NZ TRANSPORT AGENCY
WAKA KOTAHI

TRAINING AND COMPETENCY MODEL

Temporary Traffic Management

COPTTM TRAINING AND DESIGN TEAM

30 AUGUST 2019

V5.3

New Zealand Government

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NZ Transport Agency
Published August 2019

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EXECUTIVE SUMMARY

Background

This is a priority project which was identified by the CoPTTM Governance Group (CGG) and the NZ Transport Agency, who were given a recommendation to introduce competence checks as a result of a Coroner Court inquiry.

The Training and Competency Working Party (consisting of 11 industry representatives - including 6 CGG members) have developed a Training and Competency Model.

The industry has been involved in the development of the model through:

- Representation on the working party
- Industry consultation through 4 workshops (Dunedin, Christchurch, Palmerston North and Auckland) - 339 submissions were received during the industry consultation workshops
- 15 Roadshow presentations around the country.

There was general consensus from the industry that the Training and Competency Model, as amended by feedback, was the right way to proceed.

The model consists of 3 parts:

Parts	Explanation
Roles	A list of key roles or groups requiring some form of CoPTTM knowledge
Map	A map showing the CoPTTM learning blocks with a preferred order of learning and any pre-requisites
Profiles	A profile for each learning block identifying the knowledge to be covered during the learning and the skills to be assessed after the workshop/briefing has been completed

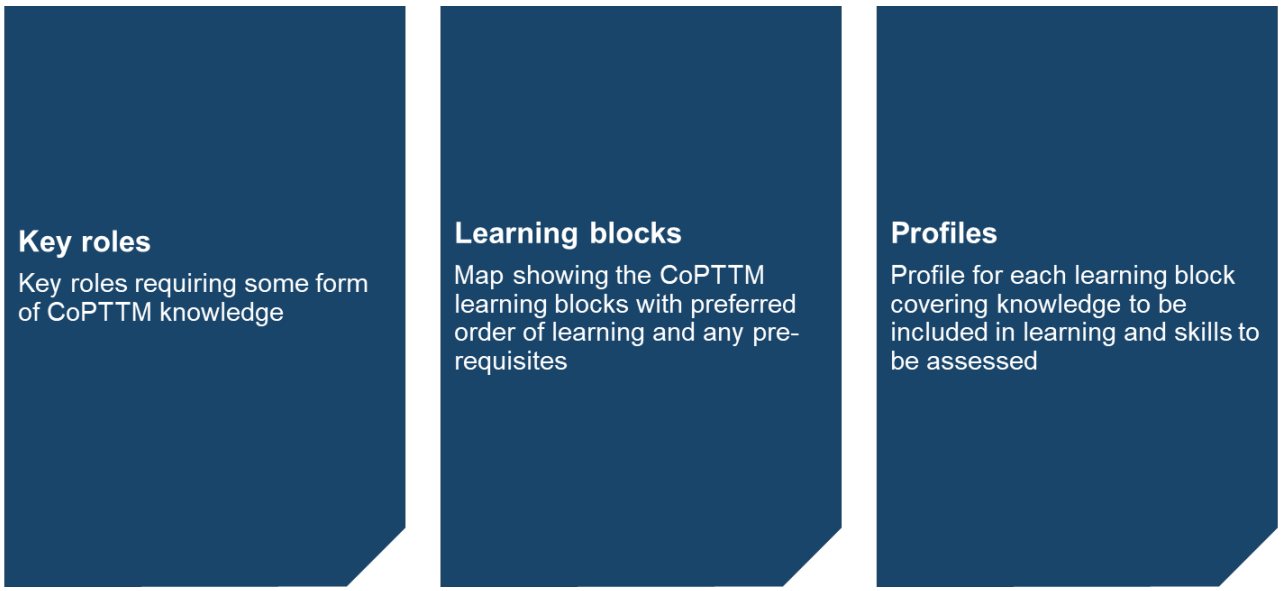
Status of the model

NZ Transport Agency has approved the Training and Competency Model and implementation is now underway.

ABOUT THE TRAINING AND COMPETENCY MODEL

About the model

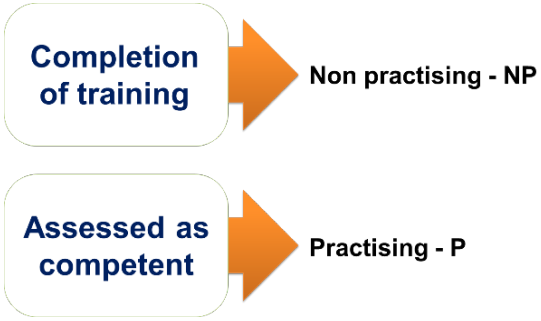
The **Training and Competency Model** consists of 3 separate but interrelated parts:



Details of each part of the model are set out on the following pages.

Non-practising and practising warrants

The model focuses on the concept of Non-practising and Practising warrants.



After the person successfully completes the learning, and passes all of the tests, they will be warranted as **Non-practising**

Once the person has been assessed as competent in all of the practical skills associated to the learning block, they will be warranted as **Practising**

STMS warrants

It has been acknowledged that there are different risk profiles for **low speed** (60km/h and less) and **high speed** (70km/h and greater) **roads**.

Considerations on low speed roads include:

- Pedestrians and pedestrian crossings
- Cyclists and cycle lanes
- Shared pedestrian and cyclist paths
- Restricted parking areas in the form of bus stops, loading zones, taxi stands, coupon parking, resident parking etc
- Higher number of intersections and accessways

Considerations on high speed roads include:

- Higher speed – longer stopping distances
- Visibility of the worksite (vertical and horizontal curves)
- Shoulder and pull over areas.

To follow these considerations, the STMS training, assessments and warrants will be based on the following categories of road environment:

Category	Road environment and characteristics	TTM Trainer
Category A	**Low speed roads (60km/h and less)** • Includes LV, L1 and L2 low speed roads • Using both type A and B signs (dependant on RCA requirements) • Includes two-way two-lane roads and multi-lane roads	Delivered by TTM Trainer who holds the STMS category A Practising warrant
Category B	**High speed two-way two-lane roads (70km/h and more)** • Includes LV, L1 and L2 high speed roads • Using both type A and B signs (dependant on RCA requirements)	Delivered by TTM Trainer who holds the STMS category B Practising warrant
Category C	**High speed multi-lane roads (70km/h and more)**	Delivered by **selected** TTM Trainer who holds the STMS Category C Practising warrant

NZ Certificate of Temporary Traffic Management

To supplement the Training and Competency Model, there will be a NZ Certificate of Temporary Traffic Management registered on the Qualifications Framework.

Completion of this certificate (and related unit standards) will be optional except for selected NZ Transport Agency warranted roles including TTM Mentor, TTM Assessor and TTM Trainer.

The certificate includes the following unit standards:

Unit standards	Title
TTM Worker	Explain the role of and operate as a TTM worker on the worksite under temporary traffic management
TC Non-practising	Demonstrate knowledge of temporary traffic management
TC Practising	Maintain the worksite under temporary traffic management
Universal STMS	Explain the requirements for the worksite under temporary traffic management
STMS Non-practising	Explain the requirements for the worksite under temporary traffic management for a road environment as defined in CoPTTM
STMS Practising	Operate as a practising Site Traffic Management Supervisor (STMS) on a road environment as defined in CoPTTM

KEY ROLES

Roles requiring CoPTTM knowledge

The first part of the training model is the key TTM roles requiring some form of CoPTTM knowledge.

These roles are set out below with a broad description of the role and the appropriate learning block(s):

Role	What they do (high level description)	Learning blocks
General Worker (site personnel)	Anyone working on or who is likely to visit a worksite	General Worker
TTM Worker	A worker who assists with TTM under direction (eg puts signs and cones out, assists with stop/go, driving activity)	TTM Worker Mobile Driver
Inspector	A person carrying out inspection activities **Note:** This may include surveyors	Inspector
Traffic Controller (TC)	The qualified person on category A and B road environments who: • Assists with deployment of the operation • Maintains the site within existing TTM phase while the STMS is away from worksite. **Note:** The TC will only be able to assist an STMS installing, modifying or removing TTM at a worksite The TC can also undertake: • Non-invasive activities where the person is on foot on the roadside of a road with a permanent speed of 60km/h or less. • Inspection activities Includes additional specialist activities for example, assisting an STMS with event management	TC Use of specialist TTM equipment

Role	What they do (high level description)	Learning blocks
STMS (onsite supervisor)	Set up, change and remove a worksite to a predetermined plan Covers additional specialist activities if required eg Event management, traffic signals, sealing, road marking and barriers All TTM at worksites on category C roads (including shoulders) must be under the control of an STMS P warranted for that category of road This ruling also applies to capital projects where each worksite must be controlled by an STMS P warranted for the category of the road Exceptions to this requirement may be dealt with by an EED or risk assessment which is signed off by the RCA	Universal STMS STMS Category A STMS Category B STMS Category C Other specialist activities
TTM Mentor	This is the on-job coach or trainer who trains staff on the practical aspects of their role. The TTM Mentor role is performed by a good STMS from the company (or a good STMS contracted for this role)	TTM Mentor
TTM Trainer	Formally trains people in CoPTTM requirements and the practical application of those requirements	TTM Trainer
TTM Assessor	Selected by NZTA to assess competence in a specific specialist activity (eg Category C practical assessment, TTM Planner assessment, barriers assessment)	TTM Assessor
TTM Planner	Develop and submit TMPs for approval. Brief onsite STMS on TMP Also includes specialist activities as required. For example, Event management	TTM Planner
Corridor Manager (includes TMC)	Manage and permit road space impact (TMP and potentially WAP approvals)	TMP Approver Corridor Manager and TMC

Role	What they do (high level description)	Learning blocks
Approving Engineer	To be considered as an option where Corridor manager and client mutually agree that this could add value. Includes first stage approval of a TMP	TMP Approver
Traffic Operations Manager	The person who may be in charge of multiple STMSs or the TTM activities of a company	No training provided as roles vary
Auditor	Assess worksites to support continuous improvement and identify and report on poor performance	TTM Audit
Manager of activities requiring TTM	People who are managing activities requiring TTM resources and do not require more detailed TTM qualifications - general overview (these people would generally employ others to undertake TTM)	Manager of activities requiring TTM

LEARNING BLOCKS

How the learning blocks work

The second part of the Training and Competency Model is the learning blocks. Each learning block provides role specific learning for a role (or combination of roles). The learning blocks include the following components - **knowledge**, **practical** and **assessment**.

Components	Explanation
Knowledge	The learning blocks include a knowledge load up from a workshop, eLearning package, a handbook or a briefing from a TTM Mentor (or a combination of these).
Practical	There is a practical component with every learning block. During this practical component the person will receive coaching from a TTM Mentor (a good STMS). The TTM Mentor will also confirm that the learner can perform tasks to the required standard.
Assessment	Each learning block has an assessment of competence. A TTM Assessor will determine if the learner is competent to undertake the role and: • Award the related unit standard (if required), and • Award the NZTA warrant (if it is an NZTA warranted role). The same assessment document will be used to assess competence for the warrant and the unit standard.

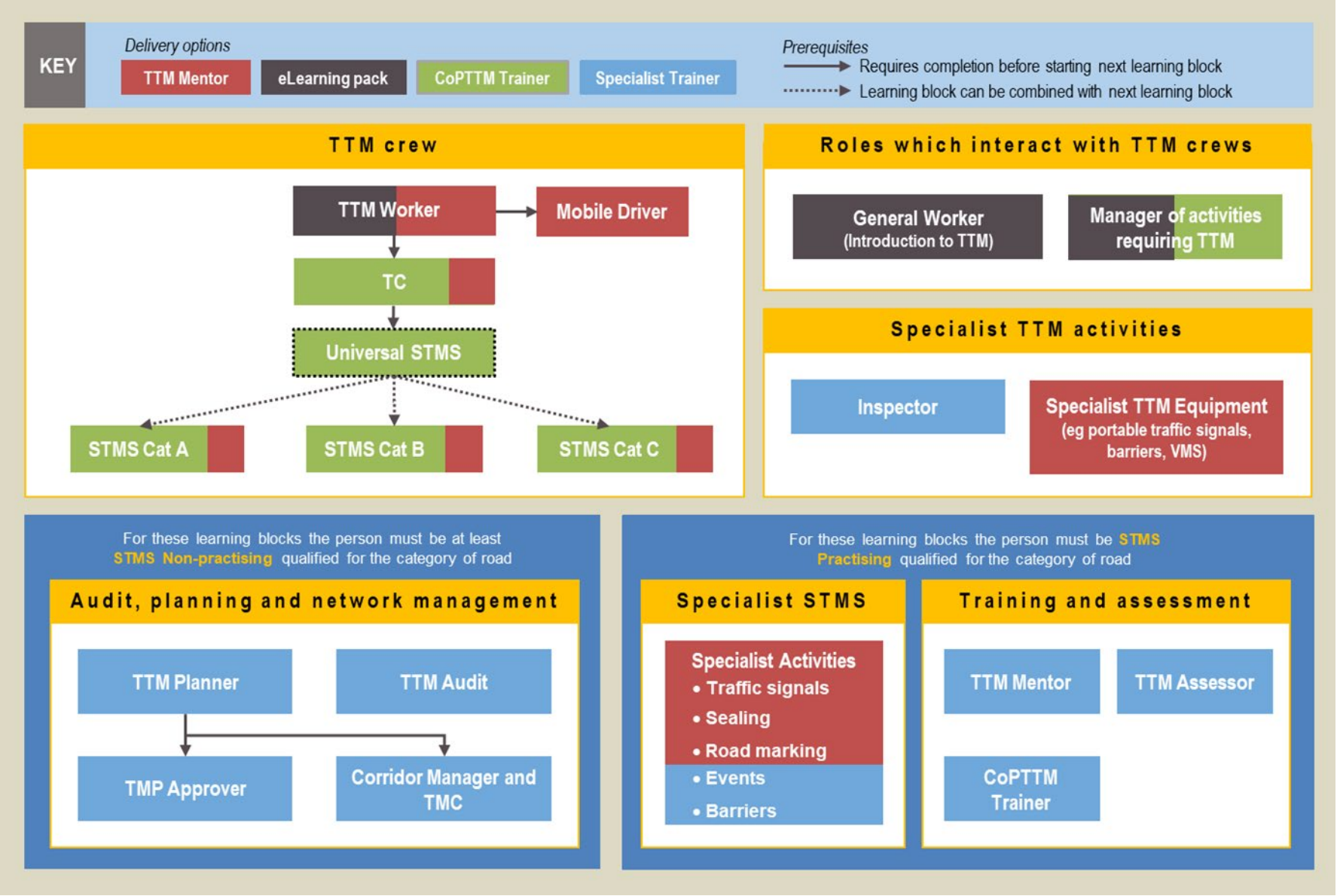
The learning blocks are set out on the following map of learning blocks which shows:

- The primary delivery options for each learning block
- The prerequisites for each learning block and the learning blocks that:
  - Must be completed before starting next learning block
  - Can be combined with other learning blocks

The following areas have been excluded from the map of learning blocks as the industry groups develop their own training material which NZTA endorses:

- KCTL
- NZ Fire service
- Heavy Haulage
- Roadside assistance
- NZ Police

Map of CoPTTM learning blocks



Summary of the CoPTTM learning blocks

A summary of the learning blocks, delivery options, formal learning time (excluding practice and assessment), TTM Mentor and TTM Assessor involvement and unit standard and warrant requirements are set out below.

Learning block	Main delivery option	Formal learning time	TTM Mentor coaching at work	Assessment by TTM Assessor	Unit Standard	Warrant
TTM Crew						
TTM Worker	TTM Mentor / eLearning pack	4 hrs	Yes		Yes	
Mobile Driver	TTM Mentor	4 hrs	Yes		Yes	
TC	TTM Trainer	1 day	Yes	Yes	Yes	NP, P
Universal STMS	TTM Trainer	2 days			Yes	
STMS Category A	TTM Trainer category A	1 day	Yes	Yes	Yes	NP, P
STMS Category B	TTM Trainer category B	1 day	Yes	Yes	Yes	NP, P
STMS Category C	TTM Trainer category C	1 day	Yes	Yes	Yes	NP, P
Roles which interact with TTM crews						
General Worker	eLearning pack and/or TTM Mentor	30 mins	Yes		Yes	
Manager of activities requiring TTM	TTM Trainer	2 hours				
Specialist TTM activities						
Inspector	Specialist Trainer	1 day		Yes	Yes	NP, P
Specialist TTM Equipment	TTM Mentor	Various timings	Yes			
Audit, Planning and Network management						
TTM Planner	Specialist Trainer	2 to 3 days	Buddy	Yes	Yes	NP, P
TMP Approver	Specialist Trainer	1 day	Buddy	Yes	Yes	NP, P
TTM Audit	Specialist Trainer	1 day	Buddy	Yes	Yes	NP, P

Learning block	Main delivery option	Formal learning time	TTM Mentor coaching at work	Assessment by TTM Assessor	Unit Standard	Warrant
Corridor Manager and TMC	Specialist Trainer	1 day	Buddy	Yes	Yes	NP, P
Specialist STMS						
Specialist activities	Specialist Trainer	Various timings		Yes	Yes	
Training and assessment						
TTM Mentor	Specialist Trainer	1 day	Yes	Yes	Yes	NP, P (for category of road)
TTM Trainer	Specialist Trainer	3 days		Yes	Yes	NP, P (for category of road)
TTM Assessor	Specialist Trainer	1 day		Yes	Yes	NP, P (for category of road)

LEARNING BLOCK PROFILES

The third part of the Training and Competency Model is the **learning block profiles**. Profiles have been developed for the following learning blocks:

1. **General Worker**
2. **Manager of activities requiring TTM**
3. **TTM Worker**
4. **Mobile Operation Driver**
5. **Traffic Controller (TC)**
6. **Inspector**
7. **Universal Site Traffic Management Supervisor (STMS)**
8. **STMS category A**
9. **STMS category B**
10. **STMS category C**
11. **Traffic Operation Manager**
12. **Use of specialist TTM equipment on-site**
13. **Other specialist activities**
14. **TTM Planner**
15. **TTM Audit**
16. **TMP Approver**
17. **Corridor Manager & TMC**
18. **TTM Mentor**
19. **TTM Assessor**
20. **TTM Trainer**

Profile information

Each profile outlines the following information:

Learning block details:

- Who completes the learning block
- Prerequisites
- Competency objective

Details of the learning:

- Knowledge of CoPTTM elements covered during the learning
- Assessment method
- Pass criteria
- Miscellaneous information

Details of the on-job practical component:

- Skill elements to be covered
- Assessment method
- Pass Criteria
- Miscellaneous information.

Profiles for each learning block are included in Appendix A: Profile for each block of learning.

IMPLEMENTATION OF THE MODEL

Development priorities

NZTA acknowledges that the development of the learning packages and the associated assessment packages for each of the learning blocks will need to occur over multiple years.

The following priority for development has been adopted:

Priority	Learning blocks	Timeframes
Priority 1	• TTM Mentor • TTM Assessor • TTM Trainer • General Worker • TTM Worker • TC • Universal STMS • STMS category A • STMS category B • STMS category C • TTM Planner	**Developed 2019/2020** **Implemented 2020**
Priority 2	• Mobile driver • Inspector • Use of specialist TTM equipment on-site • Other specialist activities	**Developed 2020** **Implemented 2020**
Priority 3	• Manager of activities requiring TTM • TTM Audit • TMP Approver • Corridor Manager & TMC	**Developed 2021** **Implemented 2021**

Existing Warrants

As the learning blocks will be developed over multiple years the following strategy will be applied as each learning block (and associated warrant) is implemented:

- The current warrant continues to apply until the expiry date for that warrant

  Note: All existing roles automatically receive the Non-practising component for that role

- If the candidate wishes to continue to be Practising in that role, they complete the competence assessment for the warrant
- When the candidate attends the refresher workshop for the warrant, the trainer renews the candidate at either:
  - the non-practising (NP), or
  - the practising (P) if the competence assessment has been completed

To allow time for this process to be organised and TTM Mentors and TTM Assessors to be warranted for the new learning block, an initial period of 6 months following the implementation of the new learning block be allowed before the competence assessment requirement kicks in.

This means that anyone refreshing their warrant during that 6-month phase in period for the learning block will not be required to complete the competence assessment for that warrant.

They will however, have to do the competence assessment at or before the next renewal of their warrant.

MORE INFORMATION ABOUT ASSESSMENTS, REFRESHERS AND EVENTS

Assessments

Items	Explanation
Practical assessment and reassessment	The purpose of practical assessment is to independently validate that learners can perform activities to the required standard. Standards are set for each activity that is to be assessed. An assessment guide is developed (based on NZQA guidelines for assessment and reassessment). It includes the principles of assessment and guidelines for reassessment.
Who assesses competence	The assessment approach is shown below: • TTM Assessors will be selected and trained by NZTA • TTM Assessors will only be able to complete assessments on the learning blocks and warrants that they have been selected and endorsed for: – General Worker – TTM Worker – Mobile Driver – TC – STMS Category A – STMS Category B – STMS Category C • The assessor will need to have US4098 • The assessment documentation will include the assessment standards (developed in conjunction with Civil Contractors and the wider industry) • Assessments will be moderated by NZTA **For the STMS assessments** • As part of practice, 3 sites will be completed to standard and the TTM Mentor will confirm that work has been completed to standard As part of the assessment, a further site will be completed to standard – the TTM Assessor will determine competence based on the verification by the TTM Mentor and their observations during the assessment

Refreshers

The following refresher workshops will be completed:

Refresher	Who delivers refresher
Category A refresher	Delivered by a TTM Trainer warranted to deliver Category A refreshers
Category B refresher	Delivered by a TTM Trainer warranted to deliver Category B refreshers
Category C refresher	Delivered by a TTM Trainer warranted to deliver Category C refreshers
Category A, B refresher	Delivered by a TTM Trainer warranted to deliver Category A, B refreshers
Category B, C refresher	Delivered by a TTM Trainer warranted to deliver Category B, C refreshers
Category A, B, C refresher	Delivered by a TTM Trainer warranted to deliver Category A, B, C refreshers

Companies need to take some initiative during the 3-year warrant cycle to:

- Maintain and raise employee competence
- Operate an audit programme for TTM

Requirements for events

There has been some discussion about the impact of the Training and Competency Model on clubs and organisations running events that impact the road environment.

The main issue is that it will be too expensive to run an event on the road due to the increased cost of being mentored by a TTM Mentor and gaining the practicing warrants for TC and STMS.

Under the previous training model, a TC Events workshop was developed but a person in charge of an event still had to hold the full STMS warrant (not a special Event warrant).

NZTA decisions

Events that occur on the road require a skilled STMS to be in charge.

A STMS Practising must be in charge of an event and a TTM Planner Practising either prepares (or checks) the TMP to ensure that it is fit for purpose and mitigates the traffic risks.

Volunteers at events (doing marshalling for example) are briefed by the STMS in charge of the TTM for the event.

The STMS must be practicing for the category of the road. Clubs can either train someone for this role, seek a volunteer for this role or hire someone to fulfil this role.

APPENDIX A: PROFILE FOR EACH LEARNING BLOCK

Set out on the following pages are the following learning block profiles:

1. **General Worker**
2. **Manager of activities requiring TTM**
3. **TTM Worker**
4. **Mobile Operation Driver**
5. **Traffic Controller (TC)**
6. **Inspector**
7. **Universal Site Traffic Management Supervisor (STMS)**
8. **STMS category A**
9. **STMS category B**
10. **STMS category C**
11. **Traffic Operation Manager**
12. **Use of specialist TTM equipment on-site**
13. **Other specialist activities**
14. **TTM Planner**
15. **TTM Audit**
16. **TMP Approver**
17. **Corridor Manager & TMC**
18. **TTM Mentor**
19. **TTM Assessor**
20. **TTM Trainer**

1. Profile - General Worker

Block of learning:	**General Worker** *Introduction to TTM*	**Who it is for:**	Anyone working on or who is likely to visit a worksite **Note:** It is not intended that this briefing replace site induction, ConstructSafe etc, but offers a complimentary component.
Prerequisite:	No prerequisites		
Competency objective	• Know how to enter and exit a worksite safely • Know how to work safely at a worksite (around road user and construction traffic) • Able to act as spotter for vehicle manoeuvres		

Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
Health and safety: • Identify / recognise correct PPE	• Visual check onsite – TTM Mentor • Hi Vis worn correctly	• Correctly wearing all PPE as per site requirements	**Briefing delivered by** eLearning package and/or TTM Mentor **Note about learning** Much of the learning will be informal while on the road. Also, a reader/writer to be supplied if required **Refresher** • No refresher workshop • Refreshed by briefing from STMS **Time**
Includes the following general worker information: • Entry/Exit points • Emergency procedures • Who to report to • Briefings • Roles and responsibilities of TTM personnel • Hazard identification - potential hazards within the worksite/road environment) • Working around plant and machinery • No go zones	• Scenarios dealing with common working space situations - can complete multiple times if required • TTM Mentor determines if knowledge requirement has been met	• Pass 100% correct answers to scenarios	

• Acting as spotter for vehicle manoeuvres			• 1 to 2 hours theory/ knowledge (plus on-site practical) **Related unit standards** US 20877
On Job practical – skill elements to be covered	**Assessment method**	**Pass Criteria**	**Misc.**
General worker practical • Wear correct PPE • Identify no go zones at a worksite • Acting safely at a worksite (around road user and construction traffic) • Acting as spotter for vehicle manoeuvres	• TTM Mentor determines if the candidate has met the standard required • TTM Assessor to determine competence	• Pass 100%	

2. Profile - Manager of activities requiring TTM

Block of learning:	**Manager of activities requiring TTM**	**Who it is for:**	• People who are managing activities requiring TTM resources (eg Project Managers, Managers of TTM Planners) and do not require more detailed TTM qualifications - these people would generally employ others to undertake TTM.
Prerequisite:	No prerequisites		
Competency objective	• Basic knowledge of the key CoPTTM requirements and responsibilities for activities requiring TTM		

Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
• Purpose of CoPTTM • Contractors responsibilities in CoPTTM Section A5.7.1 • Health and safety processes relevant for the role • When TMPs are required - common situations requiring TMP • Risks to road users and TTM crew - scenarios • Crash stats and analysis • Crash reporting • STMS appointment and suspension • Supporting TTM staff and STMS • Training records • Snapshot of other TTM roles • Worksite zones (advance warning, direction and protection, end of works) • STMS - number of worksites and travel times	• No assessment required	• Not required	**Options for delivery** Facilitated session delivered by TTM Trainer with gap analysis You tube video with gap analysis **Refresher** • No refresher workshop • Refreshed by briefing from STMS on changes to CoPTTM which impact activities undertaken by the organisation **Time** • 2 hours

• What non-STMS roles can / can't do
• Explanation of CAR/WAP
• The process
  ○ TTM Planner prepares TMP
  ○ TMP approved by RCA
  ○ Once approved STMS sets up worksite
  ○ Completes onsite record
  ○ STMS may delegate to TC under certain circumstances – STMS must check site daily
  ○ Auditing of TTM at worksite
• Responsibilities for audits
• Explanation of NNC process and potential consequences
• Document control
• Summary of CoPTTM requirements
• Where to find out more information
			Related Unit standard
			• None

On Job practical – skill elements to be covered	**Assessment method**	**Pass Criteria**	**Misc.**
• During the session, complete a gap analysis for their organisation using a form listing the systems they must have and the key requirements they must meet	• Self-assessment with peer/trainer feedback	• No pass criteria	

3. Profile - TTM Worker

Block of learning:	**TTM worker**	**Who it is for:**	A worker who assists with TTM under direction (eg puts signs and cones out, assists with stop/go)
Prerequisite:	General worker		
Competency objective	• Knowledge of TTM Worker – Role and Responsibility • Skills in performing the TTM Worker role		

Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
Health and safety: • Identify / recognise correct PPE	• Visual check – STMS / TTM Mentor • Hi Vis worn correctly	• Not required	**Briefing delivered by:** eLearning package and/or TTM Mentor **Note about learning** Much of the leaning will be informal while on the road. Also, a reader/writer to be supplied if required The order of completing the knowledge and skill elements can be changed to suit the organisation/learning of the TTM Worker, but all items in the knowledge and skill sections of the profile must be covered **Refresher** • No refresher workshop

TTM Worker training may be completed straight after the General Worker training
TTM Knowledge
• No go zones (including safety zones)
• Manual handling/lifting of TTM equipment
• Using a Stop/Go paddle
• Using radio communications
• Set out TTM equipment
• The role of a 'spotter'
• Interaction with people (good/bad practises and dealing with conflict)
	• Written questionnaire
	  ○ Reporting
	  ○ Responsibilities
	  ○ Safety zones
	• Real-life situational experiences and scenarios
	• TTM Mentor determines if knowledge requirement has been met
		• 100%
		• Open book
		• Resits allowed	

• About TMP (TMP for each site, includes text and diagram. Worksite set out as per TMP) **Worksite rules:** • Site Traffic movements – V.M.P (vehicle			

management plan)			• Refreshed by briefing from STMS **Time** • 2 hours theory/ knowledge (plus on-site practical) **Related unit standards** • US 20878
On Job practical – skill elements to be covered	**Assessment method**	**Pass Criteria**	
TTM Worker practical • Handling equipment • Comms/radio (RT) • Working on a TTM equipment vehicle	• Completed on site (or in yard) • TTM Mentor determines if the candidate has met the standard required • TTM Assessor to determine competence	• Meets minimum standard	
• Using a Stop/Go paddle	• Completed on site • TTM Mentor determines if the candidate has met the standard required • TTM Assessor to determine competence	• Meets minimum standard	

4. Profile - Mobile Operation Driver

Block of learning:	**Mobile operation driver**	**Who it is for:**	Drivers of vehicles in mobile operations Includes drivers of TTM work vehicle, shadow vehicle (with or without a TMA), lead pilot vehicle or tail pilot vehicle with or without AWVMS **Note:** Deck crew complete TTM Worker training
Prerequisite:	TTM Worker		
Competency objective	• Knowledge of relevant CoPTTM requirements for mobile operations • Able to safely operate a vehicle in mobile operations in category A, B and/or C roading environments		

Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
Knowledge • Health and safety processes relevant for the role • Knowledge of relevant CoPTTM requirements for mobile operations (requirements for Category A, B and C environments) • Roles of drivers of tail pilot, shadow, work vehicles and reasons why they are important • Work methodologies for mobile operations • Completing vehicle checks (COF, RUC, seat belts, operation arrowboard, LAS, AWVMS, appropriate signage eg PASS WITH CARE) • Use of horizontal arrowboard • Use of LAS • Use of AWVMS • Operation of devices (eg strobes, LAS, hazard lights, indicators, head lights) • Mobile operation distances • Positioning of work, shadow and pilot vehicles (eg	• NZTA issued workbook with specific information, detailing competencies, knowledge and standards that must be reached TTM Mentor determines if the candidate has met the knowledge requirement	• 100% of all scenarios meet the standards • Each scenario to have criteria for sign off • Open book • Resits allowed	**Briefing delivered by:** TTM Mentor **Refresher** • Not required • Documented briefing by STMS required on relevant changes to CoPTTM **Time** • Up to 4 hours plus on job practical **Related Unit standard** • Unit standard to be developed **Note:** Evidence may be provided by questioning,

relative to crests/curves) • Communication with other members of the operation (timely, effective, using RT) • Protecting personnel on foot • Taking a lane • Dealing with common situations (eg emergency vehicles passing mobile operation) • Issues with mobile operations (eg blocking lane and causing issues with passing traffic) • Reporting crashes and completing or assisting with an incident report where required (eg for vehicle crashes) • Record keeping (onsite records, log books etc)			demonstration, scenarios Also, a reader/writer to be supplied if required
On Job practical – skill elements to be covered	**Assessment method**	**Pass Criteria**	**Misc.**
Skills Reporting crashes and completing or assisting with an incident report where required (eg for vehicle crashes) **Assessment** • Check vehicles (eg COF, RUC, seat belts, operation of arrowboard, LAS, AWVMS) • Safely operate a work vehicle in a mobile operation • Safely operate a shadow vehicle in a mobile operation • Safely operate a tail pilot vehicle in a mobile operation • Safely operate a lead pilot vehicle in a mobile operation	• NZTA issued workbook with specific information, detailing competencies and skills that must be reached • TTM Mentor determines if the candidate has met the standard required • TTM Assessor to determine competence	• Must meet 100% of the standards for the minimum range of TTM situations • Open book • Resits allowed • Warrant can be issued for issued for category A, B and/or C environments	

5. Profile - Traffic Controller (TC)

Block of learning:	**TC**	**Who it is for:**	The qualified person in category A and B road environments who: • Assists with deployment of the operation • Maintains the site within existing TTM phase while the STMS is away from worksite The TC will only be able to assist an STMS installing, modifying or removing TTM at a worksite, except in the following circumstances: • Undertakes non-invasive activities on foot on the roadside of a road with a permanent speed of 60km/h or less • Undertakes inspection activities
Prerequisite:	TTM Worker		
Competency objective	Knowledge and skills to: • Maintain existing static worksites within the current phase while the STMS is away from worksite (only applies in category A and B road environments). • Undertake non-invasive activities where the person is on foot on the roadside of a road with a permanent speed of 60km/h or less. • Undertake inspection activities		

Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
• Health and safety processes relevant for the role • Knowledge of basic CoPTTM for TC *(for further information, refer to Appendix 3: Additional information for profiles)* • Follow briefing • Follow and read TMP (including contingency)	• Knowledge tests during training • Scenarios dealing with common worksite situations - can complete multiple times if required	• 80% pass • During the 3 year warrant cycle, companies need to: ○ Maintain and raise employee competence	**Workshop delivered by:** TTM Trainer **Refresher** • 3-year Refresher on CoPTTM changes delivered by TTM

• Monitor operation (including queuing) • Complete paperwork • Dealing with common worksite situations • Dealing with the public (verbal/communication skills) • Identify risks and manage incidents • Basic risk assessment • Communication (radio, when to contact STMS) • Take corrective actions (to make site safe) • Working with staff (eg providing direction, reinforcing performance) • Site access / Briefing visitors • Preserving safety zones • Manage MTC activities • Maintain pedestrian/cyclist facilities • Understand resource management • Understand non-invasive activities where the person is on foot on the roadside of a road with a permanent speed of 60km/h or less • Understanding of inspection activity		○ Operate an audit programme for TTM	Trainer • 3-year reassessment of practical **Time** • 1-day theory/ knowledge workshop delivered by TTM Trainer • Plus on-site practical **Related unit standards** • US 5627
On Job practical – skill elements to be covered	**Assessment method**	**Pass Criteria**	**Misc.**
Must MAINTAIN at least 1 closure from each activity type listed below. One of the closures must include footpath or cyclist control. 1. Shoulder closure, berm or footpath control 2. Lane merge, lane shift, cycle lane, priority control and TSL	• Complete a minimum of 1 closure from each activity type. One of the closures must include footpath or cyclist control • TTM Mentor determines if the candidate has met the standard	• 100% sign off **Note: Must be competent in all elements before receiving warrant** Note: There is no time	

3. MTC Undertake non-invasive activities where the person is on foot on the roadside of a road with a permanent speed of 60km/h or less Undertake inspection	required • TTM Assessor to determine competence • On-job experience with own company • Record of practice and experience	limit for when practical assessment must be completed. Must refresh knowledge 3 yearly	
If not covered during the verified closures, complete the following: • Brief visitors • Identify risks and take corrective actions (to make site safe)			

6. Profile - Inspector

Block of learning:	**Inspector**	**Who it is for:**	A person carrying out inspection activities **Note:** This **may** include surveyors provided their work fits within the range of inspection activities
Prerequisite:	No prerequisite		
Competency objective	• This qualification enables the holder, once briefed by the STMS, to undertake inspections		

Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
Health and safety: Identify / recognise correct PPE	• Visual check onsite – TTM Assessor Hi Vis worn correctly	Correctly wearing all PPE as per site requirements	
• About the Inspector role • About CoPTTM • Framework for TTM relating to inspections • Principles of CoPTTM • Knowledge of basic CoPTTM for inspections • Hazard identification (potential hazards within the worksite/road environment) • Briefing of TTM personnel (eg spotters and observers) • Emergency procedures • Working around inspection vehicle • No go zones • Acting as spotter for person on the lane	• Knowledge tests during training • Scenarios dealing with common inspection situations - can complete multiple times if required	• 100% pass	**Workshop delivered by:** NZTA approved Trainer **Refresher** • No refresher workshop • Refreshed by briefing from STMS • 3-year reassessment of practical **Time** • 4 hours theory/ knowledge • Plus on-site practical **Related unit standards**

On Job practical – skill elements to be covered	Assessment method	Pass Criteria	Misc.
Back at work assessment • Undertake 1 inspection activity (including paperwork) in a category A road environment • Undertake 1 inspection activity (including paperwork) in a category B road environment	• Observed by TTM Trainer or TTM Assessor • Must undertake 1 inspection activity (including paperwork) for category A and B road environments • TTM Trainer or TTM Assessor determines if the candidate is competent	• 100% to standard	

7. Profile - Universal Site Traffic Management Supervisor (STMS)

Block of learning:	**Universal STMS**	**Who it is for:**	This provided base knowledge for people wanting to become the: • STMS - The person who will be supervising the setup, change and removal of a worksite to a predetermined plan • Traffic Operations Manager • TTM Mentor, TTM Assessor or TTM Trainer • TTM Planner, Auditor, TMC and Corridor Manager
Prerequisite:	Mobile operation driver (for those wanting to hold the one of the STMS warrants) TC Non-practising (knowledge)		
Competency objective	• Health and safety processes relevant for the role • Knowledge of their role and responsibility **In both night and day conditions:** • Lead and give direction to their crew and visitors • Understanding the TMP • Understanding the principles of TMP implementation • Understand contingency plans • Ability to assess risk (decide what it is and severity) • Add content from CoPTTM that is common to all road environments (category A, B and C)		

Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
Knowledge • The STMS role • Basic leadership (anticipation, planning,	**During learning** • Given a scenario identify the key elements for a site safety	• 90% of all scenarios meet the standards • Each scenario to	**Workshop delivered by:** TTM Trainer

maintaining standards, delegation, safety for the team and others, supervision) • Understand the minimum requirements of a site safety briefing/induction • Knowledge of TMP • Knowledge of onsite records and other forms • Have a thorough knowledge of CoPTTM principles • Basic understanding of risk assessment and treatment • Understand contingency scenarios • Complete audit of worksite • Briefing on On-Job practical – skill elements (workbook) to be completed	briefing/induction • Given a scenario, complete an on-site record • Given a scenario, successfully identify risks and treatments required • Demonstrate knowledge of key principles for the setup, monitoring, maintenance and removal of TTM • Identify suitable contingency plan for a given scenario • Use CoPTTM to answer questions and provide references *will need to describe a scenario and then predefine the core elements within it • Then establish tolerance for pass criteria	have criteria of competence • Open book • Resits allowed	**Time** • 2 days for both knowledge and skills • Knowledge component delivered by TTM Trainer • Assessment complete by TTM Trainer **Unit standard** • To be amended **Refresher** Any Changes to CoPTTM relating to universal STMS content will be included in the category A, B and C refreshers
On Job practical – skill elements to be covered	**Assessment method**	**Pass Criteria**	**Misc.**
Skills • Navigate CoPTTM, be able to find the answer/reference or know where to source the information • Be able to understand key components of a plan and check that a plan is suitable (Advance warning, direction protection, end of works, contingencies and layout distances) • Ability to identify, assess and manage risk (do something about it) • Ability to plan a deployment / site setup and	No **ONSITE** practical skill assessment required for the universal STMS. The following skills are demonstrated in a classroom setting: • Given a situation, prepare and deliver a generic safety induction/prestart • Given a series of CoPTTM related topics identify the correct section of CoPTTM to apply • Given a scenario and a TMP, identify the suitability of the plan by comparing key information (eg advance warning,	• 90% of all scenarios meet the standards • Each scenario to have criteria of competence • Open book • Resits allowed	

calculate resources • Complete an audit of a worksite	direction protection, end of works, contingencies and layout distances) • Use the layout distances table to calculate resources needed • Given a scenario (eg photo examples, workers working at a site access point) identify significant risks and appropriate mitigations • Complete an audit of a worksite		

8. Profile - STMS category A

Block of learning:	**STMS category A (low speed)**	**Who it is for:**	A person who has achieved universal STMS competency, who is intending to be the STMS on category A roads
Prerequisite:	Universal STMS, must be TC warranted to complete the practical component for this qualification STMS is required to have endorsements for specialist activities / specialist TTM equipment (eg portable traffic signals, VMS) if in charge of operations using these and there is no other worker on site with the required endorsements		
Competency objective	• Knowledge of key elements for category A road • Skills to competently operate within a category A road environment		

Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
• Health and safety processes relevant for the role Category A specific information on: • Static operations • Mobile operations and closures • Semi static operations and closures • Inspections / special activities • Equipment • Emergency & incident response scenarios	• NZTA issued workbook with specific information, detailing competencies, knowledge and standards that must be reached • Assessment to deal with simple and complex environments • TTM Trainer determines if knowledge requirement has been met	• 100% of all scenarios meet the standards • Each scenario to have criteria for sign off • Open book • Resits allowed • During the 3 year warrant cycle, companies need to: ○ Maintain and raise employee competence ○ Operate an audit programme for TTM	Completed as part of a 1-day workshop with back at work practical **Workshop delivered by:** TTM Trainer **Refresher** • 3-year Refresher on CoPTTM changes delivered by TTM Trainer (includes any changes to Universal STMS content) • 1 day maximum **Time** - NA **Related Unit standard** • US 5628

			Note: Evidence may be provided by questioning, demonstration, scenarios etc Identify the risk factors that are inherent in a category A road environment
On Job practical – skill elements to be covered	**Assessment method**	**Pass Criteria**	**Misc.**
Category A specific on the job skills to be verified: • Deliver a site safety briefing/induction • Static operations (including stop/go) • Mobile operations and closures • Semi static operations and closures • Inspections / special activities	• NZTA issued workbook with specific information, detailing competencies and skills that must be reached • Assessment to deal with simple and complex environments • TTM Mentor determines if the candidate has met the standard required • TTM Assessor to determine competence	• Must meet 100% of the standards for the minimum range of TTM situations • Open book • Resits allowed Profile requires company to provide statement assuring of competency, and to support and inform this it would sensible for companies to record all audits indicating staff performance As part of ROPEs process, the RCA could be asked to verify records, and/or support / decline the statement of competency. TTM Assessor **to assess competence**	Range of TTM situations could include: • Shoulder closure • Live lane closure (Compulsory MTC operation) • Multi-lane closure ***Category A assessment*** Must complete 3 closures from the list of possible closures • One of the closures must be MTC • One of the closures must deal with either pedestrian or cyclist management • Only one of the closures can be a shoulder closure

		for category A ROPE process	TTM Mentor will determine if standard has been met TTM Assessor will observe one closure under 65km/h **Timeframe** As required **Refresher** Company to provide statement of competency (including performance monitoring issues, NNC etc) at the time of refresher. Company is responsible for maintaining internal staff competency The individual can either provide an application for a ROPE, or be reassessed. **Both to be assessed by a** TTM Assessor

9. Profile - STMS category B

Block of learning:	**STMS category B**	**Who it is for:**	A person who has achieved universal STMS competency, who is intending to be the STMS in a category B road environment
Prerequisite:	Universal STMS, must be TC competent to complete the practical component for this qualification STMS is required to have endorsements for specialist activities / specialist TTM equipment (eg portable traffic signals, VMS) if in charge of operations using these and there is no other worker on site with the required endorsements		
Competency objective	• Knowledge of specific category B key elements • Skills to competently operate within category B road environment		

Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
• Health and safety processes relevant for the role Category B specific information on: • Deliver a site safety briefing/induction • Static operations • Mobile operations and closures • Semi static operations and closures • Inspections / special activities • Equipment • Emergency & incident response scenarios • Interchanges and detours • Chicanes	• NZTA issued workbook with specific information, detailing competencies, knowledge and standards that must be reached • Assessment to deal with simple and complex environments • TTM Trainer determines if knowledge requirement has been met	• 100% of all scenarios meet the standards • Each scenario to have criteria for sign off • Open book • Resits allowed • During the 3 year warrant cycle, companies need to: ○ Maintain and raise employee competence ○ Operate an audit programme for TTM	Completed as part of a 1-day workshop with back at work practical **Workshop delivered by:** TTM Trainer warranted to deliver category B training **Refresher** 3-year Refresher on CoPTTM changes delivered by TTM Trainer warranted to deliver category B refreshers (includes any changes to Universal STMS content)

			Time • 1 day maximum **Related Unit standard** **Note:** Evidence may be provided by questioning, demonstration, scenarios etc • Identify the risk factors that are inherent in a category B road
On Job practical – skill elements to be covered	**Assessment method**	**Pass Criteria**	
Category B specific on the job skills to be verified: • Static operations (including stop/go) • Mobile operations and closures • Semi static operations and closures • Inspections / special activities	• NZTA issued workbook with specific information, detailing competencies and skills that must be reached • Assessment to deal with simple and complex environments • TTM Mentor determines if the candidate is competent and furnishes a statement of competence to the TTM Assessor • TTM Assessor to assess a minimum of 1 deployment from a range of approved closures for over 65km/h (excluding shoulder closure)	• Must meet 100% of the standards for the minimum range of TTM situations • Open book • Resits allowed Profile requires company to provide statement assuring of competency, and to support and inform this it would sensible for companies to record all audits indicating staff performance As part of ROPEs process, the RCA could be asked to verify	Range of TTM situations could include: • Shoulder closure • Live lane closures • Ramp closure ***Category B assessments*** Must complete 3 closures from the list of possible closures TTM Mentor will determine if standard has been met TTM Assessor will observe one **Timeframe**

		records, and/or support / decline the statement of competency.	As required **Refresher** Company to provide statement of competency (including performance monitoring issues, NNC etc) at the time of refresher. Company is responsible for maintaining internal staff competency The individual can either provide an application for a ROPE, or be reassessed.

10. Profile - STMS category C

Block of learning:	**STMS category C**	**Who it is for:**	A person who has achieved universal STMS competency, who is intending to be the STMS in category C road environments
Prerequisite:	Universal STMS, must be TC warranted to complete the practical component for this qualification STMS is required to have endorsements for specialist activities / specialist TTM equipment (eg portable traffic signals, VMS) if in charge of operations using these and there is no other worker on site with the required endorsements		
Competency objective	• Knowledge of specific category C key elements • Skills to competently operate within category C road environment		

Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
• Health and safety processes relevant for the role Category C specific information on: • Deliver a site safety briefing/induction • Static operations • Mobile operations and closures • Semi static operations and closures • Inspections / special activities • Equipment • Category C roads around interchanges and detours (to be kept brief) • Emergency & incident response scenarios	• NZTA issued workbook with specific information, detailing competencies, knowledge and standards that must be reached • Assessment to deal with simple and complex environments TTM Trainer determines if knowledge requirement has been met	• 100% of all scenarios meet the standards • Each scenario to have criteria for sign off • Open book • Resits allowed • During the 3 year warrant cycle, companies need to: ○ Maintain and raise employee competence ○ Operate an audit programme for TTM	Completed as part of a 1-day workshop with back at work practical **Workshop delivered by:** TTM Trainer warranted to deliver category C training **Refresher** 3-year Refresher on CoPTTM changes delivered TTM Trainer warranted to deliver category C training (includes any changes to Universal STMS content) **Time**

			• 1 day maximum **Related Unit standard** **Note:** Evidence may be provided by questioning, demonstration, scenarios etc Identify the risk factors that are inherent in category C road environments
On Job practical – skill elements to be covered	**Assessment method**	**Pass Criteria**	**Misc.**
category C specific on the job skills to be verified: • Static operations • Mobile operations and closures • Semi static operations and closures • Inspections / special activities	• NZTA issued workbook with specific information, detailing competencies and skills that must be reached • Assessment to deal with simple and complex environments • TTM Mentor determines if the candidate is competent and furnishes a statement of competence to the TTM Assessor • TTM Assessor to assess a minimum of 1 deployment from a range of approved closures (excluding shoulder closure)	• Must meet 100% of the standards for the minimum range of TTM situations • Open book • Resits allowed Profile requires company to provide statement assuring of competency, and to support and inform this it would sensible for companies to record all audits indicating staff performance As part of ROPE process, the RCA could be asked to verify records, and/or support /	Range of TTM situations category C roads could include: • Shoulder closure • Live lane closure • Rolling block • Chicane • Ramp closure • Multi-lane closure **Timeframe** As required **Refresher** Company to provide statement of competency (including performance monitoring

		decline the statement of competency.	issues, NNC etc) at the time of refresher. Company is responsible for maintaining internal staff competency The individual can either provide an application for a ROPE, or be reassessed.

11. Profile - Traffic Operations Manager

Block of learning:	**Traffic Operations Manager (TOM)**	**Who it is for:**	A person who manages multiple TTM crews for a company (NOTE – this is an optional role – not all companies will have a TOM)
Prerequisite:	Should be STMS knowledge qualified for the category of road environment that their crews are operating on		
Competency objective	• To ensure that the TTM crews remain CoPTTM compliant as they complete their activities		

Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
• This role varies from company to company • No formal training will be provided • Recommend that Traffic Operations Managers be TTM knowledge qualified for the category of road environment that their crews are operating on			
On Job practical – skill elements to be covered	**Assessment method**	**Pass Criteria**	**Misc.**

12. Profile - Use of specialist TTM equipment on-site

Block of learning:	**Use of specialist TTM equipment on-site**	**Who it is for:**	The STMS at worksites using the specialist equipment (portable traffic signals, VMS).
Prerequisite:	Universal STMS		
Competency objective	Personnel using the equipment has the knowledge and skills to deploy and operate the equipment. Eg: • STMS managing the deployment • Personnel programming and operating the equipment **Note:** For each item of specialist equipment there will be a separate profile		

Knowledge and skills of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
• Health and safety processes relevant for the role *Portable Traffic signals* • List of equipment they can use and supplier *Barriers* • Gain minimum qualification and get detailed information from supplier *VMS* • Specifications for types of VMS are specified in CoPTTM and P37	• Check that equipment meets specification • Check that equipment is correctly installed • Check that it is being operated and maintained correctly	• Company to manage this competency • NZTA with suppliers are developing training material for barriers and portable traffic signals	**Workshop delivered by:** Manufacturer of equipment **Refresher** • No refresher workshop • Refreshed by briefing from STMS **Note:** Further development required

On Job practical – skill elements to be covered	Assessment method	Pass Criteria	
• This training is for warranted STMS, who will be operating the specialist equipment • Company responsibility	• Company audit / supervising approach (TTM Mentor to confirm 2 examples of satisfactory deployment for each device type used) • TTM Mentor determines if the candidate is competent	Correctly meets the requirements of the equipment checklist and the TMP	

13. Profile - Other specialist activities

Block of learning:	**Specialist Activities (eg Traffic signals, Sealing, Road marking, Barriers)**	**Who it is for:**	For TTM Planner and STMS who is involved in planning and delivering the TTM aspects for an activity. **Note:** A major activity may require specialist TTM advice from a qualified person (eg traffic engineer). Optional for event manager and other key staff
Prerequisite:	Universal STMS and warrant for training on appropriate road environment		
Competency objective	• Knowledge of minimum timeframes for permits and applications • TTM Planner knows key elements of setup appropriate to the environment • STMS in charge of event needs to know how to compliantly implement the plan • Knowledge for event manager and other key staff		

Knowledge and skills of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
• Health and safety processes relevant for the role • Knowledge of key elements of CoPTTM methodologies that impact on the planning of the event • Knowledge of specific requirements for the type of activity and environment the operation is being held in (eg section I) • Knowledge of minimum timeframes for permits and applications • Understanding of requirements to successfully run the activity compliantly as per plan	• NZTA issued workbook with specific information, detailing knowledge, skills, and standards that must be reached • TTM Mentor determines if knowledge requirement has been met	• 100% of all scenarios meet the standards • Each scenario to have criteria for sign off • Open book • Resits allowed	**Workshop delivered by:** NZTA approved Trainer **Refresher** • No refresher workshop • Refreshed by briefing from STMS **Note:** **Events could include** • Cycling • Running

Specific information on: • Static operations • Mobile operations and closures • Semi static operations and closures • Inspections / special activities • Equipment			• Walking • Triathlon • Parade • Concert • Anzac parade • Wine festival • Etc **Other activities could include:** Traffic signals modifications/maintenance, Sealing, Road marking
On Job practical – skill elements to be covered	**Assessment method**	**Pass Criteria**	
• No practical assessment because of variability of activity type and difficulty of assessing across a wide range of environments • TTM Planner and other TTM personnel will already be competent STMS • Activity experience is built up under competent Events STMS and thoroughly briefed and monitored by certified/warranted STMS			

14. Profile - TTM Planner

Block of learning:	**TTM Planner**	**Who it is for:**	STMS certified/warranted person who develops and submits TMPs for approval. This person will also brief the onsite STMS in charge of the site about the TMP. *Also includes specialist activities and specialist equipment as required. For example, Event management*
Prerequisite:	Participants do not need to complete General worker learning block TTM Worker and TC (minimum knowledge component) Universal STMS STMS minimum non-practising (knowledge) component for the category of road they will be developing TMPs for (category A, B and C) Planner expected to acquire endorsements for specialist activities (eg traffic signals, sealing and road marking) / specialist TTM equipment (eg portable traffic signals, VMS) if utilising within a TMP Experience in (or observation of) installation, maintenance and removal of TTM for category of TTM		
Competency objective	Knowledge sufficient to understand key design inputs into a TMP Skills to put together a viable TMP Design a TMP that is: • Compliant with CoPTTM (could include EEDs) • Usable by STMS • Suitable/applicable to the activity and the site • Adequately balanced between competing needs		

Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.

• Health and safety processes relevant for the role
• Know the TMP development procedure
• Find requirements for:
  ○ Road network (including overweight/over dimension routes)
  ○ Local conditions
• Understand site and activity requirements for the work specific activity
• Multi-lane TTM (especially high speed) - understanding of geometry, and accommodating lane widths at lateral shift
• Traffic delay counts
• Contingency (risk)
• Temporary transport facilities
• Know when TTM barriers are required
• Create TMD
• Develop TMP
	• Attendance at 2-day workshop (immersed in TTM planning)
	• Complete TMP progressively during the workshop – signed off by trainer
		• Pass or fail to a marking template	**Workshop delivered by:**
			NZTA approved Trainer
			Refresher
			• Required if TMP requirements significantly changed – NZTA to determine
			• Must complete STMS refresher for category of road environment
			Time
			• 2-day workshop
			• Plus practical exercises

On Job practical – skill elements to be covered	**Assessment method**	**Pass Criteria**	
• Develop up to 3 real life TMPs including TMDs covering a range of activities • Submit TMPs and supporting evidence progressively for assessment • Build key learnings form the assessment into next TMP	1. TMP assessment sits outside of the normal TMP approval process 2. TMPs submitted to the RCA by the trainee need to show that they are under instruction 3. Once TTM Planner warrant becomes mandatory, TMPs will need to be reviewed by an existing TMP Planner	• TTM Planner warrant to be awarded once one of the 3 TMPs meet assessment standard – no critical issues (refer to assessment marking schedule)	

Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
	prior to submission to the RCA		

	• Submit up to 3 TMPs for assessment
	• Supporting evidence is required to assist in the assessment (included in assessment instructions)
	• For each worksite, include the following:
	  ○ Feedback from the warranted STMS who installed the TTM at the worksite
	  ○ On-site records (maximum of 5)
	  ○ A video drive through of the TTM installed at the worksite (with work activity occurring inside the working space)
	  ○ Any audits/reviews completed on the worksite.
	• TMPs assessed by selected TTM Assessor
	• TTM Planner warrant to be awarded once one of the 3 TMPs meet assessment standard
	• 3 assessments are included in the fee for the assessments. Further reassessments will incur additional fee
		All fundamental elements demonstrated, lessons learnt, and TTM Assessor must be confident that TTM Planner can design well considered, safe, viable TMPs that require no or minimal modifications on site.	

15. Profile - TTM Audit

Block of learning:	**TTM Auditor**	**Who it is for:**	STMS certified/warranted person who assesses worksites (static and mobile) to support continuous improvement and identify and report on poor performance
Prerequisite:	Non-practising (knowledge) qualified in category of road environment auditing on (TTM Worker, TC, Universal STMS and STMS for category of road environment they are auditing on) Knowledge of specialist activities/equipment (eg event, KCTL, road markers, portable traffic signals) *Desirable to have attended TTM Planner workshop*		
Competency objective	• Consistent and fair assessment of sites relative to approved TMP or CoPTTM where TMP not applicable • Be able to give feedback and take follow up actions to improve safety and functionality of site to allow work to continue safely wherever appropriate		

Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
• Health and safety processes relevant for the role • Know the auditing principles • Know the audit process • Read and understand TMP • Know related legislation • Know how to complete an inspection (cover relevant parts of inspection as they relate to audits) • Know how to complete the site condition rating (SCR) • Know CoPTTM references for Audit items • Know how to apply the assessment criteria to get consistency of assessments • Communication with and feedback to the warranted	• Completing SCR using video of sites (static and mobile) • On site assessment with a 1:4 ratio (may be completed later if a lower ratio is required)	• Must identify all critical issues onsite and at least 80% of the other issues • Correct final result	**Workshop delivered by:** NZTA approved Trainer **Refresher** • Practical refreshed every 3 years • Must complete STMS refresher for category of road environment • Auditors should not be only reliant on attending a refresher course. Expect regular/ongoing contact and revision

person on-site (including how to provide constructive feedback, how to defuse anger, how to deal with conflict) • Know the audit strategies • Know their powers and the strategies for follow-up actions • Know how to issue notices and complete follow up actions • Know how to complete the paperwork • Know what corrective action plans need to be developed • Know how to apply the escalation/contingency plans/actions • Know when TTM barriers are required • Complete SCR using video of site • Onsite practical completing SCRs			of local requirements, CoPTTM and posted updates on the website **Time** • 1-day training • Plus on-site practical **Related Unit standard** • US9705
On Job practical – skill elements to be covered	**Assessment method**	**Pass Criteria**	
• Buddy up with an RCA approved TTM Mentor to complete at least 5 SCRs (including static and mobile operations) and follow up actions • 3 of the audits must involve work on the lane	• TTM Mentor to sign-off Auditor • Trainee Auditor must be assessed competent on at least 3 of the audits they have completed	• Identify 80% critical issues on-site • Correct final result • Paperwork actioned correctly • Constructive feedback	

16. Profile - TMP Approver

Block of learning:	**TMP Approver**	**Who it is for:**	Approvers of TMPs on behalf of an RCA (including engineers who are approving TMPs)
Prerequisite:	Participants do not need to complete General worker learning block TTM Worker and TC (minimum knowledge component) Universal STMS STMS with minimum non-practising (knowledge) component for the category of road environment they will be approving TMPs for (Category A, B or C) TTM Planner Approver expected to acquire endorsements for specialist activities (eg Traffic signals, Sealing, Road marking) or specialist TTM equipment (eg portable traffic signals, VMS) if designing TMPs incorporating these Experience in (or observation of) installation, maintenance and removal of TTM for category of road environment they are approving TMPs for		

Competency objective	• Knowledge of their role and responsibility
	• Able to understand and approve TMPs that:
	  ○ Are compliant with CoPTTM (could include EEDs)
	  ○ Are suitable/applicable to the activity and the road environment
	  ○ Are safe and fit for purpose
	  ○ Contain adequate detail for the STMS to use		

Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
• Health and safety processes relevant for the role • Understand site and activity requirements for the work specific activity • Know the TMP approval process ○ Review format of TMP	• Attendance at 1-day workshop	• Approved or declined	**Workshop delivered by:** NZTA approved Trainer **Refresher** • Not required

○ Establish scope of the work activity (speed of road, impact on lanes, category of road environment and location) ○ Review TMD(s) - do they address the impacts of the work activity ○ Does proposed TTM match CoPTTM requirements ○ Review TMP in detail (TSL approval, contingency plans, monitoring, other authorisations, detours, STMS details etc) ○ Check that all appropriate applications and consents for the work activity being undertaken (eg CAR, Road opening notice) ○ Check that all appropriate forms are attached or referenced (eg On-site record, generic TMP checklist) ○ Check that proposed work dates do not impact other worksites or conflict with network requirements ○ Decide the TMP is approved or declined and stamp it ○ If approved, attach reasonable special conditions and local conditions • Stakeholder engagement • Shared road reserves • CAR/WAP process • Network management • Timeframes for processing TMPs (also reference the NZUAG) • Road closure process			• Must complete STMS refresher for category of road environment • Approvers should not be only reliant on attending a refresher course. Expect regular/ongoing contact and revision of local requirements, CoPTTM and posted updates on the website **Time** • 1-day workshop **Moderation** NZTA will undertake moderation of TMP Approvers

• Local network conditions (including overweight/over dimension routes) • Be able to locate specific requirements in CoPTTM (to a higher degree than universal STMS) • EEDs • Know when TTM barriers are required • Traffic signals • Delay assessments • Practice exercises			
On Job practical – skill elements to be covered	**Assessment method**	**Pass Criteria**	
• First 5 TMPs involving work on the lane to be checked by an existing TMP Approver • Random selection and review of 5 other approved TMPs	• Existing TMP Approver to complete checks (qualified Mentor?)	• Approval of TMPs are rated acceptable • Must have 3 TMP approvals rated as acceptable before being declared competent	

17. Profile - Corridor Manager and TMC

Block of learning:	**TMC and Corridor Manager**	**Who it is for:**	Corridor managers and TMCs
Prerequisite:	• Participants do not need to complete General worker learning block • TTM Worker and TC (minimum knowledge component) • Universal STMS • STMS with minimum Non-practising (knowledge) component for the category of road environment they are responsible for (Category A, B or C) • TTM Planner • TMP Approver (if required to approve TMPs) • Desirable to complete the Audit and TMP Approver training as their work would be improved with this knowledge		
Competency objective	• Knowledge of their role and responsibility • Be able to set network conditions and manage network activity to ensure CoPTTM and network compliance.		

Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.

• Health and safety processes relevant for the role
• Knowledge of CoPTTM to a greater understanding than a universal STMS
• Know their roles and responsibilities
• Know the requirements for the different activities conducted on the network
• Shared road reserves
• CAR/WAP process
• Reporting network activity:
  ○ Weekly report
  ○ Daily report
	• Attendance at 1-day workshop		**Workshop delivered by:**
			NZTA approved Trainer
			Refresher
			• Not required
			• Must complete STMS refresher for category of road environment
			Time
			• 1-day workshop

• Liaison with emergency services • TMC communication with the network • Setting road designations (and categories of road environment) • Crash reports • Delegations of approvals • Setting local conditions • ROPE applications • Long-term TSLs • Co-ordination • Risk assessment • Traffic impact assessment including awareness of intersection capacities, signal operation basics, temporary control options • Network performance / journey management • Statutory obligations, including Transport Rules, HSWA, NZUAG Code etc. • Incident Response • Emergency / CDEM Response • EEDs • Overweight/over dimension routes • Developing strategies to raise CoPTTM compliance • Non-conformances • Cross network discussion • Respond to public and Police enquiries • Understand implications of non-compliant TMPs			

• Understand related legislation • Managing audit process • Develop audit strategy • Develop strategies for network specific issues			
On Job practical – skill elements to be covered	**Assessment method**	**Pass Criteria**	**Misc.**

• Peer review by another TMC (preferably neighbouring or equivalent RCA) of the following:
  ○ Local conditions (network specific issues)
  ○ Strategies to raise CoPTTM compliance
  ○ Audit strategy
  ○ TMC communication with the network
  ○ Crash reporting
  ○ Risk assessment
  ○ Traffic impact assessment including awareness of intersection capacities, signal operation basics, temporary control options
  ○ Network performance / journey management
  ○ Statutory obligations, including Transport Rules, HSWA, NZUAG Code etc.
  ○ Incident Response
  ○ Emergency / CDEM Response
	• Peer review by another TMC	• The documents adequately address key issues with the network
		• Risk assessments have been completed for any issues below CoPTTM minimum standards and mitigation is appropriate for the risk	

18. Profile - TTM Mentor

Block of learning:	**TTM Mentor**	**Who it is for:**	Person who mentors/trains staff on the practical aspects of their role, may be an in-house person.
Prerequisite:	• Must have practical experience in the activities they will be training on • Must be certified/warranted in the mentoring they will be undertaking		
Competency objective	• Knowledge of NZTA requirements of mentors, the TTM Mentor responsibilities and the mentoring process • Able to provide mentoring on tasks requiring some form of CoPTTM knowledge or skill, to the required standards • Able to correctly complete the paper work associated with the mentoring • Able to apply adult learning principles to maximise the learning opportunities of the participants • Able to correctly determine if a candidate has completed work to the required standard and if not direct appropriate action		

Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
• Health and safety processes relevant for the role • NZTA requirements of TTM Mentors • Principles of adult education • On-job training hints, tips and techniques • How to complete mentoring • How to use CoPTTM during the mentoring • Practice mentoring	• Knowledge tests and scenarios during training • Practice mentoring with feedback	• 90% pass mark • Must meet minimum mentor standards to pass	**Briefing delivered by:** NZTA approved Trainer **Refresher** • Not required • Must complete STMS refresher for category of road environment **Time** • 4 hours **Related Unit standard** • Need to add

On Job practical – skill elements to be covered	Assessment method	Pass Criteria	Misc.
• As development, work with an existing TTM Mentor to complete mentoring activities	• Existing TTM Mentor observation • Assessment of competence completed by selected TTM Assessor	• Must meet TTM Mentor standards	

19. Profile - TTM Assessor

Block of learning:	**TTM Assessor**	**Who it is for:**	TTM Assessor is selected by NZTA to assess competence in a specific specialist activity (eg Category C practical assessment, TMP design assessment, Barriers assessment)
Prerequisite:	Must be TTM certified/warranted to the for the category of road environment they are assessing in		
Competency objective	• Knowledge of the assessment principles, responsibility and process • Able to correctly determine if a candidate has completed work to the required standard and if not direct appropriate action • Able to keep accurate/appropriate records of assessments • Able to award Unit standards and determine NZTA warrants		

Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.

• Health and safety processes relevant for the role
• Principles of assessment
• Responsibilities of the Assessor
• The assessment process
• Assessment documentation (including assessment standards)
• How to brief a candidate about assessment process
• How to complete TTM assessments
• Dealing with assessment issues (eg dangerous activity, candidate too slow or not able to answer specific questions)
• Providing feedback
• Record keeping
	• Knowledge tests during training
	• Practice assessment components during the training
	  ○ Brief candidate about assessment process
	  ○ Complete assessment
	  ○ Provide feedback
	  ○ Record keeping
		• 90% pass mark in knowledge tests
		• Must meet standards for each component – can rework multiple times
			Workshop delivered by:
			NZTA approved Trainer
			Refresher
			• Every 3 years
			• Must complete STMS refresher for category of road environment
			Time
			• 1 day
			Related Unit standard
			• US 4098
			Moderation
			• NZTA will undertake moderation of TTM

			Assessors
On Job practical – skill elements to be covered	**Assessment method**	**Pass Criteria**	**Misc.**
As development, work with an existing TTM Assessor to complete assessments	• Assessment of competence completed by existing Assessor	• Must meet assessment requirements for assessments	

20. Profile - TTM Trainer

Block of learning:	**TTM Trainer**	**Who it is for:**	Person who wants to become a trainer for selected CoPTTM workshops
Prerequisite:	• Must have credible industry experience in the areas they will be training on • Must be STMS warranted to the category of road environment they will be training • Must be qualified in any of the workshops they will be running • Must hold (or be enrolled in training for) New Zealand Certificate in Adult and Tertiary Teaching (previously National Certificate in Adult Education and Training) or equivalent qualification		
Competency objective	• Knowledge of NZTA requirements of trainers, the trainer responsibilities and the training process • Able to deliver the CoPTTM workshops they are authorised to deliver, to the required standards • Able to correctly complete the paper work associated with the workshop • Able to apply adult learning principles to maximise the learning opportunities of the participants		

Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
• Health and safety processes relevant for the role • NZTA requirements of trainers • Principles of adult education • Training hints, tips and techniques • How to present the main workshop they will be presenting • How to use CoPTTM during the training • Differences between the various workshops • Practice presentation of key sections of the main workshop	• Knowledge tests and scenarios during training • Practice presentations with feedback	• 90% pass mark • Must meet minimum trainer standards to pass	**Workshop delivered by:** NZTA approved Trainer **Refresher** • Every 3 years • Must complete STMS refresher for category of road environment **Time** • 3 days **Related Unit**

			standard • New Zealand Certificate in Adult and Tertiary Teaching (previously National Certificate in Adult Education and Training) – Level 4 or 5 (or equivalent qualification) **Moderation** • NZTA will undertake moderation of TTM Trainers
On Job practical – skill elements to be covered	**Assessment method**	**Pass Criteria**	**Misc.**
• Awarded probationary trainer warrant if passes the Train the Trainer workshop (able to run TC workshops unsupervised – able to assist on STMS workshops) • Deliver parts of STMS workshop with moderator present	• Moderator observation • Competence determined by TTM Assessor/Moderator	• Must meet TTM Trainer standards	