



# Future Roads

The New Zealand roading industry conference

8-9 November 2023  
Hamilton

## BUILDING RESILIENCE INTO YOUR ROADING NETWORK

- ▶ Network future-proofing
- ▶ Leadership and government strategy
- ▶ Smart traffic signal technologies and control centres
- ▶ Sustainability and emissions reduction
- ▶ Technology
- ▶ Procurement
- ▶ Materials

**NEW  
FOR 2023**  
Smart traffic signal  
technologies and  
control centres



### FEATURED SPEAKERS



**Chris Bunny**

Waka Kotahi  
NZ Transport Agency



**Emma Foley**

Uber



**Dean Kimpton**

Auckland Transport



**Siobhan Procter**

Wellington City Council



**Dawn Baxendale**

Christchurch City  
Council



**Darren Wu**

Beca

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# NEW ZEALAND'S FUTURE ROADING EVENT

Future Roads is a two-day conference and exhibition that provides a forum for strategy and execution in the New Zealand roading industry.



## MESSAGE FROM INFRASTRUCTURE NEW ZEALAND

Infrastructure New Zealand is proud to support the 2023 Future Roads conference. INZ recognises the roading network's important contribution to New Zealand's productivity and wider transport system. Our team looks forward to engaging with this year's topic – Building Resilience – as our sector discusses and debates the future of New Zealand's roads in the face of climate change and other pressing challenges. See you there.

**Nick Leggett**, *chief executive officer* – Infrastructure New Zealand



## MESSAGE FROM CIVIL CONTRACTORS NEW ZEALAND

Civil Contractors New Zealand has represented New Zealand's road construction companies since 1944, and is proud to support the 2023 Future Roads conference. The contracting community plays a vital role in the development, construction and maintenance of New Zealand's roading network – on both state highways and local roads. Future Roads provides a great forum to discuss ideas for how we can progress the country's roading networks, together. I look forward to seeing you there.

**Alan Pollard**, *chief executive officer* – Civil Contractors New Zealand



## FUTURE ROADS 2022 HIGHLIGHTS

*"It was nice to get a glimpse at where the 'big players' in the industry are wanting to go"*

*"Relevant, well hosted, valuable networking"*

*"Strong content. Delegates seemed very engaged"*

*"Great range of speakers, topics and exhibitors"*

*"Different level of attendees that we sometimes can't reach"*

*"Well organised. Good range of topics"*

- **307** attendees
- **132** organisations
- **31** exhibitors
- **strong local government attendance**

7.25am REGISTRATION AND COFFEE | TRADE EXHIBITION OPEN

8.00am MIHI WHAKATAU

8.15am WELCOME FROM THE MC

Greg Ward



## LEADERSHIP

8.25am LEADERS' PANEL: TURNING THE FOCUS TO 2024

Future Roads falls after the election and roading is sure to be a hot topic on the new government's agenda. Priorities have already started shifting and a spectrum of policy options present themselves. Will expensive multi-modal transport projects be paused while rebuild, resilience and maintenance issues receive top billing? What is getting funding attention in council transport budgets? In this panel, we hear what's on the list from top executives around the country.

- have we got the balance right around investing in new modes of transport vs maintaining the existing networks, and what about the trade-off around critical network components?
- is the roading funding system fit-for-purpose?
- incorporating resilience into the system and what is the thinking around managed retreat
- is decarbonisation still being achieved and what are the costs?

Panelists: **Chris Bunny** – Waka Kotahi NZ Transport Agency, **Siobhan Procter** – Wellington City Council, **Dawn Baxendale** – Christchurch City Council, **Simon Dyne** – Fulton Hogan, **Darren Wu** – Beca  
Facilitator: **Adrienne Miller** – UDINZ

9.30am SPONSOR ADDRESS

10.00am KEYNOTE ADDRESS: SMARTER ROADING SOLUTIONS AND THEIR ROLE IN A MORE DYNAMIC INFRASTRUCTURE

Nick Leggett was appointed chief executive of Infrastructure New Zealand in 2023 after previously leading Transporting New Zealand. In this speech, we hear about INZ's view of key priorities for the sector and where he intends taking the organisation.

- local government's role in the funding discussion for roading
- alternative materials – what is their role in the New Zealand roading network?
- private financing for roading projects and reflections on recent PPP experiences
- reflections from end users – the Transporting New Zealand experience
- how to engage with central government

**Nick Leggett** – *chief executive*, Infrastructure New Zealand

10.30am MORNING TEA AND NETWORKING

## FOCUS | PROCUREMENT

11.00am INTRODUCTION FROM THE CHAIR

Greg Ward

11.05am THE NTRO OPPORTUNITY FOR ROADING AUTHORITIES IN NEW ZEALAND

- plans for NTRO in New Zealand
- opportunities for local roading authorities to optimise the roading dollar
- what the Waka Kotahi partnership will mean and what is the focus
- off-the-shelf technology and solutions from NTRO for New Zealand

**Michael Caltabiano** – *chief executive officer*, National Transport Research Organisation

11.35am THE CASE FOR EARLY CONTRACTOR INVOLVEMENT (ECI)

What are the benefits of engaging contractors during the design and conceptualisation phase of a roading project?

ECI can provide the client with early advice about the appropriateness and buildability of a project's design. A multi-stage tender process can still be applied later on, opening the project up to competitive bids

- how many stages to conduct my tender over and when should I seek early contractor involvement?
- how much detail to disclose to the contractor?
- does this speed up my project?
- projects suited to ECI
- cost advantages

## FOCUS | TECHNOLOGY

11.00am INTRODUCTION FROM THE CHAIR

**Fraser May** – *communications and advocacy manager*, Civil Contractors New Zealand

PANEL DISCUSSION: DEVELOPMENTS IN HEAVY MOBILE EQUIPMENT MANAGEMENT, TECHNOLOGY AND PROCUREMENT

There have been huge developments in heavy roading equipment technology in recent years including in areas such as fuel efficiency and emissions, GPS integration and guidance systems, payload meters, machine controls, and centralised fleet performance data collection and monitoring.

Bringing new smarts to roading construction, repair and maintenance jobs offers benefits for the client, but what are the costs and practicalities.

**Evan Yeoman** – Higgins

Facilitator: **Matt George** – Pro-Manage Consulting

INTERNATIONAL SPEAKER: THE BENEFITS OF FIBRE-REINFORCED ASPHALT PAVEMENTS

- water-proofing properties of fibre-reinforced pavements
- understanding the costs of deployment
- how to blend fibre into your asphalt mix
- deploying utilities underneath
- case study of a recent deployment in Australia
- carbon reduction benefits

\*delivered online with live intro and Q&A link-up

**Phil Blankenship** – *consulting engineer and owner*, BATT Lab, USA



12.10pm

### INTRODUCING THE THEORY OF CONSTRAINTS IN PROCUREMENT



This year's Future Roads launches a new workshop session and action plan around dealing with constraints in the roading procurement space.

**Caroline Boot** – *director*, NZ Procurement and Probity Services

12.30pm

### NETWORKING LUNCH IN THE EXHIBITION AREA

#### FOCUS | PROCUREMENT

1.30pm

#### WELCOME BACK FROM THE CHAIR

**Greg Ward**

1.35pm

#### PROCUREMENT WORKSHOP



Identifying, understanding and dealing with constraints in roading procurement processes from a client and supplier perspective.

How it works:

- delegates will be sent survey questions in advance and asked about the constraints they deal with in the procurement of roading services. There are two separate surveys for clients and suppliers
- these survey results will be collated and circulated
- at the workshop delegates will break out into tables with one designated host per table. There will be a balance of clients and suppliers on each table
- each table will have a dedicated host who will help the table work through some of the constraints identified in the survey and come up with possible solutions and actions
- results are then shared amongst the workshop and findings are sent out to all participants after the conference

Facilitator: Greg Ward

Supported by: NZ Procurement and Probity Services

2.00pm



2.35pm

#### FOCUS | PROGRESSION

#### WELCOME BACK FROM THE CHAIR

**Fraser May** – *communications and advocacy manager*, Civil Contractors New Zealand

#### THE NEW ROAD AHEAD – RMA REFORMS

- what are the key changes and what do they mean for the roading sector?
- when will the changes take effect and what are the processes to get the new system in place?
- how can the roading sector best be involved from the start to shape the policy, planning and culture changes needed to deliver efficient and effective outcomes for the sector?

**David Allen** – *partner*, Buddle Findlay

#### INTERNATIONAL SPEAKER: FROM OVERLAYS TO FULL PAVEMENTS – A US PERSPECTIVE ON SUSTAINABLE CONCRETE PAVEMENTS

- long-term performance of US concrete pavements and concrete overlays to existing pavements
- economic impacts and benefits of concrete pavements
- cost-benefit analysis vs alternatives
- how to optimise and reduce the environmental impacts of transportation infrastructure

**Eric Ferrebee** – *senior director of technical services*, American Concrete Pavement Association (ACPA)

#### TRANSITIONING TIMES FOR TEMPORARY TRAFFIC MANAGEMENT

- explore the fundamentals of this change
- how it's being operationalised
- the potential impacts on TTM delivery

**Dave Tilton** – *chair*, TTM Industry Steering Group



3.00pm

### AFTERNOON TEA AND NETWORKING

3.30pm

#### LABOUR FORCE CONSIDERATIONS; THE OUTLOOK FOR 2024

Roading and infrastructure more broadly look set to continue to receive substantial funding post-election. New Zealand's well-publicised infrastructure deficit and weather-related rebuilds span a number of sectors which often draw on the same pool of labour. This has been constrained in recent years and can drive up the cost of new projects and routine maintenance.

#### BUILDING RESILIENCE INTO YOUR ROADING NETWORK

3.55pm

#### ROAD OWNER PROFILE: MARLBOROUGH DISTRICT COUNCIL



Marlborough District Council is one of the country's six unitary authorities, giving it local and regional council responsibility. Its roading network maintenance contracts include state highway (NOC) and local road responsibility, managed jointly with Waka Kotahi. It experienced high-rainfall events several years ago and has been building up its network resilience. Hear from Mark on how they run their network.

**Mark Wheeler** – *chief executive officer*, Marlborough District Council

4.25pm

#### INTERNATIONAL KEYNOTE: FLOOD REPAIRS – 10 TIPS FOR EFFECTIVE RECOVERY & REDUCING THE IMPACTS FROM FUTURE WEATHER EVENTS



Queensland experienced significant weather-related events in 2021 and 2022, causing widespread damage to its roading network. Since then, it has embarked on significant rebuilding and recovery efforts including the managed retreat of some areas.

**Jimmy Scott** – *general manager*, Queensland Reconstruction Authority

5.00pm

#### WRAP-UP – END OF DAY 1

5.10pm

#### NETWORKING DRINKS

6.15pm

#### FUTURE ROADS GALA DINNER

The ticketed dinner will feature a three-course meal, great networking and entertainment.

# PROGRAMME – DAY 2 (THURSDAY 9 NOVEMBER 2023)

7.45am REGISTRATION AND COFFEE | TRADE EXHIBITION OPEN

8.30am DAY TWO WELCOME AND RE-CAP

## INTERNATIONAL KEYNOTE

8.40am UBER – FUTURE OF URBAN TRANSPORT



Uber is a major user of the roading network in New Zealand and is known for disruption and innovation.

In this presentation we hear from Emma Foley, GM – New Zealand, on the future of road transport: shared, electric, multi-modal, and ultimately, working with Uber's partner Waymo, autonomous. Emma will also speak on:

- how urban design elements will become increasingly important, including utilising kerb space
- advice for council planners around EV charging infrastructure

**Emma Foley** – *general manager - New Zealand, Uber*

9.10am AUCKLAND ROADING OUTLOOK AND VISION



New chief executive Dean Kimpton takes us through the priorities and challenges discovered after his first 7 months at the helm of Auckland Transport.

**Dean Kimpton** – *chief executive officer, Auckland Transport*

9.40am PANEL DISCUSSION: BUILDING RESILIENCE INTO OUR LOCAL ROADS

Severe weather events have exposed our roading networks throughout the country, not just in 2023 but going back a few years now. This has changed the conversation dramatically around funding, materials, design, communication, and broader outcomes. So what are councils and transport agencies doing to navigate these challenging times?

Panelists: **Johannes Ferreira** – Carterton District Council, **Alan Wallace** – Auckland Transport

Facilitator: **Angela Parsonage** – AECOM

10.30am MORNING TEA AND NETWORKING

## FOCUS | RESILIENCE

11.00am INTRODUCTION FROM THE CHAIR

**Stacy Goldsworthy** – Winstone Aggregates

11.05am THE SH25A TAPARAHI REBUILD AND THE QUESTION AROUND FURTHER RESILIENCE FOR THE COROMANDEL AREA



- how it really started – what happened to SH25A?
- project scope – what are we dealing with?
- bridge, bypass, build back – how the decision was made
- the rebuild – how we're building future resilience into the transport network – from the ground up

**Jo Wilton** – *regional manager infrastructure delivery Waikato / Bay of Plenty, Waka Kotahi*

11.30am FUTURE-PROOFING THE EAST COAST ROADING NETWORK



A massive response has been underway in Hawke's Bay since cyclone Gabrielle first devastated parts of the region's infrastructure in February 2023. The roading network in particular was severely damaged, cutting off some parts of the community. Following the initial response and recovery, Waka Kotahi has moved into the rebuild phase with a view to rethinking network design and construction with an eye on improved resilience into the future.

**Jaclyn Hankin** – *regional manager - maintenance & operations, Waka Kotahi*

12.10pm WATERPROOFING WITH BITUMEN EMULSION STABILISATION



New Zealand's roads have traditionally been built with granular, flexible pavements. These pavements provide a cost-effective means of delivering and maintaining a large network of roads. The risk with granular pavements is that they are moisture susceptible and can rut, crack and pothole when these pavements are saturated.

- waterproofing granular materials whilst maintaining the properties of a flexible pavement
- results from Enviro Base

**Nik Vishwanath** – *product manager, Road Science*

## FOCUS | SMART TRAFFIC SIGNALS

11.00am INTRODUCTION FROM THE CHAIR

**Sean Lewis** – *consultant Green Signal and former chairman, Signals NZ User Group (SNUG)*

11.05am OVERVIEW AND FOOTPRINT – SIGNALS AND TRAFFIC CONTROLS IN NEW ZEALAND

A stocktake of the deployment of signals technology across New Zealand by council area.

- where is the growth occurring? New deployments
- signals, CCTV, crossings, school speed zones, pedestrian detection systems, radars
- uptake of new technologies

**Kahn Day** – *business development manager, CSL Infrastructure on behalf of SNUG (Signals NZ User Group)*

11.30am PANEL DISCUSSION: INDUSTRY DEVELOPMENTS AND CONSIDERATIONS FOR SIGNALS TECHNOLOGY DEPLOYMENT

There is increased demand for traffic signals systems to manage trends in changing traffic flows including the uptake of cycling, electric vehicles, pedestrians and shared spaces. The industry has also changed in terms of the roles of road owners, contractors, specialists and consultants. This panel provides advice for asset owners, consultants and the wider industry.

- benefits of factoring in signals early on during the design phase
- early contractor engagement and the role of collaboration
- deciding when to deploy signal technology – traffic volumes, traffic types
- the case for a council to join a Traffic Operations Centre group
- privacy and security considerations around CCTV and number plate recognition
- P43: The new traffic signals spec

Panelists: **Matthew Hoyle** – Mott MacDonald, **Duncan Wilson** – Tauranga City Council

Facilitator: **Sean Lewis** – Green Signal

12.30pm NETWORKING LUNCH IN THE EXHIBITION HALL



**FOCUS | MATERIALS**

1.30pm

**WELCOME BACK FROM THE CHAIR****Stacy Goldsworthy** – Winstone Aggregates

1.35pm

**THE FUTURE OF SAND SUPPLY FOR ROADING INFRASTRUCTURE**

Sand and aggregate is the most consumed products in the world after water. New Zealand's insatiable demand for these products makes us the third largest consumer of sand and aggregate in the world per head of population, and 60% of this demand goes into roading and roading infrastructure.

Currently sand comes from rivers, land based alluvial quarries, and dredging of marine environments around Auckland. This is supplemented by a small quantity of manufactured sand.

Environmental concerns and the impacts of climate change are impacting heavily on the availability of sand from traditional sources, at a time when demand is increasing significantly.

**Wayne Scott** – *chief executive*, The Aggregate & Quarry Association

2.00pm

2.10pm

**NATIONAL PAVEMENTS TECHNICAL GROUP (NPTG) UPDATE**

The NPTG is an industry sector group established in 2008 consisting of pavement experts from Waka Kotahi, consultants, contractors, and industry associations. Its purpose is to identify, develop, document, maintain & facilitate best practice for road pavement design, materials and construction activities in New Zealand. It also provides a formal industry gateway for Waka Kotahi documents and directives.

- update on specifications work – aggregates, bitumen, cement
- update on research activities
- update on current members

**Michelle Farrell** – *technical manager*, Civil Contractors New Zealand

2.25pm

2.30pm

**RECYCLED MATERIALS CAN PROVIDE SUPERIOR PERFORMANCE TO HIGH QUALITY VIRGIN AGGREGATES**

In situ or ex situ recycling of aged/existing pavement materials provides a low-cost solution to not only rejuvenate weak, moisture sensitive materials with substantial performance benefits and increased resilience – but has the added benefit of carbon emissions reduction when compared to reconstruction with new materials.

**Allen Browne** – *executive general manager – technical and innovation*, Hiway Group

3.00pm

3.30pm

**AFTERNOON TEA AND NETWORKING****PRIZE DRAWS****STAKEHOLDERS**

3.40pm

**PANEL DISCUSSION: MAYORS' FORUM**

For New Zealand to take a lead in sustainable roading, a co-ordinated approach will be required for design, construction, maintenance and materials-sourcing activities. Early planning should consider the sourcing of local materials. Consultants will need extensive local knowledge and design specs should match local geology and material availability.

- funding constraints: with all the asset management will in the world, there is still not enough money to maintain our roads. How do we address this problem?
- are there more cost-effective methods for low volume road maintenance – oil on roads?
- uneconomic roads and bridges and the question around managed retreat vs rebuild
- must-have or nice to have? How are we procuring our roading maintenance contracts and what value and cost do we attach to social procurement, sustainability, and the race for new modes of transport?
- should we prioritise strategic routes for maintenance and restrict heavy traffic to using these?
- where should the money be spent and what is really important – a safe and efficient network?
- analysing the central government election promises

Panelists: **Paula Southgate** – Hamilton City, **Campbell Barry** – Hutt City, **Moko Tepania** – Far North

4.40pm

**CONFERENCE WRAP-UP AND CLOSE****FOCUS | SMART TRAFFIC SIGNALS****WELCOME BACK FROM THE CHAIR**

**Sean Lewis** – *consultant Green Signal and former chairman*, Signals NZ User Group (SNUG)

**EMERGING TECHNOLOGIES: ADDRESSING LOCAL NEEDS ASSOCIATED WITH TRAFFIC SIGNALS, DEVICES AND DATA**

An overview of how traffic signals and systems can better cater for buses, active modes of travel, and support crime prevention.

Recent advancements in technology can support multi-modal optimisation and provide new tools for obtaining data to support smarter decision making.

**John Kinghorn** – *transport systems engineer*, Hamilton City Council

**WELLINGTON TRAFFIC OPERATIONS CENTRE (WTOC): CURRENT SERVICES AND OUR VISION FOR THE FUTURE**

The Wellington Transport Operation Centre (WTOC) manages signalised intersections 24/7 in real time across: Greater Wellington, New Plymouth, Whanganui, Queenstown, Timaru, Dunedin, Nelson, Ashburton, and Oamaru where it can make real-time traffic signals adjustments. Hear about this and the services the traffic signals team provides.

- intelligent traffic systems
- current challenges and opportunities
- optimisation service to local councils
- asset data collection
- design maintenance and coordination
- future plans

**Steen Bohanna** – *technical services manager*, Waka Kotahi

**QUICK FIRE 10-10-10: SIGNALS PROJECTS UPDATES FROM AROUND THE COUNTRY**

In this session we hear from three separate Road Controlling Authorities (RCAs) about signals projects planned for their jurisdictions.

**SESSION 1**  
(10 minutes)

**SESSION 2**  
(10 minutes)

**SESSION 3**  
(10 minutes)



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# EVENT HIGHLIGHTS

Future Roads will be the highlight of the roading sector calendar, featuring:

- expert speakers presenting within the New Zealand context
- insights into the New Zealand regulatory system
- best practice local community engagement
- case studies from local and international operators
- trade exhibition
- roading technologies and process innovation
- training and education opportunities
- industry gala dinner



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WWW.FUTUREROADS.CO.NZ**

**BOOK NOW**  
**8-9 NOV**  
HAMILTON



REGISTRATION TYPE	DATES	PRICE*
Full in-person delegate	8-9 Nov	\$1950
Gala dinner single ticket	8 Nov	\$185
Gala dinner table for 10	8 Nov	\$1850

\*Prices above are exclusive of GST



## EXHIBITION

Future Roads will feature an indoor exhibition catering for heavy equipment, traditional booths and other interactive delegate experiences. Key companies and suppliers will be present, showcasing products, information, services and technology.



## THE VENUE

Claudelands is an award-winning conference, meeting, function, exhibition and events venue in Hamilton, New Zealand.

It is located at the corner of Brooklyn Road and Heaphy Terrace, Claudelands, Hamilton, about a 10-15 minute walk from the CBD.



## NEW IN 2023

### START-UP INNOVATION HUB



This new exhibitor area is specifically for smaller start-up companies operating in the technology and services end of the industry. It is designed to showcase the latest thinking and innovations.

Proudly held in Hamilton,  
New Zealand

[waikatonz.com](http://waikatonz.com)

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## SPONSORSHIP OPPORTUNITIES

- Align your business with the key influencers and leaders in the sector
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