





Daniel Newcombe
Roundabout Editor
daniel.newcombe@at.govt.nz

I think that being resilient to upcoming climate events makes economic sense; there are more ways to get good economic outcomes than just allowing vehicles to travel quickly

Editorial

I've been having an up and down time lately. I have come across some really cool transport initiatives (such as our lead story on how AT engaged with the low vision community) which have reaffirmed my admiration for the many innovative and driven professionals in our industry.

And then there have been some less great things, such as some of the proposed GPS, which – in my view – significantly changes the strategic direction of much of our transport planning and undermines some key initiatives underway. Some of this was signaled during the 2023 election campaign, some was not.

Many of us have been around long enough to have gone through a number of ideological swings to our transport policy as governments change, often with great changes in the assumed purpose of our transport system — is it for economic performance, movement of people, enabling access and travel choice, efficiency of one mode or another, supporting urban growth, being more sustainable, or all of these things and more?

One thing I am particularly concerned about is the perceived – again, in my view – reduction in the emphasis on (or efforts to address) climate change.

Explicitly or not, a large amount of recent transport planning has been about providing ways of travelling to assist with the climate change challenge. The headline for any project might be about cycling or public transport or

resilience, but the underlying issue is usually helping to address and adapt to climate change. I fear that a focus on economic performance for transport investments (as indicated in the proposed GPS) overlooks this context and will simply lock in unsustainable behaviours for longer. And relying on EVs to reduce emissions just kicks the can down the road and locks in driving at the expense of other modes and, arguably, the planet.

I'm not a tree-hugging greenie, I just think that being resilient to upcoming climate events makes economic sense; there are more ways to get good economic outcomes than just allowing vehicles to travel quickly.

There are good bits in the GPS, I'm looking hard to find them, and as transport professionals we should all be interested in digesting it and providing our views on it. The Group is undertaking a <u>survey of members</u> to help inform a submission on the GPS. Please take 5 minutes and have your say.

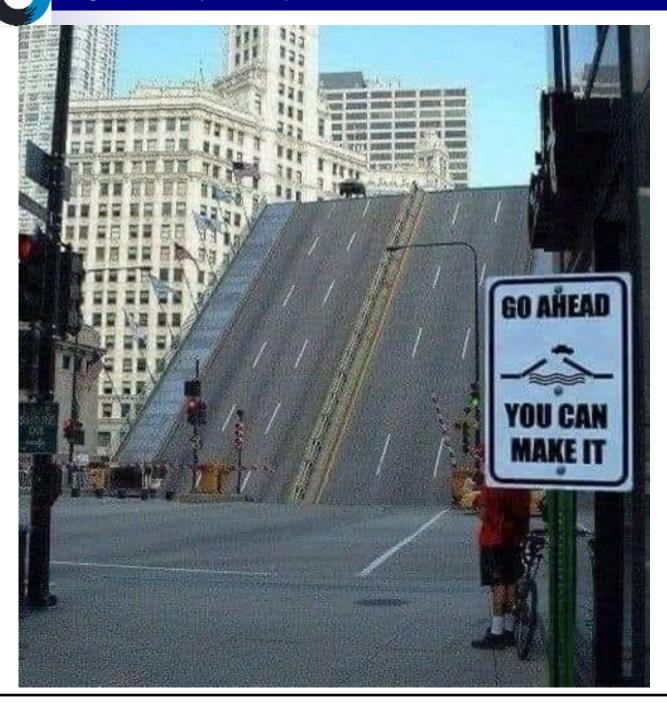
You may be happy with it or disappointed, have your say and let us know. There are always ups and downs in our profession, so tell us what you think.



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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: daniel.newcombe@at.govt.nz

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

What can we do as transport professionals in this time of change?

-with thanks to my younger colleagues Luca Ware and Amy Dunn

The draft GPS is setting a course of change in our built environment that locks in automobility, emissions and debt for future generations.

Those of us who see this may feel despondent, so I asked a couple younger colleagues to help me list four things we can do to make a positive difference in our world.

- through the challenge of open, honest and inclusive conversations. Our country is very divided, and we want to bring people with us on the journey. Enable people to feel included and respected in conversations about contentious topics (speed or parking management, cycle lanes, etc).
- Respect what people see as big issues and explain why they should care about transport too. The national vote may have hinged on issues such as perceived government overreach during COVID-19 or co-governance and Three Waters. Any one issue may dominate the thinking of family, friends, or people you meet. However, single issue voters should care about this GPS too. Respect their decisions and do not blame but make it clear how important these decisions are for us and our descendants, and that change is still possible.

The draft GPS is setting a course of change in our built environment that locks in automobility, emissions and debt for future generations.

- Keep believing in yourself, because your ideas and investment in them will bear fruit.
 Just because things are on pause now doesn't mean they will always be on pause. Your plans and work will be useful in future.
- The smalls things add up. Every intersection you can make safer and more accessible for everyone, every safe and appropriate speed limit you get installed, every school travel plan you write no matter how small these things seem in relation to the massive motorway projects is still a step in the right direction. It's the same as the global fight against climate change. It would be easy to say that we have such little influence on global emissions, why try? But every little bit counts especially when aggregated.

Your national committee is drafting a submission on the GPS and yours truly will be presenting the key points in person to the Minister of Transport.

Please make your voice heard, right now, by filling in this survey of our members:

https://www.surveymonkey.com/r/ TGGPS2024





Have you seen the vehicle equivalent of a turducken?

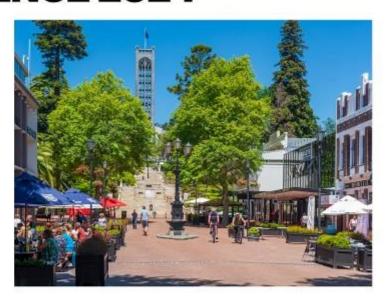


TRANSPORTATION GROUP CONFERENCE 2024

Join us in Aotearoa's sunshine capital, Whakatū Nelson for the 2024 Transportation Group Conference!

Our 2024 conference is being held at Nelsons premier conference venue, the Rutherford Hotel from 9 to 12 June 2024.

CONFERENCE WEBSITE



REGISTRATION IS NOW OPEN!

Early bird registration closes 26 April 2024. Register now to take advantage of reduced registration rates below. All rates below are inclusive of GST.

| FULL | | |
|------|--|--|
| | | |

DAY REGISTRATIONS

| Full registration | \$1,200.00 | Single day | \$675.00 |
|-------------------------|------------|------------------------|----------|
| Student full | \$500.00 | Student day | \$300.00 |
| Young professional full | \$800.00 | Young professional day | \$350.00 |
| Exhibitor | \$575.00 | | |

REGISTER HERE

MASTER OF CEREMONIES: GREG ELLIS

Always a crowd favourite, Greg is back for the 13th year as MC for the TG 2024 Conference!

A BA in Theatre and Film, along with years of experience and understanding interaction with an audience make him the ideal conference MC.







SPONSORS & EXHIBITORS

TG 2024 would not be possible without the support of our incredible Sponsors and Exhibitors. To view the prospectus, book your sponsorship package or secure an exhibition spot, click the button below.

SPONSORS & EXHIBITORS

A BIG THANKS TO THE SPONSORS THAT HAVE ALREADY JOINED US



CALL FOR PRESENTERS

The TG 2024 call for presenters submission process has now closed and successful presenters have been notified. The committee are working hard to formulate the conference programme - keep an eye on the website for updates!

STANTEC CONFERENCE DINNER

The 2024 Conference Dinner sponsored by Stantec will be held at the stunning Trafalgar Centre. Built in the early 1970s, the centre has a history of hosting major cultural and entertainment events and exhibitions.

Just a 10-minute stroll from Nelson's vibrant city centre, the Northern Extension is a new light-filled venue opening onto surrounding gardens and waterways.



SPONSORED BY:



PRE-CONFERENCE NETWORKING FUNCTION



Join us the night prior to the conference for networking and drinks at the iconic Vic Public House, Nelson's local.

Award-winning beers, ciders & wines, outstanding food, and fun, friendly service!









Photo competition—Unusual cars

This edition looks at odd cars. Not all of them look road-legal. Some look like death traps, but some look really cool (if difficult to drive). If you have seen other unusual cars, send images to:

<u>Daniel.newcombe@at.govt.nz</u>















Bridget's Rant — Trains are the business!

Hello government, do you want transport to deliver economic productivity?

Invest in inter-regional passenger rail.

Times are tough and funding is flailing. Government organisations are looking to cut costs while delivering more and more services.

Private businesses are strained too, with inflation to. and rising staff costs, and profit margins squeezed.

Despite constrained times, the wheels of the corporate world keep spinning. Business carries on. Face to face meetings remain important even in the new era of online working. Everyone knows the value of meeting in person, over coffee or a whiteboard, and of the importance of informal get-togethers with colleagues- for a walk, a lunch, and a proper talk.

So, business people travel. Recently, I was one of them. I travelled from home in Hamilton to our head office in central Auckland.

If I had driven those 220 kilometres return in my Mazda, it would have cost my business the standard government mileage rate of 95 cents per kilometre - because owning and operating a car is expensive.

IRD sets that rate and its the same (for the first 14,000km per year) for petrol, electric and hybrid cars. And it excludes any parking costs. So let's say \$200 for a return trip between Hamilton and Auckland.

> A Hamilton employee drives to Auckland, there's a thousand dollars, bang. By train, it's \$36.

It also would have cost around four hours of my time. Because when I am driving, I am not working. It's unproductive. Not uncommon for a professional to be charged at over \$200 per hour. So there's another \$800.

An employee drives to Auckland, there's a thousand dollars, bang.

But I didn't drive. I caught Te Huia. I biked to Rotokauri Station and boarded the train. Stowed my bike, plugged in my laptop, connected to wifi and did some work. With a cafe and accessible bathrooms on board, my every need was catered for.

And it cost my employer \$36 return.

It doesn't actually matter if the train takes slightly longer than the motorway, in productivity terms- I *saved* 2 hours of time, in each direction. At least.

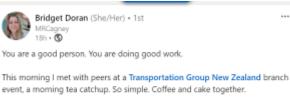
That's the productivity story about trains that we need to tell, for business-inclined minds to listen

Trains are a boon for business. Trains are the cost-of-living candy that government should queue up to invest in. Trains are the future.

Whether we are investing for efficiency, road safety, access and inclusion, or sustainabilitywhatever the political pendulum swing of the day- trains just make sense.



Bridget Doran Former National Committee Chair bdoranmrcagney.com



event, a morning tea catchup. So simple. Coffee and cake together. We talked about the state of the world, and about how we are doing, at work - and

how we are feeling, at home in this unprecedentedly uncertain, mind-blowingly beautiful world. I came away feeling uplifted. That's what social connection does for a human. Good

chemicals in the brain. Social connection is like exercise for our mental health - you might not always feel like going out and talking to people, konahi e konahi - but you'll almost always feel better afterwards.

Groups like the Transportation Group exist to build and support professional community. It's never been more important to support one another

So, kia kaha everyone. Stay strong. You are doing good work.

Image shows a coffee with latte art that reads Kia Kaha. Coffee by Sumin, Kopi Cafe, Hamilton. W





Hands On: Innovative Community Engagement for Removing Pedestrian Level Crossings at Homai Station



Above: A low vision student interacting with the 3D printed model via 'touch and braille' Auckland Transport has recently shown innovation in how to engage with its communities as part of the Level Crossing Removal Programme.

The Homai Station Pedestrian Level Crossing Removal Project aims to enhance safety and reduce conflicts between pedestrians and trains, by removing two pedestrian level crossings at Homai Station near Wiri in South Auckland, addressing safety concerns due to increased train frequencies. This is just one of many future level crossing removals that will be needed across the rail network, and involved the construction of a new pedestrian bridge to replace two crossings being closed.

Recognising the importance of community engagement, AT advocated for innovative tools to consult with stakeholders effectively. Digital tools were proposed to be used to help with this and to determine compliance with permitted standards.





Special emphasis was also placed on engaging with members of the Blind and Low Vision Education Network NZ (BLENNZ), which have a campus near the station and whose members frequently make use of Homai station.

AT, led by Kris Gibson - Programme Director for Strategic Programmes & Integrated Networks, partnered with the Beca project team and embarked on a journey to seamlessly integrate innovative digital tools into the consultation process.

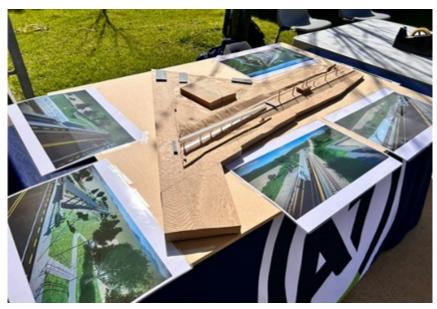
Traditional consultation methods were bolstered by new innovative methods, not previously used by AT.



As well as the standard use of community dropin events, online surveys, posters, brochures, letters and outreach via ambassadors, AT's early involvement in the BLENNZ community resulted in several innovative methods.

This engagement identified the opportunity to install audio announcements on board trains and at Homai station. AT worked with the rail operator, Auckland One Rail (AOR), to record and install audio announcements within a week prior to community engagement. This proactive approach resulted in a great response from the community.

Perhaps the project's greatest innovation emerged level crossing removal sites. through the utilisation of 3D printing.



A tactile 3D model of the proposed changes to Homai station, produced in collaboration with BLENNZ, revolutionised the consultation process. This interactive model, featuring Braille details to identify streets and features, empowered stakeholders to provide valuable feedback on proposed designs.

People were able to touch the model, orientate themselves to features and locations, and think about how the layout may affect their journeys.

The group from BLENNZ, especially low vision students, noted that the steep gradient and narrow footpaths of Browns Rd would be a challenge for some wheelchair users.

With minor adjustments to the route, the new design successfully addressed those concerns, garnering positive feedback during community engagement events.

The tactile representation allowed stakeholders – who might otherwise have not taken part or had limited involvement – to navigate and assess the proposed changes, leading to valuable insights and design adjustments so that the design successfully addressed safety concerns.

AT has committed to ongoing improvements and plans to donate the 3D model to BLENNZ for the benefit of future members.

It has been acknowledged that this part of the consultation process added unexpected social value, granting a level of 'social licence' for the project.

The success of this method highlighted its potential application for other AT projects, not just level crossing removal sites.

Above left: One of the existing level crossings.

Above right: The 3D printed model showing the proposed design.

This interactive 3D model, featuring Braille details to identify streets and features, empowered blind and low vision stakeholders to provide valuable feedback on proposed designs



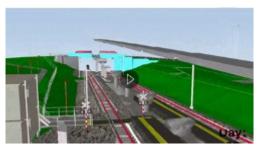
As well as innovative efforts for the BLENNZ community, the project team developed a 3D model flythrough and a detailed video to provide an immersive view of the project, facilitating stakeholder engagement and supporting the wider community's visual understanding of the proposed changes.



Utilising the digital model, the team showcased an alternative route, confirming its safety and obtaining community agreement. This not only helped to avert the need for additional consent, as the alternative route required substantial earthworks, but also led to substantial time and cost savings.

The digital model helped to confirm that project activities could be deemed 'permitted,' ensuring a streamlined planning and consenting process.

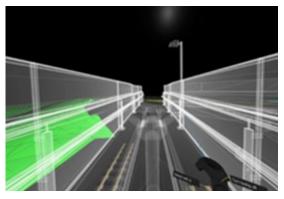
Furthermore, the integration of 4D construction sequencing (connecting the 3D design model to a construction programme to create a visual simulation of the project being built) further streamlined the process, identifying other potential triggers for resource consent and optimising construction methodologies.



The process revealed the necessity of maintaining provision for one level crossing during construction and informed design adjustments for public protection from machinery. The 4D simulation not only minimised public disruption but also identified opportunities for modular structures, enhancing future reusability and reducing crane size and associated earthworks.



The introduction of Virtual Reality (VR) through the Beca VR technology played a pivotal role in achieving consensus on design issues. Stakeholders, including individuals with varying abilities and subject matter expertise, were able to experience and comment on the design from their unique perspectives. This inclusive approach ensured that the design catered to the diverse needs of the community.



For example, the VR technology was able to show two viewpoints, one from an average height person and the other from a wheelchair eyeline view. This highlighted the need for both sides of the ramp entrance to Browns Rd footpath to be transparent, and the need for a funnel exit to mitigate conflicts with pedestrians and other users on the footpath, such as e-scooter riders.

The innovative consultation process at Homai station for the level crossing removal process was a success, largely due to Kris Gibson's team leveraging digital tools and trying innovative ways of connecting with all stakeholders.

The positive feedback received and the changes made to the resulting project design will contribute to a successful outcome for the long-term health, safety, and advancement of the community.

This approach has the potential for wider application for transport projects across the country, especially for finding ways to engage with parts of the community who may otherwise have limited involvement.

A digital 3D model flythrough and video provided an immersive view of the project, supporting the community's visual understanding of the proposed changes



The job order was a plain white roundabout, painter did a yellow smiley face with a tongue



"Everyone needs to smile a bit more."

Bay of Plenty locals were surprised when a roundabout in front of one of the region's most popular landmarks, was covered with a bright yellow smiley face and tongue - but not as shocked as council, which had asked for it to be plain white.

The roundabout had been on the road right in front of Mauao in Mt Maunganui for more than 10 years. It was slightly raised, but some tourists and visitors found it hard to recognise that it was a roundabout, and drove straight through it.

As a solution, in November, council booked a contractor, asking for it to be painted white in line with road standards.

The painter, Julian Sim, said he'd always wanted to do a smiley face on it and decided to do it as a fun thing.

"Everyone needs to smile a bit more."

He put the eyes and the nose on first, and then added the tongue recently, which is when Tauranga City Council contacted his boss.

"They weren't too happy about it, but no one had complained about it. So they just said don't do it again sort of thing," Sim told Stuff.

Nic Johansson, general manager at Tauranga City Council said the instructions were to paint it all white.

"However our contractor added some artistic flare, instead painting it yellow and adding a smiley face. Once we were made aware, we decided to leave it as it is given it was Christmas, and doesn't pose a safety issue.

"While we think it's very creative, we have asked our contractor not to paint unauthorised patterns or colours without checking with us first."

Sim's creation is dividing the town, with some agreeing it is fun, even a tourist attraction, while others say it is an eyesore.

But the smiling roundabout is creating a stir around it, with many tourists stopping for photos.

Council has decided to live with the yellow for now, even though it was not what they asked for but soon, the smile will disappear, Johansson told Stuff.

"The smiley face will remain over summer, but once the yellow paint wears off we will be painting it white as per normal standards." *Source: Stuff*



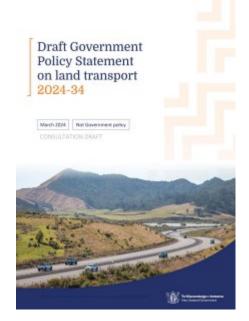
Help the Group give feedback on the draft GPS

The Transportation Group's National Committee is seeking member feedback to help form a response to the recently released draft Government Policy Statement (GPS) on Transport.

The draft GPS contains some significant changes to the previous government's transport planning and funding framework, so it is important that the Group—on behalf of its professional members—provide robust feedback.

Members with views are obviously able to provide their own feedback directly (email feedback to GPS@transport.govt.nz by 12pm on 2 April 2024) but the National Committee is inviting members to undertake a survey by 29 March 2024 which will help inform feedback. Feedback or queries can also be sent directly to Group Chair John Lieswyn at john@viastrada.nz.

The GPS document itself can be found <u>here</u>.





National Committee is inviting members to undertake a survey by 29 March 2024 which will help inform feedback



Tauranga Commission drops business case into road charges



The Tauranga City Council Commission will not continue with its proposed business case into variable road pricing after a largely negative community response.

The commission consulted the community through its long-term plan (LTP) about its Smart-Trip variable road charges.

This meant higher costs during peak travel times and lower costs when demand was less to ease congestion.

The entire business case was estimated at \$2-3 million, though exact costings were not made.

Although the commission was dropping its own investigation into the idea, chairperson Anne Tolley noted that the new coalition government had indicated that road charging would be considered as a way of reducing congestion and improving travel reliability in metropolitan centres.

"Tauranga is the only council in the country which has consulted on the road pricing concept, which would likely be very similar to the congestion charging proposed by the government.

"We therefore have some rich feedback to passon to central government as it considers how best to reduce the economic and social effects of traffic congestion; the need to reduce carbon emissions from transport activities; and generate future funding for transport network improvements in metropolitan centres like Tauranga, which will reduce the growing dependency on rates funding."

She said the NZ Transport Agency Waka Kotahi had asked the commission together with other local authorities like Auckland Council, to work on a nationwide approach to road pricing.

"Given that government policy is likely to take this matter out of our hands, the commission's view is that we should investigate the key concerns expressed by our community about the cost of road pricing charges; the quality and availability of alternative transport options; the locations and times charging could apply to; and equity and wider network impacts."

Following LTP deliberations today, the council proposed including a \$500,000 budget for each of the first three years of the LTP, to investigate ways of addressing community concerns and participate in a national approach to road pricing legislation.

The proposed funding would be reviewed as part of the council's next annual plan for the 2025/26 financial year and the availability of any subsidy or external funding to reduce the cost to Tauranga ratepayers, said Tolley.

Source: rnz.co.nz

Tauranga is the only council in the country which has consulted on the road pricing concept.



Call for Life Membership Nominations

The National Committee of the Transportation Group is calling for nominations for life membership of our group, in accordance with our Operating Procedures.

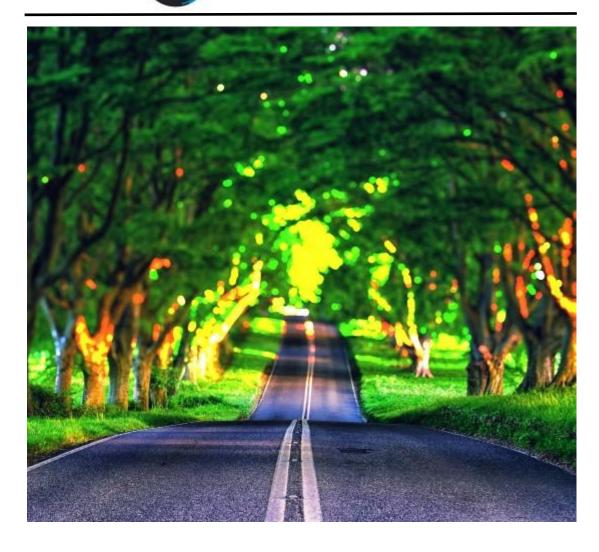
Life membership, in recognition of outstanding contribution to the group, may be recommended by nominators (comprising four group members, including at least two members from different geographic branches) and ratified by the National Committee. Life memberships can also be granted posthumously to members who have made a significant contribution to the group.

Any member granted Life membership shall not be required to pay the annual group subscription fees. Life members are entitled to free registration to one of the following events each year: the Transportation Group conference, the MUGS conference or the SNUG conference. In making a nomination please forward the following to group Chair, John Lieswyn, john@viastrada.nz, by 30 April 2024.

- Name of nominee
- Name and branch of four nominators, all being members of the Transportation Group
- Up to 200 words describing the contribution of the nominee to the Transportation Group
- Up to 200 words describing the contribution of the nominee to the transportation profession

The National Committee of the Transportation Group notes that nominations that meet the above criteria will not necessarily be ratified by the Committee, which reserves the right to award, postpone or decline any Life Membership nomination's at its discretion.



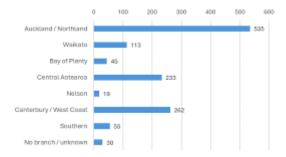


Life membership recognises an outstanding contribution to the group



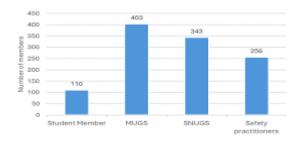
Transportation Group membership demographics

Here is a summary of the current membership demographics of the Transportation Group (as of January 2024). We currently have 1,292 members across Aotearoa, 40% in Auckland, 20% in Canterbury / West Coast and 18% in Central Aotearoa (Wellington and Lower North Island). The branch breakdown is below:



Transportation Group members may also be members of sub-groups (a single person can be in multiple sub-groups).

The following graph shows the number of people in each sub-group (including students members as a subgroup). Around 31% are part of the Modelling Users Group, 27% are part of the Signals Users Group and 20% are part of Safety Practitioners.



Age, ethnicity and gender demographics of members have been compared to 2018 Census results. All data is kept anonymous by Engineering New Zealand, we have only present aggregate data.

The number of members younger than 30 has been compared to number of 20-29 year olds, and members under >60 has been compared to number of 60-69 year olds.

The age of members is relatively similar to Aotearoa's population in both of these groups (ages 20-69).

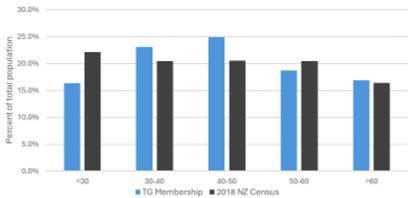
Ethnicity was not captured as comprehensively as age or gender, with 36% of members not stating their ethnicity (n=402). Members who responded with two ethnicities were counted in both categories (e.g. Māori and NZ European).

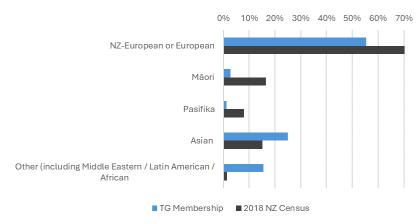
To better reflect the communities we serve across Aotearoa, Transportation Group should aim to encourage, include, and welcome more Māori and Pasifika members / transportation professionals.

The Transportation Group has substantially more males than females or gender diverse individuals. 75% of members identified as Male, 23.6% identified as Female and 0.01% identified as gender diverse (1.3% chose 'unknown').

To promote a diverse and inclusive transportation industry, the demographics of membership should more closely align to the demographics of Aotearoa namely, increasing the number of women and gender-diverse folks in our industry

By better reflecting our community we will likely attain more effective, inclusive and accepted transport outcomes. To promote a diverse and inclusive transportation industry, the demographics of membership should more closely align to the demographics of Aotearoa











SNUG 2024 - Christchurch Sept 4th-6th - SAVE THE DATE



Exhibition & Networking - September 4 SNUG Workshop 2024 – September 5 & 6

Following on from the hugely successful SNUG held last year in New Plymouth, the SNUG tems specification of the 2024 SNUG Workshop. The SNUG Committee has elected to hold the event in Christchurch, over two days on the 5th and 6th of September, with an industry exhibition and technical tour in the afternoon of the 4th.

More details of the exhibition, and how to become an exhibitor, will be announced over the next few months.

SNUG is a subgroup of the Engineering NZ Transportation Group with the objective of "bringing about the advancement of the fundamental knowledge of the art, science and practice of design, operation and maintenance of traffic signals".

The field of Traffic Signals and Traffic System Control is moving forward rapidly and the SNUG Workshop is an opportunity for traffic signal engineers, local authorities, traffic systems specialists, contractors, consultants and other practitioners to discuss current developments in Traffic Signals and Traffic System Control

On that note, if you have been involved in anything that you believe will be of interest to the signals community, please consider doing a presentation at the workshop. A call for papers will be made shortly, or you can email us directly here.

Prepare your manager by getting this years SNUG into your Performance Review or Training Plans now!

Look out for further updates on the workshop details, call for papers, programme and registration shortly.



'Urgent' eBus-damaged road repairs to cost \$400,000 in Nelson

A \$400,000 plan to urgently fix roads damaged by Nelson's new eBuses is to come before council.

The Nelson City Council will be asked to approve the funding for "urgent" remedial works to key bus routes and bus stops before the onset of winter.

In a report to go before council, group infrastructure manager Alec Louverdis wrote that an "unforeseen outcome" of the roll-out of the eBus service and new bus routes had been that some road surface deterioration had occurred across the network.

The underlying cause was "poor pavement strength" on some roads, resulting in "seal cracking, heaves and potholes".

Jenner Rd was a case in point, the report said, having suffered "major damage" before the route was retired and replaced. To date, \$29,000 has been spent on repairs, but some permanent works are still to be undertaken.

While work is being done to repair road damage, particularly at various bus stops, additional funding is needed for this financial year, Louverdis said.

An estimated \$400,000 was required to repair key sites to ensure they "withstand the challenges" of the colder and wetter months.

The situation was "not unique" to the region, as Louverdis said that the new eBuses were causing "similar issues across the country".

The council is budgeting \$70,000 for repairs on Main Rd, Stoke to be carried out before the end of the financial year.

The road was showing signs of failure in seven locations, however, these spots couldn't directly be attributed to the eBus, as the road had been a bus route for a long time and was used by many other heavy vehicles, Louverdis said.

Damage which the council has attributed to eBuses are the bus stop on Collingwood St next to 132 Health, which has been repaired, a patch on Tresillian Ave, and the corner of Washington Rd and Princes Drive, which has suffered kerb damage as the bus has travelled too close to the corner.

Repairs on Tresilian Ave are planned for June, and the council is still awaiting a date for repairs on Washington Ave.

While the cost of Collingwood St repairs came to \$3830, the full cost of Jenner Rd repairs was \$59,000.

Meanwhile, in Tasman, the district council has completed two repairs on sites damaged by eBuses, one on Queen St and one on Hill St, at a cost of \$37,630. The council is monitoring "several" other defects that appear to be related to the buses.

Tasman District Council transportation manager Jamie McPherson said some bus related damage was expected based on past experience, particularly at new bus stop locations where the edge of the road near the kerb had not had much heavy traffic previously.

However, the overall impact in terms of the council's total sealed road maintenance programme was "minor", he said.

The council had been experiencing "increasing deterioration" across its sealed road networks for many years now.

Contributing reasons included less government road maintenance funding and increased weight limits for trucks.



Contributing reasons included less government road maintenance funding allocated to councils from the 2010s until 2021, and increased weight limits for trucks since 2010, he said.

To address this "wider long-term deterioration", increased investment in sealed road maintenance and renewals is proposed by council, together with increased funding from central government. Source: Stuff



Tāmaki Makaurau abuzz as AT installs green roofs across the city



Beginning twelve months ago, with a successful trial installation at Ponsonby Central's bus shelter, Auckland Transport and supplier oOh!media has continued its mission to renature urban spaces, installing ten green roofs around Tāmaki Makaurau, with completion scheduled for early 2024.

Renowned for both the environmental benefits and positive impact on commuter wellbeing, roof planting on public structures has become a popular and effective practice internationally, particularly in Europe where it is now common place to see urban bus shelters transformed into 'green roofs' or 'buzz' stops.

Implementing this innovation down under, oOh! media New Zealand has partnered with local living roof specialists, Greenroofs working in collaboration with Sempergreen Australia.

The partnership saw an initial 12 month trial at Auckland's bustling Ponsonby Central bus shelter, to ensure the plants chosen could withstand the ever-changing weather and climate.

After close monitoring for the past 12 months, the teams are now ready to expand 'buzz stops' to the wider Tāmaki Makaurau region.

Nick Vile, General Manager of oOh!media New Zealand says, "As part of our wider ESG programme and philosophy, we are always looking for ways – big and small – to make public spaces better and ensure we are providing positive impact where it matters.

These green roofs are helping us move toward this goal in a way that not only looks good, but makes us, and our commuters feel good too."

Greenroofs Ltd specialist Will Thorne adds,

"There are many benefits to Green Roof installations. The plants of a green roof filter particulate matter from the air and covert CO₂ into oxygen, helping with air purification.

They also assist with temperature reduction, contributing to lowering the temperature in the city. Surfaces with plants warm up less quickly and store less heat.

In addition, plants evaporate water, which leads to cooling of the air, making for a more pleasant urban climate.

We are thrilled to be assisting oOh!media NZ with its green roof installations around Auckland and we look forward to hopefully seeing an expansion to the wider nation in the near future."

Simon Soulsby, Head of Partnerships at Auckland Transport says the installation of the Green Roofs is an innovative way to bring nature into urban areas and brighten up Tāmaki Makaurau's concrete jungle.

"It is important for Auckland Transport to set an example in the industry and champion the use of our public spaces in a way that positively adds to the lives of our community.

This is a great example of innovative partnerships driving sustainable solutions.

We're very excited at the prospect of more 'buzz stops' around the city – it isn't hard to smile when you pass a bus shelter in the middle of the city that has flowers and plants growing out the top of it."

The installation of the Green Roofs is currently in progress, seven roofs already installed, with the last three due in early 2024.

We're very excited at the prospect of more 'buzz stops' around the city



Parisians vote for rise in parking fees for SUVs

Parisians have approved a steep rise in parking rates for SUVs in the French capital.

The proposals were approved by 54.55% of voters, but turnout was only about 5.7% The move triples parking rates for cars weighing 1.6 tonnes or more to €18 (£16; \$20) an hour in inner Paris.

The vote was called by Socialist Mayor Anne Hidalgo, who has argued that SUVs are dangerous and bad for the environment.

About 1.3m residents of central Paris were eligible to vote. However they will not be affected by the result as street-parking for local residents will remained unchanged.

The move is mainly aimed at people from the suburbs who drive into the centre of the capital for the day.

An extensive network of cycle lanes has also been built, in an effort to discourage driving.

Environmentalists argue that SUVs consume more fuel than other cars and that their construction and use produce more harmful emissions.

Supporters of the move also note that tall vehicles are deadlier than lighter cars when they are involved in accidents.

But both drivers' groups and opposition figures have attacked the scheme, saying the SUV classification is misleading as many family sized cars would be affected.

France's Environment Minister Christophe Bechu, a centrist, told broadcaster RTL that the surcharge amounted to "punitive environmentalism" About 1.3m residents of central Paris were eligible to vote. However they will not be affected by the result as street-parking for local residents will remained unchanged



There are exemptions for fully electric cars, taxi drivers, tradespeople, health workers and people with disabilities.

Ms Hidalgo has been in office for almost 10 years. Under her tenure as mayor, many Paris streets, including the banks of the river Seine, have been pedestrianised.

Last April, Ms Hidalgo won a city referendum on banning rental e-scooters from Paris streets. However, fewer than 8% of eligible residents voted.

Source: BBC News



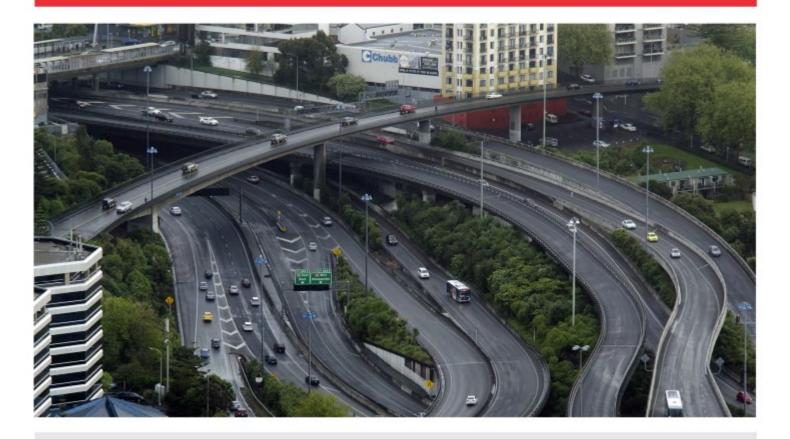






Block Course Dates

Transportation Engineering





Our block courses comprise ~24-26 hours of lectures and labs, presented in two 2-day blocks in Semester 2, 2024.

ENTR603 - Advanced Pavement Design

Thu 11 Jul and Fri 12 Jul: 9am to 5pm Thu 29 Aug and Fri 30 Aug: 9am to 5pm

ENTR608 - Traffic Management and Monitoring

Mon 4 Mar and Tue 5 Mar: 9am to 5pm Mon 15 Apr, Tue 16 Apr and Wed 17 Apr: 9am to 5pm

ENTR614 - Planning and Design of Sustainable Transport

Thu 22 Aug and Fri 23 Aug: 9am to 5pm Thu 3 Oct and Fri 4 Oct: 9am to 5pm

ENTR615 - Advanced Traffic Flow Theory

Thu 15 Aug and Fri 16 Aug: 10am to 5pm Thu 26 Sep and Fri 27 Sep: 10am to 5pm

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Nicolas Reid Principal Public Transport Planner at MRCagney Pty Ltd.

Auckland's City Rail Link will fail immediately... in the best possible way



Here's the thing: the City Rail Link is almost certainly going to be overcapacity from day one, with crowding on the trains at peak times. In the simple terms of popular transport discourse, it's going to "fail" immediately.

While the CRL greatly increases the capacity of the network with many more train services being planned, it won't have enough capacity to avoid rush-hour crowding, and it won't provide as good a service as anyone could ask for. That's because, like any other transport link, the CRL is subject to *induced demand*: the simple effect whereby making transport faster, easier and more accessible means more people use it.

But that perceived "failure" at the outset is exactly why it's such a good project.

Let me explain.

Successful transit works because many people share the same vehicles to do different things: that's what puts the "public" in public transport.

It's also why public transport services aimed at doing just one thing – like peak commuter buses, or airport express trains – tend to be less effective or economical. They just don't serve enough transport sub-markets to attract a large enough user base to gain constantly high ridership.

By contrast, the City Rail Link simultaneously achieves four big things for Auckland's rail system:

- It doubles the number of tracks through the core of the network.
- It adds new stations in the middle and south

- end of the city centre,
- It provides a much more direct route for the western line, by cutting out the three-pointturn dog leg through Newmarket and the east side of town,
- And it allows trains to run through from one side of the network to the other.

This means that from day one, the City Rail Link will effectively double the number of trains that can run across the system.

Current and potential passengers at every station in the region will enjoy the benefits of more frequent trains, which includes more seating capacity, shorter wait times, and more flexibility on when they can travel.

In this way, the "city" in City Rail Link is about *everywhere else*, not just the centre of town.

Of course, the new stations will provide direct access to parts of the central city that have Aotearoa's highest concentrations of people who work, live and study – but who are currently a long walk from the sole downtown station, Waitematā (formerly Britomart).

This will open up a lot of new access for many people who'll find convenient train travel from their doorstep and work, home or school.

At the same time, the shorter route from the west will shave ten minutes off most trips on the western line. And, for a swathe of people living within a walk, bike or short bus ride from western line stations, this will make the train much more attractive and competitive compared to driving or other modes.

Successful transit works because many people share the same vehicles to do different things: that's what puts the "public" in public transport.



Likewise, the new ability to catch a throughrunning train will make trips from one side of Auckland to the other much easier and more appealing for many more people.

Does the CRL do all these things perfectly? No. Does it do *any* of these things perfectly? Well, no, not that either.

A "perfect" rail project for Auckland – on paper, at least – would provide vastly more capacity on day one than we could conceivably need for decades or even a century.

It would also have many more stations, here and there, in other parts of town that don't have stations yet. Plus, it would carve its way across and through the landscape to straighten out all of the curves, giving more direct routes and allowing trains to run from everywhere to everywhere. But the thing is, this "perfect" day-one combination is perfectly unachievable in the real world, not that they didn't try.

In the lead up to the CRL being approved there were calls for it to have four tracks with doubled-up stations, like those in Melbourne or Sydney, to add twice as much additional capacity.

However, that would have meant a much more complex two-level tunnel with huge doubledecker stations to fit under the road corridors.

For a while, the preferred option was to build a new terminal station between Mt Eden and Kingsland station, where all the trains could run through the tunnel and bounce back, avoiding some conflicts at junctions and allowing more trains to run.

But this would have meant building a big mess of platforms and trackwork, and it would have resulted in a lot of near-empty trains moving back and forth through the centre of the network, of little use to passengers.

Likewise, for a while there was an extra station (Newton) planned for the top end of Symonds Street. This would have required both a tricky underground junction, and a super-deep station box accessible only by express elevators from the surface. Ultimately, this difficult and expensive station was dropped in favour of expanding the existing Mount Eden-Maugawhau station nearby.

At the time, there was a campaign of thinly veiled concern-trolling claiming the CRL hadn't planned enough stations, and that to be worth-while, it would need to swing over to Wynyard Quarter and then double back to the middle of town before carrying on to the universities. However, such a plan would have doubled the length of the tunnel and doubled the number of new stations, effectively doubling the travel time... and doubling the cost.

In short, for each of the things the CRL will do, there were people saying that it wouldn't do *enough*, and proposing huge expansions to the scope of the project to further increase future capacity, improve travel times, or add extra stations. But if these things had been acted on we'd not be looking at a 2025 opening date for the project, and we might not be looking at an opening date at all.

They say politics is the art of the possible – and transport projects are very political.

The CRL is the best project for Auckland because it is the one that Auckland is actually building, and will actually open and operate.

It improves on all the things it sets out to do: it doubles capacity on the network, has two new stations in the priority locations, and it makes routes faster and more useable.

While each of these might not be the *perfect* ideal for each goal, the point is that the CRL achieves its goals within a project scope that has proven



The previous plans for the complex Inner west interchange and Newtown station, replaced with a single station at Maungawhau

In this way, the "city" in City Rail Link is about everywhere else, not just the centre of town.





politically viable, reasonable to procure and construct, and perhaps most importantly of all, fundable.

This is due to the fact that the CRL is pretty much the simplest and easiest version of a city rail tunnel you could design for Auckland. The route is a near straight line on the shortest alignment possible between Britomart and the Western Line.

The two tracks are the minimum you need for an effective operation. And the two new stations are as few as you could consider to provide access to and for the heart of the city.

In other words: the City Rail Link is literally the **minimum viable product** for delivering on its goals, and because of that it is affordable and cost-effective enough to actually proceed, and because of that, it will soon be up and running and delivering all the promised benefits.

Yes, there have been delays, construction complexities and cost increases, but these have been relatively minor and manageable. Certainly, the "blowout" is nothing in comparison to what they might have been, had the tunnelling been loaded with umpteen billion dollars' worth of scope creep and additional infrastructure aimed at chasing down marginal benefits.

Undeniably, the CRL won't deliver completely on every aspect. Double the capacity won't be enough for peak hour in the long run, and crowding will still happen in the future – but it's still double the capacity, which means twice as many people being able to travel at peak time by train.

And even if the trains are still busy on weekday mornings, there will be twice as many of them, which means twice as many travellers and twice the benefits to travellers.

This is the key difference between *transit* projects and *traffic* projects.

Traffic projects do fail, by "falling over" when they get full, because traffic congestion slows down *all the vehicles on the road*, drastically reducing the capacity and reliability of the corridor, and spreading that congestion through the network to clog connecting roads and streets as well. On a highway, being over-capacity (where there are more vehicles than can fit on the road at the same time) is indeed a failure of the network, because the cars just keep piling up in the queues.

The irony of traffic is that the best-performing roads – in terms of speed, reliability and accessibility – are the ones that almost nobody uses. By contrast, on a rail line being overcapacity is a different kettle of fish. It's when you have more *people* show up than can fit in your trains, not where you have more trains than can fit on the tracks. Congestion effects on the trains themselves are minor, and are much less likely to cascade across the network, because the vehicles are controlled by the operator rather than the users.

The folks at CRL know that they can run about thirty-six trains an hour through the tunnel before things get properly "congested" and clog up the network, so that's the most they will run on opening day.

If that doesn't quite meet demand, then some potential travellers will get left behind, perhaps for a quarter of an hour or at least until the peak of the peak is over and they can hop on one of the next trains.

But nonetheless, at full peak capacity, the line still functions for those who are on board, carrying the full amount of people that the line can possibly carry, at about the same speed and only slightly less comfortably than if nobody at all was riding the train.

This is a huge difference that road users and traffic engineers probably don't appreciate when they put their minds to public transport. With transit, providing the full capacity to meet all conceivable peak demand doesn't really matter. In fact, trying to do so is often a hiding to nothing. Literally.

Auckland's transport history is a litany of grand, excessive transit schemes that never went anywhere because they zoomed in on maximising all possible benefits without worrying about cost and deliverability.

The City Rail Link bucks that trend by delivering a mountain of benefits and improvements, albeit imperfectly, at a perfectly viable scope and price. The fact that, in conventional traffic-engineer terms, it may "fail" by quickly becoming a victim of its own success in reality, rather than working perfectly in some never-never fantasy, is exactly what makes it the perfect transport project for Auckland.

Now, what other pressing transport gaps can we solve by right-sizing the approach, so we can get cracking and deliver the benefits within a decade?"

Auckland's transport history is a litany of grand, excessive transit schemes that never went anywhere but City Rail Link bucks that trend



New EV sales plummet to lowest level in three years

EV showrooms had a busy December followed by a ghostly January, after the Government killed the Clean Car Discount.

Recently-released sales data <u>showed a crash in</u> <u>new EV sales</u> at the start of the year. Used imports followed suit, according to <u>information</u> <u>published by the Ministry of Transport.</u>

The nosedive followed a busy December - when more than 4500 drivers registered New Zealandnew, zero-emission vehicles during the final month of the discount's life, where a rebate of up to \$7015 was available.

Just 352 people and businesses secured an EV in January – the lowest number of brand-new and New Zealand-new registrations since October 2020.

Meanwhile, gas guzzlers experienced the opposite.

Registrations of fossil fuel cars plummeted following the general election and then spiked in January when the Clean Car Discount's set of fees no longer applied.

Roughly 6600 very-high-emitting vehicles (producing more than 200g of carbon dioxide per kilometre) were registered last month, nearly double the typical number.

But the end of the Clean Car Discount did not have as dramatic an impact as the start. More than 29,000 gas guzzlers were purchased in a single month before the fees took force in April 2022.

The Clean Car Discount lasted less than two years, though its introduction, updates and repeal had a large influence on when people purchased cars plus the average emissions of the fleet. Kathryn Trounson of Better NZ, a charity promoting cleaner vehicles, said the Government's treatment of EVs was "unfathomable".

After a bleak January, EV sales might bounce back because they will still be cheaper to run than a petrol car – or simply slump, she said.

Ministers had hit EVs with a "double whammy", Trounson added, citing the repeal of the Clean Car Discount and an unexpectedly high rate for road user chargers, which will take force from April.

It was short-sighted not to help lower-income families "who really can't afford to pay petrol costs at the rate they are" into electric cars during a cost-of-living crisis, she said.

Because EVs do not contribute to air pollution – vehicle exhaust <u>causes</u> thousands of premature deaths and hospitalisations each year – plus fight climate change, Trounson "would like to think" the Government might review its policies "clobbering" EVs if sales stayed low.

Transport Minister Simeon Brown said low registrations of EVs and stronger sales of highemitting vehicles in January "wasn't unexpected".

The Clean Car Discount had provided \$339m more in discounts than had been collected in fees – making it "unaffordable", Brown said.

The price for a new EV had become cheaper, the minister also added. After completing a costbenefit analysis, the Government <u>planned</u> to invest \$257 million building 10,000 EV chargers.

In a briefing to Brown before the scheme was discontinued, officials said "the Clean Car Discount has helped speed the shift to low-emission vehicles".

However, other factors – including a rise in petrol prices, the arrival of more affordable Chinese EV brands and a rising awareness about climate change – may have supplemented the scheme's effectiveness, the briefing document says.

The Government also retained the Clean Car Standard, which encourages car importers to balance the number of gas guzzlers brought into the country with lower-emitting vehicles, or face a penalty.

Officials <u>said</u> the cancellation of the Clean Car Discount offered benefits – including the opportunity to better understand the impact of lower sales prices.

"If EV uptake subsequently reduces there will be a strong case for future initiatives to be developed."

The briefing noted the scheme's flaws, including equity concerns that lower-income drivers are less likely to directly benefit – though might access EVs more easily once discounted cars entered the second-hand market.

Officials said it would be "prudent" to phase out the scheme through 2024 "on the assumption that alternative options will be developed". *Source: Stuff*

Just 352 people and businesses secured an EV in January – the lowest number of registrations since October 2020.





The GPS is out! Opinion piece from Roger Boulter

Transport) is out (in draft). It may be the most radical ever.

GPSs were introduced in the last months of a Labour led government in 2008. Labour's first one was hastily re-written less than a year later by the incoming National-led government, but I doubt the political swings since then have seen a re-write going so deep as the current one; especially for what in places the draft calls 'multimodal' transport.

How to fund transport

For a start, it is clear the government is going to have a careful and radical look at how transport is funded. The old 'user-pays' idea, dating from the late 1980s, that those who benefit from transport investment should pay for it through Road User Charges (RUC) and Fuel Excise Duty (FED) has been increasingly compromised since the late 1990s, even more so since the 2002 'Moving Forward' policy announcement, and looks distinctly old-hat with agglomeration benefits and 'wider economic benefits' having come to the fore since then (notably, for example, with the Auckland Central Rail Link), and especially with the more recent advent of electric vehicles (which don't pay RUC – yet – or FED). Media comment, on this GPS draft, I've seen alternating between announcing 'good news', of no new petrol taxes for three years, and 'bad news' of a hike in rego (registration), but there's a lot more to it than that.

It shouldn't surprise us that rego goes up, since it hasn't since 1994. As for the petrol tax 'freeze', it's curious that it would go up by a big jump after three years. I see in here the government wanting a breathing space to allow them to grasp the nettle, or bite the bullet, of underlying issues

The GPS (Government Policy Statement on Land which have been toyed with for decades (by governments of all shades) but not resolved.

> We all know that tolls and PPPs (Private Public Partnerships) have been around for years as ideas, with just a few examples to date across New Zealand. To that we can now add congestion charging, which has also been toyed with in Auckland for a long time but which no government has brought to a conclusion. Then there is a clear signal of moving towards RUC for all motor vehicles, not just heavy ones, which actually is fairly non-political in that it has been in the offing (quietly) under the previous government. There is also the wider issue of inward investment from overseas, which the government will be considering in areas other than transport as well.

> Expect some hard work to nut out the whole area of how transport is funded over the next three years, and something radical in the next (three years' time) GPS. This time, the government are asking questions. Expect the 2027 GPS to advance some answers; some of which may be instead of that three-years-away big petrol tax

The bread and butter in the middle

In the middle, the bread and butter if you like, we see funding for roads going up, and for public transport, cycling and walking going down. No surprises there – that's been a classic right-ofcentre stance for years. Yet the drift away from full-blooded 'user-pays' since 2002, and with it a gradual but steady broadening, in the years since then, of the range of activities covered by the National Land Transport Fund, has always been justified by detailed economic analysis – and has also weathered changes from Labour-led to National-led and back again. The quiet numerate

| Country | Number of Vehicles in Use per 1000 Inhabitants | Average Annual Growth Rate 2015-2020 |
|--------------------|--|--------------------------------------|
| New Zealand | 869 | 3% |
| ■ U.S. | 860 | 2% |
| Poland | 761 | 4% |
| II Italy | 756 | 1% |
| Matralia Australia | 737 | 2% |
| Canada | 707 | 3% |
| ■ France | 704 | 1% |
| ► Czechia | 658 | 3% |
| Portugal | 640 | 2% |
| ■ Norway | 635 | 1% |

This GPS may be the most radical ever

NZ now leads the world in the number of vehicles per capita.



analysis of past years will, from now on, involve perhaps some 'frank' dialogue with the government. There is every reason to expect the government will welcome this, so long as the dialogue stays respectful (a bit more on that later).

There is talk throughout the draft about economic impacts, but I wonder whether those writing it realise how economic analysis has become more complex and subtle over those years, over two decades now in fact, since alternatives to private motorised transport have crept their way into land transport programmes.

For example, there is mention that certain activity classes cannot be used to install traffic calming measures, but can be used to remove them, citing the economic benefits of predictable journey time. Apart from the possibility that slower, more steady traffic speeds may in some cases get more traffic through at a more predictable travel time, other economic effects such as fuel use economy, emissions effects and road safety benefits to pedestrians and cyclists may also come into play.

The 'interesting' detail

It's when we get down to some of the detail about the 'activity classes' that I think the GPS gets really interesting, and not a little problematical, especially on its expectation that certain activity classes will not be used to fund 'multimodal' projects.

I know what they're getting at – a reaction against things like speed humps (interestingly, the GPS calls these speed 'bumps' throughout – not a typo, I think) and in-lane bus boarders. The Walking and Cycling activity class, for the first time, provides not just for provision but also maintenance of facilities for these modes. I know what they're getting at here too – avoiding maintenance of the relatively recent separated or protected cycleways taking funds which could have been spent on those parts of the roads where cars go.

When we have got beyond the change in general policy direction, this is where I think much of the discussion about the GPS, and indeed the Land Transport Programmes which will follow it, will get very interesting to say the least. A statement that funding should not be used for 'multi-modal' projects is repeated, much of it word for word, under a series of activity classes very different from each other.

You don't need to be a pavement engineer to know that the best way to 'renew' a road is to rip the whole surface off and re-lay it. However, what if the kerbside lane of this road is for buses only? Do you miss this lane out and leave it old and battered alongside a resplendent new road surface for the rest? Difficult physically and logistically, and less economically efficient than doing the whole lot together.

This, of course, wouldn't be likely in practice. The public transport and roading activity classes would be worked in conjunction with each other so that the work on the ground could remain seamless. What if, however, the public transport fund is already fully allocated (after all, there'll be a lot more that this will now need to cover) for the year of the area-wide renewals under the road renewal activity class?

This could get very messy indeed at the practical level of a Road Controlling Authority assembling a land transport programme, not to mention works 'on the ground'; a bit reminiscent of difficulties the then Transfund had in assembling 'packages' in the early 2000s. And I haven't even started on even messier cases, like a cyclists' advanced stop box which straddles the carriageway, or a bus-only lane which is only such for part of the day (notably peak commuting times).

I doubt these aspects have been properly thought through. Give the government a break, though. The GPS draft has inevitably been rushed under the intense pressure of putting 'runs on the board', made more intense through there being three government coalition partners who are not known for always getting on well together, and so will inevitably be vying with each other for public attention and kudos.

Where does a 'Pothole Prevention Fund' begin and a road renewal or maintenance fund end? Road renewals include prevention of potholes, and road maintenance includes filling them in. And what if the pothole is in a cycle lane? You can't use the potholes fund for that – but there may not be money in the 'Walking and Cycling' activity class to fill it.

Many local Councils, especially smaller ones, have <u>never</u> had <u>any</u> money from the Walking and Cycling activity class – because it hasn't been available to them. This activity class has tended to be for bigger, discrete projects in the larger centres (as those of us working in rural 'middle New Zealand' know only too well). Routinely, cycling facility provision – in both larger and smaller centres, from my own experience – has usually been funded from more general funding 'pots', notably 'Minor Improvements' or in some cases road safety.

If you're building a new road, which especially if grade-separated (as the GPS says all the new 'Roads of National Significance' will be) in urban areas the design is likely to include, as routine, pedestrian underpasses and the footpaths which go with them. However, the activity class can't fund 'multi-modal' projects. So do we miss out the underpass? Even if the new road is next to a school opposite a residential area on the other side? And even if earthworks requirements for the road itself mean the underpass's marginal cost is relatively small?

Where does a 'Pothole Prevention Fund' begin and a road renewal or maintenance fund end?



There's also a question that some of this could be unhelpful micro-management. Some commentators have already questioned whether some aspects of the GPS draft violate the statutory independence of the NZTA Board, and therefore may be illegal.

Much of the messiness stems from departure from a truism which has held since the old 1990s 'Project Evaluation Manual', and that is that the various roading activity classes <u>have always</u> funded 'multi-modal' projects. As the AA's George Fairbairn said to me when I was doing my (Transportation Group-funded in 1999-2000) national cycling strategy project, "There is only one road, and we must all share it".

'Separated' or 'protected' cycleways sometimes make news, and maybe these were in the mind of the GPS draft's authors, but most cycling has always been on general-purpose roads, which of course have also carried buses. This is why I said that this particular GPS draft may be the most radical ever. It's been routine that the roading activity classes have always occasionally funded a cycle lane, or provision for a bus stop. Moving away from this may cause problems that the authors have not anticipated.

Rail issues (including one maybe the GPS didn't want to raise)

In one place the draft says that it is wrong for road users (through FED and RUC) to pay for rail. Older ones among us will remember the late 1990s 'Alternatives to Roading' Fund, which arose when it was realised that some forms of investment, such as urban rail and coastal shipping (quaintly in those days called 'barging'; that's now out of the current GPS draft altogether, by the way) delivered better value for money than did investment in the corresponding or parallel state highways.

The culture of the Land Transport Fund 'belonging to' motorists was stronger in those days (which is why it was called a 'National Roading Fund') but even so an Urban Transport Council (in the early 1990s) was set up because public transport within cities made eminent sense even just for motorists through less congestion, let alone for benefits to the public transport users themselves.

On a simpler level, where I live (Wairarapa) a Wellington commuter on social media asked why should he pay for a rail service he never used. My answer would be that if all those who did commute by train drove in their own cars, his morning traffic queue would probably start at Upper Hutt instead of Silverstream.

Talking of which, one public transport project which has not only survived but is prominent in the GPS draft is the Lower North Island Rail Investment Project, which includes new rolling stock for the Wairarapa and Palmerston North

There's also a question that some of this could be lines into Wellington (this was also in National's unhelpful micro-management. Some commenta-

We read that inter-regional public transport is 'out' of the GPS (which may threaten the Hamilton-Auckland Te Huia service), but the Lower North Island Project is inter-regional. Although the Wairarapa Line is fully within Greater Wellington, the Palmerston North Line straddles Greater Wellington and Horizons Regions. Perhaps unwittingly, the government has left in there a precedent for further discussion about the role of, and prospective government funding for, inter-regional passenger rail.

Don't let's vent, let's reason

Many reading this will have strong views on the GPS draft. No one will be helped by venting anger.

One (not very influential) stakeholder has already banged out a media release saying that it "rejects" the draft GPS, some content of which it says is "unacceptable". That is not a very good way of winning friends and influencing people. This government is going to be 'in' for three years. We had better get used to working with it.

At this early stage (the GPS draft launch just about fell within the government's 'first hundred days') nailing political colours to masts is the order of the day. The next stage will be the nittygritty of submissions, meetings, business cases and benefit-cost analysis. Then education and dialogue will kick in.

The government has laced its GPS draft with caveats. For example, it says that cycling provision is only appropriate when there are strong economic or road safety reasons to justify it. Cue for professionals to argue, cogently, that in fact there are strong economic arguments that provision for cycling and walking and public transport (including perhaps some forms of light rail, which is also 'out' of the GPS), deliver excellent 'value for money'; possibly better in some cases than some road investment.

Going by what the GPS actually says in its detail, the government hasn't said it rejects provision for these forms of transport, just that it wants to see the colour of the money – or rather quantifiable benefits – justifying this. That shouldn't be too difficult, should it?

Reminder: The Group's National Committee is seeking member feedback to help form a response to the draft GPS.

Please undertake the Group <u>survey</u> by 29 March 2024 to help inform feedback. Feedback or queries can also be sent directly to Group Chair John Lieswyn at <u>john@viastrada.nz</u>.

The GPS document itself can be found here.

'Separated'
cycleways sometimes
make news, and
maybe these were in
the mind of the GPS
authors, but most
cycling has always
been on generalpurpose roads







Critics decry Berlin's 'behind-the-times' transport policy



Berlin's bike lane initiative has stalled, roads have been de-pedestrianized, and higher SUV parking fees have been ruled out. Why is the German capital now more car-friendly while other cities are de-congesting?

Bike campaigners and environmentalists in the German capital are denouncing what they call the "devastating" local transport policies under the new centrist government.

Latest figures by the Changing Cities campaign found that the Transport Ministry, led by the center-right <u>Christian Democratic Union (CDU)</u>'s Manja Schreiner, had barely reached a third of its bicycle lane target in 2023 — only 23 kilometers (14.3 miles) of 60 kilometers.

Meanwhile, the day after Parisians voted to triple parking fees for heavy SUVs, the Berlin government confirmed that no such measure was being considered for the German capital, though other German cities, like Hannover, said they were considering such a step.

These measures come after the pedestrianization of a section of the central Friedrichstrasse boulevard became one of the most contentious issues in the last Berlin state election in February 2023: After a court order reversed the Green Party's pedestrianization of a short stretch of the road, the Berlin CDU quickly promised to keep it open to cars in future.

"The traffic transition in Berlin has been stalled," Changing Cities spokesperson Ragnhild Sorensen said in a statement last week. "Not a single new bus lane was built in 2023, streetcar projects have been put on hold, the expansion of cycle paths has been slowed down and now they are being redesigned to be more car-friendly.

The SPD and CDU promised us a functioning city — what we got was dirty air and dangerous roads."

Schreiner defended her ministry's record to local media, arguing that her <u>Green Party</u> predecessor had also failed to meet bike lane targets and that her ministry had deliberately prioritized crossings that were particularly dangerous for cyclists.

"The debate must move away from quantity and also address the quality aspect," she told regional public broadcaster *RBB*.

The issue of traffic and balancing the interests of motorists, cyclists, and pedestrians became heavily politicized duringlast year's election campaign in Berlin, after which the new CDU Mayor Kai Wegner told the *Berliner Morgenpost* newspaper, "The way ... the Greens left the streets simply didn't suit a metropolis like Berlin."

Michaela Christ, the mobility specialist at the Berlin-based German Institute of Urban Affairs (DIFU), thinks that the debate has become all too ideology-driven.

"We have completely different political circumstances here to Paris," she told DW. "The election in Berlin was won not least with the promise of reversing all the measures that go toward progressive mobility."

"We've got caught in this fight between: 'Yes to cars,' or 'No to cars,' and that's not the aim of mobility policy," she said. "The biggest challenge for European cities is not to fall into a culture war over whether a car can drive down here or a bus, but to think together in terms of the goal."

Not a single new bus lane was built in 2023, streetcar projects have been put on hold, the expansion of cycle paths has been slowed down and now they are being redesigned to be more carfriendly





Berlin is also one of the only major cities in the developed world to build a new airport in recent years

After all, Christ pointed out, most city-dwellers use a mix of transport modes every day. "Only very few Berliners only use cars, or only public transport, or only the bike," she said. "And politicians don't have to say we want to privilege this or that mode of transport, instead, we have a common interest: The aim to is get where we want to go as quickly, comfortably, and safely as possible."

The contrast between Berlin and <u>Paris, which is</u> introducing more measures to discourage drivers in the city center, couldn't be starker. That's partly down the different histories of the two cities, according to Giulio Mattioli, urban development researcher at the Technical University in Dortmund.

"A lot of European cities are very congested, and there is a perceived struggle with too many cars, and the belief that something has to be done about it, and it seems that Berlin is behind the curve in many ways," Mattioli told DW. "Other cities have pedestrianized city streets without that much controversy."

There are reasons for this: Berlin has relatively few cars per inhabitant, partly because its unique history means it hasn't developed like other cities. The Berlin Wall from 1961 to 1989 restricted how much the city could grow, which means there are now fewer car-dependent suburbs.

"Cities have to get to that stage when it's really, really apparent to everyone, including motorists, that there is such a thing as too many cars on the streets, and Berlin hasn't quite reached that," said Mattioli.

There are also ways in which Berlin is still catching up with other European capitals like Paris and London — Berlin is one of the only major

cities in the developed world to <u>build a new airport</u> in recent years and is also still extending its A100 city highway around the city.

"There's still this idea that having cars and having new motorways is something modern — it's something that belongs to a large city, whereas, in places like Paris and London, they say: 'No, we're leading the way in restricting cars'," said Mattioli.

Not only that, certain legal peculiarities in Germany have made it harder for cities to make their roads more bike and pedestrian-friendly. For instance, Germany is one of the few countries that doesn't allow cities to unilaterally change their default speed limits: Though there are campaigns in Berlin and other German cities to lower the speed limit from 50 km/h to 30 km/h, this can't be done without a green light from the federal government.

Similarly, Germany has unusually strict regulations over how roads are designated, either as for pedestrians, bikes, or cars. This has made it difficult for local governments to convert roads or build new bike lanes, as successive Berlin governments are finding — whether they have the political will or not.

Source: DW.com







Roadworkers of the week—SH29A repair

Our Roadworkers of the Week this week are roadworkers from J Swap Contractors who did an amazing job fixing the hole under State Highway 29A in Tauranga.

You may've seen the coverage of the significant cavity we discovered under SH29A —the fourmetre deep and four-metre wide hole was at least 11 metres long, stretching across the width of the road. The hole was caused by the failure of a stormwater drain which likely occurred some time ago.

Thanks to a monumental effort by a team from J Swap, the cavity was fixed over the weekend and the road opened in the morning on Tuesday, with support from WSP in New Zealand.

Once the issue had been investigated, and the severity of the issue understood, Sean (project manager), Brian (drainage lead), Storm (machine

operator) and Romeo (labourer) led the efforts to get the road fixed as quickly as possible. These photos show the scale of the work involved—a 38-metre-long, 4.5-metre-deep excavation, with the whole road dug up in order for the stormwater pipe to be replaced.

Events like this, where there's a sudden impact on a state highway, can happen at any time, and often without warning. We're really proud of the massive effort everyone put in to get SH29A back open so quickly—a big thanks from us to the J Swap team for the hard work they're doing out on the roads.

When you see roadworkers out on the road this summer, travel safely through their worksites, follow signage and any instructions you receive, and give them a wave to say thanks for their tremendous mahi.

Source: NZTA



When you see roadworkers out on the road this summer, give them a wave to say thanks for their tremendous mahi





State Highway 25A Taparahi Bridge Case Study

Infrastructure New Zealand released a report on the State Highway 25A Taparahi Bridge Case Study and Associated Economic Benefits.

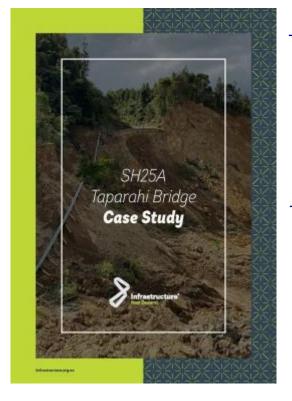
Delivered to the Minister of Transport Simeon Brown recently, the report highlights how the expedited reopening of State Highway 25A on the Coromandel Peninsula following the damaging storm events of January 2023 increased GDP in the region by \$85.88 million.

This is a great local economic story, brought about by excellent planning, co-operation and delivery from the public and private sectors working together to delivery a critical piece of infrastructure.

With input from the major project partners, the report highlights the key lessons from the bridge project that led to its accelerated completion.

The aim of this paper is to help inform the new Government's desired infrastructure approach, and to improve New Zealand's planning, consenting and procurement systems, thereby gaining significant efficiencies through faster project delivery.

The case study highlights the benefits of streamlined delivery to unlock greater value and economic benefits through a hastened return to productive utilisation of key infrastructure assets.



The report highlights how the expedited reopening of SH25A in the Coromandel following damaging storm events increased GDP in the region by \$85m

Read the full report here: https://lnkd.in/gAKB9Ngm



Group member Ian Appleton shared this photo of a car (using that term loosely) seen in Ruby Bay, near Rabbit Island. Stand aside, EVs. This car is as green as it gets.



Lyttelton Tunnel turns 60

22nd Feb marked 60 years since the Lyttelton Tunnel first opened on State Highway 74 in Christchurch.

It was built for £2.7 million in 1964 and held the record for the longest road tunnel in the country until the opening of Waterview Tunnel in Auckland in 2017.

Having Lyttelton Tunnel meant the Port Hills were no longer a barrier to road transport.

Christchurch and Lyttelton were originally connected by a zigzag path, then a tortuous hilly road, a railway tunnel, and finally a road tunnel—114 years after the first organised settlement.

Since the Canterbury earthquakes and the closure of Sumner Road, the tunnel is now the only direct route for traffic to Lyttelton Port, carrying more than 11,000 vehicles per day.







T-Tech24 Future Transport Conference

University of Auckland, June 25-26th

Accelerating New Zealand with Intelligent Transport Solutions

T-Tech is a forum and exhibition that brings together some 200 decision-makers, experts, innovators and researchers on intelligent transport systems – the technologies and tech-enabled solutions that advance a better transport future.

The two-day T-Tech24 programme will explore policies, research and trials, technologies, and tech-enabled solutions that advance and support transport efficiency, safety, sustainability, resilience, equity, and accessibility.

T-Tech is New Zealand's premium event to learn about and discuss new technology and emerging ideas and solutions from New Zealand and around the world.

Topics

- Public and shared transport technologies and solutions
- Demand management and road user charging
- Electric, connected and automated transport
- · Data, AI, analytics, and cybersecurity
- Technologies for safe and resilient infrastructure
- Smart transport modelling, operations, and asset management

Programme Highlights

- International keynotes
- 40+ distinguished speakers
- Networking events and conference dinner
- Government updates and announcements
- Posters and exhibition

T-Tech is the annual conference for ITSNZ, New Zealand's peak body for Intelligent Transport Systems and Future Transport Solutions.

Conference Website https://itsnz.org/t-tech24



Concern for Tauranga SH2 commuters as Takitimu North Link completion delayed



The mayor of communities along a congestionplagued stretch of State Highway 2 north of Tauranga has "great concern" for people's wellbeing as an alternative route is delayed.

The \$655 million Takitimu North Link (TNL) Stage One route is now not due to open until 2027 at the earliest, according to NZ Transport Agency Waka Kotahi (NZTA).

It comes as the Government faces <u>a potential \$24</u> <u>billion fiscal hole relating to transport projects</u> due to increased costs.

The under-construction TNL Stage One is the Bay of Plenty's most expensive transport project. It is a 6.8-kilometre, four-lane expressway from Tauranga to Te Puna that would eventually extend to Ōmokoroa in Stage 2.

It was expected to ease traffic on SH2 north of Tauranga, where motorists have complained of "horrific" congestion leading to missed flights and appointments. NZTA this week advised SH2 commuters work from home due to significant roadworks.

Western Bay of Plenty mayor James Denyer said that while the TNL was the solution to the ongoing traffic woes, he had "great concern" for people's wellbeing while waiting for it to open.

"It's not just the time it takes to [travel]. It's the uncertainty or variables. If you do it one day and it takes one hour and the next day it takes two

hours, it's hard to build that flexibility into your day. You can get up an hour early [to avoid congestion] but eventually, the lack of sleep etc gets to you."

Denyer lives near Katikati and is among those directly affected, especially when attempting to reach meetings on time.

Funding for the TNL Stage Two was controversially pulled in June 2021. Last week, it was ranked the second-highest priority transport project in Tauranga and the Western Bay - next to SH29/SH29A works - in the draft Regional Land Transport Plan, which would go out for consultation.

Denyer said he was assured the transport agency was working as fast as possible.

TNL Stage One construction began in late 2021 and had been expected to finish in 2026. In response to an Official Information Act request, NZTA national manager of infrastructure delivery Mark Kinvig said the estimated completion date was now 2027. However, the agency anticipated a revised date, and budget, in mid-2024.

Kinvig said <u>Covid-19</u> delayed property acquisition and archeology investigations, as did <u>"record-breaking" rainfall</u>. Last January, the Western Bay had more than 400 per cent its normal rainfall, according to Niwa records.

You can get up an hour early to avoid congestion but eventually, the lack of sleep gets to you.



Higher property costs, delays to land access and other cost changes such as stormwater and drainage project design were also factors. Increases in material and labour costs were also factors and "continue to be volatile", Kinvig said.

"[The] completion date remains under review pending assessment of impacts," Kinvig said. A transport agency document sighted by the *NZ Herald* estimated 17 national projects, including the TNL Stage Two, could cost \$30.9b to \$46.6b, but the previous Government budgeted \$22.2b. It's estimated the second stage of the TNL could cost \$900m to \$1.4b, up from \$627m.

Whakamarama resident Neil Rogers said the TNL was desperately needed and he was "gutted it's already taken this long".

"We've got another three years of this to endure."

was about half a kilometre of tar sealing. That's what's caused gridlock up and down the corridor all day."

Bay of Plenty MP Tom Rutherford said he would meet with the transport agency and the Minister of Transport Simeon Brown next week for an update.

"I understand and share the frustrations of local residents about the delays to the timeline of Stage One. Considering the rapid growth in the area, it is essential that this project is advanced as quickly as possible," Rutherford said.

NZTA manager of maintenance and operations for the region, Roger Brady, said it understood how frustrating the congestion was. This was a particularly busy time with more "activity on roads during the warmer, drier months of the year when we complete the bulk of our critical work -

Covid-19 delayed property acquisition and archeology investigations, as did "record-breaking" rainfall.



Rogers said he believed the region got "a pretty raw deal" on new highways.

He was concerned at a lack of clarity on whether the TNL would be tolled, which in his view would be a "total travesty" given <u>Tauranga already had two of New Zealand's three toll roads</u>, he said.

Rogers said SH2 had always been busy and it seemed "mind-numbing" works to cater to the demand had "been left for so long and there's no alternative route".

"It's not like the congestion is being caused by major or weird events. The big hold-up last week as well as our longer-term projects," Brady said.

Due to rapid population growth, there were 24,500 vehicles per day crossing SH2's Wairoa River Bridge, he said.

Congestion between Ōmokoroa, Te Puna and Bethlehem in particular contributed significantly to SH2 pressures but the TNL would help.

"We are also protecting the route for Stage Two of the project, and working with local government and other central government agencies to, as much as possible, ensure growth alongside SH2 is sensible and sustainable."

Source: NZ Herald



Transportation Group Scholarship for ACRS Conference





In recognition of the close professional connection between the Safety Practitioners' Group of the Transportation Group New Zealand and the Women in Road Safety Network of the Australasian College of Road Safety (ACRS), the National Committee is pleased to sponsor a Transportation Group member to attend the ACRS Conference, which this year is being held in Hobart.

The sponsorship (to the value of NZD1500) is to support a member to attend the ACRS conference.

Any costs above the value of the sponsorship have to be covered by the successful candidate.

Interested members are invited to submit an EOI to wirsn@acrs.com with the subject 'EOI for Transportation Group Scholarship for ACRS

Conference', supported by their CV and a brief (up to 300 words) commentary on the following criteria:

- benefit to member, employer and profession from member's participation in the conference
- member's contribution to profession (especially the Transportation Group)

After the conference, the successful member will prepare a brief conference report that will be published in the Roundabout magazine and is encouraged to give a presentation on their trip to their local Branch and the next Transportation Conference if possible.

Expressions of interest are open until **Friday**, **19 April**. For queries, please contact Gemma Dioni via email gemma.dioni@ccc.govt.nz



"The reason I've pulled you over is you were weaving down the street. Please blow into the bag sir. No. No, don't bite it. Don't bite it. Don't.... Sigh, you'll have to come back to the station with me."



Call for nominations for CPEng Competency Assessment Board

Introduction

The Competency Assessment Board (CAB) is comprised of a panel of senior Chartered Professional engineers responsible for making decisions regarding applications for admission to, or renewal of, competence-based registers overseen and administered by Engineering New Zealand in its role as the Registration Authority.

Appointment to the CAB should be considered a privilege. CAB members hold a distinguished position that allows them to significantly influence the enhancement and preservation of professional standards within the engineering field in New Zealand.

CAB member role

CAB member role The standard term for a CAB member on the Board is 2 years. At the end of 2-year period this role can be reviewed, with the CAB member typically having the option to remain on the Board for a further 2-year period, with the maximum collective term being three 2-year periods.

Call for nominations

The Competence Assessment Board are needing to appoint two new members to:

- Lighten the load per board member; and
- Provide more diversity in terms of board membership in order that we can better cover of different disciplines (fields of engineering). We are particularly keen to appoint new members in the Transportation; Building Services; Mechanical or Structural Transportation; Building Services; Mechanical or Structural areas.
- We are keen to increase the Board's diversity in terms of location (North Island preferred), gender, and ethnicity

What's involved?

CAB members are senior Chartered Professional Engineers who meet monthly and collectively decide whether to admit/renew or decline applications for competence-based registers. The primary task that would be involved would be a monthly review of assessment reports.

Time commitment?

Generally, the process takes about 3-4 hours for CAB members to review their allocated number of applications each month. There is also a monthly meeting (currently every second Thursday of the month) to review and approve applications collectively as a board. This meeting generally takes the morning from 9:00 to 11:30 and on occasion may finish at midday at the latest. The CAB meet face-to-face in Wellington, twice a year.

Remuneration?

is a voluntary (unpaid) role and an essential part of the CPEng process.

Nomination process and due date

To nominate someone, please email <u>Registrar@engineeringnz.org</u> with the following:

- Nominee's full name
- Nominee's discipline
- Statement of support why do you think they'd be a great addition to the CAB? If possible, their CV.

Please send us your nominations by Friday, 22 March. Self-nominations are possible.

The Board is responsible for making decisions regarding applications for admission to, or renewal of, competence-based registers overseen by ENZ.





Cheaper public transport trial helped people experiencing 'transport poverty'

<u>Cheaper public transport</u> in Christchurch meant more people on lower incomes had more money for everyday essentials, including food, a new study shows.

Researchers at the city's Otago University campus surveyed more than 370 people, comprising of public housing tenants and senior residents, all of whom faced "transport difficulty".

Half price bus fares ran for 14 months in Christchurch before ending in June 2023. The scheme reduced an adult single fare zone in Christchurch to \$1.30 with a MetroCard, or \$2.10 cash.

Other centres around the country phased out half price fares year, including in both Auckland and Wellington where it was wrapped up in July and September, respectively.

The study found almost half of participants were able to afford additional trips, with more than a third able to spend money on food and other essentials as a result.

Dr Angela Curl, a senior lecturer at Otago's Department of Population Health, said research found those experiencing "transport poverty" benefited in terms of accessibility and easing financial stress.

"We know that public housing residents, including those in our study, experience transport difficulties related to affordability and accessibility, with Statistics New Zealand figures showing the lowest income households spend more than a quarter of their incomes on transport," she said.

"Our findings show that for many who live in public housing, access to reduced fares on public transport reduces their financial stress, gives them the ability to get to places they need, removes anxiety, and improves their wellbeing and social contact."

Participants were asked about awareness, use and impact of half price bus fares.

An <u>earlier Waka Kotahi report</u>, *Impact of Half-Price Public Transport Fares - A Research Note*, published in February 2022 showed bus patronage in Wellington and Christchurch matched 2019 rates, but largely remained below pre-Covid-19 levels even since the introduction of half price fares.

But the report said people who already relied on public transport, like city dwellers, people with disabilities, and those without cars, were benefiting from cheaper fares by saving money and choosing to travel more often. In the Otago University study, 45 percent of public housing respondents stated half price fares had allowed them to make a trip they would otherwise have been unable to take, compared to 16 percent of other respondents.

Thirty-six percent said they had been able to spend money on other things such as food due to cheaper fares, compared to 8 percent of other participants.

A quarter indicated they would not have taken their most recent trip if paying a full price fare. Curl said most interviewees indicated making use of half price fares while they were available.

"As well as the obvious financial benefits, respondents told us that half price fares allowed them to travel greater distances, explore more of the city and spend more time out and about without having to try and get home within a two hour free transfer period or during concessionary fare time periods.

"Mental health benefits were reported too, with participants stating they able to see friends and family more often, with one saying they were able to make new friends on the bus, while another said he'd been able to take up a voluntary role he'd previously been unable to afford to get to."

Elsewhere, some said travelling by bus also removed anxieties about "driving, being stuck in traffic, or unable to find parking".

Other respondents said they did not make use of half price fares because of a lack of appropriate mental health support on buses, while some expressed concern of becoming too reliant on them, only for fares to increase again.

Source: RNZ

Mental health benefits were reported too, with participants stating they able to see friends and family more often





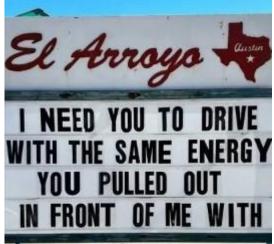














Traffic Fatalities Are Up Almost Everywhere, But Hoboken in New York Hasn't Had One In Nearly 7 Years



Once a bustling industrial port town directly across from midtown Manhattan, Hoboken is now a trendy walkable/bikeable destination town with posh waterfront highrises and twee coffee shops.

Despite lots of foot traffic, and considerable four-wheeled traffic, the city hasn't seen a single traffic death since January 2017, and according to *Bloomberg*, traffic injuries are down about 40 percent in that same period. Mayor Ravi Bhalla's 'Vision Zero' executive order, a campaign to completely eliminate traffic deaths, has proven its worth in keeping Hobokenites alive.

The plan boils down to a few simple changes in the tiny city on the Hudson; lower speed limits, protected bike lanes, improved crosswalks, and curb extensions. That's it. Some signs, a bit of paint, and some concrete curbing has completely slashed road deaths in the city to zero.

The city's goal isn't ending there, however, as Vision Zero hopes to achieve zero traffic injuries by 2030. It's definitely an ambitious, but worthy, goal.

"Just with a bucket of paint, you can actually create a curb extension; you can create high visibility crosswalks, which create a much safer environment at a very cheap cost," Bhalla said.

"And then when you do the next iteration of repaving, you can really amplify and increase on those improvements that you've made." The first step for Bhalla was to reduce the number of cars on Hoboken's streets. By installing bike lanes and inviting bike-sharing company Citi Bike to his little corner of New Jersey, this was accomplished fairly quickly.

Since Citi Bike entered Hoboken in 2021, nearly a million trips have been taken on peddled pedal power. Along with the bike lane plan was an opportunity to repave and re-paint all of the city's crosswalks for better pedestrian visibility. Forty curb extensions have been installed, which nudge cars farther from street corners when making turns, and prevents pedestrians from being hidden by thick A-pillars.

The biggest change, however, has been the city's commitment to speed reduction. In 2022 Hoboken lowered its city speed limit from 30 miles per hour to just 20. Pedestrians have an 80 percent survival rate when hit by a car travelling 30 miles per hour, but the survivability of an impact balloons to more than 93 percent when the car is moving at 20 miles per hour. Death and injury rates rise exponentially with speed, and New Jersey has proven that reducing speed reduces death and injury.

This kind of city planning has an opportunity to catch on. Reducing pedestrian-to-car impacts is the first step. Reducing the speed of those impacts is the next step. And improving our signage, road paint, and concrete curbing to make pedestrians and cyclists safer is as important as anything else.

Hoboken has proven it doesn't take much, but it does take action. So many cities could learn from Hoboken's impressive Vision Zero plan, and implement their own.

Source: Jalopnik

Hoboken has proven it doesn't take much to achieve Vision Zero, but it does take action.



Weather damage continues to keep Northland's rail line closed indefinitely

Northland's only railway continues to be <u>closed</u> indefinitely due to storm damage, as work chugs along to repair hundreds of slips.

The North Auckland Line has been closed since the end of January, when it was damaged in the Auckland Anniversary weekend floods. Cyclone Gabrielle and further flooding in February also caused more damage to the fragile network.

Across the 180km line between Whangarei and Auckland's Swanson, more than 200 sites were damaged by overslips, slumps, washouts and underslips. More than 30 of these sites needed significant geotechnical investigation, including 10 sites which required significant engineering.

As the extent of the damage became clear, the timeframe for repairing the rail line continues to be pushed out. KiwiRail initially expected the rail line to be opened in mid-2023, then early 2024. But Northland programme director Eric Hennephof says a re-opening date is still not confirmed.

One of the delays has been caused by a major fibre optic cable buried in the rail corridor for about 60km between Maungatūroto and north Auckland, he said.

The cable had to be moved before heavy machinery could be used on the rail line, to protect numerous internet connections in Northland from being severed.

This held up work on some of the larger sites over the holiday period, Hennephof said. KiwiRail is also planning out how \$50 million worth of Government-funded extra resilience work can be fit into the work schedule, to make the rail line better able to withstand future weather events.

"We are currently working through all of these details and expect to have a clearer re-opening timeframe in the coming months," he said.

Up to the end of December, more than \$28m has been spent on rebuilding the North Auckland Line, as part of a \$200m budget for repairing weather-damaged rail lines in the North Island.

"It is a massive job and we are making good progress on repairs," Hennephof said.

Work completed includes fixing a massive <u>350m</u> -wide slip at Tahekeroa, between Helensville and



Wellsford, where 35,000cu m of material slipped 400m down across a road and the rail line below. About 95 per cent of the material was reused to build a 4m-high road embankment to help catch future slips, while two other large slips in the area were also remediated.

While the slip repair work is progressing, KiwiRail has also been upgrading the line between Whangārei and Kauri to take 18-tonne axle loads, including laying 20,000 new concrete sleepers and 13km of rail.

This upgrade - which was also completed on the line from Swanson to Whangarei just days before the severe weather hit - will allow the line to run the same locomotives as used in the rest of the North Island and to run longer trains, Hennephof said.

"It's an important step to bring Northland's railway on par with the rest of the North Island and enabled us to offer improved freight services," he

"Longer-term, the track upgrade work to Whangārei is also crucial for running more services if the rail spur to Marsden Point were to be built. KiwiRail is currently <u>funded to purchase</u> land needed for the spur and to undertake its detailed design."

For one of the main users of Northland rail, Fonterra, the closure has meant an increase in both costs and carbon emissions.

The dairy co-operative used rail to transport 100 per cent of its product containerised for export from its Kauri plant and Northport cool stores, said general manager of logistics and customer experience Brendan Miller. These products are now transported by road to MetroPort in Auckland, he said.

However, Miller said the closure has not impacted Fonterra's ability to get its product to customers and it has been kept well-informed by KiwiRail about the reasons for the delays.

Source: NZ Herald



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(Road) Signs of our times



















Kenya's push to make 'boda-boda' motorbike taxis go electric



Moses Lugalia has joined Kenya's budding electric vehicle revolution - by exchanging the noisy roar of his petrol motorbike for the gentle hum of an electric one.

The biggest incentive to go electric for the 27-year-old rider of a motorbike taxi - known locally as a "boda-boda" - was the promise of saving money at a time when fuel prices keep rising.

Motorbike taxis are everywhere in Kenya, as in many African countries, because they are cheaper than cars, and can be better for navigating the notorious traffic jams in the capital, Nairobi.

Mr Lugalia has been in the motorbike taxi business for five years, transporting people and goods around Nairobi.

He would spend about 1,000 Kenyan shillings a day - just over \$6 - on fuel when he used a petrol bike.

Nairobi drivers earn on average about \$10-15 a day, according to the country's Boda-Boda Association.

Since going electric, Mr Lugalia says he spends no more than \$1.42 a day - so his profits are now up and that makes him very happy.

"Because of the cost of petrol, I am able to save a lot more using my electric bike," says Mr Lugalia with a smile.

Instead of filling up with petrol, Mr Lugalia now swaps the bike's electric battery once, sometimes twice, a day at one of the growing number of swap stations in Nairobi. A fully charged battery will allow him to drive for about 80km (50 miles), almost a whole day's work.

"Electric is the future in Kenya," Mr Lugalia tells the BBC.

The Kenyan government thinks so too. President William Ruto launched a national "e-mobility" programme on 1 September 2023.

Motorbikes and three-wheeled tuk-tuks, or auto rickshaws, are the centrepiece of a move to make transport green and reduce air pollution.

The government hopes the prospect of cheaper running costs will create a gearshift in the minds of other drivers of the ubiquitous boda-bodas, most of whom still use petrol or diesel.

There are about three million boda-boda riders in Kenya, according to the transport minister, and the UN estimates some five million people benefit from their incomes.

Instead of filling up with petrol, he now swaps the bike's electric battery once, sometimes twice, a day at one of the growing number of swap stations in Nairobi







Taking a boda-boda is a convenient, fast and cheap way to get around.

But many of the motorcycles are old, poorly maintained and big polluters. Although they produce less carbon dioxide than cars, they release more nitrogen oxides and hydrocarbons - which affect air quality and the climate.

Nairobi is one of the world's most heavily congested cities. Its population swells from about 4.5 million to more than six million people during rush-hours.

The daily gridlock can be a choking nightmare for commuters - transport accounts for about 40% of Nairobi's air pollution, and globally for about 20% of greenhouse gas emissions, according to the Clean Air Fund. Other major climate change culprits are deforestation, agriculture, manufacturing, and the open burning of waste.

Africa contributes only 2% to 3% of global greenhouse gas emissions, but it suffers disproportionately from climate change, according to the UN Environment Programme.

Nevertheless, Kenya's government sees a shift to green transport as vital to help meet its climate goals. It wants more than 200,000 electric bikes on the road by the end of 2024.

On average e-bikes emit 75% less total greenhouse gases. So far only about 2,000 boda-boda drivers have switched from petrol to electric.

In many ways, Kenya is an ideal market for electric motorbikes. About 85% of its electricity is renewable, generated by hydro, solar, geothermal, and wind.

Kenya has experienced some devastating droughts in recent years - which affects hydropower - but there is significant room to grow its geothermal, solar and wind capacity.

A handful of Kenyan start-ups have taken advantage of this and set up shop in the past three years, manufacturing, designing, assembling and selling electric motorcycles. They are also teaming up with creditors to offer cheap loans, which is the only way boda-boda drivers can afford to buy their own vehicles.

Mr Lugalia sold off his old petrol bike and used some of the proceeds to make a down-payment for an electric bike - and then paid the rest of the \$1,500 in daily instalments over a year. He now owns the bike outright - but not the battery.

"That wouldn't make economic and business sense," says Steve Juma, the co-founder of electric bike company Ecobodaa, as the battery is the most expensive part of an electric bike. It would almost double the cost.

So sellers retain ownership of the battery and have set up about several hundred battery-swap points in the capital - in shopping malls, petrol stations and fast food outlets.

Mr Lugalia says he has no trouble finding a place where he can swap over batteries. Using an app on his phone, he can open a cabinet, place his spent lithium battery into an empty locker, and take out a fully charged one from another locker.

But if you go beyond the city, it is a different story - and that is a huge disincentive for most boda-boda drivers I spoke to when I was in Nai-

"You can't go to a remote area where there is no charging system for the battery," one man said, explaining why he was not yet ready to go green.

While others said they did not want electric bikes because of the perception that they were more expensive to buy than petrol ones. And others say the range of an electric bike - between 60 and 80km - is too limiting.

The government, however, sees a future where all Kenyan streets echo with the quiet hum of emotorcycles and wants to eventually phase out traditional boda-bodas altogether. There is still a long way to go, given how limited the electric vehicle infrastructure is beyond Nairobi.

But the government says the private sector, which is already investing in Nairobi, can play a pivotal role elsewhere too.

"We are confident that if we succeed in establishing proper infrastructure in Nairobi, that will encourage the same investors to invest," Kenyan Cabinet Secretary for Roads and Transport, Kipchumba Murkomen, told the BBC.

Some companies have already announced ambitious plans. Masalule Kituyi of Roam says the company will be producing 8,000 electric motorcycles by next year. And by the end of 2024, another Nairobi-based start-up, Arc-Ride, wants to build 1,000 electric vehicles and set up more than 300 battery stations in Nairobi.

Source: BBC News

Sellers retain ownership of the battery and have set up several hundred battery-swap points in the capital



Four-year court dispute over driving in Auckland bus lane



Nelson man Norman Flounders, 79, has vowed to continue a four-year-long court scrap over a fine he got from <u>Auckland Transport</u> for driving in a bus lane.

The dispute has been through a hearing before two Justices of the Peace, the District Court and the High Court, and now looks set to go higher, with Flounders vowing never to pay the \$300 fine and appeal to the Appeal Court.

The dispute arose from two instances, on July 16 and July 20 in 2020, when Flounders knowingly drove through a bus lane on Khyber Pass Rd in Newmarket.

He entered the bus lane at the start of the bus lane and turned left into an alleyway just after the end of the bus lane, parked his car and went to a coffee shop.

Flounders was issued two infringement notices alleging that he used a special vehicle lane reserved for a bus.

He disputed that and the matter went to a hearing before two Justices of the Peace in 2021. The JPs found the offence proven and fined him \$150 on each offence plus \$60 in court costs.

Flounders appealed the decision to the District Court. His appeal, before Judge Grant Fraser in April last year was dismissed. So Flounders went to the High Court to seek leave to appeal Fraser's decision. The application was heard by Justice Mark Woolford in the High Court at Auckland in November.

Woolford declined leave to appeal.

At the heart of the case is <u>clause 2.3(4) of the</u> <u>Road User Rule</u>, which sets out what is commonly referred to as the 50-metre rule.

It provides an exception to the general rule (that you cannot drive in a special vehicle lane) if the driver drives in the lane to cross it to make a turn or leave the roadway, provided the driver uses the lane for the minimum length necessary to make the manoeuvre, for no more than a maximum of 50 metres, and gives way to vehicles entitled to use the lane.

Auckland Transport staff responded to Flounders dispute with a sketch map that showed the distance between the sign showing the start of the bus lane and the end of the bus lane was 77 metres.

Flounders argued that the bus lane wasn't continuous because it was bisected by a pedestrian crossing that was 17.5m wide.

He said this meant there was actually two distinct bus lanes, and he calculated one to measure 9m and the other to measure 40m.

At the heart of the case is clause 2.3(4) of the Road User Rule, which sets out what is commonly referred to as the 50-metre rule.





Flounders argued that the bus lane wasn't continuous because it was bisected by a pedestrian crossing that was 17.5m wide

Both judges ruled that there was only one bus lane, not two, and that regardless of the actual length of the bus lane, Flounders used the bus lane for more than "the minimum length necessary to complete the manoeuvre".

Another claim by Flounders that he used the bus lane because it wouldn't have been safe for him to get out of it. This claim was not borne out by CCTV video of the incidents, the judges noted.

Judge Fraser said Flounders travelled in the bus lane for more than the minimum distance necessary in order to enable him to complete his left turn, and his "explanation on both days is inconsistent with the scene as depicted in the visual record".

"He should have continued in the general traffic lane where there was limited traffic on one day and more dense traffic on the other. There were no issues in terms of safety for him to signal from the lane on the east side of the pedestrian precinct and cross into the bus lane for a short distance, and then effect his left turn," the judge said.

When it came the High Court appeal before Justice Woolford, Flounders didn't tackle Judge Fraser's reasoning for finding the offences proven, and instead focused on the sketch that was provided by Auckland Transport.

He described it as a "fabrication" and "a pack of lies with no legal standing", and was adamant the bus lane itself is in some way illegal.

Recently, Flounders told *Stuff* that he had not and would not pay the fines, and he intended to file

an appeal with the Appeal Court.

"I knew the second judge would repeat what the first judge did. I knew I was dogtucker, but that said, I'm not a radical, and in this case I think everything rests on the sketch that was used and that sketch was not of a standard the court should consider," he said.



"I mean, it doesn't even include the traffic lights or show where the actual intersection is. It's a false document," he said.

"You just can't include that 17.5m pedestrian crossing as part of the measurement".

"It's the busiest part of Auckland, that area, and they want to clip everybody's ticket as they go through," Flounders said. He said he'd missed the window to appeal the decision, due to personal reasons, but would apply for leave to appeal Justice Woodford's decision.

Auckland Transport did not wish to comment. *Source: Stuff*



Furious UK motorists complain their cars are being wrecked by bus lane 'trap'



Angry UK motorists are complaining that their cars are being damaged and written off after being caught in a controversial bus lane "trap".

Dozens of motorists have found their cars stuck in the bus lane despite signs warning them not to enter it.

The trap is located at the junction of Station Road and Harrison Way in St Ives, Cambridgeshire and is designed to prevent vehicles from driving onto the busway.

The pit in the road is wide enough that small vehicles fall into it but small enough that larger-diameter-wheeled vehicles, such as buses, may pass. But some locals are now complaining that the trap is a hazard, with up to five motorists getting stuck every week.

The daughter of a motorist recently caught in the trap, who wishes to remain anonymous, says the incident has left both her parents "shaken and traumatised".

Their vehicle was seriously damaged in the drop, and they are finding out if it is repairable or a write off and she claims her father was one of five drivers who ended up in the trap last week.

He is in his 80s, but she insists he is a competent driver who misunderstood the exit signs leading out of a car park.

She said: "He somehow ended up back in the same car park again. He said the signage was poor and if he exited the same way, he'd end up doing the same thing. So he went a different way and ended up in the car trap.

"We know of someone in their 20s who has also gone into the trap – you can't argue this is because of my father's age.

"Considering the number of incidents, there must be another way to manage the junction that doesn't cause this much damage to vehicles."

Philippa Parker drove into the trap which, she claims, was full of weeds last summer and complained to the council.

She also argues poor signposting leading up to the trap is what led to the incident. Philippa, from Wiltshire, said: "The signs were totally inadequate.

"Motorists were driving up to the junction while we were waiting for the recovery.

"If we weren't there, they would've made the same mistake.

"The abuse and awful language people were shouting as they passed us was also shocking."



"It left us with a very bad impression of St Ives afterwards."

However, Cambridgeshire County Council said last month it is only aware of 60 incidents of vehicles caught in the trap since it opened 12 years ago.

It also says the warnings, such as signage, currently in place are adequate.

Cllr Kevin Reynolds from Cambridgeshire County Council has admitted he has little sympathy for the drivers who get stuck.

He said: "If people driving along that road cannot see a big hole in the ground in front of them then I would argue they wouldn't be able to see a small child.

"I would question whether they should be behind the wheel at all..."

Source: Independent



If people driving along that road cannot see a big hole in the ground in front of them then I would argue they wouldn't be able to see a small child.





I run or walk on the footpaths in my neighbourhood every morning and frequently find my way blocked.

Usually it is by a poorly/illegally parked car – you know the saying, "Its always an Audi" – but often the obstacle is a much more natural nuisance.

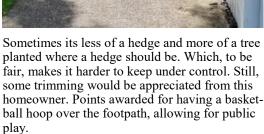
Having observed these obstacles, irritants and dangers for many years, I have finally decided to record them. A 'Hedge Hall of Infamy' if you will.

Don't get me wrong, I love hedges. I have one myself and trim it within an inch of its life on fine weekends or just before relatives come over. However, if not properly controlled, these green fences can also severely curtail those on foot (or appropriately small wheels). I therefore give you: Hedges against humanity.

Let's start with the classic overgrown hedge. It was kept under control for many years but recently has clearly started to loosen its belt. You can tell from the neighbour's white fence just where the hedge originally was, but it now obstructs half the footpath. Points awarded for keeping it neat, even as it encroaches.



I love hedges. I have one myself and trim it within an inch of its life on fine weekends or just before relatives come over.





This is less of hedge and more of a jungle. I think the problem here is that the homeowner's view of the footpath is blocked by a fence and their driveway is around a corner, so they rarely see this catastrophe.

Over the years, nature has returned and wildlife has flourished, except for the Lesser Spotted Postie, who has to choose the other side of the road.





A similar situation exists in this photo, where the homeowner's trees are neatly trimmed within the property but continue to expand unnoticed out over the footpath, pushing any unwary passers-by into the powerpole. Which they clearly should have noticed because it has those two reflective dot things on it, and therefore it would have passed a safety audit.



If you look closely at this photo, you will see that the owner of these hedges has tried to attack the growth and has had to store some of the cut branches on the grass verge, but at some point it all just became too much and they decided to just leave a person-shaped channel to pass along.

Points awarded for the variety of plants making up the hedge.



Occasionally it isn't a hedge which is the problem, but a street tree (and sometimes they gang up together, which is really quite mean).

In the next photo, the footpath is completely passable, but only if you are a dwarf or very good at doing the limbo.

The street tree (which I think is a feijoa, so at some times of the year it provides either a delicious snack or dangerous underfoot conditions) continues to bulge out and sag downwards, which even the best of us do in our old age. Points awarded for being a fruit tree.



The street tree continues to bulge out and sag downwards, which even the best of us do in our old age

For the gardeners out there, agapanthus plants are well known as beautiful but hard-to-get-rid-of.

In this photo you can see what would once have been a small and neat agapanthus planting at the base of a rock wall has now become a triffid-like situation (kids, ask your parents), which forces passers-by onto the grass verge. Points awarded for the bumblebees these plants attract.





For a Grande Finale.

my favourite hedge

blockage, taking up

80% of the footpath

width (I measured)

It is possible to contain agapanthus plants, as this homeowner has tried to do with some kind of mesh. However all it has done is illustrate how far the neighbour's hedge has encroached onto the footpath. Points for trying.



Sometimes it isn't the hedge that is out to get you, but the roots. A tantilising trip hazard for the unwary. Nature: it will get you any way it can.



Sometimes the hedge, trees and street trees combine to form a tunnel effect. Points awarded for keeping the grass verge maintained even though nothing else is.



The below situation is arguably fine, if you only ever walk in single file, or have no friends. Or aren't a larger-sized person. Or don't mind rubbing shoulders with Mother Nature.



And for a Grande Finale, my favourite hedge blockage, taking up 80% of the footpath width (I measured) and topped off with a large powerpole that blocks people from using the grass verge to pass around it.

To this homeowner: Well done, sir. Your years of neglect have finally paid off.

Points awarded for the height of the hedge and weird brick wall being overwhelmed by the hedge.

Next time, perhaps, 'Obstructing Audis of the Apocalypse'...



Photos, text and sarcasm supplied by Roundabout Editor Daniel Newcombe. If you have a photo essay you would like to supply, no matter how pedantic, please get in touch: <u>Daniel.newcombe@at.govt.nz</u>



High-speed train company Hyperloop One shuts down



The company which became well known for its idea of shooting people hundreds of miles an hour through a vacuum has shut down.

The aim of Hyperloop One, based on an idea by Elon Musk, was to dramatically cut journey times.

It has previously received backing from Virgin founder Richard Branson, but he pulled out last year.

The firm will lay off its remaining staff by the end of the year, <u>according to Bloomberg.</u>

The company had promised a new era of high speed travel, using magnetic levitation (maglev) technology - which is already used in some transport systems - within a vacuum tube.

This would reduce friction and air resistance, allowing the train to travel at speeds of 700mph (1,127km/h). It was also meant to be greener than current high-speed transport.

However, while Hyperloop One did build some prototypes in the Nevada desert, the project stalled with some experts expressing doubts about its engineering challenges.

It would have required the construction of giant tubes across the countryside and within towns.

It also had a problem with corners - so all the tubes would have to be in a straight line.

A trial of the system took place with two company employees in 2020 - the first successful passenger ride using hyperloop technology.

The pod reached a top speed of 107mph (172km/h) on the 546yds (500m) test run. But the company announced a change in strategy in 2022, saying it would focus on transporting cargo instead of people.

That change also came with an announcement of over 100 job losses, and was followed by more job cuts later in the year.

By the end of the year, it was reported that Richard Branson, who had been company chairman, was pulling out and the company lost the endorsement of Virgin.

The company had also endured scandal over the years, with one previous director Ziyavudin Magomedov jailed in Russia on embezzlement charges.

Another investor, Shervin Pishevar, left in 2017 after Bloomberg reported <u>sexual misconduct allegations</u>.

The original hyperloop was based on a report published by Elon Musk in 2013 which proposed the idea of shooting capsules through a tube at high speed.

Mr Musk has his own firm, The Boring Company, which is researching similar technology using underground tunnels.

There are also other similar companies around the world which continue to work on the concept. DP World, the Dubai-based company which owns a majority stake in Hyperloop One, has been contacted for comment.

Source: BBC News

It also had a problem with corners - so all the tubes would have to be in a straight line.





Are cars getting too big for the road?

In some parts of the world, cars have always been on the larger side. But now these behemoths are spreading – and the consequences are still being figured out.

The 2024 Chevrolet Suburban, a nine-passenger sports utility vehicle (SUV), measures 5.5m, and is advertised as "a room with a view".

A seven-seat, fully electric crossover vehicle designed by Kia houses an 800-Volt battery that weighs, on average, 450kg. An electric Hummer SUV, meanwhile, has a maximum width, including mirrors, of 2.4m.

Large cars are becoming ever more popular. In fact, the size of the average car is growing wider at a rate of 1cm every two years, according to the non-profit Transport and Environment. With this increase in size comes some equally large problems, from environmental repercussions to safety hazards, and the sheer difficulty of manoeuvring cars in streets and parking spaces designed for smaller models.

As the city of <u>Paris, France, votes to triple the parking fees for visitors' SUVs in its streets</u>, what can be done to remedy the challenges that come with large cars?

Large cars are
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How the car got so big

Car shapes and sizes have steadily ballooned since the late 1970s. The reasons for this increase are various and complex. The addition of safety features like lateral and frontal airbags and "crumple zones" required more space, while consumers began to seek out luxury, exotic and import vehicles. Finally, the auto industry incentivised the purchase of trucks and SUVs over lighter sedans.

In 1975, the US Congress amended fuel economy regulations on new passenger vehicles in the form of Corporate Average Fuel Efficiency standards. These standards determine fuel-economy targets, but instated more lenient requirements for light trucks and SUVs than standard cars. The standards have been updated since, but still allow lower fuel-efficiency standards for larger vehicles.

There are other factors at play too. It used to be the case that a single manufacturer would offer smaller vehicle variants in Europe, South America and parts of Asia, while consumers in the US (and China, the world's largest car market) could select from a range of much larger options.

That variation is disappearing. The majority of vehicles in the UK used to be designed and produced in Britain, with narrow English streets in mind. Now, vehicles in the UK (and the EU) tend to be larger imports designed to navigate the urban sprawl and looping freeways found elsewhere.

In 2020, the average mass of new cars in the EU and the UK increased to 1.457 tonnes, 3% higher than in 2019 and 15% above 2001 levels.

The shift towards heavier (and therefore less fuel efficient) conventional vehicles increases both oil demand and CO2 emissions; consider that global CO2 emissions of SUVs are nearing 1 billion tonnes.

"This is a phenomenon that has spread throughout the globe; we see SUVs making inroads in Europe, China and South Africa due to a combination of factors," says Apostolos D. Petropoulos, an energy modeller at the world energy outlook team at the <u>International Energy Agen-</u> <u>cy</u> headquartered in Paris, France.



Big cars come with big challenges

Even a stationary SUV can be a significant problem in a city that evolved around smaller cars. In 2023, Which? — an organisation that tests consumer products and services — found that 161 car models were too big for the average parking space in the UK. Twenty-seven of those models were so wide that it would be difficult to open the doors while constrained within a single parking bay.

In the EU, the average width of new cars has now surpassed 180cm, which is often used as a lower threshold for on-street parking in Europe. Meanwhile in the US, the strain on parking exacerbated by SUVs has been making headlines for more than 20 years.

A problem too, is the rising emissions that come with bigger vehicles. One report, by the US Environmental Protection Agency, notes that "all vehicle types are at record low CO2 emissions; however, market shifts away from cars and towards SUVs and pickups have offset some of the fleetwide benefits".

In other words, bigger cars are diminishing our climate emissions gains. And it is worth noting that most car manufacturers offer smaller, more efficient alternatives.

Shifting SUVs to electric isn't a complete solution either. While the switch to electric vehicles is a valuable step toward net zero emissions, there are drawbacks as those vehicles increase in size.

Cars fitted with electric batteries can also become weighty projectiles in the event of a crash; according to the IEA's 2023 EV Outlook, "Battery electric SUVs often have batteries that are two-to three-times larger than small cars."

Electric models of SUVs come with their own climate costs. In 2022, around 55% of the available EV models available worldwide were SUVs, and demand has seen consistent growth.

The architecture of an electric SUV is a complex system involving batteries, motors, sensors, electronic controls, auxiliary equipment, wiring, housing and other components.

The batteries that power the majority of EVs rely on raw materials such as lithium, cobalt and nickel. Mining for these resources has its own environmental impact. Finally, larger vehicles will require suitable charging stations, which in turn puts stress on our electric grids.

When shopping for a gasoline-powered car, consumers often focus on miles per gallon. Plug-in vehicles, by contrast, don't use mpg as a metric; an EV's energy consumption is measured in kilo-

watt-hours per 100 miles (160km). Bigger cars require more kilowatt-hours: an electric sedan, for example, requires roughly half as many kilowatt hours as does an electric SUV, according to Petropoulos.

That's not to say EVs aren't still a better climate choice than conventional cars. "While EVs' production is more carbon-intensive than that of gaspowered cars, this difference quickly disappears; a car with an internal combustion engine produces emissions over the course of its lifetime, whereas an EV does not," says Laura LoSciuto, leader of the Battery Circular Economy Initiative at the Rocky Mountain Institute in Colorado.

"EVs are an overall net win emissions-wise, even if the grid on which it relies is powered by fossil fuels.... [Our] transportation system needs to be electrified, period, despite the issues with car culture," she says.

Rising US road deaths

Electric SUVs are equipped with bigger batteries because these vehicles have higher power needs. But EV (and conventional) SUVs are also geared toward better performance, meaning it's not just the weight and size of these vehicles that affects traffic safety – it's the way they're driven too.

"We can attribute some of the dangers of these bigger cars on the behaviour of the consumers," says Petropoulos. "They want to accelerate faster, which requires more battery power."

The New York Times <u>recently highlighted</u> the "exceptionally American" problem of rising road deaths. Roadways are becoming safer in many developed countries across the world, but not the United States.

Some design trends may not be helping. Many newer, behemoth models have high hoods, which pose distinct safety hazards. A US study of nearly 18,000 crashes involving pedestrians found that SUVs and vans with a hood height greater than 102cm were about 45% more likely to cause fatalities than those with a height of 76cm or less.

Another study of 3,400 vehicle crashes in the <u>US</u> where a pedestrian was struck found a link between the front-end vehicle height and the risk of the pedestrian's death. Raising the front-end of the vehicle by 10cm was linked to a 22% increase in pedestrian fatality risk, the study found.

"A number of alarm bells are going off, and the responses are staggering in how ineffective they are," says Kevin J. Krizek, professor of environmental design at University of Colorado Boulder, who co-authored a white paper on fatal road crashes, or "traffic violence", that was submitted last month to US Secretary of Transportation Pete Buttigieg.

EVs are an overall net win emissions-wise, even if the grid on which it relies is powered by fossil fuels



"In high school physics, force is a function of mass and speed, but in the world of vehicles, there's a third deadly factor: the design of the hood," says LoSciuto.

"The higher and more angular the hood, the greater the risk." Frontal blind spots large enough to hide adults and children can lead to fatal accidents. "Unlike their shorter, sloped counterparts, these towering hoods don't just hit – they can shove victims to the ground and under the vehicle," says LoSciuto.

Perhaps there's a future in which we're simply less dependent on big cars. Is there an alternative type of transportation system that pivots away from bigger, faster vehicles altogether?

"The <u>optimal solution</u> sits before us: retrofitting streets to make them safe for people using myriad smaller and lighter vehicles," says Krizek.

"Fleet operators already await movement on this front; economic development incentives could be provided to spur companies to produce more of these types of vehicles (hundreds already exist), which bolsters the idea."

There are signs of some cities moving in this direction already. Even traditionally car-centric European cities such as <u>Brussels are considering restrictions on SUVs</u>, even as <u>Paris puts its heavy parking charge on visitors using them</u>. Other policymakers in New York are proposing to rein in large cars through tax policies like <u>weight-based registration fees</u>.

But for some cities, <u>from London to New York</u>, the answer may be not to single out large cars, <u>but encourage other forms of transport altogether</u>. *Source: BBC Future*



















Iceland's 'bike whisperer': the vigilante who finds stolen bicycles – and helps thieves change

It all started in 2019, when Bjartmar Leósson started to see a rise in bike theft in Reykjavík. Rather than accepting that once a bicycle was stolen it had disappeared forever, the bus driver and self-confessed "bike nerd" decided to start tracking them down and returning them to their rightful owners.

Four years and, he estimates, hundreds of salvaged bikes later, the 44-year-old has developed a reputation in the Icelandic capital among cyclists and potential bike thieves. Known as the Reykjavík "bike whisperer", people across his home city turn to him for help to find their missing bicycles, tools and even <u>cars</u>. Often, he says, bike thieves hand over bikes without being asked and some former bike thieves have started to help him.

"It's like a little snowball that got really big really fast," says Leósson, whose other nicknames include "the bike cop", "bike priest" and "bicycle Jesus".

Now when somebody loses their bike it can take as little as 48 hours to track it down on his Facebook page, *Hjóladót ofl. tapað fundið eða stolið* (Bicycle stuff etc lost, found or stolen), updated every few hours with missing and found items and which has more than 14,500 members.

"It's not only me," he says. "Many times someone sees a bike hidden in a bush, takes a picture and then someone else comments 'hey that's my bike'. So everyone's looking out." While not a globally renowned cycling city, twowheeled transport is on the rise in Reykjavík, which has a population of 139,875 people.

Through its new cycle path system, the city aims to increase the share of cycle trips to at least 10% of all journeys made by 2025.

In the last three years there has been a steady reduction in bike theft in the city, according to police statistics, falling from 569 in 2021 to 508 the following year and 404 in the first 11 months of 2023.

"Bjartmar Leósson is doing a great job finding and collecting bikes that have been stolen," said the Reykjavík police chief, Guðmundur Pétur Guðmundsson.

"Police often guide victims of theft to various sales groups and his [Facebook] group just to increase the likelihood to find the bike a gain." All bike theft reports were investigated, he added

While Leósson's investigative work is now altruistic, anger was a strong driving factor when he first started.

He began taking bikes to the police after seeing what he believed to be stolen items outside a homeless shelter and admits he would confront and argue with the people he believed responsible. Now, he empathises with them.

Now when people's bikes get stolen, the police direct them to his Facebook page





"At first I was very shocked and angry at the situation," he says. "A lot of bikes outside the shelter, a police car driving past, no one doing anything.

"I was very angry, they were angry – it was very rough at first. But then I started to think: OK, it doesn't matter, I can scream until I'm blue in the face, nothing's going to change. So I decided to try to level with them and just talk to them."

From that point, the dynamic changed. He started to become friends with residents of the shelter, some of whom started to help him track down bikes. Some of those, he says, he helped into rehab and the impact on Leósson himself was life changing.

Now when people's bikes get stolen, he says, the police direct them to his Facebook page. When there is a finder's fee he gives it to people living in the shelter. He he says he now sees the bike theft problem is often driven by addiction, aided by long rehab waiting lists and closures during the summer.

His passion for bicycles started as a young child riding his first tricycle down the street and as a teenager he started mountain bike racing and getting interested in vintage bikes. The first time he had a bike stolen, he says, he felt "like somebody had just punched me in the stomach". But he also remembers thinking that it was not an unsolvable mystery.

"I thought to myself: OK, your bike is out there somewhere, it's a needle in a haystack ... but this haystack is not that big, this is Reykjavík. And I decided: I am going to find my bike."

He put notes through neighbours' doors and before long he had a description of a person believed to have been seen with his bike in the city centre.

"Every single day I thought to myself: today is a good day to find my bike." And one day he spotted somebody on his bike, stopped him and got it back.

But his approach since then – when he was "stubborn and maybe a bit loud" – has changed dramatically.

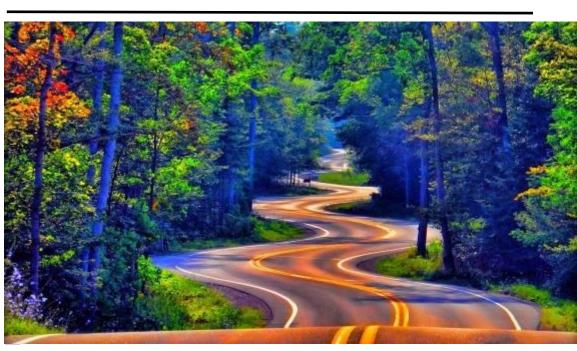
"Now when I see these guys on a stolen bike, I just talk to them very peacefully and calmly. The other day I talked to one of these guys and didn't even mention the bike, I just basically said: tell me your story," he says. At the end of the conversation, the man handed him the bike.

While cycling is on the rise in the city, he says, bike theft can put people off using bikes in place of public transport because they are afraid to leave them out locked up – and can stop them cycling entirely.

"Some people have switched from car to bike, and when the bike gets stolen and the police seem to do nothing about it, then they go just back to the car."

Source: Guardian







The tale of two TODs

By Malcolm McCracken and Darren Davis

On the face of it, the

New Lynn Transit

Oriented

Development had it

all



Transit oriented development is a hot topic in New Zealand and around the world. By locating more people, both working and living, close to rapid and frequent public transport, we can improve livelihoods while supporting other goals like reducing emissions from transport.

The story of New Lynn and Avondale is one of great comparison in the approaches and outcomes delivered and there are lessons to be learnt from both.

Firstly, what is Transit Oriented Development?

There is a broad subset of literature focused on defining TOD. However, in simple terms, TOD is generally considered as medium to high density, mixed-used development centred around a rapid transit station.



The planned over-site development at Te Waihortiu Station in Auckland. Source -The Symphony Centre

The term can refer to a single building, like an over-site development (OSD), as planned over Te

Waihorotiu Station in Auckland. It can also be used to describe a neighbourhood set around public transport.

Typically, TOD is used in cases where there is rapid transit, a railway or a busway. However, it should be understood there is a lower scale of TOD, where you see medium-density development close to frequent bus routes with significant, if not complete, levels of bus priority, that enable faster and more reliable journey times.



For example, apartments along Dominion and Great North Roads in Auckland fit this category. This scale of TOD is applicable in a far broader subset of urban environments, not just major cities

New Lynn Transit Oriented Development

On the face of it, the New Lynn Transit Oriented Development had it all. It was a core element in a comprehensive plan, the New Lynn Urban Plan, to reimagine New Lynn from the ground up, centred on trenching rail to reduce severance and making a bus rail interchange the anchor for comprehensive redevelopment.

It had many of the key success factors for urban regeneration, such as a single-minded focus, a lead agency with planning powers and a dedicated and passionate project team.

What was initially delivered between 2010 and 2012 was promising. A state-of-the-art bus/ rail interchange, along with bus network changes, helped grow patronage of the station and wider network significantly since the opening.

New Lynn was the third busiest station, behind Newmarket and Britomart, on the network until 2019, when it was overtaken by Panmure, another bus-rail interchange success story. Coordinated with the new station and grade separation of the rail line was a three-storey commercial development and an apartment tower next to the station.

However, not much has happened since. The birth of the super city put paid to the place-based





focus on areas not in the ambit of Eke Panuku, Kāinga Ora or the Tāmaki Regeneration Company.

Attempts to reduce or eliminate minimum parking requirements were stymied for over nine years by legal action by supermarket chains and big box retailers, enabling surrounding development to become a car-oriented mess that would make Lincoln Road proud.

Key brownfield sites such as Crown Lynn and Monier Brickworks lay fallow for many years and are now only slowly starting to regenerate. And planning failed to address the elephant in the room of LynnMall, which sucked the energy out of surrounding of the surrounding streets and in turn failed to address or orient itself to the bus/rail interchange and TOD.

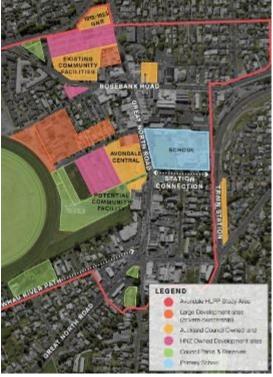
While there have been many regeneration proposals over the years including Kiwi Property and Kāinga Ora, little has been delivered. The opening of City Rail Link, set down for 2026, will bring New Lynn much closer to the city centre by rail. This may be the trigger for New Lynn to become market-attractive but, in the meantime, one station up the road in Avondale, a lot more action has already been seen...

Avondale Town Centre Regeneration

The Avondale Town Centre regeneration project is a programme by Eke Panuku (the Auckland Council development agency) to develop Auckland Council owned land and coordinate social housing development and local streetscape improvements to support the town centre.

This is not often stated as a Transit Oriented Development project. In contrast to New Lynn, Avondale hasn't had the same focus on transport infrastructure but "the bones are there" with the location and existing public transport options.

The Avondale Train Station has services every 10 minutes in the peak and 20 minutes until late evening. Like New Lynn, Avondale will benefit significantly from the opening of the City Rail Link, but it also has multiple frequent (every 15



In contrast to New Lynn, Avondale hasn't had the same focus on transport infrastructure but "the bones are there"

minutes) bus routes, along with other connector services. This provides a high level of public transport accessibility to the wider city.

While the bones are there, the real story in Avondale is land use change, which has been far more pronounced with a consistent focus by Eke Panuku to work with Kāinga Ora and private developers to deliver new medium-density residential development in the Town Centre.

Auckland Council had some, limited land holdings, which has provided a base for Eke Panuku to enter development agreements for medium to high-density developments, conduct land swaps and site amalgamations. Developments in the Town Centre include:

- 1817 Great North Road is now home to the Aroha apartments by Ockham. Here, Eke Panuku were able to enter a development agreement to push higher density development and smaller apartments to fit within the Kiwibuild first home buyer caps. In total delivering 117 homes.
- This has been cleverly coordinated with the soon-to-be-completed Kāinga Ora Highbury Triangle development next door, which is delivering 236 new elderly housing units, sharing a new laneway between Great North Road and Tait Park. As I have covered previously, Kāinga Ora relocating elderly housing into Town Centres is a great policy, supporting residents to have more independence and access through transit and walkable locations.
- Kāinga Ora is also in the procurement process for the construction of **137 apartments** on a large block at 18 Elm St & 17 Racecourse



Parade. This site was previously the Auckland International College boarding house and was acquired by Eke Panuku in 2016.

Manawa (going through the resource consent process) is a planned 750 apartment development by Ockham Residential. The site was previously split in ownership but Eke Panuku amalgamated two properties through effectively a land swap with Käinga Ora for the 10 Racecourse Parade and the Elm Street site noted above.

Along with previously completed developments, including 72 apartments in the <u>Set</u> development on Racecourse Parade, and other consented market developments nearby, there is significant intensification occurring in the Avondale Town Centre and across the wider suburb.



So, what can we learn from this?

Having agencies like Eke Panuku take 'ownership' of a centre and work to advance development and community outcomes can be significant for coordinating public and private projects.

In New Lynn, Eke Panuku is currently marketing one site but having an organisation take ownership of the wider centre could support urban regeneration. Site amalgamations could be helpful for stimulating development on the older light industrial properties beside the New Lynn rail trench.

Eke Panuku can compulsorily purchase land for urban renewal. However, it is worth noting this is not frequently used due to financial limitations with just a \$100m development fund available. Access to capital is critical for undertaking site amalgamation and shaping better development opportunities.

While the original New Lynn TOD project addressed many key issues around the station, there are still further improvements to be made. Cycle network improvements for accessing the New Lynn Station are planned to be funded through the Auckland Council - Climate Action Targeted Rate. Meanwhile, New Lynn station is nearing capacity for buses and with planned service improvements in West Auckland, more stops and layover space will be required.

Coordinating these with other public space improvements and urban development can help create a stronger urban centre. In Avondale, the emerging development story is fantastic. It's worth noting that Avondale is closer to the Auckland City Centre, the proximity of which, may be driving higher demand for housing and help make developments like Aroha, more viable.

However, work done in Avondale to advance development has certainly contributed to more homes being built and greater master planning is delivering better design outcomes. There are other challenges, for Avondale, which lie with the public sector. These include:

- Rail improvements, including grade separating level crossings, which are critical for planned service improvements, along with station upgrades and bus priority for the many bus routes that converge on the centre.
- Town centre and station access improvements, particularly for cycling and micromobility.
- Town Centre enhancements that improve local amenities will become more important to support the centre and surrounding neighbourhoods as the population grows. The new community centre and library is a good start on this.

The original New Lynn TOD project was successful in coordinating all three elements to some extent.

In summary, New Lynn received coordinated infrastructure improvements to support TOD but the development largely hasn't followed. One stop up the line, Avondale hasn't had the same scale of infrastructure investment but a targeted development programme by Eke Panuku has seen far greater development delivered, planned and consented.

In developing TOD, many factors contribute to the end product. Enabling market development through upzoning is key, while redeveloping underutilised council or government land can also provide a significant opportunity. However, without public investment in public transport services, infrastructure and public amenities, broader outcomes including mode shift and emissions reductions are unlikely to be realised. Equally, less investment in public transport and infrastructure will likely be a handbrake to some extent on development.

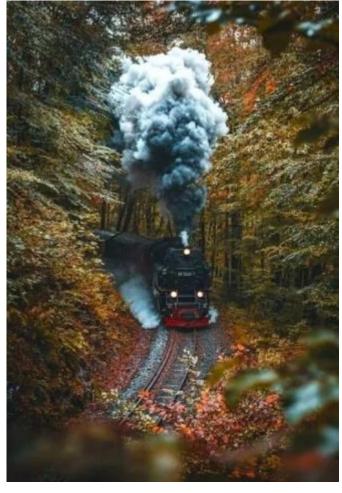
This interdependency is why it can be important to have guiding agencies take "ownership" of centres like Avondale. As we see greater development enabled around key centres and rapid transit, on the back of the National Policy Statement on Urban Development, supporting measures for intensification need to be considered. New Lynn and Avondale provide great lessons in this for key centres elsewhere in Auckland and other cities around the country.

Without public investment in public transport, infrastructure and public amenities, broader outcomes, mode shift and emissions reductions are unlikely to be realised



Steam trains. Just because.









Anatomy of a crash: deaths, signs and overgrown foliage

Mark Cummings knows what it's like to go up against the system, and lose. When he lost his 15-year-old daughter, Jayde Cummings, in a crash, his own life started to collapse around him.

In the four and a half years since the death of his eldest child, <u>Cummings had been sent to prison</u>, lost his marriage, suffered a head injury, his mental and physical health deteriorated, as legal bills racked-up around him.

"It is a struggle to go forward."

All Cummings, 48, had wanted was an apology from the Dunedin City Council and its contractor, Downer, which was tasked with checking the safety of rural intersections.

But that apology, and a handshake, didn't come until the end of the coronial hearing, almost four years after the crash.

That contrasted with the actions of Cummings, who in March 2021 took a cricket bat and smashed part of a lawyer's office and a council building after learning the teen driver behind the crash was discharged and had his criminal record wiped.

Cummings, now stuck inside the system, spent almost six months on remand.

"I was so angry and mad it was probably the best thing for me ... but that's with hindsight," he said in an interview with *Stuff* last year.

Fast forward a year and he wanted to meet with the other parties. He would not rule out further legal action. It comes as coroner found the cause of the crash was the carelessness of the driver, but a contractor's inaction contributed.

On September 17, 2019, about 5pm, Jayde told her mother, Lisa Park, that she was going out for a drive, and was reminded to not go on the motorway.

She said a friendly farewell - "later" - and walked out the front door, and then into a Mitsubishi ute driven by a 17-year-old driver. The ute was later spotted driving past a CCTV camera about 5.17pm.

The driver, who cannot be named for legal reasons, later failed to stop at a stop sign-controlled intersection sign on Church Rd West by the township of Outram, near Dunedin, and crashed into a Holden Commodore driven by Stephen Macnee, 57, of Waihola.

Cummings died at the scene, and when people arrived - about 5.35pm - they freed Macnee from his seatbelt, but he died shortly afterwards.



The teenage driver, who suffered serious injuries, later admitted charges of careless driving causing death when he appeared in the Youth Court. The driver, who was on a restricted licence at the time, had no memory of the crash.

The deaths of Cummings and Macnee was the subject of a coroner's inquest by Coroner Marcus Elliott in Dunedin in May, and his 50-page finding has now be released.

The inquest looked at the Huntly Rd and Church Rd West intersection, including whether the stop sign, which was partly obscured by foliage, was visible as well as being the correct size.

A resident told the inquest it was difficult to see approaching vehicles at the intersection, and that was compounded with the "stop signs being covered, virtually half-covered with the foliage". Based on evidence at the inquest, the coroner concluded that the reduced visibility made it not obvious to a driver that they were approaching an intersection, especially if travelling up to 100kph.

The coroner also noted there was no dispute that the left hand stop sign was obscured by foliage: evidence showed it was completely obscured to an approaching vehicle from 120m, partially visible from 50m, and fully visible from 30m. Painted road marking detailing the word 'stop' on Church Rd West was faded and covered by debris.

There were no indications at the scene that the driver braked or skidded prior to the crash.

The coroner also noted there was no dispute that the left hand stop sign was obscured by foliage. Painted road marking detailing the word 'stop' was faded and covered by debris.



The coroner concluded that while there an advanced warning sign of the impending intersection, it was more probable than not that the teen driver "did not perceive its location and therefore made no attempt to stop".

The council contractor, Downer Ltd, argued the crash was caused by driver carelessness, as the Youth Court found.

That was rejected by the coroner who also observed that the Youth Court judge noted that foliage was obscuring the left-hand stop sign. While the crash was caused by driver carelessness, that relevant act of carelessness would not have taken place if the left hand stop sign had not been obscured by foliage.

The coronial inquest heard the Dunedin City Council attended audits with Downer, with the last recorded joint inspection prior to the crash on May 23, 2019.

"The level of foliage in the road envelope at the time of the accident had not grown in a matter of weeks."

Despite that, the contractor nor the council had identified concerns over the large trees and over-hanging branches, which were under the management of Delta. Downer submitted that it was Delta that had a contractual obligation to identify and manage vegetation that encroached into the road envelope.

It had an obligation to undertake this work, yet there was no evidence Delta undertook any inspections, Downer argued.

The coroner noted that while the council had contracted Downer to assess safety risks, including regular audits of intersections, it "could not absolve itself of its legal responsibility as road controlling authority or delegate that legal obligation".

But Downer was contracted to carry out fortnightly inspections, which meant that about eight further inspections should have been carried out by Downer between that May inspection and the crash.

"Downer's inaction contributed to the crash and to the deaths of Jayde Cummings and Stephen Macnee," the coroner said in his findings.

Since the crash the council had made several changes to improve the intersection's safety, including moving the left hand stop sign closer to the road, and using a larger sign.

A review of other rural intersections had identified 21 others to be prioritised for safety improvements.

The coroner noted the deaths of Cummings and Macnee once again illustrated the danger that drivers on long, straight rural roads may not identify the presence of an intersection in sufficient time to stop, and the importance of paying close attention to all signs and markings.

Given the council had completed a review of atrisk intersections, a recommendation was not required, nor was one needed over speed reduction for rural crossroads, with the council developing a speed management plan for those areas.

The coroner noted that Downer could not identify why the visibility issue was not identified. Downer, which no longer has the council contract for that work, supported this.

The coroner also recommended Waka Kotahi NZ Transport Agency should conduct a review of signs and markings at rural crossroads, and take appropriate steps to implement any safety changSince the crash, the council had made several changes to improve the intersection's safety, including moving the stop sign closer to the road, and using a larger sign



Dunedin City Council chief executive Sandy Graham noted the tragedy and said "we once again express our sympathy to the families of Jayde Cummings and Steve Macnee".

The council, which was not found at fault by the coroner, had already taken steps to improve rural intersection safety but "that does not take away from the loss experienced by both families".

The council's work to improve rural intersections was ongoing. Murray Robertson, Downer transport and infrastructure chief operating officer, who also expressed condolences to the victims and their families, welcomed the coroner's recommendations to improve safety and control risk at rural crossroads.

"We are incorporating such improvements into our practices and processes with the aim of ensuring all road signs and markings provide the safest possible environment for road users." Source: Stuff



Auckland's Flood Recovery Update - One year on

It's been a year since the Auckland Anniversary floods and Cyclone Gabrielle. While there is still a long road ahead, there has been some great progress so far.

The floods of 2023 brought unprecedented rain and damage across the Auckland region. More drastically, they were followed by Cyclone Gabrielle just two weeks later, bringing with it further destruction and disruption.

For many, these events were catastrophic, changing lives and homes forever. A year on and for many, the effects and issues are still ongoing.

The storms resulted in 2003 damaged sites on Auckland's network

During the flood events and the immediate aftermath, hundreds of AT people worked around the clock to log issues and provide immediate response to help get our roads back up and running.

Roading crews from Downer, Fulton Hogan, Ventia and dozens of small contractors worked through the rain and appalling conditions to open what roads they could. More than 500 road maintenance crew members continued that work for months on-end to clear roads and restore access to homes and communities.

Sites currently under construction: 34

Across Auckland there are still currently:

8 local roads with full closures in place

29 open to single lane

2 roads are open with restrictions

6 roads are open to residents only

By the end of December 2023, AT had spent \$126 million addressing sites and communities affected by the 2023 weather events. This is 32% of the projected total forecast Flood Recovery cost of \$390 million.

Repair progress to date

As noted above, to date 47% of the minor to major road repairs have been completed. Below is a selection showing some of the hard mahi that the teams have completed over the last year.

Mill Flat Road Bridge, Coatesville

Mill Flat Road Bridge was washed away during the Auckland Anniversary Weekend flood, stranding local residents with no easy alternative access available.

Within six days, a temporary Bailey Bridge was erected to enable access.







Within communities, we saw (and continue to see) so many people work tirelessly to provide their assistance to others, check in on one another and do what they could to get our roads up and running again.

While there is still a long road ahead, (the programme of works is expected to take another 18 months to two years) there has been some great progress so far.

Summary statistics

Total sites: 2003

Small issues and slips resolved quickly: 1200 Further sites identified requiring minor-major

repairs: 813

Of the 813 minor to major road repairs needed across Auckland:

Completed to date: 383 (47%)

AT is currently working on the design of the new bridge and expect construction of the new bridge to be underway by the end of 2024.

Bethells Road, Te Henga





Bethells Road sustained several slips along its length and the Bethells Beach community were isolated when their main road washed out. The Fulton Hogan team worked so very hard to rebuild the road in the wash out area over just eight days.

Following the initial works, the road has been completely closed during the day at times whilst works were on, only opening for 5-minute windows every two hours. Residents have been incredible and remained patient throughout these months of difficult traffic management.

Works in Te Henga have included the clearing of masses of debris under the Bethells Road Bridge which crosses Waiti Stream - all of which built up during the storms and scoured out the nearby banks.



Paremoremo Road, Paremoremo

Four large slips occurred on Paremoremo Road requiring very large new retaining walls to be constructed to support the road. Three slips were repaired by December 2023 and the fourth will be repaired this year.



Tahekeroa Road, TahekeroaDuring Cyclone Gabrielle, a 390-metre slip

closed <u>Tahekeroa Road</u> and fell on the main trunk railway north of Helensville.

Contractors removed around 35,000 cubic metres of earth from the slip, 95% of which was re-



used on the site to construct the new earth structures and reshape the ground surface and saving several million dollars in tip fees, cartage and the cost for imported fill.

Ridge Road, Lucas Heights

Two major slips occurred along Ridge Road. Repair work started in October 2023 and was completed in December 2023.

In a very unique situation, the only way for a young neighbour Tyler Parker to get to his school bus each day is to walk through the construction site. Every morning and every afternoon, AT's traffic controller on this site stops the works and escorts Tyler to and from home.





Krippner Road, Puhoi

Krippner Road was hit particularly hard, with 10 minor to major slips and several other smaller slips affecting the road. The Downer construction team have been on site since mid-2023 repairing the issues.

By December, repairs were largely complete, with just minor works such as chip seal and barrier installation to be completed in early 2024.



Titirangi Road, Titirangi

Even seemingly minor storm damage can actually be quite major to repair. This footpath in Titirangi Village slumped during the storms. The repair required improvements to a massive retaining wall that is holding up the road



Every morning and every afternoon, AT's traffic controller on the Puhoi site stops the works and escorts a young child to and from home



Scenic Drive, Waitakere Ranges

There were thirteen slips on just a three kilometre section of Scenic Drive in the Waitakere ranges, occurring between the Arataki Visitors Centre and West Coast Road.

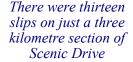
Glenvar Road, Torbay

The top section of <u>Glenvar Road</u> was damaged during the floods, after land gave way on both sides of the narrow ridge between East Coast Road and Fitzwilliam Drive.











To date contractors Ventia have cleared and repaired nine of these locations. Currently Ventia and Fulton Hogan are working simultaneously on two sites and the two remaining sites are in the final stages of design.

The complex Glenvar Road rebuild required significant earthworks, soil nailing, relocation of service utilities and construction of large retaining walls. The resulting repairs make the road safer, and more resilient to future weather events.











Engineering NZ: AGM and upcoming CPEng webinars

AGM

Our 110th Annual General Meeting will be held at noon Friday 22 March and all financial members are welcome to attend. The AGM is a hybrid event you can <u>register here</u> to attend online or in -person with us in Wellington at Level 6, 40 Taranaki Street.

If you would like to host a CPEng event and or viewing of the LGYC webinar, please email danielle.eckersley@engineeringnz.org to explore what support the team can offer.

CPEng webinars in 2024

The assessment team have a number of webinars on Let's get you chartered (LGYC) scheduled throughout the year:

24 May, 3pm – <u>Lets get you chartered webinar</u> 23 August, 12pm – <u>Lets get you chartered webi-</u> nar



INZ Infrastructure Sector Confidence Survey—Due today

As part of our ongoing effort to represent and advocate for our industry at the highest levels of Government, we are conducting a survey to gauge the sector's confidence on both the current and future state of New Zealand's infrastructure environment.

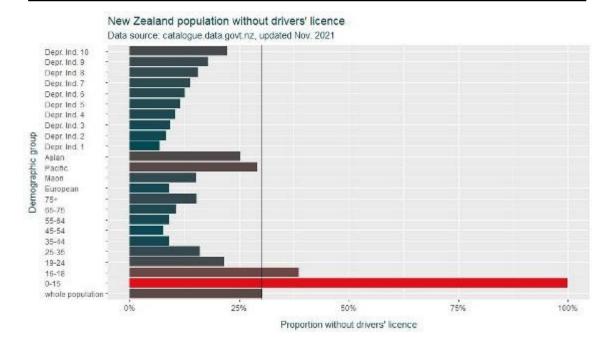
Your insights will be invaluable in shaping our understanding of the sector's capacity and the general confidence of the sector currently. Your responses will be used in an aggregated format, without attribution, to ensure confidentiality while enabling us to present a comprehensive view to Government.

The successful delivery of future infrastructure projects depends significantly on our sector's ability to deliver. By participating in this survey, you are helping us build a stronger foundation for our advocacy efforts so we can communicate your reality directly to the Government.

We ask that you please complete the survey here, by **5pm on Friday 15 March**, ensuring your voice is heard in this critical conversation. Your feedback will directly influence our approach to advocating for the needs and potential of the infrastructure sector. We will endeavour to share the results with the industry and wider stakeholders as soon as possible.

Thank you for your participation and your continued support of Infrastructure New Zealand.



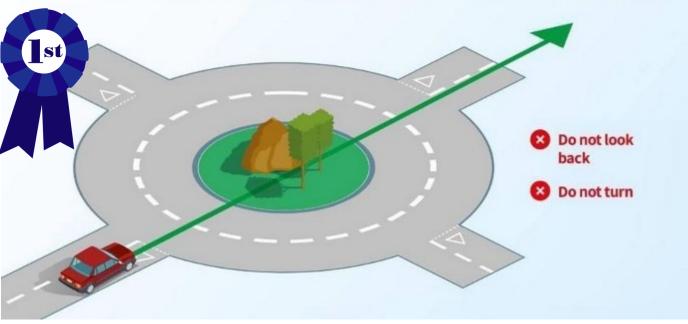


Basing a transport system on everyone being able to drive misses out on a large proportion of the population.



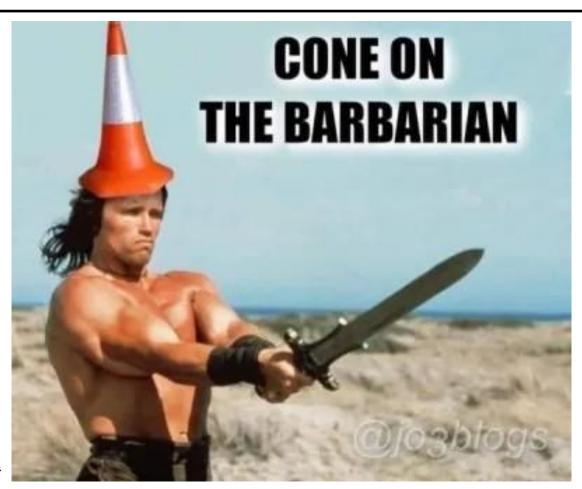
Roundabout of the Month

HOW TO DRIVE A ROUNDABOUT



This month's roundabout is an illustration as part of instructions for American drivers unfamiliar with roundabouts.

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





Active Modes Infrastructure Group (AMIG) Update

Welcome back to another year of AMIG meetings! The first online meeting for 2024 was held on Feb 22nd; here's a few of the things discussed there:

Some NZ guidance on **pedestrian wayfinding** (signs, boards, totems, etc) is nearing completion, based on best-practice found elsewhere around the world. After AMIG feedback and TDC Steering Group ratification, it should hopefully be available on the Pedestrian Network Guidance website soon after that.

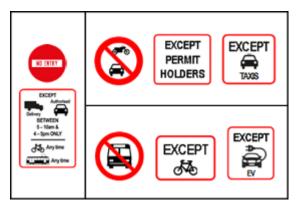


As **micro-mobility devices** like e-scooters become more prevalent, there is a need for further design guidance to cover their needs; currently neither the CNG nor PNG say much about them. It is suggested that planning and design guidance addresses

improving the environment for micro-mobility, including details like kerb heights and angles, surface quality, path widths, and sight-lines. Some new guidance covering micro-mobility is planned to be added to the CNG in the near future.



With the current development of some new traffic filtering design guidance, a related question being considered is what **new traffic filtering signs** might need to be introduced in NZ to cover various vehicle prohibition and exemptions situations not currently captured here. Ideally the signs should also make use of symbols as much as possible too to aid comprehension. AMIG feedback is being sought before further work is done to update the TCD Rule.



What's the difference between a "separated cycleway" and a "segregated cycle path"? Currently there are a few cycle facility terms floating around

that are a bit inconsistent and often not legally recognised in our Rules either. Some discussion was held to try to agree on a **consistent set of cycleway terms** depending on whether the facility in question is separate or not from the roadway or pedestrians. This should help to simplify the distinctions in the CNG and also align better with Austroads usage.



The long-awaited revision of the NZTA *Traffic Control Devices Manual Part 4* (At Intersections) is nearing completion, with publication expected mid-2024. After that, it's back to looking at some further revisions to Part 5 (Between Intersections), including cycle crossing updates. And with the pending regulatory approval of directional cycle signals and 2-aspect pedestrian/cycle signals, it will be time again for some further updates of Part 4

One bit of guidance not currently well covered in NZ is how to provide for **mobility-impaired users parking next to a separated cycle path**. Other agencies (e.g. VicRoads) have attempted to come

up with potential designs, and work done already in Auckland along Karangahape Rd and in Wellington around bus stop bypasses might provide useful guidance on how to develop similar good practice here to add to the CNG.



Other topics discussed at the latest AMIG meeting included progress on arranging low-level cycle signal trials, modelling of a shared Barnes Dance in Palmerston North, and the latest active mode crash statistics. Detailed minutes about all these topics can be found on the AMIG website:

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

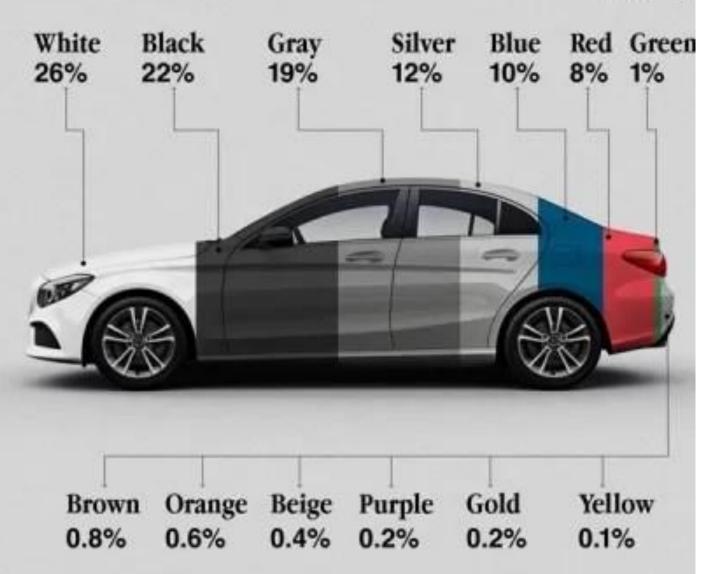
The next AMIG meeting will be on May 2nd (online). Contact Wayne Newman (wayne@cresmere.co.nz) or Gerry Dance (Gerry.Dance@nzta.govt.nz) to get on the circulation list. I am also happy to discuss with you any ideas or issues that you'd like to raise at AMIG.

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



The Most Popular Car Colors in the U.S.

2023



Figures rounded Source: ISeeCars (Oct 2023)





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These 40m-long escalators, at the

Beresford Square

entrance to the Karang-

a-Hape Station, are

going to be the

longest in the country

City Rail Link update





Everyone gets excited about escalators and new super long escalators being installed at the new Karanga-a-Hape station.



These 40-metre-long escalators, at the Beresford Square entrance to the Karang-a-Hape Station, are going to be the longest in the country.

The three escalators are made up of 27 sections (9 per escalator row) and will take approximately six weeks to install.

The team must do it in two stages as there is not enough space on site to store all the sections at once.

These photos show the escalator sections awaiting installation on the B2 level and the first few having been installed at the bottom of the escalator slab.



Once installed, a specialised team will add the details like the stairs and the banisters followed by commissioning and testing.



When fully operational, the direction of these escalators can be adjusted according to pedestrian demand, much like the lanes of traffic on the Auckland Harbour Bridge.

Behind the scaffolding, brackets for the interior architectural panels are being installed.

So how does the length rate with other escalators? The 40-metre-long escalators at the station are the longest in the country, but we got beaten for being the longest in Australasia.

In Australia the longest had been at Melbourne's Parliament Station at 30 metres but now nine connected escalators, each spanning 45 metres long and weighing 26 tonnes have been installed at Sydney's Central Station stretching 955 metres from end to end.

The longest single escalators in the world are at three Russian railway stations. They're all 138 metres. There's a picture of the St. Petersburg one shown here.

The actual longest escalator system in the world is in Hong Kong – the Central Mid-Level escalator system has an elevation of roughly 135 meters and a distance of more than 800 meters, that's just short of half a mile.



A picture of the 138m-long St. Petersburg escalator.

Roundabout





We've finished completed installation of the second and final railway line below the central city.

The newly laid 3.4 kilometres of track will carry trains underground north from Maungawhau Station at Eden Terrace and connect with the two new central city ones – Karanga-a-Hape and Te Waihorotiu – and downtown's Waitematā Station (Britomart). CRL's southbound line was installed last year.

It gives the green light for testing trains through the tunnels. The focus shifts to that train testing and finishing the fit out of the stations and tunnels, alongside landscaping and urban realm enhancements. The fit-out programme includes the installation of lifts, escalators, security systems, CCTV, electricity, signalling and communications.

Chief executive, Dr Sean Sweeney, says completing the two tracks brings us one big step closer to the next phase of the project - testing trains inside the tunnels mid-year, and from there handing CRL over next year to <u>Auckland Transport</u> and <u>KiwiRail</u>, who will operate and maintain it.

The news means all track-laying across the project's three sites is now complete. That's 11 kilometres of line. New tracks were also laid at Maungawhau to connect CRL and the Western/

North Auckland Line, and a short section of track was laid at the eastern end of Waitematā (Britomart) Station.



11km of track has been laid, including one of the steepest sections of railway in New Zealand.

Over three years, CRL's project-wide track laying programme used more than 1100 tonnes of steel, poured almost 11,000 tonnes of concrete, laid 4,000 sleepers and completed hundreds of rail welds, which smooth out the 'clickety-clack' joins where track sections meet, to give Aucklanders a smoother ride.

CRL Ltd's main contractor, <u>Link Alliance</u> and railway infrastructure company, <u>Martinus New Zealand</u>, installed the track on what is one of the steepest sections of railway in New Zealand.

From Maungawhau the line drops 70 metres to Waitematā, which sits below sea level. At its deepest point, CRL runs 42 metres underneath Auckland's busy Central Motorway Junction. Link Alliance Project Director, Francois Dudouit, says conditions under Auckland were challenging with tight curves, a steep gradient and no room for heavy machinery to pass.

We became New Zealand's first construction organisation to gain a Rail Operators and Rail Access Provider licence under the Railways Act – an innovation that gave us the flexibility we needed to plan the job and get it done to the highest standard.







Transportation Group National Committee



National Chairperson/Research Sub-committee: John

Lieswyn john@viastrada.nz

Vice Chairperson: Mark Gregory mark.gregory@wsp.com

Immediate Past Chair: Bridget Doran

bdoran@mrcagney.com

Auckland Branch Chair/Signal Network User Group:

Matt Hoyle matthew.hoyle@mottmac.com

Membership Secretary: Stephanie Willcox

stephanie.willcox@jacobs.com

Bay of Plenty Branch Chair: Craig Richards

craig.richards@beca.com

Waikato Branch Chair: Bridget Doran

bdoran@mrcagney.com

Central Branch Chair: Peter Cockrem

peter@cockrem.com

Nelson/Marlborough branch: Michael Town

Michael.town@beca.com

Canterbury/West Coast Branch Chair: Karishma Kumar

Karishma.Kumar@nzta.govt.nz

Southern Branch Chair: Aaron Isaacs

Aaron.isaacs@stantec.com **Treasurer:** Melanie Muirson

Melanie.Muirson@stantec.com

Modelling User Group: Bevan Wilmshurst

bevan.wilmshurst@stantec.com

Active Modes Infrastructure Group: Glen Koorey

glen@viastrada.nz

TDB rep: Tony Brennand Tony.Brennand@nzta.govt.nz

Branch Administrators



Auckland: Chun-Lin Lee chun-

lin.lee@stantec.com

Bay of Plenty: Sarah Dove s.dove@harrisongrierson.com **Central:** Josephine Draper

josephine.draper@abley.com

Canterbury/West Coast: Sahan Lalpe

sahan.lalpe@stantec.com

Southern: TBA

Roundabout Editor: Daniel Newcombe

daniel.newcombe@at.govt.nz

Find us on the web: <u>Transportationgroup.nz</u>

1980 "In 2023 we will have flying cars!" 2023



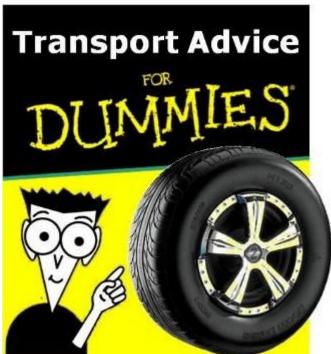
THEN



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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

Can we use artificial intelligence to do our transport planning work? Asking for a friend.

Mohammed, Welington

Dear Madman

Yes you can, and in fact many organisations already are. You can tell which ones, because they are making more sense than when their fallible humans did the thinking.

AI will take the politics and guesswork out of transport planning, so long as the input data is perfect, the desired parameters are clear and unchanging, and the human decisionmakers are also replaced with AI.

So, all things considered, its probably time to start looking for a new career.

Have you considered potato farming?

The Transport Guy

Dear Transport Guy

Can you help me with something? I always thought buses were like open plan offices and you could sit wherever you liked.

However the other day when I hopped on a bus and went to sit down in an empty seat, I found a sign saying this seat is 'reserved'. It happened again later in the week. Then I found a 'seat faulty' sign which I am pretty sure was only put out to stop me sitting there.

What should I do?

Chris, Auckland

Dear Crazed

The use of a sign to 'bags' a seat is a well-known trick in hot-desk offices. I know of several people, well actually, just me, who carry a 'faulty desk' sign that I put out on a desk I want, to stop others from sitting there.

I hadn't heard of that approach being applied on buses, however I suspect you only read the first part of the sign.

The seat was reserved for people with mobility impairments. Obviously your indignation at being denied your right to go wherever you want and do whatever you want to do (this is called the 'Audi Driver Effect') prevented you from fully reading and understanding the sign.

I recommend standing from now on.

The Transport Guy



Dear Transport Guy

What is it about Auckland? We have the world's most expense railway per kilometre (CRL), the world's most expensive motorway per kilometre (the imminent East West Link), and the world's most expensive cycle bridge (RIP Northern Pathway). All of these are in Auckland. Why is it so expensive here?

Simon, Auckland

Dear Simian

You are forgetting the most expensive ferries, which were across Cook Strait, so its not just Auckland's fault. Let's just hope its because we're the best* country in the world (*except to build things in).

The Transport Guy

