

Trafinz NEWSLETTER

OCTOBER 2022

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THE BEST Australasian Road Safety Conference

Trafinz jointly hosted the 56th ARSC in Ōtautahi Christchurch (28–30 September 2022), together with the Australasian College of Road Safety (ACRS) and Austroads. With 467 registrations attending in person together with 233 virtual attendees from 18 countries, the 2022 conference was the largest in ARSC history.

One ACRS delegate, who has attended ARSCs for some 30 years, told us that he thought the New Zealand ACRS/Austroads/Trafinz conference was the best he had ever been to, especially for its programme and content. And of course, the seamless running of the conference was largely due to the tireless efforts of Glenda Harding and her team who have been stalwart organisers of Trafinz conferences for many years. The virtual nature of the conference, and a brand new venue, was both challenging and innovative.

The keynote presentation by Claes Tingvall on the first day, presenting at some unearthly hour from his home in Sweden, provided the techs with some band width challenges, but was successfully completed, albeit in two parts. The Abley sponsored conference app also ensured virtual attendees had the same opportunity as everybody there to ask questions of presenters. And of course there will be a complete record of all sessions for attendees to catch up on the other three of the four concurrent sessions that they couldn't attend. The conference theme was "Changing today for tomorrow".



NOTABLE QUOTES FROM ARSC:

PROF. CLAES TINGVALL

- "Establishing and assigning a safety footprint to every organisation's value chain will put road safety at an equal footing to health, climate and equity"
- "Differentiating vehicles by 'city safe' and 'highway safe' will be the next evolution of ANCAP measures"
- "Cities mandating 30km/h speed limits unless there is strong evidence that higher speeds are safe will provide safety and quality of life for everybody"

FABIAN MARSH

 "How do we implement Road to Zero at scale – what needs to be different?"

MARTIN SMALL

 "Road safety (in Vietnam) is like dealing with unexploded ordinances – if they don't kill, they injure and maim"

STEVE ABLEY

 "CarbonWise helps employers to measure and report on people's commuting emissions, so they can encourage and potentially incentivise those same people to make better transport choices".

PROF. SIMON KINGHAM

- "Air pollution contributes to premature deaths of 3300 (NZ) adults in one year"
- "Maori are more than twice as likely to be killed on our roads"
- "There is little empirical evidence to support the proposition that travel time saving should be central to transport economic
- analysis"
- "The optimum speed limit in city traffic for minimising Co2
 emissions for a small petrol hatchback is around 28km/h and for
 minimising NOx is around 20km/h"
- "Slower speed limits in towns would be the single thing that would help impact inequality"
- "We need to change the narrative so that people understand that speed limits are not just about safety"
- "Emissions reduction is a priority; we can't electrify our way out of it; we have to change behaviour"

DR ROD CARR

- "One barrel of oil is estimated to do the equivalent of 10,000 hours of labour – at the current value of oil that equates an hour of labour to be worth 1 cent"
- "80% of greenhouse gas emissions globally are a result of combustion of fossil fuels in the open air – we need to stop it!"
- "Since the Paris Agreement in 2015, the global fossil fuels industry
 has spent \$4.5 trillion looking for and finding new reserves of fossil
 fuels, increasing their balance sheet reserves by 60% this is nuts!"
- "We like the idea that we will change when we are good and ready, that someone else will change first, and that we will change but just not now – we need to figure out how to get mode shift in transport, at pace, at scale, now!"



PROF. SUSAN KRUMDIECK

- "The question of the day, well the week, is what are we going to do"
- "2 degrees increase is not a target, so something huge has to happen now"
- "We require an 80% reduction in fossil fuel production"
- "Transition Engineering this is about looking at what we really have, not fantasising about what we might have, understanding we need an 80% downshift, so what happens next"
- "Oil sector has been making \$2.8 billion profit each day for the last 50 years the only way to change this outcome is convincing them they could make more money by making an 80% reduction in production"

NICOLE ROSIE

- "There is a disconnect between the ideology, the policy, which
 is quite conceptual, and the pragmatism and reality of trying to
 implement that to communities that want the outcome but don't
 understand those pieces and how they fit together we haven't
 joined the dots for people, and it becomes really difficult when
 issues become politicised"
- "Those communities, women with five children, don't have the option of getting on a bike and biking, they are literally living day to day, so that openness and honesty in the conversation doesn't allow these women to say I want climate but I actually need to drive my car we have to stop this very binary thinking that if you are in for climate you can't fly on a plane to Fiji we need to get more sophisticated in the way we talk about some of this stuff, far more inclusive in the conversation, because some of the voices that need to be heard the loudest are the least heard in the conversation at the moment."

Complimentary—— AWARD ANNOU Trafinz registrations ANNOU The Waka Kotahi Auckland S presented with the 2022 Trafing at the APSC din

As co-hosts, Trafinz were able to distribute a number of complimentary conference registrations. Reports from these attendees are available on the Trafinz website <u>here</u>. Here are some excerpts:

The impact of road safety on climate change and understanding road safety outcomes for Māori were the two biggest takeaways for me. We have already been talking in our teams about Simon and Dulcie's presentations, particularly about not being able to electrify out way out of the problem and it taking a thousand cups of tea to build partnerships. I want to say a big thanks to Trafinz and its members for their support to attend the conference (Hugh Wilson).

What really resonated with me was the call to action from Prof. Susan Krumdiek. As practitioners we are in a privileged position to do something about climate change and safety. The term "Transition Engineering" really helps frame our thoughts and actions to help us break out of the status quo. Thanks to Trafinz for the complimentary registration (Jamie McPherson)

There were so many amazing speakers and people at the conference. Some of my most memorable quotes for me were "Designing streets (for people?)"; "Prevent what is preventable"; and "We don't put enough value in slow journeys". I came back to the office buzzing about the conference and talking to anyone who would listen, about how good it was and trying to share learnings with others who could not make it. (Sarah Thomson)

It was reassuring to see the work we are doing also being rolled out in other countries, it really helps give you confidence in our work. Standouts for me were the presentation on Road to Zero; the information on the 'hearts and minds' promotional campaign; the fact Australia and New Zealand are aligned in their approach to road safety through Sweden's holistic approach of "vision zero" through a safe system approach; road safety is everyone's business; addressing each risk area in isolation is not enough to bring deaths down to zero; and counties must embrace an approach that looks at mobility systems as a whole. Some resonating quotes: "We can't electrify our way out of climate change" (Dr Rod Carr) and "any policy change now has to go through with a climate change lens" (Prof Simon Kingham) (Sarah Anderson).



AWARD ANNOUNCEMENT

The Waka Kotahi Auckland Systems Management Alliance were presented with the 2022 Trafinz Highly Commended Award for Safety Leadership at the ARSC dinner, which was attended by the Hon. Michael Wood, Minister of Transport.





Grant Gordon, Sam Pasley, Hon. Michael Wood, Andrew Stevens, Dr Ingrid Johnston and Prof. (Emeritus) Ann Williamson

Over a decade ago the Alliance recognised that suicides and potential suicide attempts on their network outweighed the number of Death and Serious Injury (DSI) incidents, potentially threefold!

Examples of work since undertaken to bring about change in this area include:

- Influencing the risk analyses within 2007 Transit NZ Thrown
 Object Risk matrix and Waka Kotahi Bridge Manual guide;
- Ensuring a future side screen retrofit is able to be undertaken should the risk profile of the structure change, if new bridge designs do not include side screens;
- Inclusion in the low cost / low risk budgets funding stream and linking into upgrades of existing infrastructure associated with walking and cycling improvements for the retrofit of other structures; and
- Guiding designers to sympathetically incorporate screens into designs so that they are barely noticeable, such as on the Dilworth and Westgate bridges where aesthetically pleasing screens are seamlessly incorporated.

With a potential 80% reduction in suicide risk and 10 sites already protected, a positive outcome has clearly been made for our most vulnerable citizens. As this also reduces thrown object risk and enhances pedestrian and cyclist amenity and safety, the benefits are far wider.

Trafinz congratulates the Waka Kotahi - Auckland Systems Management team for their work.

SAVE THE DATE



The next Trafinz conference will be held 5–8 September at Cordis Hotel, Tāmaki Makaurau Auckland.



Funding the future land transport system

We are pleased to share with members the email below from Te Manatū Waka, Ministry of Transport.

How should we fund the land transport system in the future?

Travelling easily and efficiently is a central part of our New Zealand way of life and doing business, and we all have expectations and ideas about how the system should work and how the network should perform. The way we travel is also changing as we respond to big trends and challenges like climate change resilience and the design of our cities.

We are undertaking a long-term project about how we pay for Aotearoa New Zealand's land transport system in the future.

This month we are running an innovative public conversation forum that allows us to listen to a wide range of people and understand different perspectives about 'who should pay for what' as we see the demands and expectations on our transport system changing. If you can, and if you are interested, please send this around your organisation or network, or to anyone you think may like to participate. Feel free to join in yourself.

Let us know what you think...

Te Manatū Waka Ministry of Transport is inviting people to share their ideas and vote on the ideas of others in an interactive online conversation called Polis.

This will be open from 4 October to early November – and participants can check in throughout that time to see what else has been said. It's an anonymous and engaging way to share thoughts, opinions or ideas about things like fairness, access, climate response and costs of transport in Aotearoa New Zealand.

You can access the conversation here: https://www.complexconversations.nz/future_transport/

More information about the topic and other details are also through that link.

There will be other opportunities and approaches for engaging on this for your organisation, but we hope this conversation sparks some interest as a different way of talking about some pretty big and complex funding challenges.

Ngā mihi nui Demand Management & Revenue Team **Te Manatū Waka Ministry of Transport**

Trafinz ——submissions

Trafinz has made two submissions on national government proposals:

- 1. Reshaping Streets regulatory changes, and
- The impact of automated vehicles operating on Aotearoa New Zealand roads

The full transcripts of Trafinz submissions can be found here.

Reshaping Streets regulatory changes

The Minister of Transport is proposing a set of regulatory changes to make it easier for local authorities (like councils) to make street changes that support public transport, active travel and placemaking. These proposals would enable local authorities to make street changes more efficiently and provide new ways for communities to be involved in changes that affect them.

The proposed regulatory changes include:

- a new 'Street Layouts' land transport rule for local authorities, as road controlling authorities (RCAs), to use for changing street layouts, piloting street changes, restricting vehicles, establishing Community Streets and School Streets, and for deciding on other street changes
- amending sections in the Local Government Act 1974 (LGA1974)
 covering pedestrian malls, transport shelters (like bus shelters), and temporary road closures
- changes to other rules and regulations so that local authorities can reduce speed limits as part of pilots, trial Traffic Control Devices (TCDs) more effectively, and to make legislation more accessible.
- Trafinz's submission supported the proposals for a set of regulatory changes.

Trafinz's submission strongly supported integrating the Accessible Streets regulatory package with this proposed Reshaping Streets regulatory changes. Ideally, there would be one new rule developed that combines the draft Streets Layout Rule with the draft Land Transport Rule: Paths and Margins 2020, so as to minimise the number of Rules which need to be referenced and to minimise conflicting requirements between these documents and the existing Road User and Traffic Control Devices Rules.

Long Term Insights Briefing (LTIB): The impact of automated vehicles operating on Aotearoa New Zealand roads

The Ministry of Transport has decided to focus the first LTIB on the impact of autonomous vehicles operating on New Zealand roads. This includes their potential impact on New Zealand's transport system and the wellbeing of New Zealanders. Autonomous vehicles (AVs) meet the requirements of a LTIB as they have not received adequate consideration to date and are likely to affect the wellbeing of New Zealanders at least 10 years into the future.

Trafinz ———submissions

AVs are predicted to fundamentally change the transport sector. There is, however, a high degree of uncertainty in understanding their potential impact. On the one hand, AVs could significantly improve road safety outcomes and contribute to a more integrated, accessible and cost-effective transport system for New Zealand. However, they could also introduce new road safety risks (such as hardware and software failures and malicious hacking), and make new demands on transport services, infrastructure and regulations. While AVs are still an emerging technology, over the next 5-10 years (and beyond) they are likely to have a major impact on regulatory systems, equity, congestion, the use of public spaces, economic development, labour markets, the health of New Zealanders and the way we connect with each other. Not all of these impacts will be positive.

Trafinz's submission noted that without adequate national policy and protocols for the introduction of AVs, the proliferation of private Internal Combustion Engine (ICE) AVs in particular could be counterproductive from economic, efficiency and safety perspectives. Trafinz noted it would be highly desirable to encourage AVs primarily EVs and 4–5 star safety rated at a minimum.

Trafinz commends the content provided in the briefing document as it has been taken from a wide group of transportation specialists, and will enable the conversation started by Trafinz almost a decade ago to commence again.

Trafinz's submission identified areas that need to be clearly investigated to inform decision makers of risks, created through the levels of exposure of AVs mixing with the current, old fleet. These risks can be measured under exposure, likelihood and severity potential within the transportation system for any scenario of AV deployment on public roads.

Trafinz believes the deployment of L4–5 AVs is a major, bold step in transportation for NZ. Such a step is commensurate with the historical change from horses and coaches to ICE vehicles.

Trafinz submitted that:

- the step to AVs is inevitable, and providing for it should be well
 planned and based on the extensive evidence amassed in NZ since
 the introduction of the ICE vehicles, together with recognition of the
 current traffic mix and age of the fleet on our roads today;
- for the ICE vehicle deployment, evidence shows that both Local and Central Government have had to constantly, and retrospectively, address unplanned failures, incorrect forecasting, and address unintended problems, both in the context of the fleet and the network; and
- historically this has been due to policy and network funding decisions based on insufficient empirical evidence, resulting in poor safety and emission outcomes and under investment in the network.

A new framework for speed management

Earlier this year a new rule for setting speed limits took effect (the Land Transport Rule: Setting of Speed Limits 2022) replacing the previous 2017 rule. Under the new rule, all road controlling authorities (RCAs) are required to use speed management plans to set out why and how they propose to better manage speed to make it safer for people to move around. Developed every three years to align with the National Land Transport Programme (NLTP) cycle, speed management plans provide the full picture of how RCAs will integrate safety-related infrastructure improvements, speed limit changes and safety camera placement to manage speed.

Guidance on speed management

The <u>Speed Management Guide: Road to Zero edition</u>, developed by Waka Kotahi, was published in July. This guide provides information and guidance to help RCAs develop speed management plans that will deliver consistent implementation of safe and appropriate speed limits over time, and make informed, accurate and consistent speed management decisions in their communities.

MegaMaps: Road to Zero edition

Waka Kotahi has also developed <u>MegaMaps: Road to Zero edition</u> to accompany the Speed Management Guide: Road to Zero edition, providing guidance on safe and appropriate speeds when developing speed management plans.



National Speed Limit Register

The <u>National Speed Limit Register</u> provides an online, maps-based, central source of speed limits for roads in New Zealand. It enables organisations responsible for speed management to record, update and share speed limit data, and that data is publicly accessible so people can easily search for details on speed limits.

The Waka Kotahi state highway speed management plan

A draft Interim State Highway Speed Management Plan is currently being prepared by Waka Kotahi for the current 2021-2024 NLTP period. This plan will show how speeds are planned to be managed on the state highway network over the next two years through to June 2024, including implementation timeframes.

Waka Kotahi expects to begin public consultation on the draft Interim plan in November 2022, and will be in touch with partners and stakeholders closer to the time to let them know how they can give feedback on the draft plan, and where to find further information.

For any queries in the meantime about the draft Interim speed management plan, please send an email to: speedmanagement@nzta.govt.nz

Safe System Audit Guidelines

The Safe System audit guidelines provide guidance for undertaking Safe System audits for transport projects in New Zealand. It replaces the existing road safety audit procedures for projects guideline interim release May 2013.

The benefits

- The update to the audit guidelines provides an improved approach that applies system level thinking.
- It recognises the interactions between different components of our transport projects in how they influence crash likelihood, risk and injury severity outcomes.
- It simplifies two different assessment/audit into a single Safe
 System audit for use throughout the project development lifecycle.
- The incorporation of the Safe System assessment should drive better value for money and improved road safety outcomes.
- Resources

You can find the guidelines here

Any feedback or questions please email trafficandsafety@nzta.govt.nz

Virtual training courses are available (register via link). Waka Kotahi will provide financial support to local government staff.

https://www.nzta.govt.nz/safety/partners/road-to-zero-resources/vision-zero-learning





Waka Kotahi updates

The following updates are summaries of Waka Kotahi's September edition of Te Pae Kaa Kaa newsletter which can be viewed online here.

Commercial Vehicle Safety Programme on the move

The Commercial Vehicle Safety Programme (CVSP), initially called Weigh Right, now encompasses much more than just weight.

The CVSP uses roadside technology and intelligent software to screen and collect vehicle number plates and weight data and validate it against the Motor Vehicle Register and Permits data.

The system is now able to perform a wider range of checks, including:

- Certificate of Fitness (COF) and vehicle licence compliance
- Whether the vehicle has active notices ordering it off the road (pink, green or yellow stickers)
- Vehicles where safety-related concerns associated with an operator have been identified.

CVSCs will be used increasingly as multi-agency facilities in joint education, compliance and/or enforcement operations between the Police, Waka Kotahi and organisations such as the Environmental Protection Authority, WorkSafe, various ministries, regional councils and rural health providers



Astounding safety camera results

More than 100,000 potential driving offences have been detected during the first half of a Waka Kotahi trial of safety cameras in Tāmaki Makaurau (Auckland).

During the first three months, 96,080 mobile phone use offences were detected (1.34 percent of vehicles through the camera sites), and more than 8000 instances of drivers and front passengers not wearing seatbelts (0.32 percent of vehicles through the camera sites over one month). Learn more about the trial on the <u>Waka Kotahi website</u>.



Operation Hannah puts focus on alpine road safety

Operation Hannah, named in memory of 11-year-old Hannah Francis, who tragically died during a road incident on Mt Ruapehu in July 2018, is an annual operation aimed at improving road safety in alpine areas. It is led by NZ Police and supported by Waka Kotahi.

In 2018, there were two alpine road deaths and 106 injuries in New Zealand involving bus passengers. In 2020, there was one death and 44 injuries.

In preparation for Operation Hannah this year ski field operators, transporters, the Bus and Coach Association, local councils, iwi, Police and WorkSafe were bought together to raise awareness of the alpine bus code and compliance expectations, and to share safe system practices.

The next phase of Operation Hannah begins in early October on the mountain slopes around Queenstown and National Park, running roadside operations.



Successful R3F pilot wraps up

The Waka Kotahi Safer Rail team has completed its pilot of the newly developed Rail Regulatory Risk Framework (R3F) and accompanying risk tool. The framework has been designed to help assessors clearly identify areas of risk. The pilot involved eight rail licence holders who were assessed on the four sections of the audit: governance and leadership, operational management, safety risk management and safety assurance. The information gained from the assessments, and from the licence holders' feedback, is now being evaluated.

Ordinary Safety Assessments will continue under the existing system until the feedback has been incorporated where necessary and R3F is ready for implementation.



Some observations from Ontario

- From Glenn Bunting

In July and August my wife and I visited our three grandchildren in Kingston, Canada. Here are some interesting 'traffic' things I saw:

Pedestrian priority and crossings – in Ontario pedestrians get a lot more priority than we do in New Zealand. A couple of times I'd stopped on the kerbside for cars at residential street corners only to find the cars slow and stop to allow me to cross. Weirdly they have marked zebra and even rainbow type crossings with signs telling pedestrians that cars don't have to stop for those. Pedestrian crossings that require drivers to stop for crossing pedestrians have signs, flashing lights with pedestrian call buttons, and look like these (note the triangle markings they paint on the approaches):



School speeds and Speed Limits – the urban speed limit in Ontario is generally 50km/h, and they have 40km/h school zones for a block or so around schools. I saw this in Whitby, Toronto, on the streets around a school, either indicating a compliance issue or that the community considers 40 still too fast:







Speed Hump:



Three Way Stop – as for the very common four way stops, the first to arrive is the first to leave. Note the yellow centreline for the stop controls:



Active pedestrian warning sign in advance of parks:



Electronic Bilingual Variable Message Signs – commandeered for safe driving messages. Toronto's Director of Transportation has said "We have about 60 messages in our library that we can cycle through". Cannabis is legal in Ontario, but drug driving is not. Impaired driving is the leading criminal cause of death and injury in Canada, and drug-impaired driving detected by law enforcement is increasing. The percentage of Canadian drivers killed in vehicle crashes who test positive for drugs now exceeds the numbers who test positive for alcohol. Here is a drug driving message. Another I saw read "Even a little high is too high":



Roadworks road marking – through the roadworks sites on the expressways I noted the use of yellow lane lines for temporary lanes:





New — Trafinz Members

Trafinz would like to welcome the following as new members

- Gisborne Cycle and Walkway Trust
- Students Against Dangerous Driving
- Traffic Engineering Solutions Ltd
- Spokes Canterbury
- Kenlj Consulting





King Cone

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