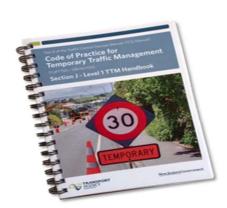
General Introduction into the world of the Temporary Traffic Management industry

Why do we have a **Code of Practice for Temporary Traffic Management?** (CoPTTM)

This presentation is aimed for anyone wanting to gain general knowledge and insight into how the system works. This would be useful for company roles that need to arrange temporary traffic management (TTM) services, or staff that are working on road work sites.







These slides are about the NZTA Code of Practice for Temporary Traffic Management (CoPTTM), bringing some light to the rules and roles of our industry.

This is just a basic glimpse at the Code covering the core aspects.

Who is this for?

- managers or business owners
- anyone who would like some guidance on roles before attending training courses
- companies that need some basic understanding of when you may need to engage temporary traffic management, including some of the planning steps involved

The information provided has been constructed by TMC Ltd, using Waka Kotahi NZ Transport Agency (NZTA) resources that can be found on their website. These slides are not NZTA material, and have been made in a way to give you some understanding in a quick and unique way. You should always refer to NZTA supplied documents when planning safety at road work sites as this is only a brief overview.

Always have an approved TMP from NZTA/or Local Council and a qualified practicing STMS for the road category you're working on, before implementing any traffic management.

For full details and resources about the NZTA CoPTTM refer to the NZTA website link below.

https://www.nzta.govt.nz/resources/code-temp-traffic-management

A **KEY QUESTION** to ask yourself before doing any TTM job, <u>before</u> we put the shovel in the ground or while we are planning/quoting work on any road work site is **do we** have a **TMP**?

TMPs (Traffic Management Plans) are required for all activities that vary the normal operating conditions of a road!

A7 Traffic management plans (TMPs)

A7.1 General

A7.1.1 About TMPs

A TMP details the measures to ensure, so far as reasonably practicable, the safety for all people involved in the activity.

It is a document describing the nature and extent of TTM at a worksite and how road users (including pedestrians and cyclists) will be managed by the use of TTM-measures.

The TMPs are required for all activities that vary the normal operating conditions of a road, irrespective of whether the activity is on a carriageway, on a footpath, or on a road shoulder.

The TMPs are also needed for activities outside the road reserve, which will affect the normal operating conditions of the road.

Depending on the size, duration and location of the worksite multiple TMPs (or a TMP with multiple TMDs) may be required for various stages of the work.

TMPs must include local RCA requirements (RCAs must be consulted as they may have local requirements for managing pedestrians, cyclists and parking).

Where regulatory parking and stopping areas are to be affected by the works additional consultation time may be required during planning for the activity.

When we look at the following slides, ask yourself do these situations need a TMP (plan)?

Are they affecting the normal operating conditions of the road?



What are your thoughts on these scenarios? Was there a Plan, was there a qualified worker

on site, is that the correct signage?

Would you see this if you were driving on a 100km/h road?

STOCK

Facing the wrong way & puts the truck over-taking the site in danger. No control in place.



Do footpaths not count? If a pedestrian now walks into the traffic lane, and gets hit, who is liable?



Why did this innocent person walk into the lane?
Does it matter if it's just a 5min job?



Now we have looked at those pictures, consider some of the Principles of why we have CoPPTM.

A3 Principles

To ensure, so far as reasonably practicable, safe and efficient TTM, CoPTTM is based on the following fundamental principles:

- TTM must be consistent throughout New Zealand.
- TTM must be fit for purpose, suitable for the nature and duration of the work, installed, set up, and used correctly.
- TTM must ensure, so far as reasonably practicable, the provision and maintenance of safe systems of work for on road activities for road workers and road users.
- All on-road activities must be carried out in accordance with a TMP that has been approved by the RCA or delegated person (refer to section A7 Traffic management plans (TMPs)).
- The provision of an environment that is without risks to health and safety
 of road users and road workers must be an integral part of all activities
 carried out on the road from planning the activity through to completion.
- Clear and positive guidance must be provided for road users approaching, travelling through and exiting the worksite.

Activities on any road must be planned so as to cause as little disruption, delay or inconvenience to road users as possible without compromising safety. The length, width and duration of any TTM must be restricted to the minimum required for the safe operation of the activity.

Let's revisit those pictures. What are some of the issues and why is that important?

Is this a commonly understood sign a motorist will see and understand? No. Its not consistent with what we expect around NZ!

Did they have a TMP or implement any traffic management? Is the traffic being properly controlled? Will the hiab lift this onto or over a pedestrian? The risks are high as no TTM has been implemented! Any pedestrian will now be forced to walk into the road. We know cars and humans don't mix well, so the danger here is from not thinking how they changed the environment by taking away the footpath with no planning or controls.

A short job does not mean it's a safe job. Regardless of the activity, if it affected normal operating conditions (including foot traffic), we must have a TMP so we know what to controls to put in place!









It's not just vehicle traffic we need to think about. It's how the site affects <u>all parties</u> (road users) and what risk this exposes them to. It then becomes <u>your responsibility</u> if you are the person conducting or undertaking business (PCBU, Health & Safety at Work Act 2015)!



- Cyclists (Traffic Lanes & Cycle lanes)
- Pedestrians (Footpaths & your work)
- Traffic (vehicles & motorbikes)
- Road workers (doing the job)

The secret is thinking about your environment. All locations will vary in lane widths and the types of traffic they have. And there are many other things to consider like visibility, speed of the road & traffic volumes.

So now we hope you can see why we have a Code of Practice!

Even the vehicle we use to set up TTM sites has specifications to ensure workers and the public have sufficient warning when working on the road. Workers have courses and practical assessments to achieve, to ensure they operate resources correctly and know how to implement a safe traffic management site using the correct equipment.

Most importantly, we need a signed off TMP that reinforces all these aspects, including key roles. The TMP is the plan, without a plan in any industry you are disadvantaged and safety has not been considered.

The goal is to have <u>consistent TTM throughout NZ.</u> Standardisation helps protect workers and provides familiarity for roads users anywhere in NZ. The Code ensures CLEAR & POSITIVE GUIDANCE, REDUCES CRASHES & FATALITIES, MINIMUM STANDARD FOR THE INDUSTRY.









Stats indicate 85% of all fatalities happen on sites that are unattended (meaning there were no workers onsite but TTM was still established). Investigation typically showed workers or TTM crew onsite were not following the code, or in other words the site was not setup as per the signed off TMP that a Temporary Traffic Management Planner (TTMP) created.

Also alarmingly, 90% of all road worksite crashes occur because there was no TMP (plan in place). No plan, no diagram made up, nothing for the workers to follow. These two things combined makes us re-evaluate how we look at a site, what we use and how we reduce risks to make it safer for road users & workers. Covering your tail! Can we build a house without a plan? No. Can we put together a kit set or flatpack together easily without a plan? No!









10

For the haters © let's think about things...

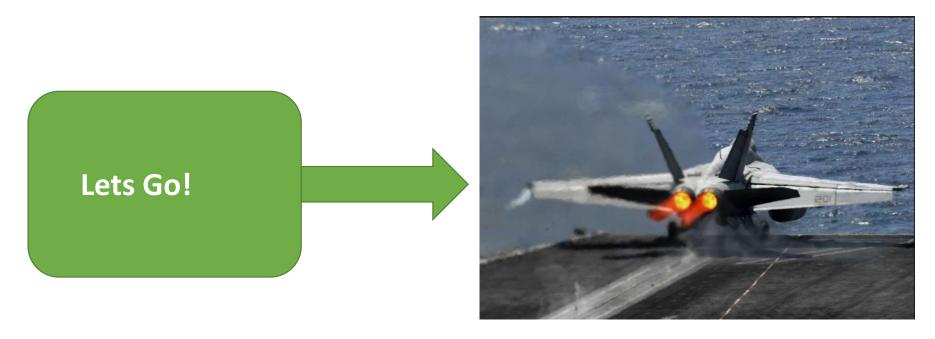
Remember we live in New Zealand, not in a third world country. We have the systems in place, regardless of whether we like it or not, we have to get on board. It's not just your workers that are at risk, it's the ROAD USERS as well!



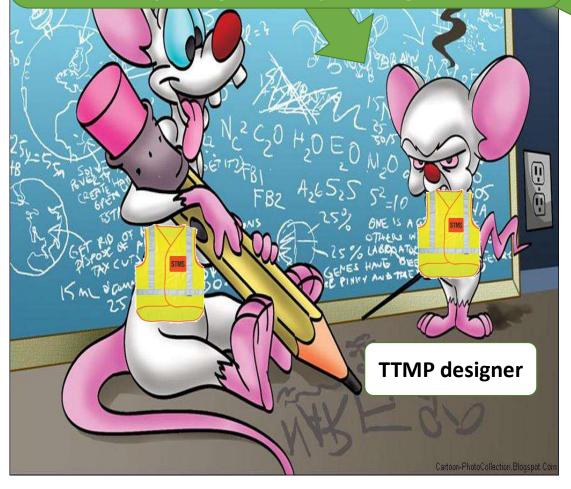
We don't live in a third world country.
We live in NZ.



Okay, so hopefully you're on board now, ears are up and you're keen to <u>quickly</u> see how you can use the CoPTTM system & put controls in place.



Step 1: Starts with a qualified <u>TTM Planner</u> preparing a TMP. They have the knowledge base to design these plans and consult with the Road Controlling Authority (RCA) to ensure the plan is fit for purpose & signed off. This is a different skill set to a practicing STMS who has the warrant and the practicing skills to setup and management TTM sites.



TRAFFIC MANAGEMENT PLAN (TMP) - FULL FORM

Use this form for complex activities. Refer to the NZ Transport Agency's Traffic control devices manual, part 8 Code of practice for temporary traffic management (CoPTTM), section E, appendix A for a guide on how to complete each field.

Organisations	TMP reference: Contractor (Working Space): Geosolve Ltd		Principal (Client): NZTA				
nce		Contractor (TTM): GeoSolve Ltd & Traffic Management & Control Ltd	RCA: NZTA				
Location details and	Road	names and suburb	House no /RPs (from and to)	Road Perman level speed			
road characteristics		ad List & Site Locations	Refer attached	Level 1 (includes LV)	Varies		
Traffic details (main route)	AADT Varies		Peak flows. 8am & 5pm				

Description of work activity

FWD Testing (Falling Weight Deflectometer)

Mobile Operation. Towing vehicle plus FWD trailer. Operation of the FWD testing will all take place inside the FWD truck. Testing positioned as far left in live lane as possible, this allows vehicles to pass safely while testing and this is possible on most carriageways that have suitable shoulder/lane widths. The FWD machine will stop every 200m Network testing and 10-50m for the AWT sites for an average time of 20 seconds per test. When performing a test the FWD uses hydraulics that is completely operated from inside the vehicle cab while the FWD lowers the loading plate onto ground & then drops a weight to simulate vehicle loading while measuring deflections. Progressing at average 5-50km/hr.

Planned work programme

Alternative dates if

activity delayed

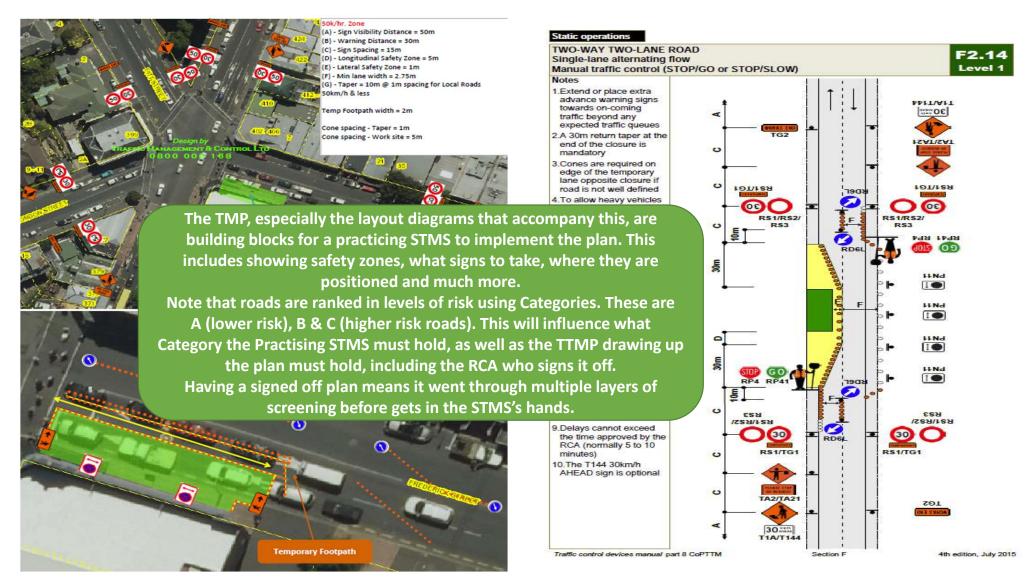
	Start date	18 th July 2016	Time	24/7 (avoid peak traffic flows 8am & 5pm)	End date	30 September 2016	Time	24/7 (avoid peak traffic flows 8am & 5pm)
	Consider significant stages, for example:	A majority of the work is to be completed end July & all August 2016						

Road aspects affected (delete either Yes or No to show which aspects are affected)

Pedestrians affected?	No	Property access affected?	No	Traffic lanes affected?	No	
Cyclists affected?	No	Restricted parking affected?	No	Delays or queuing likely?	No	

Proposed traffic management methods

Installation	Vehicle setup signage clear off the live lane in a safe position that does not interfere with traffic flows
(includes parking of	TTMC-W Hi Vis Vests, Hazard Lights & Flashing Reacons all on

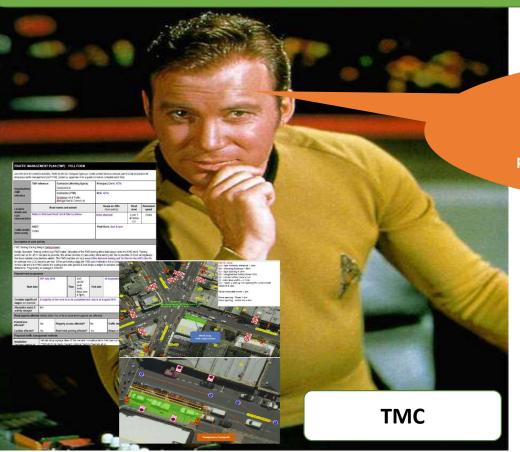




The TMC (Traffic Management Coordinator) is a fancy way of saying the person within the RCA and today for us lets think of this as Mr James T. Kirk. This is who will sign off the TMPs that our TTMP prepared.

Don't worry - you will get to know these people well and build important relationships. Think of them as the safety net

as they will review your TMP and suggest changes and or give guidance when necessary. Under the new NZTA training model they also would have to attend and achieve the TTMP qualification. We'll all be talking common language!



I'll give you a tip: I'm a busy man so give me at least 5 working days notice! This is the minimum requirement when sending me a TMP for lower categories roads and simpler jobs. This gives me enough time to check your plan before you take off. And I have a lot of plans firing my way all the time, so be patient.



The RCA & TMC are like your mechanic shop who are qualified to sign off and give your Car (TMP) a Warrant of Fitness. It's a safety net, to check that it complies with the rules (CoPTTM).

Know your TMP is safe to use onsite!



Just because Pinky the mouse (our TTMP designer) designed his amazing TMP, it doesn't mean he has the practical knowledge to establish the site or be the STMS onsite. This is listed on the TMP separately.



Once Captain Kirk (who generally works for the RCA) sends the TMP back approved from the Starship Enterprise (RCA) then the delegated Practising STMS may setup the site.





STMS toolbox briefing.

TMP must stay onsite!

STMS remains on site at all times or Captain Kirk (AKA your TMC) may shut the site down!

They often spot check and audit the site using a Site Condition Rating form to compare what was approved with what was then implemented.

Use this form for complex activities. Refer to the NZ Transport Agency's Traffic control devices manual, part 8 temporary traffic management (CoPTTM), section E, appendix A for a guide on how to complete each field.

Organizations (TIMP) Georote LES Contractor (TTM): Geological LES A Trailic Management & Corrector (LES A): Geological LES A Trailic Management & Correct LES Contractor (TEM): Geological LES A Trailic Management & Correct LES Contractor (TEM): Geological LES A Trailic Management & Correct LES Contractor (Management & Correct LES CONTRACTOR (M

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Description of work activity

FWD Testing (Falling Weight Detectometer)

doble Operation. Towing vehicle plus PFND trailer Operation of the PFND testing will all take gives reads the PFND text. Testing, the production of the production of the PFND testing will be testing and the user grant the series and the production will be the production will select the production will be producted by the production of the production will be producted by the production of the production will be producted by the production of the production will be producted by the production of the pro

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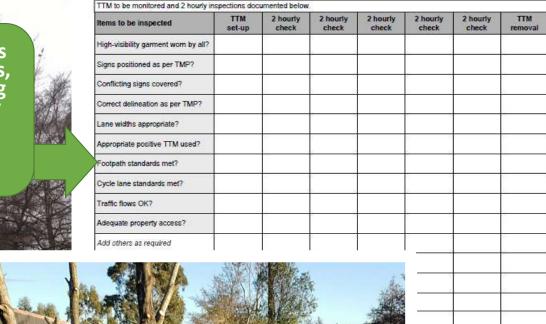
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Consider significant stages, for example:	A majority of the work is to be completed end July & all August 2016							
Alternative dates if activity delayed	N/A							
Road aspects affected	delete eit	her Yes or No t	o show w	which aspects	are affected)			
Pedestrians affected?	No	Property	roperty access affected?		No	Traffic lanes affected?	No	
Cyclists affected?	No Restricted parking affected?		No	Delays or queuing likely	? No	i.		
Proposed traffic mana	gement me	ethods						

Installation Vehicle setup signage clear off the live lane in a safe position that does not interfere with traffic flow





CLOSED



Worksite monitoring



Other roles like Stop/Go workers will have some of the entry level qualifications like TTM Workers & Traffic Controllers that assist the STMS in charge.

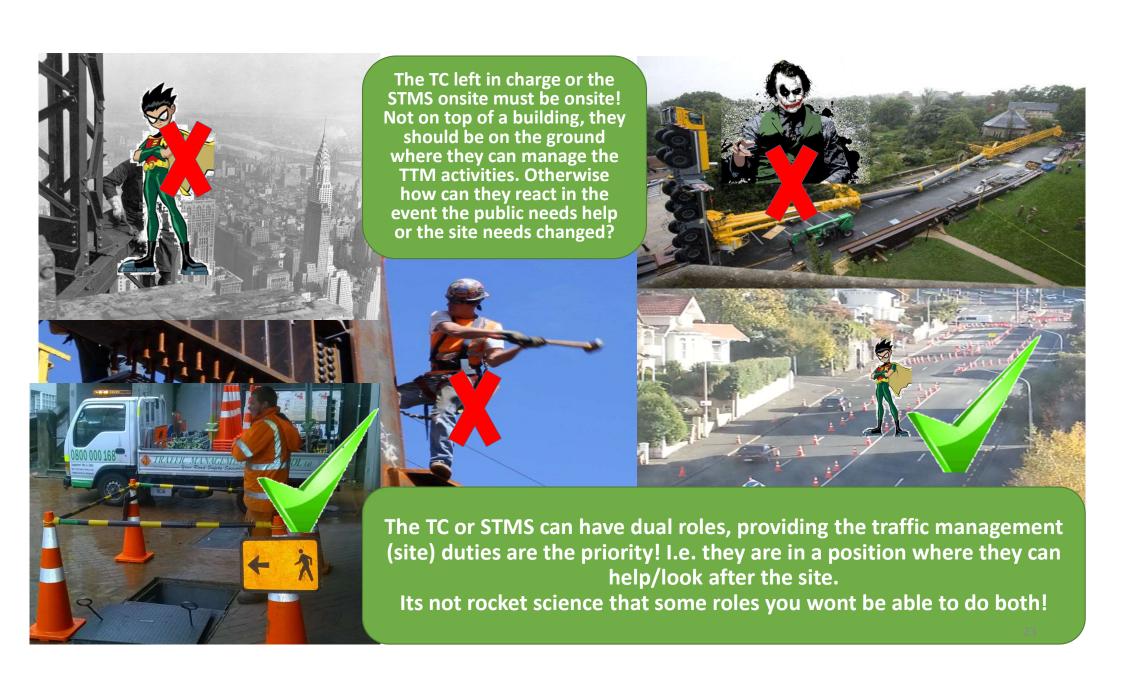
If the STMS wants to leave the site to fight other battles then he must find & delegate to a qualified Practising Traffic Controller (TC) in this situation its Robin who has good entry level practical experience to manage TTM aspects when the STMS is not present, who then <u>must stay onsite</u> at all times & completes the 2 hourly checks for the STMS. When you're not a home you normally delegate the next suitably experienced person to look after the kids, think of it that way we need someone to still manage the TTM site.



In order for Batman (STMS who remains in charge) to be able provide support to his TC (Robin) in the event he needs help or support then Batman must remain within 30 minutes travel time of the site and check on Robin at least once a day. If the site is left unattended (TTM left up and no workers onsite) the STMS also must check the site once a day and be within specified travel times (typically this is 60 minutes on Category A roads).



Even Batman can't fight too many battles at once, so to play fair & take your role as STMS seriously its capped to maximum of 6 Active sites if delegating to TC's in charge of the worksite.



If things change, the approved TMP details contingency options or chat to Kirk your TMC from Starship Enterprise.

The TC can not make sufficient changes, they are there to maintain the site. If you do need support then call the STMS to return. When we do make changes or have issues around how a TTM site is operating, also inform TMC/RCA. Document these changes on the TMP & On Site Record form.



Remember, the TC (Traffic Controller) is just like having your learner licence: you're not in charge, the STMS is so seek their advice, contact them when needed, don't change the site without their knowledge as they are ultimately responsible and liable for the TTM site.



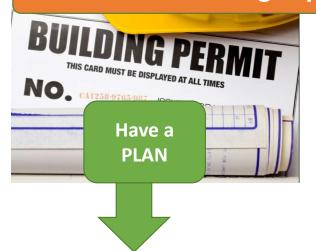


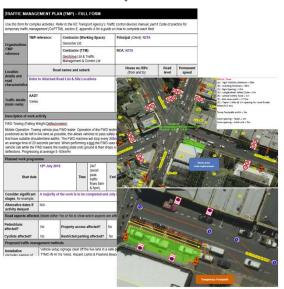
The STMS is ultimately in charge & responsible if something happens, even if a TC is onsite, hence why a good briefing is required. They must be within 30min and check the site once a day. Remember the STMS (Batman) knows the TMP the best and has all the secret trade advice on how to fix things, he's the real support.



Like any industry, someone is always ultimately in charge of the other workers onsite - on the road this is the STMS.

To sum things up - Comparing other industries to the NZTA CoPTTM:









onsite







Authorities in charge to check & audit these processes to ensure compliance .





If you take the driver out of the car while moving its very hard to control the car. This is the same as having no qualified STMS/TC onsite to look after the TMP. And we all know what could happen if you don't have the correct licence to operate a car so the same logic for an active TTM worksite as a car?

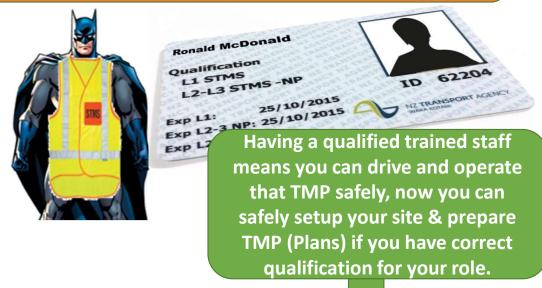
Last of all a car with no WOF is as unsafe as a TMP that has not been signed off.



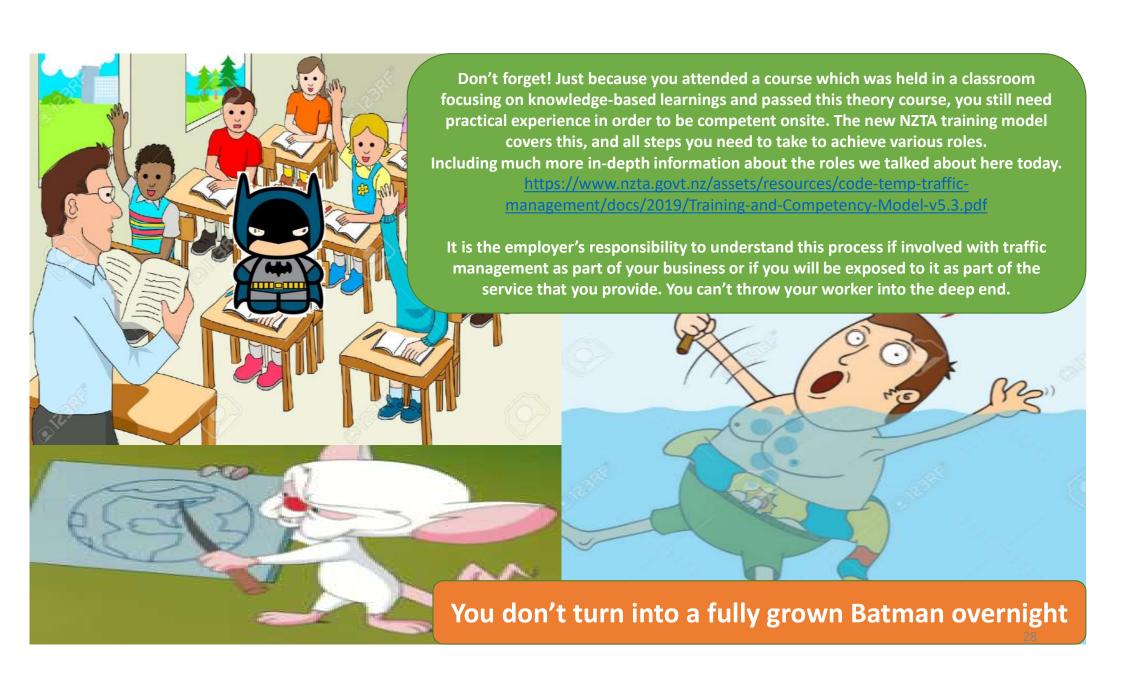


Having a signed off TMP (plan) is like having a WOF on a car, its safe to operate once approved









How to find training info and where to find the code (free to download) & remember we are not expected to remember everything, just know where to look. https://www.nzta.govt.nz/resources/code-temp-traffic-management

