

# Driving efficiency in road maintenance

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# Current state

- We manage a \$67 billion asset that depreciates at \$730m a year.
- NZTA manages 11,500km of state highways and supports 90,000km of local roads – that's more than 100,000km combined.
- Current spend is not enough to sustain asset quality given current network pressures.
- Capacity to deliver is another constraint. We can still optimise our performance to maximise delivery with current resources.
- Our current Network Outcome Contracts (NOCs) are at end of term and being renegotiated prior to a change of model, but short-term commercial roll overs carry an increased cost.
- Cost for delivering renewals has increased 21% since 2021. Cost per km is up to \$33k, from \$29k.
- Most recent satisfaction surveys of the state highway network shows 82% satisfaction, down 3% from previous years. This has been attributed to increasing impact of severe weather events.
- Pothole problem: Specifically, surface condition satisfaction is down to 65%, from 73%. Surface condition is one of the primary drivers of satisfaction (along with travel time, value for money and other driver behaviour).



# GPS 2024-34

Draft Government  
Policy Statement  
on land transport  
2024-34

March 2024

Not Government policy

CONSULTATION DRAFT



A commitment to four key transport priorities:

- Economic growth and productivity
- Safety
- Value for money
- **Increased maintenance and resilience**

Re-focused Pothole Prevention Activity Class

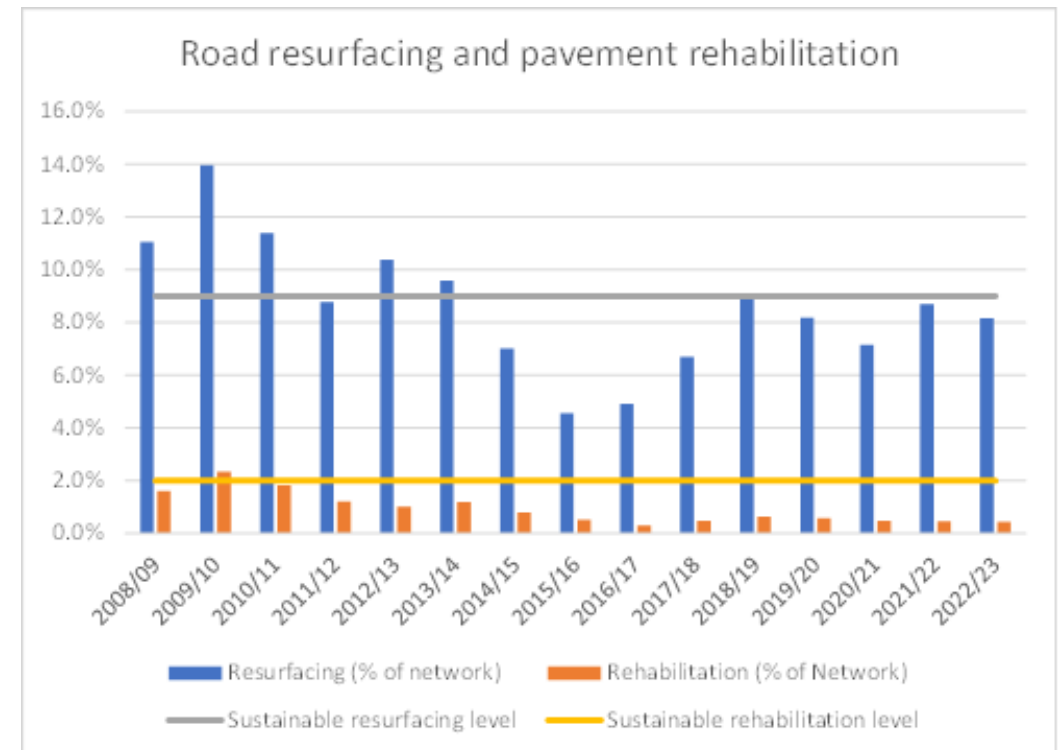
- *Specifically for resealing, rehabilitation and drainage*
- *To achieve 2% Rehab and 9% Resurfacing of total network per annum*

# Long term efficiencies

Overall, long term efficiencies will be derived from investment into a significant uplift in high quality renewal activities over a sustained period of time.

- Over a 10-year period this will reduce the volume of reactive maintenance the contractors are required to perform.
- Reducing rework will also deliver efficiencies through removing the consumption of resources multiple times at the same location for diminishing returns.

It has been below the sustainable level for some time (particularly rehabilitations):



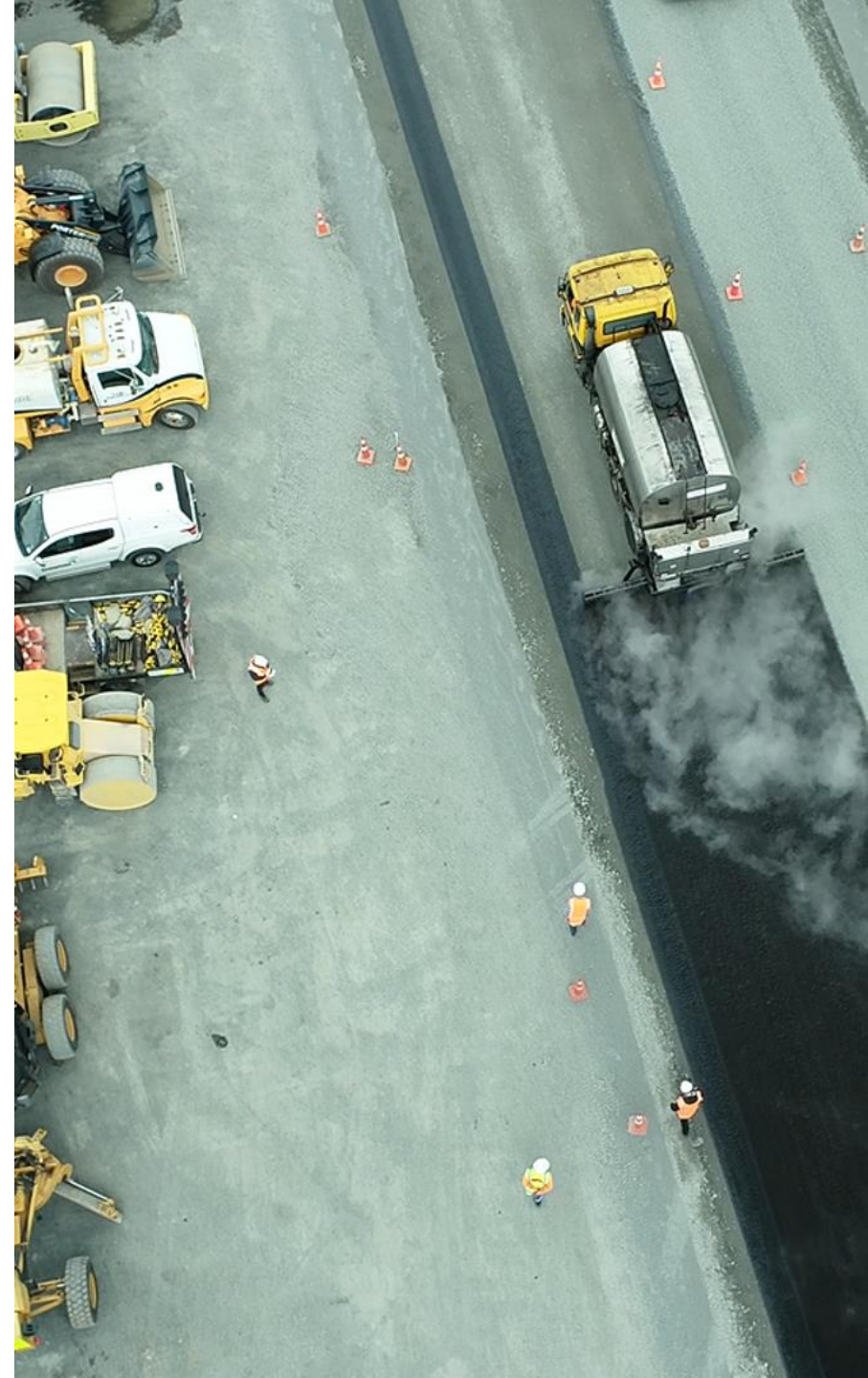
# TTM Efficiency and Effectiveness

## What are we doing?

- 'TTM focus month' in February where NZTA regional teams completed a national level audit of TTM at 800 worksites on the network.
- They found that 20% of the sites had TTM that was not necessary and the majority (69.8%) of the sites were unattended due to either reseal sites under aftercare or nightworks sites visited during the day.

## Move from CoPTTM to NZGTTM

- We are rolling out the new risk-based approach to TTM across our state highway network, including pilots with Downer, Fulton Hogan, HEB, Higgins and WSP. We're also updating our contracts to ensure a consistent national approach to risk-based TTM planning, set up, maintenance and monitoring across our network.





# Delivery efficiencies

## Case Study : SH1 Wellington Urban Motorway

As a main road leading into the capital city, intersecting high density residential areas and 57,646 vehicles travelling in and out of the city daily, it's difficult to schedule roadworks on.

Completing works under lane closure or stop/go is inefficient, a safety hazard for crews and road users, and more expensive.

**The solution:** A series of southbound and northbound night-time closures. The aim was to get as much done all in one go to save time, money, and minimise disruption. Most importantly, it was safer for our crews within the closure area.

Planning of this closure began 6 months in advance. This included coordination of all works between WTA internal teams, transport projects, local councils and utilities. We communicated early and extensively so that customers, stakeholders, residents, businesses and the general public were well aware so they could plan ahead.

**The outcomes:** In the 3-week window, WTA renewed 30,974m<sup>2</sup> of asphalt, installed 21 electronic signs, 260m of barrier, completed 16 structural inspections, cleaned many areas of graffiti, and cleared over 1km of vegetation and trimmed trees. Other activities included clearing litter, replacing signs, clearing drains and replacing damaged sump gates.

We saved \$154,000 on traffic management and removed 125 hours of high-risk activities from our workers by using a combined closure. That's 125 hours of time given back to our crews. There were 68 TTM tasks covered in three weeks, and only 15 site set ups.

# Integrated Delivery Model

A new Maintenance Delivery Model with

- NZTA as an intelligent client, taking more control of asset management
- Flexible contracting opportunities across industry tiers
- Competitive tension alongside collaboration
- Standardisation of design and smarter methodologies/treatments

Longer, more secure, planning cycles

- That build contractor investment confidence
- And lead to improved industry capacity & capability



# And our thinking has to change

There needs to be a real shift in thinking to “whole-of-life” costs

- Stronger = longer service life
- Stronger = less maintenance over time
- Less maintenance/better condition = carbon reduction
- Higher up-front cost = Lower whole-of-life cost
- Less disruption to network users (resilience/road works)

# We're on the way

The problem is clearly identified

The Government has given strong direction and funding through the draft GPS:

- 24-hour pothole fix
- Efficient TTM and effective delivery
- NZTA is re-shaping its delivery model and its way of operating

