are 23 recommendations in the CoPTTM Strategic Direction discussion document. On reviewing the responses, we were able to identify recommendations where there was a high level of support from CGG members and also recommendations that need further discussion.

Support for each recommendation was recorded as follows:

Recommendation number	% agree	% agree with concerns	Comment
1	60	20	General support for this recommendation
2	30	40	This recommendation needs further discussion
3	60	40	General support for this recommendation
4	40	40	General support for this recommendation
5	30	20	This recommendation needs further discussion
6	50	-	This recommendation needs further discussion
7	60	30	General support for this recommendation
8	40	40	General support for this recommendation
9	20	50	This recommendation needs further discussion
10	55	40	General support for this recommendation
11	45	45	General support for this recommendation
12	45	45	General support for this recommendation
13	45	35	General support for this recommendation

14	35	35	This recommendation needs further discussion
15	10	70	This recommendation needs further discussion
16	45	35	General support for this recommendation
17	55	35	General support for this recommendation
18	70	20	General support for this recommendation
19	65	25	General support for this recommendation
20	75	20	General support for this recommendation
21	45	35	General support for this recommendation
22	35	35	This recommendation needs further discussion
23	55	45	General support for this recommendation

To further develop the CoPTTM strategic direction it was decided that:

- CGG will allocate 1 hour at the start of each CGG meeting for:
 - Governance decisions (strategy etc)
 - Tracking of progress and results.
- CGG will form a subgroup to begin work on a proposed strategic direction (Subgroup volunteers – Simon Harty, Tom Kiddle, Damien Houlahan, Stacy Goldsworthy, Neil Greaves)
- As part of developing the strategic direction, there may be short discussions with senior managers from Health, Safety and Environment and SDD
- Once a draft strategic direction has been developed, the subgroup will seek endorsement of the strategic direction from the full CGG
- Once endorsed, the draft strategic direction will be submitted to senior NZTA managers in Health, Safety and Environment and SDD
- First meeting of the subgroup to be held in late January 2019

Actions agreed	Person responsible	Timeframe
• Provide survey results to the group	Simon Harty	30 January 2019
• Investigate getting professional facilitator in to help the subgroup create vision and values	Tony Stella	15 January 2019

General business

Farewell to Stuart Fraser and thankyou for 28 years of service

Neil Greaves thanked Stuart for his 28 years of service to the TTM industry. During that time Stuart has developed an ever-growing set of training programmes to be delivered by likeminded people around NZ. He has worked tirelessly to keep CoPTTM current and reflecting industry best practice.

Neil explained that Stuart's final CoPTTM Train the Trainer and Trainer refresher workshops were held at the Millennium Hotel in Taupo in the last 2 weeks of November.

As there was a gathering of existing CoPTTM Trainers on the Sunday night, people who Stuart had worked with during his time with Transit and NZTA were invited to attend.

It was a great occasion with many people acknowledging Stuart's efforts on behalf of the TTM industry. There were emotional moments and times of fun and laughter as people shared their experiences of working with Stuart.

[Click this link](#) to see some photos of the Taupo farewell to Stuart.

Neil asked CGG to acknowledge Stuart's efforts over the last 28 years. Everybody showed their appreciation of his contribution during that time.

What are the new roles?

Stuart's role has been divided into two separate roles.

Kim Laurensen is now **Senior Advisor Technical Training and Education** at NZTA and is the contact for business matters.

Kim.laurensen@nzta.govt.nz

Neil Greaves is contracting as **Senior CoPTTM Advisor** at NZTA and is the contact for technical CoPTTM guidance.

Neil.greaves@nzta.govt.nz

NZTA will be recruiting a CoPTTM Data Administrator in the new year.

TMA and light arrow proposal

Discussions are ongoing on this proposal. Meetings are being held in Auckland on 17-18 December 2018 as the industry works with NZTA to fine tune the proposed changes.

Coroner's recommendation

There has been a recent Coroner's Court recommendation that NZTA have been asked to comment on. It involved a long worksite and the Coroner felt that delineation devices along the centreline would have been helpful in alerting the driver to a hazardous area. Stuart felt that in addition, amber flashing beacons may also have been helpful.

He undertook to remind CGG that the use of amber flashing beacons is an approved positive traffic management technique. He emphasised that while they are an option, he does not want them used at every site. He suggested saving the technique for difficult sites.

Where to from here

Minutes will be sent out by 17 December 2018.

The next meeting will be held sometime in June or July 2019. A meeting invite will be sent out in the New Year.

Actions list

Actions for Neil Greaves

Actions agreed	Person responsible	Timeframe
<ul style="list-style-type: none"> Request sign manufacturers to stop producing non-legal signs (eg double right arrows) 	Neil Greaves	Feb 2019

Actions for Tony Stella

Actions agreed	Person responsible	Timeframe
<ul style="list-style-type: none"> Go back to TCD Steering Group to request a 300mm single arrow be approved 	Tony Stella	Feb 2019
<ul style="list-style-type: none"> Amend CoPTTM and training material to show RD6 can be mounted on ballasted or stabilised delineator 	Tony Stella	Feb 2019
<ul style="list-style-type: none"> Issue TAN requesting interested parties subscribe to CoPTTM.Notify 	Tony Stella	21 Dec 2018
<ul style="list-style-type: none"> Send training schedule to Stacy Goldsworthy to advertise to CCNZ members 	Tony Stella	30 January 2019
<ul style="list-style-type: none"> Investigate getting professional facilitator in to help the subgroup create vision and values 	Tony Stella	15 January 2019

Actions for Simon Harty

Actions agreed	Person responsible	Timeframe
<ul style="list-style-type: none"> Provide survey results to the group 	Simon Harty	30 January 2019

Actions for CoPTTM Edit team

Actions agreed	Person responsible	Timeframe
<ul style="list-style-type: none">Follow up with AMIG and then get signs amended	CoPTTM Edit Team	February 2019

Actions for Kim/Neil/Tony

Actions agreed	Person responsible	Timeframe
<ul style="list-style-type: none">Complete business case and submit for approval	Kim/Neil/Tony	30 Jan 2019