Roundabout

Magazine of the Transportation Group NZ

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Urban Mobility: Insights from Amsterdam and Ghent

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And much more...

Editorial

Daniel Newcombe
Roundabout Editor
tgroundabout.editor@gmail.com

I have to admit that I am approaching the end-of-year break with relief rather than joy.

As it gets toward Christmas and the end of the year, it is common to look back at your accomplishments and highlights from the year. This year – and this is becoming a habit from recent years – seems to have been a blur of churn, bad news and uncertainty.

I don't want to appear ungrateful – I have a good job (which is reasonably secure, well, as well as it can be in the current climate) and am working with some really good people on some really cool stuff. But I have to admit that I am approaching the end-of-year break with relief rather than joy.

Perhaps it is from being saturated with negative feelings from the various calamities in the world – political, environmental, military, economic – and the ongoing concern from many in the NZ transportation sector at a few of the current government's actions. I have to admit to continue to be concerned at the changes to speed limits (it's not reversing blanket reductions, it's reversing carefully targeted reductions asked for by the community, and replacing them with blanket limits, IMHO).

We can all argue about the value of investing in one project versus another – RONS vs cycleways, road vs rail – but the speed limit changes deal with people's safety and with their lives. The results will be measured not in BCRs or travel time savings, but in deaths and serious injuries. Things that are life-changing for individuals and their families.

I am heartened though by continuing to be surrounded by dedicated and conscientious professionals, who don't just go online and grumble about things; they focus on doing the best they can in their work, to the maximum benefit of the community.

They don't always agree with the tasks they have been handed, but they try to do them the best they can. To maximise road safety, to get the most out of our transport network and to ensure our transport investment is efficient and gives us the benefits we're after.

Which brings me to thinking about next year. How will I get through 2025 without similarly reaching the end in a blur of stress and uncertainty? I've been contemplating about it and a key – for me – will be to not dwell on things I can neither change nor be directly affected by.

I may think a Trump cabinet appointee is a poor choice, but I can't change it and it doesn't directly affect me. I may be horrified with ongoing atrocities in the Middle East, but I can't change it (though I can and do donate to charities helping those affected). So I will stop doom-scrolling and try to focus instead on things I can change – like the way transport works in my community.

Do the best I can for the projects I work on. And the hope is that after another year I'll be able to look back with pride, hope and - probably -some relief. Merry Christmas.

Inside this issue:

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 in-between 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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Chair's Chat

John Lieswyn
National Committee Chair
john@viastrada.nz

News from your Chair on events of the last few months includes (a) thoughts about world politics as they relate to transport (b) Conference news and (c) a successful webinar on our national parking standard.

Remaining positive in the face of adverse political outcomes
Back in September I lamented the loss in civility in American public life. In November I travelled back to my home country to visit elderly parents – and to vote.

It seemed Ms. Harris was going to win – in my voting queue 90% of the people were holding Democratic Party voting guides. Evidently that was no indication, as a convicted felon and serial liar was elected president of the largest democracy in the world. As you can tell, I was despondent. His party platform is anti-public transport and will undo progress on transport choices.

Then I read an excellent post by Mobility Matters Daily (UK) author James Gleave titled "How to fight back" inspiring words to live by. I paraphrase his recommendations:

- Volunteer in your community – find something that interests you and sign up. For me, I remove graffiti.
- Do something good without asking – this might be small things that help our communities. Mow the elderly neighbour's lawn or buy a trailer load of firewood for someone struggling to pay their bills.
- Stand for office – or get your friends to stand for progressive (and evidence based) transport policies
- Shift your money to more ethical investments
- Set up an action group within your own organisation – set aside some time to talk and actions will flow from there
- Donate to good causes – just because it's the right thing to do. And finally…
- Protest – "this is a personal decision for you…protests are effective at enabling change".

Every time I think we are losing the battle for hearts and minds to the outrage machine, I re-read "How to fight back". I highly recommend signing up for Mobility Matters: https://mobilitymatters.io/

Conference timing – what do you think?
As I noted last Roundabout, we've chosen Wellington for our next host city and Auckland after that, before heading to a smaller centre the year after (Rotorua? Whangārei?).

Given the late running of Nelson 2024, we're probably going for a springtime conference for Wellington 2025. From 2001 to 2008 the Group Conference was held between September and November, so there is precedent. However it's a busy time of the year for transport conferences and there are other knock-on effects we are having to surmount.

We skipped 2009 in order to shift to the autumn (March – May), and skipped 2022 due to COVID -19. So if we are to go back to autumn then we would probably skip 2026 – otherwise we'd be running conferences too close together.

We are seeking feedback from membership on the option of skipping 2026 to shift the Conference to the autumn schedule we've used since 2010. Email: john@viastrada.nz

Getting the ball rolling on the Wellington 2025 conference
The Wellington Branch conference organising committee is gaining steam. TG members Tobie Pretorius (Tonkin and Taylor) and Erica Walker (Aurecon) are co-convenors. Other committee members include Caron Greenough (Porirua City), Michael Town (Beca, 2024 Convenor and Nelson/Tasman Branch Chair), Jodi Lawson (NZ Transport Agency Waka Kotahi), Nadine Dodge (Infra Commission Te Waihanga), and yours truly representing National Committee.

We also have just been joined by Lewis Thorwaldson (MR Cagney) who is the Auckland Branch Chair and likely to be on the Auckland 2026/27 Conference organising committee.

Above: This may or may not be the future of Wellington. Tunnels, tunnels, tunnels!

We are seeking feedback from membership on the option of skipping 2026 to shift the conference to the autumn schedule we've used since 2010. Email john@viastrada.nz with any feedback.

A key objective for us is reducing costs and increasing revenue so we can offer a lower registration cost. Easier said than done, but we'll try!

The draft theme has been developed by the committee to align with the GPS direction. Although likely to evolve, it is currently "***Working with what we have: resilience for the future".***

Podcasts and webinars
On the 29th of October, the Group had a very successful webinar on parking presented by Wes Edwards (CPEng, IntPE(NZ), FEngNZ) a member of the Standards Australia committee responsible for the AS/NZS 2890 series as nominated by Engineering New Zealand.

Over 200 members of the Group tuned in. The proposed changes include an increase in vehicle dimensions, changes to vehicle class definitions, updating sight distance at access points (in recognition of the increase in speed of path users), and more. Consultation closed on 22 November and I'm keen to see how the NZ reps respond to feedback. Watch the webinar here: https://youtu.be/qvzrbJkE9uM

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

Above: This also may or may not be the future of Wellington. Can't beat it on a good day!

One Transportation Planet—extract from 2007 paper

The late Malcolm Douglass was a former Group Chair and author of "A Wheel on Each Corner – History of the Transportation Group 1956-2006".

Right is a extract from "One Transportation Planet", a paper given by Malcolm to the 2007 TRICS Conference in London.

Chair's summary:

- The following extract shows that when the political right takes action, it has generated major job losses and restructuring in transportation, as Malcolm recounts.
- In the 1980s, 75,000 people working in transport were made redundant, and many transportation professionals shifted to the private sector or their skills were lost. Railways and public transport cratered while highways and trucking boomed.
- In 2024 some of the same things are happening again – but the losses are across public and private sectors.
- If you have been affected, I hope you can find re-employment in New Zealand – we need you!

1.3 A Sketch of NZ Transportation

Over New Zealand's 170 years of European occupation, transport has been a core activity of central government, local government and commercial life. Initially transport was by sea. However land based transport quickly converted bridle trails, to bullock tracks, to coach roads then to motor roads. Transportation also included the creation of a national rail network by 1890. Extensive port improvements occurred in the 1860s and later with the containerisation era of the 1960s. Since the 1950s new airports have been built and their continued extension and development has been necessary to match the spectacular growth in this mode of travel.

The welfare state from the 1930s to the 1980s included, amongst its social goals, the development of a transport system. The resulting improvement in rural and urban accessibility made transport cheaper and more reliable. The most significant transport projects since the 1950s have been made possible through large earthworks and reinforced concrete bridge construction. This construction of new roads and motorways has represented great effort to try and match the demands of a five fold growth in motor vehicle traffic between 1955 and 2005(Ref 6). These transitions are shown in Plates 1 to 3 (Ref 10)

In 1973 it was estimated that 150,000 people or 14% of the New Zealand labour force were, one way or another, employed in transport. Up to 1988 the transport sector was mostly owned and managed by central government, which had operational, planning and subsidy responsibilities. However in the late 1980s the government introduced strong new-right market-led policies resulting in major changes to the sector. This included the sale and transfer of state owned bus, rail, sea, air and other transport assets to private enterprise and State Owned Enterprises (SOE). Following government restructuring in the 1980s the number of people employed in transport was reduced by half to 75,000 people or 4% of the 2005 total labour force. These losses also included a loss of professional engineering design skills. After 150 years the much respected NZ Public Works Department (by then the Ministry of Works and Development) was disestablished in 1987.

From 1982 the de-regulation led to a significant growth in private transport operators and half of the professional engineering design resources transferred from government into private sector consultancies. A down side of that phase of change was a reduced integration in planning for transportation as a whole. I believe this is the same path taken in the UK over the past 50 years. However in New Zealand these changes occurred in a rapid and dramatic way from 1985 to 1995.

Jingle bus, jingle bus, jingle to the mall (or shops)

Christmas is just around the corner, and Auckland Transport's (AT) in-house creative team, Creative@AT, have been busy wrapping up a campaign to encourage Christmas shoppers to avoid parking hassles this year and take public transport to the shops.

Collaborating closely with the AT Marketing team, they kept the messages short, sharp and upbeat.

Media includes billboards, bus stop advertising, radio ads featuring Christmas songs with a twist, a specially wrapped bus, and a very special bus stop in Newmarket that - at the press of a big button - plays a specially re-worded Christmas song.
Source: AT

The campaign includes a very special bus stop in Newmarket that - at the press of a big button - plays a specially re-worded Christmas song.

Popemobile goes all-electric after nearly a century

Pope Francis has taken delivery of a bespoke Mercedes-Benz G-Class, marking a significant update to the Vatican's fleet of Popemobiles.

Based on the G 580 with EQ technology, the new vehicle is a fusion of tradition and innovation, continuing a legacy of Mercedes vehicles serving the papacy since 1930.

This one-off model, boasting extensive customisations, was crafted in collaboration with the Vatican.

Finished in a pearl white exterior, the new Popemobile features an open-top design to enhance audience visibility. Modifications include the removal and reconstruction of the left rear door, which is now seamlessly integrated into the bodywork. The right rear door, revamped to open suicide-style, leads to a raised platform outfitted with a centrally positioned swivelling chair.

Mercedes describes the chair, which is height-adjustable, as enabling the pontiff to "move around flexibly" and interact with crowds from multiple angles.

Behind the chair, two foldable jump seats provide additional accommodation, while rear steps and platforms support security personnel. For adverse weather, a hardtop cover can be added to the vehicle.

The G-Class EV incorporates a quad-motor all-wheel drive system adapted specifically for the slow speeds required during public appearances.

While precise specifications for this Popemobile remain undisclosed, the standard G 580 EQ model offers impressive performance, including a 116kWh battery and 432kW of power.

In its typical form, it achieves a range of up to 385km and a top speed of 180km/h.

While this is the first fully electric Popemobile, the Vatican has previously explored greener alternatives.

In 2011, Mercedes-Benz developed a hybrid Popemobile for Pope Benedict XVI, based on the M-Class SUV. It combined a petrol engine with a lithium-ion battery, allowing short distances of electric-only travel.

This latest Popemobile spotlights Mercedes-Benz's nearly century-long partnership with the Vatican. It all began in 1930 with the Nurburg 460 Pullman for Pope Pius XI, setting a precedent for luxury, safety and innovation tailored to papal requirements.
Source: Drivencarguide.co.nz

Photo competition—unnecessary roundabouts

This edition looks at the wide variety of apparently unnecessary roundabouts from around the world. There is always a reason for them: some we know, some lost to the mists of time. Seen better ones? Send images to: tgroundabout.editor@gmail.com

At the **City of Charles Sturt** in South Australia, we had a roundabout that originally comprised four legs, which reduced to three legs, then eventually two legs (as a result of road closures for provision of adjacent community facilities).

When it reduced to only NE and NW roads, it was considered whether it should be simply a 90-degree bend or whether to keep the existing roundabout (central island and splitters). Given that there was a high school east of the intersection, with most traffic accessing the high school to/from the east due to proximity to the arterial network, it was resolved to retain the roundabout to allow vehicles to easily return to the arterial network after passenger drop-off/pick-up.

The **Laguna Garzón Bridge** is a bridge crossing the Laguna Garzón in Uruguay, on the border between the Maldonado and Rocha departments. The bridge is famous for its unusual circular shape and was designed by Uruguayan architect Rafael Viñoly It is designed in a circular shape to force drivers to slow down, and allows for pedestrian access along the one-way circular route, including crosswalks that allow pedestrian access to either the inner or outer sidewalks of the circle

This apparently useless roundabout is at **Lee Abbey Bay Beach**, on the Devon/Somerset border towards the centre of the Exmoor coast. A road runs west of Lynton and through The Valley of Rocks to Lee Abbey Estate. At this point, it becomes a toll road and a small charge applies. The roundabout allows those not wanting—or unable—to pay the toll to turn around and leave.

Bridget's Rant — what can I say?

Bridget Doran
Former National Committee Chair
bridget@bridgetdoran.nz

I'm not sure whether I'm allowed to say shitshow in Roundabout but since I've said it now, I'll say it again: what a shitshow 2024 has been for the professional transportation community.

We've seen the release and enactment of the worst Government Policy Statement on transport that I've ever seen, and I say that not because I'm an ideological hippy throwing my train set out of the cot.

The GPS is set up to not deliver on its own objectives. It's just bad policy in that respect. It purports to be about economic productivity, but does nothing significant to make the movement of people and freight more efficient, and makes trains worse.

It says road safety is a goal, but it puts way too much money into five-star (or four point five by the time they're value-engineered) vanity highways, at the literal expense of lives saved, and trauma prevented, on the other 99.9 percent of our road network.

And we're seeing the implications in local communities. Bus routes not being extended to cater to growth, a major urban intersection upgrade cancelled because it includes pedestrian crossings (I mean… take a deep breath, Doran), speed limits threatened with raising without justification except a Ministerial Decree.

For a lot of us, decades of work towards a more equitable, safer, healthier, more productive and useful transport system are being rapidly undone. Shitshow. There, I've said it three times now.

Within all of this it's super interesting to reflect on why we deliver on bad policy.

I was sitting in a meeting recently about long-ish term planning for buses. And in 2024, whether we admit it or not, we still seem to let the traffic model dictate how far we can go with providing safe, efficient urban mobility.

My conclusion is that nothing is more certain in a human life than death, taxes, and power holding onto power. We all try to hold on to what power we have, and it's threatened when we think people won't believe us any more. Power is credibility and connection and trust, words being gospel, statements going unchallenged.

We don't challenge because we don't think our bosses would back us up, and wherever we work in transport, our bosses are ultimately accountable to …politicians.

And politicians are accountable only to who they perceive as 'the electorate', who get their information and form their views from algorithms controlled by billionaire psychopaths. Neat.

The counter to this of course is to break the paradigm and build something different. How?

Through community, and in-person actual community with your actual neighbours, people who live in the same place you do. Because with in-person conversation we can build our opinions based on empathy and understanding, and not on the echo-chamber-fuelled made-up belief structures that are spiralling out of control in online 'communities'.

We know this, we all value in-person meetings in a way we couldn't have imagined before 2020.

So, over the holiday if you're fortunate to have one, take lots of deep breaths and connect with people.

Compassion and open-mindedness, leading to collectives and movements for good, is the antidote to power and control.

For more about that, add Grant Ennis' *Dark PR* to your Summer reading list. Top of my pile is *The Stupidity Paradox: The Power and Pitfalls of Functional Stupidity at Work*. Make of that what you will.

See you in 2025.

Politicians are accountable only to who they perceive as 'the electorate', who get their information and form their views from algorithms controlled by billionaire psychopaths. Neat.

Sir,—Surely it is becoming evident every day that the root cause of most motor accidents is speed. Cars are too fast for our country roads and most other roads, too. Instead of the everlasting platitudes about the need for care and sobriety, why not tackle the problem at its source and prevent cars going too fast? Many trucks, I understand, are fitted with a speed governor (a simple device), tying the speed down to about 35 m.p.h., with great benefit in reduced maintenance and safety. Cars should be so fitted, the maximum speed being, say, 55 m.p.h. or less. Of course this means compulsion (and much less work for panel-beaters, etc.) but we are compelled to do many other things today.—Yours, etc.,

R.C.J. (OXFORD).
March 28, 1963.

They knew about the dangers of speed from way back.
From the Christchurch Press, Volume CII, Issue 30093, 29 March 1963, Page 3

Urban Mobility: Insights from Amsterdam and Ghent on Funding, Cost Reduction and Business Empowerment

By Emily Cambridge

Activate urban.

Insights inspired by my recent trip to the University of Amsterdam's Planning a Cycling City forum and the Velo-city World Cycle Congress, where I presented on the Christchurch cycleway.

Over the past decade, New Zealand has benefitted significantly from the development of projects which place an emphasis on active modes and cycle tourism.

New urban cycleways and shared use paths connect communities, with most regions now showcasing a national cycle trail as a destination for tourism, with some cities retrofitting their streets to become walking and cycling friendly.

The benefits these projects have provided include transport choice, economic growth, increased activity in communities and are inspiring our next generation to consider alternative modes of transport.

How can we leverage what we have and continue to grow our networks for people walking and cycling in Aotearoa New Zealand?

Consider prioritisation of city centre streets
In under a decade, Ghent rapidly transformed into a cycling-friendly city. Ghent's population is similar to Wellington with 260,000 inhabitants.

Speed management is important, but it is not enough. The real debate is about space. We have to give space not to cars, but to people.

When traffic counters showed that nearly 40% of motorised traffic in the city centre was just passing through, the city took action. In 2017, Ghent proposed an ambitious circulation plan to prevent through traffic from entering the city centre, enabling the city to reclaim public spaces for residents, resulting in a more accessible, liveable and safer urban environment.

The local government led the circulation plan, showcasing how local councils can promote liveable cities with walking and cycling at the core.

By measuring how many people used our central cities for just passing through, we could determine how much traffic could be removed by restricting this as an option.

Similar to Ghent city, there is an opportunity to create a ring road around the central city to provide an efficient corridor for vehicles to move around. With fewer cars congesting our streets, we could enjoy quieter, more attractive areas for dwelling, easier road crossings, and safer spaces for walking and cycling.

Alternative funding opportunities
At Velo-city, several presentations showcased external financing for walking and cycling projects.

Denmark highlighted its iconic cycleway projects, co-financed through large investment funds, private investors and crowd funding.

Private development investors could be attracted to co-fund active mode connections between urban developments, employment centres, and key destinations. These connections result in better connectivity, attractive environments and higher yield for developers. An added incentive for developers is that development contributions are directly reinvested to benefit future residents, leading to a higher yield.

In Denmark, the Landgangen in Esbjerg stands as an elevated walking and cycling route that connects the harbour to the city centre and cost €2.8million.

Impressively, €2.35million was externally funded: €1million from a local developer, €0.9million from a private foundation, €4million from Esbjerg Harbour, and €0.5million from Esbjerg Municipality.

These finance options can unlock more funding for flagship active mode projects in Aotearoa. Successful co-financed projects share common traits, offering valuable lessons for New Zealand projects:

- Iconic or innovative designs that go beyond typical bicycle infrastructure
- Integration into a larger strategic investment in the local area, such as urban development
- Focus on solving local traffic challenges and enhancing security
- Strong local commitment which helps to attract funding.

Imagine the possibilities for active modes if we could source 80% of funding from alternative sources.

Reducing the build cost of cycle projects
While Ghent's city streets have prioritised public transport, walking and cycling, most streets show minimal infrastructure changes and often look similar to their previous versions.

The ambitious circulation plan came with limited funding for expensive installations, so the Council opted for small interventions. These included painted surfaces, signage, modal filters, and paving, all indicating that these streets prioritise people.

In the Netherlands and Belgium, unique low-speed environments allow cars and cyclists to share the same road space.

While cyclists get the priority, vehicles can still use the space and traffic flow is maintained, albeit slower and safer.

Some examples pictured below highlight these alternative options. Due to a lack of policy favouring cyclists and strict road safety auditing processes, it may be challenging to directly translate these road layouts onto New Zealand roads.

There is however an opportunity to use versions of these layouts in the low-speed streets around recreational corridors, and support the changes with education, signs and local Councillors support.

Figure 1: An alternative road layout near Amsterdam, The Netherlands, providing priority for cyclists while also enabling through traffic movement. In this scenario, traffic can utilise the entire road space, however, they must merge to the grey zone around cyclists.

Empowering businesses

I was fascinated to hear from Meredith Glaser, the lead of the Urban Cycling Institute (UCI), on the work they do with large organisations, notably the largest sporting goods retailer in the world, French sporting goods retailer Decathlon.

The UCI team created a tailor-made, 15-week program for the Decathlon leadership team focused on opportunities to encourage and celebrate cycling for their staff and customers.

Decathlon's goal is to reduce environmental, social and governance (ESG) targets and reduce carbon as they have validated their ambitious environmental commitment through Science Based Targets Initiative (SBTi), a corporate climate action organisation that enables companies and financial institutions worldwide to play their part in combating the climate crisis.

There are several multinational companies with strong presence here in New Zealand that are also committed to the SBTi climate action targets alongside organisations like Decathlon.

There is an opportunity for these companies to be leaders in this climate action space and be leaders for change in how we move (including people and freight).

I would love to see leadership from some of our New Zealand-based businesses to engage with local and central government representatives. By advocating for improved infrastructure for alternative modes of transport, they can drive meaningful change in the communities where they operate.

Leverage large scale events as examples for alternative transport methods

Paris is an inspiring example of transformation from a car-centric city to a cycle-friendly one, now poised to host an Olympic Games. Paris aims to host the most cycle-friendly Olympic Games in history, with every venue connecting via a new 70km cycle network.

While the dream of New Zealand hosting an Olympic Games seems far off, there are many large-scale events held at stadiums and venues, like the recent 2023 FIFA Women's World Cup.

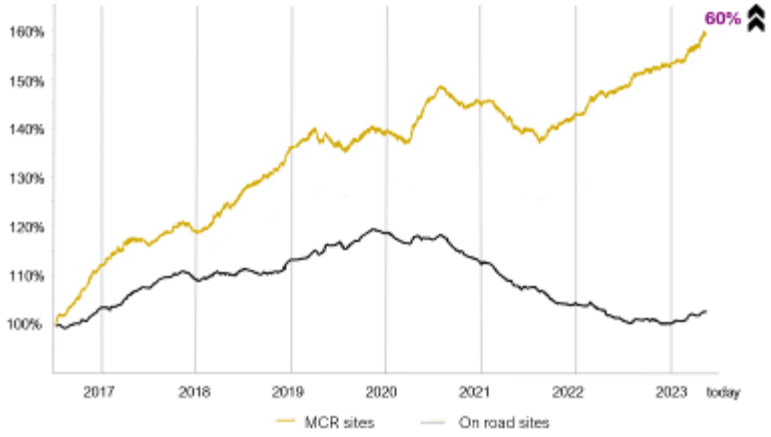
Recently, the Ghent Football Club embraced cycling to solve mobility issues with their new stadium. They encouraged supporters living within 20 minutes of the stadium to cycle to the matches. Starting with 800 bike racks, they saw 3500 fans cycling on opening night.

With proper facilities and safe cycle routes, bikes can significantly reduce congestion during large events. As an example, Eden Park is one of the largest sports venues in Aotearoa and its proximity to the trains and northwestern cycleway provides a great opportunity to attract sports fans to the venue on alternative modes.

Ghent Football Club saw 3500 fans cycle to the stadium on opening night.

Figure 2: Ghent Football Club's main stadium now has 800 bike racks to accommodate bike parking during club games. Source: https://www.efdn.org/

'Build it and they will come' is a theory that many transport business cases have been built on – from motorway projects to cycleway projects or even new waterfront boulevards.



The evidence is clear, and statistics show that this statement is true, as evidenced in Christchurch, where major cycleways have seen user numbers grow 60% since 2016 (figure 3).

Figure 3 (left): Cycle numbers have grown to 60% since construction of the network began in 2016. The graph shows the numbers on both Major Cycleway Route (MCR) sites and other on road sites across the city. The grey line also highlights how cyclists have changed their journeys onto the new cycleways. Source: Christchurch City Council (2024).

In closing, my favourite quote that best captures the overall key themes of the conference comes from the Deputy Mayor of the City of Ghent, Filip Watteeuw, *"Speed management is important, but it is not enough. The real debate is about space. We have to give space not to cars, but to people."*

Emily Cambridge
Activate Urban
emily.cambridge05@gmail.com
Mob: 0273010495
www.activateurban.co.nz

Cyclists on phones face jail under Japan's new laws

The number of accidents involving cyclists started climbing in 2021, as more people opted to cycle instead of using public transport during the pandemic

Cyclists using a mobile phone while riding in Japan could face up to six months jail under strict new rules introduced recently.

Those who breach the revised road traffic law can be punished with a maximum sentence of six months in prison, or a fine of 100,000 yen ($655).

The number of accidents involving cyclists started climbing in 2021, as more people opted to cycle instead of using public transport during the pandemic, according to local media. Authorities are now racing to regulate riders.

Besides cracking down on phone usage, the new rules also target cyclists riding under the influence of alcohol, with a penalty of up to three years in prison or a fine of 500,000 yen ($3,300).

Hours after the new laws came into effect, Osaka authorities confirmed that they had already recorded five violations, including two men who were caught riding bicycles while drunk. One of the men had collided with another cyclist, but no injuries were reported.

Under the new rules, cyclists who cause accidents can be fined up to 300,000 yen ($2,000; £1,500) or jailed up to a year.

The total number of traffic accidents across Japan may be declining, but bicycle accidents are on the rise. More than 72,000 bicycle accidents were recorded in Japan in 2023, accounting for over 20% of all traffic accidents in the country, according to local media.

In the first half of 2024 there was one fatality and 17 serious injuries from accidents involving cyclists using their phones — the highest number since the police started recording such statistics in 2007.

Between 2018 and 2022 there were 454 accidents caused by cyclists using phones, according to police — a 50% increase from the previous five-year period.

The latest rules come amid a series of safety regulations aimed at protecting the safety of riders and pedestrians.

Last year, authorities made it compulsory for cyclists to wear helmets. In May, Japan's parliament passed a bill allowing police to fine cyclists for traffic violations.

Unlike in many other countries, cycling on pavements is legal in Japan, and is a common practice.

Source: BBC

Troubling new analysis: Why NZ needs tougher laws for serial speedsters

Tougher fines and measures may be needed to crack down on serial speeders, say researchers who've revealed a troubling link between tickets and road crashes.

Their just-published analysis suggests drivers ticketed for speeding are nearly three times more likely to be in a crash – with that risk compounding as they rack up more fines.

The research found a strong link between high-speed violations and the likelihood of future crashes

Speed was a contributing factor in around a third of the 341 fatal crashes recorded on our roads in 2023, when officers personally issued just over 400,000 speeding infringements.

Those fines range from $30 and 10 demerit points for travelling 10km/h over the speed limit, to $630 and 50 demerit points for 46km/m to 50km/h over the limit.

"Still, there's a general appreciation that our fine regime might be set too low – and it hasn't been changed for many years," said Dr Darren Walton, director of the consultancy Crow's Nest Research and adjunct associate professor at the University of Canterbury.

At the same time, the relationship between ticketing, driver behaviour and crash risk hasn't been well-understood in New Zealand, which per capita has one of the highest road tolls in the world.

In their study, Walton and fellow researcher Dr Ross Hendy, of Melbourne's Monash University, analysed driver data between 2017 and 2019. After sorting drivers into groups based on their ticket count and their most excessive speeding, they found a strong link between high-speed violations and the likelihood of future crashes.

Those who piled up more than four fines over two years faced the steepest increase, with roughly one in 10 being involved in a crash where they were at fault.

That stood in stark contrast to the overall crash rate of 1.2% for all drivers over the period – suggesting those repeat offenders could be targeted with more interventions.

"We do have a demerit system that attempts to address the problem, but we could have a much more sophisticated approach."

That could include a wider demerit system, he said, or an escalating fine regime where each subsequent ticket had a multiplier applied.

In Switzerland, for instance, fines were scaled to a driver's wealth, making penalties for speeding far more substantial and, potentially, a greater deterrent.

"A $30 ticket can be less than a parking fine and that doesn't seem right to me – so linking fines to incomes is likely to be more effective and equitable," Walton said. "However, it's very hard to work out income, so adding to the burden on the courts to decide such issues is probably best reserved for extreme cases."

In other insights, the research suggested being pulled over and given a ticket, rather than being snapped by a speed camera, was more likely to reduce risky driving behaviour.

That's also been observed in Queensland, where officer-led enforcement of speeding has been shown to significantly cut crash rates, while cam-

"We just need to understand that speeding is a big part of crashes, and we've got to take speed limits seriously and not encourage people to drive fast".

era-issued tickets have had a more limited effect. One unexpected finding was the similarity in crash odds between drivers with a history of speeding and those with a blood-alcohol concentration at or just above the criminal threshold.

In fact, the data indicated a driver with just two speeding tickets had a comparable crash risk to a driver with a blood-alcohol level of 0.08 – a criminal offence in most jurisdictions.

That raised questions about the relative treatment of speeding and drunk driving in road safety policy, Walton said, as speeding offences typically faced lighter penalties.

Ultimately, he said the analysis couldn't conclusively answer whether tougher fines would be enough to deter that hardcore group of speeders.

"If we changed the fines, would we find out that people who accumulated tickets reduce their crash risk?

"Or would a new fine system change the total profile of risk, reducing the overall likelihood of being in a crash?

"At least one advantage of undertaking this work is that it sets the benchmark for monitoring, whether future policy or regulatory changes work."

Police and the Ministry of Transport referred Herald questions to Transport Minister Simeon Brown, who said the new findings showed why road policing was so important.

The Government's Road Policing Investment Programme had targets to ensure police were focused on the most high-risk times, driver behaviours and locations, he said.

"I have made clear ... that the Government will instruct the Ministry of Transport to review penalties for traffic offences to ensure that they are fit for purpose and deterring dangerous behaviour."

The study comes after the Government recently copped criticism for undoing blanket speed limit reductions introduced by Labour, while also raising the possibility of motorists travelling up to 120km/h on major motorways.

Among experts who've spoken out on those changes is the Ministry of Transport's former chief science adviser, professor Simon Kingham, who welcomed the latest study.

"We just need to understand that speeding is a big part of crashes," Kingham said, "and we've got to take speed limits seriously and not encourage people to drive fast".
Source: NZ Herald

How Nelson-Tasman Doubled Bus Patronage in Three Months

Transportation Group Conference 2024 Best Practice Paper and Best Conference Paper

Chun-Lin Lee, Senior Transportation Engineer/Planner, Stantec NZ
chun-lin.lee@stantec.com

Doug Weir, Senior Principal Transport Planner/Practice Leader, Public Transport, Stantec NZ
doug.weir@stantec.com

Good public transport continues to play a vital role in our journey towards a more sustainable transport system with a reduced carbon footprint. But what does a 'good' public transport system look like, and what encourages people to use it?

Patronage had been static over the preceding five years and it was declining on some.

In 2020, Nelson City Council (NCC) and Tasman District Council (TDC) recognised that their joint public transport system could contribute more towards meeting regional environmental and social goals. A review of the region's public transport was undertaken, which recommended three stages of improvements to be delivered over a 10-year investment period. NCC and TDC implemented Stage 1 of the improvements in August 2023, and the community immediately responded, with total network patronage doubling in just three months.

So how did Nelson-Tasman achieve such a significant uplift in patronage, and can anything be learnt and applied to public transport improvements in other regions? Comparing the previous and new networks illustrates the changes that were made and their impact—and provides some answers to this question.

The previous network is illustrated in Figure 1. While it had been established for some time, it performed poorly under most measures except farebox recovery. Issues included:

- Considerable variation in service levels, both within and between routes (including the two main trunk routes), with service availability and often low frequencies that differed by route, time of day, and day of the week
- Complicated and indirect routing, including irregular one-way loop services in some areas
- Network gaps, including links to growth areas, important destinations, and regional centres
- An overly complex fare zone system, with relatively expensive fares in the national context
- A mixed fleet of diesel buses that varied considerably in size and age, and
- Minimal bus stop infrastructure outside the main trunk routes.

Patronage had been static over the preceding five years and it was declining on some. Engagement with stakeholders and the public found that public transport was viewed as being complex and unattractive, especially times and timetables, routes, and fares.

The new Stage 1 network, illustrated in Figure 2, provided a total refresh, introducing:

- Regular and legible 30-minute all-day urban frequencies from 7:00 am-7:00 pm, seven days a week
- A simplified network of direct routes serving growth areas and key destinations including Nelson Airport
- New weekday limited stop regional services to Motueka, Māpua, and Wakefield
- A new on-demand service, replacing poorly performing local routes in Stoke
- A simpler fare structure and lower fares ($2 for Bee Card users at implementation)
- A new electric bus fleet

- Formalised and higher quality bus stops throughout the network
- Better information at bus stops and online, and
- New “eBus” branding.

The two subsequent stages are tentatively planned for 2026 and 2029, subject to funding availability. Stage 2 would introduce weekend bus services on regional routes and park and ride facilities, and Stage 3 would increase peak frequencies on the urban routes, with a focus on the highest patronage routes (routes 1 and 2).

Figure 1: Nelson-Tasman’s previous bus network as at August 2020

Figure 3 shows monthly network patronage between January 2015 and February 2024, illustrating both the previous trend and the scale of the response to the service and other improvements introduced with the new network.

The response—doubling in the first three months, as discussed above—was higher and much more immediate than typically seen in response to service changes. One year on from implementation, annual patronage had jumped to 931,328, from 462,055 in the year prior to August 2023, showing that the increase was sustained.

The increase was over and above the increases associated with the half-price fares scheme, which ran between April 2022 and June 2023, and the subsequent Community Connect scheme.

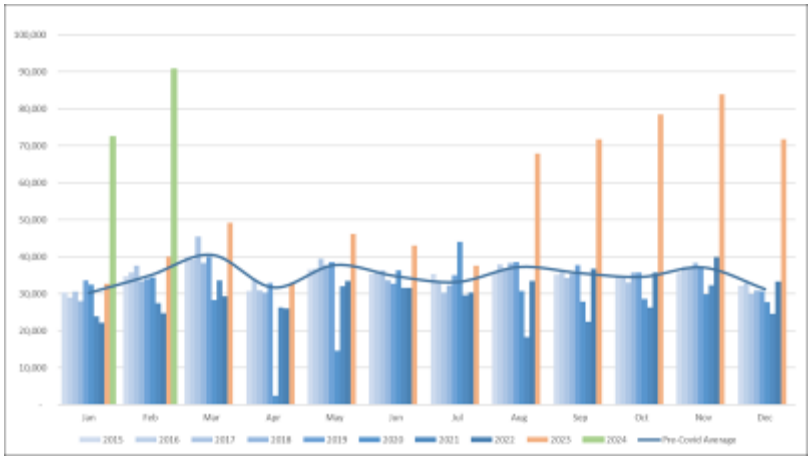


Figure 3: Monthly patronage from 2015 to 2024 (Stage 1 implemented on 1 August 2023)

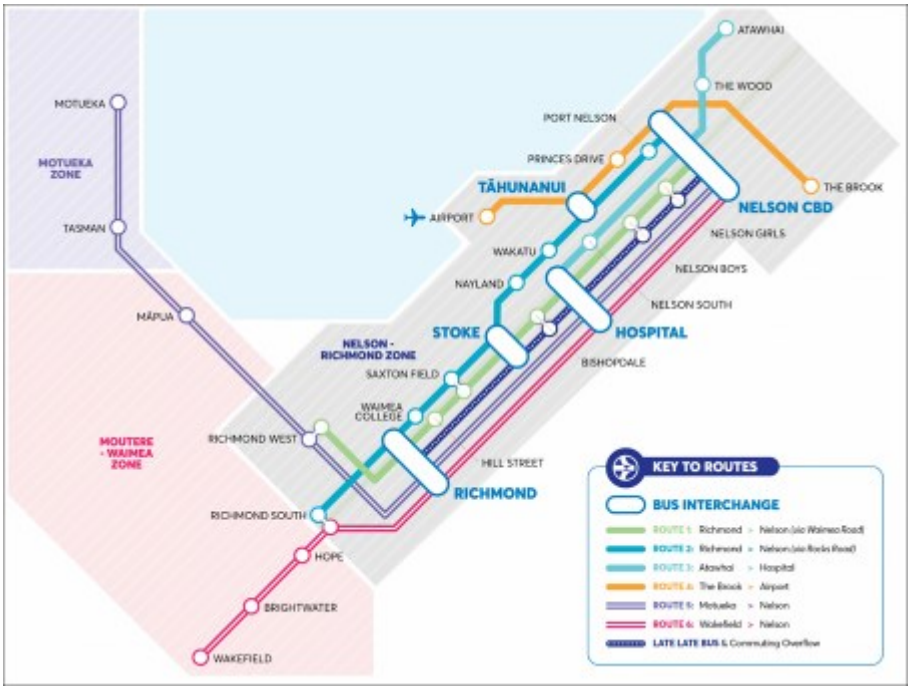


Figure 2: Nelson-Tasman’s new bus network introduced in August 2023

Two subsequent stages are tentatively planned for 2026 and 2029, subject to funding availability

Although post-implementation customer satisfaction surveys were not available at the time of writing, the public response to the upgrades has been positive.

One customer was quoted saying “it's really exciting having weekend buses; it's like gold, and the buses are going to be quiet, they are not going to be noisy.”

After the first year, Tasman Mayor Tim King stated that "eBus has had a massive impact for our communities… over 70,000 journeys across the Motueka and Wakefield routes is a testament to how essential these routes are for us", while Nelson Mayor Nick Smith observed that "the region can be hugely proud of having the first electric bus service of this scale… the expansion of the bus frequency and destinations to cover 3885 kilometres each day has helped drive a doubling in use".

With unexpected challenges cropping up, it has not all been smooth sailing. Although services have generally run on time, some reliability issues have arisen. The scale and speed of patronage uptake led to longer dwell times, which, combined with congestion, resulted in longer travel times and service delays. Timetable adjustments have been made to address these issues and more are likely.

The heavier weight of electric buses compared to the previous diesel buses has been linked to pavement failures on some roads. While it is difficult to attribute these solely to the buses due to the increased weight of heavy vehicles in general and damage sustained in intense weather events, some issues occurred after implementing the new network. This resulted in the re-routing of part of one route, which unfortunately impacted access in that area of Nelson.

Although services have generally run on time, some reliability issues have arisen. The scale and speed of patronage uptake has led to longer dwell times.

Use of the Stoke on-demand service steadily declined across the first seven months, from 148 people in August 2023 to only 48 in February 2024. This represented poor value for money (cited as costing $215 per passenger journey) and resulted in the decision to end the service on 30 April 2024.

So, what can other regions learn from Nelson-Tasman's experience when considering changes to their public transport networks?

A public transport system is greater than the sum of its parts. The whole-of-system approach, which delivered improvements to routes, service levels, fares, infrastructure, fleet, branding, and information, revealed latent demand and consequently achieved more than the incremental benefits each component part may have achieved on its own. These changes significantly improved the customer experience-related attributes considered by the review (coverage, convenience, facilities, fares, and information). This is seen in both the strength and continuation of the immediate response.

Don't disregard the attractiveness and benefits of public transport in peri-urban areas. The regional routes from Motueka and Wakefield to Richmond and Nelson have been highly successful, accounting for 8% of total patronage while representing only 7% of total bus trips, despite only operating at limited frequencies on weekdays. Driving is the only alternative mode for these journeys, making public transport provision critical for taking steps towards a more sustainable transport system. It also provides significantly improved access to centres and their amenities for non-drivers.

Be aware of the potential for and be ready to respond to unintended outcomes. The higher-than-predicted patronage, along with congestion, contributed to increased running times, reliability issues, and the need to readjust timetables. Heavier electric buses resulted in pavement issues and the need to realign some routes. The uptake of on-demand services in Stoke was poor, which ultimately resulted in its removal.

Overall, the significant and sustained uptake in customers demonstrates a shift in the public perception of public transport in Nelson-Tasman and appears to be linked to the whole-of-system approach to improvements. It is expected that many of the same principles and learnings could be applied to other regions in New Zealand to achieve equivalent results and promote mode shift to sustainable transport.

We would like to acknowledge the hard work of the NCC and TDC staff involved in the 2020 Nelson-Tasman Public Transport Review, implementation of Stage 1 improvements, and subsequent changes.

R U a social media guru?

The National Committee is seeking a social media guru to assist in sharing our stories and events. If you or someone you know is adept at social media and would be able to assist, please contact your branch chair or john@viastrada.co.nz

TRANSPORTATION GROUP NEW ZEALAND

Congratulations to our new Engineering NZ Fellows

Melanie Muirson
Melanie Muirson, a Chartered Professional Engineer with over 28 years in road safety and transport engineering, is dedicated to creating safe, efficient, and inclusive transport solutions for all users. Her expertise is highly valued by central and local government agencies, and she actively contributes to industry training and development, fostering the growth of the next generation of engineers.

Mel is also the Treasurer for the Group and sits on our National Committee. Congratulations Mel!

Michael O'Halloran
Michael O'Halloran has extensive experience delivering complex transport infrastructure and advising on major projects for New Zealand's key transport agencies. He has served as National Transport Chair for the Association of Consulting Engineers, fostering trusted relationships within the profession, and is committed to advancing equity, diversity, and inclusion in engineering.

Zaid Essa
Zaid Essa, originally from Iraq, has over 25 years of experience as a Civil and Transportation engineer. He has worked across various sectors, including consulting, contracting, government, and military, delivering major infrastructure projects. He has been volunteering with SIGIE and supporting international engineers in New Zealand since 2009, becoming one of the first two Lifetime members of the group. Currently, he is the Senior Programme Manager for Kāinga Ora – Homes and Communities – Urban Development and Delivery, supporting large-scale projects in the Infrastructure Programme and Funding team.

Timothy Haig
Tim Haig has used his civil engineering skills to deliver significant transport projects in the Bay of Plenty, from feasibility through to construction completion, leading to improved community wellbeing, road safety, and economic development. He is proud to have done so sustainably, mindful of the potential environmental impacts of large infrastructure projects.

Glen Prince
Glen Prince has over 30 years of experience in the transport industry, working across both the private and public sectors on large infrastructure projects. As a project manager, he is committed to the health, safety, and wellbeing of the sector and its people and delivering "best for project" outcomes, focusing on quality, timely delivery and value for money. Glen is also dedicated to giving back to the industry, mentoring and coaching emerging engineering professionals. This has included supporting engineers through their professional registration and serving as a Practice Area Assessor.

Distinguished Fellows

Dean Kimpton
Dean is elected a Distinguished Fellow for his extensive work delivering and managing public-facing infrastructure in highly complex environments, most notably following the significant financial impacts on the public transport system of Auckland following the COVID pandemic. In his role as Auckland Transport Chief Executive, Dean has focused on network productivity, redesigning AT's structure to deliver exceptional service and increase Auckland's trust and confidence in the organisation.

This work has involved tackling unexpected events as well as extending the organisation in directions necessary for collective growth. AT staff and contractors worked hard to repair roads across Tāmaki Makaurau following the 2023 Auckland floods and Cyclone Gabrielle, but also initiated carefully planned improvements to service delivery.

Peter Spies
Peter Spies is elected a Distinguished Fellow for his significant leadership in the delivery of many of New Zealand's largest infrastructure projects through the development of innovative forms of contracting and his role in their governance. Peter gained his Bachelor of Science in Civil Engineering at the University of Natal in Durban, South Africa in 1985.

Since then, he has worked in England and South Africa before reaching the shores of New Zealand around 27 years ago. Since 2009 he has been the Chief Advisor, Engineering at Waka Kotahi, New Zealand Transport Agency, procuring and delivering significant Roading infrastructure projects including Waterview Connection, the North Canterbury Transport Infrastructure Rebuild Alliance (Kaikoura earthquake) and the opening of Transmission Gully.

engineering new zealand te ao rangahau

Fellowship is an honoured class of membership recognising highly experienced professionals who've made a huge impact on engineering in Aotearoa. Engineering New Zealand Te Ao Rangahau welcomes our newest Distinguished Fellows and Fellows – recognised among engineering's most esteemed.

Bridges to span generations

The demands on Aotearoa's bridges and road structures are ever rising, with increased vehicle weights, extreme weather and climatic events, and heightened expectations of resilience under accidental loadings such as vessel and vehicle impacts.

By Andrew Ball
CMEngNZ CPEng IntPE(NZ)

While modern design standards have made infrastructure more resilient with minimal instances of failure, a large portion of our ageing bridges stem from the late 1930s construction boom. In benign environments with low traffic use, these bridges have performed well.

Yet those subjected to harsh environmental conditions, increased loadings and perennial deferred maintenance are fast approaching the end of their service life, or are no longer able to meet expected levels of service and resilience.

Most of these aged assets fall short of today's design standards, having been designed for hazards and loads much lighter than current demands.

These factors of aged asset portfolios and increasing demands put the country's road structures at a critical junction.

Criticality of asset management
Long-life assets such as bridges have for many years been an easy target for "sweating the asset" strategies. Unlike potholes, which are conspicuous in the road surface, structural deterioration generally occurs out of the public view.

Relatively benign effects such as corrosion of reinforcing and structural steel, or waterway degradation, if left unattended progressively consume asset life and increase vulnerability.

This can lead to life-safety threats, early asset replacement or costly unplanned interventions. Unfortunately, this scenario has become increasingly common among asset owners.

Rising freight loads, traffic volumes and major weather events are exposing the deteriorating conditions and inherent vulnerabilities in our existing structures.

Addressing the vulnerabilities that have reached a critical state is consuming an increasing portion of investment in network operations, often at the expense of proactive and preventative maintenance.

Time for asset managers to shine
Asset managers serve as the safety net for the general public, entrusted with identifying threats to asset performance, managing these vulnerabilities and prioritising necessary interventions for the lowest whole-of-life cost.

The ethos of maximising the use of existing assets resonates strongly within the asset management community, promoting sustainable resource use and efficient use of taxpayer and ratepayer contributions.

Leading asset owners of Aotearoa's transport structures, in collaboration with diligent structures managers, have proactively screened their asset portfolios for failure risks not normally captured during condition inspections.

Instances like load-deficient bridge halving joints, exposed truss members above deck, or bridges susceptible to vessel impact have been pinpointed through meticulous scrutiny.

Through proactive and strategic interventions to address these vulnerabilities, the integrity and safety of critical transport infrastructure can still be protected. However, the growing cost of delivering these treatments presents a barrier to progress.

A pathway forward
The role of asset managers grows increasingly pivotal, albeit with their safety nets wearing thin with growing backlogs of deferred maintenance, arising from decades of insufficient maintenance or asset renewals to maintain a steady state. On top of this, uncertain climate change dynamics, eco-conscious road network operations and enduring fiscal limitations magnify the challenges faced.

Embracing proactive maintenance and targeted improvements is essential for aged assets to achieve their design life, or better still, remain in service indefinitely.

This approach requires that asset owners have a thorough understanding of their portfolios, built up on individual asset condition, vulnerabilities and documented management strategies that make best use of these assets.

Decisions made on a whole-of-life optimisation approach would put an end to a "throwaway" era. It would also allow the delivery of greater financial and resource operational efficiency through reduced premature asset renewal and reduced need for emergency works.

Reducing levels of service may provide relief where the funding constraints prevent intervention. This trade-off of efficiency for reliability is a necessary consideration for communities residing in sparsely populated regions.

The good news is that good asset managers already have a thorough understanding of the condition, threats and vulnerabilities of the portfolios that they manage.

Our design standards have continued to evolve to enable justified replacements to be longer lasting and more resilient now.

We must work together to ensure the urgent threats facing the country's bridges are well understood, and to emphasise the importance of adequate funding and investment to keep these critical community assets safe and serviceable into the future.

Andrew Ball CMEngNZ CPEng IntPE(NZ) is the Transport Structures Asset Management Director at Beca, with more than 20 years' experience in the life cycle of transport structures from concept design through to end-of-life planning and everything in between.

This article was first published in the September 2024 issue of EG magazine.

Unlike potholes, which are conspicuous in the road surface, structural deterioration generally occurs out of the public view.

engineering new zealand te ao rangahau

Push, Pull, and Sort: Insights from a Christchurch branch event

Urban economics is a social science that studies location choice within and between cities

Urban Growth and Economic Dynamics: Insights from Dr. Stuart Donovan

Society has changed over many years to evolve into the more urbanised versions we see of it today. In an era of rapid urbanisation, understanding what drives people to cities and shapes their economic dynamics is more crucial than ever.

On October 10th, 2024, the Canterbury branch of the Transportation Group hosted Dr. Stuart Donovan, who delivered an enlightening talk titled Push, Pull, and Sort – An Introduction to the Economic Forces That Are Shaping Our Cities.

Held at the Pegasus Arms Tavern in Christchurch, this event highlighted the interplay of urban economics, transport costs, and location choices in shaping the urban landscape.

Naturally, being a Transportation Group event, the bike stands were full on the entire street. The event attracted a wide variety of professionals from the Transport scene in Christchurch including road designers, transport economists, and other city enthusiasts.

The talk covered the following key topics:

Foundations of Urban Economics
Dr. Donovan began by exploring urban economics, a field concerned with why people and businesses choose specific locations within and between cities.

Cities, he noted, have historically emerged out of necessity and have evolved into dynamic hubs of economic activity. Technological advancements, including improved air quality and infrastructure, have enabled these urban areas to overcome historical challenges such as poor sanitation and disease.

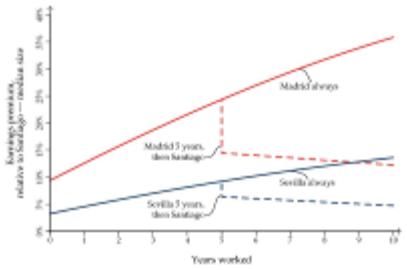
At the heart of Dr. Donovan's presentation was the concept of push, pull, and sort. This framework illustrates how economic forces shape urbanisation:

- Push: Technological and productivity advancements, such as agricultural innovations, historically drove people from rural areas to cities in search of better opportunities.
- Pull: Cities offer higher wages and amenities that attract individuals and businesses. Even in areas with abundant land, proximity to urban centres often commands a premium.
- Sort: People organise themselves within urban areas based on factors like income, job opportunities, and lifestyle preferences, reflecting a blend of systematic and personal drivers.

The New Zealand Context
New Zealand mirrors global urbanisation trends. Dr. Donovan highlighted that wealthier countries tend to have higher urbanisation rates, driven by job migration from rural to urban settings.

Notably, wage premiums in larger cities like Auckland are growing faster than in smaller cities, though these benefits are offset by rising living costs. This raises a critical question: are urban wage premiums simply compensating for higher costs, or do they represent genuine improvements in quality of life?

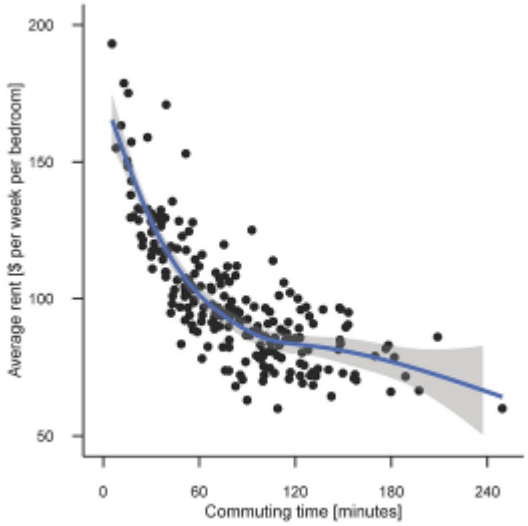
An interesting study by De la Roca and Puga (2017) mentioned during the presentation showed the additional learning advantage of working in big cities and how it can translate to higher earning potential later on, even after moving back to smaller cities.



A key factor in New Zealand's urbanisation story is the infrastructure deficit caused by rapid population growth and historical zoning restrictions. Dr. Donovan emphasised that addressing these gaps requires proactive planning and innovative policy tools to ensure cities remain livable and economically vibrant.

The Role of Transport and Policy in Urban Dynamics
Transport costs play a pivotal role in urban productivity. High commuting costs can deter workforce participation, hampering economic output. In New Zealand, historical downzoning (restricting housing growth) has restricted urban growth, exacerbating housing and affordability challenges. Dr. Donovan advocated for upzoning to maximise land use in areas with established infrastructure, thereby increasing housing supply and reducing costs.

The graph below created by Dr. Donovan illustrates the relation between average rents and commuting times for Brisbane how much more people are willing to pay to live closer to the city centre, even in a city where the jobs are relatively dispersed compared to mono-centric cities.



Housing as a Social and Economic Good
Historically kiwis have viewed housing as an investment which will appreciate substantially over time. This is partly why the urban housing market is so volatile, with constrained supply often driving prices up faster than wages.

To remedy this, Dr. Donovan argued for a balanced approach that treats housing as both an investment and a fundamental social good. Institutional investors could play a stabilising role in the housing market, reducing speculative pressures and fostering long-term affordability.

Building the Cities of the Future
As a solution to some of the challenges New Zealand cities face Dr Donnocan proposed providing certainty on infrastructure, upzoning, and looking at new ways we can pay for the infrastructure we so desperately need. Policy innovation featured prominently as part of this discussion.

Dr. Donovan highlighted new mechanisms for funding infrastructure developments including targeted rates (taxes charged to property owners benefiting from specific infrastructure projects) and tax increment financing (using future increases in property tax revenue from a redeveloped area to fund projects within that area).

While not yet implemented in New Zealand, these tools have been successful internationally in addressing urban growth challenges.

Urban economics is a social science that studies location choice within and between cities.

Dr. Donovan's talk underscored the importance of long-term urban planning that balances economic, social, and environmental priorities. From improving transport infrastructure to leveraging innovative policy tools, New Zealand has significant opportunities to enhance its urban environments.

For everyone who attended, this event served as a timely reminder of the power of urban economics to shape not just cities but the lives of those who inhabit them.

Thanks to the Christchurch committee for coordinating this fantastic event!

This event served as a timely reminder of the power of urban economics to shape not just cities but the lives of those who inhabit them.

Wales's 20mph speed limit saves lives and money. So why has it become a culture-war battlefield?

One taxi driver claimed accidents would "skyrocket" because people like him would be constantly "staring at the speedometer" rather than looking at the road.

Imagine you're a politician running a country. In front of you there is a proposal that in just nine months would save your society more than £45m, prevent almost 500 people being killed or injured, make your residential areas more appealing places to live in and reduce car insurance premiums by an average of £50.

Tempting, right?

Still not convinced? It is also backed by multiple scientific studies and examples of where it has been enacted in other parts of the world.

Better yet, it was in your manifesto at the last election, when you became easily the largest party in your parliament. It also has the universal support of all emergency services in your nation. This is the dream.

Yet this is exactly what happened in Wales and it became the single most unpopular and controversial piece of lawmaking in the (admittedly short) history of our Senedd (parliament).

I still can't quite get over the fact that a scheme designed to save the lives of children became the latest culture war battlefield.

In September 2023 the Welsh government introduced the default 20mph speed limit, changing every road in Cymru that had a 30mph limit to 20mph unless it was given an exemption by the local authority.

Essentially, almost everywhere people lived in Wales now had slower speed limits.

The evidence that this would save lives was unequivocal and overwhelming.

The response from some to the policy was unrestrained fury. A petition on the Senedd website opposing the new measures has reached nearly 470,000 signatures (in a nation of just over 3 million people).

Protests sprang up citing the cost of the policy (£32m, mostly on changing the road signs and markings). Some of them were somewhat counterintuitive – many of the 20mph signs were vandalised, meaning they had to be replaced at additional cost.

And to show their displeasure at having to drive slower through communities, protesters also held a go-slow drive on the M4 and several other major Welsh roads.

A far from exhaustive list of other gripes included that it would apparently result in more emissions (it probably won't), it would "destroy" car engines, it would increase congestion, and road rage incidents would spike. As I reported on the policy, I couldn't believe my inbox.

One taxi driver sent me furious messages claiming that accidents would "skyrocket" because people like him would be constantly "staring at the speedometer" rather than looking at the road. This seemed an odd admission for a professional driver to make.

However, a year on from the scheme's introduction we can see pretty strong evidence that the 20mph limit is very effective in saving lives and preventing injuries.

We now have the road collision data for the first three quarters since the policy was introduced and the figures are pretty clear. Compared with the same period the year before, the number of people killed on the affected roads is down 35%, serious injuries are down 14.2% and slight injuries 31%.

Leaving aside all the children who won't be killed, the lives not ruined, there is also a massive financial benefit. The Department for Transport estimates that the total societal cost of someone being killed on the road is just over £2.4m.

A serious injury is £271,000. Even a "slight" injury is nearly £21,000. If we apply these estimates to the first nine months in Wales we can see the savings that the 20mph change has made.

On roads affected by the change there were 10 fewer deaths compared with the previous period, saving £24m. In just nine months there has been a total saving of £45.5m – not even counting the long-term savings to the NHS from people taking up cycling or walking instead of driving, or the savings for many Welsh drivers caused by the reduction in their insurance premiums.

Makes that £32m on new road signs and markings look like a pretty smart investment, right?

So why all the outrage?

Well, it turns out that much of it was manufactured. In January of this year I did a little digging through four of the main Facebook groups opposing the change to 20mph in Wales. I found that in each case one of the admins was a Tory councillor from Sunderland who has, and this is hilarious, campaigned to have 20mph limits in parts of his home town.

One of the other admins shares a name with a man who was a Tory candidate in Burnley in 2021, another had the same name as the election agent for Vale of Glamorgan Conservatives, while one was seemingly a partner of a Tory Senedd member.

Since the policy came in, the Welsh Tory leader, Andrew RT Davies, has been very critical of it, calling it a "blanket" speed limit (which is odd as it isn't a blanket policy).

The most shameless part is that the Tories know the policy works. Back in 2018, Davies himself proudly posed with a poster saying "20's plenty where people live". In a debate in 2020 the party overwhelmingly supported the policy, with the then leader Paul Davies voting in favour (though Davies did not attend).

The Welsh government itself has been far from flawless in its implementation. It spent only £1.6m of the £32m total cost on explaining the policy, focusing on telling the public that it was coming in, but not why. And the government has since tried to distance itself from the policy, even as evidence of its effectiveness grows.

Recent public pronouncements have emphasised that the government has "listened" and decided that some roads will revert to 30mph.

Ultimately, the 20mph change was an attempt to rebalance the communities in which we live, so they are no longer dominated by cars. The policy aims to make our neighbourhoods more livable (20mph is three decibels lower than 30mph). It has a positive impact on particulate pollution because cars have to brake less. And it clearly saves lives.

The experience in Wales is a lesson for the wider UK and beyond. Evidence-based policy does work, but you have to own it, explain it and stay the course. It costs political capital, and politicians need to be brave. In a world where facts and evidence matter less and less, it is all the more vital that we stand by that evidence to take our nation forward (at an appropriate speed).
Source: Guardian

Evidence-based policy does work, but you have to own it, explain it and stay the course.

Celebrating Palmy's First Footpath Running Race Track!

One boy begged to be dropped off "further away" from the school drop off zone so he could race the track and try beat his speed from the day before

The launch of Palmerston North's Footpath Running Race Track on Aroha Street is another wonderful step towards a more playful and Palmy.

Inspired by Arup's Playful Cities Design Guide, this 25-meter race track outside one of the city's larger primary schools, allows everyone to race and clock their speeds on a dedicated speedometer, turning everyday spaces into opportunities for play.

This project is an example of "Play Beyond the Playgrounds" and "Play as an Everywhere Concept"—transforming urban spaces into interactive, inclusive experiences that encourage play at every turn, not just in dedicated play areas. It's about creating active and vibrant environments that engage the community wherever they go.

So far the project has had some wonderful feedback, with one from a mum who spoke of her son begging to be dropped off "further away" from the school drop off zone so he can race the track and try beat his speed from the day before. :-)
Source: PNCC

Manhole covers in Oklahoma, US have a city map on them with a white dot showing where you are.

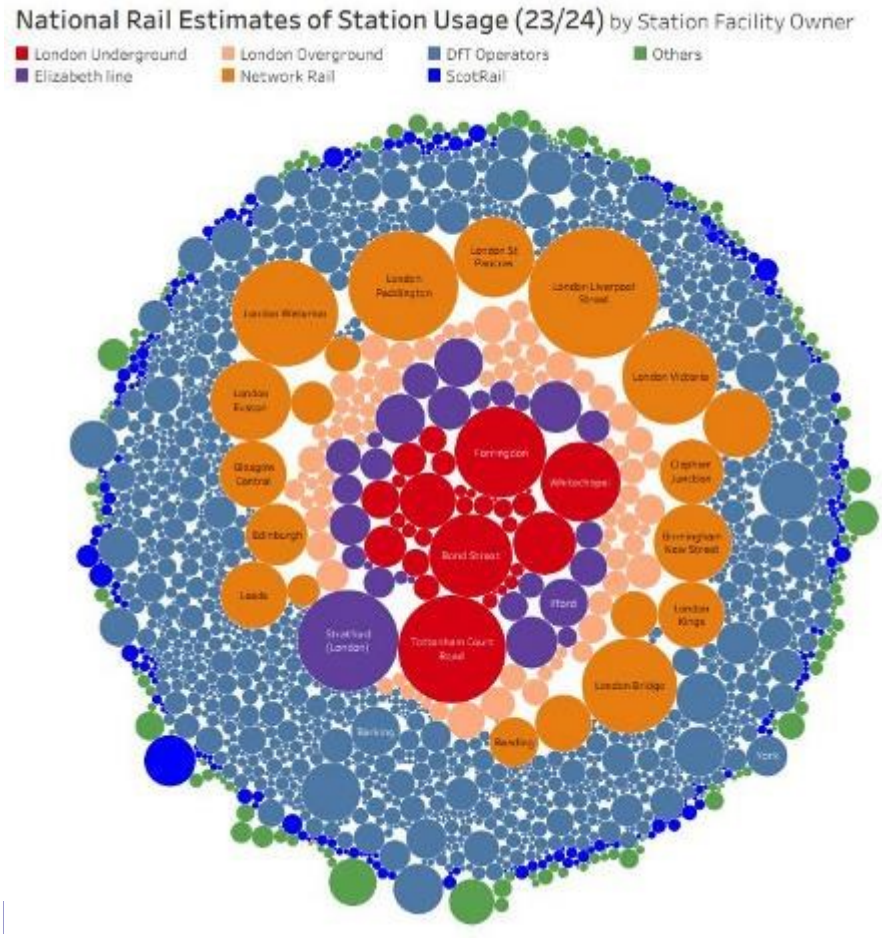
The little yellow digger that could!

It's the little yellow digger that could: NZTA recently finished clearing rockfall off the roof of the Otira Gorge rockfall shelter on State Highway 73 near Arthur's Pass, and did it using this small remote-controlled digger.

This part of SH73 is a unique and challenging environment, and it's not safe to have people working under an active rockfall – but with remote-control the work can be done safely.

The RC digger was operated by a crew from a safe distance. The team was ready to jump into action quickly after rockfall started spilling over the shelter and onto the road and, despite some bad weather, the little digger and its operators made excellent progress and finished two weeks ahead of the planned completion date for the work. If NZTA had used a digger with a crew member inside it would've had to do time-consuming scaling and stabilisation work.

This is the first time in New Zealand that a digger has been used on top of a rockfall shelter – and it's also the first time the Otira Gorge rockfall shelter has been cleared since it was built.



UK rail station usage

Ever seen every UK National Rail station on one page? Well, here it is and it's even more interesting than you thought!

Each blob is scaled to 2023/24 National Rail entries and exits as per the latest Office of Rail and Road (ORR) data released last month.

The lovely purple highlights the Elizabeth Line managed stations that cosy nicely around the London Underground owned stations in the middle that have also seen a massive increase in patronage since the line opened.

The orange of Network Rail separates London Overground Rail Operations Ltd (LOROL), London Underground and the Elizabeth Line from the Department for Transport (DfT), United Kingdom operators' stations. The sheer number of stations here of varying sizes is fascinating - notice York tucked away on the bottom right.

The dark blue around the outside is of course ScotRail with the big blob at 7'clock being Glasgow Queen Street with 14m entries and exits.

Malcolm Bulpitt 1943-2024

From Group member Ian Appleton:

I had the good fortune to meet Malcolm Bulpitt in the early 1990s when he headed the Road Safety Unit at Kent County Council in the UK. He was extremely helpful to me when I was introducing roads safety audits in New Zealand.

While he did not come to New Zealand in any official capacity, he and his wife Elizabeth came here on holiday.

Extracts from the Eulogy read at Malcolm Bulpitt's funeral on 9th September 2024

Malcolm was born on 19 August 1943.

Malcolm's first job was at the Ordnance Survey in Southampton. From there he moved to the GLC where he introduced the first contraflow bus lane in Piccadilly and was part of the original Road Safety Investigation Unit.

He introduced the first contraflow bus lane in Piccadilly and was part of the original Road Safety Investigation Unit.

In the 1970s he moved to Kent County Council to start their Road Safety Unit. He was also heavily involved with the Channel Tunnel, representing Kent at meetings in France.

He helped to redesign the road layout to access the Eurotunnel Terminal from the A20 so that it would meet Safety Audit requirements.

In 1990 he introduced Road Safety audits in the U.K. heading up Kent's Accident Investigation Unit and visited many countries to help them write their own procedures.

His wife Elizabeth was proud to be present in Melbourne to hear Malcolm being introduced as the 'Father of Safety Audit.'

After retiring from KCC he joined the Coventry based consultancy TMS in 1997.

He continued to undertake safety studies and road safety audits at TMS, but his main contribution was as a trainer, travelling the length and breadth of the UK and Ireland selling safety audit in his own inimitable style as well as travelling to Australia, Canada and Ireland.

TMS described Malcolm recently as 'one of the truly great pioneers in road safety engineering - not just in the UK but internationally.'

There is a tribute to Malcolm on the TMS Consultancy website.

People and nature co-existing...

Promoting public transport with SmartVMS: Real-Time Journey Time Messaging in Action!

Auckland embraces innovation by introducing Smart Variable Message Signs (VMS) to enhance public transport communication.

In a collaboration between Auckland Transport and Smart City NZ, VMS signs are used to display of real-time journey information, emphasising the efficiency and reliability of different transportation modes.

Positioned strategically across eight main motorway access points north and south of the Auckland Harbour Bridge, these SmartVMS signs will display real-time journey times for cars, buses, and trains, ranking the fastest options based on current traffic conditions.

The initiative aims to boost public transport usage by offering this real-time data, alleviating motorway congestion, and enhancing peak-hour travel experiences.

Residents of Auckland are encouraged to watch out for these updates and explore how opting for public transport can save time and contribute to sustainability. It's a step towards reducing congestion and improving overall travel efficiency.

Ferrari pretends to be an electric car, hogs EV charger

This petrol-powered F430 was spotted in Greece recently parked in a bay reserved for electric vehicles, while the plug can be seen resting within the car's rear wheel.

The photo has gone viral online, with the incident attracting a range of commenters either supporting or condemning the exotic car driver's decision.

The Ferrari F430 was allegedly caught at an unspecified carpark in Greece, with the photo uploaded to a local Facebook electric vehicle group in November.

Adding insult to injury, the EV charge plug can be seen resting within the supercar's rear wheel, though it's unclear if it actually was the Ferrari driver who placed it there.

According to the original Facebook user who posted the photo, "There were many free parking spaces".

"It's a yes from me," one commenter wrote, while another added: "A classic hater. He's somewhere around there and he sees why he's afraid of keys".

The act of parking an internal combustion engine (ICE) vehicle in an EV charge bay is commonly known as 'ICEing', and has surged in popularity across other countries including Australia, with local road authorities having introduced new anti-ICEing laws to combat offenders willingly preventing EV drivers from accessing chargers.

In terms of Ferraris that can actually be plugged in to recharge, the brand currently produces the plug-in hybrid 296 and SF90 models.

Ferrari is also in the process of developing two battery-powered models, with one unnamed insider telling Reuters the first battery-powered car from the exotic car maker is tipped to start from €500,000 ($1 million).

Ferrari previously announced its electric car sales forecast in June 2024, with the Italian manufacturer stating its battery-powered car could account for five per cent of 2026 sales and a further 40 per cent of global sales by 2030.
Source: Drive.com.au

Ferrari is in the process of developing two battery-powered models. But this isn't one of them.

Transportation Engineering

The University of Auckland
NEW ZEALAND

Undergraduate and Postgraduate Transportation - Courses 2025

Nov 2024

Department of Civil & Environmental Engineering, University of Auckland
For Master of Civil Engineering MCivilEng with/without Transportation specialisation, also for Post Graduate Certificate / Diploma / [PGCertCivilEng]/[PGDipCivilEng or Postgraduate Diploma in Engineering PGDipEng or for a one-off Certificate of Proficiency, COP.

COURSE	DESCRIPTION
Semester 1 (Mar-Jun,'25)	***dates/timing changes may be made***
CIVIL735 – Transport Modelling and Design (Monday and Tuesday, 3-hrs, 12 weeks)	The planning, modelling, design and operation of current and future transport systems. Topics include transport models and their applications, Intelligent Transport Systems and emerging technologies, transport planning process and travel demand modelling. Transport models are developed to plan, design and manage transport networks based on fundamental modelling concepts, New Zealand specifications and international best practices.
Civil 736 - Transport Safety and Mobility (Monday and Tuesday 3-hrs, 12 weeks)	Develop a sound understanding of safety and mobility of transport systems. Transport safety topics include safe systems, crash reduction studies, road safety audits and at-grade intersection geometric design, economic appraisal methods and transport infrastructure funding. Planning for transport mobility and sustainable transport systems, public transport systems, active modes and travel behaviour.
CIVIL 762 Transportation Planning (Block 1 - 20, 21 March) (Block 3 – 10, 11 April) (Block 2 – 22, 23 May)	Provides an in-depth exploration of various components of the urban transportation planning process, with emphasis on theories on modelling. The principle behind the conventional four-stage transport planning model, namely, trip generation, trip distribution, modal split and trip assignment, is covered in detail.
CIVIL765 – Infrastructure Asset Management (Block 1 - 11, 12 March) (Block 2 – 29, 30 April) (Block 3 - 13,14 May)	Advanced theories and techniques fundamental to the management of infrastructure assets, with a primary focus on Asset Management Plans. Covers the entire spectrum of infrastructure, including roads, water networks and buildings. A major independent project incorporates a literature review and selection and then a critical review of an Asset Management Plan from the industry.
CIVIL764 (Block 1 – 13, 14 Apr) (Block 2 – 3, 4 April) (Block 3 - 8. 9 May)	Advanced planning, design, operation and safety management of predominantly two-way two-lane highways, including passing and overtaking models analysis and treatments, collision modification and mitigation, roadway design, skid resistance, delineation, temporary traffic control, evaluation methods, and environmental management measures. An independently applied research project will use advanced analytical skills to critically evaluate factors that impact highway safety.
CIVIL770 - Transport Systems Economics (Block 1 – 7, 19 March) (Block 2 – 1, 2 May) (Block 3 – 29, 30 May)	Advanced specialist topics in transportation economics, including the theory of demand and supply of transport, government intervention policies, and externalities and agglomeration. Two transportation infrastructure projects were analysed to determine likely future social/real-time benefits / disbenefits.

Transportation Engineering

The University of Auckland NEW ZEALAND

Undergraduate and Postgraduate Transportation - Courses 2025

Semester 2 (Jul-Oct,'25)	***dates/timing changes may be made***
CIVIL763 Smart Infrastructure Analytics (Tues 2-4 pm, Weekly during Semester)	Develops fundamental knowledge in the use of computer programming and data analytics to solve real-world infrastructure problems, such as reducing traffic congestion, predicting water usage and infrastructure failures. Group and independent projects are undertaken in which students study complex smart infrastructure analytics problems using real-world data.
CIVIL 771 – Planning & Managing Transport (Block 1 – 23, 24 July) (Block 2 – 20, 21 August) (Block 3 – 1, 2 October)	An advanced course on integrating land use planning and transport provisions, including planning for different land use trip types and parking, travel demand management techniques, and intelligent transport systems. An independent project applies this specialised knowledge.
EngGen 726 - Climate Adaptation of Infrastructure (Block 1 – 31 July, 1 August) (Block 2 – 7, 8 August) (Block 3 – 14, 15 August)	Impacts of climate change on infrastructure and adaptation strategies to respond to these changes. Impact assessments, vulnerability studies, and development of adaptation strategies and techniques for whole of life asset management. Decision-making, management and climate resilience of transport, potable water provision, stormwater and wastewater systems, buildings, and other physical infrastructure systems.

NOTE: Other relevant courses at the University of Canterbury (Civil / Transportation) or at Auckland (in Civil / Construction Management / Master Engineering Management/ Auckland OnLine) *or elsewhere can be suitable for credit – prior approval is required.*

For Admission / Enrolment or Course options contact: **Bevan Clement** *DDI* (09) 923 6181 *(M)* 021 022 65184
Email: *b.clement@auckland.ac.nz*

Further details, including the course outlines, can be found at: https://www.calendar.auckland.ac.nz/en/courses/faculty-of-engineering.html

The University of Auckland NEW ZEALAND

Taking care of tomorrow today: Asset management state of play

Whether it is leaky pipes or potholes or cities struggling under demands for growth, New Zealanders will have seen how important it is to look after and plan for infrastructure.

Download the new Taking care of tomorrow today report here.

This report is a high-level snapshot of New Zealand's approach to asset management. It incorporates the findings of independent asset management experts as well as expertise and observations from Te Waihanga.

This report is a high-level snapshot of New Zealand's approach to asset management

Key findings

- There is limited awareness of the 'what' and 'why' of asset management in many sectors. We need to look at the big picture when it comes to infrastructure. This includes everything from strategic planning and management of assets through to the day-to-day maintenance.
- Capability and capacity are the biggest constraints in improving infrastructure asset management maturity in NZ. This includes improving the resourcing and skillset of the asset management workforce, as well as the leadership and governance of the asset management system across most sectors.
- There is little transparency of infrastructure and asset management performance and planning. This includes a lack of user-friendly access to information on how infrastructure is performing and what future funding intentions are.
- There is need to better provide for renewal and maintenance of infrastructure. In some cases, funding gaps for maintenance and renewals are known, but there is not always the appetite to achieve the investment required.
- Demand planning and management needs greater focus and we can go further than a Statistics New Zealand population forecast. This could include greater understanding of demographic change, customer behaviour, demand management strategies and potential future scenarios.
- Making the most of operational programmes is a key opportunity for improvement. Organisations can usefully quantify the levels of planned versus reactive maintenance to inform more cost-effective approaches to asset management.
- System and Improvement is one of the lowest scoring functions for all sectors. This is shown in a lack of asset management maturity progress for many sectors over the last ten years.
- The study contains recommendations under four key areas:
  1. Improving governance and leadership
  2. Improving transparency in asset management practices, infrastructure performance and medium-long term funding plans
  3. better prioritising of resilience over 'recovery'
  4. Build asset management capacity and capability.

New York votes to revive congestion pricing plan with lower toll

New York's MTA board voted recently to pass the congestion pricing plan, setting the base toll at $US9 through 2027.

There was one dissenting vote. The board indicated the base toll would be "phased in" with the fare raising to $12 for 2028 through 2030 and $15 in 2031.

It marks the first step toward the plan becoming law despite facing major opposition across the Tri-State.

Work will now resume on the Second Avenue Subway and six elevator projects, as well as the purchase of 270 electric buses and procurement on A/C train signal upgrades.

The vote comes five months after Gov. Kathy Hochul slammed the brakes on the tolling program in June, saying it was the wrong time to hit commuters with a $15 toll.

The fee would be imposed on most vehicles driving into Manhattan neighborhoods south of 60th Street and collected via license plate readers. It would come on top of the often-hefty tolls drivers pay to enter the island borough via some bridges and tunnels.

There are exemptions for emergency vehicles, buses and transportation for the elderly and the disabled-and for those with health conditions who must avoid mass transit.

Congestion pricing is aimed at reducing traffic and pollution while encouraging use of public transit. It has long existed in other cities around the globe, including London, Stockholm, Milan and Singapore, but not in the U.S.

While supporters say the program will help alleviate some of the gridlock on Manhattan streets and keep the MTA funded, critics say even the lowered tolls will add up quickly.

The vote comes five months after the Governor slammed the brakes on the tolling program, saying it was the wrong time to hit commuters with a toll.

Hochul's new plan calls for the $9 fee on most vehicles, which would help fund the city's cash-strapped public transit system but at a lower price tag for drivers.

The board's approval will start a public education period, where the MTA will message the upcoming unpausing of congestion pricing and its new toll structure of $9 per car and $2.25 during overnight periods.

At the conclusion of the public information period, the agencies involved will sign a Value Pricing Pilot Program agreement before the Jan. 5 start date.

Town supervisors of four Long Island towns -- Hempstead, Oyster Bay, North Hempstead and Brookhaven -- held a press conference Monday, urging President-elect Donald Trump to stop the plan.

"The people who have to drive to the city, ladies and gentlemen, these are people that don't have the means to get on the train, they work at different hours, they work at different locations, you know, these are not the titans of industry," said Hempstead Town Supervisor Donald Clavin.
Source: ABC

2025: A Pivotal Year for Hydrogen Transport in NZ

HIRINGA

2025 is set to be a hugely significant year for hydrogen transport as it begins to take off in New Zealand.

With Hiringa Energy's green hydrogen refuelling network now operational across the North Island, the stars are aligning for transport operators looking to dip their toes in the water of hydrogen trucks.

It's not hard to see why. The refuelling infrastructure is in place, the first test cases of hydrogen trucks are showing signs of success (NZ's first hydrogen truck ticked over 120,000 kilometres recently), and the economy is turning a corner after a tough few years.

With increasing awareness of hydrogen's suitability in heavy transport and pressure to decarbonise in order to achieve business and government targets, the time is right for many.

EECA's Low Emissions Heavy Vehicle Fund can now be used to cover up to 25% of the cost of procuring a hydrogen truck

EECA's Low Emissions Heavy Vehicle Fund (LEHVF) can now be used to cover up to 25% of the cost of procuring a hydrogen truck or converting a diesel engine to dual fuel (blend of diesel and hydrogen).

"We're hearing that a range of transport operators are looking to acquire hydrogen vehicles for the first time in 2025," says Hiringa Head of New Business Ryan McDonald.

"In many cases, people recognise that they need to start decarbonising now if they're to achieve their carbon zero ambitions. We're expecting New Zealand's fleet of hydrogen trucks to grow significantly in 2025."

Planning for hydrogen infrastructure

Planning for hydrogen infrastructure now will support the anticipated growth in hydrogen vehicles in the short and long term. Like any new technology and infrastructure, the success of hydrogen will rely on government, councils, regulators, academics and industry all working together.

There are four key areas to focus on:

- Ensuring refuelling stations and hydrogen production facilities are appropriately zoned and permitted. This may involve updating local planning schemes to include hydrogen infrastructure that have not been considered previously, and factoring in how things like water supply and water runoff should be managed.
- Keeping up to date with safety regulations specific to hydrogen production, storage and refuelling. This often involves a multi-agency approach – for example, Hiringa is partnering with WorkSafe to update safety regulations to include hydrogen considerations.
- Facilitating connections to the electrical grid for hydrogen production facilities and related solar or wind infrastructure e.g. grid capacity, load profile, co-location opportunities and scalability.
- Proactively facilitating engagement opportunities and providing education for neighbours, iwi, local businesses and other stakeholders, about the benefits and safety of hydrogen technology to gain community support and a social license to operate.

The road ahead

Hydrogen has a critical role to play in decarbonising New Zealand's transport in particular. As an infant industry, it has unique features, but the blueprint for managing combustion fuels is well established.

More recently, geothermal power, solar technology and onshore wind farms have also required similar involvement from multiple parties to unlock these types of opportunities.

The transition to hydrogen transport is not just about the vehicles, the technology and the infrastructure. It requires a concerted effort from all stakeholders, including local authorities, to create a supportive regulatory and social environment that enables this important infrastructure to support New Zealand's acceleration towards a carbon-free future.

The road safety fallacy

The recurring call for bicycle helmets is a classic example of the Airplane Fallacy. Well-intended, but treating symptoms instead of tackling the cause. And that creates more problems than it solves.

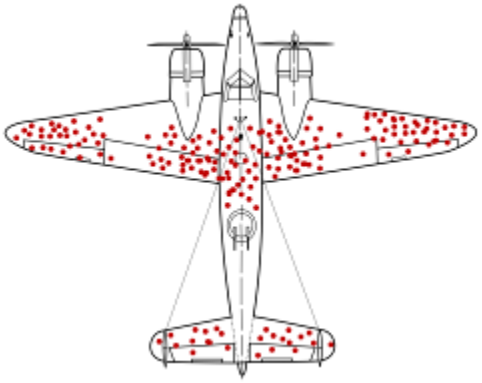
Nobody is against road safety. Unsafe streets are one of the biggest annoyances of the Dutch. Interest groups, experts and politicians have been asking for more attention and urgency on this theme for decades.

Our focus is mainly on the number of victims and how we can better protect them. As a result, we miss essential information about the causes.

But our focus is mainly on the number of victims and how we can better protect them. As a result, we miss essential information about the causes. And we talk about well-intentioned, but ineffective and even harmful measures such as protective clothing for potential victims. Together, we would have a much greater positive impact if we escaped our **Airplane Fallacy**.

AIRPLANE FALLACY

During World War II, engineers studied the damage to aircraft returning from missions over enemy territory [1]. To reduce the number of aircraft lost, they reinforced the areas with the most damage. However, the number of aircraft lost remained high.



Hungarian mathematician Abraham Wald noticed that the data was only collected by looking at the returning planes. He argued that this creates an important blind spot. The planes that were shot down are missing from the assessment!

This means that the places with bullet holes are precisely the ones that do not need extra protection. After all, that is how the pilots could still return safely.

So it is much more likely that the places without bullet holes show where the planes are vulnerable. Planes that were hit there did not return.

The Airplane Fallacy is a logical fallacy in which a focus on data that has already gone through a certain selection process leads to the wrong conclusions.

The error in Road Safety thinking

This logical but tragic error has been seen in the discussion about road safety for decades. Often driven by doctors or relatives, calls are made to better protect road accident victims.

This is then adopted by existing road safety organisations, on TV, radio and in the newspapers and by politicians. How does the same 'Airplane Fallacy' play a role here?

We see a large and growing group of victims with head injuries coming to the Emergency Department. A general trend (an increase in injuries as a result of falls) but also visible among road accident victims. That must be incredibly traumatic to be confronted with that day in, day out.

Just like with the traumatic impact of losing a loved one, it is a logical human reflex to seek a solution for this [2]. We see that the person involved in road accidents develops a story as a grief mechanism: "what if he/she had done something differently?" or "how can we prevent this in the future?" [3].

But just like with airplanes, our attention to road victims means that we mainly know their details: who they are, what kind of transportation they used, and what trauma they had. Over the years, we have become accustomed to discussing the victims by means of transportation: "the number of road deaths on bicycles is increasing" [4].

We see the same now that hospitals have collected data in the context of the discussion about the increase in accidents with **fatbikes** and **e-bikes**. Below is the counting list that all ER doctors received from VeiligheidNL. But can we also see now what is missing here?

This will be registered

The number of fat bike and other e-bike victims treated in your emergency department in the week from September 30 to October 6 will be counted separately.

- For each victim you count of it involved a fatbike or e-bike and per victim:
  - Age category (0 to 3, 4 to 11, 12 to 15, 16-17, 18 to 24, 25 to 54, 55 to 69 and 70 and older)
  - Yes/no bike helmet
  - type of injury (fracture, concussion/brain damage, intra-abdominal and other injuries)
  - traffic participation (rider, passenger, hit by fatbike/e-bike)
  - yes/no hospital admission
  - yes/no surgery
  - deceased

This results in an overview of the number of fatbike and other e-bike victims and a number of characteristics of these victims, which allows us to make statements about the characteristics of the victims and the severity of the injury per type of bike. A limited number of questions was deliberately chosen to keep the registration burden low.

Just as engineers use bullet holes to reinforce airplanes, the data we collect in this way is used to discuss how we can better protect victims. No one will deny that all victims brought to the ER would have benefited from protective clothing. This also makes it seem like a logical strategy to implement this as a policy.

But - just like with airplanes - we lack crucial information to arrive at truly effective interventions.

What we should ALSO want to know!
Instead of just looking at the victims that are brought in, we should look much more closely at the underlying mechanisms of road safety:

1. We should want to know the KEY DETAILS OF CRASHES. Following an earlier call on this, more and more organisations are showing accident data in the form of so-called **Collision Matrices**. In these, we see **all parties involved in each accident**. Information that says more about what exactly is going on on the street. This information is crucial if we really want to seriously limit the suffering and trauma in traffic instead of just mitigating the consequences.

In the Netherlands, the Centraal Bureau voor de Statistiek showed this last year for the first time for **traffic deaths**, with totals for the period 2019 -2023 [5]. Where we immediately see that most cyclists and pedestrians die in a collision with a driver of a motorized vehicle. But in all recent reports on road safety we do not see that at all.

'Cycling victims' are therefore usually not victims of cycling, but of something else. In the data on **Fatbikes** we also see that: the victims and their means of transport are identical to their market share. That means that it is unlikely that that explains anything of their injuries.

ROAD TRAFFIC FATALITIES IN THE NETHERLANDS IN 2019-2023
by road user and (other) 'main vehicle' involved in the crash

FATALITIES	IN A COLLISION WITH... Bicycle	Carvan	2-Wheel motorized	Truck/ bus	Fixed object	Other/ unknown	Single sided	TOTAL
Pedestrian	13	172	13	43	0	23	0	264
Bicycle	56	504	41	113	52	53	380	1199
Moped/scooter	9	89	0	13	37	9	47	204
isability vehicle	0	51	6	0	24	0	111	192
Motor bike	0	106	6	14	64	9	37	236
Van	0	18	0	28	32	0	11	89
Car	0	295	0	135	408	15	167	1020
Other		14	0	6	13	0	16	49
TOTAL	78	1249	66	352	630	109	769	

Every time we fail to explicitly discuss the underlying causes of suffering and trauma, we inadvertently normalize danger. We suggest that cycling and walking are dangerous, when the real danger comes from motorized vehicles. Without addressing this, this primary cause has only grown in number, size, weight, and power. And the distraction for those who need to drive it safely has only increased. We see this in **transport minister** Barry Madlener who calls for more bicycle helmets on the same day [5] and at the same time wants to increase the speed limit [6].

2. We should want to understand the MORAL DIFFERENCES between victims. If we group victims based on their own mode, we miss essential differences between groups of victims. There will always be planes that simply crash, but from a safety perspective, they are fundamentally different from those that are shot down. In the CBS data, we also see two categories: people who die *without* and *with* the involvement of another party.

We must view the first group in the light of other 'accidental falls'. Every five days, one person dies as a result of a fall from a bicycle. Tragic, but in those same five days, no fewer than 95 people die as a result of another type of fall [8].

Take into account that we – and especially the elderly – increasingly cycle more often and further. This seems to hint at cycling being intrinsically a very safe activity compared to many other things people fall and die with.

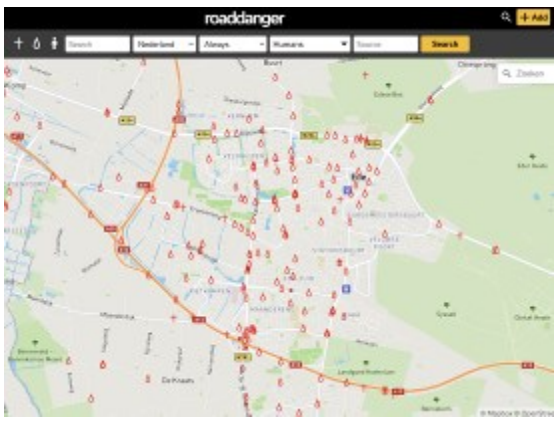
This seems to hint at cycling being intrinsically a very safe activity compared to many other things people fall and die with.

But the second group are *real traffic victims*: people who die as a result of a collision by/with another person. The 658 cyclists and 228 pedestrians who died as a result of such a collision should instead fall into the same category as other human-to-human violence. Usually unintentional, of course.

These kinds of numbers would be completely unacceptable in any other domain of our lives. *Where is the public outrage about this? Why are the doctors not addressing this head on?* What if instead of focusing on protective measures for cyclists, we focused on eliminating the key sources of danger on our streets?

As a bonus, there would immediately also be more safety for all 1,667 people who have now died in a collision with someone in a motorized vehicle.

In this way, we would *much more effectively* reduce the number of traumatized people on all sides and the traffic violence in our public space.



3. We should want to know the FULL COMPLEXITY. By definition, our expertise gives us a limited view of the entire system. We must therefore always be very careful so that our interventions do not lead to unwanted negative effects. Just like with any operation and just like with any medicine.

So be careful if you only see the symptoms and do not yet know the underlying causes well. The aircraft engineers discovered this thanks to a mathematician. Doctors and experts should therefore seek cooperation with other disciplines and people who have been working on traffic hazards for decades.

Prevent negative impacts

Other disciplines can, for example, say that strong signals come from Denmark that promoting helmets leads to an expected and significant drop in cycling rates, especially among vulnerable groups such as children [9].

Through this dynamic traffic actually becomes more dangerous for everybody! Experienced people from other disciplines can also tell you that bicycle helmets lead to more dehumanization of cyclists [10], have negative effects on the behavior of motorists [11], and lead to more dangerous behavior of cyclists themselves [12].

They know the enormous positive effects of the Dutch cycling culture on the sustainability and liveability of our cities, on the social costs of our mobility system and on the physical, mental and social health of the population [13].

So be careful if you only see the symptoms and do not yet know the underlying causes well.

We should therefore be extremely careful about introducing barriers to this. **In light of all this knowledge, we should not only aim for safe cycling, but first and foremost for much more cycling. And for much fewer car trips.**

Historians like Peter Norton can explain how traffic violence originated in the 1920s [14]. Activists like Maartje Van Putten , leader of the **Stop the Murder of Children** movement 50 years ago and now active in the Rechtvaardige Straat, can help us understand the dynamics surrounding interventions on our streets.

The Fietsersbond and **MENSenSTRAAT** have been working for decades to curb the speed of motorized vehicles in particular. And my own work as a scientist builds on international insights in how the limitations in our thinking about traffic violence influences policy [15], media [16] and the broader field of road safety [17].

Open up our thinking

If we don't only want to alleviate the consequences of crashes, but really reduce the suffering and trauma on our streets, then **we need to question the limitations of our thinking broadly**.

The only way to do that is by working together with all disciplines that can help to understand the complexity well. And by always taking into account the full complexity of road safety. Let us connect all the people who think about this from different disciplines and backgrounds. And let's try together to not only fix the planes, but to end the war itself.

Source:Lab of Thought

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[17] https://tsr.international/TSR/article/view/26039/23171

Watch the Group webinar on Parking Standards

The Transportation Group recently held a webinar to learn about the new car parking standards out for consultation.

This was presented by Wes Edwards (CPEng, IntPE(NZ), FEngNZ) a member of the Standards Australia committee responsible for the AS/NZS 2890 series. Wes summarised the key changes that are proposed for this influential standard.

AS/NZS 2890.1 sets out the minimum requirements for the design and layout of off-street parking facilities for motor cars, light vans up to 5.4 m long and motorcycles. It includes access and egress requirements for both public and private car parks, and car parking on domestic properties.

The objective of the document is to provide planners, designers and regulatory bodies with requirements and recommendations for the design and layout of off-street parking facilities.

The following lists the principle changes and additions to this edition of the document:
(a) A reappraisal of design vehicle characteristics and dimensions which includes, an increase in the dimensions of the B99 design vehicle length and width and consequential increases in the dimensions for parking spaces and access ramps.
(b) Changes to the definitions of vehicle user classes.
(c) Updating the sight distance requirements at access points.
(d) Identification of additional design requirements for mechanical parking.
(e) Re-organisation of gradient requirements to consolidate within a single section.

You can watch the webinar here:
https://youtu.be/qvzrbJkE9uM

TRANSPORTATION GROUP NEW ZEALAND

AS/NZS 2890.1 sets out the minimum requirements for the design and layout of off-street parking facilities

Signs of the times

New Plymouth council wrestles with multi-million dollar transport shortfall

Te Ara o Te Ata - Mt Messenger Bypass earthworks.

The Council met to consider how to fund the replacement of cracking concrete streetlights and ageing bridges in the city - some of them more than 100-years-old.

The threat of ageing concrete streetlights falling onto passersbys and the risk of "sweating" assets such as bridges has been raised as the New Plymouth council wrestles with a multi-million dollar shortfall in New Zealand Transport Agency (NZTA) funding.

The district council budgeted for an NZTA contribution to its transportation budget of $113 million when it signed off its long-term plan (LTP) in May.

But Waka Kotahi has stumped up just $86.42m in its National Land Transport Programme (NTLP), leaving the council $27m short.

Its Strategy and Operations Committee met recently to consider how to fund or reprioritise the replacement of cracking concrete streetlights and ageing bridges in the city - some of them more than 100-years-old - among other promised projects such as a second bridge across the Waiwhakaiho River.

Mayor Neil Holdom did not hold back in his criticism.

"I suppose this is a classic case of meet the new boss, same as the old boss. For six years now, central government has refused to adequately fund the roading network."

Holdom said people only had to look at the state highway network to know the government was a terrible asset manager.

"There's no money to do strategy. It's a budget based on potholes and very little else and really it doesn't allow us to do a good job as a prudent asset manager unless we put people's rates up."

Pothole repair was the one area where NPDC received a bigger funding allocation than requested.

A council officer's report said councillors would have to consider increasing its level of funding to meet the shortfall, maintain its funding and reprioritise what projects went ahead, or decrease funding and axe some jobs.

The report said council could debt fund the shortfall as it had in the previous LTP period, but warned that came with a downside.

"While this is an option in the present case, there is a risk that debt funding the NLTP 2024-27 shortfall may set a precedent for NZTA that New Plymouth district can and will look after itself and could result in a continuation of deficient funding under future NLTPs."

The report warned tough choices lay ahead. "For example, bridges are ageing infrastructure and we need to prioritise what gets 'sweated' and what gets renewed," the report said.

"This includes interdependencies with other programmes and aspirations such as the Puketapu Growth Area and the need for an additional bridge across the Waiwhakaiho River."

The report provided case studies outlining the implication of decreased funding.

Street light replacements was one.

The report said NZTA approved $2.1m for 2024 -27 traffic service renewals which did not allow for the replacement of additional concrete street light poles, just reactive renewals.

Council had just under 1100 concrete/spun light poles that needed replacing.

The report said the NZTA budget did not allow for it to accelerate its programme to replace these.

"These poles are starting to crack and there is a risk that they could fall on members of the public or their assets. Deterioration of streetlight columns is increased in New Plymouth due to the coastal environment impacting corrosion rates."

Bridges were another case study.

"The council has an ageing bridge stock, which poses a significant risk. Bridges generally have a useful life of 100 years, and the council has 23 bridges older than this," the report said.

"While good maintenance can extend their useful lives, it requires appropriate budgeting. The budget in the LTP of $2,648,439 would allow us to have three roaming crews maintaining our bridges, retaining walls and large diameter culverts. The NZTA allocation of $2,026,515 would mean we need to reduce this to two crews."

To align with depreciation, the council should invest at least $4.5m every three years in bridge renewals, the report said.

In a letter outlining its position, the Transport Agency said it had allocated $808m for 2024-27 period for all of Taranaki.
"To create a safer and more efficient land transport system that supports economic growth and prosperity."

The $808m captured all of Taranaki including state highways, with a large share being spent on the much delayed Mt Messenger Bypass on State Highway 3.

The council officer's report said at a subsequent meeting NZTA advised "it approved as much as it could afford for New Plymouth's transport network under the NLTP 2024-27" and the city's "allocation was in line with councils of a similar size, e.g. Hastings".

Deputy mayor David Bublitz could see a silver lining in the funding shortfall.

"This could help drive efficiencies in the organisation, get teams working together and be less siloed as we look for savings."

A point councillor Max Brough echoed.
"With my taxpayer's hat on this is us being told to do things better."

Holdom said he would like to see the NLTP lined up with councils' LTP planning processes advocated for a three waters-style solution.

"And government should seriously look at economic regulation of the transport sector because if it is good enough for three waters we are seeing exactly the same thing in transport and why not use the same solution economic regulation to determine how much money is required to adequately maintain the assets otherwise they will crumble."

The strategy and operations committee noted the officer's report and it would now go out for consideration at community board level before returning to council on 17 December where councillors would make funding decisions.
Source: RNZ

While good maintenance can extend the useful lives of assets, it requires appropriate budgeting.

What defines a busy bus route?

Public transport use across New Zealand, and around the world, is still recovering from the effects of the Covid pandemic.

In Tāmaki Makarau, Auckland Transport says use of public transport is back to around 90% of pre-pandemic levels, which is good news. Given the current on-going issues faced by trains (related to the rail network rebuild) and ferries (due to a shortage of crew), it is buses that have been leading this charge in our biggest city.

In Auckland, around 40% of boardings (across all modes) are during the peak hours (7am to 9am and 4pm to 6pm), while the other 60% is during the rest of the day. So, while many people may experience the return of patronage as a full bus as part of their morning commute, services are also busy throughout the day and into the evening.

This is something that many peak time commuters don't often see. If most use is outside peak times, how can we really judge what a well-used bus route is?

This is the first in a series of posts looking at how we can fairly judge what exactly a busy bus route is, what the busiest routes are in Auckland, and how those compare to others across Aotearoa.

If most use is outside peak times, how can we really judge what a well-used bus route is?

How do you fairly compare routes?
There are many possible ways to measure how busy a bus route is, most of which focus on the performance of individual trips (such as utilisation of on-board capacity). These metrics are valid, but they tend to focus on or favour measurement of the peak period. If we want to measure the overall performance of the route, then we need a different measure.

Measuring overall boardings on a route is an obvious approach, but it has its flaws too. Bus routes have different lengths, frequencies, sizes of vehicles, and other characteristics that mean just looking at boardings doesn't give a complete picture. A hypothetical route that runs infrequently but has all its seats taken may have the same number of boardings as a service that runs every 5 minutes but is only a third full each trip. Which of these would we say is busier?

We need a way to fairly compare these routes. One measure that allows for a fair comparison of routes with different frequencies, lengths and runtimes is boardings per service hour (BPSH). This measure is based on the idea that a 'service hour' is essentially a standardised unit.

One hour's worth of service on a busy route costs essentially the same as an hour on a quiet route, given driver wages are the main cost of operating public transport (and the size of the bus doesn't have a significant impact). The metric therefore allows us to look not just at how busy a route is, but how efficient it is.

To understand this metric, consider this example, if Bus Route A runs hourly, and its trip takes 30 minutes, that is half an in-service hour. Bus Route B's trip also takes 30 minutes, but ran every 15 minutes, that would be two in-service hours' worth of time. If there were 10 passengers using each service within those same hours, that would equal 20 (10/0.5) and 5 (10/2) BPSH respectively.

Using this metric, we can look at how busy routes are relative to each other (even if they operate differently).

We should also keep in mind that not every route is designed to achieve high BPSH – some routes play an important coverage role, providing transport access to areas that may never be expected to have many boardings. In Auckland, most services are expected to achieve at least 17 BPSH, with most others between 7 and 17.

What are the busiest routes in Auckland?
Auckland Transport helpfully reports its BPSH figures by route on its website. I used data from March 2023 to compare it with publicly available data from other cities.

The core routes of the Northern Busway, the NX1 and NX2, are the busiest in Auckland, perhaps unsurprisingly given they are premium, rapid transit services. The NX1 achieves between 60 and 80 BPSH, while the NX2 manages around 50 to 60.

The Dominion Road peak bus services (252, 253) are the next highest, with around 50 to 60 BPSH each. These services only operate at peak times (in the peak direction only), so it is also unsurprising that they perform well. The all-day Dominion Road services (25B, 25L) manage around 30 to 40 BPSH.

Rounding out the top five is route 70, from Botany to Britomart. This is the highest non-rapid transit all-day route, and it achieves between 40 to 60 BPSH (depending on the month). Given the route's length and travel time are longer than the other already mentioned routes, this is a strong performance.

Most frequent routes (including where services are made up of two branching routes, like the 22N and 22R on New North Road) average around 25 to 35 BPSH. Generally, BPSH is highest for frequent services, then connector services, then local services (using the terminology from AT's service hierarchy) and AT's targets for these services are generally in line with this expectation, with a few exceptions where connector routes perform especially well.

What about examples of low performing routes in Auckland?
The lowest 'regular' all-day service that AT operates is route 393, the Pukekohe South loop, which manages around 4 to 5 BPSH. This service has a low performance given it operates in a smaller rural centre, and also suffers from the fact that Pukekohe's train station is currently closed.

Many other low performing routes are rural services (such as route 128 between Helensville and Hibiscus Coast), or services to developing areas (like route 378 between Karaka and Papakura).

The lowest performing all-day service within the central Auckland urban area is route 783, the Eastern Bays Loop. This service manages around 6 BPSH. It connects to a number of smaller centres, like Eastridge, Mission Bay, Kohimarama and St Heliers, and provides connections to services like the TāmakiLink.

The route is essentially a 'coverage' service, designed to plug gaps in the wider network and ensure connections are available all-day to these centres from places like Glendowie. It is also a wealthier area, relatively close to the city centre, which is likely to impact on the use of services.

How do Auckland's BPSH compare to other cities in Aotearoa?
No other New Zealand region publishes information about boardings per service hour, and many only release network-level information. A few regions do release route-level boardings information, which makes it possible to work out BPSH by calculating the number of in-service hours (from timetables) and then dividing the boardings by these.

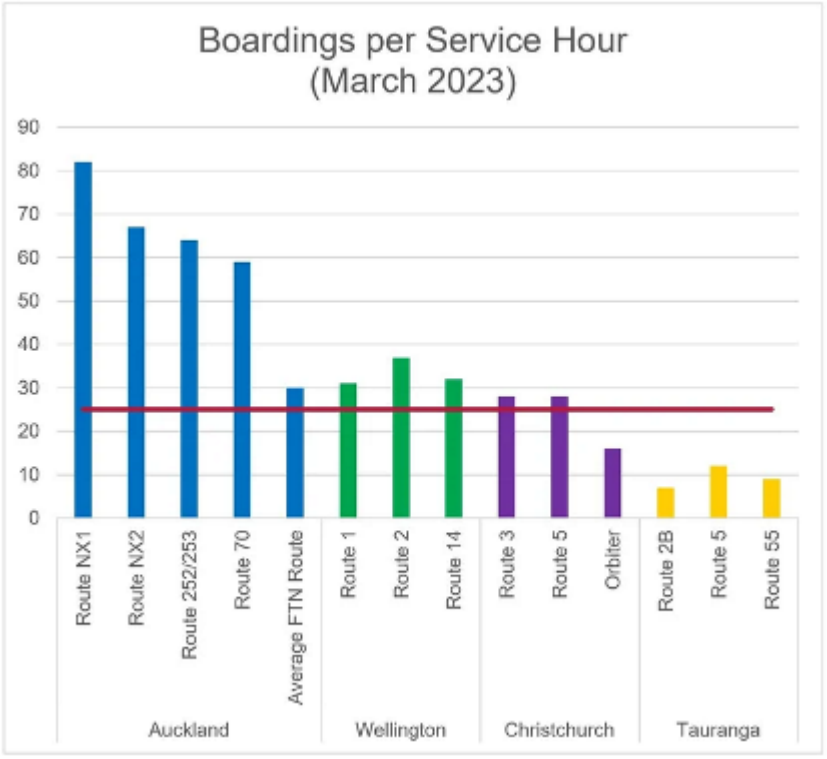
Importantly, Auckland's reported BPSH is based on weekdays only. Where other cities publish their route-level boardings, it is usually by week or month, so calculating BPSH involves considering weekends.

This gives Auckland's figures a slightly unfair advantage, as Auckland's weekend patronage is usually roughly a third of weekday patronage while services generally operate at a similar level of all-day frequency on weekends (in all cities). The data used here is all taken from March 2023, so may be slightly out of date given the rate at which public transport use is returning.

Auckland Transport says use of public transport is back to around 90% of pre-pandemic levels, which is good news.

Wellington's three busiest routes (in terms of total boardings per week) perform well in terms of BPSH compared to many of Auckland's strategic routes:

- Route 1 between Island Bay, the City Centre and northern suburbs achieves around 30 BPSH.
- Route 2 between Karori, the City Centre, and Seatoun achieves around 35 to 40 BPSH.
- Route 14 between Kilburnie, Roseneath, the City Centre, Wilton and Karori achieves around 30 to 35 BPSH.
- All of these routes benefit from being 'pendulum' routes that are routed through rather than terminating within the City Centre. This means each trip can achieve high utilisation and boardings in both directions.



A 'busy' bus service in New Zealand's three main centres appears to be one that achieves over 25 boardings per in-service hour.

Christchurch's three busiest routes are slightly less busy than Wellington's but still perform well compared to many of Auckland's strategic routes. Use of public transport in the city is still relatively low compared to what it was before the 2010/11 earthquakes, due to network changes and businesses moving away from the city centre to areas where the public transport network is less competitive with other modes.

- Route 3, between the Airport and Sumner, achieves around 28 BPSH.
- Similarly, route 5 between Hornby (with some services starting in Rolleston) and New Brighton also achieves 28 BPSH.
- The suburban circular Orbiter route is the next-busiest route and achieves 16 BPSH. The reason this is lower than the other routes is partly due to its high (10-minute) frequency throughout the day.

As a smaller centre, **Tauranga's** performance is unsurprisingly lower. Its three busiest routes, in terms of monthly boardings, are closer to the performance of 'local' routes in Auckland (despite some running every 15 minutes, which is considered 'frequent' in Auckland):

- Route 2B between eastern Papamoa, Bayfair and the City Centre achieves around 6 to 7 BPSH.
- Route 5 between Bayfair, Mt Maunganui and the City Centre achieves around 9 to 12 BPSH. This is the highest performing route, given it connects three key centres.
- Route 55 between Ohauiti, Greerton and the City Centre achieves around 9 BPSH.
- Despite all these routes serving multiple centres at decent frequencies, Tauranga's lack of bus priority and relatively uncompetitive travel times (even with the traffic congestion the city experiences) likely contributes to relatively low BPSH. As noted above, these services may perform better if considering just weekdays.

So what?

Consideration of BPSH provides a useful way to compare how well services with different characteristics, in different jurisdictions, are performing. As a standardised measure, it lets us check if services that have fewer overall boardings are performing well against more popular routes by considering the amount of resource required to operate them.

BPSH also provides a useful way of checking if a potential improvement to a route is worth the investment. Hypothetically, a large percentage increase in boardings may make an improvement sound appealing. If achieving that increase requires investment that will reduce overall BPSH, however, we might think that it is not actually efficient. Ideally, we should be increasing both overall boardings and BPSH, to ensure the best value for money.

In closing

A 'busy' bus service in New Zealand's three main centres appears to be one that achieves over 25 boardings per in-service hour. This accounts for the busiest routes in Christchurch and Wellington, and the top 25% of all routes in Auckland.

Not all routes are meant to carry lots of people all the time. Public transport has an important social role in providing access to transport for everyone in the city (especially those on lower incomes or who may not be able to use other forms of transport).

In the next post in this series I will look at the factors that contribute to routes achieving high BPSH, and compare New Zealand cities performance to cities overseas.

Source: Abley

Rising Pasifika star wins NZ Roading Industry award

She also made history as the first Samoan woman engineer to present at the Auckland Council Transport and Infrastructure Committee

Fatima Leung-Wai, one of Auckland Transport's Construction Delivery Managers, recently received the inaugural NZ Roading Industry Rising Star Award.

Fatima Leung-Wai joined Auckland Transport as a Senior Project Manager in February 2023, following a year at GHD as an electrical engineer and project manager. Her rapid career progression led her to manage a team of six project managers overseeing significant transportation infrastructure projects in Central Auckland.

Fatima's leadership has been pivotal in the success of the Point Chevalier to Westmere Improvements project (right), where her strategic communication turned conflicts into collaborative successes.

She also made history as the first Samoan woman engineer to present at the Auckland Council Transport and Infrastructure Committee.

To inspire future engineers, Fatima engaged students from Western Springs College and Pasadena Intermediate during Engineering New Zealand Wonder Day.

Committed to community empowerment, Fatima is also a founding board member of the Vinnies Tamaki Makaurau Trust and helped establish the PACIFICA Auckland South-Eastern Branch. Her advocacy extended to the Counties Manukau District Health Board Consumer Council during the Manukau Health Park refurbishment.

Fatima's leadership journey is not confined to New Zealand. In 2016, she coordinated a multi-language youth festival schedule for World Youth Day in Krakow, Poland, where she had the opportunity to have lunch with Pope Francis. In 2009, she worked with Engineers

Without Borders to install a solar-powered water pumping system in Tonga. Her dedication to the engineering field is further demonstrated through her role as Chair of the IPENZ Taranaki Branch in 2013, where she set up Taranaki Connect, an initiative for women in engineering and construction.

Fatima's story is one of service, leadership, and unwavering commitment to positive change. Her achievements and dedication make her a deserving winner of the inaugural NZ Roading Industry Rising Star Award, inspiring those around her to make a difference in the world.
Source: AT

Europe wants you to travel by train. But why is it so complex and expensive?

"I'm trying to live a more sustainable life," she said, "And I felt embarrassed I ended up flying."

Across Europe, flights are priced at a fraction of the cost of train tickets, hampering the growing number of people who want to travel sustainably. The big question is: why?

When Tess Longfield booked her family holiday this year, sustainable travel was one of her major concerns.

"We wanted to go to Brittany," she said, "and we wanted to travel by train because I felt it was more sustainable. I bought Eurostar tickets easily and was willing to pay extra in comparison to flying. I booked an Airbnb and planned to buy the Paris-to-Brittany train ticket closer to the time. I felt good about the trip."

But it didn't go according to plan. While Longfield bought the Eurostar tickets nine months ahead of the trip, the internal French rail tickets weren't available – typically you can't buy European train tickets more than six months in advance. They sold out immediately on the day they became available, leaving her with no option but to cancel the Eurostar tickets and book a flight instead.

"I'm trying to live a more sustainable life," she said, "And I felt embarrassed. I felt ashamed that I ended up flying. I don't mind spending more or it taking more time to arrange – I really wanted to do it by train."

She's not alone. Sustainability communications consultant Jo Geneen is based in Amsterdam and regularly travels across Europe by train to meetings in Hamburg, Paris and London. But she's one of a growing number of consumers feeling frustrated about the difficulties of travelling by train compared to the far-less-sustainable option of flying.

"I recently booked a trip to Hamburg from Amsterdam," Geneen said. "I was forced to cancel it at the last minute, and found the ticket was non-refundable. It's so frustrating: it already cost more." She was left with the choice of rebooking the trip, knowing it was non-refundable and more expensive, or booking a faster, flexible and refundable flight. Sadly, it was an easy choice to make.

"As a consumer, how can we make the right decisions? When you're faced with routes that are four or five times cheaper to fly, it's so hard to do the right thing."

It's a question seemingly at odds with what's happening in Europe's railways. Across the continent, rail travel is booming. Throughout 2024, night train routes across Europe have continued to expand and grow, led by Austria's Nightjet network that now runs routes including Vienna-Venice and Paris-Berlin.

Eurail, which runs Interrail, one of the continent's best-known train travel brands, says it has seen the demand for European train travel and flight-free itineraries grow by 25% between 2022 and 2023.

There's no question that people want to travel by train, despite the higher prices and occasional inconveniences. Some governments are also prioritising it. In France there is a ban on short-haul flights if there is a rail alternative that takes less than 2.5 hours; and in Spain, a similar ban is being considered as part of its 2050 climate action plan.

Yet, for all the rise in travel options and bookings, there continues to be a disconnect: people in Europe are finding that significantly higher prices and complicated booking situations thwart their desire to be sustainable.

Justin Francis, CEO of Responsible Travel, the world's largest travel company dedicated to environmentally friendly travel, has been a long-term campaigner on the issue. He can see a few key reasons why train travel is struggling against Europe's budget airline market.

"Why do we not tax aviation fuel, which is a fossil fuel, therefore artificially making aviation cheaper? We should have a fair taxation system," he said. (Diesel fuel used for trains is currently taxed at differential rates across Europe, depending on the country.)

"The final reason is that under the EU package holiday regulations, if a tour operator books a customer on a holiday involving rail and the train is delayed or failed, the tour operator must refund them," he says. "If they book with an airline and the airline is late or delayed or cancelled, the airline refunds them."

What this all means for travellers is that buying a holiday where you travel by train is not likely to be a seamless one.

You could be left sitting on a train platform waiting for a connection for longer than you'd like; it will probably be more expensive, and most likely you'll have to book it yourself.

In addition, as it's harder for tour operators and travel agencies to book train travel for their customers, there's less likelihood of getting a group rate and better prices, too.

These issues have not gone unnoticed at a government level. An EU Action Plan was launched earlier this year aiming to make rail travel more sustainable, efficient and well-connected across the continent.

Why do we not tax aviation fuel, which is a fossil fuel, therefore artificially making aviation cheaper?

Another reason, he says, is that we need to join up train routes to make travelling by rail quicker and more efficient across Europe. And travellers should be able to book further ahead than 180 days – not being able to do so means that travel agents and tour operators can't guarantee routes and plans far enough ahead of time, and can't offer packages that would otherwise make sense, logistically and financially.

It's a step forward to harmonising rail networks and working towards better solutions, but without addressing the taxation issue, and thereby levelling prices, it's unclear if the EU's commitment to making train travel the top choice will have the desired impact.

So, what can you do if you want to travel by train?

Byway is a rare UK travel agent that arranges 100% flight-free travel across Europe. Using its custom JourneyAI programme, it plans and arranges trips, finding the best routes and bypassing the logistical issues of working across different currencies, languages and timetables for its customers in the process. Customers also have a WhatsApp number to call if they get rerouted or delayed during their trip.

"If you exclude time and money from the trip-planning process," said James Hill, one of the company's concierges, "Who wouldn't want to travel by train in Europe?"

Byway says their customers enjoy the very things you can't find when you're travelling by plane: slow travel, a more old-fashioned slant on life, and the restaurant cars, where you can eat in comfort while watching the countryside pass by.

While the journey might be slower, you don't have to check in two hours before, you avoid long security screening queues, and you arrive in the heart of a city, not an hour away from it.

"Italy is eternally popular as a destination for us," says Hill. "It's got tiny little regional trains that rattle through vineyards and super modern high-speed trains – some of the best in the world. It's got sleeper trains that drive onto ferries in the middle of the night. It's a perfect place to do rail travel."

In the FAQs on their website, the company makes it clear that the price issue is one they would like to tackle too, also pointing out that airlines pay no fuel duty and plane tickets are zero-rated for VAT, meaning it's much easier to offer cheap fares. Instead, they advocate for levies for frequent fliers, flight taxes and a ban on domestic short-haul flights.

Elswehere, Busbud is also seeking to make it easier to plan a flight-free trip by removing the logistical friction of booking via multiple operators. The firm, likened to an Expedia for ground transportation (bus, coach and train travel), offers a digital way to book point-to-point transport across the US, Canada and Europe without flying.

"Ground transportation is the last area of travel to be digitised and there's so much to do and it is so, so complex," explained Christine Petersen, Busbud's chief marketing officer.

"As travellers, we're looking for better solutions that aren't flying. We talk about the pleasure in the journey and in the experience aspect that isn't just about getting from A to B. You can look out the window, you can get up, you can walk about. You go into the cafe car and have a bite to eat. It's a very different experience."

While the journey might be slower, you don't have to check in two hours before, you avoid long security screening queues, and you arrive in the heart of a city, not an hour away from it. All this means that, for many routes, you're not losing a significant amount of time on the way.

However, from Francis' perspective, significant changes need to take place before train travel comes anywhere near to taking over from air travel.

"We need to compete on a level playing field," he said. "I think we've been living on hope by encouraging people that rail travel is the answer. It's time to get real. It isn't the answer, unless we can address the fundamental issues."
Source: BBC

Matrix Innovation Award: applications to open mid-2025

The Matrix Innovation Award is the Transportation Group's premier award to recognise innovation in the transportation industry. The award celebrates stand-out innovation in transport improvements across any sector – safety, environment, community, construction, technology, data, etc.

The winner of the award is announced at the Transportation Group conference each year, at which finalists will present their project to attendees.

Due to the 2025 conference being later in the year, applications for the Matrix award will be delayed to mid-2025 from the planned opening date of December 2024. Keep yours eyes peeled for the call for applications,

The winner or team leader of the winning project will win a trip to the next AITPM conference in Australia (flights, accommodation, registration, activities) and will be invited to present on their project to a conference stream. Matrix will be developing a reciprocal award for an Australian winner to attend and present at the Transportation Group conference.

The application form is here

If you have any further questions regarding this award or the application process, please feel free to contact the Transportation Group's Awards coordinator Daniel Newcombe at: daniel.newcombe@at.govt.nz

Portfolio Thinking: Why best for asset doesn't cut it anymore

The way we approach asset management is changing. We are moving from a focus on what is best for each asset to considering what is best for the entire asset portfolio. While factors like climate change can impact our ability to afford the best solutions, asset managers can explore new ways of thinking to deliver better outcomes for their stakeholders.

The best for asset approach

As asset managers, we manage a diverse network of individual assets. These assets can be categorised into families with similar features – like footpaths, culverts, structures, and continuous assets like roads or pipe networks. Each group has unique characteristics that influence our management approach, whether the assets are standalone, componentised, or segmented.

The 'Best-for-Asset' approach treats each asset as a discrete item and develops a maintenance and renewal strategy based on the best whole-of-life solution for that specific asset, section or component.

Typically, an economic analysis is performed on a range of design options to determine the optimal whole-of-life solution for each asset. Renewal activities are ranked in a prioritised programme with a typically tight budget.

It seems logical to think that if each asset is managed optimally, the whole network would be as well. However, this isn't necessarily true, as assets are interconnected, and treating two assets at the same time does not necessarily double the cost due to mobilisation and scale efficiencies for example.

Best for asset vs best for portfolio

From a renewal viewpoint, assets are not discrete, and there are cost efficiencies to be gained through combining activities, grouping by location, and lengthening treatment sections to minimise establishment and traffic management costs.

If we were to look at treatment lengths for example, which are uniformly performing contiguous section of roads. These are scheduled for resurfacing or pavement renewal in the future and the best for asset approach assumes each treatment length will be programmed at the optimum time for that section to maximise life from that asset.

The issue arises when the adjacent section of road may be scheduled for a similar treatment the following year. It is much more efficient to combine those sections of road into a single resurfacing, rather than optimising the lives separately, by considering the establishment and disestablishment costs of plant and traffic management. In simple terms, resurfacing four 200m sections is much less efficient and more expensive than resurfacing a single 800m section.

Adopting a 'whole of corridor' approach, rather than focusing on optimising each individual asset, enhances productivity and efficiency. The forward work programme is more likely to be completed within the construction season, reduce overall costs, minimises customer disruption, and improves performance across the board. While this concept is not new, it does serve to support the push towards a much more intentional approach to this whole of corridor approach, particularly given the current issues faced by asset managers.

Impact of Climate Change

It is fair to say that budgets are always constrained, but there has been a step change in demand on funding recently from the increase in significant weather events and increased rainfalls. Impacts include shortened asset lifecycles, increased funding needs, increased replacements needs for now under-capacity assets that are still in good condition, and the requirement to fund recovery to assets damaged by storm events e.g. Northland, Auckland, Hawkes Bay and Marlborough.

Previously reliable assets are now struggling to provide the same level of service to the community. Increased rainfall impacts culverts capacities, causing frequent flooding despite assets being in good condition. This results in not only renewing assets at the end of their lifecycle, but also repairs to extend the life of the asset.

Mike Tapper
Senior Technical Director - Transportation

Beca

In simple terms, resurfacing four 200m sections is much less efficient and more expensive than resurfacing a single 800m section.

What's more, renewals now cost significantly more due to rising construction costs over the past five years. Inflation has surged, with extra pressure on available budgets and reduces the scope of work achievable with the same funds. How should the asset manager respond?

Fortunately, there are solutions. Understanding the budget environment and focusing on corridor efficiencies enables asset managers to make the best whole-of-life decisions for the network as a whole. However, tight budgets sometimes force managers to delay or make non-optimal decisions on major expenditure. Certainly, this seems to be the environment we are in currently. So, how can we achieve expenditure in the most efficient way possible given the funds available? How can we close the gap as much as we can between what we need and what we can afford?

Reducing demand and increasing effectiveness

Councils can challenge service levels rather than replacing assets like-for-like. For instance, a two-lane bridge on a rural road could be replaced with a single-lane bridge that offers the same service level. This approach can apply both at the asset and network levels.

Consider how response times can save money through finding the right balance between efficiency and responsiveness. Responding to a pothole within two hours can be a great customer response but is an expensive approach to maintaining potholes.

Responding to a pothole within two hours can be a great customer response but is an expensive approach to maintaining potholes.

Contract response times, often based on complex scenarios involving fault, severity, location and asset hierarchy, can constrain efficient operations and are challenging to monitor and comply with. This can be simplified by empowering the contractor to determine a response time based on the situation and monitor whether that is met. Robust and honest contractual relationships can go a long way in managing expectations.

Taking on Risk

Lower-cost/higher-risk solutions can allow the spread of funding to be greater. For road renewals, there could be two options, a renewal that requires a $500K capital investment for a low-risk solution, or a $200K capital investment with higher risk, heavy maintenance with shorter lives and higher risk of future maintenance.

The asset manager will often choose the solution with the best Net Present Value (NPV) but often these present high up-front costs to deliver a long-term saving, a luxury one may not be able to afford. In a constrained environment, there is an opportunity to consider what the benefit would be of keeping that $300K for other investment. A better solution may be to take the higher risk option with the added benefit of investing the "saving" into other areas.

Consider treating design standards as a guide

In greenfield development, it is fair to say that design standards are a base minimum requirement.

In maintenance, assets are already in existence and not necessarily in good condition. For example, with slip recovery works, often a retaining wall solution will have the seismic design requirements relaxed and incorporating these seismic requirements significantly increases the cost of the solution.

This can tie up funding that could be used to repair other slips that would mean the road can open. Secondly, if such an earthquake event did occur, the wall would be safe, but the road could remain closed due to slips in other locations. A more optimal solution is for the client agency to take on the seismic risk to allow more sites to be repaired.

With culvert design, an asset manager may have several sites where culverts are flooding in a 2-year event. It is unaffordable to upgrade the culverts to the full 50-year design event but unacceptable for the community to have flooding in every rainfall event. A solution could be to repair to a 10-year design event.

Whilst perhaps not the most efficient solution, but the inclusion of other mitigating treatments may improve an overall solution to the network problem. Designers particularly need to be open to a more pragmatic approach, as often some designs may not be financially possible nor acceptable. It's important to focus on feasible solutions and engage in risk-based discussions with the client to explore options and make informed decisions.

Understand the criticality of assets
Often communities with have several route options serving them. If structures on two routes are both requiring replacement, consider whether the community needs both structures, or can one become a ford or a have a reduced capacity such that freight takes the alternative route. Overlaying a criticality framework over the asset base means that some assets will become potentially redundant or allow a lower level of service, again creating budget saving opportunities.

Cost
Contract structures that allow for efficient procurement environments with flexible programming, innovative solutions and continuous improvements are effective, and are often based on the relationships between parties as much as any one contractual framework. Allowing for collaborative inputs and flexing of programming as various situations arise allow for efficient programmes that can respond to challenges quickly.

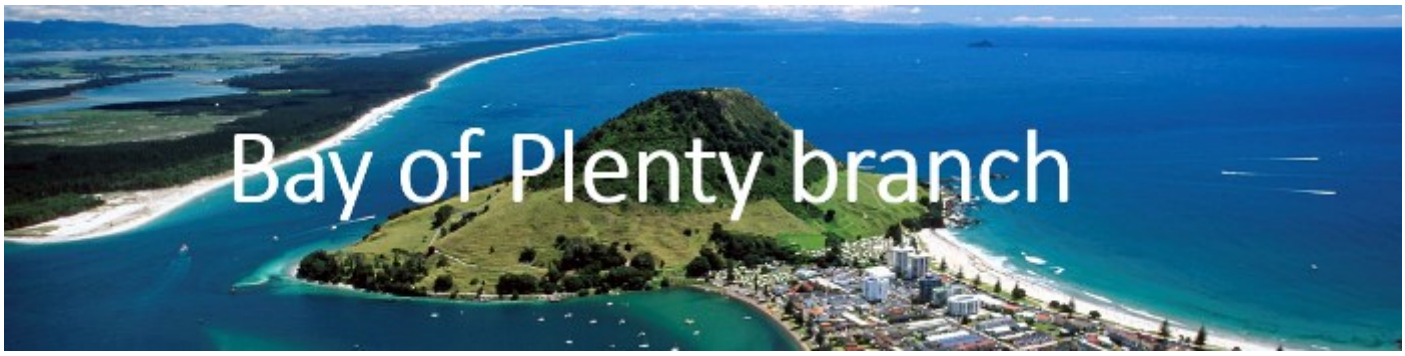
A single area-based rate for example does not allow for any productivity savings to be monetised. Consider how savings will be accessed when setting up the schedule of quantities to be priced.

Standardising solutions and design elements present a significant opportunity for cost saving and working at pace. For instance, using existing bridge beams for the construction of the bridge on SH25A coupled with an empowered team significantly reduced the timeline for the programme and the bridge was able to open three months ahead of schedule.

Summary
The current environment is pushing asset managers to move beyond best for asset approaches. The time of up-front capital expenditure to reap long-term savings is a luxury we often can't afford. Hopefully this article has given some approaches to close the widening gap between what we need and what we can afford.
Source: Beca

The current environment is pushing asset managers to move beyond best for asset approaches.

Beca



The Bay of Plenty branch hosted it's annual Christmas lunch in Tauranga recently.

It was a great occasion to catch up and start making plans for events we will organise in 2025. Lots of Christmas decorations (some wearable) got us in the festive sprit.

Thanks to the BoP organising committee for all your effort this year, and best wishes to our secretary Erica for her move to Wellington (and the conference organising committee).

Meri Kirihimete

All change on the London Overground

All change on the Overground - by Jonn Elledge (substack.com)

Last spring, to great fanfare, Transport for London unveiled the new names for the six lines of the London Overground rail network. There was excitement, in some quarters, about the biggest shake up of the capital's tube map in many a year.

There was rage about the (this from the *Daily Mail*) "patronising and insultingly twee" choice of names. There was also cheering about the exact same thing, and the fact that it had annoyed the people who were annoyed by it. There were even columns, by humble substackers, in national newspapers.

And then – well, it stopped. The hullabaloo died down, but other than some temporary posters at Overground stations, announcing that the new names were on their way, not a lot seemed to happen.

That didn't seem right: TfL had said that the changes would be complete this autumn. And there must surely be quite a lot of things to change. Maps on platforms; maps in trains; wayfinding signs at stations (6,000 of them, TfL says); digital information, everywhere you might think of to look for it.

All of this must be changed, as quickly and seamlessly as possible.

So what, I wondered, is actually happening? What does a change like this actually involve? And blessed as I am with the sort of newsletter in which I can write about pretty much whatever I damn well please, I decided to ask.

The new names came after much of the work on a rather less discussed element of the new line identities: the colours

First things first; the names were not the most difficult thing. They may have been the most controversial element, and required a long selection process (consultation exercises, engagement with stakeholders, long list, short list and so on).

But "*whatever* names we had been picked would have been quite divisive," argues Jon Hunter, Transport for London's head of design – or as he cheerfully describes himself, "head of crayons". "So long as there's a story, people will accept them eventually."

And the names, in fact, came after much of the work on a rather less discussed element of the new line identities: the colours. These will be shown on the map in what are known as 'tramlines': two coloured lines, with a third white line of equal width separating them.

TfL's intention is that these should become as instinctively associated with the lines they represent as the colours of the tube lines are today – that one day a map showing the Overground in uniform orange should look as strange and jarring as early Tube maps showing the Bakerloo in red and Central in yellow now do.

Picking the new colours, though, was no easy business. All six needed to work on both the Tube map and the more extensive Tube & Rail Map, produced in collaboration with the Rail Delivery Group. They also needed to be colours that wouldn't clash with branding used by other organisations (other bits of TfL, train operating companies) whose material they might appear near.

Most importantly they had to be striking and easily recognisable when reproduced on vitreous enamel, of the sort used on TfL signage (and also, unexpectedly, fabergé eggs). Though it gets less attention than minor changes to the Tube Map, TfL sees this "materiality" as another key part of its branding, Hunter says, and the use of such enamel has a number of benefits. It's self cleaning and static inert, so dirt doesn't build up as it would on, say, aluminium.

The colours also remain stable, even when exposed to light for long periods. There is signage still extant on the tube today that's been up for a century or more; the new generation of overground signage is being designed with similar lifespans in mind.

That durability does, though, come with restrictions: it means, for example, that the colours can't be too bright. So selecting the new colours was done "with great care and over quite a long period of time", Hunter says. Around eight possible shades were identified, then shuffled through various combinations to minimise clashes (areas where lines of similar colours meet, for example).

The selection was only finalised after the line names had been chosen, so that, where possible, there would be a link between colour and name. So, the Mildmay line, named after a hospital, is a blue not a millions miles from the NHS logo; the Suffragette is a sort of pear green in part because that means the tramlines end up representing two thirds of that movement's green/purple/white tricolour. The Lioness is yellow because, well, lions are yellow.

Hunter didn't give reasons for the other three (red for Windrush, maroon for Weaver, grey for Liberty): they were just the best options from the colours left over. But it seems likely Londoners will be associating them with their lines and instinctively navigating by them very soon. "The names and colours normalise through use,"

Underground

	Name
	Bakerloo
	Central
	Circle
	District
	Hammersmith & City
	Metropolitan
	Northern
	Piccadilly
	Jubilee
	Victoria
	Waterloo & City

Overground

	Name
	Liberty
	Lioness
	Mildmay
	Suffragette
	Weaver
	Windrush

Hunter notes. "I don't mean decades of use, but months: this stuff embeds very quickly." There was an outcry from some about the name "Elizabeth line" when it was first announced back in 2016, he notes – but "very few people still call it Crossrail now".

Less agonising went into the decision to show the lines as hollow tramlines, not solid colour. "We use hollow/filled to provide some kind of semiotic difference between tube and other lines," Hunter explains. The main difference between the two is headway: "The Victoria line runs every 1-2 minutes, while parts of the overground are much less frequent."

I'm not entirely sold on this – the Elizabeth line and parts of the DLR get high frequency services, while parts of the outer tube network do not, yet it's the latter which get the imprimatur of solid colour. But, Hunter adds, the human eye's inability to distinguish more than around a dozen colours at a glance would mean that "if we just went for all solid colours we would have ended up with different graphical language by now anyway".

This is, after all, why Paris uses different thicknesses to show different types of train; New York bundles multiple lines into single colours; and so on.

That covers what the changes are. But how will they be rolled out across the network?
As it turns out, quietly, largely unnoticed, that's been happening for ages.

Backroom efforts to redraw maps and signage schemes have been going on since last summer, many months before the announcement was made. TfL has already published updated maps incorporating the new designs (which got a lot of attention on the internet), and assorted design guides outlining technical details (which by and large haven't).

Most importantly they had to be striking and easily recognisable when reproduced on vitreous enamel, of the sort used on TfL signage (and also, unexpectedly, fabergé eggs).

The biggest, most public bit of the change, though, will be the replacement of existing signage using uniform Overground orange with new wayfinding signs using the new names and colours.

This, says Hunter, has been the "most complicated part of it" but, miraculously, most of it has already happened. At the time we speak, in mid July, he tells me that around 70% of the signage has already been replaced.

Over a period of a few days all of that temporary vinyl overlay will be removed and the new signage will be revealed.

So why haven't regular passengers noticed it on their commutes? Because the new signs are hidden by, effectively, stickers.

"You shouldn't notice that there's been any physical change to the signage unless you look quite closely and notice, say, a little bit of blue at a Mildmay station," he explains.

"Over a period of a few days all of that temporary vinyl overlay will be removed and the new signage will be revealed."

The reason for this "peel and reveal" approach is that the change involves 113 stations across six lines: "It's probably the biggest [such change] Europe, if not the world, has ever done in a live environment… Unless we do what we call a big bang change, we risk creating a confusing mess for people."

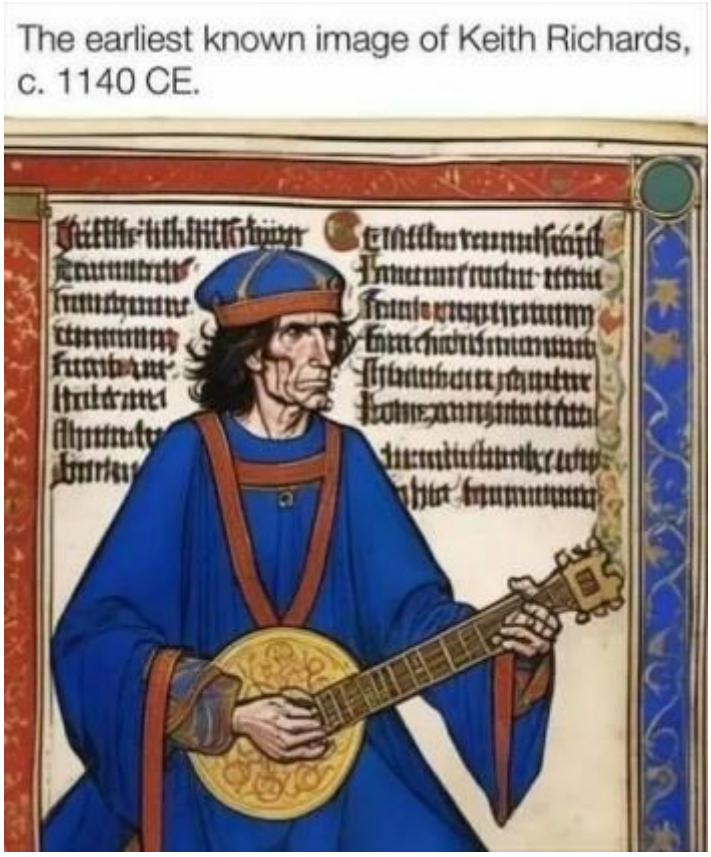
While all this is going on, other teams are updating other materials: not just the printed line maps, but electronic systems like the moving line diagrams shown on screens aboard trains; the journey planner app, TfL Go; the physical boards which update passengers about disruptions.

"It's an overused word, but it really is a herculean effort," says Hunter. "It involves many many teams, many organisations, ourselves, our partners at Arriva [the company which operates the Overground], MTR [same, with the Elizabeth line] and C2C [Barking and Upminster stations]". Even then the job won't be done: there'll still be maps and diagrams on trains and other assets run by other operators to consider.

As things stand, due to the cost implications, those changes will roll out gradually as part of the regular updates through which maps are quietly updated all the time. "But if we get feedback suggesting that huge numbers of people are confused, we'll look at fast tracking that."

For the moment though he doesn't expect that to be necessary. "Londoners work things out very, very quickly, which is reassuring for us." I tell Hunter I'm excited to nip across the road to my local Overground station to see if I can spot a vinyl overlay, and he breaks my heart: my line hasn't been done yet.

Soon, though. One day, not many weeks from now, London will wake up to find it has six new lines. It's like magic, only with enamel signage that'll outlive us all.



Caption competition

This photo was sent in by keen read (and former Group Chair) Bridget Burdett. It shows the remains of a parking sign, lying in the trail of a crashed car, A caption has been suggested. If you have a better one, please send it to Bridget. Or just think it to yourself and chuckle.

India's iconic tramcars set to ride into Kolkata sunset

In February 2023, Kolkata celebrated 150 years of its tramways with music, cake, a beauty parade of vintage trams, including a century-old wooden car, and a cheerful tram conductor, Roberto D'Andrea, who travelled all the way from Melbourne, Australia.

Melbourne and Kolkata boast two of the oldest operational tramways in the world. Melbourne's trams date back to 1885. Kolkata's first tram, a horse-drawn one, started in 1873. That's where the similarities end.

The state government has announced that it wants to do away with trams entirely, save for one small loop as a heritage route

Melbourne's tram system is going strong despite the government once attempting to get rid of them. The system has been upgraded and some trams are solar-powered.

Kolkata's trams have been steadily declining over the years. From 52 routes in the 1970s, down to 25 in 2015 and now to just three. The tram cars rattle and wheeze, having not been updated in years. Even the signs inside have not changed. "Beware of pickpockets", "No change available for 100 rupees ($1.19; $0.89) or 50" and "To stop the car please ring the bell only once".

Now, the state government has announced that it wants to do away with trams entirely, save for one small loop as a heritage route. But a dogged group of tram activists is fighting back.

"It's a huge backward step as cities worldwide are 'decarbonising transport' because of global warming and climate change," says Mr D'Andrea, who has helped foster a Kolkata-Melbourne tram friendship over the years.

"More than 400 cities run tram systems. Cities that dismantled their tramways are rebuilding them at great expense in places like Sydney and Helsinki and all over France. Hong Kong runs trams at high frequency on narrow streets," he says.

But West Bengal transport minister Snehasis Chakraborty told the media: "The population and vehicular count of Kolkata have multiplied several times but the city's roads have not widened. Road space continues to hover around 6% which is way less than Mumbai's 18% and Delhi's 10%."

Both those cities once had trams. Mumbai had double-decker ones. Both have done away with them, leaving Kolkata as the only Indian city to hold onto the trundling streetcars.

In 1902, Calcutta as it was known then, became the first Asian city with electric trams. Even after independence, the Calcutta Tramways Company was listed on the London Stock Exchange till 1968. In some ways, the mystery is that Kolkata's trams have survived this long.

"In the 1950s and 60s, during the personal automobile boom, people were getting rid of trams everywhere, not just in India," says transport consultant Suvendu Seth. "Now they are making a comeback. The light rail in many cities in the United States is just a newer version of trams."

He says that instead of complaining about lack of road space, an innovative solution could be to make some roads open only to pedestrians and trams.

Source: BBC

Ian Clark travels the world

We've all been waiting with bated breath for the latest report from Group member Ian Clark in his travels around the world.

This edition, Ian was too busy to write a full report, but he was kind enough to send three illustrative photos of his recent travels.

The captions are short, if deep. Enjoy.

Me taking a photo of my wife taking a photo of her sister taking a photo of a statue (in Oslo)

Man with a large fish (in Gothenburg)

A ferry with a silly name (in Oslo)

California driver nabbed for using carpool lane with plastic effigy

In an apparent effort to add to the illusion, the skeleton was wearing a mask with a giant mouth.

Drivers looking to beat California's endless traffic can use designated carpool lanes, provided they have others in their car. But there's one pesky requirement: those other people have to be alive.

That was not the case for a driver stopped recently near San Jose for using a fake companion, police say. Riding in the passenger seat was a plastic skeleton. In an apparent effort to add to the illusion, the skeleton was wearing a mask with a giant mouth, reminiscent of the Scream films.

"While #spookyseason is upon us, it's important to remember that decorations being transported in the passenger seat do not qualify to meet carpool requirements," the California highway patrol (CHP) wrote on Facebook. The driver has not been publicly identified.

Carpool lanes, or high-occupancy vehicle (HOV) lanes, aim to incentivize ridesharing, easing traffic and "maximizing the people-carrying capacity of California highways", the state's department of transportation says.

In northern California, they are in operation only during rush-hour traffic. Driving solo in an HOV lane can land drivers a $490 ticket, and about 50,000 passengers are cited for the infraction yearly, according to the San Francisco Chronicle.

State law defines an "occupant" of a car as "any person who occupies a safety restraint device, ie, seatbelt", the CHP says. Photos show the skeleton was wearing a seatbelt, but was not a person.

This isn't the first time the skeleton ruse has been deployed. In 2020, a 62-year-old man was cited in Arizona for trying to use the HOV lane with a skeleton as his companion. Officers saw right through that, despite the skeleton's hat. The year before that, a driver attempted a similar ploy with a mannequin in sunglasses.
Source: Guardian

‘A triumph’: London’s £19bn Elizabeth line is named best new architecture in Britain

The prize has been awarded to the “line-wide” design of the stations below ground level, led by Grimshaw Architects, with engineering by AtkinsRéalis, way-finding by Maynard and lighting by Equation. Different architects were responsible for each station above ground, with more mixed results. Unusually for the architecture-centric award, the other consultants have been named as equal co-designers, reflecting the collaborative nature of the £18.6bn endeavour, which led to a truly integrated result.

Service “totems” on the concourses integrate everything from lighting and cameras to signage and speakers

With the longest platforms, the biggest tunnels and the fastest trains on the entire London underground, the Elizabeth line boasts a dizzying list of superlatives, carrying more people a day than any other train line in the country. It is now deemed to have the best design, too – being named as the winner of the 2024 RIBA Stirling prize for the finest architecture in the UK.

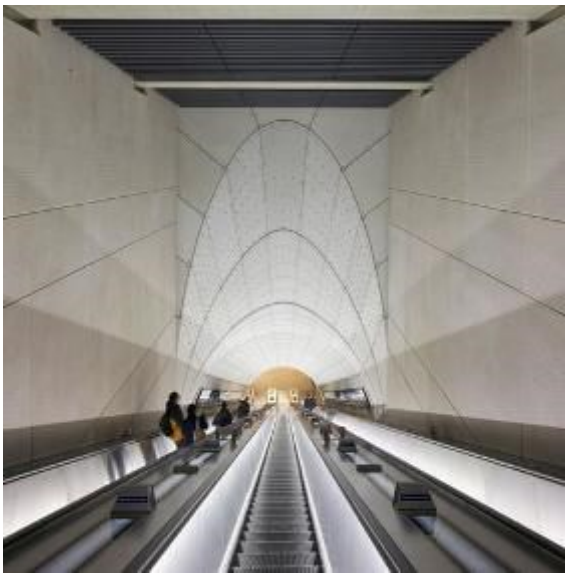
The competition was stiff: from the National Portrait Gallery in London to the renovation of the Park Hill estate in Sheffield, from a Dorset dairy farm conversion to a street of social housing in Hackney and the 67-acre regeneration of King’s Cross.

The Lizzie line is a worthy winner, providing a dazzling demonstration that, for all chaos surrounding HS2, Britain is still capable of pulling off gargantuan transport infrastructure projects with style and panache. Stepping off the escalators and entering its streamlined white tunnels is like being teleported to a parallel universe, worlds away from the rest of the creaking, sooty tube network.

From the airy, clutter-free concourses to the soft acoustic, calm lighting and clear signage, every detail has been honed to make the passenger experience as simple and stress-free as possible. It is a model of standardisation and prefabrication, built with rare precision, its effortless elegance belying the fiendish complexity of coordinating the 73-mile-long endeavour, and the transformative effect it has had on the lives of millions.

“The Elizabeth line is a triumph in architect-led collaboration, offering a flawless, efficient, beautifully choreographed solution to inner-city transport,” said RIBA president Muyiwa Oki, chair of the Stirling prize jury. “It rewrites the rules of accessible public transport and sets a bold new standard for civic infrastructure, opening up the network, and by extension London, to everyone.”

While other tube stations are cluttered with signs and light fittings added haphazardly over the years, the Elizabeth line has condensed and rationalised everything into a unified whole. Service “totems” on the concourses – inspired by the uplighter columns of Charles Holden’s 1930s tube stations – integrate everything from lighting and cameras to signage and speakers, as do seamless panels above the platform edge screens, all easily accessible for maintenance.



Corralling together all the gubbins means that the full volume of the tunnels can be expressed, with no need for suspended ceilings and walls to hide the services. The result feels extraordinarily spacious, with broad concourses that melt into wide cross-passages, all clad with sinuous white panels, as if the entire line has been moulded from a single substance.

The fluid geometry helps to minimise blind spots and improve people flow, and it also reflects how the tunnels were made. Rather than using iron or concrete retaining rings, which form right-angled corners as seen elsewhere on the underground, concrete was sprayed directly on to the exposed earth after excavation, creating softer tunnel intersections.

This smooth, tubular world is lined with a continuous skin of white glass fibre-reinforced concrete panels, whose design was honed to reduce the number of panel types from 80 to just nine, saving costs and material – the carbon payback time should be about 10 years.

Source: Guardian

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TRANSPORTATION GROUP NEW ZEALAND

Roundabout of the Month

This unusual “octagonal triple-kerber” in Dickens Heath, Solihull, UK. shows not all roundabouts are round.
If you have any other interesting images to share, send them to Daniel.newcombe@at.govt.nz

Active Modes Infrastructure Group (AMIG) Update

The final AMIG report for the year and this is a double-banger capturing both the happenings of the Sep 12th and Nov 28th meetings. Here's some of the things discussed:

• At last, **Part 4 of the *Traffic Control Devices Manual*** (At Intersections) has been published on the NZTA website – you can find a PDF copy at https://www.nzta.govt.nz/resources/traffic-control-devices-manual/. The new guidance features various layouts and signage including how to provide for walking and cycling at different types of intersections.

• Earlier in the year we mentioned the work going on to expand the range of **traffic filtering and restriction signs** available to use. A range of additional vehicle types have been identified that could be added to signs either allowing or prohibiting them, including cars, goods vehicles, motorcycles, electric vehicles, resident permit holders, and so on. Rather like parking signs, the thinking is that there may be up to four panels identifying the restriction, when it applies, which vehicles, and any exemptions. An interesting question to consider will be whether to use words or symbols to illustrate some of these – might need some trialling.

• Related to the above discussion, there has also been some thinking about how to update the (rather old) NZTA *Travel Demand Management Manual & Toolkit* and to better align them with current organisational thinking. The recent work on traffic filtering could form the first part of a new **Network Optimisation Toolkit**, which could fill in some gaps in our current guidance on street management.

• In refreshing the current *Cycling Network Guidance*, one thing being revisited is how to **categorise different cycling facilities**. A more simplified system is being proposed that would simply regroup options into categories of "shared roadway", "on-road facilities", and "off-road facilities".

• The intersection of bus stops with cycleways can be tricky, trying to ensure that conflicts are managed between bus passengers and cyclists. Although the *PT Design Guide* now has several **bus stop bypass design** options, there are still opportunities for further improvements (e.g. further markings), especially to address people exiting at the rear bus door.

• Several draft cycling guidelines were presented for comment at AMIG in September. These included:

∗**Path speed management** devices e.g. chicanes

∗Cycling on **rural roads**

∗Cycling infrastructure on **hills and gradients**

AMIG endorsed their publication as draft documents, to get wider feedback from industry users.

• Other topics discussed at the latest AMIG meetings included vertical deflection devices on cycleways, feedback on path behaviour markings, barrier arms at dual crossings, Wellington trials of narrow shoulders, and a national walking/cycling count database. Detailed minutes about all these topics will eventually be found on the AMIG website:

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

So that's all the AMIG meetings for 2024; the first of four next year should be in mid-February. As always, contact AMIG convenors Wayne Newman (wayne@cresmere.co.nz) or Gerry Dance (Gerry.Dance@nzta.govt.nz) if you have any issues to raise or present at AMIG – or contact me directly.

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

City Rail Link update

Discover Auckland's Future with the City Rail Link Virtual Engagement Space!

We're excited to introduce our new Virtual Engagement Space, designed to educate and engage the community about Auckland's transformative City Rail Link (CRL), set to open in 2026!

Explore the brand new CRL stations, learn about the project's benefits and progress, and discover your future travel options.

Join us in this virtual journey and be part of New Zealand's biggest public transport project! Together, we're building a more connected and sustainable city.
Future Rail Tamaki Makaurau - Auckland Transport - Virtual Open House

The name 'Karanga-a-Hape' is a grammatical correction of Karangahape.

And now it's the turn of another CRL station to get its signage.

The official place naming body, New Zealand Geographic Board Ngā Pou Taunaha o Aotearoa which names railway stations announced its decision on CRL stations names back in March 2023.

CRL Ltd has a longstanding partnership with the Mana Whenua Forum and in 2017, the Forum had gifted CRL Ltd with four names for the CRL stations. These names are steeped in history and represent important elements of iwi tradition and heritage and reflect significant geographical features around the stations.

The name 'Karanga-a-Hape' is a grammatical correction of Karangahape. Named for the great calling of Hape, who was left behind by his people when he was denied passage across the ocean in his waka (canoe).

After performing a karakia he was gifted a kaitiaki (guardian) - a stingray - and together they crossed the water to arrive in Aotearoa ahead of the Tainui waka that left before them. The name Karanga-a-Hape, celebrates Hape's call to welcome his own relatives who had denied him passage.

Te Waihorotiu Station over time

This is how our platform space is looking today inside our new midtown Te Waihorotiu Station.

If you've followed us here for a while, you'll be amazed at how it has taken shape. These photos were taken on the same day year by year.

The reinstatement of Auckland's heritage bluestone wall is now underway.

It's the oldest piece of road construction in the central city that was made from local material. The bluestone wall is along the eastern side of Albert Street, between Wyndham Street and Victoria Street West (see image below).

It was completed in 1880 following the widening of Durham Street.

We carefully deconstructed the wall in 2020 because of the construction of our nearby new CRL midtown Te Waihorotiu Station and have painstakingly preserved it.

Each of the approximately 1800 blocks were surveyed, numbered, and have been stored offsite for the past four years.

Our stonemason contractor has now returned and is carefully reinstating the wall, block by block.

What else is happening?

Once CRL is constructed, we need to test everything before it can open. There are a huge range of systems that need to be tested on the CRL, from signalling for the trains to running the air conditioning in the stations.

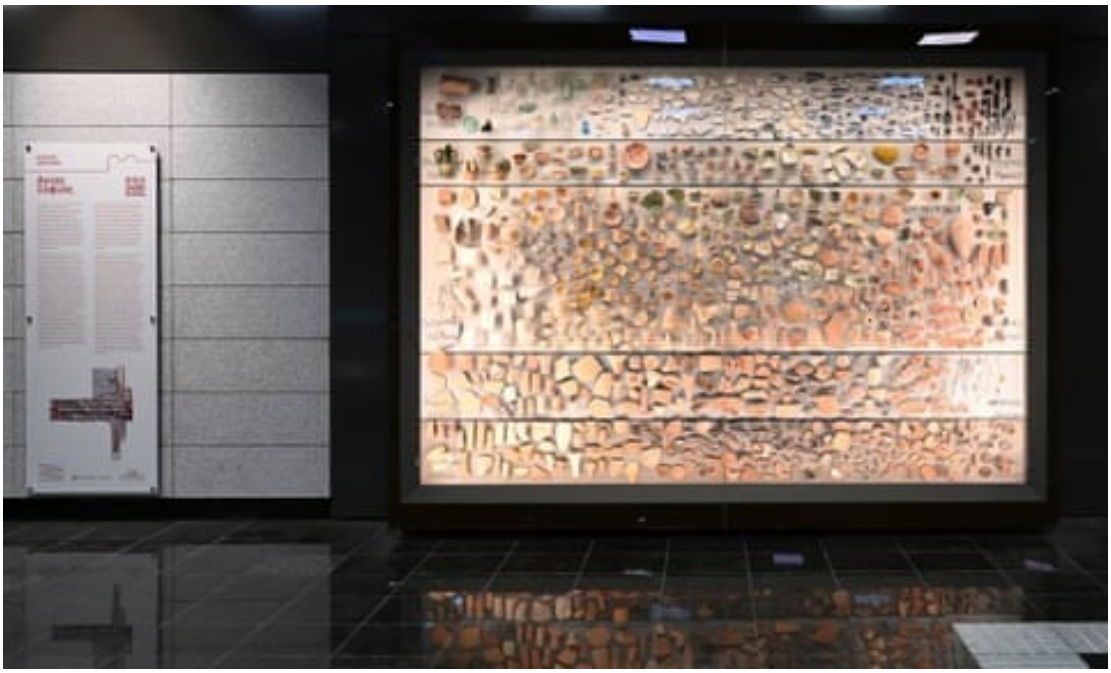
Testing everything is a complex operation that will take months. Not only does each system need to work as planned, but all the systems need to work together in integration. This includes integration between the newly installed infrastructure and systems, existing systems on the trains, and existing Auckland Transport IT and communication systems.

A new control centre at Maungawhau will provide a place to monitor and control all the systems across the new stations – including Waitematā (Britomart).

Our stonemason contractor has now returned and is carefully reinstating the wall, block by block.

Magazine of the Transportation Group NZ Issue 182 December

‘A blend of ancient and modern’: inside Thessaloniki’s new €3bn metro system



The subway was originally scheduled for completion in 2012.

It caused untold commotion, decades of disruption and – among historians and archaeologists – controversy and despair. But in the very near future, the antiquities-rich subterranean world of Thessaloniki will open to a world of driverless trains and hi-tech automation with the inauguration of its long-awaited subway.

The excitement on the streets of the northern Greek port city is almost palpable.

“Archaeologically, it has been an extremely complex and difficult endeavour,” said the culture minister, Lina Mendoni, of the more than 300,000 finds made since construction began 22 years ago.

“To get here required a battle on many fronts.”

The discovery of treasures – many to be exhibited in the stations themselves – promises a modern ride through the multilayered history of a metropolis that dates back 2,300 years and through which the Romans, Byzantines and Ottomans all passed.

Two marble squares, an early Christian basilica, a Roman-era thoroughfare, water and drainage systems and ancient Greek burial sites brimming with jewellery and gold are among the trove.

Signature pieces will be showcased in the 13 “archaeo-stations” opened in central Thessaloniki this weekend. More will be added when a second line is completed next year.

“What you see offers a remarkable blend of the ancient and modern, integrating archaeological heritage with metro infrastructure,” Christos Staikouras, the transport minister, told reporters.

As part of the carefully orchestrated inauguration an “entire archaeological site” kept under wraps will be unveiled for the first time at the central Venizelou station shortly.

After touring the site with a delegation of officials, including the nation’s president, the prime minister, Kyriakos Mitsotakis, said: “I think that when the people of Thessaloniki have the chance to see this station they will recognise the huge effort that has been put in so that the city could have antiquities and a metro.”

The fully automated rapid transit system – the first of its kind in Greece – is expected to serve more than 250,000 passengers a day, reducing traffic congestion by as many as 60,000 vehicles.

The underground's complex engineering explains why, at least initially, it will only run along a 10km track, spawning complaints over the network's limited reach – an extension to the city's international airport eight miles away is planned for 2040.

But the grand opening is slated to be attended not only by much of the centre-right Greek government but also by foreign officials including the Italian infrastructure minister, Matteo Salvini. Italy's Webuild was part of the construction consortium behind the EU-funded mega-project.

Not since the Athens subway system was inaugurated almost 25 years ago has an infrastructure project of such scale or significance been undertaken in Greece.

The subway was originally scheduled for completion in 2012.

From the outset, the problem-plagued public project not only brought mayhem to Thessaloniki's most central district but became symbolic of government ineptitude and what local people viewed, more generally, as the disregard with which officials treated the country's northern capital.

The unearthing of so many artefacts forced engineers and archaeologists to collaborate closely in what became one of Greece's biggest and most controversial excavations. Metro tunnels had to be dug at least 20 metres deep to preserve finds nearer the surface while architects were compelled to return to their drawing boards to redesign stations as treasures were discovered.

The delays and additional financial demands of a transport network that has already cost €3bn has spurred the culture ministry to describe the project as the "biggest salvation work" ever carried out in Greece.

Not all agree. Echoing the consternation of some fellow historians, Angelos Chaniotis, who teaches at Princeton University, bemoaned what he said were treasures "sliced horizontally and vertically" before being "stitched together, like a puzzle" to accommodate the subway.

Far from being a cause for jubilation, construction of the underground had "undermined the authenticity of the antiquities and does not justify celebrations," he wrote in an op-ed published in the more usually pro-government Kathimerini newspaper.
Source: Guardian

Transportation Group National Committee

National Chairperson/Research Sub-committee: John Lieswyn john@viastrada.nz

Vice Chairperson: Mark Gregory mark.gregory@ecan.govt.nz

Immediate Past Chair: Bridget Doran bridget@bridgetdoran.nz

Auckland Branch Chair/Signal Network User Group: Matt Hoyle matthew.hoyle@mottmac.com

Membership Secretary: Stephanie Willcox stephanie.willcox@jacobs.com

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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.d.isaacs@gmail.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

2025 Conference convenor: Tobie Pretorious TPretorius@tonkintaylor.co.nz

Branch Administrators

Auckland: Chun-Lin Lee chun-lin.lee@stantec.com

Bay of Plenty: Sarah Dove sarah.dove@tauranga.govt.nz

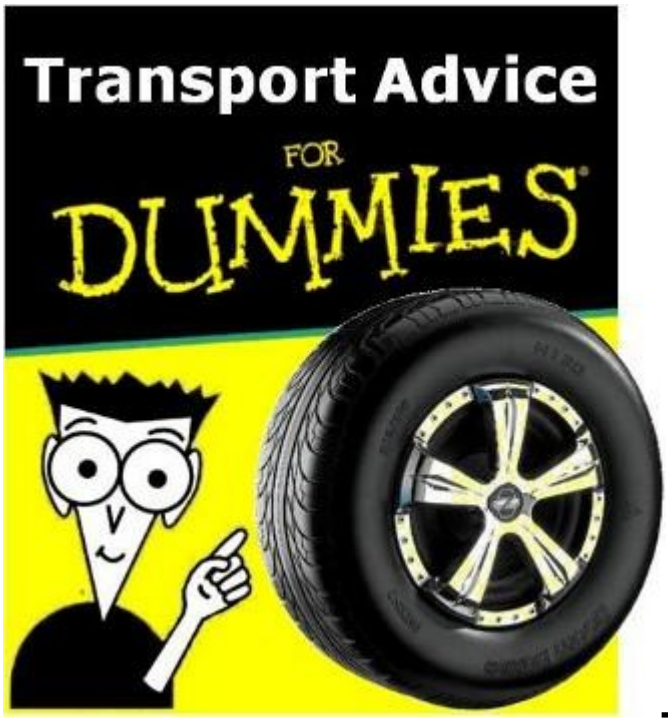
Central: Josephine Draper josephine.draper@abley.com

Canterbury/West Coast: Sahan Lalpe sahan.lalpe@stantec.com

Southern: TBA

Roundabout Editor: Daniel Newcombe tgroundabout.editor@gmail.com

Find us on the web:
Transportationgroup.nz



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

Every time Christmas holidays or some long weekend comes round, NZTA close a whole bunch of passing lanes on our State Highways—just when there is more traffic that needs them!

So then I get stuck in a long queue of traffic and can't get past anybody. So frustrating!

What's going on?

Pete, Remuera

Dear Putrid

There is a strong rationale for this. You know how annoyed you get with other drivers overtaking and getting in front of you?

If you can't pass slow-moving idiots in front of you, that also means those tail-gating idiots behind you can't get past. So think of it as an 'idiot control' mechanism. That just happens to control you.

The Transport Guy

Dear Transport Guy

I work for a council in the active modes team. As you know, recently we had all our money cut and can't even mention that we want to keep helping people walk or cycle in their communities—for fear of being criticised for 'not getting the message'. And yet, massively expensive and poor value-for-money roads just sail through because somehow they are seen as inherently good. Its crazy! What can I do?

Steve, [Redeacted]

All you need to do is follow the language used for those large and unaffordable road projects.

Dear Steamed

Just like you got used to having money to spend on normal stuff—but still had to justify it—you need to get used to not having money to spend on normal stuff—and still justify it.

So, all you need to do is follow the language used for those large and unaffordable road projects.

Don't talk about 'cyclists' or—heaven forbid—'people', instead talk about 'economically productive users', Don't talk about 'safety', talk about 'faster travel times from users not getting run over'.

The other thing to do is sprinkle key words throughout your material. The kind of ones that make people think you know what you are doing.

Like use the word 'faster'. Even if you mean 'we'll paint the cycle lane in summer so it dries faster'. Use the word 'freight' often, even if it relates to cargo bikes (don't mention the word 'bikes'). See what I mean?

The other thing to do is come up with important-sounding and familiar-looking acronyms. Like 'Riding On the North Side' (RONS). Or 'Grade-separating People Safely' (GPS). If you can find a way to say 'high BCR (Built Cycleway Ratio)' then you have it made.

All of this seems silly, but really reveals the truth—people don't read your reports or business cases.

So long as you sprinkle those words or acronyms throughout the Executive Summary or conclusion of your material, reviewers will skim it and see 'productive' and 'faster' and 'GPS' and just think it is the bees knees.

The Transport Guy

Make sure you don't mention the word 'speed hump' in your material. A photo of a moose is OK.

Kids explain traffic engineering

“Night-time is cool. It’s like the day-time, but darker.”