New Zealand guide to temporary traffic management

All workers and road users go home safe every day



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Why we implement temporary traffic management

Part 1 sets out why we have TTM and provides information about the purpose of the NZGTTM. This includes references to relevant legislation, strategy and guides.

Who should read this?

- Senior leaders* responsible for organisational systems and processes.
- Temporary Traffic Management Planner (TTMP).
- Site Traffic Management Supervisor (STMS).
- Road workers.
- Department managers.
- Corridor manager.
- Traffic management managers.
- Project managers.
- Contract managers.

* Senior leaders include anyone typically in roles like CEO, GM or Regional Manager.

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Introduction

How this guide fits into the bigger picture

In terms of transport and road safety, this guide is aligned with government priorities and direction. In this section you'll find information on how national legislation, strategies and guidance provide the context for this guide.

Many of us know of a time where a worker or member of the public has died or been seriously injured at a worksite. We must all do **everything we can** to eliminate and reduce the risk of death and serious harm.

In Aotearoa New Zealand, legislation along with national strategy and guidance documents, requires that persons conducting a business or undertaking (PCBU) **must** do all things reasonably practicable to keep workers and road users safe.

Safety is our number one priority – convenience comes second.

Legislation

Health and Safety at Work Act 2015 (HSWA)

legislation.govt.nz/act/public/2015/0070/latest/DLM5976660.html

What HSWA sets out to do

Everyone must have the best protection possible from workplace health and safety risks, as is reasonably practicable.

A good health and safety system relies on participation, leadership, and accountability from businesses, workers, and government. Everyone needs to work together.

HSWA sets out the principles, duties, and rights in relation to workplace health and safety.

What does this mean?

Everyone is responsible for safety and health

HSWA makes everyone's roles and responsibilities clear.

PCBUs are responsible for the health and safety of their workers and any other workers they influence or direct. They're also responsible for the health and safety of people at risk from the work they're doing. In relation to TTM, a PCBU is any entity that is controlling or impacting road workers and users.

If you create the risk, you manage the risk

Work-related health and safety risks must be identified and managed, so everyone is kept safe and healthy. This means looking for potential for work-related health conditions as well as the injuries that could occur.

Everybody involved must proactively do everything they can to identify risks and put in place controls to eliminate or minimise the risks to workers and road users such as drivers, passengers, pedestrians, and cyclists.

- All parties are responsible, whether they are the client, designer, or contractor from Director to CEO to manager to worker.
- Everyone has obligations to both workers and road users.
- Everyone gets the highest level of protection reasonably practicable.
- Everyone needs to proactively identify risk and put in place controls to eliminate or minimise the risks as far as reasonably practicable.

Local Government Act 2002 and 1974 (LGA)

2002 - legislation.govt.nz/act/public/2002/0084/latest/DLM170873.html

1974 - legislation.govt.nz/act/public/1974/0066/latest/DLM415532.html

The LGA provides for democratic and effective local government that recognises the diversity of communities in Aotearoa New Zealand.

The LGA:

- states the purpose of local government
- provides a framework and powers for local authorities to decide which activities they undertake and how they'll do them
- promotes the accountability of local authorities to their communities
- provides for local authorities to promote the social, economic, environmental, and cultural well-being of their communities, using a sustainable development approach.

Local government has a responsibility to protect and promote the safety of the community.

Section 145 of the LGA 2002 states:

145. General bylaw-making power for territorial authorities

A territorial authority may make bylaws for its district for one or more of the following purposes:

- **a.** protecting the public from nuisance:
- **b.** protecting, promoting, and maintaining public health and safety:
- c. minimising the potential for offensive behaviour in public places.

Section 353 of the LGA 1974 states:

353. General safety provisions as to roads

The council shall take all sufficient precautions for the general safety of the public and traffic and workmen employed on or near any road, and in particular shall—

- **a.** take all reasonable precautions to prevent accidents during the construction or repair by the council of any road, or when any opening is made therein by the council for the repair of drains or gas pipes or for any other purpose, and require other persons doing such work to take such precautions, by erecting barriers, devices to cause traffic to slow down, or fences across any such road or around any dangerous place therein, or otherwise, and shall cause, and require other persons doing such work to cause, any such dangerous place to be sufficiently lighted by night; and any person removing any such protective work, or removing or extinguishing any such light, without the authority of the council, commits an offence:
- **b.** require the owner or occupier of any land upon which there is any hole, well, excavation, or other place dangerous to persons passing along any road forthwith to fill in, cover, or enclose the same:
- **c.** whenever the public safety or convenience renders it expedient, require the owner or occupier of any land not separated from a road by a sufficient fence to enclose the same by a fence to the satisfaction of the council.

- Local government has responsibilities to the communities they serve
- These responsibilities include protecting, promoting, and maintaining public health and safety during road construction or repair.

Land Transport Management Act 2003 (LTMA)

legislation.govt.nz/act/public/2003/0118/latest/DLM226230.html

The purpose of the LTMA

The LTMA contributes to the aim of achieving an affordable, integrated, safe, responsive, and sustainable land transport system.

The LTMA covers things like:

- planning and investment in land transport
- social and environmental outcomes
- funding mechanisms.

What this means for the temporary traffic management industry

The TTM system is used by those who work on land transport funded projects to:

- contribute to a safer land transport system
- deliver projects that improve the safety of the transport system
- deliver projects in a safe manner.

Other Acts

There are other acts relevant to TTM, including the:

- Railways Act 2005 legislation.govt.nz/act/public /2005/0037/latest/ DLM341568.html
- Civil Defence Emergency Management Act 2002 legislation.govt.nz/act/ public/2002/0033/51.0/ DLM149789.html
- Fire and Emergency New Zealand Act 2017 legislation.govt.nz/act/ public/2017/0017/latest/ DLM6712701.html
- Policing Act 2008 legislation.govt.nz/act/ public/2008/0072/latest/ whole.html
- Utilities Access Act 2010 legislation.govt.nz/act/ public/2010/0098/latest/ whole.html

These acts require organisations operating on or next to roads to meet obligations that include safety, access, prevention or reduction of harm and damage, and civil rights.

While organisations have many different obligations relating to the operation of roads, the safety of people and managing risk is common to all.

National strategy

Road to Zero, New Zealand's road safety strategy 2020–2030

transport.govt.nz/assets/Uploads/Report/Road-to-Zero-strategy_final.pdf

Road to Zero places human wellbeing at the heart of our road transport planning. It outlines a road safety system that supports and expects road users to make good choices but acknowledges that we can all make mistakes. It values every life and the liveability of our communities, and it upholds the right of all of us to feel safe and arrive safely on our journeys across Aotearoa.

Our vision

An Aotearoa where no one is killed or seriously injured in road crashes. This means that no death or serious injury while travelling on our roads is acceptable.

Seven guiding principles support this vision:

- We promote good choices but plan for mistakes.
- We design for human vulnerability.
- We strengthen all parts of the road transport system.
- We have a shared responsibility for improving road safety.
- Our actions are grounded in evidence and evaluated.
- Our road safety actions support health, wellbeing, and liveable places.
- We make safety a critical decision-making priority.

Of these seven principles, three are important to TTM:

We promote good choices but plan for mistakes

We expect everyone to follow the rules and make good choices when they use the roads. Most serious crashes are not caused on purpose. Some people will take risks, but usually a crash is caused by a momentary lapse or error in judgement. Most crashes happen when someone makes a mistake. These mistakes should not end in serious injury or death.

We design for human vulnerability

In a crash, there's only so much force our bodies can take before we're injured. Our chances of survival or avoiding serious injury drops rapidly the faster we go. For a pedestrian, wheeled pedestrian, cyclist, or motorcyclist hit by a car, the limit is 30 km/h. In a side impact collision of two cars, it's 50 km/h and in a head-on crash of two cars, it's 70 km/h.

Children, the elderly, and people with disabilities are more vulnerable. With people getting older and more people walking, cycling, scootering, and using mobility aids, there are likely to be more vulnerable people using our transport network. Our road system design must recognise our vulnerabilities and plan for mistakes, so that a crash doesn't end in serious injuries or death.

We make safety a critical decision-making priority

Safety is as important as public health and sustainability. It must be given the same priority in our investment and regulatory frameworks. It is not optional or a nice-to-have add-on. This means that other objectives, such as increased efficiency, need to be achieved in a way that improves safety.

- Safety is a key focus for the transport system.
- An Aotearoa where nobody is killed or seriously injured in road crashes.
- Plan for mistakes and human vulnerability.

The Road to Zero strategy shifts our focus to designing for human error and vulnerability. Everyone must consider what might happen if somebody doesn't follow the TTM on a site. We need to make sure everyone is safe.

One Network Framework

The One Network Framework is our national classification system for roads and streets and is based on a movement and place framework. It's a tool to help establish transport network function and inform decision making and potential interventions for each road and street type. The framework also introduces classifications for different modes of transport, recognising that our roads and streets have different functions for different modes. Streets not only keep people and goods moving, but they're also places for people to live, work and enjoy. Other words for the function of a road and streets are purpose or role. Examples of the function of roads can be to:

- move freight lots of heavy vehicles
- allow access to private property or businesses
- facilitate travel between towns
- move buses
- allow pedestrians or cyclists safe passage
- allow people space to spend time socialising or shopping.

Go to nzta.govt.nz/onf for more information.

- Roads and streets are for people to use, our TTM response needs to be consistent with the needs of users.
- We no longer solely focus on traffic volume to inform decision making.
- We acknowledge all modes of transport walking, cycling, public transport, general vehicles and freight.
- We acknowledge roads and streets provide a place function a place where people live, work, shop, play, meet and gather with others.
- Temporary traffic management applied to the network should consider the function that a road or street performs, as well as the modes of transport, and the people that use them.

National guidance

WorkSafe Good Practice Guideline: Keeping healthy and safe while working on the road and roadside

The WorkSafe Good Practice Guideline has advice on how to manage the health and safety risks road and roadside workers are exposed to while at work. They can help PCBUs to meet their duties under the Health and Safety at Work Act 2015 (HSWA).

worksafe.govt.nz/topic-and-industry/road-and-roadside/keeping-healthy-safe-working-road-or-roadside

Examples of road and roadside work are shown in Figure 1.

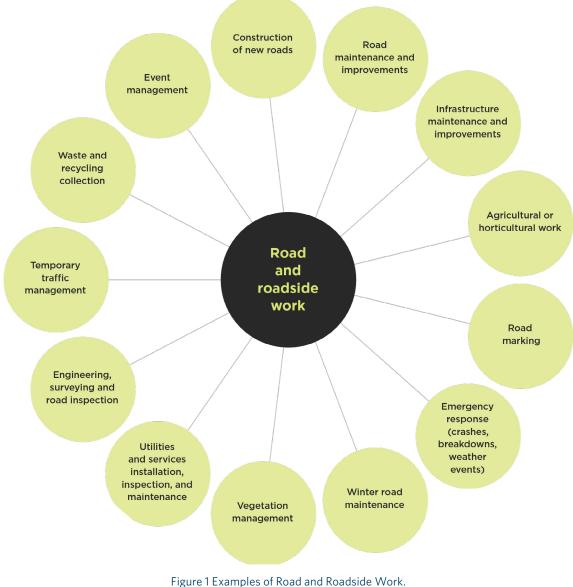


Image credit: WorkSafe

The WorkSafe Good Practice Guideline covers all work being done on a road or roadside. In these environments the worker and work activity create risk to the road user and the road user creates risk to the worker as shown in Figure 2.



Figure 2 Risk relationship between worker/work activity and road users. Image credit: WorkSafe

Road and roadside workers can be exposed to many risks to their health and safety. All PCBUs involved with road and roadside activities have a duty to keep everyone safe when working on or near roads.

What this means for the temporary traffic management industry

- All parties have obligations client, designer, and contractor from CEO to worker level.
- All parties have obligations to both workers and road users.
- You need to give the highest level of protection, as is reasonably practical.
- You need to proactively identify risk and controls to eliminate or minimise the risks as far as reasonably practical.

Top tip: Managing risk of harmful interactions

Unfortunately, harmful interactions to road workers are on the rise, especially from road users affected by road or roadside work. Useful guidance on how to manage the risk from harmful interactions can be found at: worksafe.govt.nz/topic-and-industry/ road-and-roadside/keeping-healthy-safe-working-road-or-roadside/part-b/15-0-mental-wellbeing

Everybody involved must proactively do all things reasonably practicable to identify risks and controls to eliminate or minimise the risks to workers and road users.

Why we need TTM

Workers and road users need to be protected from the hazards created by a work site. A good TTM plan can achieve this by following the key principles in figure 3.

Everybody – everybody involved has responsibilities for safety.

Safety – safety of everyone in the transport system.

Risk – we must proactively identify risks and work to eliminate or minimise these risks.

Mistakes - people make mistakes or take risks.

Vulnerability - people should not pay for mistakes with their lives.

Figure 3 TTM key responsibilities

All workers and road users go home safe every day

