

5 May 2023

Waka Kotahi NZ Transport Agency's response:

- In some circumstances, a more conservative approach will be adopted, but not all.
- The Health and Safety at Work Act 2015 has two supporting requirements that encourage creativity of thought when developing risk controls:
 1. Application of the phrase “all things reasonably practicable”. This helps through placing a limit on the complexity of a control. For example, with an elaborate risk control, there will likely be additional risks during the installation and removal process. An example is that installing portable crash barriers is a time consuming and complex activity, which could take a day or more.

Therefore, it is not the safest reasonably practicable approach to install barriers for a project that will only take one hour. This would be an increase in the risk for the total project, rather than a decrease.
 2. Application of the hierarchy of controls concept (Health and Safety at Work Regulations 2016 section 6 - www.legislation.govt.nz/regulation/public/2016/0013/latest/DLM6727382.html). The table provided below is an excerpt from New Zealand Guide to Temporary Traffic Management (NZGTTM) and provides a tabular representation of this material. The key to this concept is starting with eliminating the risk first, and if this is not possible, then moving down the list.

 <p>Most effective control</p> <p>Least effective control</p>	Preferred	Eliminate the risk	Eliminate risks to health and safety, so far as is reasonably practicable;
	Second choice	Substituting Isolating Engineering	Minimise risks to health and safety, so far as is reasonably practicable, by taking one or more of these actions that are the most appropriate and effective, taking into account the nature of the risk
		Administrative	If a risk then remains, you must minimise the remaining risk as far as reasonably practical
	Least preferred	Personal protective equipment	If a risk then remains, you must minimise the remaining risk using PPE

Table 1: Hierarchy of Controls

- Traditional Temporary Traffic Management (TTM) starts at the bottom of the list and combines Personal Protective Equipment (PPE), Administrative and Engineering control types. Isolation through use of portable crash barriers or truck mounted crash attenuators are sometimes used. However, rarely is the substitution approach deployed.
- Elimination is not undertaking the work task at all; hence it is not a realistic option for most scenarios i.e., we must install EV chargers, fix infrastructure, hold concerts, sports events etc. Therefore, we have focused on the opportunity in the substitution control type.
- Substitution is undertaking the task using a different approach for the work activity. Examples of the substitution approach are provided in response to question two.

Question 2: *I am finding some of this hard to understand and it feels like practical examples before/after are the most useful in explaining how this will make things better. Are WK able to provide some information about the pilots and how they worked?*

- As advised above, examples of the substitution approach are as follows:

- **Remote control mowing:**

Remote control mowers to mow motorway roadsides are being used in Auckland and Wellington. This has removed workers on foot or driving tractors and enables the robotic mower operator to position themselves well clear of moving traffic. As the mowers are small and pose minimal risk to road users, the TTM support for this alternative work method has significantly changed.

In Auckland, when mowing using tractors and on foot, the lane closest to the shoulder was closed with TTM including truck mounted crash attenuators, cones and advanced warning signs on utes. This TTM is no longer deployed since the change to remote control mowing. The TTM used now is to enable safe access and egress from the mowing area by the vehicle transporting the robotic mower i.e. a very short use of TTM resources (minutes as opposed to hours a day).

- **Coordinating work activities to minimise the exposure of workers, TTM staff and number of sites road users must pass through.**

Note coordination of activities (all types of clients), is an explicit requirement of the Utilities Access Code of Practice established under the Utilities Access Act 2010.

The most notable application of this approach is works on the Remutaka Hill (State Highway 2). Historically work was undertaken using stop go approach. Given the narrow road, this created significant risk to road workers and was very challenging for large vehicles to navigate past worksites and, it took 325 nights a year to complete necessary works. The approach now is to close the road, which has significantly improved productivity, meaning that only 25 nights a year are required to complete all the works. Also, additional works by organisations such as the Department of Conservation and Greater Wellington Regional Council is undertaken during the closures.

A very recent example was the closure of SH58 for the weekend of 29/30 April 2023. This one weekend closure was as an alternative to three (with fourth as contingency) weekends of stop-go operation. By closing the road and deploying 130 staff, the work was completed in 48 hours (faster than planned).

Refer to the following website link:

www.nzta.govt.nz/media-releases/fast-work-sees-wellingtons-state-highway-58-reopen-ahead-of-schedule/

<https://www.facebook.com/nztawgtn/posts/pfbid02MvU6gBeNu3XbJCVfao8rWAcgbQm5LwqVMy-sc2tFGdwSirt1F3USesrwQHGVZ4RzQI>

- Using a different risk-based approach to the work method has significant implications on the TTM requirements. This can have implications on safety, cost, duration, road users and the community. The most important aspect in this regard is to work through the planning decisions openly, thoroughly and consult and communicate widely. The traditional TTM requirements and process did not encourage or require this, however the NZGTTM and foundational legislation does.

It is important to note that care must be taken with each site, and that it's assessed on its merits – the sector is being strongly encouraged to do this. For example, there are locations on the transport network where detours are very long (add five hours travel time) therefore are unlikely to be the safest reasonably practicable approach.

- There is significant opportunity to benefit from improved coordination of works – safety, financially, road user and community impacts.
- The topics identified from the pilots as requiring change is extensive. This is not just a change to TTM, rather systemic changes that touch on issues such as:
 - Culture change across client organisation, supplier organisations, and the community of New Zealand to support robust planning, leading to safety outcomes (also financial and disruption opportunities as mentioned above).
 - Contract terms including the basis of payment.
 - Changed resourcing – people and functions within contracts.
 - Training and competency assessments of staff (client organisations and suppliers).
 - National guidance (the NZGTTM and supporting material), including modifications to engineering documents and matters such as traffic control devices specifications.

Question 3: *It's noted that the new guide is inconsistent with HSWA 2015, is it supposed to be "consistent"?*
(Para 15, bullet 2)

- Apologies, it should read 'the new guide is **consistent** with HSWA 2015.'

Question 4: *Examples of how the new guidelines will save money.*

Please refer to the information provided in response to questions one and two.

Proactively Released

MINO-737 – Part 2 – Changes to Temporary Traffic Management (TTM)

5 May 2023

Provide communications material for social media and speaking points regarding the changes to TTM in New Zealand.

Waka Kotahi NZ Transport Agency's response:

The following information has been provided to assist you with your communications regarding the changes to TTM. In your posts, you are welcome to use the speaking points provided and link to our various media releases (for links, refer to sections **Examples of how the NZGTTM was tested in various roading projects** and **Useful Links** below).

Speaking points

- The new Waka Kotahi best practice guidance for TTM (the NZGTTM) aims to improve safety at work sites – a key challenge facing our transport system.
- It aims to protect the people who build and maintain our roads, manage events and services like power, water and communications, or are involved in any activity where a temporary road design is required.
- It uses a risk-based approach and emphasises better planning upfront – risk assessment and planning come first before decisions on control types and equipment are made. This ensures that TTM setups are as safe as possible for the specific risks at each site.
- This is a change in how Waka Kotahi and the construction and maintenance industry delivers its work - a shift from the current traditional, highly prescriptive traffic management plans and practices to assessing the specific risks at a site and putting the safest and most appropriate safety controls in place.
- It also allows traffic management plans to be based on the right sizing of TTM controls for the specific risks identified at each work site.
- The NZGTTM has been designed to be consistent with *WorkSafe's Good Practice Guideline: [Keeping safe and healthy on the road and roadside](#)* to help organisations meet their legal obligations under the Health and Safety at Work Act 2015 (HSWA).

Examples of how the NZGTTM was tested in various roading projects

- **Waka Kotahi State Highway 58 Safety Improvements Project:**

- Between 8pm Friday 28 April and 7pm Sunday 30 April 2023 Waka Kotahi and lead contractor Downer NZ closed SH58 between SH1 Transmission Gully and SH2 Haywards Interchange to complete road works.
- It was due to reopen at 4am Monday morning but contractors had it open to traffic nine hours earlier than planned.
- The closure was a road-test of the new risk-based approach outlined in the New Zealand guide to temporary traffic management (NZGTTM).
- The closure came out as the best option weighing up safety, productivity for the project, and the effect on people's journeys. The alternative was to work over several weekends and nights of stop/go traffic management.

Media release: [Fast work sees Wellington's State Highway 58 reopen ahead of schedule](#)
[LinkedIn post](#)
[Facebook post](#)

- **Weld Pass:**

- The Weld Pass, midway between Blenheim and Seddon, underwent safety improvements and road resurfacing mid-February 2022.
- These works required 580 tonnes of asphalt mix, moved by eleven trucks.
- Due to the 6m narrow width of this winding section of State Highway 1, the road crew used a new risk-based approach to temporary traffic management and closed the road to keep people safe.
- The road crew completed the job in just four nights. Usually, it would take six to eight weeks.

Video: <https://youtu.be/wp3CbPnjXUI>

- **Other examples - over the coming weeks and months we anticipate there will be more opportunities to proactively highlight local government partners trialling the new guide as they transition from the current Code of Practice for Temporary Traffic Management (CoPTTM) to the NZGTTM. We can supply information about these as they come to hand. For example, Auckland Transport are exploring the option of trialling the new risk-based TTM approach:**

- AT intend to work towards adoption of the NZGTTM thus replacing the current Code of Practice for Temporary Traffic Management (CoPTTM).
- Whilst AT continues to use CoPTTM, they will be undertaking targeted trials of the NZGTTM wherever possible in order to learn and make the eventual adoption region wide easier.
- For example, AT are considering trialling the risk-based approach to TTM on their upcoming works on Ponsonby Road and Pompallier Terrace in June 2023.

Useful links

- Website link to the NZGTTM: www.nzta.govt.nz/roads-and-rail/new-zealand-guide-to-temporary-traffic-management/
- Waka Kotahi media release: [New temporary traffic management guide released to improve safety at work sites](#)
- Civil Contractors New Zealand (CCNZ) media release: [New guide signals a new era for temporary traffic management](#)

Other useful documents

- Key messages for Directors of Regional Relationships and internal stake holders are provided in the attached document titled 'MINO-731 NZGTTM Key Messages – 1 May 2023.pdf'
- Frequently asked questions are provided in the attached document titled 'MINO-731 NZGTTM FAQs – 1 May 2023.pdf'
- Photos are provided as jpg attachments.

New Zealand guide to temporary traffic management

All audiences - May 2023

Frequently asked questions

Please use these to support questions relating to version 1 of the New Zealand guide to temporary traffic management:

[New Zealand guide to temporary traffic management \(NZGTTM\)](#)

CoPTTM is not broken, why change to the NZGTTM?

The current Code of Practice for Temporary Traffic Management (CoPTTM) has been in place for over 20 years, yet safety issues keep happening under it.

People continue to die and be seriously injured at TTM sites and this needs to change. Between 2017 and 2021, there were 43 fatal crashes and 287 serious injury crashes at road work sites with temporary speed limits. This is an increase on the previous 5-year period.

Within our industry, there's a growing shift to a risk-based approach – it's time for our national approach to temporary traffic management to reflect this and put the safety of our road workers and road users first.

Waka Kotahi's new guidance aims to change the way we plan and manage people's safety at TTM sites. The new guidance puts risk assessment and planning first. This is to make sure the TTM control types, design, and equipment used will keep people safe.

The NZGTTM is consistent with *WorkSafe Good Practice Guideline: Keeping healthy and safe on the road and roadside* to help organisations meet their legal obligations under HSWA.

[WorkSafe Good Practice Guideline: Keeping healthy and safe when working on the road or roadside](#)

How will the new guidance improve road safety?

Waka Kotahi is committed to Road to Zero, a safer Aotearoa New Zealand where no one is killed or seriously injured on our roads.

Waka Kotahi believes all road workers and road users should go home safe every day, whether they're on state highways or local roads.

There is more to do to make this a reality. Waka Kotahi's new guidance is one step in the right direction. Other initiatives are also underway to improve road safety – research to support our risk-based approach, safety camera trials and road worker safety education campaigns.

The NZGTTM puts risk assessment and planning first before decisions and control types and equipment are made. This new risk-based approach ensures that TTM setups are as safe as possible for the specific risks at each site.

In practice, this means that the NZGTTM acts as an important tool to encourage a new way of thinking and planning at the start of a project. It aims to encourage everyone to take responsibility for managing people's safety by identifying safety risks and putting appropriate steps in place to keep people safe first, rather than considering the traffic management plan later.

How will Waka Kotahi transition to the new guidance?

To show our support for this new approach, Waka Kotahi will adopt the new guidance first at our own work sites across our transport network.

Construction and maintenance suppliers who carry out road works across our state highway network (Fulton Hogan, Downer, Higgins, HEB and WSP) along with Waka Kotahi, are the early adopters of the new risk-based guidance.

Waka Kotahi is working with its partners and suppliers to support them to respond and resource the new approach, while still meeting Waka Kotahi requirements on its contracts.

To help this transition, Waka Kotahi suppliers tested the new risk-based guidance during summer 2022/2023 in these areas:

- Northland - Fulton Hogan.
- Marlborough Roads (State Highways only) - Fulton Hogan and HEB.
- North Canterbury – Downer.
- Westlink – WSP.
- Manawatu – Higgins.

During 2023, Waka Kotahi will work with its partners and suppliers on a range of transition activities including:

- updating Waka Kotahi contract requirements over time
- developing additional guidance notes and supporting material for the TTM library to outline how the NZGTTM principles can be applied in practice
- rolling out educational workshops and regional roadshows
- supporting the new industry-led TTM steering group to deliver a successful transition from CoPTTM to the NZGTTM and to redevelop the wider sector's training requirements.

Waka Kotahi also welcomes the wider industry to work together to support the transition to the new guidance and improve road safety. Waka Kotahi recognises this represents a change in the way the industry delivers its work and that adopting the new approach will require strong support across the sector.

How will Waka Kotahi support the industry to transition to the new guidance?

Our first step to support the industry to transition to the NZGTTM will start with adopting the new risk-based approach at Waka Kotahi work sites consistently across the transport network. We're working closely with our construction and maintenance suppliers to transition now, and we welcome other organisations to use the new guidance.

The recently established industry-led steering group for road worker safety will play a vital role to support a successful transition from CoPTTM to the NZGTTM:

Read the CCNZ media release: [Temporary traffic management steering group appointees named](#)

The role of the TTM industry steering group is to represent the views of the collective TTM industry and to take the lead on how the industry can adopt the new guidance at road works in practical terms. Waka

Kotahi looks forward to supporting this group, along with other forums and stakeholder groups, to help support the wider industry to transition to the risk-based approach.

What does a contractor do if a worksite requires approval from different Road Controlling Authorities who use different guides?

In all cases, the contracting PCBU (client), lead contractor PCBU, sub-contractor PCBU and engineer/designer PCBU must comply with the requirements of New Zealand legislation, in this case the Health and Safety at Work Act 2015 (HSWA). Industry best practice guides such as the NZGTTM and *WorkSafe's Good Practice Guide: Keeping healthy and safe while working on the road or roadside* do not change these legal obligations.

Where more than one PCBU has the same duty, they must consult, cooperate, and coordinate as far as reasonably practicable - refer to HSWA 2015 Section 34 Subsection 1.

When a lead contractor PCBU prepares a risk assessment they must consult, coordinate, and cooperate with the Road Controlling Authorities (RCA), the RCA must consult, coordinate, and cooperate with the lead contractor to make sure all reasonably practicable steps have been taken to ensure the safety of workers and others.

Alternatively, if a lead contractor PCBU follows traditional CoPTTM process and doesn't prepare a risk assessment and submits to an RCA for approval, the RCA is encouraged to ask for a risk assessment.

[WorkSafe's Good Practice Guide: Keeping healthy and safe while working on the road or roadside](#)

What is the difference between the new guide and the practice notes that can be found in the TTM library?

[Explore the TTM library](#)

The guide provides advice on how to keep people safe at temporary traffic work sites. It aims to help persons conducting a business or undertaking (PCBUs) to meet their duties under the Health and Safety at Work Act 2015 (HSWA). It includes a general introduction to risk management along with TTM engineering principles and guidance for transport practitioners planning and preparing for temporary traffic management activity.

The TTM library has supporting information and resources on a range of topics to help the industry to put the guide into practice. In the TTM library you will find three categories of notes:

Guidance notes - following the TTM principles introduced in the guide, these notes outline how these principles can be applied in practice. The notes will also include guidance on how to manage unusual circumstances using the principles of the guide.

Operational practice notes - risks and considerations of control measures that the contracting PCBU determines are appropriate for regularly repeated specific activities. Operational practice notes are foundational to TMP's for site specific and pre-approved reusable schemes.

Administrative notes - various administrative and process requirements to bring life to the TTM system principles including forms and documentation that are relevant while preparing or implementing a TMP, audit forms and on-site record forms.

Waka Kotahi and our industry partners have provided some resources as a starting point, and as more are developed by the TTM industry these will be added to the TTM library.

Risk management can be subjective, how does the guide ensure consistency?

Risk management enables the organisations to work together to identify the risks present at a site. This flexibility enables the safest possible risk control option to be identified and implemented.

The NZGTTM includes tools that are useful to assist with this:

- Focus on risk of harm to people from the activity. Consider all groups of people affected such as road workers, TTM crews, vehicle drivers, vehicle passengers, vulnerable road users.
- Apply the hierarchy of controls. Use the hierarchy of controls to identify the safest reasonably practicable solutions for a site, this is a legal requirement.
- Apply engineering standards. Geometric design for the site layout, traffic control devices rule and Waka Kotahi M23 for equipment standards, along with other guides and standards referenced in the NZGTTM toolbox.

How is disagreement of management of risks resolved?

The first step is for the lead contractor PCBU to work with the Road Controlling Authority, rail authority, airports, port organisations and others to consult, coordinate, and cooperate to reach agreement.

Where the consult, cooperate, consult approach fails the recommended next course of action is to involve the contracting PCBU to mediate the disagreement. This is because they have duties, as part of the contracting chain, under the Health and Safety at Work Act 2015.

In addition, it's important to note that the lead contractor PCBU is likely to be best placed as the site manager, as they have greatest influence and control over what happens onsite. As a result, the lead contractor PCBU must ensure that the controls implemented onsite are as safe as reasonably practicable.

The transport operator author, such as an RCA, rail access authority, airport or port organisations, also have duties under applicable legislation that must be fulfilled. These pieces of legislation require that the safety of workers and transport system users is ensured. This includes approval of road closures, access onto rail, airport or port land and other matters.

What is the cost comparison of TTM using the new guidance (NZGTTM) compared to CoPTTM?

The new guidance was published by Waka Kotahi on 27 April 2023: <https://www.nzta.govt.nz/media-releases/new-temporary-traffic-management-guide-released-to-improve-safety-at-work-sites/>

The costs of TTM under the new risk-based guidance are unknown. The transition from the current CoPTTM to the new guidance will take time.

Using the new risk based-approach to TTM doesn't necessarily result in a cost increase. The new risk-based approach does allow for the right sizing of TTM controls for the risks identified at each work site. This means that the costs could increase or decrease depending on the TTM solution that is chosen.

As part of testing and finalising the new guidance, pilots were run by key suppliers during the Summer 2022/2023.

Findings indicate that the new guidance there are both savings and cost increases expected with the implementation of the NZGTTM.

Examples include:

- Use of a robotic mower removes a potentially vulnerable person from close-proximity traffic, which has seen a substantial improvement in safety as well as a reduction in TTM costs.
- A road closure to complete works in three nights rather than stop/go operations for 16 nights sees a reduction in TTM costs and increased safety for workers.
- Scheduling multiple operations (litter collection, mowing, sign cleaning, line marking) at a TTM site, as opposed to one operation with its own TTM site both increases safety and reduces the cost of TTM.
- Use of crash mitigation barriers for long term sites instead of cones. This substantially improves safety for road workers and road users, however, requires a higher expenditure.

Proactively Released

Key messages

For DRRs, internal stakeholders – May 2023

New Zealand guide to temporary traffic management

Introducing version 1 of the New Zealand guide to temporary traffic management:

- Waka Kotahi, with input from WorkSafe, construction and maintenance suppliers and the road safety sector, has published new best practice guidance to keep road workers and road user safe when working and travelling through road work sites.
- Version 1 of the *New Zealand guide to temporary traffic management* (NZGTTM) prioritises risk planning and mitigation and is available on the Waka Kotahi website:

[New Zealand guide to temporary traffic management \(NZGTTM\)](#)

Background key messages:

- The focus of the Waka Kotahi NZGTTM is on 'safety first' – this is consistent with the Health and Safety at Work Act 2015 (HSWA), WorkSafe guidelines and Road to Zero.
- The Waka Kotahi NZGTTM uses a risk-based approach, as required by HSWA, rather than a compliance-based approach outlined in the current Code of Practice for Temporary Traffic Management (CoPTTM). The compliance-based approach is now inconsistent with legislation and serious safety issues; fatalities and serious injury continue to occur at road work sites.
- A risk-based approach allows us to move away from applying a set of rules to a more flexible set of planning guidelines that prioritises the safety of roadworkers and road users – it puts risk management planning for TTM first, before decisions on what TTM control types, design and equipment are made. The new risk-based approach ensures that TTM setups are as safe as possible for the specific risks at each site.
- Version 1 of the guide sits alongside the *WorkSafe Good Practice Guideline: Keeping healthy and safe on the road and roadside* to help PCBUs meet their legal obligations under HSWA. [WorkSafe Good Practice Guideline: Keeping healthy and safe when working on the road or roadside](#)
- The new guide has been developed with the support of our major supplier partners and WorkSafe and illustrates our shared commitment to reducing the risk of deaths or serious injury on our roadsides. Our partners' commitment to implementing the guide and reducing risk to their workforce is evident in their support for setting up the national TTM industry steering group and new TTM credentials (qualifications) group, to move from a compliance-based approach to this new risk-based approach.

Applying the guide / first steps to transition:

- The TTM industry steering group's priority will be to support the sector to transition from the CoPTTM to the NZGTTM.
- As a first step, Waka Kotahi will update its contracts with its key construction and maintenance partners (Fulton Hogan, Downer, Higgins, HEB and WSP) to adopt the new guidance at Waka Kotahi work sites across our transport network.
- Ongoing engagement with Waka Kotahi construction and maintenance suppliers and the TTM sector are vital to help plan our transition activities, which will be phased over time to ensure our suppliers can respond, train and resource the new risk-based approach that we will require on our contracts.

What it means for RCAs:

- In line with our sector leadership approach, we also want to make sure the new guidance can be used by all other Road Controlling Authorities (RCAs) including local authorities to provide a best practice approach to the planning of TTM on our roads across the motu.
- While not mandatory, the intention is that the new guidance will eventually replace the Code of Temporary Traffic Management (CoPTTM), so we welcome other RCAs to use it for their own TTM activities on local roads and roadsides.
- Over the coming months, Waka Kotahi will host a series of regional TTM workshops to allow RCAs and their contractors learn more about the new risk-based approach outlined in the NZGTTM, the key changes compared to CoPTTM, and how we plan to transition by starting with adopting the new guidance at Waka Kotahi work sites.
- These will be an opportunity to also discuss what the changes will mean for RCAs, listen to feedback and understand what support will be required.