Activating dormant potential for a new TTM world

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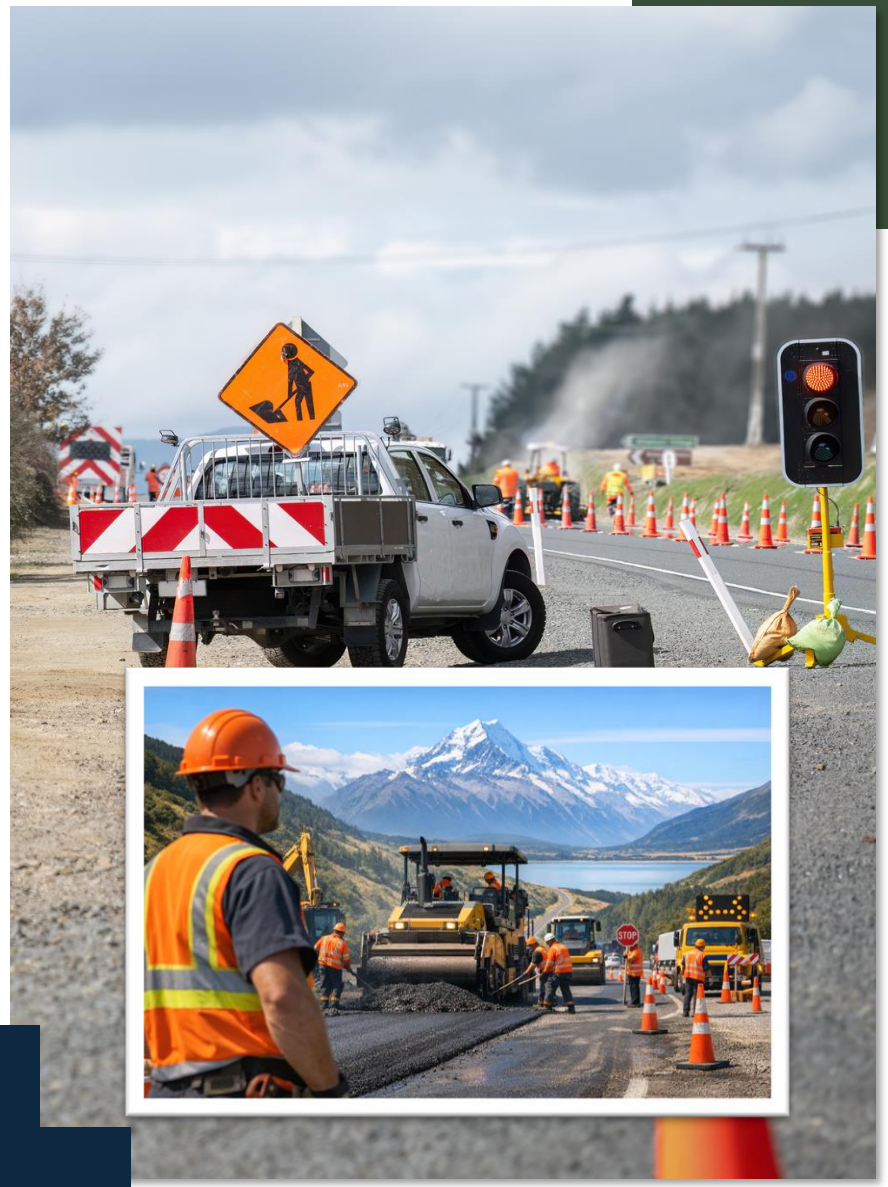
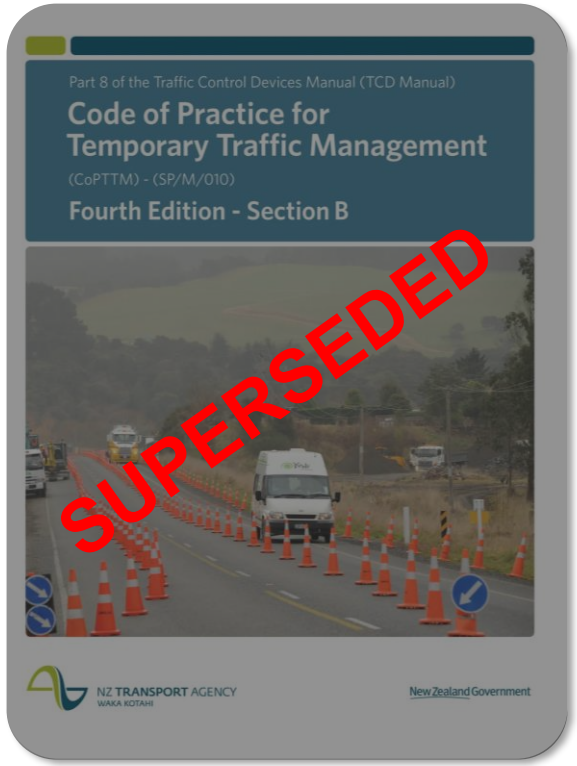
Agenda

- Background
- Roles and Responsibilities
- Enabling Dormant Potential
- Call to Arms



Recap – What is this new TTM world?



- Led to a compliance culture across the industry
- Inhibited ability to right size TTM for the specific work activity
- Seen as a mechanical process tagged on at the end
- Reduced emphasis on health and safety outcomes being at the core

- Gives effect to HSWA 2015
- Focuses first on the risks associated with the work activity
- Planning allows for appropriate management of risks and right sizing response
- Clarifies ownership of risks to those who are best placed to own or deal with them

Emergency Weather Events

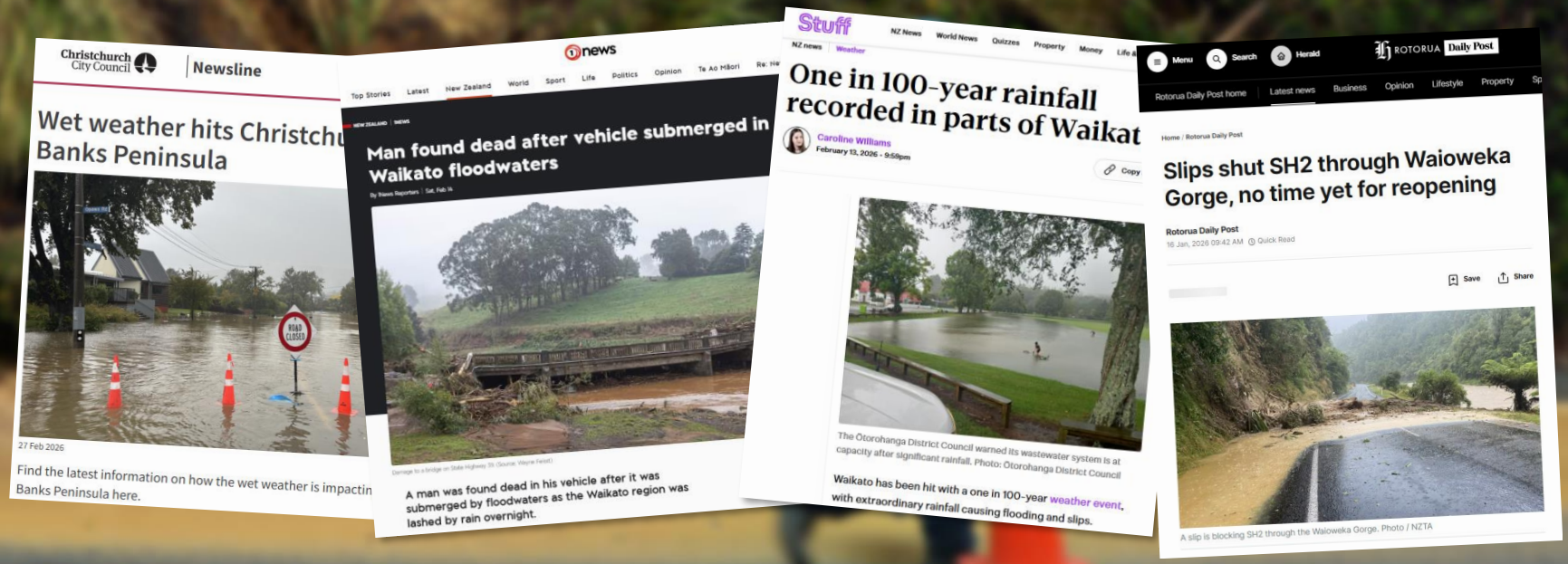
NZTA Annual Expenditure on Emergency Works

2013/14

$148M

2023/24

$666M



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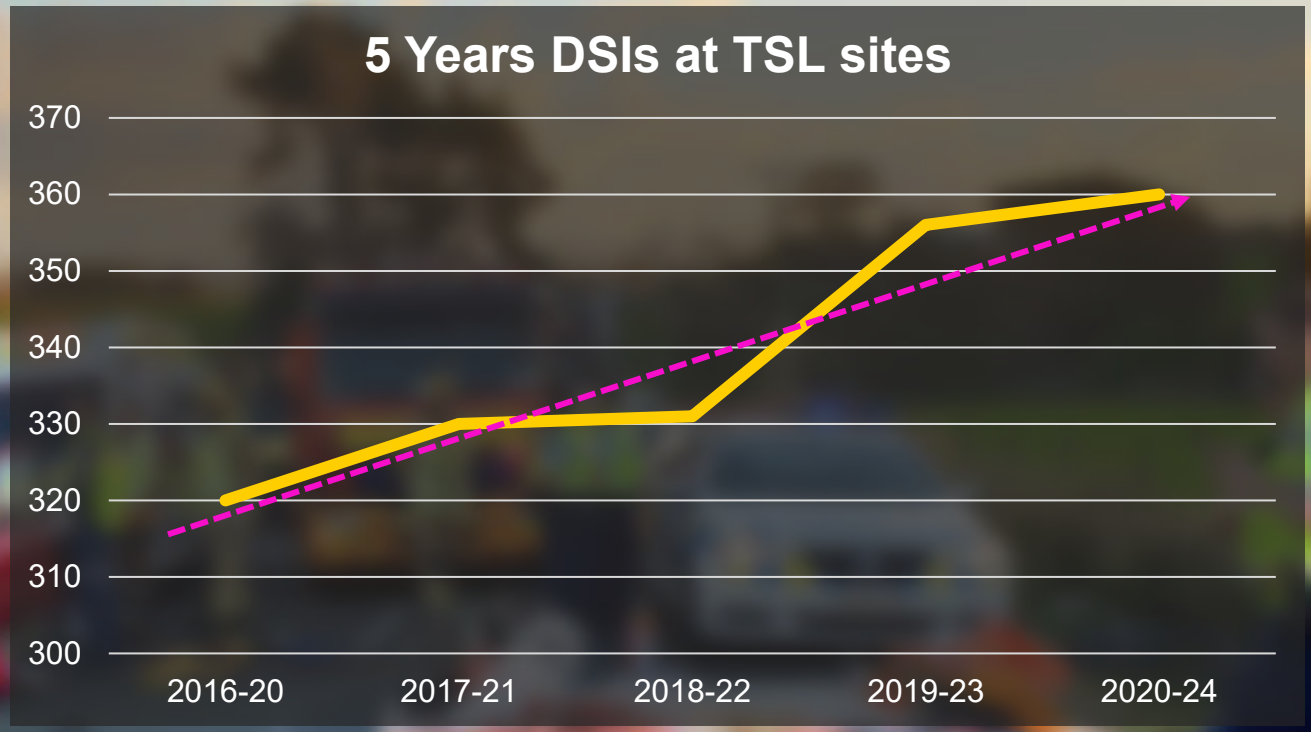
What the statistics say



Head-on, run-off road (ROR) and rear end crashes account for **78.8% of DSI** casualties for TTM-related crashes

Inappropriate speed is a crash cause factor for

83%

of fatal crashes

60% of ROR crashes occur on **gravel or loose chip** with **70%** of them occurring when the site is **unattended**

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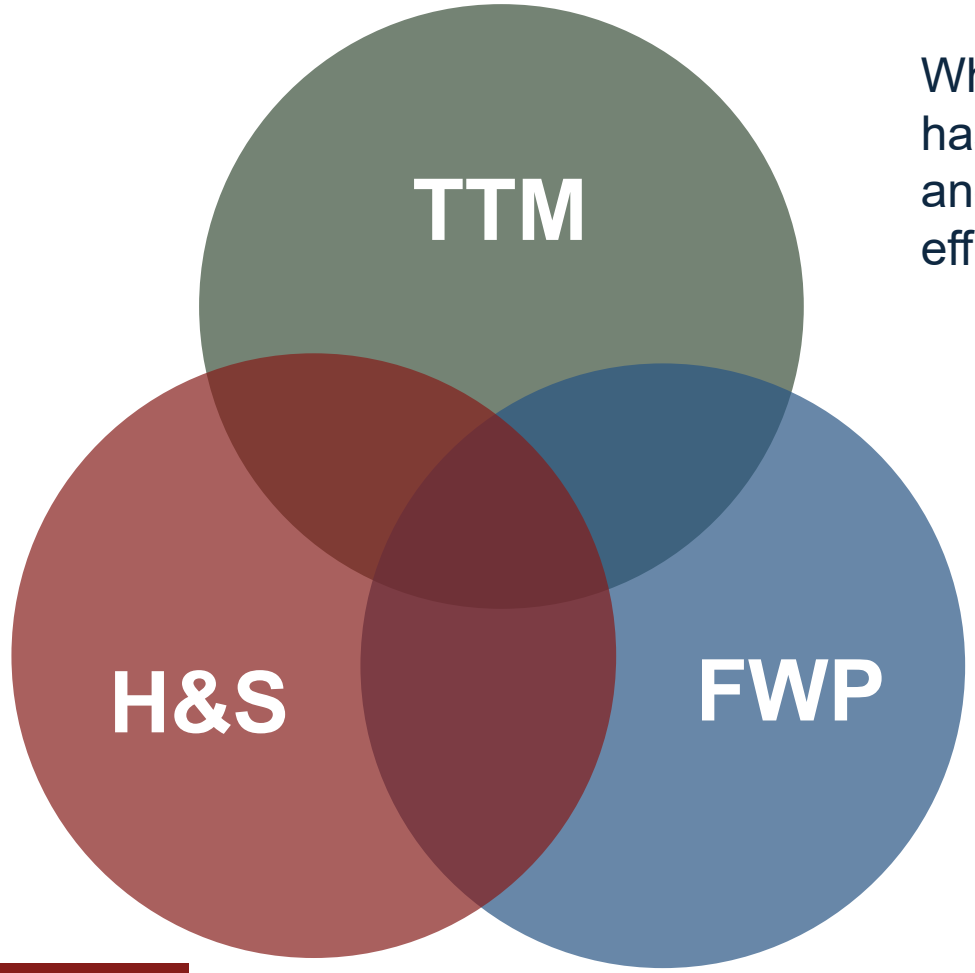
It’s not just TTM anymore

Recalibrating our mission



Whilst we started this journey looking at TTM, the future pathway has identified synergies with FWP and H&S that we can’t ‘unsee’ and makes a lot of sense to tie together to achieve safety, efficiency and productivity improvements

TTM Practice – Knowledge and learning that improves risk-based application for TTM planning and delivery

Forward Works Planning – Coordination of work activity on our road networks enabling improved efficiency and productivity

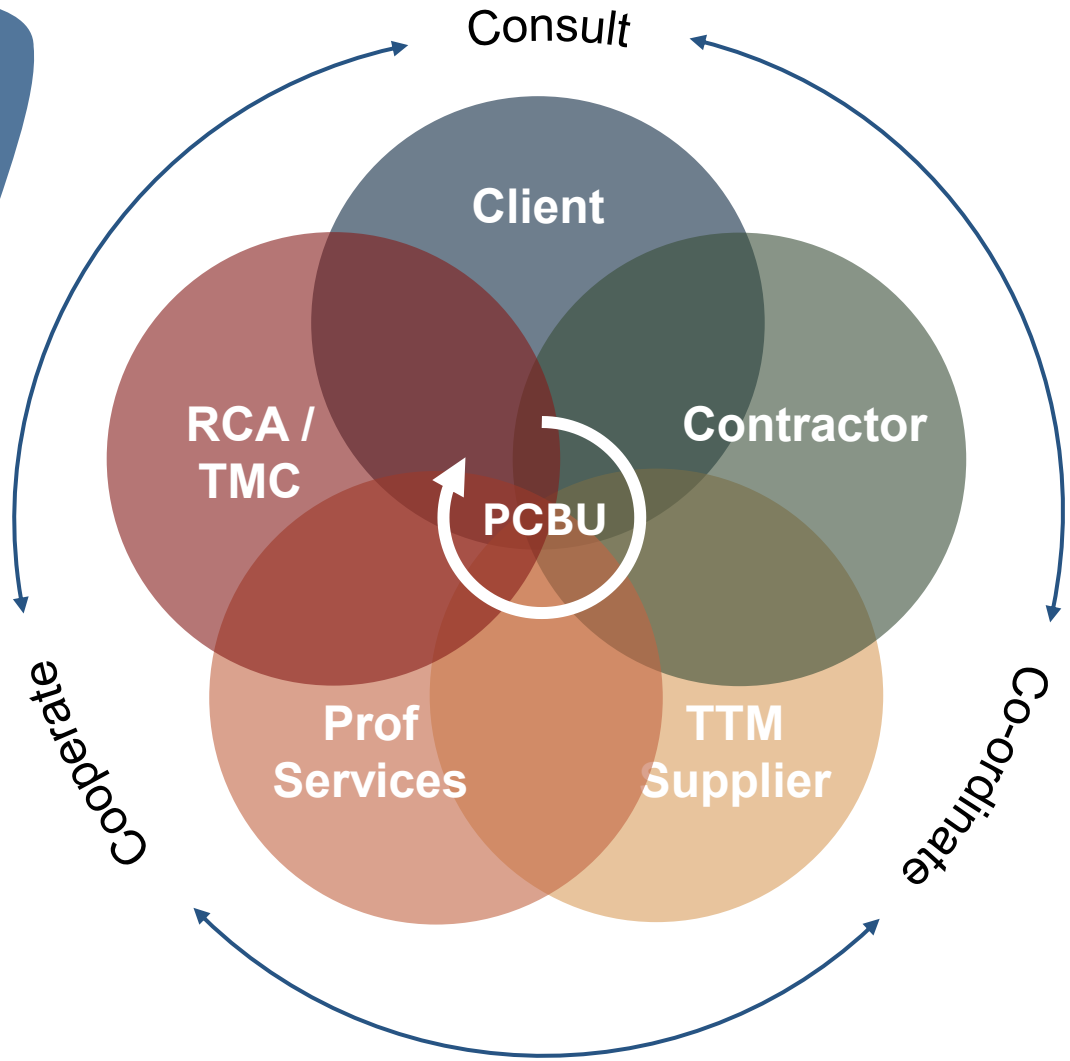
H&S Practices – Improving the realised health and safety benefits for road users and road workers at worksites

Traditional Roles under COPTTM

- Planning for work activities are often done in isolation with little consideration or involvement of TTM / Traffic Engineering expertise (by contractors)
- Siloed work planning (client, contractor and industry as a whole) resulting in reduced focus on optimisation of work activities
- TTM Planners and TTM skills brought in near the end of planning and typically have COPTTM
- RCAs / TMCs as TMP approvers are primarily only checking for compliance against COPTTM

Roles under NZGTTM

- The 3 C's are legal obligations under HSWA when multiple PCBUs are involved
- They encourage open communication, effective and consistent safety measures and joint management of risks



- There is recognition of our respective PCBU responsibilities under HSWA 2015
- Each party contributes different perspectives to consideration of risk
- Clients and Contractors still often retain lead roles
- A ONE team approach enables additional benefits

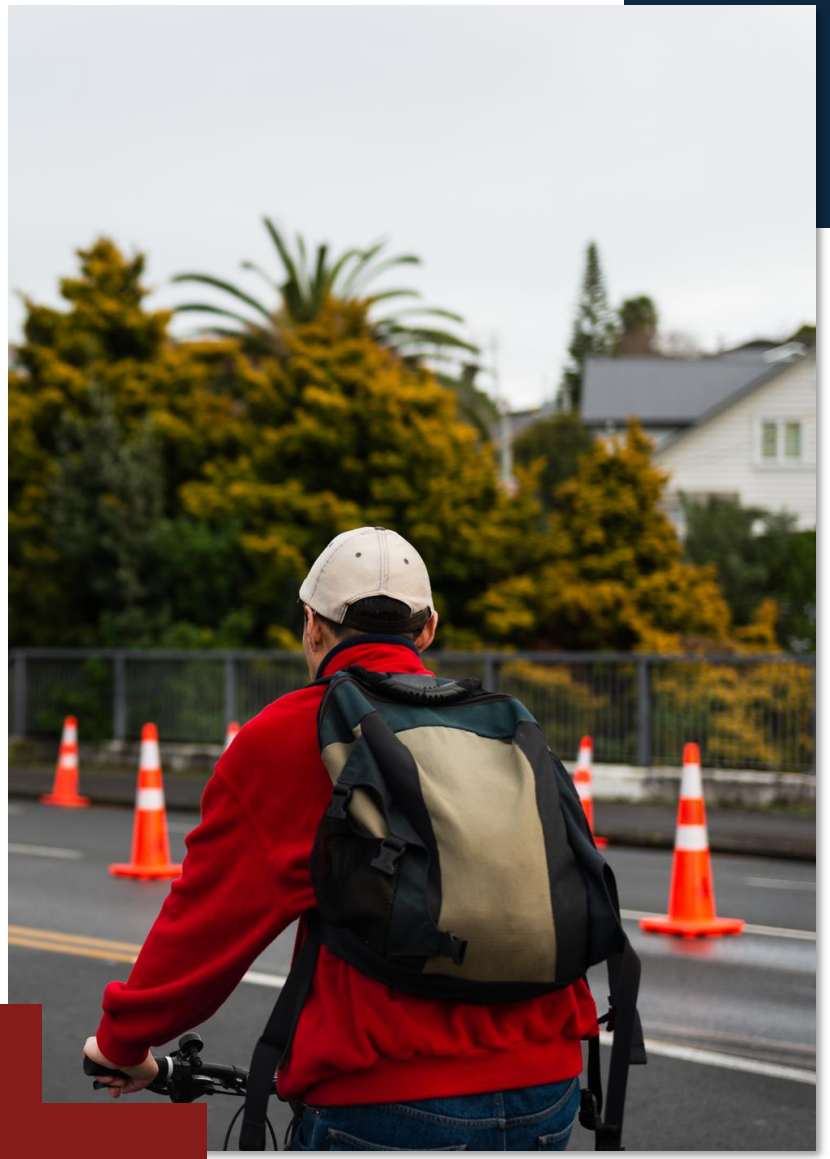
Dormant Potential

What's currently missing that would add significant value to the risk-based approach?

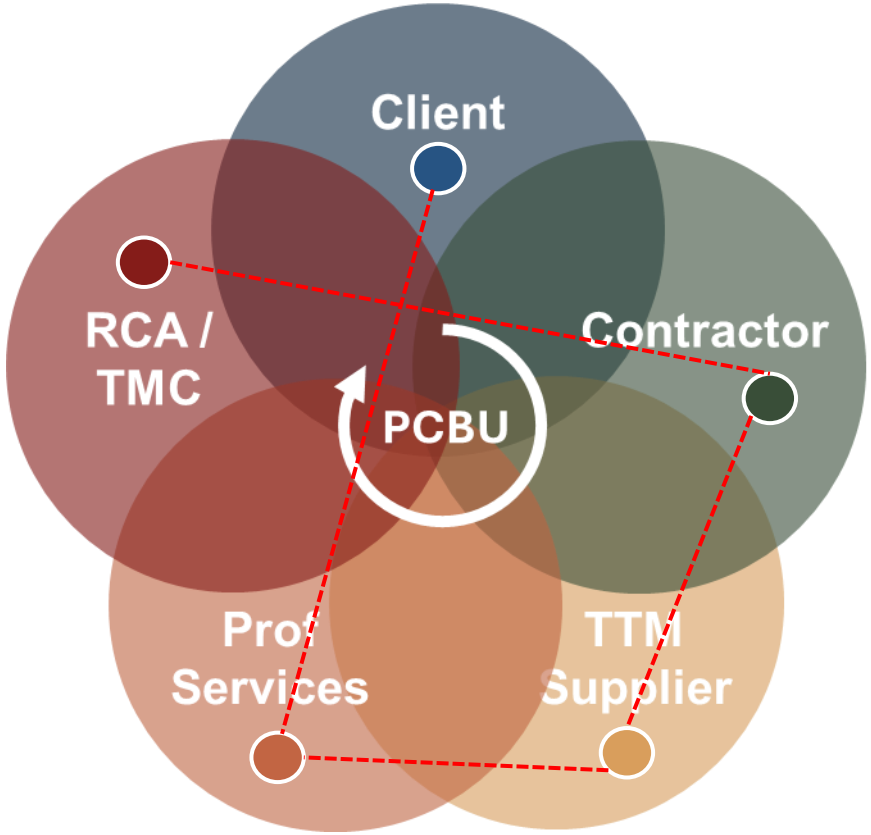
- Complexity of road environment and TTM setup
- Human behaviour
- Traffic engineering
- Road Safety Engineering
- Network performance monitoring and optimisation
- Sequencing and works efficiency

Road blocks –

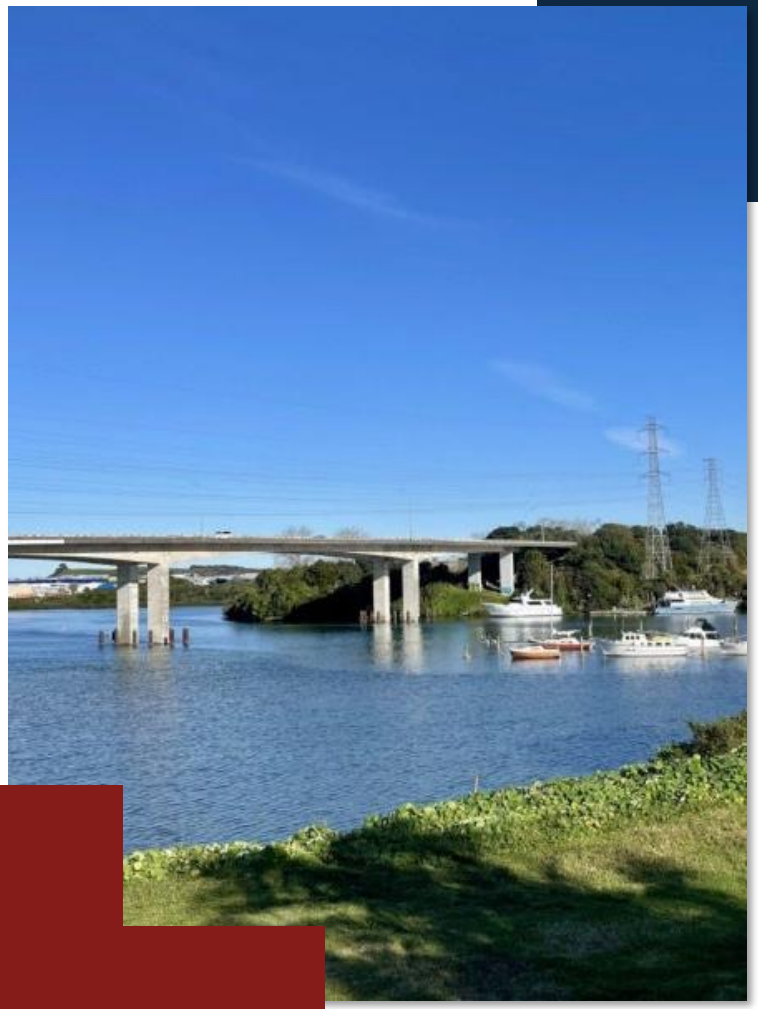
- Resident / customer dis-satisfaction.
- Clients not understanding their duties
- Misguided sense of accountability
- RCA staff not understanding their duties
- Contractors underestimating the risks and costs
- Misperception of legislation and regulation
- Reality is unrecognised value



Waipuna Bridge Joints Replacement [Case Study]



- Complex work activity with high high network disruption risk informed team skills needed
- Client (AT) commissioned prof services to take an early look alongside procuring contractor
- Singular project team approach to plan and implement operation



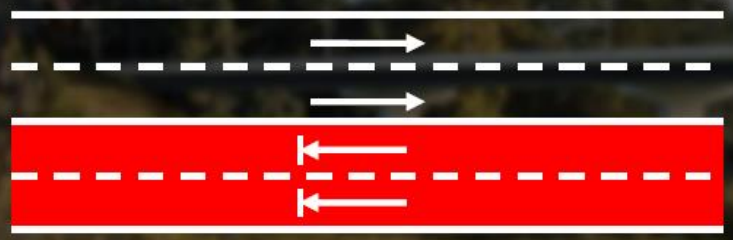
ORIGINAL PLAN

Works planned to start over Christmas | New Year and would require closing one direction of travel completely at a time for 10 days each

UP TO

3000

vehicles per hour disruption during the peak period of a typical commuter day



20 days of 50% capacity loss including **5 days** of commuter peak disruption

1 DIRECTION OF TRAVEL

WOULD SIGNIFICANTLY AFFECT EMERGENCY SERVICES

Single direction closures would require extensive detours – affecting key trips like Boxing Day sales!

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DOING THINGS DIFFERENTLY

Early integrated planning that is informed by risk

Having the right skills and capabilities working together

OPTIMISED OUTCOME

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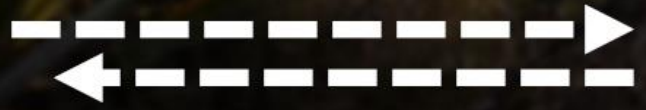
OPTIMISED OUTCOME

Adopted a contra-flow arrangement by creating a gap in the concrete barriers to channel traffic to the opposing direction

Additional 1-2 weeks of preparation NIGHT works in November prior to the main work

15 days of 50% capacity loss including **NO days** of commuter peak disruption

2 DIRECTIONS OF TRAVEL ENABLED



1-Lane in each direction at ALL times

DIVERSION ROUTES DEPLOYED WHEN NEEDED TO ADD CAPACITY

ECONOMIC COST SAVINGS

$5.7M

For not affecting 5 days of commuter traffic

What the sector needs now

How can we help?

FOR ALL:

- Champion a risk-first approach and link real-world observations and context to our thinking
- Help build evidence and case studies and share your learnings with others
- Collaborate early and break down silos between contributing parties

CONTRACTORS

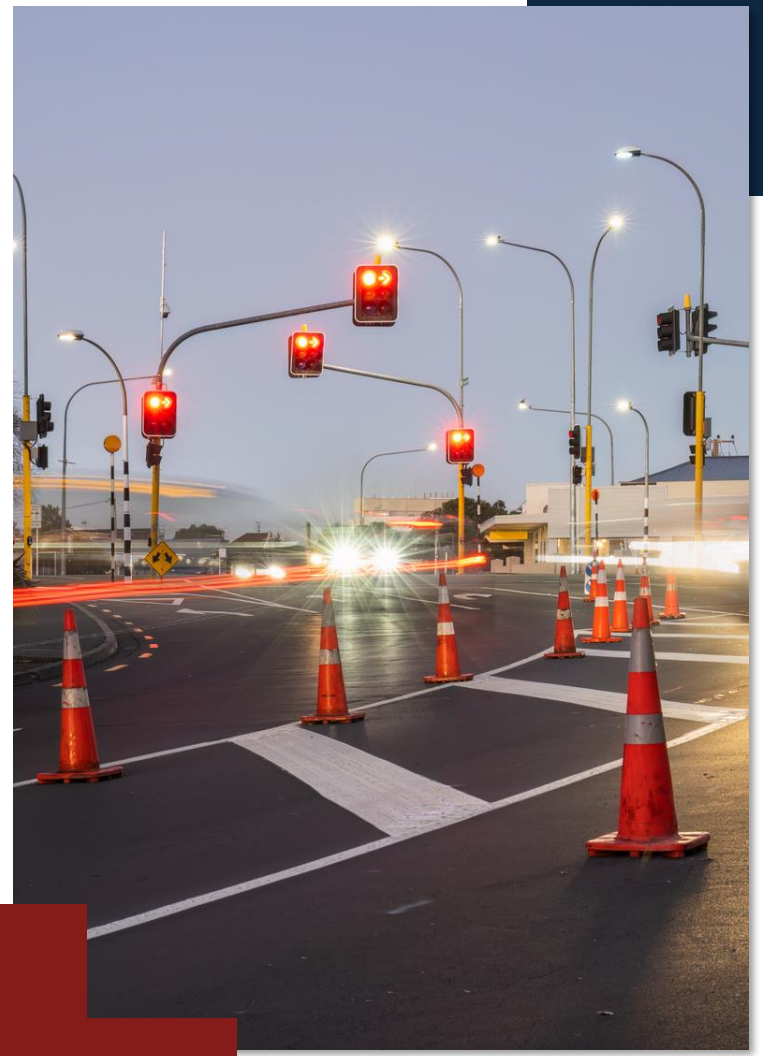
Review the definition of value and outcomes for work activities and consider the contributing parties that can help

CLIENTS

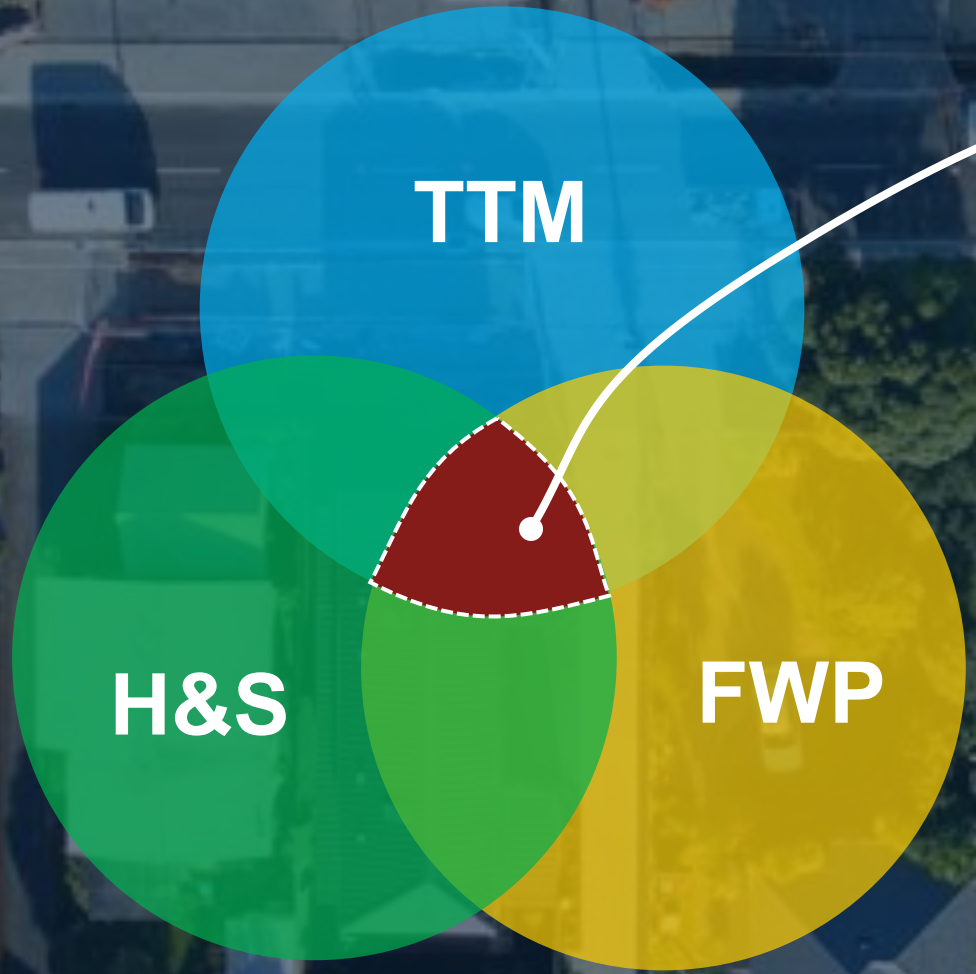
Be clear on the outcomes for your projects and network and lead from the front to instil the 3C's

PROF SERVICES

Support upskilling and identification of value add outcomes e.g. road safety and network disruption reduction



Wrapping Up



- It's not just about road cones – it never has been!
- Improved safety, efficiency and productivity requires a sweet spot focus between TTM, FWP and H&S
- It's not necessarily a new way of working but where we need to go does require conscious activation