Magazine of the Transportation Group NZ

Issue 181 September 2024

## Learning from our youth:

## Group award-winner

## **Jesse Rumball-Smith**

### In this edition:

- Let's talk about parking! And toilet paper
- Road pricing and car-dependency
- Conference photos and recap
- Awards and award winners
- 120km/hr speed limits
- History of SCATS

And much more....

Editorial



Daniel Newcombe Roundabout Editor tgroundabout.editor@gmail.com

I'm asked AI to

*"write me a joke"* 

about transport".

Judge the results.

For this edition I had the pleasure of interviewing Jesse Rumball-Smith (cover story) on his innovative thinking to use new technology to achieve road safety benefits.

His enthusiasm and fresh thinking was a joy to behold, perhaps because for the rest of my professional life I am surrounded by engineers and planners drilled into following very specific processes—and usually very limited in their application of innovation (it's often just an unscored component of a tender and not actively pursued in our professional lives).

One of the things that came through in talking to Jesse was how there were ways of using emerging technologies that were unexpected and innovative because someone new (usually younger) thought to apply them in a new way, rather than just incrementally improving something we already have.

Read his article and be impressed.

In keeping with the technology theme, I am helping trial an Artificial Intelligence (AI) tool and, being unsure what to do with it, I asked it to "write me a joke about transport".

Here is the joke:

A man was driving his car on a busy highway, when he saw a sign that said "Speed Limit 100". He thought to himself, "Wow, that's fast. I wonder what the hurry is." He sped up to 100 km/h and kept driving, until he saw another sign that said "Speed Limit 80". He thought, "Hmm, that's strange. Why did they lower the speed limit?"

He slowed down to 80 km/h and continued driving, until he saw another sign that said "Speed Limit 60". He thought, "What's going on? Is there something wrong with the road?"

He reduced his speed to 60 km/h and drove on, until he saw another sign that said "Speed Limit 40". He thought, "This is ridiculous. How can anyone drive so slow?"

He slowed down to 40 km/h and kept driving, until he saw another sign that said "Speed Limit 20". He thought, "This is insane. I'm barely moving."

He crawled along at 20 km/h and reached the end of the highway, where he saw a final sign that said "Welcome to Speed Limit".

Judging by the quality of that joke, there is still a place for human thinking. Especially with emerging young thinkers like Jesse.



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#### Issue 181 September



A nature photographer captured this magical moment.

Roundabout is the magazine of the Transportation Group NZ, published quarterly. It features topical articles and other relevant tidbits from the traffic engineering and transport planning world, as well as details on the latest happenings in the NZ transportation scene.

All contributions, including articles, letters to the editor, amusing traffic related images and anecdotes are welcome. Opinions expressed in Roundabout are not necessarily the opinion of the Transportation Group NZ or the editor, except the editorial of course. here is no charge for publishing vacancies for transportation professionals, as this is considered an industry-supporting initiative.

Correspondence welcome, to editor Daniel Newcombe at: <u>daniel.newcombe@at.govt.nz</u>

Roundabout is published around the 15th of March, June, September and December each year, and contributions are due by the 10th of each publication month.

A monthly Mini-Roundabout email update is circulated on the 15th of inbetween months and contributions are due by the 12th of each month.

If somehow you have come to be reading Roundabout but aren't yet a member of the Transportation Group NZ, you are most welcome to join. Just fill in an application form, available from the Group website: www.transportationgroup.nz

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John Lieswyn National Committee Chair john@viastrada.nz

## **Chair's Chat**

months includes (a) recap of your National Committee's Strategy Day (b) politics continue to dominate our professional lives (c) thoughts from the Smart Cities APAC conference (d) continuing engagement with other NZ sector Misinformation is rife as social media fills with leaders and (e) our first podcast since Bridget so ably initiated these.

#### National Committee Strategy Day

Your National Committee got together for the annual strategic planning day on 2 August 2024. You can flip through our agenda PowerPoint here and the minutes here. Two key outcomes profession. are summarised as follows.



Conference: the survey we recently sent around to members indicated strong support to continue with an annual conference. To better align with the feedback we got, your committee agreed to change our current six year conference rotation schedule to a four year one, with three out of In my last Roundabout article, I lauded hardfour years being in one of our largest three cities.

The following schedule is subject to confirmation with our branch committees and ongoing discussions with other transportation professional sector groups, with whom we may combine efforts:

- 2025: Wellington
- 2026: Christchurch
- 2027: Auckland (potentially a major collaboration with another group, with up to 1,000 international transportation industry delegates)
- 2028: a leading Tier 1 or Tier 2 city
- Repeat

Social media – as volunteers, we have been struggling to keep Transportation Group's social media channels populated with relevant and timely content.

We met with Engineering New Zealand communications staff and agreed to pilot a collaboration where our content is edited and improved by ENZ and cross-posted amongst our combined channels.

#### **Politics**

It's hard not to look at the train wreck that is American politics, eh? Especially so for your Chair, a dual citizen of the US and NZ.

News this edition covers events of the last few Right now, a high-stakes battle is being waged for the future of a country that could determine whether or not humanity can mitigate the worst effects of climate change.

> AI-generated memes and Iranian and Russian bot accounts seek to divide average Americans. My own brothers and sister, all adhering to our own information sources, are barely on speaking terms.

> This divisiveness is already taking root in our small corner of the world and affecting our

> After the Dom Post and Stuff published a series of insightful articles on road space reallocation and cycleways last year, the regression to the mean is startling. There are near daily opinion pieces attacking evidence-based efforts to promote a more sustainable and equitable transportation system.

## The Dominion Post says: Wellington needs to change its thinking on cycleways

working journalists but now I wonder again if the media is controlled by those with a vested interest in the status quo.

All this on the heels of major job losses in our sector - how can those of us still with jobs remain positive and engaged?

#### Smart Cities APAC, Adelaide

I recently attended the Smart Cities Conference in Adelaide and am cautiously optimistic after hearing RethinkX



Given war and climate change (almost certainly linked), the presenter noted that one survey shows 96% of youth are pessimistic about the future. Scary, eh?

But he then presented a more positive prediction based on "cost curves":

*Your committee* agreed to change our current six year conference rotation schedule to a four year one, with three out of four years being in one of our largest three cities.

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- industries (fossil fuels, traditional agriculture, internal combustion vehicles) will disappear quite rapidly.
- There are some thought-provoking ideas about the disruption of transportation - I am sceptical about some predictions around AVs but overall it's worth a look at the video.
- One of the big moves is in Precision Fermentation - which isn't about beer but rather synthetic food production. And it doesn't look or taste like the grub envisioned on the hit show Snowpiercer, thankfully! Aside from totally undermining the huge NZ dairy industry, this tech could partly address the loss of productive farmland due to suburban sprawl. However, we still think it would be better to grow up rather than out for good transportation planning reasons.

#### Continuing engagement with other sectors

We continue to have productive conversations with other related groups, including ITS-NZ. A

As prices for green tech go down, legacy major opportunity for us is to collaborate with ITS-NZ on a pan-sector Young Transportation Professionals (YTP) effort to support students and new graduates with mentorship and opportunities for further advancement.

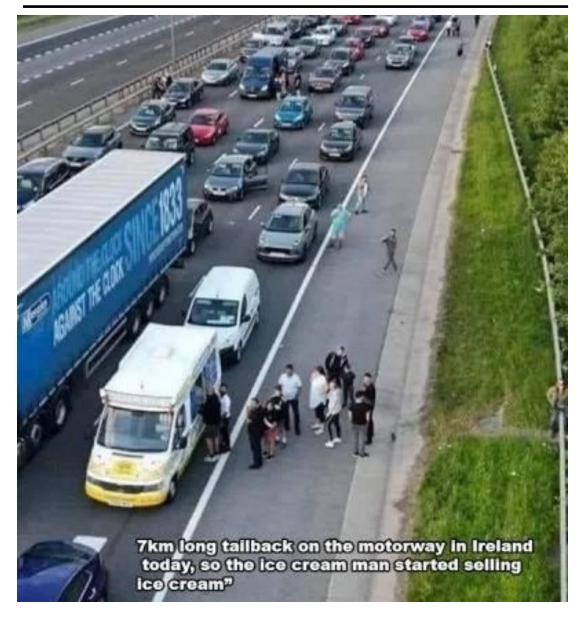
> See slides 60 – 65 of the Strategy Day Power-Point for more information.

#### Podcasts

I was pleased to restart Bridget's Chair's Conversations series with a 30 minute interview of Thomas Nash, chair of the Wellington Regional Council's Transport Committee. Put it on 1.5x playback speed and you'll get the gist of a very interesting conversation!

The intention is to create something like this from the Australian Road Safety Conference.

As always, don't hesitate to reach out with your thoughts - drop me a line anytime at john@viastrada.nz. Until next time, keep the faith!



We continue to have productive conversations with other related groups, including ITS-NZ



## Photo competition—Road signs

This edition looks at the wide variety of road signs—some official, some not—often best observed in the context of their surroundings. Seen ones? Send images to: <u>tgroundabout.editor@gmail.com</u>



#### **Issue 181 September**



## Bridget's Rant - Riding in the rain

My ebike was admitted to intensive care for a couple of weeks recently, so I took the road bike into town a few times. Reminded myself that Hamilton does have hills. It also has weather.

I was caught in an intense storm biking home the other day. I was not prepared. But who cares when you're biking home, right? Might as well enjoy it. I do like smiling at people in cars as I ride past them through the ephemeral puddles. There's something childlike and joyful about biking in the rain. Simeon our politicians, I mean some of our politicians, should try it sometime.



Riding a bike is one of the best ways to observe and ponder the interaction of transport with human behaviour.

Transport is such an interesting career in part because we are immersed in it in daily

life. I think about everyone driving around, and I wonder what they're thinking about.

Except I know what they're thinking about, because I've done studies – and most of them aren't thinking about the conflict point between public service impartiality and professional ethics. Biking drenched along the mean mixed-use arterials of eastern Hamilton, I was thinking about just that intersection.

It's a brave new world for public servants who are also obliged to uphold professional ethics. Public servants must serve the government of the day with political impartiality, and do their best to deliver government policy.

This rule assumes that the government of the day is democratically elected and also... is mostly kind of sensible in what it decrees. Hmm.

At the same time, Chartered members of Engineering New Zealand (in fact all members of Engineering New Zealand) must act ethically. That means, for example, that I must take reasonable steps to safeguard health and safety; I must have regard to effects on environment; I must act competently, behave appropriately, and inform others of the consequences of not following advice.

So, what if I think that a government policy will cause an unreasonable increase in premature death and serious injury? What happens when government policy says something that quite explicitly makes an environment less healthy and less safe, with negative effects on the environment?

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When we as a professional community have reported as much in submissions to the government, and they keep on decreeing the bad things anyway.. how do we act with competence and behave appropriately when we are asked to remove raised pedestrian crossings, which we know promote health and prevent serious injury and death?

Ultimately, engineers can be held to account for a serious breach of ethics, but there won't be a court case against a transport engineer any time soon, even those who sign off on plans to remove a raised pedestrian crossing.



That's because, essentially, society has agreed that rare and predictable premature death, including of children, is a reasonable price to pay for imaginary productivity benefits of a few seconds per vehicle of travel time "savings".

There won't be a court case.. but it's a conundrum (at best!) for all of our public servant peers in Aotearoa. And it's not ok.

You should all know that your peers in the profession support you to do your best work, and if you need to say No, please say No.



It's a difficult time to be a principled transportation professional. After you've done your best in your day job to act in accordance with your ethics, I recommend a bike ride home, without a motor, and preferably in the rain.

It's a short but beautiful life. Find your joy.



**Bridget Doran** Former National Committee Chair <u>bridget@bridgetdoran.nz</u>

Transport is such an interesting career in part because we are immersed in it in daily life

## Learning from our youth—Jesse Rumball-Smith



is the latest - and youngest ever - winner of est, safest vehicles. the Transportation Group's Research Award, and sat down with Roundabout to discuss his Jesse was motivated by the fact that less well-off ideas and enthusiasm of younger people.

Jesse won the award for developing a road safety "I think, in terms of equity, the most important app called SafeDrive. The app, which Jesse codagainst posted speed limits and uses audio messages to 'nudge' the driver to slow to below the does it help?" speed limit. Monitoring of drivers using the app has showed promising results and real safety He wanted to find an app-based road safety solubenefits.

The award prizemoney has allowed Jesse, from Wellington College, to travel to Germany to present his app to an international European Human Factors and Ergonomics Society conference and continue to explore opportunities to expand the Jesse knows that this inequality issue doesn't just an Engineering NZ article that follows).

The first thing to know about Jesse's work is that "I wish I didn't have to build an equity solution it is as much about equity as it is about road safety.

Jesse saw that much of the focus of the previous but in healthcare as well and all around." Government's 'Road to Zero' and the efforts of the transport profession was on road infrastruc- "This won't be a silver bullet to saving lives on technologies.

small and elite percentage of the population, as gestion."

Sixteen-year-old student Jesse Rumball-Smith only the wealthiest will be able to afford the lat-

thoughts on the Group, the transportation people would continue to drive older, less-safe profession and how we can better harness the cars, with fewer safety features, and experience worse road safety outcomes as a result.

focus and every decision that we make on our ed himself, monitors the speed of a vehicle roads, or any infrastructure project, should be considered through the lens of 'who in society

> tion that anyone with a phone could use - without having to afford an expensive car.

> "And that was the fundamental crux of why I made the app."

app's features. (Read more about Jesse's work in apply to the transport sector, but can be seen right across the community in various ways.

> like this to 'Band-Aid' the problem, but the real problem is we need to fix equity and accessibility of life-saving safety features, not just in transport

ture or road safety advancements using new car the roads, but likewise road barriers won't be either. You need to find an array of innovative solutions from all areas, which come together to Jesse saw that these are likely to benefit only a really fix people dying on our roads or fix con-

"This won't be a silver bullet to saving lives on the roads, but likewise road barriers won't be either.'

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are human-centric, focusing on improving the (beyond waiting to get to university). driver rather than the vehicle.

Effectively the app gives the driver the same information – in a carefully targeted way – as Intelligent Speed Adaptation (ISA) systems from the world. latest vehicles.

The results from his research have been impressive and he has plans to continue to enhance and world's Science Fair." develop the app.

A key theme is that the app must be able to work offline (so as to not require lots of data – which could limit some people's ability to use it) and work on a wide range of devices (so people don't need the latest phone to be able to use the app).

Jesse has explored the 'gamification' of the app for better engaging youth in safe driving practices, however the target audience are adults, who have been shown to change their driving behaviour in response to specific audio 'nudges'. Jesse is also investigating the potential to develop a safety app for cyclists and moped users.

Jesse expressed a desire for a future where transportation solutions - and advocacy from the Transportation Group - are more focused on eq- In terms of his own travel experiences around uity and accessibility, rather than just technological advancements that may benefit only a few.

When talking about the Group, Jesse said there was very limited visibility amongst students of its existence or role (he thanked former Group Chair Bridget Doran for alerting him to the Group and its Research Award).

While new Group members tend to be engineering students at universities or recent graduates, Jesse says there are many enthusiastic and ideafilled students still at school, who represent an untapped market of potential Group members.

He suggests social media as the best way to get through to students, but it remains to be seen what the Group has of interest to them.

His app development was spurred by participating in a school science fair, as many thousands of He envisages a more balanced future for transstudents do every year. However, Jesse notes that there is no pathway beyond that for those with



Jesse's interest is in creating tech solutions that great ideas or wanting to pursue their ideas

He says the last National Science Fair was 30 years ago, and there is no ongoing connection to similar organisations or events elsewhere in the

"If we want to be a tech nation, it's crazy we only sent one person in history to the biggest



Wellington, Jesse said he and his schoolmates were heavily influenced by the cost of travel, rather than speed, comfort or safety issues.

In particular, student discounts on for-hire escooters (cheaper than bus fares) made them a popular option, even in inclement Wellington weather.

Although focused on better using technology to improve road safety, Jesse doesn't consider EVs are going to be the transport industry's main solution to climate change. He says that doubling down on driving, but using a different energy source, isn't the way forward.

"Technology should help us get to a world where we don't need to drive as much and people can be more human-centric.'

portation that leverages technology while focusing on human-centric solutions.

"You can have human-centric tech solutions and those might be the ones that are the most effective."

There is an opportunity for Group members to assist Jesse in his ongoing development of the app. If you are interested in supporting Jesse and his endeavours, feel free to contact him on: jesse@rumballsmith.co.nz

"You can have human *-centric tech solutions* and those might be the ones that are the most effective.'

## Jesse Rumball-Smith: Teen engineer and entrepreneur



"..to me it's super inequitable that only the richest people in the country get access to this really effective safety technology."

> Sixteen-year-old Wellington College student Jesse Rumball-Smith has a passion for engineering – especially his latest creation, an app he researched and coded himself, called SafeDrive.

"I got the idea at Easter time," he said. "I was watching the news, and instead of talking about holiday cheer, it was all about the holiday road toll. That kind of took me down the rabbit hole of "What are we really doing in New Zealand to make our roads safer?""

Jesse found that much of New Zealand's road safety strategy was focused on road design.

"It was all about safer road barriers, safer intersections, or how to better protect people during a crash," he said.

"But almost 90% of crashes include driverrelated factors like speeding, distraction or fatigue, so all that is just an ambulance at the bottom of the cliff. With SafeDrive, I want to prevent a crash before it happens."

Jesse also learned that effective interventions are available - if you can afford it.

"Your brand spanking new car might have something called Intelligent Speed Assistance [ISA], which actually does reduce your chances of crashing by warning you if you speed," he said. "But most New Zealanders don't have access to that – we've got one of the oldest fleets in the world – and to me it's super inequitable that only the richest people in the country get access to this really effective safety technology."

The question then became how to democratise the technology.

"We've all got a supercomputer in our pockets now," Jesse said.

"So I decided to create an app that built on some of the ideas behind ISA technology – something accessible to anyone with a smart phone mounted on their dash."

Jesse's focus on equity presented some additional design challenges.

"I couldn't use mobile data – if it went up to the cloud every time the app needed to check the speed limit where you're driving then it would run up your data bill, and people without a SIM card couldn't use it," he said.

"I wanted SafeDrive to always work, even in airplane mode."

Fortunately, <u>NZ Transport Agency Waka Kotahi</u> provides a national speed limit registry, which the app can download and update when it has access to Wi-Fi.





This means that when a user is driving, it only uses the phone's GPS and accelerometer to detect speeding, by comparing the phone's speed to the locally stored registry.

The next challenge was figuring out how to convince people to slow down once the app knew they were speeding.

"Some cars with ISA will beep and flash at you when you speed, but that's both annoying and distracting," Jesse said.

"So we used 'nudge theory' – spoken messages from the app that gradually escalate, to make the driver feel more accountable."

"But what I'm most proud of, is that on each following journey, drivers got better and better – we were literally reprogramming them to be better drivers – because most people don't want to crash."

The messages were designed with input from transport and clinical psychologists. They start small, saying things like "Heads up! The speed limit here is 50km/h."

If that doesn't work, they escalate, using real data to convince the driver to slow down. For example, "Hey, if you keep driving at this speed, you'll only arrive 45 seconds earlier," or "Warning! At this speed, you're 1.5x more likely to have a major crash. Please slow down." Similar messages were designed for other driverrelated risk factors like fatigue, distraction and bad weather.

The results from Jesse's early testing have been promising.

"We had about 50 or 60 testers log about 500 kilometres worth of journeys, and we found that speeding and distraction decreased by 35% and speeding severity decreased by 20%," said Jesse.

"But what I'm most proud of, is that on each following journey, drivers got better and better – we were literally reprogramming them to be better drivers – because most people don't want to crash."

Jesse is already working on updated features for the app.

"I built a new version of the fatigue detection feature on the weekend," he said. "Instead of using drive time and time of day, it uses the selfie camera and machine learning to look at your eyes and face to detect your level of fatigue. We're also looking at using the front camera as a dashcam."

He is also seeking funding and partners to further develop the app.

"There's big potential for this sort of technology in the fleet management area," said Jesse. "But what I'm more interested in personally is the consumer side, and there's a whole lot that can be done there with insurance companies and brand deals."

"The worst piece of advice I've ever been given is to be realistic. So if you've got big ideas and big passions – don't be realistic, just ask for help."

Such deals might offer cheaper insurance to regular users, or vouchers for discounts or free products if they drive a certain number of safe kilometres in a row.

"In a partnership like that, everyone wins – the brands look good for supporting a safety initiative, the app gets income, and users get rewards for driving safely," he said.

All Jesse needs now is more people to get behind the product.

"I'm seeking investment," he said. "There are potential clients who are interested and ready to go, but I'm still only a school student, so I'm limited by capacity. We need to hire developers."



Jesse also offered advice for students interested in becoming entrepreneurs.

"The best piece of advice I've ever been given is to always ask for help," said Jesse.

"The worst piece of advice I've ever been given is to be realistic. So if you've got big ideas and big passions – don't be realistic, just ask for help."

Source: Engineering NZ



"I'm seeking investment," he said. "There are potential clients who are interested and ready to go, but I'm still only a school student"



## Bid for 120kph speed limit on Christchurch Southern Motorway "because they are already driving that fast"

Drivers could be cruising down the Christchurch Southern Motorway at 120kph if Selwyn's mayor gets his way. The coalition government is reviewing speed limits across the country as it reverses the blanket reductions made by the previous Labour Government in 2022.

Increasing the speed between Rolleston and Christchurch to 120kph from 100kph would be appropriate because many drivers were already speeding, he said. Under the draft Setting of Speed Limits Rule 2024, released for consultation in June, Transport Minister Simeon Brown asked for feedback on highways that could be increased to 120kph.

Selwyn District Council mayor Sam Broughton wrote to the Ministry of Transport, Brown and Act Party leader David Seymour in July in support of the idea. Increasing the speed between Rolleston and Christchurch to 120kph from 100kph would be appropriate because many drivers were already speeding, he said.

"Whether it is for general traffic, direct public transport services, or moving freight, council considers increasing the speed limit of the motorway between Rolleston and Brougham St will assist in improving efficiency and connectivity while still being safe," he wrote.

"This is reflected in generally higher average speeds above 100kph we already observe along the motorway."

Transport expert Professor Simon Kingham said raising the speed limit meant spending large sums of money to build a suitable road, just to save a few minutes of travel time.

"If we as a region want to engineer the road to be able to go faster we have to spend money to do that. It's going to be a handful of seconds of minutes, but at what cost."

If the speed increased, so would the crashes and their severity, Kingham said. There are no roads in Aotearoa that can safely be driven on at 120kph, an NZ Transport Agency Waka Kotahi (NZTA) spokesperson said.

The fastest motorways currently are the 110kph Waikato Expressway and the Tauranga Eastern Link. A proposal to increase the Christchurch Southern Motorway to 110kph was being developed by the Government, the spokesperson said.

Since opening in 2020, five people had been seriously injured in crashes on the motorway, according to NZTA statistics. None were fatal. But it expected more vehicles on the highway in the next decade. In 2021, 21,000 vehicles used the motorway daily. This was expected to jump to 33,000 by 2040. Broughton said Rolleston's population would increase by 20,000 people to become a city of 50,000 by 2050. The Selwyn district's total population is expected to rise from 86,000 to more than 190,000 in the next 10 years.

In his letter to Brown, Broughton also said he supported reverting the speed limit on a section of State Highway 75 between Halswell and Akaroa to 100kph.The highway from Halswell to Little River was reduced to 80kph in 2022 to improve safety. The section from Little River to Akaroa was reduced to 70kph and 60kph in areas. Some other sections, such as school zones, were reduced further.

There were 747 crashes from Halswell to Akaroa from 2011 to 2020, according to NZTA statistics. Nine people died and 74 were seriously injured. NZTA recorded 24 crashes from Halswell to Little River, six from Little River to Akaroa, and no deaths between when the reductions came into effect and May 2024.

The speed reductions had sparked intense debate from road users. Some said crashes were due to poor driving, while others said speed reductions were essential to protect lives.

Broughton said NZTA did not produce any "compelling evidence" to reduce the speed limit from Halswell to Little River. The change made travel less efficient, frustrated motorists, and led to risky behaviour due to long queues, he said.

"This rural section is flat and easy to drive, with long straights that do not warrant such an onerous blanket speed restrictions."

The council want to keep the 60kph speed limit from Little River to Akaroa and requested Tai Tapu remain at 50kph, Broughton said. *Source: The Press* 

**UPDATE**: The Minister of Transport announced a 110km/h speed limit for the State Highway 1 Kāpiti Expressway in Wellington.

The new speed limit will apply to 24.5km of the expressway, from north of the Poplar Avenue interchange to south of the northern Ōtaki interchange. The new speed limit will be in place by November 2024.

Until the change is made, the maximum speed limit remains 100km/h.

NZTA's <u>website</u> has more information on the permanent speed limit change and our consultation summary, including people's submissions.



## First electric empty container handlers to support lowering NZ's ports' emissions



We've had great success with Sparky, the world's first fullsized electric tugboat, and we're pleased to see more emissions-free cargo handling options become available.

New electric empty container handlers promise to play a key role in decarbonising two of NZ's largest ports, in the latest round of successful applications from EECA's Low Emission Transport Fund (LETF).

Port of Auckland and Wellington's CentrePort have each been approved co-funding of \$500,000 towards procuring an electric empty container handler (ECH), as well as associated on-port charging infrastructure.

It is the first time the LETF, which focusses on activities in the transport sector that move people and/or goods on roads, off-road, and in the marine and aviation sectors, has approved co-funding for electric ECHs, which are large, forklift-type pieces of equipment used to move and store empty containers.

EECA GM Transport Richard Briggs said the cofunding will allow the ports to demonstrate to others around New Zealand, as well as shareholders, how a critical link in the supply chain can be electrified, with safe, reliable technology.

"With no electric ECHs in New Zealand, and only a few in Australia, integrating these pieces of equipment into daily operations will give confidence to the sector as well as help develop zeroemissions supply chains, integrating with other electric-powered equipment and vehicles."

Port of Auckland, New Zealand's largest import Page 13

port, will procure an electric ECH and its charger, and will set up the infrastructure for its operation. Port of Auckland currently has six diesel empty container handlers. It estimates replacing one of its diesel ECHs with an electric model will reduce the port's greenhouse gas emissions by at least 670,977kg CO<sub>2</sub>e over 10 years.

Port of Auckland Limited chief executive officer Roger Gray said: "As New Zealand's largest import port, we want to help lead the adoption of electric and emissions-free port equipment.

"We've had great success with Sparky, the world's first full-sized electric tugboat, and we're pleased to see more emissions-free cargo handling options become available. This is a great step forward for the port industry."

CentrePort CEO Anthony Delaney said large mobile plant operating in the port's container terminal and depot accounted for 33 percent of its scope 1 and 2 emissions.

"We are excited to have the opportunity to reduce these emissions with the support of EECA, and as part of our wider systems approach to emissions reduction," he said. "Our objectives are aligned and the need for flexibility to ensure economic viability of projects is well considered."

Round 14 of LETF funding is now open. Vehicle, Technology, Off-road and Marine projects are eligible. Learn more and apply here.





By Professor Imran Muhammad, is a professionally trained urban planner with over 15 years' experience of research, teaching and professional practice in the field of urban transport planning. He teaches within the School of People, Environment and Planning, at Massey University.

We have to ask the question of who gains and who loses by advancing a particular transport project.

## **Re-politicising and decolonising transport planning**

Transport policy and planning are always political.

Actions such as spending \$44 million on consultants and then killing the Light Rail Project in Auckland, de-establishing Let's Get Wellington Moving, removing transport-related emission targets in the Government Policy Statement of 2024, and reintroducing Roads Of National Significance and the Fast Track Bill just in one year show the political rollercoaster of transport planning.

Politics act as a 'gravitational force' in transport planning and this will not change in the foreseeable future. So what is the solution? More politics or less politics?

#### Political power vs technical knowledge

Professor Bent Flyvbjerg's work at Oxford University argued that scientific and technical knowledge is not enough for making and unmaking transport mega-projects.

We have to develop a contextual understanding and explore the power relations in a society. Power is a relational concept which generates specific visions and ideologies converted into policies and projects.

We have to ask the question of who gains and who loses by advancing a particular transport project. Transport mega-projects might help gain political mileage, implement technology, grow businesses, and even create a city's identity, such as the Harbour Bridge in Auckland.

Therefore, we have to develop the political rationalities of each project as much as we develop the transport-related technicalities and economic realities of these projects.

Understanding the uncertainties and complexities Most transport projects (including roads and public transport) go over budget and over schedule and deliver fewer benefits than they initially promised.

The reason is that large-scale transport projects contain increased uncertainty and complexity. In recent years, New Zealand has seen the increased cost of Transmission Gully and the City Rail Link as a result of COVID-19 and the delays in construction caused by global supply chain issues, labour shortages, and the international politics of the Ukraine War.

Artificial intelligence (AI) might help in improving technical assessments, but the complexity and uncertainty will not go away.

What constitutes a "successful" transport megaproject? Professor Harry Dimitriou's work at University College London showed that traditional business cases and project management criteria relating to cost overruns, completion dates, travel time savings for users, and rates of returns for judging success are highly misleading and also promote additional major risks and uncertainties for the sustainability of such investments.

Success means that a transport project can effectively meet the needs of intra- and intergenerational equity and the global concerns of climate change and economic prosperity.

Therefore, we need multidimensional criteria that include environmental, economic, social, and institutional sustainability. This would help us to understand whether a transport project contributes to or hinders broader long-term success.

Success is different in different time periods, in different spaces and within different cultures. The power of context can be found by broadening our analysis.

## Building coalitions and creating a window of opportunity

Dr Crystal Legacy at Melbourne University worked extensively on de-politicising and repoliticising transport planning in Australia and Canada.

She put strong emphasis on building a coalition, developing a collective will, and "creating a window of opportunity" for change in transport planning.

For her, re-politicising transport planning did not mean contestation but meaningful engagement that achieved a central common goal. The process of a transport policy or project is politically messy, unpredictable, and contested.

Professionals and the public can influence the direction of transport planning if they pitch the right project at the right time and build political support. Even if there is no substantial physical change in the near future, this effort can bring awareness of new ways of framing transport problems and developing solutions in the long term.

The City Rail Link project is an example which was proposed back in 1929, lobbied by Sir Dove-Myer Robinson in the 1950s and 1960s, agreed to by both the Labour and National-led governments in the 1960s and 1970s and will now be operational in 2025, nearly 100 years later.

Our own work on the <u>future of automated vehi-</u> <u>cles</u> (AVs) in New Zealand has emphasised political–institutional factors at the strategic, tactical, operational, and reflective levels that may influence a successful transition to AVs in the future

#### Decolonising the future of transport planning

The future of transport planning lies in thinking beyond techno-rational mathematical modelling, forecasting, Benefit- Cost Ratio (BCR), and AI by considering the politics of transport planning.

In the New Zealand context, future politics should not ignore Tiriti o Waitangi-led responsibilities.

I have no idea what Tiriti-led transport looks like. However, there are some key principles to follow:

- First, we must understand the limitations of current professional practices and frame-works, which created the negative politics in transport planning evident over the past few years.
- Second, we must think about the coproduction of transport-related knowledge. We have to build clear connections linking transport politics, policies, and professionals

with Māori communities. We can build relationships with Māori and add the everyday experiences of local communities and sociocultural values to our models and impact assessment reports.

• Third, we must integrate nature and culture with transport-related knowledge to include ethics and justice in transport planning.

New Zealand needs a broader discussion on what Tiriti-led transport policies, planning, and projects look like.

We have to respond to this discussion by paying close attention to the power relations and politics that have contributed to our transport-related challenges in the first place.

It is a continuous journey of the creative destruction of existing knowledge and co-producing an alternative transport system where our children and grandchildren can live in harmony with people and nature.

Therefore, transport requires more rather than less political debate and understanding.

We have to pay close attention to the power relations and politics that have contributed to our transportrelated challenges in the first place.



## **Prioritisation of SH5 Safety Improvements**

Winner of the Transportation Group conference's Highly Commended Practice Paper **Glen Randall, WSP** 



Therefore, the question became what projects can we deliver quickly and for a far smaller budget?

> Contractors along SH5 are nearing completion of almost 6km of new guardrail, 7km of widened shoulders, 1.5km of wide centrelines, and over 8km of Audible Tactile Pavers (ATP).

Collectively, these safety treatments are applied to approximately 6% of the 130km stretch of road between Napier and Taupo, known as SH5.

For those not familiar, SH5 is the primary connection of Hawkes Bay with the upper north island and was previously identified for safety improvement in 2021 as part of the now disestablished Speed and Infrastructure Programme (SIP).

Following the conclusion of the feasibility study it was found that significant investment (beyond the original budget) would be needed to realise the safety benefits in line with the Road to Zero Strategic Model.

The higher-than-expected costs were largely due to the complexity to implement Primary Safe System Interventions (SSI's), such as median barriers, together with Secondary SSI's such as wide centrelines and wider shoulder widths along a corridor comprising of taxing topography along its length.

Notwithstanding the preliminary findings demonstrating that significant investment was needed, the interventions possible would result in the majority of SH5 remaining at 80km/h (the speed

limit was lowered from 100km/h to 80km/h in early/February 2022 for roughly 60% of the SH5 length).



It therefore became apparent that spending a significant amount of money without enabling the speed limit to be uplifted back to 100km/h would not be publicly well received.

An ancillary concern was the ongoing exposure to road safety risks for communities and travellers in the interim whilst funding is secured for a longer-term programme of investment.

The ability to implement 'quick wins' was therefore desirable as road users could immediately

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benefit from these safety gains, despite a smaller percentage of the corridor being treated.

Therefore, the question became - what projects can we deliver quickly and for a far smaller budget? This is where the development of a prioritisation tool was borne to assist in the decision -making process.

The methodology adopted was to initially focus on identifying high risk areas. Multiple data sources were used to develop a list of treatment sites and in the end more than 40 'mini projects' were identified.

These projects were all assessed using NZTA's Death and Serious Injury (DSI) calculator to help predict the likely safety benefits for each project.



Following this, a Multi Criteria Analysis (MCA) was undertaken to ensure other variables such as Community Acceptance, the deliverability / timing of the project, quantifying construction difficulty and duration of construction were all included in the assessment.

This provided decision makers with a 'total risk' for each treatment and provides an improved wholistic view of each treatment, rather than focussing purely on road safety.

The DSI reduction, the MCA scoring, together with rough cost estimates were all combined to develop a prioritisation list.

The tools intelligence is in its ability to for the user to input a predetermined upper budget and for the tool to return the projects which provide the best value for money projects in order of overall performance.



In the case of SH5, the tool highlighted eight high-risk sites, totalling an investment budget of \$14M. These eight sites allowed for the treatment of around 6% of the corridor, but more importantly, were able to be implemented within the following construction season.

This meant the benefits from these treatments could be realised sooner rather than waiting several years while the business case process is completed.

This point is particularly relevant as SH5 was severely damaged by Cyclone Gabrielle in 2023 and having detailed design drawings ready meant that the Transport Recovery East Coast (TREC) teams were able to commence construction shortly after the emergency works to reopen the road had been completed.

WSP are hoping to develop the tool further and for its range of applications to be enhanced.

This provided decision makers with a 'total risk' for each treatment and provides an improved wholistic view of each treatment



Above: A live Passenger Information Display (PID) in the foyer of a Kāinga Ora development.

Greener journeys just got easier for Kāinga Ora staff and customers with the installation of a live bus tracker at Ngāhuripoke in Auckland's Northcote.

With 85 homes and a Kāinga Ora office, the three-block Ngāhuripoke development was the perfect place for a live Passenger Information Display (PID).

The display shows customers and staff real-time departures for nearby Auckland Transport (AT) buses, making it easier to plan journeys and get where they need to go.

Working with the local team, Kāinga Ora Principal Urban Designer George Weeks led the project in an effort to better connect Northcote and reduce its residents' reliance on cars.

"The aim is to make public transport and active modes truly viable as part of a cohesive community. To achieve this aim, information on public transport is vital."

George says the PID was part of a complete package offered to Ngāhuripoke social housing customers, to make public transport easier to use.

In partnership with AT, Kāinga Ora gave customers Northcote-specific bus and cycling maps,

## Next stop: Ngāhuripoke

and personalised journey planning to help them get familiar with the area. Every new resident was also given a HOP card with enough credit for two weeks' free travel.

"This project shows the true value of partnership," George says.

Pete Moth, AT Head of Public Transport Services Planning & Development, says he was *"delighted"* to see Kāinga Ora improving public transport accessibility for social housing customers under Northcote Development.

"This complements the forthcoming upgrade of the 942 bus to the frequent 94 and will open up public transport to many more customers. We look forward to supporting further use of PIDs in Kāinga Ora developments and elsewhere."

George explained that installing the PID cost about 15 per cent of the price to build a single car parking space and highlights the value of sustainable transport options for people.

"It also supports wider Kāinga Ora aims around transport, health and liveability. We'll be monitoring the success of the PID and are already looking for other places to install them, including higher-density developments with good public transport."

Every new resident was also given a HOP card with enough credit for two weeks' free travel. Magazine of the Transportation Group NZ







## Completely normal cars, nothing to see here...







## The street you can use, as long as you're there at least 15 minutes



Residents of a Mount Maunganui street have wel- ing closure periods, only buses, motorbikes and comed greater access to their homes after dealing with "pretty tough" closures for two years.

The eastern end of Links Avenue was closed from 7am to 9am and 2pm to 4pm on weekdays due to safety concerns, but the council is trialling a new system.

People can now enter and leave Links Ave from the same end of the street at any time. Motorists can also enter from one end and leave from other end, as long as it's been more than 15 minutes, without facing a fine.

The controversial cul-de-sac, formed by two bus lanes between Solway Place and Concord Ave, has been in place since March 2022.

Originally it was going to be a four-month trial in response to safety concerns around the high traffic volumes while children travelled to and from school.

The street has undergone a number of changes in access times, while vehicle movements have dropped from 7500 to 3500 per day since the closure.

Initially the street was shut at all times, but in December 2022 it became peak times, seven days a week. In mid-2023, the closure hours were reduced, and it was fully open on weekends. Duremergency vehicles could use the street.

Anyone breaching the rules faced a \$150 fine. Since the new trial began on July 1, 112 fines have been issued with seven of these waived. More than \$5m in fines have been issued since March 2022 with \$1.3m of these waived.

Tauranga City AFC chairperson Brendon McHugh said the latest change is "really positive" for the football club. The club is just past the closure near Concord Ave and McHugh said they've had to put up with a lot of complaints from people.



"It was pretty tough on us."

It was a "struggle" for parents and players who had to access the club from the other end of Links

Motorists can enter from one end and leave from other end, as long as it's been more than 15 minutes. without facing a fine.



Ave, around 1km away for practices, games and holiday programmes.

"We were really happy when they took away the weekends, that was probably the biggest thing for us because we just couldn't use it.

"It's a good result. If they're not going to take [the closure] away completely, then it does help address the problem of it being a thoroughfare."

McHugh was also part of the volunteer community panel Tauranga City Council set up in August 2022 to help find a traffic solution after a backlash about the closure.

Another panel member Teresa Killian said the new trial is hugely beneficial especially for older residents who were "very isolated" because they weren't confident using the main roads and the closure deterred visitors.

The council was asked for resident exemptions, but McHugh said panel members were told it wasn't an option.

Council network safety and sustainability manger Karen Hay said the council looked at ways to reduce the impact of the closure on residents from the start, but there were operational and regulatory constraints.

"Maintaining an exemption list of number plates for all residents on Links Avenue and connecting streets was not possible as it would have to be monitored manually." Resident Teri Logie, who set up the 'Don't Close Links Ave to the Mt' Facebook page, said the new trial is better, but she still questions the closure.



"There are roads past every school, why this one?"

Residents were told about the new trial through a letter from council which was "a bit unclear", said Logie.

Hay said council apologised if the letter was unclear and it included an email address for people to ask questions. More than 750 letters were sent, and the new trial was advertised in council's weekly bulletin and on its website, she said.

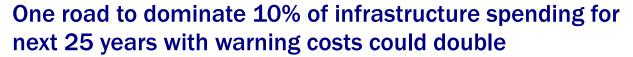
"The new trial allows a broader range of users, including residents, visitors and businesses, to use Links Avenue within the restricted hours, providing greater flexibility for the community." *Source: Stuff*  "There are roads past every school, why this one?"





## Seal? Loose seal? Fresh seal? I'm sorry, <u>what kind of seal?</u>

Former Group Chair Bridget Doran sent in this photo of an innovative use of a road sign from Timaru's Marine Parade, warning people of a juvenile New Zealand sea lion (pakake/whakahao) which was taking a break at the town's port.





A single road network in Northland will consume one dollar in every 10 spent by the Government on infrastructure over the next <u>25 years - exclud-</u> <u>ing maintenance and renewals - the Infrastructure</u> <u>Commission says.</u>

The Government's favoured tools to pay for the road, tolling and value capture, were "never going to pay for anything near the real cost of the super-highway In a paper on a Northland expressway network that will eventually connect Auckland and Whangārai, the commission warmed that this was

Whangārei, the commission warned that this was a large proportion of the pool of capital intended to be spent on all other central government infrastructure like, "roads, hospitals, schools, defence, justice, public admin, etc".

It also warned that the already high cost of the project could double.

The advice was drawn up for Infrastructure Minister Chris Bishop and advised him on the Government's plan to accelerate the construction of Roads of National Significance in Northland.

National campaigned on a series of three road projects that connect Whangārei to Port Marsden, taking the current expressway north of Auckland from Warkworth up to Wellsford, and finding a new route for the Brynderwyns. The Brynderwyn commitment was included in its coalition agreement with NZ First.

The paper was released under the Official Information Act to 350 Aotearoa, a climate change campaign group.



"Is this one motorway really worth one tenth of our entire country's spending on schools, hospitals, houses, and public transport infrastructure?," 350 Aotearoa campaigner, Adam Currie told the *Herald*.

"Northland is in desperate need of government investment, but this project is not it. If the Government seriously cared about Northland, they would be investing in projects that actually - such as investment in education and healthcare, jobs for nature and rail, such as the Marsden Point Rail Link," he said.

He warned that the Government's favoured tools to pay for the road, tolling and value capture, were "never going to pay for anything near the real cost of the super-highway, leaving taxpayers to cough up the bill".

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Currie also warned the road would lead to more pollution, with adverse impacts on New Zealand's climate change emissions and lung health. Transport Minister Simeon Brown told the *Herald* the Government was "committed to building a four-lane highway alternative to the Brynderwyns as part of the National-NZ First coalition agreement".

"This includes a commitment to investigate the use of private finance to accelerate construction, which is why we are undertaking a market sounding. The Government is working at pace to deliver upon this key infrastructure priority," Brown said.

"These market soundings are currently taking place, and officials are due to report findings back to me in the coming months.

"The Government has an ambitious plan to boost productivity and support economic growth by delivering the infrastructure New Zealand requires to get people and freight to get to where they want to go quickly and safely."

The Infrastructure Commission also warned the Government that it needed to be more upfront about the potential for costs to escalate.

It said the Government "should be more transparent about the uncertainty of current cost estimates, including risks relating to the terrain the highways will traverse and structures required (tunnel and viaduct for the first section)".

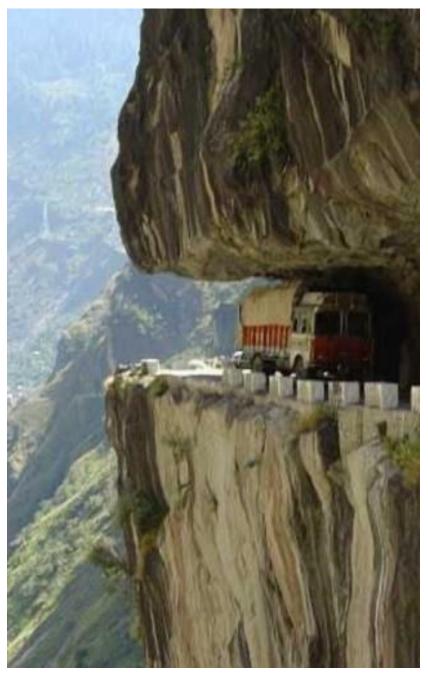
"The actual costs could be much higher, and it would not be abnormal for projects of this complexity to cost 50%-100% more than initial estimates," the commission said.

It was "concerned" at the "process by which this project has been identified as being of such high priority for delivery, amid scarce funding".

And it warned that the Government's strategy for accelerating delivery of the road by seeking inprinciple commitments to the project ahead of a detailed investment case was "high risk" and "inconsistent with good practice". The Green Party's transport spokeswoman Julie Anne Genter, a critic of expensive road projects, warned the cost of these projects was so great it would "significantly limit the ability of future governments to invest in necessary infrastructure".

She warned that the 10% of infrastructure spending figure related only to the Northland Roads of National Significance programme. A figure that included all 17 such roads nationwide would be higher.

"A few more big projects like this and we'll literally have no money left for hospitals and other transport infrastructure like rail," she said. *Source: NZ Herald*  "A few more big projects like this and we'll literally have no money left for hospitals"



Contrary to what you might think, this is not a render of the future Northland expressway as it passes the Brynderwyns. But it could be.



### Buying time: toll roads, congestion charges, and transport

Recently Te Waihanga released a report 'Buying time: toll roads, congestion charges, and transport investment'.

The report sets out the importance of implementing time-of-use pricing and road tolling to help us drive more value from our transport investment.

As part of this, Te Waihanga set out some benchmarks for thinking about the value proposition for transport infrastructure. For new roading infrastructure to generate enough tolling revenue to cover the costs of the asset, projects need to broadly hit three criteria:

- Value: travel time savings of around 15 minutes
- Usage: serve around 40,000 vehicles a day (that's a busy Christchurch road)
- Cost: come in at around \$32m per kilometre.

By these metrics, many recent or proposed investments have not been close to full cost recovery. Penlink (12% recovery), Puhoi to Wellsford (25%), Transmission Gully (7-10%), Tauranga Eastern Link (23%) and Auckland Northern Gateway (42%) are all modelled as having relatively low rates of recovery.

For a sector that has experienced a 649% increase in per capita investment since 1990 (compared to 49% in electricity and declines in hospital spend per 65+ population), these results should be thought provoking.

There are two clear implications for the infrastructure sector.

The first is that greater project value engineering is needed if we are to lift cost recovery, demonstrate value and improve pipeline certainty (by freeing transport investment from other fiscal constraints).

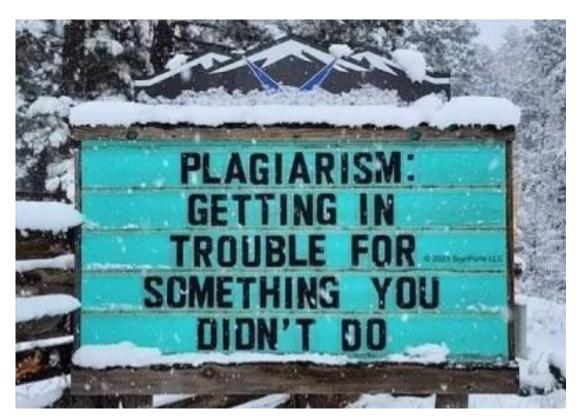
Second, the report is a provocation to think about relative cross sectoral priorities in the context of affordability.

New Zealand faces an urgency to decarbonise, a clear need to build greater resilience in the face of changing weather patterns; hospitals that are in poor shape; and an intimidating wave of local government and central government maintenance and renewals before us.

New Zealand can't afford to do it all, all at once so we will need a sharp focus on value and priorities.

To quote Ernest Rutherford, "we haven't got the money, so we have got to think".

To see the report click here.



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## Inaugural Matrix award—presentation









The Matrix Innovation Award is the Transportation Group's premier award to recognise innovation in the transportation industry.

The award celebrates stand-out innovation in transport improvements across any sector - safety, environment, community, construction, technology, data, etc.

The 2023 winner of the award, announced at the recent conference, was Auckland Systems Management for their 'Road closure trailer' project.

Andrew Stevens (left), as project lead, receives a trip to the next AITPM conference in Australia (flights, accommodation, registration, activities) and will be invited to present on the project to a conference stream.

The other finalists were:

- Auckland University Glen Eden Micromobility Hub Network
- Urban Connection Ltd Evidence Based Safety Assessment Applying UAV – Three Siters
- WSP Resilience Training and Support for Road Safety Practitioners





## **Conference awards**

#### **Best Abstract**

**Best Research Paper** 

Craig Richardson and Sarah Dove - 'SmartTrip - test- Jeanette Ward - Let's talk about parking! ing a road pricing concept to secure smart futures'



**Best Practice Paper & Best Conference Paper** Chun Lin Lee & Doug Weir - 'How Nelson-Tasman People's Choice award - Oral presentation Doubled Bus Patronage in Three Months



**Highly Commended Research Paper** Bill Frith - Using speed-crash models appropriately





Kylie Huard—Parking in Queenstown – it really is bonkers!



**People's Choice award – Soapbox** Dilys Dixi Fong—Where's the fun in that?



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**People's Choice award – Learning Café** Lyndon Hammond—But where will I park? Building support for revitalization



**Best Think Piece Paper** James Llewellyn A Policy and Funding Framework for Community Transport

**People's Choice award – Rapid-fire** *Molly Hoggard—Do we GET IT? The gender equality toolkit in transport* 



**Highly Commended Practice Paper** *Glen Randall 'SH5 Safety Improvements Prioritisation* 

## Applications for Tertiary Study Grant Now Open

#### Applications for Tertiary Study Grant are new open

The Transportation Group aims to advance the knowledge base and practice of the transportation profession in New Zealand.

The Tertiary Study Grant of \$10,000 for a member of the Transportation Group to undertake tertiary study to advance the knowledge base and practice of transportation in New Zealand.

This tertiary study will focus on issues that are important and topical in the transportation area, and the successful member will spread that useful and usable knowledge to peers.

Applications are open until Friday 27 September 2024.

Enquiries or applications should be sent electronically to Awards Coordinator - <u>Daniel Newcombe</u>.

Please note, there is a separate <u>Transport Research Award</u> for non-tertiary research or a study tour on a transport topic (opens October 2024).



### TRANSPORTATION GROUP <u>NEW ZEALAND</u>



Congratulations to all our award winners.

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## SCATS History – The Sydney Traffic Control Centres

Every traffic control centre has to start somewhere.



Every traffic control centre has to start somewhere. The first photo is Sydney's original control centre in Brisbane St, Darlinghurst.

It opened in 1964 and was usually referred to as the Brisbane St control centre. At the time, it would have been considered state of the art, complete with map and multiple CCTV cameras.

The operator, a member of the NSW Police Force, was able to modify the phase splits via the console in real time. The second photo is an update of the Brisbane St control room, circa 1975. The number of CCTV cameras and monitors has been increased and the police officer on duty is using a TEC 420 data terminal which had a display of 20 lines, with each line containing 50 characters.

He appears to be monitoring intersection 532, Cleveland St, Crown St and Baptist St in Surry Hills, a suburb of Sydney. The terminal would have been connected to the newly acquired PDP-11/20 computer.



The following two photos are of the Traffic Control and Emergency Centre on the 1st floor of 1 Oxford St, Darlinghurst (the State Bank Building at the time), which was opened in 1979. Brisbane Street ran alongside this building, which made the transfer of the Brisbane St control room to the new Emergency Centre control room much easier.

The last photo is the Transport Management Centre or TMC in Garden St, Eveleigh. The Emergency Centre control room was moved to Eveleigh in 1999 in preparation for the Sydney Olympics in 2000. *Source: Ken McCallum, LinkedIn* 









Michael Town Conference convenor

Choosing to spend his carbon allocation on a lifetime supply of beer rather than make to trip to New Zealand (wise choice), Day 2 started with a virtual presentation from Glenn Lyons • ty travelled to Whakatū Nelson in early June for the 2024 Transport Conference. See conference photos throughout this edition.

With so much uncertainty and change in the Aotearoa New Zealand transport community in the build-up, the organising team were thrilled to have so many people make the trip to connect, share, learn and laugh with each other during the three-day event.

Despite claims of the sunniest place in New Zealand, some wild Nelson weather almost prevented a few attendees from making it to the opening day, including Greg the MC! Luckily, we were spared the need to improvise, and Day 1 kicked off with the usual introductions and welcomes.

We first heard from Mayor Nick Smith, who after sharing the local Nelson Tasman context gave us his perspective on the balanced regional transport needs of the city.

Showing his political experience, after hailing the new ebus service as a huge success, he also stressed that many people just want to be able to drive their cars around without massive traffic jams.

The first keynote speaker was Jehan Casinader, who spoke about the need to change how we communicate transport projects and outcomes using better storytelling.

Our transport stories need to have characters people can relate to and a journey they are going on. That journey will have some hurdles, so what is the jeopardy if our characters don't reach their happy ending?

Moving from improving level of service to allowing your children to walk to school carefree, these stories will connect with transport decision makers and our communities at an emotional level.

Information gaps or too much complexity is rarely the issue, rather we don't quite nail what people care about. By shifting this narrative, a wellconsidered story will allow transport professionals to deliver more transport improvements across Aotearoa.

The remainder of the day was filled with the concurrent technical sessions (once we had figured out the layout of the Rutherford Hotel), with some highlights from this writer's day including:

• Daniel Newcombe sharing Auckland's rapid transit journey, and how being agile and making decisions over time avoids the need to predict the future (and getting critised when you don't).

## **Conference recap**

- Richard Hart detailing the SECRET of making inner city freight logistics work (subsidise, enforce, communicate, regulate, enforce, trial).
- Olivia Heer sharing how Cable Cars could be coming to a NZ city near you.
- Jamie McPherson showing that the faster, more agile delivery of Streets for People actually got more cycleways installed than the more permanent Transport Choices programme in Tasman.

Day 1 ended with a walk down to the welcoming function at the Suter Art Gallery, where amongst a backdrop of the finest Nelson art the conference attendees got to know each other a bit better.

Choosing to spend his carbon allocation on a lifetime supply of beer rather than make to trip to New Zealand (wise choice), Day 2 started off with a miraculously glitch free virtual presentation from Glenn Lyons, the president of CIHT.

He introduced triple access planning, the concept that people access goods, jobs and other opportunities through not just movement but also spatial proximity and digital connectivity.

In an uncertain world where the future is hard to predict, '*The Triple Access System offers tremendous opportunity to support urban and rural living in ways which assist economic activity and social justice and are compatible with a need to reduce greenhouse gas emissions*', with more information available online.

Glenn was followed by Dr Ihirangi Heke, who despite not quite knowing why he had been invited to speak, nicely flowed on from the transport system discussion to ask us if social and indigenous decisions were well represented in our transport models?

Do all people commute for only an education or work purpose? While he didn't have all of the answers, he suggested we actually ask the communities we are trying to understand and predict how they want to move within our cities and towns, and what solutions they may have.

Having spent the last day and half inside, the attendees were let loose outside for the technical tours.

While some went out on their own tour of the technical mountain bike trails around Nelson, others had the chance to explore Nelson by bike or foot, and Richmond by bus.

The sun was shining, and people enjoyed the outdoors as they checked out the well renowned



Railway Reserve shared path and seaside Rocks Road, the new ebus service and the raised platforms at the Champion Road roundabout, and the Matai River corridor connecting the city to its past.

The day ended with a dinner and celebration of various award winners at the Trafalgar Centre, which had been transformed into a hybrid of Great Gatsby meets Downtown Abbey meets Peaky Blinders for the evening.

Despite the fake whiskey and mellow band, regular conference attendees showed the next generation what the TG conference is all about, having a laugh and getting out there on the dance floor. The party continued into the evening, once people has found a pub that was actually open on a Tuesday night in Nelson...

The final day brough us back to the reality of the current transport status in Aotearoa, and the need to give the SHIP more than a gentle nudge to set us back on course.

Dr Imran Mohammed and Deputy Mayor Rohan O'Niell-Stevens challenged our industry to shape our own transport stories to get ahead of social media narratives.

If we can generate community support through storytelling on the big picture challenges we are trying to overcome, it is more likely to make a project enduring across political priorities and issues. If we all could be better magicians, keeping the audience occupied with better community outcomes in one hand whilst we slide in some good transport infrastructure in with the other, the world would be better for it. Our need to influence was made obvious by the Climate Change Commission and Infrastructure Commission, who delicately pointed out that the current transport infrastructure investment in New Zealand may be at odds with some of their recent advice.

Dr Nadine Dodge from the Infrastructure Commission and the panel group left us with some gems at the end of the conference:

- Motorways are like pizza, if it's free, people will consume as much as they can.
- We have to choose between user pays, all of New Zealand pays, or future New Zealanders pay.
- We are spending more on motorways than we ever have, yet travel times are getting worse.
- Land use underpins transport demand, very few people actually want to drive.
- Move the conversation beyond cost and who pays for it, discuss the wider benefits for the community up front.
- Invest in the elements of projects that give the most benefit to the most people first.

So, what did I take away from the TG 2024 Conference?

Despite some difficult changes in our industry, our community of transport professionals remain as committed as ever to improving the day to day lives of people in Aotearoa.

But we have been challenged to wear more than just technical hats, and to influence the change we want to see in our transport system to get investment at the right place, right time, and for infrastructure future generations will benefit from.



Motorways are like pizza, if it's free, people will consume as much as they can.

## **Conference networking photos**





























Magazine of the Transportation Group NZ



















Pete Moth (Head of PT development, Auckland Transport)

The great thing about Frequent Transit Networks (or FTN) is that you can plan your lives around them. They can determine whether or not you own a car (or a second car). They can influence where you live

## Auckland's Frequent Transit Network hits 40 routes

Cast your mind back to late 2016.

Auckland has just electrified its rail network, and the 2024 Olympics will shortly be announced as being hosted by Paris. On top of the rail network, however, travelling on frequent transit in Auckland was difficult – or non-existent. Just nine frequent "corridors" existed, with less than 15% of the population living within walking distance of "turn up and go" transit.

Turn up and Go Transit is basically transit without the need for a timetable. Services run so frequently that passengers do not need to worry when they turn up at their stop.

In Auckland, we currently define this as a service that runs "at least every 15 minutes, 7am-7pm, 7 days a week". There are ambitions to improve the definition to "at least every ten minutes", to be true turn-up-and-go – but for now, we use 15 minutes. Which is still pretty good.

In this post, a frequent route is defined as a route that runs at least every 15 minutes, 7am-7pm, 7 days a week. Routes with branches (such as 22N and 22R) are treated as a single frequent route.

The great thing about Frequent Transit Networks (or FTN) is that you can plan your lives around them. They can determine whether or not you own a car (or a second car). They can influence where you live.

They can be used for work, education, leisure, retail or family-based trips. Some real estate adverts now talk about "easy access to Link buses" in their property descriptions – I would love this message to extend to ALL frequent routes in Auckland not just link buses! And with recent bus fan pages appearing, (such as #ifuckinglovethe70) it is clear that frequent transit resonates with people.

Back in 2016 we had nine FTN corridors: the Northern Express, Inner Link, Outer Link, City Link, and some routes linking Takapuna, New Lynn, Onewa Rd, Pakuranga and Otahuhu to the city centre.

The network developments between 2016 and 2019 (the roll out of what is known as Auckland's New Network) saw huge increases in FTN routes; a whopping 31 of them were on our streets by the end of 2019. Frequent routes appeared on orbital routes such as Mt Albert Rd; on Waiheke Island; to the airport; along Tamaki Drive; and to Howick.

For the New Network, many single-seat journeys (on often very infrequent services) were replaced by the need for transferring. At the time of the New Network, Auckland also introduced a differ-



ent fare system based on zones to enable free transfers between services. Transferring between services therefore does not cost you any more.

During this time, PT patronage in Auckland rose from around 80 million boardings per year to 100 million. Boardings on the FTN grew disproportionately higher than the rest of the network.

Subsequent to this, we have added route 64 (Newmarket – Kingsland), the Airport Link, route 38 (Onehunga – Airport), route 36 (Manukau to Onehunga). The image at the top of the following page represents the FTN as of 2022. You can play spot the difference – 22 new routes were added between 2016 and 2022.

As documented by the excellent Shaun Baker in his post "Frequency is Freedom", the FTN has continued to develop since 2022. The formation of the Climate Action Transport Targeted Rate (CATTR) in 2022 has given the opportunity to increase this further, through the creation of the following new routes:

- Route 74: Glen Innes to Onehunga, via Sylvia Park
- Route 74: Glen Innes to Britomart, via Kepa Rd
- WX1: Westgate to City Centre, via SH16
- Route 13: Henderson to Te Atatu Peninsula
- Route 11T/W: Westgate to City Centre, via Great North Rd

Recently, our FTN reached 40 routes, with the creation of route 94, running between Takapuna,

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#### Frequent Transit Network 2022



#### Frequent Transit Network 2024



We have a good FTN network, and one that is very different to only eight years ago. Yet many Aucklanders simply do not know about this network. Off-peak public transport mode share across Auckland remains pitifully low – around 2% – compared to our peak PT mode share of roughly 12%

Northcote and Beach Haven. With this, every Kāinga Ora development site in the Auckland region is now served by Frequent Transit.

With this, we now have around 45% of the Auckland population within 500m (or walking distance) of an FTN route. That is almost half of Auckland who can plan their life around public transport.

Weekend trips to the beach with family (Tamaki Link, 83, 50), trips to the zoo (18 or 11) and trips to Westgate shopping centre (WX1, 11) are now possible 7 days a week, at turn-up-and-go frequency. For many trips, you do not need a car.

We have seen some great patronage news stories recently, showing that "Frequency is Freedom" – provide turn-up-and-go frequency, and people will vote with their feet:

- WX1: averaging around 3,000 boardings per day, and the route hit 500,000 boardings within just 8 months of opening
- 94: patronage is averaging close to 2,000 per day, considerably higher than the 1,700 we were seeing before the service improvement
- 11T/W: collectively, this route has seen nearly 600,000 boardings since introduction in November 2023
- 13: will hit 500,000 boardings within 10 months of its operation, on current trends.

The final map shows the 40 routes in all their glory.

And there is more to come. Through the CATTR,

Auckland Transport aim to create three new Frequent routes in the next 12 months:

- 67 Between New Lynn and Onehunga (upgraded 670)
- 65 along Balmoral Rd (upgraded 650)
- 12 between Henderson and Constellation, via Westgate (upgrade 120 – a much-needed Upper Harbour connection. Route 120 carries more PAX than many Frequent routes)

Later in 2026, we aim to deliver several frequent bus routes in South Auckland to bring places such as Manurewa, Highbrook, Drury and Paerata onto the FTN map. By 2027, more than half of Aucklanders will be within walking distance of a bus route that departs at least every 15 minutes, 7am-7pm, 7 days a week.

We have a good FTN network, and one that is very different to only eight years ago. Yet many Aucklanders simply do not know about this network. Off-peak public transport mode share across Auckland remains pitifully low – around 2% – compared to our peak PT mode share of roughly 12%.

The creation of an expanding FTN provides a huge opportunity for more off-peak trips to be taken by PT. With increased flexible working patterns, there is an increased demand to travel outside of peak times. And now we have a network that provides a turn-up-and-go frequency all day, every day.

My request to you all is to please raise awareness of our Frequent Transit Network.





## Let's talk about parking! The safety impacts of on-street parking



Winner of the Transportation Group conference's Best Research Paper Jeanette Ward, Technical Director, Abley

The research undertaken sought to identify how on-street parking impacts safety, multi-modal and place outcomes

#### Introduction and background

Over the last century, many of our streets have been designed around the increasing prevalence of motor vehicle movement and parking.

With limited space on our road corridors, achieving multi-modal outcomes (i.e catering for a range of travel modes) often involves road space reallocation in existing streets.

On-street parking is sometimes removed, and other uses of that space are prioritised, such wider footpaths, cycle facilities, bus lanes and amenity improvements. Often there is public resistance to reducing or changing on-street parking, which can create challenges in delivering multi-modal outcomes and/or have negative safety impacts when parking is retained or provided in a suboptimal way.

While there is a growing body of data and statistics about road safety there is little data specifically and comprehensively focusing on how parking can impact the safety of other travel modes. The research undertaken sought to identify how on-street parking impacts safety, multimodal and place outcomes and to develop strategies that contribute to improving these outcomes.

There was a focus on alignment with the Safe System approach of reducing deaths and serious injuries in road crashes. However, it also recognised that parking also contributes to minor injuries, perceived safety and impacts on accessibility, these can also negatively impact achieving better multi-modal outcomes.

The research focused on urban on-street parking rather than off-street parking which is subject to different types of risks and management regimes, nor did it examine parking management practices or examine where parking should or should not be located for economic reasons.

However, it is acknowledged that there are aspects of parking management that also can improve safety. The full paper discusses some key findings of the research and provides practical advice to transport planner and designers.

Road Controlling Authorities (RCAs) develop parking policies/management plans and manage on-street car parking spaces. Parking spaces can be time restricted or allocated to certain uses (such as mobility parking). The scale of infringement fines for parking are set by the New Zealand Government. At present, the magnitude of fines is generally known by the public to be low and therefore people often risk a parking violation due to the low financial penalty.

In New Zealand parking on-street is usually either parallel (with the kerb or road edge) or angle (angle varies from 30 to 90 degrees) parking configuration. Some streets may have parallel parking on one side and angle parking on the other side. Angle parking is sometimes located in the middle of the road on very wide streets. There are also a few instances of reverse in angle parking in NZ. Parking, both parallel and angle, can be indented between kerb buildouts.

A literature review found several key impacts of on-street parking. From a positive perspective it can provide a traffic calming function and can create a comfort buffer between pedestrians on the footpath and moving vehicles. From a negative perspective it can cause crashes and can deter people from using active modes. This article focuses on the safety impacts.

#### Safety impacts in NZ context

An analysis of the NZ Crash Analysis System data between 2017 and 2021 found that there were 14,030 urban crashes of all severities involving parked cars or because of the act of parking. This is 7.7% of all reported crashes and 2.5% of all DSIs which occurred during the 5year period. The parking related DSIs included nine fatal crashes and 286 serious injury crashes, **Table 1** shows these outcomes by mode.

The majority of DSI crashes involving parking were vehicle collisions with parked cars. Many of these crashes were due to loss of control, visibility being obscured (sunstrike or fog), or inattentive driving, medical events or falling asleep at the wheel.

Vulnerable road users (pedestrians, cyclists and motorcyclists) made up almost half of all serious injuries from parking related crashes and over two-thirds of all deaths in parking related crashes in this five-year period. Injury claim data from ACC for the same period did not help inform the research as there was no way to differentiate between on-street and off-street parking.

The key DSI outcomes for vulnerable road users are: Car door opening into cyclist's path, cyclists colliding with parked cars, pedestrian crossing the road from the drivers left side and being struck by the vehicle.

Table 1 - DSIcrashes by

| mode    | Injury Severity | Pedestrian       | Cycling          | Motorcyclists/mopeds | Car occupants     |
|---------|-----------------|------------------|------------------|----------------------|-------------------|
| Page 36 | DSI             | 40 (13% of DSIs) | 73 (25% of DSIs) | 32 (11% of DSIs)     | 150 (51% of DSIs) |

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It is clear from the literature and crash data that car door opening into the path of cyclists is the main cause of cycle / parking related crashes.

The literature reviewed (including design guidance) generally recommended reconfiguring road space to allow for wider/buffered bicycle lanes or shifting the lane to the kerb side of parking, as shown in the Dunedin example below.

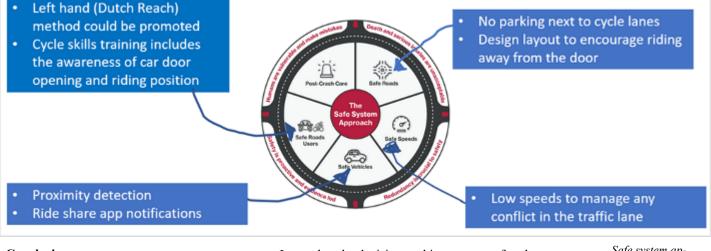


However, mitigating this risk through the provision of separated cycleways or removing parking maybe not be feasible on all streets. This safety issue requires taking a safe system approach as shown below. Good parking policy and management can contribute to better safety and multi-modal outcomes.

Parking management can also guide where onstreet parking is located through a parking space hierarchy that prioritises the types of parking in different areas or street types. This can support using the road space for other uses such as cycle facilities.

There are various ways that parking can be provided within a street, each having advantages and disadvantages depending on the context. When people are designing streets, they have a range of parking related aspects to consider as part of the parking layout decision, including any local parking management plan, the role of the street, speed management, traffic characteristics, space available and external factors.

Good street design can reduce the likelihood of a crash. The Safe System Audit process should capture any parking related safety issues and can be used by RCAs to engage with stakeholders lobbying for a design that creates a suboptimal safety outcome. Good street design including parking reduce the likelihood of a crash.



#### Conclusions

As well as the safety issues found to be related to on-street parking, there are other impacts that can affect achieving good multi-modal outcomes.

For example, a vehicle parked on the footpath or in a driveway can block the footpath and require footpath users to detour around this obstacle, this can be difficult or often impossible for someone with a disability. There is no consolidated New Zealand data on how often this occurs and the impact it has on deterring people from walking.

It was also found that cyclists feel less safe riding in places where there are parked cars, even if there is a cycle lane. This can contribute to people choosing not to cycle.

Integral to the decision-making process of parking layouts are what safety and design mitigation strategies are available to help improve road safety and multi-modal outcomes. A range of existing and potential strategies were identified in the research.

Cyclist safety issues have the greatest number of strategies due to their risk in a range of cycle facility and parking layout scenarios.

A range of regulatory, driver behaviour, safety campaigns and design guidance improvement measures are also needed to help address parking related safety issues and contribute to better multi -modal outcomes. Safe system approach to mitigating dooring risk Roundabout

## **Using Speed-Crash Models Appropriately**

Winner of the Transportation Group conference's Highly Commended Research Paper Bill Frith and Fergus Tate, WSP A hard-hitting TV advertisement from over twenty years ago cuts to the heart of a stark, simple road safety truth - 'the faster you go, the bigger the mess'.



If the average speed travelled on a twolane, two-way rural road decreases from 100km/h to 80km/h, the model says then deaths and serious injuries on that road will be expected to decrease by 43% This, in a nutshell, is the subject of a WSP paper on speed-crash modelling that was highly commended at the recent Transportation Group Conference.

Crash risk increases exponentially as average vehicle speeds increase. Speed-crash models quantify this by statistically linking percentage changes in average vehicle speeds with percentage changes in vehicle crashes and crash death and serious injury. They use real-world data collected by speed measurement devices like traffic monitoring equipment and radar.

"If the average speed travelled on a two-lane, two -way rural road decreases from 100km/h to 80km/h, for example, then deaths and serious injuries on that road will be expected to decrease by 43 percent," says WSP research leader for road safety Bill Frith, who co-authored the paper with WSP technical group lead Fergus Tate.

Speed-crash models have become increasingly sophisticated since the first was developed in the 1980s by Swedish researcher Goran Nilsson.

When speed limits were changed on rural roads in Sweden, Goran looked at changes in actual vehicle speeds and the crashes that accompanied them. Later, the Norwegian Rune Elvik and Australian Max Cameron refined Goran's model to be used on urban roads.

Used by transport agencies and municipalities around the world, speed-crash models play a vital role in transport safety planning. They're no small benefit in Aotearoa New Zealand where annual road deaths consistently exceed 300.

Bill and Fergus' paper provides guidance for anyone using speed-crash models. It recommends

what type of model to use in what circumstance and encourages those who aren't using a speedcrash model to consider doing so.

Speed-crash models now exist for all types of roads, including expressways, rural roads, urban roads, and urban arterials. Models are also available that show what happens when a vehicle hits vulnerable road users such as cyclists or pedestrians at various speeds.

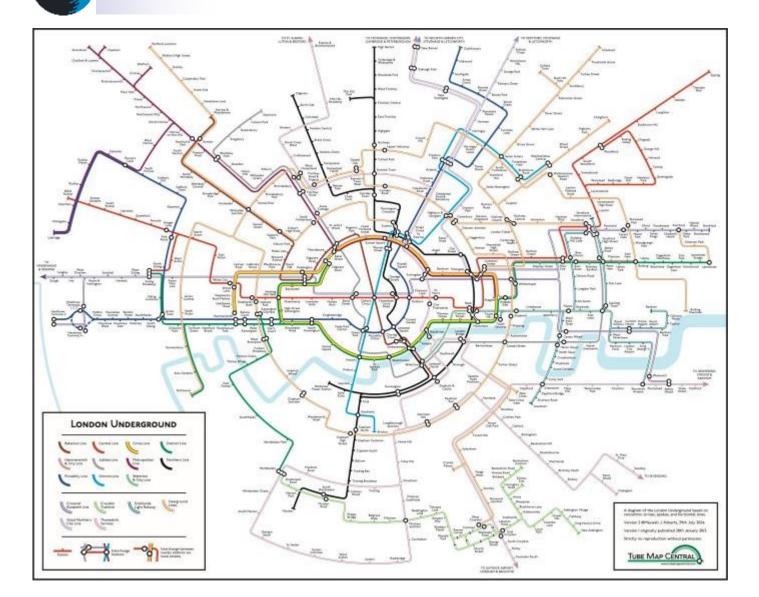
The paper recommends in most circumstances that models that deal with average, or mean, changes in speed are used. Bill says these correspond to reality in all cases, except where there's a very pronounced step-change in speed as with intelligent speed adaptation – where everyone has a device in their car that discourages or prevents the breaking of speed limits.

Because speed-crash models show that higher speeds are linked with a greater risk of road death and serious injury, Bill says it's important that drivers ease off the pedal, stick to the speed limit, and drive to the conditions.

"It's more important than ever that we understand the consequences when things change the speed profile of a road – such as more heavyfooted drivers, putting speed limits up or down, installing speed cameras, or changing the road from one type to another."

To find out more about speed-crash modelling, download <u>Bill and Fergus' paper.</u>





## Help inform Group practice and policy positions

New Zealand faces unprecedented challenges in maintaining the infrastructure and services required to support a strong and sustainable economy on these islands.

There has never been greater need for a cross transportsector professional body to shine light on the most effective ways to deliver critical transport infrastructure and services.

The Transportation Group is embarking on a programme on developing a series of practice and policy positions, covering global best practice through a New Zealand lens.

These will include a series of four-page summary documents, easily accessible by decision makers and practitioners and will cover an array of topics.

Some of our priority topics include the financing of Transport infrastructure, alternatives to infrastructure, and the development and coordination of Transportation with other strategic economic sectors.

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Some of the themes will have significant impacts on practice, and the programme will allow the suitable gathering of evidence, and debating from across subject matter experts and key stakeholders. These will include industry experts and the collation of information from other industry groups.

We are looking to our members for expertise and passion, and invite anyone interested to participate. Please contact me (email below) if you'd like to be part of our opening workshop.

As a community, we are sitting on extensive knowledge which is both deep and wide ranging, and from multiple sectors. This is our opportunity to put our best foot forward and develop valuable insights into how the transport system can be made to better serve New Zealand.

Deputy Chair Mark Gregory

markgregorz@gmail.com

## What on earth does toilet paper have to do with parking?

Kylie Huard (Principal Transportation Planner at Stantec) recently presented "Parking in Queenstown – it really is bonkers" at the Transportation Group Conference. It won her the People's Choice Award for Best Oral Presentation.



That was how Kylie Huard introduced her presentation on Parking in Queenstown at the recent Transportation Group Conference. She used this analogy to demonstrate scarcity, drawing on the scenes of hysteria and panic buying of toilet paper that led to supermarkets imposing restrictions during the COVID pandemic. Like toilet paper, people can get a bit emotional when parking supply is threatened or changed, and restrictions as well as pricing are commonly used to manage scarce parking resources in our cities and busy town centres.

While the comparison with toilet paper might seem a little odd, it's one which has helped Kylie open up the conversation with Queenstown Lakes District's Councillors and community on the role of parking in shaping the look, feel and function of the District's town centres. Kylie shared her experience working with QLDC to address the district's parking problems, peppered with storytelling to provide an engaging and informative presentation on a topic that is typically dry and almost always divisive.

#### **Project Scope**

To date, the project has included the development of a Parking Strategy ('the why'), Parking Guidelines ('the how') and Parking Management Plans ('the what, where and when') for Queenstown, Wānaka and Frankton. A key driver for parking reform is the limited and constrained transport networks, combined with enormous population growth and high numbers of tourists converging on these small towns across the district in NZ's Southern Alps. However, the district faces some further unique challenges including:

• A housing affordability crisis combined with a tourism and hospitality-based economy resulting in 'houselessness' where people may have jobs but are unable to find an affordable place to live. This has led to multi-tenanted houses, with media reports of 20-30 adults living in surburban dwellings, resulting in high parking demands in residential areas.

- The high seasonal demands for parking large vehicles including **motorhomes and coaches** that require oversized parking bays. Coaches also require a range of parking options including drop off, layover, overnight and even longer term parking to manage commercial drivers' fatigue obligations.
- The large number of **baches in Wānaka** and low population density means public transport is currently not yet viable
- Spillover parking from Queenstown Airport in Frankton, with local residents caught up in the enforcement of parking restrictions designed to deter long term parking from airport customers and staff.
- The significant number of **taxis** operating in the district to serve the hospitality and tourist industries means access to ranks is managed through a permit scheme, resulting in issues between permit and non-permit holders.
- The large cohort of **tourists** to the district each day who are generally unfamiliar with the area.

#### **Data Capture, Validation and Analysis**



The project incorporated data capture to understand the demand for parking across the three town centres. Kylie shared her experience using mobile licence plate recognition (LPR) cameras, which are increasingly being used for enforcement but to date have had limited application with data collection.

Like toilet paper, people can get a bit emotional when parking supply is threatened or changed O

She highlighted the benefits of using LPR (including extensive coverage, improved resource co-ordination, high quality and consistent data outputs), but outlined its limitations (such as capturing duration of stay data, the need for quality inventory data, reliance on a single data collection resource, and straying GPS data).

Kylie also shared the results from a validation exercise Stantec incorporated into the project to test the efficacy of the data. While the validation results recorded a 93% accuracy rate of number plates read, she highlighted she didn't need perfection – she just needed to know the 'hit' rate – whether a car was there to determine demand. Validation of the data returned a 99.2% hit rate.

Parking occupancy data was captured in October 2023 and February 2024 to measure seasonal variation, to observe key trends and changing demand over the course of the day. The outputs provided useful insights, identifying areas with spare and limited capacity, and were used in presentations to Councillors and stakeholders.

Data analysis showed exceptionally high onstreet parking occupancy rates in Queenstown, and parts of Wānaka and Frankton at peak times. Baseline residential demands were captured by undertaking data capture runs at 7am, and runs were also undertaken in Queenstown in the evening to measure the night time economy parking demands.

#### **Potential Actions**

Kylie presented on some of the potential actions that will be considered by the community and Council. She prefaced these by stressing the need to take a pragmatic approach in order to achieve success. As parking is very divisive, there is a need to accept compromises, and to provide some 'carrots' as parking reform typically involves a lot of 'sticks'. Possible actions include:

- Differentiating loading for key users: currently loading zones are provided for multiple users including delivery trucks, coaches, couriers and for customer drop off/pick up. However, a single customer using a multi-bay loading zone means the remaining area is unavailable to meet the needs of larger vehicles such as trucks or coaches.
- Providing a consistent management approach within precincts: neighbouring streets within Queenstown are subject to different management approaches, with some streets providing free short term parking, while adjacent streets are subject to longer term paid parking. To reduce circulation, a consistent approach to restrictions and pricing will be applied within each defined precincts.
- Spatial coverage to meet the needs of key users: mobility parking and loading zones need to offer convenient access for these users.

Mapping the coverage of these spaces enabled gaps to be readily identified.

• **Pricing:** Implementation of pricing for coach parking, parking in parks and reserves, and within town centres where parking is currently free.



#### **Parking Permits**

Another area where key changes are being explored includes the use of parking permits, and the introduction of e-permits.

A range of permits are currently in place to manage the district's complex parking problems, and the benefits and eligibility requirements of these were reviewed. Examples of potential changes include:

- Introduction of a local QLDC resident permit: A local resident permit would enable the introduction of differential parking pricing and entitle local residents to discounted parking. This permit recognises the burden local residents face generated from the high tourist demands, and ensures visitors contribute to paying for the district's transport infrastructure.
- Changes to the seniors' permit: Seniors (75+) are currently entitled to free parking with this \$5, three-year permit. Potential changes to this permit will see seniors' given more time to park in time restricted bays, however they will be required to pay for parking.
- Introduction of a new parents' permit: The project team has initiated conversations with Plunket to explore introducing a permit to improve access for new parents, with similar benefits to the seniors' permit.
- Introduction of residential zone permits: These are commonly used in other cities to balance the competing demands of residents, commuters and shoppers, but are not yet used in the district.

As parking is very divisive, there is a need to accept compromises, and to provide some 'carrots' as parking reform typically involves a lot of 'sticks'.



## **Conference dinner photos**









## Magazine of the Transportation Group NZ





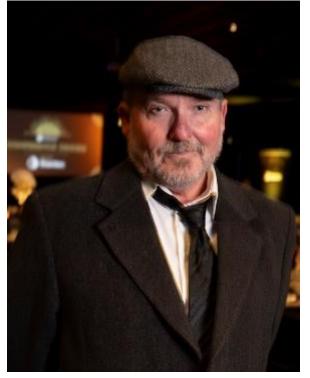








## More conference dinner photos





















Thanks to our dinner sponsor:

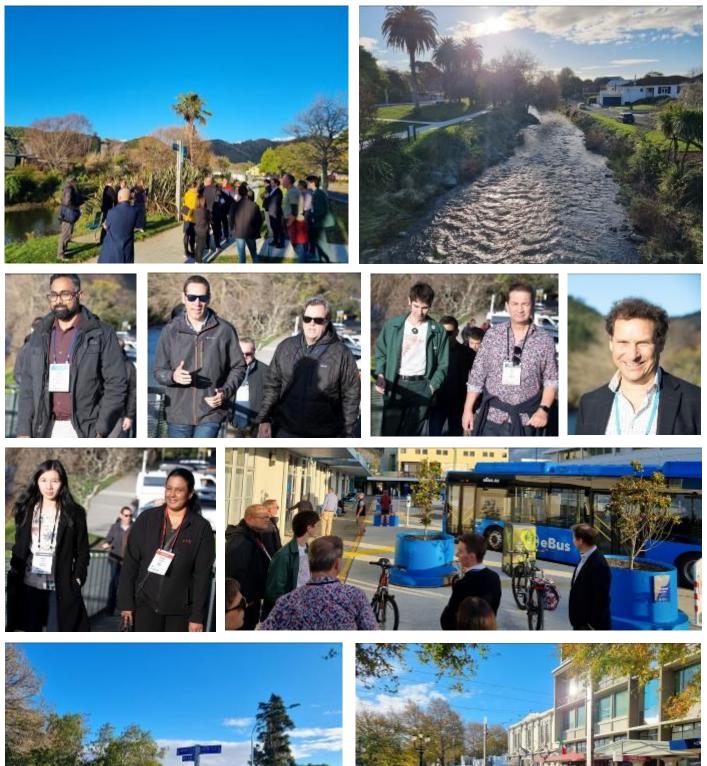




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## **Conference walking tour photos**





## **Conference cycling tour photos**















This photo on the right from conference convenor Michael Town showing central city streets in Nelson in Autumn (not on the cycling tour but soon after) demonstrates that like muddy lines through grass can show pedestrian desire lines, piles of leaves can show you where traffic calming islands could go.



# Nelson Tasman bus service sees 101% increase after one year of eBus



Nelson Tasman residents have embraced the future of public transport with enthusiasm, taking 931,328 journeys on the new eBus service in its first year.

The fleet of 17 new Foton electric buses rolled out on 1 August 2023.

Nelson Mayor Nick Smith says there has been strong growth in patronage since the eBus service was introduced, with the number of journeys jumping from 462,055 in the final year of the former NBus service, to 931,328 in the first year of eBus - a 101% increase.

"The region can be hugely proud of having the first electric bus service of this scale. The expansion of the bus frequency and destinations to cover 3885 kilometres each day has helped drive a doubling in use.

"Our new eBus service has had a few bumps and will need continued refinement. We are doing a one-year review to look at how it can be further improved. Our goal is to further grow the service to achieve a million journeys a year," he says.

While Nelson previously had a bus service, public transport in this format is new to Tasman.

"eBus has had a massive impact for our communities," says Tasman Mayor Tim King.

"Over 70,000 journeys across the Motueka and Wakefield routes is a testament to how essential these routes are for us.

"Add to that, the peak hour overflow buses and

the Motueka bus at capacity in the school holidays, and you can see a real appetite for public transport in Tasman," he says.

Route 7 is the overflow bus that follows Route 1 from Richmond to Nelson in the morning and vice versa in the afternoon. It only travels during weekdays, collecting students and commuters.

The overflow has connected a further 20,000 passengers to the network that would otherwise have had to rely on private transport.

Patronage data from the first month of eBus was viewed as a positive indicator of what was to come. An immediate increase from July (NBus) to August (eBus) was clear and the numbers continued to rise. Patronage has fluctuated over the year but aligns with standard movements in public transport such as winter patronage numbers.

Nelson City Council Group Manager Infrastructure, Alec Louverdis says patronage peaked in March 2024 at 91,687, but there are no signs of a plateau as improvements continue to be made.

"Thanks to funding from NZTA Waka Kotahi, both Councils have installed shelters, solar lighting and wayfinding signage across the network.

"Nelson City Council has installed 18 new bus shelters across 16 sites including the Tāhunanui interchange on Muritai Street and busy routes like The Brook.

"This funding also allowed us to upgrade the shelters at the busy hospital interchange where we will also install solar lighting."

The region can be hugely proud of having the first electric bus service of this scale.

#### **Issue 181 September**

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In Tasman, 16 bus seats have been installed with new shelters in Wakefield and Motueka.

Funding from NZTA Waka Kotahi also covered the installation of wayfinding signage across the whole network. These signs were added to each bus stop to indicate to passengers which routes frequent the stop. A number of passengers say the new service is much better suited to their needs and is fit for purpose.

Bus user Gina says "navigating wet streets on a bike can be tricky; I'd rather enjoy a cozy bus ride than risk a slippery adventure on two wheels.

"Arriving at work dry and warm makes me much more productive in the morning," she says.

An incentive from her workplace to use public or active transport is a further incentive, along with the cost savings. The eBus came along at the right time for 71-year-old Robert.

"My little runabout had finally given up the ghost and my health was deteriorating so I wasn't sure if I would be able to continue driving. I saw that The Brook was one of the new routes so thought I'd wait to see whether I could replace my car with the bus."

Four months later, eBus launched with a bus stop outside Robert's house.

"I have a Supergold card and travel off-peak, so travel is free for me. I use the bus 3 - 4 times a day, for hospital appointments, to get to the library and everything in between," he says.

In the year since the launch, there has been various additions and adjustments.

In April 2024, eBus started a trial to allow large dogs onboard with a muzzle. To date, this trial

has been considered a success and Council will be seeking to extend it through the summer months.

Council has been seeking feedback on the new service via the eBus Shape page, with timetable scheduling, Bee card queries and route requests all common themes.

This feedback will be taken into account during the upcoming one-year review of the eBus service, with a focus on route timetables. Some early changes have already been made in response to passenger feedback.

In July 2024 for example, the first timetable adjustment was made for Route 5 and Route 6. Alec says it's about providing a public transport system that works for its users.

"The previous timetable wasn't consistent with actual travel time, didn't have proper allowances for passenger boardings and was putting too much pressure on the schedule."

The eBus service will continue to be improved and upgraded, with plans (subject to NZTA funding) to see the Motueka and Wakefield routes extend to the weekends, and a park-and-ride facility for Richmond.

One exciting change coming is the new national ticketing solution, Motu Move. The solution will be rolled out region by region and is currently planned to launch in Nelson in 2026.

"Motu Move will bring a new way to pay for your bus," says Alec.

"Passengers will be able to use their debit or credit card to tag on and off public transport throughout Nelson and around the country." The overflow bus service has connected a further 20,000 passengers to the network that would otherwise have had to rely on private transport.

# **SIDRA Training**

- ViaStrada is looking at more SIDRA INTERSECTION training in the near future
  - Online? In-Person?
  - Beginner? Intermediate?
- Please complete the following survey to register your interest <u>https://viastrada.nz/sidra</u>
  - Survey link under SIDRA Training







Roundabout

## The Transport Planning Society of NZ wants to give out AWARDS!!!!



For those of you that haven't yet been told about this amazing new home for our transport planners – here is a brief outline of what we are about.

Our aim is to facilitate, develop and promote best practice and innovation in transport planning here in Aotearoa New Zealand.

We aim to create a Society that provides an open, diverse and inclusive transport planning community, which represents and champions the transport planning profession.

TPS Awards - Young Transport Planner of the Year



(\*actual award may vary CONSIDERABLY from this image)

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Yes – we want to recognise our amazing Transport Planners here in Aotearoa!



But first -a bit about us and what we have been up to (you can skip this if you are only interested in getting awards).

Some of the readers of this eminent publication will know that we now have a NZ branch of the Transport Planning Society. This branch was set up 2 and a half years ago and many people have since gained their Professional qualification (and Chartership).

Whilst TPS has a broad range of strategic objectives the key focus of the NZ branch right now is to:

- Support the career progression of transport planners in NZ through the management and promotion of the Transport Planning Professional (TPP) qualification
- Build a strong and sustainable core membership base for the Society and grow the membership, particularly in geographical areas and sectors where transport planners are underrepresented in the Society, and to be proactive in the creation of an open, diverse and inclusive transport planning community.

We have spent time over the last 18 months ensuring that we build up the number of trained mentors here in NZ to help with gaining qualification as a Chartered Transport Planning Professional, so now is a great time to get in touch (newzealand@tps.org.uk).

The broader TPS Society is also:

- Ensuring TPS is influential and proactive in seeking improvements in policy and practice, and in setting the transport agenda at a national, regional and local level.
- Continuing running an effective TPS operation to provide the widest possible forum to engage on relevant and topical transport planning issues.

• Improving the public understanding and the image of transport planning and transport planners, and promote transport planning as a profession.

Joining the Transport Planning Society is easy and costs around \$90 per annum. For this you will gain access to the Newsletter which provides information from our colleagues over in the UK and also contains information coming from the increasing number of branches internationally. <u>Membership (tps.org.uk)</u>

### **NOW ABOUT THOSE AWARDS!\***



The TPS NZ branch wants to reach out and congratulate (via the medium of a lovely certificate) those who operate at the pre-coal face of transport.

Those of you who have done the hard mahi developing an understanding of the 'why' before the 'what', the 'who' in 'zoo', the 'missing' before the 'found'... (I could go on, but I will stop now). To that end we have devised three awards this year:

## Young Transport Planner of the Year – an award for those under 30. (QR code on left)

This annual award celebrates the innovative spirit and impactful contributions of transport planners under the age of 30 who are shaping the future of transportation in New Zealand. Do you know a young transport planner who:

- Brings enthusiasm and innovative approaches to projects or policies?
- Constantly learns and shares global best practices?
- Goes the extra mile to understand community insights or represent underrepresented groups?
- Shows commitment by volunteering for challenging projects or helping others in their journey?

#### **Issue 181 September**

TPS Awards - Transport Planning

Project of the Year



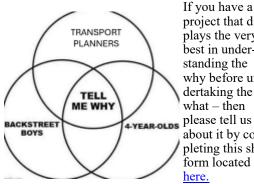
Then please enter them for the Award by completing the short form located here.

#### Transport Planning Project of the Year (QR code on top right)

This award seeks to identify an outstanding project that showcases the key skills and competencies of those in the transport planning profession. Projects that involve development of key transport policy, strategic or master plans, changing travel behaviour, commercial or operational projects (e.g. new bus services/trains/other operational projects in freight or intermodal integration) will all be considered for this award.

We are looking for projects that show significant innovation to best practice in at least 4 of the 8 areas below:

- Policy context the extent to which a project responds to a wider policy environment - including challenging status quo.
- Data the extent to which the project made use of data and analytical tools to help develop options and provide a critical framework for the project for appraisal.
- Models and forecasting the extent to which the project innovated in the area of scenario or forecasting approaches.
- Appraisal and evaluation the extent to which the appraisal or evaluation of the project followed best or innovative new practices to help decision makers. Challenging the status quo approaches and critical thinking are of particular interest.
- Stakeholder engagement the extent to which the project undertook stakeholder engagement - and how this was undertaken in line with best practice or was innovative and led to greater engagement.
- Te Tiriti O Waitangi How Māori partnership principles and/or the development of Kaitiakitanga principles were applied to the project.
- Applying principles of system design Where appropriate how the project responds to other transport system requirements e.g. operational costs/maintenance/interaction with other parts of the transport or built environment.
- Communication and collaboration other components of communication that have improved the data, outcomes or acceptance of the proposal of interest.



project that displays the very best in understanding the why before undertaking the what - then please tell us about it by completing this short form located

Our final award... and a cracker!

#### **TPS NZ Awards – Transport Planner biennial** award (QR code on bottom right)

Some of us have been doing this for a long time and it's not always easy. This award seeks nominations for Transport Planner Biennial Award and is for those who have been working as a transport planner for over 15 years. With this award we would like to recognise those who have been working diligently in the field for a long time and we particularly want to recognise people who contribute to the profession in the following ways:

- Do you know somebody who has been diligently producing great work over their career but has never been noticed?
- Do you know somebody who has been influential in changing how people think about transport?
- Do you know somebody who is constantly learning and sharing their experiences with others?
- Do you know somebody who takes a special interest in helping people understand transport planning and getting them involved?

If you know someone who you think should be recognised for their constant attention to the world of Transport Planning, complete the short nomination form here.

If you can understand this joke - you may prequalify for the biennial award!



Entries need to be in before 6pm on the 16<sup>th</sup> of October. A panel from the TPS NZ will review entries. You will be informed of whether you have been nominated by the 25<sup>th</sup> October and may be invited to a short meeting to discuss your nomination. Winners and nominees will be announced as part of Transport Planning Day on the 11<sup>th</sup> of November. WE ARE VERY EXCIT-ED TO HEAR FROM YOU!

If you just want to have a yarn about whether it's worth entering – or have any questions then you can contact sarah@sarahloynes.com or James.Hills@at.govt.nz we will give you call.









## SmartTrip - Testing a road pricing concept to secure smart futures

Winner of the Transportation Group conference's Best Abstract Sarah Dove, Tauranga City Council & Craig Richards, Beca

Variable Road

times.

A Tauranga City Council (TCC), Waka Kotahi and Beca study to explore potential and options for introducing a Variable Road Pricing (VRP) scheme in Tauranga has shown that road pricing could provide a range of benefits including reduced congestion and faster, more reliable journey times.

It could also deliver significant economic benefits, encourage different transport choices, reduce transport-related greenhouse gas emissions, and help to address funding shortages.

Community feedback on the concept (through Long Term Plan consultation) however has been more centred on concerns of negative financial impacts to people and businesses across the western Bay of Plenty sub-region.

Approach

Pricing in Tauranga could provide a range The study was delivered in two stages. Working collaboratively the initial stage focussed on comof benefits including paring different approaches to road pricing such reduced congestion as fixed price, dynamic pricing and variable pricand faster, more ing (VRP). *reliable journey* 

> It sought to gain an understanding of the potential for, and implications of, road pricing in Tauranga. This stage determined that applying VRP (where price is known / scheduled in advance of travel) rather than dynamic road pricing (where pricing changes in real time based on network conditions) was the appropriate concept to test in stage two as it was deemed more effective in achieving the study's objectives.

With the broad approach agreed and based on best practise from cities that have implemented road pricing, the team developed a range of options for further evaluation with differences between access and distance based pricing.

Two of the schemes we evaluated established a cordon around the Te Papa Peninsular (central suburbs) and users would pay to enter the cordon. Another two options were network and distanced based where users would pay to travel on a priced network on a per kilometre basis. A range of price points were tested with different charges for cars and trucks and higher costs in peak periods vs off peak.

The options were evaluated using the Tauranga Transport Strategic Model (TTSM). Six network performance indications from the model were used to inform the evaluation:

- VKT (Vehicle Kilometers Travelled) (Average daily vehicle kilometers travelled)
- Emissions (Carbon dioxide equivalentCO2E Kg / Day)
- Delay (Average Daily vehicle hours of delay: Congested time - free flow time)
- Public transport mode share
- Level of service (Proportion of the priced network links at LOS D or better)
- Revenue (net revenue generated, road pricing minus existing toll revenue).

In addition, the team evaluated the change in movement across the network to check if pricing

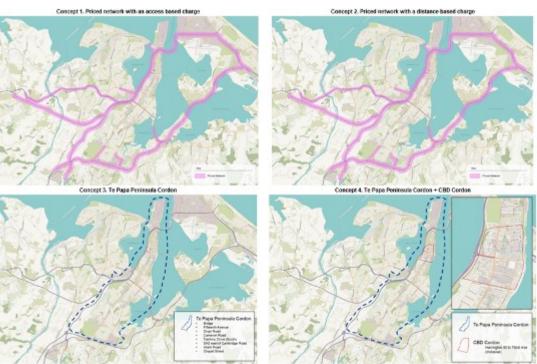


Figure 1: Road Pricing Concepts

Pa



would lead to higher traffic volumes on our more sensitive roads i.e. around schools and town centres.

The results from the option assessment enabled the development of a road pricing scenario (hybrid of priced network with both access and distance-based charges) that became the focus of stage two.

Stage two then further assessed this scenario, for example the extent of the priced network; improved management of network diversion; improve network level of service implications. Then like stage one this second stage of the study used the sub-regional transport model to understand matters like network performance (e.g. delay), vehicle kilometres travelled and mode shift, and in addition potential revenue and costs at two future scenario years (2035 and 2048).

#### Findings

The VRP scenario assessed in this study would generate approximately \$88m in net revenue per annum in 2035 growing to \$158m by 2048. Variable road pricing reduces overall network delay by 20%, improves journey time reliability and supports some desirable urban form outcomes. Road pricing was found to reduce VKT by 6% and encourage a shift to public transport and active modes.

Road pricing can result in higher traffic flows on The analysis found that the average additional non-priced roads as compared to a scenario without pricing. This occurs as result of changes in origin location however there was no apparent travel behaviour and changes to route choice. regressive relationship with average household The study predicts a 4% increase in VKT on lo- income, i.e. the additional costs were reasonably cal roads with road pricing. Some roads would be evenly distributed across all income bands. more affected that others. Given that local roads

can be more sensitive to traffic movements, any future studies of road pricing in Tauranga will need to evaluate local road impacts and potential mitigation in more detail.

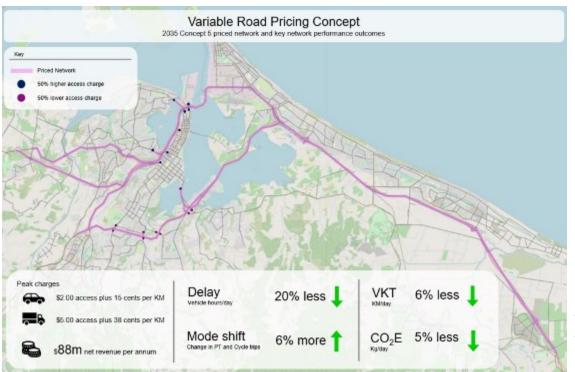
The study found that the forecast public transport mode share with road pricing increases but remains well below the minimum 25% public transport mode seen in the other jurisdictions across the world where road pricing was implemented or being considered, further consideration / design of the bus system in the VRP scenarios could improve this outcome.

The priced network assumed in this study is complex with over 100 entry and exits points. Based on an ANPR system it is estimated that around 95 to 100 camera sites would be needed to implement the system. The system would require complex back-office technology to operate, and the camera sites would likely have a visual amenity impact.

Road pricing schemes can raise social equity concerns because they may disproportionately affect lower-income drivers. If not carefully designed, the scheme may be seen as unfair. This study quantified an indicator of equity, which was the additional monetary cost that travellers would be faced with relative to their average income.

cost that travellers would be faced with varies by

*Road pricing schemes* can raise social equity concerns *because they may* disproportionately affect lower-income drivers.





#### **Household Cost Analysis**

Following the initial findings, TCC sought to understand the likely cost implications for households in the region if VRP is introduced. As every household will be impacted differently depending on where they live and their travel characteristics, the team defined 'example households' to compare potential outcomes for different families.

In some cases the potential additional household cost could be significant in relation to typical transport spend, however this is mostly in cases of larger families living further from main destinations and where alternative options such as rerouting or public transport are not as accessible.

The work concluded that should VRP be progressed, then a focused effort toward providing transport alternatives in specific locations and to specific destinations like universities, the hospital and CBD will be important to achieving equity and reducing potential household cost impacts.

#### **Comms and Engagement**

Based on the responses, the TCC Commissioners agreed to not proceed with a full business case at this stage and to further investigate key areas of community feedback received.

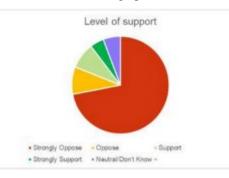
The SmartTrip concept was introduced to the community through Long Term Plan (LTP) consultation Nov-Dec 2023) and feedback focused on the cost to households and businesses. Benefits such as reduced travel times, and improved travel time reliability were less obvious to respondents.

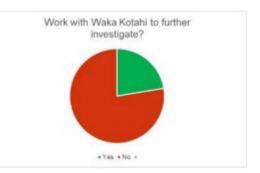
Through the engagement three questions were asked:

(a) 'What is your level of support for using SmartTrip variable road pricing to accelerate Tauranga's investment in a better road network and transport services thereby reducing congestion and carbon emissions?
(b) Should we work with Waka Kotahi and Government to further investigate SmartTrip through a business case investigation? (This would confirm the benefits variable road pricing could provide and identify solutions which would address any potential negative impacts).

(c) Any comments?

The LTP engagement process received 1,667 submissions. The responses to Questions 1 and 2 are visualised in the two graphs below.





Question 3 (the open question) was answered by 711 respondents, and provided nuanced insight in reasons why people are opposed or supportive. The most common topics for not supporting SmartTrip were: Cost of living / not able or willing to pay more; The quality of alternative modes of transport needing improvement; and equity concerns for those on lower incomes, in certain suburbs, and for those with disabilities.

Based on the consideration of responses and assessment of identified options, the TCC Commissioners agreed to:

- Not proceed with a full business case at this stage;
- Further investigate key areas of community feedback received, including exploring pricing scenarios in terms of current or forecast active and public transport enhancement projects;
- Continue to liaise with Waka Kotahi, the Ministry of Transport, and other interested councils to explore nationally consistent approaches to road pricing, to enact any benefits in policy and engagement alignment.

The rational for the recommendations were due to there being: no current legislation in place to implement road pricing schemes; that at a national level the issue of road pricing is now actively being progressed and there is an opportunity for Tauranga City Council to participate in this process and influence; feedback received through the engagement identified specific issues which warrant further investigation and consideration; and it was appropriate to await further direction from the GPS 2024 on Land Transport.

The need for proactive messaging that presents both costs and benefits to the community and managing media releases to support continued investigation was a key finding of the study. In conjunction, responding to key concerns from community feedback and more detailed work on the benefits and implications of the concept, such as equity and social licence, will be important aspects of any next stage of investigation should this be considered by Government or Council.

Acknowledgements: Sarah Dove (TCC), Richard Hurn (NZTA), Andrew Murray, Craig Richards and Matthew Hickson (Beca).

Graph 1 (right): Question One

Graph 2 (above right) Question Two





Timothy Welch Senior Lecturer in Urban Planning, University of Auckland,

This NLTP isn't just a missed opportunity, it's a deliberate Uturn away from the sustainable, efficient urban transport systems the cities need.

# plan steers NZ back to a car-dependent past

Spinning its wheels: the new national transport

The government's new National Land Transport Programme (<u>NLTP</u>) could easily have been renamed the "highway funding project", given its intense focus on road building.

Released recently, the plan outlines funding priorities for the next three years. If it comes to fruition, much of the spending will be driven into major highway schemes, and steered away from sustainable transport alternatives for the main cities.

The programme allocates NZ\$7 billion for state highway improvements between now and 2027, most of which goes to the newest iteration of the so-called Roads of National Significance (RoNS).

On top of this massive highway bill, the programme gives another \$1 billion in contingency funding to accelerated planning of the RoNS. But the total \$8 billion price tag doesn't actually buy new highways.

The roads are several years, if not decades, away from becoming a reality. Instead, these funds will be dedicated to extensive planning, design and preparatory work, rather than actual construction.

For many of those road projects, the current NLTP period focuses on route protection, environmental assessments, property acquisition and preliminary designs.

The State Highway 1 Warkworth-to-Wellsford project, for instance, will only begin construction late in this NLTP period. Others, like the East-West Link and State Highway 29 Tauriko West projects, are still in the development and route protection stages.

Even more telling, projects such as the State Highway 16 North-West alternative highway won't see any construction during this NLTP period. Nor will the State Highway 6 Hope Bypass in Nelson, which won't break ground until 2029.

The approach effectively commits billions in taxpayer dollars to preparatory work without delivering any tangible infrastructure improvements.

New Zealanders will likely find themselves stuck in worsening traffic, waiting for highways that may never materialise.

These projects could easily be sidelined by future budget constraints or <u>changing political priori-</u><u>ties</u>. A growing recognition of induced demand – where new roads generate more traffic rather than alleviate congestion – and the looming challenges of climate change risk these carbonintensive projects being obsolete before they even begin.

Meanwhile, projects that could address far more severe congestion in the main cities are being cut back or indefinitely postponed.

Transport Minister Simeon Brown's election promise to prioritise mending potholes – essentially a rebranding of standard road maintenance – will also significantly affect transport funding.

In all, a staggering \$10.06 billion will be spent maintaining and operating the overbuilt road net-work, including:

- \$2.07 billion allocated for state highway pothole prevention
- \$2.3 billion for state highway operations
- \$3.44 billion for local road pothole prevention
- \$2.25 billion for local road operations.

This enormous sum, mainly dedicated to preserving the status quo, raises questions about the financial <u>sustainability and efficiency</u> of our current transport infrastructure model.

The road-building focus of the new NLTP will draw funding away from projects that offer the best bet of reducing urban congestion, lowering the number of road deaths and meaningfully curbing transport emissions.

The programme pulls the plug on new cycling and walking projects, furthering the culture war Brown ignited when he took the reins as transport minister.

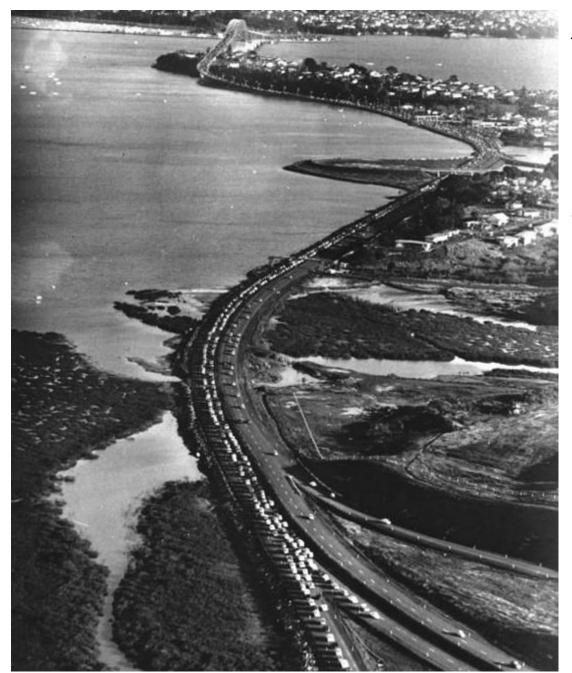
Announcing his plan, <u>he claimed</u> New Zealanders were "sick and tired of the amount of money going into cycleways".

A mere \$460 million is allocated for walking and cycling over the entire three-year period, a fraction of the billions earmarked for highways.

This also represents a significant decrease from previous NLTP periods, with the document merely stating there is "no available funding for new projects" in this area.

With the focus on completing already committed projects and maintaining existing infrastructure, it's a clear signal active transport modes have been pushed aside in favour of the government's asphalt aspirations.

Public transport funding also falls prey to the new highway building programme. While the NLTP allocates \$3.73 billion for public transport



Meanwhile, projects that could address far more severe congestion in the main cities are being cut back or indefinitely postponed.

Northern Motorway from Esmonde Rd to the Auckland Harbour Bridge—1959

services and \$2.64 billion for infrastructure, the lion's share of this is earmarked for maintaining existing services, with very little left for expansion.

There is no grand vision for public transport. A mere \$136 million is allocated for service improvements across the entire country. Auckland, already choking on traffic, gets a mere \$100 million. Christchurch gets \$8 million.

Even more alarming is the expectation of increased fare revenue and third-party funding for public transport. The transport plan involves squeezing more money out of commuters already struggling with the cost-of-living, while simultaneously starving the system of the investment it needs.

Auckland's Northwest Rapid Transit corridor has been left dangling, its fate tied to "additional funding availability". The message seems clear: highways are a necessity, but efficient urban transit is a luxury.

This NLTP isn't just a missed opportunity, it's a deliberate U-turn away from the sustainable, efficient urban transport systems the cities need.

Rather than investing in New Zealanders having a genuine choice in how they move in the future, it shackles them to a car-dependent past – one pothole-free highway at a time. *Source: The Conversation.com* 



## **Conference art gallery event**













## Issue 181 September

## Magazine of the Transportation Group NZ















Thanks to our event sponsor:

## This man travelled from Canada to Mexico on only public transport



William Hui has been fascinated with public transportation for as long as he can remember. So it only made sense that the 40-year-old systems engineer would challenge himself to travel from his hometown of Vancouver, British Columbia, to Tijuana, Mexico, solely on public buses and trains.

On 24 June, Mr Hui set out to do just that, taking a nine-day journey along the US Pacific coast. Mr Hui told the BBC he only had a few rules for his trip: absolutely no Greyhound buses or Amtrak trains were allowed, and walking between bus stops had to be kept to a minimum.

"At no point in this trip did I have to walk more than maybe 15 minutes from one bus stop to another," he told the BBC on Friday.

"It was just remarkable to see how the different services connected, especially in rural areas," he added.

This was not the first time Mr Hui set out on an unusual journey. In 2013, he tried to travel as far south from Vancouver as he could, but only made it to Salem, Oregon.

"I wanted to go further, I just couldn't because there was no transit pretty much crossing Oregon into central California," Mr Hui said. But earlier this year, he learned of a new, four-hour bus route that links Eureka, a city in northern California, to another city named Ukiah, about two hours north of San Francisco.

He called that route "the missing link", which finally allowed him to make the journey all the way to Mexico more than a decade later.

Mr Hui said a lot has changed from that initial trip, including how more public transit buses now are equipped with WiFi and accept credit or debit card payments.

Some, however, still only accept cash. "I went to the currency exchange before I set out on this journey and asked for 50 \$1 bills just so I had exact change," he said.

Another thing Mr Hui noted was the difference between public transport in bigger cities, like Seattle or San Francisco, and smaller rural areas, where one bus would travel several hours to link people over the span of hundreds of kilometres. When it came to international borders, Mr Hui said he crossed them by foot. At the US-Canada border, he said he was met with scepticism by border agents as he tried to explain the purpose of his journey.

"There are not that many people who cross the (northern) border by foot," Mr Hui said. By contrast, he noticed a more well-travelled route between San Diego, in California, and Tijuana, Mexico, and generally more foot traffic at the southern border.

In all, Mr Hui spent a total of about \$200 (£157) on bus tickets. But the views along the way, he said, were priceless.

"I was absolutely amazed by the Oregon coastline when I passed through central Oregon," he said, and was also "awestruck by the redwoods" as he travelled through northern California. "And I've been saying this to folks who have asked: I was really there for the journey, not so much the destination," he said.

Mr Hui, who works at TransLink - the transportation authority in Vancouver - said his fascination with public transport stems from his appreciation of the "logistics puzzle" behind transit systems that allow buses and trains to get to their intended destinations on time.

He added that he enjoys the novelty of experiencing a new system of public transport, and the role these systems play in helping connect people from one place to another.

"One thing that struck me on this trip is how important transit is to the communities it serves," Mr Hui said. "At no point was I alone on the bus for extended periods of time," he said. Another thing that surprised Mr Hui is the minimal delays throughout his trip.

"That was the amazing part," he said. Even with the notoriously lengthy Los Angeles traffic, Mr Hui said he had enough time to make his next connection and did not have to resort to any backup plans.

For anyone who wants to set out on a similar journey, Mr Hui advised to research ahead of time and to pack light since there are typically no luggage racks or baggage space available. He added that it is good to also plan out bathroom breaks.

"Shopping centres, libraries, community centers, those are great places to find a washroom during a short stop," Mr Hui said. And perhaps the most important tip: "Know when the bus comes." *Source: BBC News* 

His fascination with public transport stems from his appreciation of the "logistics puzzle" behind transit systems that allow buses and trains to get to their intended destinations on time.



300 in May.

# Thames-Coromandel District Council staff told to stop speeding

Thames-Coromandel District Council staff have "dramatically" reduced their speed in vehicles with figures showing a drop of nearly 500% in reported "events" between May and June.

The statistics formed part of a health and safety

report which showed "over-speed data" had rec-

"We have seen a dramatic reduction in the number of over-speed events in May; this is a result

of speeding being a topic of discussion at team

toolbox meetings," the report stated.

orded just over 50 events in June compared to

Over Speed Data

Thames-Coromandel District Council's overspeed data from November 2023 to June 2024.

The council's health and safety team were developing mental wellbeing support in the form of a new reporting tool which required managers to engage with staff and have open discussions around what they did well and how they were doing in general.

Staff were encouraged to seek help and support through their team leaders or health and safety team while the council offered a free counselling service.

Personal confrontation was one of "nine nasty hazards" identified as significant in terms of resources and attention, to reduce their impact and occurrence.

They also included working at height, workrelated health hazards and impairment, asset failure, work in the vicinity of energised amenities, slips, trips and falls, ignition sources, and events and activities on council property.

A new health and safety committee would be formed with terms of reference being developed. The idea is to have management and worker representation, focussing on proactive health and safety being undertaken, learnings from incidents and investigations, and considerations around health and safety improvements. *Source: Waikato Herald* 

I was sitting in traffic the other day. That's probably why I got run over The report showed speeding had been a topic of discussion at meetings across the council, and a specific notification about it had been sent out by the chief executive to all staff.

"Managers are encouraged to provide feedback to their staff, and it is hoped the reduction trend continues."

The report showed speeding had been a topic of discussion at meetings across the council, and a specific notification about it had been sent out by the chief executive to all staff.

Employers can track speed by installing GPS devices in vehicles.

Figures showed the majority of speeding drivers were travelling between 10 and 15km/h over the speed limit.

The table showed over-speed data between November 2023 and June 2024 with numbers increasing from 125 events in January to just over 200 in February, 270 in March and April, then 300 in May.

While there had been a reduction in speeding, concerns were raised about personal confrontation incidents with 41 reported in the year to June 30.

The report stated the installation of physical barriers, CCTV and panic alarms was under way with "significant effort put into personal confrontation hazard during this reporting period".

Scenario-based training had been developed to ensure staff were pre-prepared and a training programme would be delivered to all business units by the end of the fourth quarter in 2024.

Where significant personal confrontation incidents had occurred during the reporting period, an individual debrief session had been undertaken with the staff members including the offering of appropriate support, and a learnings and training session held with their teams to reiterate appropriate response to confrontation.

## New avalanche shelter for Homer Tunnel

NZTA recently finished a new avalanche shelter for the Homer year-old shelter that'd reached the end of its life, and brings Tunnel on State Highway 94. The new shelter is a significant safety upgrade for SH94, the only road leading to Milford Sound.

The new shelter, on the Te Anau side of the tunnel, was assembled onsite with pre-cast concrete modules. It replaces the 70-

greater avalanche and rockfall protection. As well as building the new shelter, NZTA improved the power, sound, and lighting systems in the tunnel—including a new plant and equip-ment room built into the foot of the mountain.

To find out more about the project, visit the project website





## Who doesn't like a shoe car?

















## **Report from AITPM Conference in Perth, August 2024**



Ian Clark, Director Flow Transportation Specialists

The Kiwis now working over in Australia say "hi" by the way

I was fortunate to be able to attend this year's on the Welsh approach, which has also included Australian Institute of Traffic Planning and Man- significant speed limit reductions, with the statisagement (AITPM) conference, recently held in tics already reporting a fair measure of success. Perth, assisted by a contribution by the Transportation Group.

I've attended a fair few of these, due to my ongoing role as the New Zealand (Transport) Modelling User Group (NZMUGS) representative on Transport Modellers Network (TMN).

Last year, there were very few Kiwis in Melbourne. This year there were about a dozen, despite the long travel time to Western Australia. Plus, there were many familiar faces of Australians who are active over here, or Kiwis now until recently, the Chief Science Advisor to the working over there. They say "hi" by the way.

there have been some recent discussions about sued here, particularly the approach to speed limthe future format of the Transportation Group its, and his presentation included a headline from conference. It's interesting to note that transport an article in the media in July 2024 which stated modelling is one of the central components of the "Former head transport adviser calls speed limit AITPM conference, whereas in New Zealand we plan 'mystifying'". seem to like to do our own thing.

I won't try to summarise each and every presentation I attended, but here goes with a few highlights:

There was a session on Activity-Based-Models, which asked the question "is there still a role for "traditional" four stage models - and it turns out, sonably hope to see collaboration in this space. there is.

There was a panel discussion on the topic of "strategic models: helpful or harmful" and it appears to be a bit of both. I heard reference to a particular project that has been by all accounts "a bit of a mess", which may have affected views on My main interest here was around the main this.

Actually, before I get into trouble, the concerns expressed with strategic models were more about the way outputs are used by others, and not with the models themselves (although it is fair to say that all strategic models could be improved through a combination of more resources and There was also a session on Household Travel better data).

A presenter at last year's conference reported on Wales, with the review by the Welsh Government leading to 30 out of 46 projects being cancelled.

This year's speakers included Lee Waters, Welsh MP and Deputy Minister for Climate Change from 2021 to early 2024, who gave more details trips rising at a higher rate than public transport.

I had been aware of the "new path" (or Llwybr Newydd, to give it it's correct title), and of the speed limit reductions, but I hadn't been aware that the Welsh Transport Appraisal Guidance (Weltag) now no longer requires benefit-cost the Australian equivalent body, the AITPM analysis for many projects. Where it is required, the benefit-cost ratios are to be calculated both without and with travel time savings.

> There was therefore significant interest in the keynote presentation given by Professor Simon Kingham, from the University of Canterbury and New Zealand Government.

Firstly, I will comment that I understand that He reported on the different approach being pur-

There was a presentation from Dr Supan Perera from University of Sydney, who is setting up "Australia's first national trip and parking generation platform and analysis tool". It's great to see further investment in this topic on this side of the world, and Supan sits on the board of our very own Trips Database Bureau, so we can rea-

Incidentally, there was also a presentation from Jacob Martin from WSP, on "Mode Shift by Distance: developing evidence based mode share targets".

graphs on trip lengths and mode shares (which clearly change with distance), as a comparison with NZ data may help us draw conclusions on the extent to which Australia's first national trip and parking generation platform and analysis tool will be of relevance to us in New Zealand.

Surveys (HTS), with each (Australian) state reporting on their achievements in this area.

the change in attitude to investment in roads in The statistics about how many people had been surveyed in each state in each year provided a series of facts, but it was interesting to see some results from Perth indicating that while Western Australia has been investing in transport and in modes other than the private car, they are travelling further distances, and for longer, with car

### Magazine of the Transportation Group NZ

One possible takeaway from this presentation is transport policy debates is similar to the NZ reasonably expect a mode shift away from pri- and is to be supported. vate vehicles to public transport.

vision for a National Approach whereby each continuing to foster ties with the AITPM, and state would survey a sample of 5% of households NZMUGS with the AITPM TMN. in each state capital, every five years.

Also, the AITPM has launched an "issues paper" for consultation: "The path to net zero: decarbonizing Australia's transport system"

Firstly it's worth a read, and secondly, I note having an Australian institute providing inputs to

that if you make both car driving and public Transport Group putting together a submission transport more attractive at the same time with on the NZ Government's draft Government Polilarge investments in infrastructure, you can't cy Statement on Land Transport earlier this year,

I guess this report needs a final comment: great At the HTS workshop, the TMN outlined their conference and well worth the Transport Group



While Western Australia has been investing in modes other than the private car, they are travelling further distances, and for longer, with car trips rising at a higher rate than public transport.



Contrary to rumours, this is not a photo of Ian Clark being breathtested by Police on his way back to his hotel at the AITPM conference (on his UberHorse).

### Roundabout



## A "significant win for pedestrians" in the GPS 2024? Really?



Roger Boulter roger@boulter.co.nz 021 872 654

Back in 2002 when this Activity Class was created, the idea that walking or cycling could even be considered 'transport' – let alone transport eligible for 'national'-level funding – was very novel Easy to miss amidst the animated commentary of this year's Government Policy Statement on Land Transport, was a little detail about footpaths.

Walking advocacy group Living Street Aotearoa (see their website, <u>www.livingstreets.org.nz</u>) had had a meeting with Minister of Transport Simeon Brown, and had asked that the National Land Transport Fund's 'Walking and Cycling Improvements' Activity Class should be split into 'Walking Improvements' and 'Cycling Improvements'. They didn't get this, but the Minister did commit that 25% of the Activity Class would be spent on "footpaths and other walking projects". Living Streets, on their website, called this "a significant win for pedestrians".

Easy to say, but I'd suggest more difficult to translate onto the ground.

Back in 2002 when this Activity Class was created, the idea that walking or cycling could even be considered 'transport' – let alone transport eligible for 'national'-level funding – was very novel.

The directive to have such an Activity Class had emerged from the Government's February 2002 'Moving Forward' package. The decision had been at a political level, and the new Activity Class was to come in from July – just a few months after its announcement.

Officials from the former Transfund NZ, rather at a loss as to how to implement this, then approached anyone (including yours truly) who they thought might have any expertise in walking or cycling, in a rush to get allocation criteria established.

Not long before this Reena Kokotailo, leader of the National Pedestrian Project funded by the Road Safety Trust (following her previous background with 'SafeKids'), had warned very strongly not to conflate 'walking' with 'cycling'. She called this "the joined at the hip problem", and argued that 'walking' and 'cycling' were quite different from each other.

Reena was, of course, correct, but setting up two separate initiatives, to address needs of two separate forms of what were now considered 'transport' seems to have been just too much for officialdom. 'Walking and cycling' got conflated, not only in the new Activity Class but also in the Ministry-led National Walking and Cycling Strategy – which Reena then got to lead – and also conferences.

The loss of the fledgling national walking conferences, which had been going for a few years on alternate years from the cycling conferences, was felt particularly keenly by Living Streets, stemming apparently from a Transfund official refusing funding for separate conferences. Thus the '2 Walk and Cycle' conference series was born. Living Streets at one point withdrew their support from this conference series – on the grounds that it had become overwhelmingly about cycling – and set up the 'Walking Summit' conferences (although I think there has since been some sort of reconciliation).

Transfund's transport economists had a problem. Whereas 'cycling facilities' were rarer than hen's teeth (and compared to the total length of roading still are) footpaths were ubiquitous, at least in urban areas. The idea of all existing footpaths, which up until then had been considered 'an amenity' (and nothing to do with 'transport') suddenly becoming eligible for 'transport' funding, was a major challenge philosophically. There was also the practical issue that the funding pot was miniscule compared to the number of footpaths already in place, let alone any new ones that might be considered.

Reena Kokotailo's argument had been that if 'walking and cycling' were conflated, then cycling would not only dominate, but overwhelmingly so. This, despite walking arguably being far more important, bearing in mind that far more people walk than cycle, and that walking is an integral part of most people's lives in a way that cycling is not.



Cycling had an iconic, eye-catching public image, as sexy, health- and environment- conscious and creative, while walking was seen as unglamorous and rather 'pedestrian'. I doubt many would disagree that Reena was correct. The Activity Class over its history has been used overwhelmingly to fund cycling, not walking, infrastructure. Living Streets, in their recent website announcement, echo this: "The effect of the combined class is to pit walking and cycling against O

each other to access limited funding – and that has meant that walking gets the scraps".

If some readers at this point are thinking "Oh no, a lot of that Activity Class's funding goes on 'shared paths, which pedestrians use too", I'll address that below.

There is also a deep methodological problem. I think it's fair to say that transport planners and roading engineers tend to see transport in terms of 'networks'. There are the arterial road network, rail network, bus network, road freight network and 'cycle route network'. The 'network' concept, however, should be less central for walking.

Look no further than such luminaries as Jan Gehl (and no doubt many more urban design voices could be cited) and it is clear that walking is about an awful lot more than 'getting from A to B'. It is also about crime deterrence, and commercial success when walkers don't just walk but start to dawdle, chat with each other, windowshop and actual-shop. Then there are the social cohesion benefits of face-to-face interaction which happens through walking (but not through driving), and 'place-making'. How are these benefits to be measured by those accustomed to metrics such as efficient traffic flow, congestion levels and crash or injury numbers?



This in turn raises further questions. Is 'transport' funding to be used for the likes of decent lighting, seating, shelters and maybe some public art or landscaping – which may be needed in order for those 'non-engineering' benefits to be realised? As for 'network', even for cycling this concept could questioned because of cycling's finegrain nature, and this will be even more the case for walking because of its significantly shorter distance range.

A Transfund official, at this time (2002), who had been given the task of devising the new allocation criteria, said to me that they did not want to 'gold-plate' footpaths. I think it was these methodological issues he was grappling with.

There were two other problems too, which were closely related to each other. Firstly, there were a lot more advocates for cycling than advocates for walking. Secondly, officialdom was accustomed to seeing walking as a 'road safety problem'.

The latter of those two problems applied to cycling too, of course, but by that time, the early 2000s, there was a growing literature defining the benefits of cycling (albeit often in nonmainstream niches such as specialist conference networks; academia where a particular academic wanted to pursue this new field; or advocacy organisations).

The battle had been raging through the '90s as to whether cycling was 'dangerous' from road safety risk or beneficial, especially in preventive health, and the benefits were coming to be seen as greater compared to the risks (very much greater, in fact). For walking, however, this methodological change was less advanced. You only have to look at the fact that Reena Kokotailo's early 2000s National Pedestrian Project – a ground-breaker in making a case for proactive development of walking – drew its funding from the Road Safety Trust.

The end result was that Transfund officials drew up methodology based largely on benefits of cycling. Having been involved at the time, I think they simply didn't know where to start when it came to walking. Also, with the National Land Transport Fund being reactive, relying on Road Controlling Authorities to advance proposals, the projects put forward by local Councils tended to be for 'cycling facilities', and far less anything to benefit walking (outside the road safety field, which had its own separate funding).

The same problem of overwhelming dominance of cycling compared to walking was seen in the work on the 2005 National Walking and Cycling Strategy. Especially with Reena Kokotailo leading this work, walking was not neglected in the Strategy itself, but this was followed by a 2006 'Implementation Plan', the 'flagship' of which was the 'Walking and Cycling Model CommuniIs 'transport' funding to be used for the likes of decent lighting, seating, shelters and maybe some public art or landscaping?



ties Programme' (in Hastings and New Plymouth).

Rather than a model for elsewhere, as had originally been intended by the Labour-led government which had initiated the Strategy, the post-2008 National-led government came to refer to the 'Model Communities Programme' as if it had been a stand-alone project – and after the project's completion, presentations on it were sometimes all (or almost all) about cycling.

A few years later there then followed the 'Urban Cycleways Programme', and a 'National Cycling Team' to implement it. Where had walking gone in all this?

An answer I have sometimes been given is 'shared paths'. Since those years, 'shared paths' have become quite commonly proposed, and in fact so commonplace in new projects that I'd even see them as informally having become a default among consultants and officials.

If you look at official advice, however, 'shared paths' aren't best practice for either walking or cycling, and a wide range of advocacy bodies – and some professionals, although I'd suggest not nearly enough – will tell you of the problems they give rise to.

In response to a proposal to legalise footpath cycling at this time (which has not gone away, having been on a policy 'back burner' for years as perhaps too hot to handle politically), a coalition called 'Footpaths for Feet' arose, drawing in Living Streets Aotearoa, Grey Power, and bodies representing people with various types of disabilities.

'Shared paths' of course are not footpaths, but are usually proposed because of the same motivation as that suggested law change, i.e. to help cycling. I can't think of a case where a 'shared path' has been proposed primarily to help pedestrians. Pedestrians may lose out, for example having a 'shared path' <u>instead of</u> a previous footpath. Even without this, the presence of cyclists may be a significant deterrent to walking, quite apart from the crash and injury risk, even if the latter is low.

This is an area which I'd suggest is underdeveloped. We have data on crashes and injuries (albeit significantly under-reported, especially for the 'minor' ones), and we are well-used to using such data to inform transport planning decisions. Also, a common argument is that the risk to pedestrians (from cyclists) on shared paths is much less than the risk to cyclists (from motor vehicles) on roadways, and of course this is true.

However, how much analysis is there -I mean serious, professional and rigorous, so that it cannot be dismissed as 'anecdotal' – on <u>perception</u>

of safety, and the effect this has on people's propensity to walk on 'shared paths', and the societal costs this in turn imposes? Then there is the social exclusion aspect, bearing in mind that an able-bodied person may be less deterred than those social sectors who are already the most marginalised, such as elderly, people with disabilities, or people without access to a car.



Research in such areas would include measurement of the extent to which the most vulnerable and marginalised sectors of our society, notably frail elderly and disabled, are deterred from venturing out for fear of being hit by cyclists, and the consequences for their well-being of being 'shut in' in this way.

All this seems more the province of social science than engineering, and hardly likely to be captured in the engineering metrics with which we will be more familiar.

Let's face it, there are massive differences in the needs of cyclists and pedestrians when it comes to 'shared paths'. Cyclists not only move a lot faster, but may be more likely to be on the path for a specific journey purpose (such as commuting).

A problem that has been raised is pedestrians 'dawdling', wandering about without looking for cyclists, or even chatting in groups so as to block a path. A common 'solution' has been groundsurface direction arrows alerting users to 'keep left'.

But if this path really is 'shared', what is wrong

How much analysis is there – I mean serious, professional and rigorous – on perception of safety, and the effect this has on people's propensity to walk on 'shared paths'

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with pedestrians dawdling, wandering over the whole path width and chatting in groups - bearing in mind these things are a big part of what gives walking its appeal (back to the likes of Jan Gehl et al on that, I'd suggest)? The answer, I'd suggest, isn't that pedestrians are doing anything wrong - but that 'shared paths' are simply not a good 'solution', bearing in mind how wildly different the needs of cyclists and pedestrians are from each other.

There has sometimes been an inference that pedestrians on shared paths ought to constantly be alert for the potential presence of cyclists – but this may significantly reduce walking's attractiveness.

Cyclists are encouraged to give plenty of warning to pedestrians of their presence on such paths, but I've myself sometimes found a clear voice ringing out "Coming Through!" sounds more like an "Out of my way!" than the 'polite warning' it purports to be.

Watch this space on progress on this Ministerial promise that 25% of the 'Walking and Cycling Improvements' Activity Class will be spent on "footpaths and other walking projects". I really hope we don't see a lot of 'shared paths' followed by the unconvincing rider (no pun intended) that 'these are 50% to benefit pedestrians'. I doubt that would be what the Minister intended, nor what Living Streets Aotearoa had in mind in their original suggestion.

If, on the other hand, we are really to see 25% of this Activity Class spent on meeting needs of pedestrians (including, of course, 'wheeled pedestrians' such as those using wheelchairs or small-wheeled non-motorised devices) - as distinct from 'shared paths' - then I suggest this will require a big area of research needed to itemise the benefits, compared to the costs, and what will be needed if we are to realise those benefits.

And I'm not writing this as a consultant after work. I'm retired now. But come on, who else will rise to this challenge?

Watch this space on progress on this Ministerial promise that 25% of the Walking and Cycling Improvements' Activity Class will be spent on "footpaths and other walking projects".



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Magazine of the Transportation Group NZ

## **Roundabout of the Month**



## Meet 'Rhonda the Roundabout,' The Traffic Feature With Its Own Theme Song and Fan Page

The good people of Clarksville, Tennessee seem to love turning pieces of infrastructure into local heroes. Years ago, one particular guardrail there kept getting crashed into, and so "Gary the Guardrail" was named and celebrated.

Gary's Facebook fan page doesn't seem to be up anymore, but "Rhonda the Roundabout," a new traffic flow feature in town, has stepped into the limelight thanks to a live-streaming traffic cam that's caught the wacky antics of people getting lost on it.

So, why are we talking about it at all? That traffic cam — which you can peek at here—has apparently caught people getting confused going the wrong way and, more hilariously,

doing *laps*. As of Thursday, August 8, Rhonda's Facebook fans have clocked the top three "high scores" of 50 laps (gray SUV), 25 laps (three motorcycles), and 21 laps (red pickup truck).

Anyway, back in Tennessee, Rhonda opened just two days ago on August 6 and already has its own Facebook page (5.5K members, as of this writing). It even has a theme song which I assume was created with AI.

If you have any other interesting images to share, send them to <u>Daniel.newcombe@at.govt.nz</u>



Just look how instinctively the mother carries the baby in its mouth. Nature is beautiful...



Roundabout

## Active Modes Infrastructure Group (AMIG) Update

The latest AMIG meeting was held on August 1<sup>st</sup> (delayed slightly from July). It was a shorter 2-hour meeting, which seemed appropriate given that one of the themes was about "doing more for less". Here's some of the things discussed:

From the almost-too-good-to-be-true files, it seems that **Part 4 of the** *Traffic Control Devices Manual* (At Intersections) may finally be about to be published, at least in PDF form (*mind you, we said that back in March...*). Then, attention will be back to TCD Manual Part 5 (Between Intersections), which is due for some further updates including mid-block cycle crossings.



Meanwhile, further trials of **pedestrian/cycle shared Barnes Dance signals** are being eyed up for sites in Auckland. With official regulatory ratification still some time away, following trials of shared signals in four main urban cities, it was decided to test a few more sites as part of the current trial process.



Auckland Transport provided an interesting presentation about their efforts to develop **quick-build cycling infrastructure using separators** and some lessons learned from that. A particular flashpoint was the problems encountered on Upper Harbour Drive where several separator kerbs were struck by vehicles.

Some key lessons (incorporated into some new guidelines) were in considering the choice of concrete vs rubber separators and the use of vertical delineators to highlight them. AT are also investigating further the effects of different separator spacings and heights, as well as the effects of traffic speed/volume, geometry, parking, etc on separator damage. As part of this work, AT unveiled a draft Practice Note on Interim Cycle Facilities (as well as associated drawings) for AMIG feedback.



As alluded to above, one of the imperatives of the new Government is efficiency and value-formoney, which presents some interesting challenges: how do we provide **reasonable walking/cycling funding with reduced investment**?



This could apply to cycle lanes, crossing treatments, or the use of coloured surfacings. Some suggestions were looking

to use more low-cost quick-build facilities, and also using the forthcoming traffic filtering guidance to create simple walk/cycle-friendly street treatments. It will certainly be an interesting time making the best of the available limited budgets...

Other topics discussed at the August AMIG meeting included placement of sharrows in traffic lanes behind angle parking, and progress on Land Transport Amendment Rules to introduce new traffic control devices. Detailed minutes about all these topics will eventually be found on the AMIG website:

https://nzta.govt.nz/walking-cycling-and-publictransport/active-modes-infrastructure-group/

By the time this issue of *Roundabout* is out, the next AMIG meeting will have been held on Sept 12<sup>th</sup>. So, we'll report on that meeting and the final one of the year (Nov 28<sup>th</sup>) in the next issue. In the meantime, contact Wayne Newman (wayne@cresmere.co.nz), Gerry Dance (<u>Gerry.Dance@nzta.govt.nz</u>) or myself if you have any interesting projects or issues that you'd like to present at AMIG – all ideas welcome!

Glen Koorey (Trptn Group AMIG rep), ViaStrada (<u>glen@viastrada.nz</u>, ph.027-739-6905

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## City Rail Link update



'Milky Way' inspires CRL station design

The fins protect the station's ventilation and air intake systems while their diamond pattern design represents the place of Aotearoa New Zealand in the Milky Way. Elders from Tāmaki Makaurau Auckland iwi led a traditional dawn blessing recently for a symbolic unveiling of the distinctive panels that wrap around the upper levels of City Rail Link's Karanga-a-Hape Station.

The project's main delivery partner, Link Alliance, lifted more than a hundred of the blue and white panels, each one containing a selection of blue and white aluminium fins, to complete what is known as the station's sky element – panels that serve both a modern-day function while acknowledging the city's cultural heritage.

They protect Karanga-a-Hape's ventilation and air intake systems while their diamond pattern design represents Te Ātea, the stars of the eternal cosmos, and the place of Aotearoa New Zealand in Te Ikaroa (the Milky Way).



"Aucklanders already know that we're delivering a world-class railway and now they have a further reminder that it is one unique to their city as well," says Dr Sean Sweeney, City Rail Link



Ltd's Chief Executive. "We have a very positive partnership with iwi through our Mana Whenua Forum and the great, distinctly Tāmaki Makaurau, contribution the Forum is making is something I am immensely proud of."

Karanga-a-Hape's sky element is designed by iwi artist Reuben Kirkwood (Ngāi Tai) alongside Link Alliance's architecture team.

"Reuben's work beautifully encapsulates the binding of the spiritual and mortal realms in an otherwise contemporary urban setting, elevating the Mercury Lane elevation at Karanga-a-Hape to the ethereal," says Adrian Pettit from CRL's Mana Whenua Forum.

Sky elements and their ties to Māori tradition and storytelling were unveiled earlier this year at CRL's two other new stations, Te Waihorotiu and Maungawhau.

Designs at all three stations reflect the Māori creation myth of Ranginui (the sky father) and Papatūānuku (the earth mother), and their son Tāne Mahuta, the god of the forest. Traditional designs at Karanga-a-Hape Station also acknowledge the story of Hape, a significant ancestor who journeyed to Aotearoa on the back of a stingray.

Fit outs continue across all three stations. When CRL opens in 2026, Karanga-a-Hape will be New Zealand's deepest railway station with platforms 33 metres below ground.

## CRL Tunnel 'school' for Auckland Test Train Officers

Auckland One Rail's group of test train officers have been part of a brand new below-ground experience – preparing to operate trains safely through the CRL tunnels.

"CRL is a whole new scenario for the test train officers," says Dr Sean Sweeney, Chief Executive of CRL Ltd.

"We are building New Zealand's first underground railway. CRL trains will use one of the steepest rail grades in New Zealand and construction includes infrastructure and new operations and maintenance requirements not seen in this country before. There is much to learn."

The test train officers are tenured drivers with extensive experience. They will operate the first trains to be tested in the tunnels later this year. Locomotive Engineer (train driver) Charmaine Fitton says looking behind the scenes underground is an exciting opportunity to get ready for the big changes coming when CRL opens in 2026. Roundabout



"When you drive outside everything is pretty and you have these landmarks that you can use as reference points but in a tunnel, you're closed in and have to judge braking distances and things like that, so I think that'll be the most challenging part of the training," Charmaine says.

The 3.45-kilometre-long tunnels below the city centre connect the current Waitematā (Britomart) terminus station with Maungawhau Station on the North Auckland/Western Line. Two underground stations – Karanga-a-Hape and Te Waihorotiu – are under construction along the route.

A programme as big as this one requires a team effort. CRL Ltd, its Link Alliance contractors, Auckland Transport, KiwiRail and Auckland One Rail, which operates the city's trains, are working together to ensure drivers, station staff network controllers and rail maintenance staff will be ready from day one.

AT's Director of Public Transport and Active Modes, Stacey van der Putten, says more than 260 train drivers, in addition to 200 train managers and station staff, will all need to be trained for the big changes ahead, before opening

"There's a lot of preparation involved to make sure we're ready to operate an entirely new route that will give Aucklanders quicker and easier access to inner-city destinations."

To support the practical aspects of the training, special equipment, track mock-ups and updated train driver simulator programmes have been developed. KiwiRail Chief Infrastructure Officer Andre Lovatt says connecting a new railway to an existing network is complex and requires a wide range of staff all working together to integrate systems while keeping trains running safely.

"We've worked hard to bring cohesion and consistency to learning and handover for all the staff that'll be working across everything from train & station operations, train driving, signalling, rail maintenance and electrical infrastructure.

"In fact, the training programme goes beyond just CRL. It prepares people working on Auckland's rail to manage all of the new upgraded assets across the wider network and to operate the new services coming with City Rail Link," says Mr Lovatt.

The training and testing programme is contributing to CRL's commitment to hand over the project in November 2025 to Auckland Transport and KiwiRail.

It will be a City Rail Link with completed and tested infrastructure that meets the highest standards of safety.

AT and KiwiRail will then carry out the final work that's essential to be ready for customers on trains, including trial running to practice operating CRL and validate the reliability of all systems.









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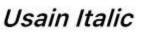


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## Usain Bold



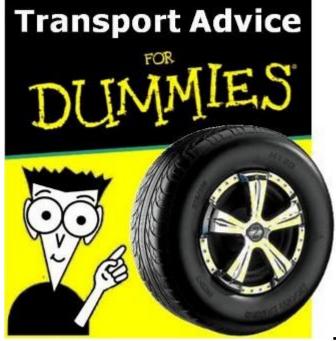
Friend: You laugh at the dumbest things

Me: No I don't.

The things I laugh at:







A tongue-in-cheek column on transport matters by The Transport Guy. The contents do not represent the views of the Transportation Group, or anyone else for that matter. Follow the advice at your own risk. If you have a question for The Transport Guy, no matter how stupid, email it to transportfordummies@gmail.com and he'll do his best to answer.

#### **Dear Transport Guy**

I found a pothole on my street recently and I was very displeased to see that it was still there a week later, despite the government setting aside billions of dollars to fix them.

What's going on?

Karen, Eastern Suburbs

You are discovering there is a difference between announcing

**Dear Car Head** 

making it happen (children often struggle with this concept too). It takes time to scale up a repair

you want something and actually

team and all the supporting processes, materials, etc.

Perhaps the best thing would be to pop to the nearest ATM, withdraw a few million in cash from that Pothole Fund and just shovel it into the pothole.

The Transport Guy

### **Dear Transport Guy**

I have been reading about the discontent in some parts of society about the recent transport budget changes—namely big cuts in active mode programmes, so we can put more into quite reasonable projects for the majority of people who drive.

I think if those other people want nice things, they should pay for them themselves. We live in a user pays society. Drivers pay road tax and that should only go on roads. What's the problem?

#### Marcus, Paraparaumu

#### **Dear Mucus**

If your car caught fire, is your only option to drive into the sea, because you couldn't possibly get out onto a footpath?

We do live in a user pays society, though not many are as lucky as you to apparently live in a car and never need to get out of it to walk on a footpath or cross a road, or know anyone else who has to.

I can only imagine that world you live in. Do you drive your car straight out of your kitchen and into your office, without letting your feet touch the ground?

And when your children and grandchildren go to school, are they driven straight into their classroom? When you go to a local café, do you levitate from the carpark to the table? Or do you only go to drive-throughs?

If your car caught fire, is your only option to drive into the sea, because you couldn't possibly get out onto a footpath (which may not be there anyway, as pedestrians couldn't raise enough money to pay for it)? I'm clearly being sarcastic (its my natural state) but an ideological user-pays philosophy seems to selfishly ignore all the times in your life (childhood, elderly years, times of unemployment or physical impairments) when you may not be able to pay or manage for yourself and you'd rely on infrastructure or services from society at large.

Or the reality that the transport network isn't personalised to all your origins and destinations. It also ignores the needs of the rest of society, though that seems less of a concern to you.

Finally, you seem like the kind of person who complains often about all the traffic (ignoring the fact that you are also the traffic). The classic problem is that if road taxes could only be spent on more roads, as opposed to ways to give people choices to get off roads (PT, active modes), the traffic congestion problem just gets worse.

#### The Transport Guy



# **Kids explain traffic engineering**

"Railway lines are so cool. They are so straight! Except when they go around a corner."