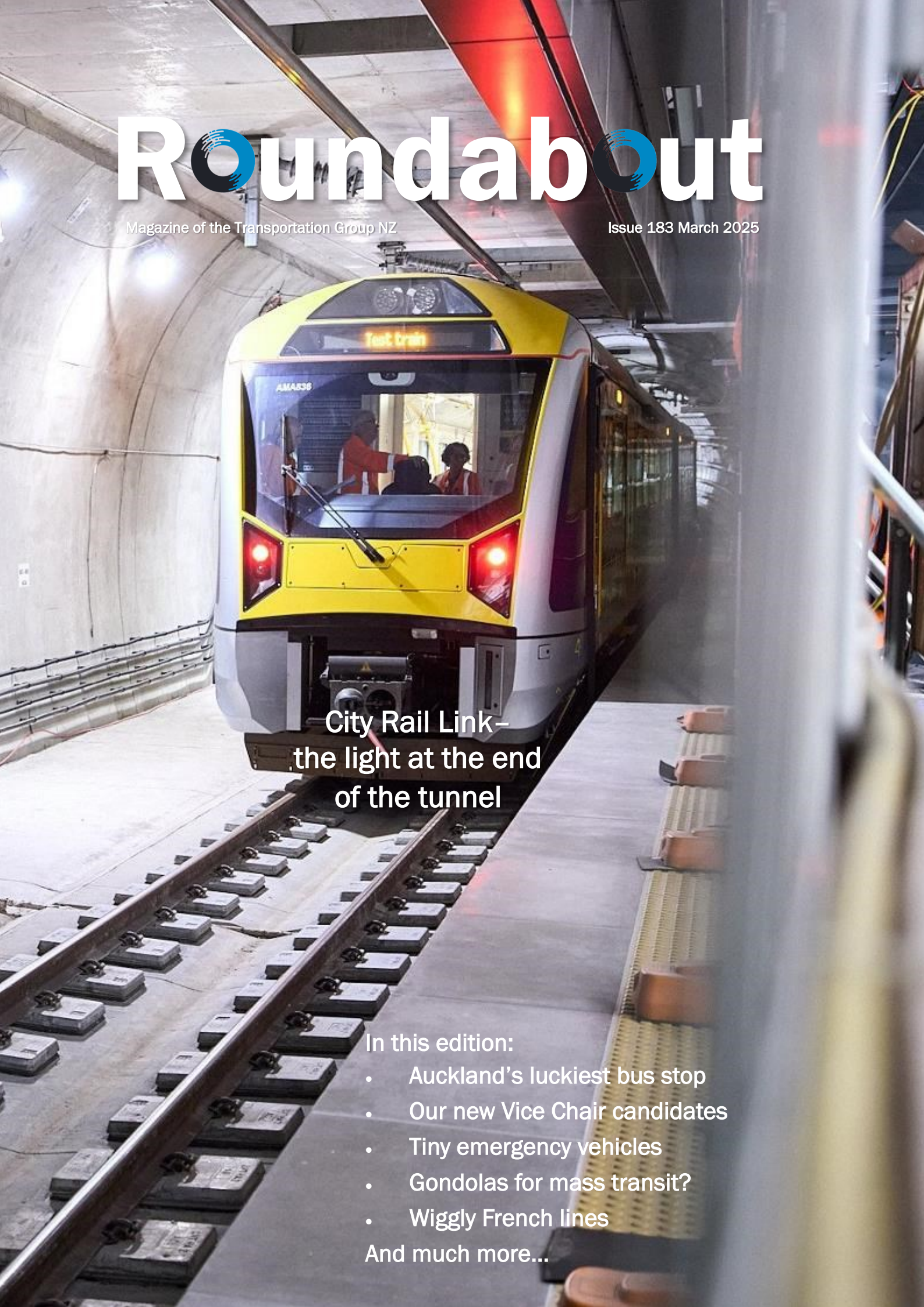
Roundabout

Magazine of the Transportation Group NZ

Issue 183 March 2025



City Rail Link– the light at the end of the tunnel

In this edition:

- Auckland's luckiest bus stop
- Our new Vice Chair candidates
- Tiny emergency vehicles
- Gondolas for mass transit?
- Wiggly French lines

And much more...

Editorial

Daniel Newcombe
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I've noticed there are some people in our industry who seem to be eternal optimists. Nothing seems to get in their way.

Every annoying challenge gets approached as a simple obstacle to work around, without pausing. Things that frustrate and stymie others just get a shrug from them and they carry on.

They believe in what they are doing and they just get on and do it. God, I admire them.

This is obviously all relevant in changing political circumstances, where there may be wild swings in policy direction and some projects abruptly stop or get reshaped. Some people's entire careers have vanished in front of their eyes. Things that used to be important can now barely be mentioned.

I've personally struggled with some of the changes, the ones that clash with what I would consider to be fundamentals of our profession – a focus on safety, multiple modes, climate change, etc.

But while things can still feel challenging, I've noticed that those eternal optimists are just carrying on.

They have digested the changes, thought about it and found a way to carry on with their ethics and professionalism maintained.

It takes care and effort, but they seem to have found a way to carry on, and not radically depart from what they were trying to do before. As if to say 'Don't fight it. Find a way'.

Some people's entire careers have vanished in front of their eyes.

Inside this issue:

So I've thought about it. There are lots of examples I've seen in current projects but I don't want to highlight them in case that causes ructions. So here is a hypothetical example I've made up: Improving safety on an urban road where speed is a factor. [Please note, I don't work in road safety, so this may not make much sense to those who do.]

As has been well covered in the media, we aren't doing speed tables or lower speeds anymore. We're all about maintaining traffic flow.

And you know what maintains traffic flow? Roundabouts. Better than signalized intersections, anyway. They also happen to require traffic to slow down.

So if I have a route that might otherwise have required some raised tables or a lower speed limit, now I just put in roundabouts.

Every sidestreet. Every possible future sidestreet. Anywhere traffic might turn or stop and therefore needs to be managed. Dozens of roundabouts if needed. Just small ones.

In this hypothetical example, we achieve the outcomes desired – smoothly flowing (but also slower) traffic which is safer – while aligning with current policy. It might even have unexpected benefits and be better than the original plan.

It's a positive way forward and it avoids arguing about what we *would* have done—we just carry on doing.

OK, maybe it isn't the best example, but I'm trying to make a point to anyone feeling stymied in their current work. Take a lesson from those eternal optimists and find another way.

This may be another way to slow down traffic.

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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John Lieswyn
National Committee Chair
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Outgoing Chair's Chat

The last two years has flashed by and this will be my final Chair's Chat before I pass the baton to Mark Gregory at our AGM at 12 noon, Tuesday the 25th March.

I will present the Chair's Report at that AGM.

We have continued to deliver on the Group aims but after Jeanette Ward's big ideas and Bridget Doran's challenges to our profession, my accomplishments have been primarily about building connections between the many organisations in our sector.

First I will summarise those efforts to build relationships, then provide a few thoughts on progressive transport policy, and finish with Conference news.

Building relationships
A few weeks ago I convened our fifth transportation sector group leaders meeting. This time we brought in representatives of the road building and maintenance sectors.

We now have agreement to convene at least annual meetings of the leaders of all organisations to share information such as dates for our symposia and conferences as well as opportunities for local or national collaboration.

I've created a list of 27 organisations and a calendar of 29 major events in 2025 from these interactions. My hope is that NZTA or MoT will host the list of key stakeholders and events on one of their websites – if not we will look to host them on our TG website.

Why the backsliding? We as a profession have failed to build and maintain social licence.

Ideology or facts? It's all in the eye of the beholder.
It is no secret that the current Government has cancelled or hobbled all transport projects and programmes that aren't about cars and trucks.

Streets for People, Transport Choices, Safer Speeds – all great sounding names for projects that are in the dustbin despite demonstrable and empirical benefits.

Bus fares have increased, Auckland Light Rail cancelled, and it seems our second largest city will never get a rapid transit system. Cycleways are under threat of removal and we are no longer funded for safer pedestrian crossings.

It isn't just in Aotearoa New Zealand – around the world, the backlash to progressive climate action or attempts to rebalance our system after decades of motor vehicle subsidies has been fierce.

For example - after decades of work, the New York City congestion charging system finally launched with the proceeds to support public transport and immediate benefits noted by city residents – but now POTUS has cancelled it without any evidence beyond "it's too costly for drivers".

Why the backsliding? We as a profession have failed to build and maintain social licence.

We were given all the tools – from The Workshop to the excellent guidance in "Reframing our Urban Mobility Challenge" (Claire Pascoe, 2019). We knew what to do, tried to do it, and still face stiff resistance.

We presented facts and empathetic stories, and continued to be faced with conspiracy theories and accusations that we were ideologically anti-car (by the way, your Chair is a petrol-head, just not for daily travel!).

It is a topic I'd love to explore more with you all, perhaps at our next Conference.

I thought about all this while collecting data on the cycleways uptake in Wellington this week and seeing the following vandalised sign about Thorndon Quay changes (notice I didn't say "improvements"? It is all in the eye of the beholder).

Figure 1: a transport project information describing "improvements" is vandalised with the misspelled words "nonsense shambles"

Conference news
The big news is that Engineering New Zealand's Transportation Group and Trafinz, the two oldest and largest organisations in our sector, have agreed to collaborate on Transportation Conference, 8-11 March 2026 in Wellington.

We haven't started working on the programme yet but it will address the interests of planners, engineers, the private and public sectors and have a particular focus on road safety for all people using the road transport system.

In the current austere environment, it may be difficult to get support for conference attendance. If you are applying to attend, please focus on the valuable learning opportunities that increase our collective productivity.

We aim to run conferences that are fun and celebratory, but the main objective of our conference is to "advance knowledge".

As always, don't hesitate to reach out with your thoughts – drop me a line anytime at john@viastrada.nz.

John at the Smart Cities conference in Adelaide last year

Incoming Chair's Chat

Mark Gregory
National Committee Chair
Mark.Gregory@ecan.govt.nz

As John passes the baton, I'd like to acknowledge his leadership and that my priorities will continue to build on the achievements John described in his recent Chair's Chat.

Before launching into that, it's always good to be reminded of who *we, the Engineering NZ Transportation Group,* are and where we've come. I want to share how I perceive us and our future. Your feedback will be integral along this journey!

I am privileged to lead a fine institution that has been developing the Transportation sector in New Zealand since 1956.

Our remarkable history is recorded in Malcolm Douglas' book, A Wheel on each Corner, and it is inspiring to recall the contributions which have laid the groundwork for modern practice we often take for granted.

This has been achieved by a strong and talented community, sharing ideas and driving innovation and we are now the second largest Engineering NZ Special Interest Group, approaching 2,000 members.

We are a large, active, leading and inter-disciplinary community. By which I mean a Community of varying Engineering and Planning disciplines, among others.

I want to share how I perceive us and our future. Your feedback will be integral along this journey!

I strongly support inter-disciplinary cohesion and see this as among our greatest value prospects, as none can exist in a bubble. We can benefit from organised access to each other's knowledge through our conferences, events and publications.

For those who don't know me, my own background is an inter-disciplined one, approaching Transportation through Planning and Engineering, with degrees in each from the UK and NZ respectively, and 16 years' experience including in the UK, Australia and NZ.

I have taken the path towards Chartered Transport Planner (CTPP) and am a Chartered Member of the CIHT.

My own journey in TG has come through NZMUGs and TDB where I have been a Committee and Board member since 2017.

I'm currently co-sponsoring an EngNZ initiative to improve aspects of its service delivery. I've worked a number of roles, proficient in either detailed or strategic focus, with a view to systems based design.

I've developed / reviewed / researched in the field of multi-modal modelling and network

planning, written affidavits for planning hearings, and developed strategies across all modes and scales. I'm at home setting out Investment cases and strategic planning, and currently working on PT futures with ECAN in Christchurch.

Like many of you, I do what I love. My wife Megan is also in Transportation, having recently received Chartered Professional Engineer status, and we have two boys who (6 and 4) who are already avid cyclists… as well as being fascinated with other less-sustainable and noisier forms of transport.

Away from work, I enjoy gardening, building things, music and summer family adventures.

My priorities for the next two years include building on our successes, for example:

- Promoting greater inter-disciplinary cohesion and the flow of ingenuity through this organisation, and beyond. We need to move forward together, at the same pace, in order to realise our full innovative potential.
- Actively promoting the *incredible* work of this group more widely, including internationally

We are key players in determining the future of New Zealand. Putting it over-simplistically, we know transport infrastructure – we know how to build it, optimise and even find alternatives to it.

Our brilliant subgroups cover all the topic areas required to develop the most intelligent, efficient and adaptable transport system for New Zealand.

I am looking forward to meeting Chris Bishop and discussing ideas around these principals. Our community does have exceptional potential in steering transport in NZ in the right direction –

for our children and their enjoyment of a prosperous and sustainable society. But it's all good making lofty statements like these – what does it actually look like?

Evolution is a series of events – there will be big moments, but most progression is mostly steadier and grass roots based. A series of small knowledge exchanges will build and 'catch fire.'

This comes about through each one of us reading roundabout and going to our local branch events. It's all PD and it all counts. We are a mixed group of thinkers, doers, and everything in between.

The more we interact, the easier it is for the good stuff to flow – and as we can easily look back on our history where we have led and shaped, we can easily see ourselves playing a bigger role in approaching some of New Zealand's tough questions.

We can't quickly forget how hard the past year has been – and neither should we – but we can look forwards with purpose, and possibly more than ever before.

We have solid leadership, internationally regarded from across all sectors.

We are privileged to have a huge community of brilliant emerging professionals – and if you are one reading this, then please stand up and take your place as our future.

To those members who have been on the fringes for a while, come on in, join your local branch committee.

We are committed to being ever more welcoming and appreciate ingenuity regardless of where it comes from. I'm an NZ citizen but not from here originally, like so many others.

I believe what makes Kiwis Kiwi is the ability to brilliantly work around a challenge. Let's build on our opportunities to be *that* Transport Community that fosters tomorrow's solutions through inclusion and technical excellence.

Turning to the past chair - John, thank you for your leadership these past two years, and for your friendship too.

You are an excellent role model for our professions. You have made notable contributions, including grounding our history and records, increasing our networking with other groups, and your general dedication.

Finally I acknowledge and appreciate the confidence in me to lead this group for the next two years, including our established leadership, the national committee and the support from everyone.

You facilitate the greatness of this group and it's a privilege to do this with you. Every coffee or chat is inspiring, and I will work hard to make this all count.

Ngā mihi nui

Let's build on our opportunities to be that Transport Community that fosters tomorrow's solutions through inclusion and technical excellence.

Vice Chair candidate statement—Bruno Royce

There are two candidates for Vice Chair. The Vice Chair will serve two years and then become the Chair in 2027.

Members will be sent voting details shortly and the successful candidate will be announced at the Group's AGM on March 25th.

Dear Members of the Transport Group,

I am writing to express my interest in the position of Transportation Group Vice Chair.

With a career spanning over 25 years as a Chartered engineer, I have consistently contributed to the advancement of transportation safety, research, and policy in Aotearoa.

It is with this experience and passion for road safety and transportation innovation that I offer my candidacy for this important role.

Throughout my career, I have actively promoted road safety and contributed to its research.

I have presented many conference papers locally and internationally, including Candia Road, which was "Highly Commended" at ENZ 2017, and my recent paper, Fix Crash Corner, which was published in the Journal of Road Safety (2022) and featured as a NZTA "Case Study".

Also, I regularly share research and other ideas related to road safety with my professional network on LinkedIn.

As an advocate for active travel, I practice what I preach by commuting by bicycle to work. However, I also recognise the importance of balancing the needs of various transportation modes due to diverse urban environments.

Furthermore, while robust guidelines from NZTA and government regulations are essential, on-the-ground technical decisions should consider the practical needs of councils and local communities.

As a Director of a medium-sized transportation consultancy, I have gained extensive experience working with stakeholders, managing politics and navigating diverse community needs.

Mentoring engineers from their graduate stages to becoming emerging professionals has also been a rewarding aspect of my career, and I am eager to continue fostering the career development of young talent.

The Transportation Group's mission to advance technical knowledge, planning, and management of transportation in Aotearoa aligns with my own professional philosophy, and I am eager to contribute to this mission in the role of Vice Chair

Links:
Journal of Road Safety: https://journalofroadsafety.org/article/39638-fix-crash-corner-a-roundabout-story

Waka Kotahi website link: https://www.nzta.govt.nz/safety/partners/road-safety-resources/safe-system-case-studies/onehunga-raised-roundabout/

With a career spanning over 25 years as a Chartered engineer, I have consistently contributed to the advancement of transportation safety, research, and policy in Aotearoa.

Vice Chair candidate statement—Justine Wilton

Kia ora tatou

I would be honoured to be our Group's Vice Chair.

With nearly 30 years in transportation engineering, (and in this group), I am committed to shaping the future of transport in Aotearoa.

My experience in road network management includes urban and rural areas, as consultant and Head Contractor, providing me with a comprehensive understanding of the sector.

In work, my priorities are trauma reduction, access, participation, economic prosperity, quality of life and fiscal responsibility.

I lead technical efforts at WSP through mentoring and two technical committees, and have served on local ENZ and Transportation Group committees.

My vision is for the Transportation Group to be a community that members are proud to belong to where all members feel valued and empowered to contribute.

I value in-person events and will continue to support the culture of the Group. I am committed to ensuring we encompass all aspects of transport, reflecting the inter-disciplinary nature of our membership.

Our industry is in the toughest period I've seen in my working life. Redundancy, career change and emigration are realities.

It's a pivotal time for the sector; as Vice Chair, I will support the Chair at governance level to engage with the decision makers, funding providers and policy makers to encourage continued progress towards an effective, accessible and safe transport system.

Outside of work, sports (playing, refereeing, coaching and governance) and family life has been a focus. Tauranga has been my home for 20 years; my upbringing was in Taupo, Rarotonga and Australia.

My two kids are now at uni – clearly the chatter at home from their civil engineering parents has had an influence with one doing Environmental Science in USA (living the athlete lifestyle) and the other has just entered Engineering at UC.

Thank you for your support.

Justine

TRANSPORTATION GROUP NEW ZEALAND

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Members will be sent voting details shortly and the successful candidate will be announced at the Group's AGM on March 25th.

With nearly 30 years in transportation engineering, (and in this group), I am committed to shaping the future of transport in Aotearoa.

TRANSPORTATION CONFERENCE 2026

8 - 11 MARCH 2026 | TĀKINA CONVENTION CENTRE

TE WHANGANUI-A-TARA WELLINGTON

TG AND TRAFINZ WORKING TOGETHER

Transportation Group and Trafinz have formed an alliance to co-host their annual conference.

Combining the interests of both organisations will be of significant benefit to conference sponsors, exhibitors and delegates. All together, under the one umbrella, discussing in depth the challenges the transport sector faces.

Record delegate numbers are expected, along with interest from our long standing sponsors and exhibitors, not to mention new companies who will see the value of being part of this conference.

CONFERENCE THEME

WORKING WITH WHAT WE HAVE: RESILIENCE FOR THE FUTURE

Aotearoa New Zealand's transport network keeps our people connected and is crucial for economic growth, whether via road, rail, cycleway, or waterway. Keeping the transport network resilient against disruptions as well as fit for purpose for the future underpins a lot of the work in which the transport sector invests, from maintaining or upgrading our state highways and local roads to renewing the rail network to expanding our cycleways and footpaths and improving bus reliability and capacity.

Today, our transport network continues to experience significant challenges to New Zealand's social and economic prosperity. In the context of these challenges, the transport sector needs to be prepared to manage risks within an increasingly resource-constrained environment.

How do we leverage the limited resources at our disposal to ensure that our critical transport infrastructure is resilient to these challenges today, and in the future? How do we stabilise our transport system, ensuring that an infrastructure deficit is managed effectively?

This theme involves looking deeply at what transport in New Zealand could be doing better today – inviting perspectives from all areas of the sector – to ensure a more resilient tomorrow.

VENUE: TĀKINA CONVENTION CENTRE

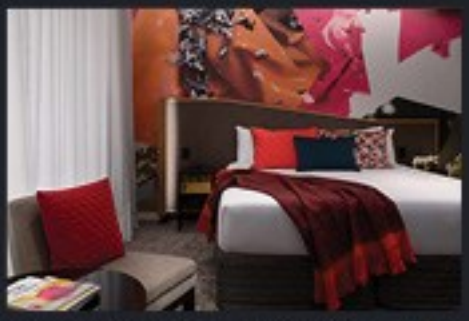
Tākina Convention Centre IS situated in the heart of Wellington. This is the perfect venue for speakers, sponsors and delegates to connect, share and build a supportive network.

Tākina is a landmark for Wellington's sustainable future. The building is targeting a 5-Star Green Star custom Built Rating, representing New Zealand excellence in environmental sustainability.

ACCOMMODATION

Wellington has a superb range of accommodation options, many of which are within walking distance to the conference venue, Tākina Convention Centre.

The conference has secured a range of accommodation rooms over a variety of properties in Wellington's CBD. See below a sample of the hotels on offer.



QT WELLINGTON from $369 a night

Where art, luxury, and eccentric charm collide.

Located on Wellington's waterfront, just steps from Tākina and the city's vibrant nightlife. Whether you're a creative soul or a luxury seeker, QT Wellington promises an unforgettable stay with a touch of theatrical flair.

NAUMI HOTEL from $245 a night

A vibrant boutique hotel in the heart of the city, blending bold design with luxury comfort.

Located on Cuba Street, you're steps away from Wellington's best cafes, bars, and shops. Naumi offers a playful yet sophisticated retreat for travelers who love a touch of the extraordinary.

WEST PLAZA HOTEL from $190 a night

Offering classic comfort and convenience in the heart of the city.

Perfectly positioned near Tākina, the waterfront, and Wellington's vibrant shopping and dining scene, this hotel provides spacious rooms, warm hospitality, and excellent service. Whether you're visiting for business or leisure, West Plaza delivers a relaxed and reliable stay with everything you need right at your doorstep.

DON'T MISS OUT ON UPDATES!

Don't want to miss out on conference updates? Subscribe to the newsletter by visiting the conference website or by clicking below!

SUBSCRIBE TO THE CONFERENCE NEWSLETTER

Photo competition—could an autonomous car understand these signs?

This edition looks at confusing sets of road signs from Australia, and wonders ‘Could an autonomous car understand them and do the correct thing?’
Seen better ones? Send images to: tgroundabout.editor@gmail.com

Bridget's Rant — There's never a crash in a traffic model

I graduated civil engineering school having never heard* of Isambard Kingdom Brunel. If nothing else, the man deserves attention for the parental chutzpah giving a kid a name like that. Evidently, he did some other impressive stuff too. And now that I'm more interested in the behaviour of transport engineers than in transport engineering per se, I'm starting to learn a little more about the history of our profession.

Most of my learning comes bite-sized with pictures attached. Peter Norton (Associate Professor, University of Virginia, and author of Autonorama: The Illusory Promise of High-Tech Driving) regularly shares hugely insightful excerpts from old newspapers, most from well before I was born. The 100-year history of pedestrian safety and traffic engineering is Peter's favourite topic, and, in particular, how the motor vehicle lobby claimed so much power.

Here in one sentence from her letter to the Editor, Margaret E. French sums up the complexity of planning and design for pedestrians in light of newly installed traffic signals:

"The city which has wrested from [the pedestrian] the right to look out for his own safety (and wisely in the main) thus deceives him and leaves him in a veritable trap."

'Wisely (in the main)' is my favourite line. Ms French knows that traffic signals are probably necessary but certainly insufficient as a road safety panacea.

Our challenge as transport planners and road safety advocates now, is that the urban transport system is neither here nor there. It's not a two-dimensional black and white replication of a traffic model. There is never a crash in a traffic model because human behaviour is out of scope. Neither are our city streets a shared urban nirvana of free-for-all negotiated passage. The rules work, until the human enters.

We've long acknowledged this conundrum. The Movement and Place framework tries to work it out, but all we ever end up doing is defining city plazas really well, and motorways really clearly, and then we all look at the mess in the middle and disagree about assigning a busy urban thoroughfare complete with scooting schoolkids and subdivided sections scores a 2.6 for movement and a 3.1 for place, and at that point I gaze out the window and think, so what?

The challenge I think, is that pedestrians don't behave anything like motor vehicles, so their behaviour can't be effectively modelled, and they most certainly shouldn't be 'engineered' like Brunel's concrete and steel**.

Mostly, cars and trucks stick to their lanes and follow the rules, because they've all got four wheels and a similar footprint, and the streets work for all of them, and they don't have much choice anyway. Well, not all streets work well for all pedestrians; the spaces where people can and cannot walk are not at all well-defined, and we don't all have the same 'footprint', so we hop, skip, wheel, and jump around – in full accordance with our primate instincts.

The Gisborne Herald.

IN WHICH IS INCORPORATED "THE TIMES."

GISBORNE, FRIDAY, OCTOBER 17, 1947.

JAYWALKER "BLITZ"

AUCKLAND CAMPAIGN

PEDESTRIAN MANNERS

(P.A.) AUCKLAND, Oct. 17.

Auckland traffic officers will begin a "blitz" against jaywalkers and footpath loiterers on Monday. Pedestrian manners have reached a new "low" here, according to the traffic officials, who are determined to force a "complete improvement."

People who straggle across roads and do not use the pedestrian crossings will be harried by traffic men, who also will promote education in the use of the "push-button" signals which were recently installed at one busy street corner.

These signals are the forerunners of others.

And so, despite all of the transport profession's efforts to promote a safe system that accounts for the human in designing streets, precedence prevails.

We have growing pockets of community-centric, safe places. We have increasing numbers of well-formed multi-modal arterials with leafy separated bike paths.

But most of the world's urban streets remain as-constructed decades ago, a wish-wash, a competition between human and machine, where the bigger, faster vehicle *always* wins.

A veritable trap, indeed.

It's **possible I wasn't paying attention to **every word** my esteemed lecturers proffered in my presence, so I don't hold my holey education against you, University of Canterbury.*
***I have no idea what Brunel built his bridges out of. See * above.*

Bridget Doran
Former National Committee Chair
bridget@bridgetdoran.nz

Ms French knows that traffic signals are probably necessary but certainly insufficient as a road safety panacea..

Image credit: Papers Past | Newspapers | Gisborne Herald | 17 October 1947

Group members we have recently lost: Peter McCombs

The Transportation Group is saddened to learn of the passing of Peter McCombs DistFEngNZ IntPE(NZ).

Peter was a transportation engineer and a member of Engineering New Zealand (previously IPENZ) for 55 years. He was the founding Chair of Transportation Group.

His commitment to the engineering profession was recognised by Life Membership of the Transportation Group in 2008, the Turner Award for Professional Commitment in 2009, Dobson Supreme Technical Award for Transport Infrastructure in 2010, the President's Fulton-Downer Gold Medal in 2015, and as a Distinguished Fellow in 2017.

Pictured: Peter pictured with wife Beverly after receiving his Distinguished Fellowship in 2017

Peter also served on the Distinguished Fellow Selection Panel for four years and has been a key part of the ENZ Complaints and Disciplinary process, presiding over more than 70 complaints, investigations, and hearings.

Peter was also an influential Chairman of ITSNZ from 2013 through to 2016. During that time he was instrumental in ITSNZ winning and hosting the 2014 ITS Asia-Pacific forum, going on to co-chair of ITS Asia-Pacific Board.

Peter's career had many more remarkable achievements over the years including

- Founding Traffic Design Group in the 1970's
- Becoming the International Director for the Institute of Transport Engineers
- Directing the rollout of the Traffic Demand Management Ramp Metering project in Auckland, at the time New Zealand's most high-profile ITS project

Members will remember Peter fondly as a great engineer and leader who built meaningful relationships, an inspiration and mentor to colleagues. He was an eloquent speaker and moderator, organiser, and an all-around gentleman and good guy.

In 2017, ITSNZ awarded Peter McCombs a life membership for leadership, his investment of time, passion and energy, and his achievements in advancing the industry.

Peter was smart, kind, caring, committed, and with a great sense of humour. He'll be greatly missed. Our sincere condolences go to his wife Beverley, his family and close friends.

Mike Goodge

From Ian Appleton:

Mike Goodge died in Vientiane, Laos on 13th February 2025. He had lived in Laos for many years with his wife Anousone and daughters Emily and Ellen.

If you have memories of Mike, please contact Ian Appleton

Above: Ian Appleton with Mike and his daughter Emily on my trip to Laos in 2014.

Mike was involved in the New Zealand transportation profession with the implementation of the Accident Blackspot programme, starting in 1985, and then with the road safety audit programme starting in 1990.

I would like to compile a "Memories of Mike Goodge in New Zealand" in a future edition of Roundabout.

My request is for those who met and/or worked with Mike in New Zealand or elsewhere, to send me your memories and photos.

My email address is appleton@xtra.co.nz. I will try to include your contribution as is, but I may have to edit to avoid duplication.

Forgotten World Highway Tāngarākau Gorge fully sealed, ending era of metal roads on NZ's state highways

"Even though it's a 100km/h speed environment, I would still recommend you drive slowly because it is still quite narrow."

In the end of an era for New Zealand land transport, the last stretch of metal road in the country's state highway network has been tar-sealed.

Contractors have put the finishing touches to 12km of tarseal through the remote Tāngarākau Gorge on State Highway 43 in East Taranaki. Otherwise known as the Forgotten World Highway, SH43 connects Taumarunui in the King Country to Stratford in Taranaki.

The windy 150km route passes through rugged country, climbs three saddles and includes the Moki Tunnel, aka the Hobbit's Hole.

Until now, motorists have also had to contend with a metal road through the Tāngarākau Gorge.

John Herlihy, president of the self-proclaimed Whangamōmona Republic, has set up camp at the famous hotel with which it shares its name. He was initially against sealing the road.

"It was one of the only unsealed highways in New Zealand and it's a bit iconic, and it's only 11km; if it was 50 or 60 I would've said fire ahead.

"But I've changed my mind and the boys have done a real good job and it's lovely and smooth and all the tourists love it now. Some of them are scared of metal roads. They shouldn't be, but they are."

His one reservation was that motorists would now drive too fast.

"As long as people slow down and take their time. You know that's probably my biggest worry; people go faster and faster and they'll end up over the side. Because it was gravel and people were scared of it, they did tend to come through at 30 or 40km/h."

Project manager Sree Nutulapati was in charge of tarsealing the gorge. It was not without its challenges.

"It is a remote and, as you can also see because we've just driven through here, it's a constrained work environment and it's only 4m wide at certain sections. So, if you put a grader and a digger in you can hardly get past one another."

He said there were steep drop-offs and motorists would still need to take care.

"It's still windy and even though it's a 100km/h speed environment, I would still recommend you drive slowly because it is still quite narrow. Some of the sections, even though it is sealed, are only 5m wide when ideally on a state highway you would have about 7m."

An average of 170 vehicles a day used the road and with the gorge sealed, it was estimated traffic would increase 15%, bringing vehicle numbers close to 13,000 a year.
Source: RNZ

TRANSPORTATION GROUP NEW ZEALAND

Join us for our AGM!

Tuesday 25th March 12-1pm

It's time for the annual reminder of our accomplishments over the past year. Come and join our professional community virtually at the 69th Transportation Group AGM.

You should have received a Teams appointment from Engineering NZ. If not, please contact tech.groups@engineeringnz.org to register. If you can't attend and wish to record your apologies, send an email to john@viastrada.nz with the subject line "AGM apology"

Here are some highlight from the agenda:

- Chair's Report
- Treasurer's Report
- Group Procedures: proposed changes for consultation
- Update on Group Conference 2026
- Awards
- National Committee membership changes
- Incoming Chair speech
- Newly-elected Vice Chair speech

Looking forward to seeing you there.

Look at the cool stuff the Nelson/Marlborough branch is doing. Come lead them!

Aotearoa Bike Challenge
To celebrate the Aotearoa Bike Challenge, members of the Nelson/Marlborough Transportation Group branch and the Engineering NZ branch hopped on their bikes and headed out to the Honest Lawyer to boost their kilometres recorded on the competition website and share some stories.

Check out the photos! Look at what a cool place it is! What a nice bunch of people the branch members are! Wouldn't they be a nice bunch of people to lead?

Lead the Transportation Group in Nelson/ Marlborough!
Are you passionate about shaping the future of transportation in the Nelson and Tasman district? This is your opportunity to give back to the engineering profession, develop your leadership skills, expand your profile and network nationally, and help coordinate engaging activities for local professionals.

A call will go out to local members shortly, but if you're interested or would like to learn more, please get in touch with michael.town@beca.com for a chat or a coffee.

This is your opportunity to give back to the engineering profession, develop your leadership skills, expand your profile and network nationally, and help coordinate engaging activities for local professionals.

Bishop announces levies system for infrastructure growth

The Government has announced new rules around housing infrastructure aimed at making housing developments and transport corridors more financially attractive to councils.

In a speech to a LGNZ metro and provincial sector conference delivered recently, Infrastructure Minister Chris Bishop laid out what he calls a "demand-led not planner-led" development infrastructure system.

Development contributions - where councils mostly determined a charge after a development is ready to go - will be replaced by a scheme of broad-based and pre-set levies.

In addition, new charges will be introduced so those who benefit from infrastructure will have to pay for it.

And atop all of this the Government is going to install a new regulator to set and govern the setting of new levies to stop councils using monopoly powers over land use to jack up the charges.

"Under the status quo, councils and developers face significant challenges to fund and finance enabling infrastructure for housing," Bishop says.

"We want to move to a future state where funding and financing tools enable a responsive supply of infrastructure where it is commercially viable to build new houses."

Development contributions were designed in 2002 for a world with a strategy of 'urban containment', where councils put rings around and ceilings on top of our cities.

Bishop says in the speech that the new scheme will "shift market expectations of future scarcity" and bring down the cost of land and seeing it developed more quickly.

But the biggest potential change is a new scheme that Cabinet has approved to charge end users of new infrastructure - such as new roads and public transport hubs - a levy towards their development.

"As a general principle, those who benefit from publicly funded infrastructure should help contribute to the cost of it," the speech says.

"We will enable Infrastructure Funding and Financing Act levies to be charged for major transport projects, e.g. projects delivered by NZTA."

Previously the Government has worked on various forms of "complicated" value capture but that appears to have been set aside.

"Our preference is for a much simpler solution that builds on existing legislation - getting beneficiaries to pay for some proportion of the cost of the investment through infrastructure levies," Bishop said.

While details will be worked on by officials, in general it will mean levies charged to those who benefit from projects such as new motorways, train stations or bus interchanges.

The other major change is the intention to scrap development contributions, which Bishop says came out of careful, planner-led system which led to supply constraints that "created a scorching hot land and housing market driven by artificial scarcity".

"Development contributions were designed in 2002 for a world with a strategy of 'urban containment', where councils put rings around and ceilings on top of our cities."

Bishop says that the new system will allow councils to collect a far greater proportion of the costs of development.

"Councils and other infrastructure providers will be able to charge developers for their share of aggregate infrastructure growth costs across an urban area over the long-term. Development Levies will provide far more flexibility for councils and other infrastructure providers to recover costs for any in-sequence development - whether planned and costed, or not," the speech says.

"Quite simply, this tool will respond to growth and recover costs, no matter where the growth occurs within land zoned for housing."

The new levies will be ring-fenced for separate services such as drinking water, waster water and transport and councils will have discretion to charge extra levies on areas that had particularly expensive development costs.

But councils will also be subject to a new regulator. Bishop does not name the regulator or the sort of function the Commerce Commission carries out in other sectors.

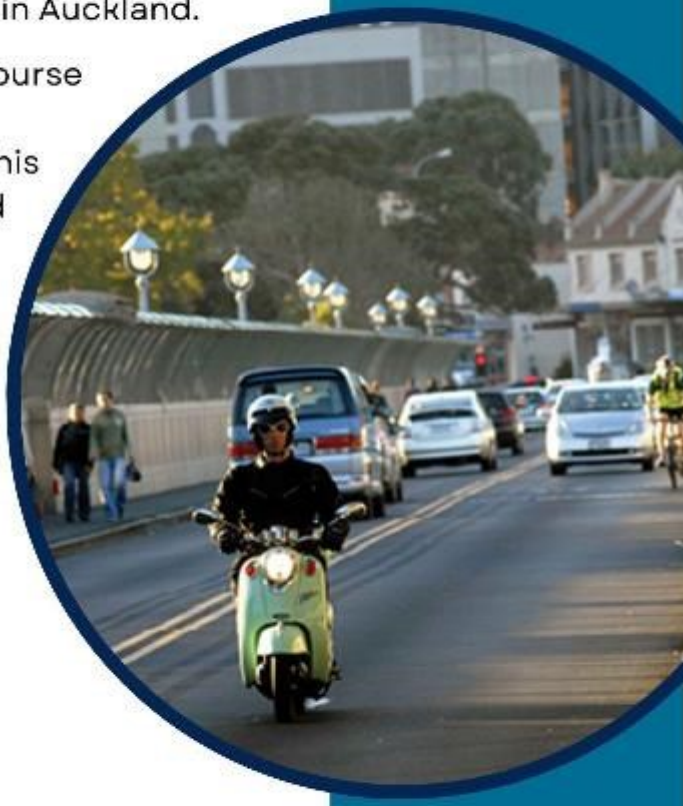
"Councils can have monopolistic pricing power as the sole provider of certain infrastructure. The new levy system will restrict local authority discretion about various matters, such as setting the methodology used to allocate project costs."
Source: RNZ

HUMAN FACTORS
IN THE LAND TRANSPORT SYSTEM

We are pleased to announce the inaugural Human Factors in the Land Transport System one-day short course, in person, in Auckland.

Attendees at this highly interactive and practical course will learn about the science of human behaviour, designing effective solutions for people, and how this leads to lower human costs, more user-friendly and efficient projects, and more focused spending.

The course is suitable for transport and road safety engineers, health and safety professionals, planners, managers, leaders, other transport system designers, and anyone who has an interest in designing for people.



Thursday 29th May
8.30am to 5pm

Location:
20 Viaduct Harbour Avenue, Auckland

The course will equip participants to:

- Approach projects and work with a human factors lens.
- Identify where human factors input can improve usability and efficiency, and reduce risk and cost.
- Assemble teams that can apply human factors methods to improve human and system performance.

HFESNZ

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AT

021-043-8416 www.mackieresearch.co.nz julia@mackieresearch.co.nz

City Rail Link update—first train runs

These tests will accelerate in the coming weeks. This includes brake testing on what is one of the steepest sections of railway in NZ

A giant, slow step in a journey that will transform travel in New Zealand's largest city was completed successfully recently when a test train made its first trip through the full length of Auckland's City Rail Link (CRL) tunnels.

The 3.45-kilometre-long inaugural journey ran south from Waitematā Station (Britomart) under central Auckland past the new underground stations at Te Waihorotiu and Karanga-a-Hape to Maungawhau Station on the Western/North Auckland Line.

The three-carriage train left Waitematā station on time at 9pm and took two-and-a-half hours to complete its first journey.

The speed was deliberately slow – around five kilometres an hour – allowing technicians to complete their first round of underground checks and balances relating to tunnel clearance, power supply and signalling. The train successfully completed five trips during the night.

The successful test run is welcomed by Auckland Council which, along with the Government, funds New Zealand's largest transport infrastructure project.

"This is momentous for Auckland and the City Rail Link programme, which has had its fair share of challenges," says Mayor Wayne Brown.

"It's good to see progress being made because Auckland deserves a public transport system that will deliver benefits for Aucklanders and visitors alike. I've always said I was determined to get the project finished and over the line, and we can finally see the light at the end of the tunnel."

Getting the green signal to proceed came after exhaustive planning and safety checks that peaked when the tunnels' overhead lines were energised ready to provide the electricity to power trains.

City Rail Link Ltd's Chief Executive, Patrick Brockie, described the journey as a "colossal milestone" that the project had been working towards since spades first went in the ground at Britomart in 2016.

"City Rail Link Ltd was established to deliver NZ's biggest infrastructure project – one that will be an absolute gamechanger for Auckland. Last night's test run is a major step in our transition from a construction site into a railway and we now start a comprehensive testing schedule ahead of people riding the train next year," says Mr Brockie.

CRL is a new rail connection that turns dead-end Waitematā into a through line station to better connect the central city and the wider rail network.

KiwiRail says the first end-to-end journey launched a key testing phase to confirm trains can seamlessly transition between CRL and the wider network.

"This is a huge milestone for the CRL project and all our partners. We've all worked tirelessly to get to this point and seeing a train make its

first journey through the full length of the tunnels is true cause for celebration. Last night's first end-to-end journey launches the key 'dynamic' train testing phase of the CRL project to confirm that trains and the CRL infrastructure can seamlessly integrate with the wider KiwiRail network," says Bevan Assink, KiwiRail's Programme Director City Rail Link.

"These tests will accelerate in the coming weeks. This includes brake testing on what is one of the steepest sections of railway in New Zealand, recovery procedures and the start of hands-on training for drivers. The start of CRL dynamic testing in the tunnels closely follows another key milestone - the successful completion of KiwiRail's latest stage of its network upgrade programme, where significant progress was made with major network rebuild works over the summer holidays," says Mr Assink.

Auckland Transport director public transport and active modes Stacey van der Putten says: "When City Rail Link opens in 2026 it will better connect Aucklanders to the people and places they want to visit. For the first time the rail network is joined up for trains at the heart of our public transport system."

"The test train has made the first direct, easier journey that tens of thousands of people will be making every day. But before that happens, we've still got a lot of work to do to make sure journeys on Auckland's new railway are safe, reliable and seamless from day one," says Ms van der Putten.

Running trains through the tunnels is but one part of a busy schedule of tests and checks working to ensure Aucklanders can use a world class rail system in 2026. Work includes testing complex tunnel ventilation systems, tunnel supervision and security, lighting, upgraded communications, and providing hands-on training for Auckland's metro drivers and station staff – and many more.
"At all times," Mr Brockie says, "safety is our absolute priority."

Mr Brockie acknowledged the work of his CRL Ltd team, the project's main Link Alliance contractors, KiwiRail, Auckland Transport and Auckland One Rail.

"Everyone involved in being ready for the first train has the right to be proud – a great achievement that demonstrated the very best in innovation and co-operation to deliver an outstanding outcome for Auckland and its more accessible future," he says.

There are 8300 separate tests to be done so the CRL can open in 2026.

Besides trains in the tunnel, tests include mechanics, electrics, security, fire, communications and hydraulic systems for the tunnel and stations.

Since the first test train ran, the team has continued to work through the hundreds of individual tests required before opening day. These tests cover everything from train operations to safety systems.

The team have already completed a range of tests under four categories, including:
- Train clearance at low speed (up to 5 km/h)
- Checks on the catenary/pantograph interface with the overhead line
- Train clearance at speeds up to 40 km/h
- Signal sight line checks

Until July, the focus is on ensuring test trains and infrastructure operate safely, including brake checks, emergency systems, and trains running at full speed.

This will be followed by staff training, operational procedures, and testing how systems and staff handle both normal and disrupted conditions, expected to finish by early October.

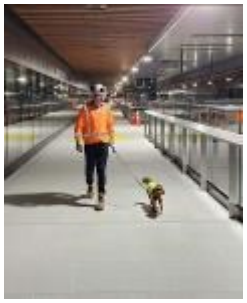
Later in the year, testing will involve emergency response teams like Police and Civil Defence.

There are 8300 separate tests to be done so the CRL can open in 2026

Meet Bosco. Many of the final touches are now being installed at CRL stations – and our furry friends are not forgotten.

At our new midtown CRL Te Waihorotiu Station, the team is installing an underground drinking fountain – especially made for dogs.

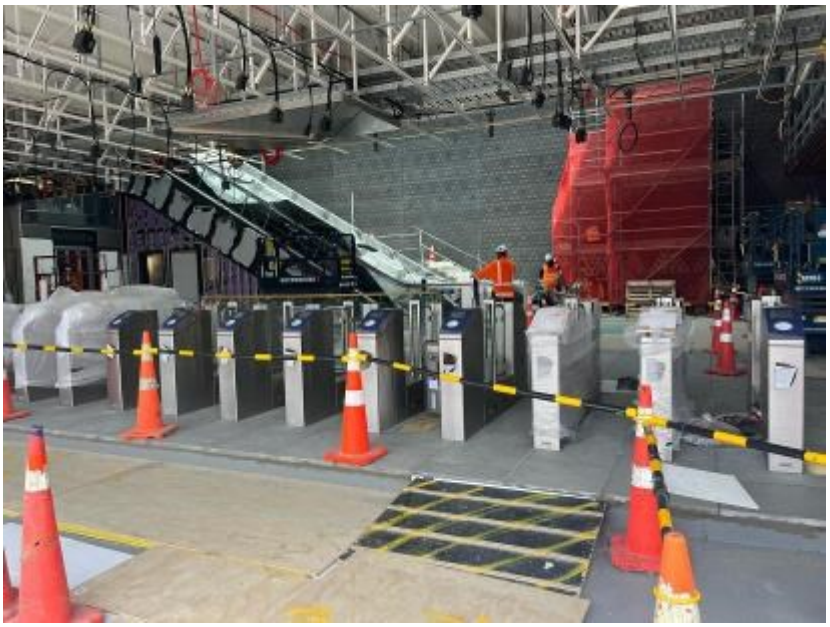
All CRL stations are fully accessible and certified disability assist dogs will always be welcome.



Auckland Transport also now welcomes domestic pets on public transport including trains, for off-peak travel and in accordance with Auckland Transport's pet travel terms and conditions.

Here we have Bosco giving the official pawprint of approval while also taking a sniff around underground.

And don't worry, humans – drinking fountains in the stations will be available for you too.



Turnstiles installed
They look like station sentinels standing tall, proud and ready for when Maungawhau Station is open.

Eleven of 14 turnstiles to ticket future travellers through Maungawhau Station were installed recently. The work started at 4am and took one hour per turnstile, to complete the cabling and installation into the ground.

Crews at the station are now installing ticketing booths, to provide AT HOP card services, although future commuters will also be able to use a credit or debit card to get into the station.

Another sign of how close the station completion is but of course there is much more testing to do before CRL can open in 2026.

Crews at the station are now installing ticketing booths, to provide AT HOP card services, although future commuters will also be able to use a credit or debit card

Maungawhau Station virtual tour
The former Mt Eden train stop has been enlarged and re-developed with a modern station building. The new Maungawhau Station includes new and upgraded platforms for the CRL line and existing Western Line.

In collaboration with our delivery partners Link Alliance, we've launched a 360-degree virtual tour that lets you explore the station.

Take a virtual walk through the station's architecture, concourse, and platform level.

Thanks a million! Auckland taps milestone with new ways to pay for public transport

On January 20th 2025 at precisely 3.56pm, an unsuspecting passenger made history when they hopped off a route 27H bus by the Grafton Bridge after a short trip up Symonds Street.

As the passenger tagged off the bus, that one small tap of a phone, smart watch, credit or debit card marked the end of the millionth journey made using contactless payments in Auckland since new ways to pay were introduced in November last year.

We will never know who that passenger was, but what we do know is that passenger made history in their own little way – so thanks a million!

AT Chief Executive Dean Kimpton says reaching one million trips is a tremendous milestone for Auckland's public transport and one that was reached weeks earlier than originally expected.

"Aucklanders have long asked for easy and alternative ways to pay on public transport." Mr Kimpton says.

"We have responded with the upgrade to our ticketing systems that means you can use a contactless payment option, alongside our AT HOP card. Giving immediate benefits for customers with reliable and cost-effective technology.

"When we introduced new ways to pay for public transport last November we received overwhelmingly positive feedback from Aucklanders and visitors alike. Since then we've seen a really strong uptake of contactless payments across the network, with the highest use over weekends and on routes like the AirportLink and our Waiheke Island bus services.

Auckland's big weekend of events helped to push up the number of customers using contactless payments further, Mr Kimpton says.

"With visitors in the city for Luke Combs, SailGP and the Auckland FC match on Saturday we experienced the biggest day so far for contactless payments, with 13 per cent of customers making the most of AT's new ways to pay."

"AT's roll-out of contactless payments was a real highlight, but we've got even more to look forward to, with trains returning to Pukekohe following the electrification of the line from Papakura, a fleet of brand new double decker electric buses taking over the WX1 route from April, and our first electric ferries hitting the water this year "

NZMUGS Research—Post-Covid trip rates

Results showed that both employee trip rates and office densities have increased resulting in increased trip rates for the office activity post-Covid.

Covid-19 has spread across the globe from when it was first discovered in November 2019.

The respiratory coronavirus has totally changed the way people and businesses operate including how employees work, and travel to and from their place of work.

Currently, there is little research on how Covid-19 has impacted employee travel patterns in New Zealand.

This research project—instigated by the NZMUGS subgroup of the Transportation Group—focuses on the impact of Covid-19 on employee travel patterns focusing specifically on employees working in offices.

This study has collected data from employees working at various offices to determine whether their travel patterns have changed in a post-Covid environment.

This study aims to identify any changes to employee travel patterns by collecting data via an online survey.

These results were then used to determine if/how employee travel patterns have changed. Results showed that both employee trip rates and office densities have increased resulting in increased trip rates for the office activity post-Covid.

How Have Trip Rates for Office Activity Changed in a Post-Covid Environment?

- NZMUGS- Predicted vs Actual Stage 1 (2023)
- NZMUGS- Predicted vs Actual Stage 2 (2024)

Auckland's luckiest bus stop

To celebrate the Lunar New Year, AT have created a stunning bus wrap to wish Aucklanders, particularly the Chinese Community, a Happy New Year.

The celebrations have also extended to Auckland's luckiest bus stop!

The number '8' is considered highly auspicious, symbolising luck and prosperity, so AT created a very special installation at bus stop 8888 on Williamson Ave.

Both ideas were dreamed up by AT's very own in-house creative department, Creative@AT.

AT created a very special installation at bus stop 8888

NZ's largest electric bus contract awarded for West and South Auckland

New Zealand's largest ever tendered bus services contract has been awarded recently, with Auckland Transport (AT) signing on Ritchies Transport to deliver expanded operations in west and south Auckland.

AT's Director of Public Transport and Active Modes Stacey van der Putten says the new nine-year, $1.068 billion contract with Ritchies is particularly exciting as it will see 175 new electric buses introduced on the network while delivering value for ratepayers and public transport users.

The $1.068 billion contract with Ritchies will see 175 new electric buses introduced.

"Because of the large scale of this bus contract we have been able to secure strong value for ratepayers and continue the fast pace of electrification of Auckland's bus network," Ms van der Putten said.

"This signifies a major step forward in enhancing Auckland's public transport infrastructure and reflects AT's commitment to delivering a robust, future-ready public transit system.

"For our customers the modern new electric buses will make catching the bus a quieter, more comfortable and enjoyable way to travel.

"The inclusion of zero emission buses and advanced environmental standards in the contract aligns with AT's Mission Electric and sustainability goals to significantly reduce carbon emissions, contributing to a cleaner, greener Auckland," she said.

The new contract will see some bus routes completely operated by electric buses and also includes the Airport Link, where the existing electric buses will be replaced with larger vehicles with more capacity from late 2025.

Ritchies CEO Michele Kernahan says the new contracts reflects Ritchies' ability to deliver a compelling public transport solution for Auckland Transport.

"The new contract is a credit to our entire team for their hard work and dedication, whether they are driving our buses, managing operations, or cleaning and maintaining fleets.

"This is an exciting time for both our existing staff and those who will join us. It will mean a much stronger presence in west Auckland, new facilities in Māngere, and expansion of our existing operations in Takanini and Pukekohe as we electrify depots, introduce new fleet, and prepare for service transitions to support the delivery of high-quality public bus services to Aucklanders," says Ms Kernahan.

Once operational, the new contract will deliver more frequent and reliable bus services, directly benefiting west and south Auckland communities by improving connectivity and reducing wait times.

The contract will add at least three new frequent bus routes, which run at least every 15 minutes, 7am to 7pm, 7 days a week.

In addition, new communities in Clarks Beach, Paerata, Red Hills and Whenuapai will benefit from additional bus services. These service improvements are funded through Auckland Council's Climate Action Transport Targeted Rate (CATTR).

All buses used on these contracts will be fitted with advanced driver assistance systems, which include collision avoidance, lane departure warnings, and pedestrian and cyclist detection. They will also be fitted with a driver fatigue management system.

The contract is structured to accommodate future service expansions and technology upgrades, ensuring we can continue to meet the growing demands of the city's dynamic public transport needs.

There are currently 180 zero emission buses in operation in Auckland, the largest number of any city in Australasia, with another 75 due to join the fleet by June.

Future growth, including the vehicles being announced in this contract, will see the number increase to around 450 by August 2026, which is around a third of the 1350 buses that operates AT's services.
Source: AT

NYC's congestion pricing pulls in US$48.6m in first month

We've seen the traffic reduction — and the revenues are coming in-line with what we were projecting when we did all the years of studies.

New York City's new toll on motorists driving into Manhattan's busiest areas raised $48.6 million in its first month, as President Donald Trump is seeking to end the congestion pricing program just weeks after it began.

The Metropolitan Transportation Authority, which manages the city's transit network, began charging drivers on Jan. 5. The amount of toll revenue collected between that start date and Jan. 31 is in line with budgeted projections, Jai Patel, MTA's deputy chief financial officer, said in an interview. The MTA anticipates the fee will bring in nearly $500 million a year, or about $40 million per month.

Taxis and for-hire vehicles account for about 20% of the revenue collected, with the remaining amount coming from passenger cars, trucks and other vehicles, Patel said.

Congestion pricing charges most motorists $9 to drive into the area south of 60th Street. It's the first such tolling program in the US and aims to reduce traffic and improve air quality.

So far, traffic has decreased. There were 2.6 million fewer vehicles south of 60th Street from the start of congestion pricing through Feb. 17, a 10% drop, leading to traffic moving faster along Manhattan streets.

"It's in line with what we've seen both on the traffic side — we've seen the traffic reduction — and the revenues are coming in-line with what we were projecting when we did all the years of studies," Patel said.

The first month's tally resulted in $37.5 million of net revenue after $9.1 million of operating expenses and $2 million were set aside for mitigation projects to help combat environmental issues outside of the tolled area, she said.

The tolling gantries continue to charge drivers even as Trump has moved to stop congestion pricing. US Transportation Secretary Sean Duffy sent a letter to Governor Kathy Hochul, saying the Federal Highway Administration would withdraw from an agreement with the MTA that gave the transit agency the authority to charge drivers.

The MTA immediately filed suit, seeking a court decision to stop Duffy's efforts. Hochul suggested that Trump wasn't sympathetic when she discussed congestion pricing with him in a meeting recently at the White House.

"I wanted to take my case to him directly, and let him see the benefits of this program because our city is paralyzed with gridlock," Hochul said on CBS's *Face the Nation*. "We had a path forward to be able to make the city move again, and it's working. I wanted to just have that opportunity to convey that."

Officials expect congestion pricing will encourage people to use public transportation rather than driving to get into parts of Manhattan. Paid ridership on the MTA's subways and commuter rail lines increased in January, with the agency collecting $11 million more than budgeted in farebox revenue last month, according to MTA data.

Source: Bloomberg

The relationship between enforcement and the perceived risk of detection for driving offences

A study by Monash University Accident Research Centre has revealed that while drivers' perceptions of being caught for drink-driving are strongly linked to enforcement exposure, no such connection exists for speeding.

This suggests traditional deterrence models, which rely on visible speed enforcement to create a general deterrent effect, may be ineffective for managing speeding behaviour

This suggests traditional deterrence models, which rely on visible speed enforcement to create a general deterrent effect, may be ineffective for managing speeding behaviour.

The research also identified high-risk drivers who continue to offend despite awareness of enforcement, highlighting the need for more targeted road policing strategies.

To improve speed enforcement, authorities should shift towards methods that increase the certainty of detection rather than relying on visibility.

Since the study found no link between visible speed enforcement and deterrence, strategies should focus on covert mobile speed cameras, point-to-point average speed monitoring, and expanded use of unmarked enforcement vehicles.

Specific deterrence should be prioritised by ensuring those who exceed speed limits are caught and penalised, with escalating penalties for repeat offenders.

Public education must also reinforce that detection is unpredictable and unavoidable, countering the perception that enforcement can be easily evaded.

By focusing on these approaches, authorities can create a stronger deterrent effect and improve road safety.

See the report here

Dead wood is not dead

Group member Andre Tomecki sent in this photo from Vanuatu, entitled "Dead wood is not dead". If you look closely, you'll notice the post with the sign on it is not quite as not-living as you'd expect.

SAFE SYSTEM SOLUTIONS
ROAD SAFETY · AUDITING · ENGINEERING · PROJECT DEVELOPMENT

Victoria walks

FACE-TO-FACE TRAINING

UNIVERSAL ACCESS AUDITS

MELBOURNE - 2 & 3 JUNE 2025

Road and street managers are increasingly recognising the importance of safety for pedestrians as vulnerable road users, and the need to provide for Universal Access to meet the requirements of the Federal Disability Discrimination Act (DDA). The value of audits to assess streets and activity centres for safe pedestrian movement and disability access is increasingly recognised, and there is industry demand for trained and competent auditors. This course provides participants with the key skills and tools to complete a Universal Access Audit in accordance with best practice guidance.

WHAT IS COVERED

- Pedestrian road safety and the factors that make a location more or less walkable
- Comprehensive background to human factors psychology, engagement for inclusive access, and inclusive design in transport
- Design that provides safe, practical, all-abilities access and DDA compliance, with detailed modules on
- Paths
- Intersections
- Formal and informal mid-block crossings
- Real-world perspectives from people with lived experience of disability
- Accessible car parking
- Field excursion – apply what you've learned in real world context

WHO SHOULD ATTEND

- People who want to become a Universal Access Auditor
- State and local government personnel
- Engineers, planners, designers, traffic managers
- Consultants involved in road safety wanting to add inclusive access auditing to their skill set
- Disability sector advocates and practitioners

COST (PER PERSON GST EXCLUSIVE)

- Universal Access Audits $1900

FOR MORE INFORMATION

training@SafeSystemSolutions.com.au
+61 3 9381 2222

CLICK HERE TO REGISTER

PRESENTERS

Bridget Doran
Director | Bridget Doran Consulting

Bridget is a chartered engineer and researcher. She has over twenty years' experience in transport policy, design, community engagement, and participatory planning.

Duane Burtt
Principal Policy Advisor | Victoria Walks

Duane has more than 25 years' experience as a planner and policy analyst in Australia and New Zealand. Over ten years at Victoria Walks he has focused on pedestrian oriented town planning and street design.

Amanda Lawrie-Jones
Access & Inclusion Consultant | Accessible Action

Amanda Lawrie-Jones is an experienced Access & Inclusion Consultant with decades of organisational capability expertise. She founded Accessible Action in 2015 to help organisations remove barriers and promote inclusion for people with disabilities.

Jo Eady
Senior Advisor | Victoria Walks

Jo has over 15 years' experience in active transport, walking and accessibility auditing and planning. Jo developed Victoria Walks' Audit tool for assessing physical accessibility of outdoor walking paths.

Avoiding waste: Recycling edge marker posts

Instead of binning every post, they are being repurposed into PVC pipes

Here's a great initiative that's been kicked off by NZTA's Northland maintenance contractors Fulton Hogan: They're now recycling plastic edge marker posts that'd otherwise end up in a landfill.

The humble edge marker post plays a vital role in road safety, and when NZTA replace them they'd typically end up in a rubbish pile.

Instead of binning every post, Fulton Hogan in Northland has partnered with WM New Zealand and Marley NZ to facilitate the posts being repurposed into PVC pipes.

This initiative has been rolled out in Auckland and Christchurch after a successful trial in Northland.

The posts are fully recycled into durable PVC pipes that'll be used in wastewater systems, helping to protect our waterways.

This is a great example of how the industry can reduce waste and give materials a second life.

A big thank you to the teams for making a positive change for the environment!

Auckland Transport Operations Centre – Site Visit

Auckland branch members are invited to visit the Auckland Transport Operations Centre (ATOC).

ATOC operates 24/7 to help manage the transport network in real-time. ATOC's area of operation is from Taupō north, this includes approximately 3000km of state highways plus around 7500km of arterial/local roads in Auckland and dozens of public transport facilities.

ATOC carries out real-time monitoring, incident management, traffic signal optimisation and review as well as providing travel information to its customers.

This site visit will give members of the Auckland/Northland branch a greater understanding of how ATOC operates. On occasion, significant events occur which restrict access for visitors, if this occurs the site visit will go on with a reduced scope. Spaces are limited, please register to confirm your place.

Date: Wednesday, 16 April
Time: 9 - 11am
Venue: Auckland Transport Operations Centre (Meeting point, lobby beside ASB Bank)
Location: 78 Taharoto Road

Register here

French village's squiggle road design to slow speeding vehicles goes viral

In a bid to combat speeding and ensure safety, the picturesque French village of Baune, near the city of Angers, has resorted to the unconventional method of what can best be described as a squiggle road.

Frustrated by the inability of traditional traffic signs to slow down drivers in their 30km/h zone, local officials decided to paint peculiar squiggly lines on the road surface.

These seemingly abstract road markings, resembling something of an art project, were introduced following concerns over motorists consistently breaking the speed limit within the village.

According to Baune's mayor, Audrey Revereault, the aim is to "create a visual disturbance" for drivers and encourage them to reduce their speed.

Surprisingly, this novel approach appears to be working, with drivers successfully adhering to the speed limit.

Jean-Charles Prono, the mayor of Loire-Authion, a group of seven villages that includes Baune, expressed the difficulty of slowing down fast drivers and the need for effective solutions.

He mentioned that the goal is to "make it difficult to read the landscape," thereby forcing drivers to pay closer attention to the road.

It's worth noting that these peculiar markings are still in a trial phase to assess their effectiveness. Speed bumps were considered as an alternative but were overlooked due to concerns about creating noise disturbances for residents.

Locals have shared their mixed reactions to the squiggly road lines on a local Facebook page, 'Ca bouge sur Bauné.' While some found it challenging and unsettling to drive over these unconventional road markings, they seem to be achieving the desired effect in slowing down vehicles.

The world may not yet know the full impact of these abstract squiggles on road safety and driver behavior, but it's safe to say they might confound autonomous driving systems.

While it remains uncertain whether this squiggle road approach will gain traction worldwide, it serves as a quirky example of thinking outside the box to address road safety concerns.
Source: Momentummag.com

Frustrated by the inability of traditional traffic signs to slow down drivers in their 30km/h zone, local officials decided to paint peculiar squiggly lines on the road surface

Computer replaces 89-year-old signal box at Wellington Station

The digital signalling also built redundancy into the system, with the screens in the Hutt Valley duplicated in Auckland, which could be used in case of emergency

The lever has been pulled for the final time on New Zealand's last railway signal box.

After 89 years, the manual signal box in Wellington, which controls train movement on the tracks, is gone, and has been replaced by a computerised system already adopted by the rest of the country.

KiwiRail chief of capital David Gordon said the upgrade was part of several changes to the Wellington junction that would allow for more trains on the network – slated to be in service in five years' time.

He said entry to the station had for almost 90 years been controlled by "people standing in a signal box pulling levers".

"So the job that was previously done by looking out the window, is now done by looking at a screen in Wallaceville."

Gordon said the digital signalling also built redundancy into the system, with the screens in the Hutt Valley duplicated in Auckland, which could be used in case of emergency.

He said while the manual system was still used in many parts of the world – including London's underground – it was not versatile.

"It is so incredibly reliable, provided you don't want to change it, but it only does one job. Whereas computer-based technology you can reprogramme."

Gordon said Kiwirail was considering what it would do with the manual levers and suspected they could end up in a heritage museum, but no decision had been made just yet.

He said the signal box upgrade and addition of more than 20 turntables was necessary to open up the entry to Wellington Station, which was "critically constrained".

"We've spread the junction out so trains have got a bit more of a safety overlap and we've dealt with the signalling. So, what was a restriction on the network is now gone.

"Those [future] services were not going to be possible had we not done this work."

The upgrades were among a series of maintenance projects that shut down Wellington's railway network over the Christmas break.

KiwiRail is putting the finishing touches on its summer rail upgrades, which means Wellington rail services (excluding the Wairarapa Line) are back up and running, as KiwiRail delivers an ambitious work programme across the Wellington region.

Each year KiwiRail takes advantage of the quieter holiday period to temporarily close the rail network and undertake a programme of critical maintenance and upgrades (known as a block of line).

David Gordon says the new year saw a successful block of line, with works completed to schedule so far.

"It has been a smooth holiday period despite the rough weather, and while we have tight deadlines to get a large amount of work done safely, we have managed to complete all the projects we set out to do," says David. "I would like to extend my sincere thanks to our staff and contractors who give up time during the summer holiday period to get the job done.

"Our thanks also extend to the people of the Wellington region – to commuters and to rail corridor neighbours – for their patience while we undertake this necessary work."

Major works have been carried out at 17 sites around Wellington and the Wairarapa, including new signalling and track configuration at Wellington Railway Station, upgrades at Linden Station and Porirua stations, track replacement between Tawa and Linden, and Crofton Downs to Wadestown. This is in addition to bridge repairs and extensive rail maintenance work across the network.

"Meanwhile work continues on the Wairarapa Line, as we work around the clock to renew almost 9km of ballast, sleepers, and rail in the Remutaka Tunnel," says David.

Metlink acting group manager Bonnie Parfitt thanks passengers for their patience over the festive period. "KiwiRail's summer projects are part of the bigger picture of ongoing improvements to the rail network to improve resilience, reliability, and pave the way for future services," says Bonnie.

"The switch from manual to computer-based signalling at Wellington Station is a big change that has gone well. KiwiRail train control and Metlink staff are doing a great job of working with a new system, and while we continue to monitor things over coming days, passengers are encouraged to plan ahead and keep an eye on the Metlink website or app for any updates."
Source: KiwiRail

We've spread the junction out so trains have got a bit more of a safety overlap

Elizabeth line post-opening evaluation

Transport for London and the UK's Department for Transport have undertaken a post-opening evaluation of the Elizabeth line, assessing transport outcomes.

The report provides a comprehensive analysis of the early impacts of the Elizabeth line on transport connectivity, socio-economic factors, and various transport-related outcomes.

There is also reference to the equivalent Crossrail report done in 2022.

Read the full report here

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

The 100-Year Road to Car Dependency in the US

In 1924 Los Angeles, streets and sidewalks were busy with various traffic, but streetcars and pedestrians were prioritized over automobiles, making it a less efficient mode of transport.

Americans drive much more than the people of any other country – and it's not by preference.

We're dependent on driving, not in love with it. The consequences are expensive, unsustainable and lethal. In 2022, 42,514 people died in traffic violence on America's road and streets.

Americans drive much more than the people of any other country – and it's not by preference. We're dependent on driving, not in love with it.

How did we get here? Americans did not choose car dependency. We didn't vote for it, and it was not the winner in a free market competition. The real answer is complex, but a single turning point reveals an essential part of the story.

That turning point was 100 years ago today. In Los Angeles, on Wednesday, October 8, 1924, a 30-year-old English teacher named Miller McClintock submitted his proposal for a new city traffic ordinance to the City of Los Angeles.

McClintock wrote it at the request of America's most successful Studebaker dealer: Paul Hoffman, just 33. Hoffman had used his business prowess not just to sell Studebakers, but also to win the chairmanship of the Los Angeles Traffic Commission, a group of businessmen who had cultivated close relationships with key members of the Los Angeles City Council.

Hoffman wanted a new traffic ordinance for Los Angeles that would favor his customers. He aspired to a city in which drivers had priority over pedestrians. Three decades later, he explained his motives plainly: "I claim no altruism whatsoever for that early interest," he told an audience of young traffic professionals in 1956. "I was in the automobile business in Los Angeles."

As a car dealer, Hoffman could not write a traffic ordinance himself. "Studebaker Salesman Proposes New Traffic Ordinance" was not a winning headline.

So instead, in July 1924 Hoffman commissioned Miller McClintock to write it. The traffic commission put McClintock on retainer as its "traffic consultant," a title that was not an obvious fit for an English teacher. But McClintock was also working on a PhD in municipal government at Harvard University, and the subject of his thesis was city traffic. That was sufficient, Hoffman calculated, to give McClintock the credibility he needed.

In 1924 there were already 16 million cars on American roads and streets, but the smart bet then was that driving your own car would never be the main way to get around a city. People walked. City sidewalks were often crowded with pedestrians. Street railways made walking practical. Streetcar lines reached into the suburbs and the networks were usually so extensive that people could get almost anywhere without a car.

Those who tried to drive found the going slow. Pedestrians were everywhere, and a driver stuck behind a streetcar often couldn't pass it. And if you injured or killed a pedestrian — anywhere in the street — the driver was likely to be found liable.

After all, streets were for everyone, and a person who chose to operate a dangerous machine was responsible for the consequences.

Automobiles and pedestrians were a deadly mix. Traffic deaths in cities were high and rising steeply, and most of those killed were pedestrians, often children. People did not think about safety like we usually do today. They did not ask, "How can we make driving safer for people in cars?" That's because streets were not primarily for drivers. They were for everyone. So instead, people asked, "How do we keep streets safe for all?" And since drivers were a small minority operating dangerous machines, the usual answer was to restrict driving.

Insiders in automobile businesses had no confidence that driving would ever become the usual way to get around a city for most people. In cities, most people who could afford a car weren't buying one. They had good alternatives, the rules prevented fast driving, and anyone who tried driving fast anyway had to share streets with pedestrians and their streetcars. And as death tolls rose, the proposals to restrict driving grew more vocal. Pedestrians far outnumbered drivers, so motordom could not turn to democratic processes for relief.

At that time, enterprises with a business interest in automobiles called themselves "motordom." Motordom recognized that its greatest obstacle to future of ubiquitous driving in cities was the way most people looked at the problem. As long as the usual question was "How do we keep streets safe for all?" motordom could not win. Motordom organized to change this.

In 1922 an insider in motordom, Edward Mehren, concluded: "The obvious solution … lies only in a radical revision of our conception of what a city street is for." If streets were for automobiles, drivers would have priority over pedestrians. Then pedestrians — not drivers — would be restricted, and pedestrians would be responsible for their own deaths. McClintock's traffic ordinance was a critical step in the "radical revision."

On behalf of the Los Angeles Traffic Commission, McClintock submitted his traffic ordinance to city council on October 8, 1924. It was far from the first ordinance to provide for the regulation of pedestrians, but it was by far the most influential.

The proposed ordinance specified that "roadways, except at safety zones and at crosswalks are primarily intended for the use of vehicles and street cars." In business districts, McClintock's ordinance confined pedestrians: "no pedestrian shall cross a roadway other than by a crosswalk."

This rule is unsurprising today only because we have all grown up with the legacy of this influential ordinance. In fact, judges had ruled consistently that streets were as much for pedestrians as for anyone else, and that motorists' duty of care was far greater.

McClintock's ordinance was the greatest single factor in overturning this legal standard — and not just in Los Angeles.

With some revisions, the city council adopted McClintock's ordinance. It became effective on Saturday, January 24, 1925. Though implementation was far from incident-free, it won the admiration of motordom coast to coast. Meanwhile Studebaker awarded Hoffman by making him a corporate vice president. For McClintock, the company endowed the first national institute of traffic engineering and made the author of the Los Angeles Traffic Ordinance its first director.

In California, motordom promoted the LA ordinance throughout the state. McClintock, the Automobile Club of Southern California, and the California State Automobile Association developed it into a Uniform Traffic Ordinance for California cities.

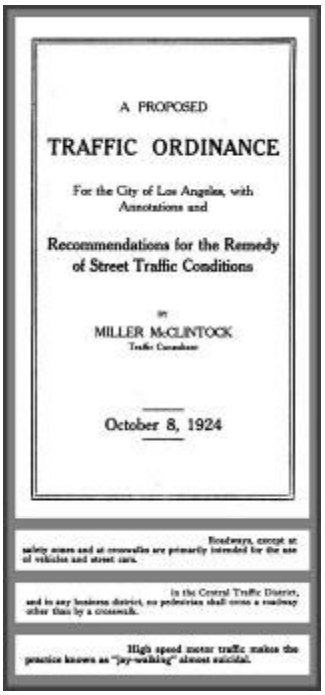
Thereafter the ordinance became the model for cities throughout the United States. In 1927 and 1928 insiders in motordom drafted a Model Municipal Traffic Ordinance, adapting it from the Los Angeles traffic ordinance. Just as Hoffman had needed McClintock to give the L.A. ordinance credibility as the work of an impartial expert, national motordom used the U.S. Department of Commerce as an intermediary in the model ordinance. It was issued by the Commerce Department, though it was written by a committee chaired by a Cadillac salesman. By late 1930, 23 cities beyond California had adopted the model ordinance, in whole or in part. New Jersey, New York, and Wisconsin adopted versions of it as state law.

Once implemented, these ordinances became grounds for raising speed limits, deterring walking as a cause of "delay" (to motorists), and eventually even removing many marked crosswalks because of their supposed tendency to give pedestrians "a false sense of security." Meanwhile the street railways, in part because of interference from growing motor traffic, went bankrupt and were scrapped. Eventually even people who could not afford a car were often compelled to buy one. Walking in America did not just decline; it was deterred.

One hundred years later

The origins of car dependency in the United States are mostly forgotten today. We fill this vacuum of memory with various notions, above all that we Americans just prefer to drive and chose car dependency for ourselves. Such ideas are ahistorical and serve to excuse and perpetuate an expensive, unsustainable and deadly status quo. On the centennial of the Los Angeles Traffic Ordinance, it's worth remembering that many of our forebearers who chose cars did so only as a last resort. We never chose car dependency.

Source: Planetizen



A PROPOSED

TRAFFIC ORDINANCE

For the City of Los Angeles, with Annotations and

Recommendations for the Remedy of Street Traffic Conditions

by

MILLER McCLINTOCK

Traffic Commissioner

October 8, 1924

Roadways, except at safety zones and at crosswalks are primarily intended for the use of vehicles and street cars.

In the Central Traffic District, and in any business district, no pedestrian shall cross a roadway other than by a crosswalk.

High speed motor traffic makes the practice known as "jay-walking" almost suicidal.

Australia, what are those green reflectors for?

If you hit the road on a holiday in Australia during the Christmas break, there's a good chance you may have spotted these little green reflectors along the way. But what do they actually mean, and how can they help you?

Originally intended for truck drivers, here's what you need to know about the green reflectors on the road and how they can help even when you're just driving a car.

The difference between the green reflectors and a regular pull-over bay is that the green dots signal an informal bay that is not maintained, and many aren't paved

The green reflectors were originally intended to signal a safe space for trucks to pull over, rest, check their load, and let faster vehicles pass when driving on a two-way carriageway or single-lane road.

However, they have since been accepted and used by people towing large trailers, caravans, and even people in cars who just want to let the people behind them pass.

There is a basic system to it that all road users should keep an eye out for. If there are three dots, it means a safe spot to pull over is approximately 500 metres away, two green dots mean 250 metres away, and one green dot means you've reached the safe space to pull over.

The difference between the green reflectors and a regular pull-over bay is that the green dots signal an informal bay that is not maintained, and many aren't paved.

Instead, they are chosen based on the firmness of the ground and the visibility that passing traffic has.

According to road safety programme Truck Friendly, the idea was first started by Rod Hannifey, a long-haul truck driver and road safety advocate who became involved in road safety after a near-miss head-on accident with an impatient vehicle.

"[After the near miss] I pulled up for my break and thought: 'What can I do to lessen these problems?' and have been involved since," wrote Hannifey on his blog, TruckRight.

"It is generally recognised that there are insufficient truck rest areas and insufficient money available to fix the problem immediately.

"There are many informal spots used by truck drivers where there is either not enough capacity in current truck bays or where the spacing, location and or lack of facilities – particularly shade in the daytime – sees trucks pulling up on wide road shoulders.

"Because such informal sites are not normally marked in any way and are too easily passed before they can be recognised as a safe place to stop – regular black skid marks often attest to this problem, where a truck has had to brake savagely to attempt to access such a site [they've only] seen at the last second."

In 2000, Hannifey led the first official installations of the reflectors (which were originally blue but later changed to green) along the Newell Highway, New South Wales.

Hannifey has won road safety awards and for the project over the past two decades. As of 2024, the green reflector scheme has been rolled out by the Queensland, South Australian, New South Wales, and Victorian governments, but Hannifey has previously told media outlets that he has personally installed around 97% of them.

Source: Drive.com

The Future of Transport: Balancing Affordability and Innovation for All

The call for papers is now open, click the link below for more details. The ATRF 2025 will cover a broad range of topics, including, but not limited to:

- Travel demand modelling (including scenario planning and analysis and risk management)
- Traffic modelling, forecasting and simulation (including control and management)
- Travel behaviour, travel surveys and demand management
- Transport Infrastructure and land-use (including urban design)
- Transport economics, funding, pricing and appraisal
- Active transport (cycling, walking, micro-mobility, etc.)
- Public transport
- Freight and logistics, aviation, maritime and supply chain resilience
- Traffic safety
- Technology and Innovation
- Intelligent transport systems (connected and autonomous vehicles, MaaS, on-demand transport, smart cities, etc)
- Social, health, and environmental effects of transport (health, climate change, air quality, etc)

Call for papers open now!

Norway on track to be first to go all-electric

Norway is the world leader when it comes to the take up of electric cars, which last year accounted for nine out of 10 new vehicles sold in the country. Can other nations learn from it?

For more than 75 years Oslo-based car dealership Harald A Møller has been importing

Volkswagens, but early in 2024 it bid farewell to fossil fuel cars.

88.9% of new cars sold in the country last year were EVs, up from 82.4% in 2023

Now all the passenger vehicles for sale in its showroom are electric (EV).

"We think it's wrong to advise a customer coming in here today to buy an ICE [internal combustion engine] car, because the future is electric," says chief executive Ulf Tore Hekneby, as he walks around the cars on display. "Long-range, high-charging speed. It's hard to go back."

On the streets of Norway's capital, Oslo, battery-powered cars aren't a novelty, they're the norm. Take a look around and you'll soon notice that almost every other car has an "E" for "electric" on its licence plate.

The Nordic nation of 5.5 million people has adopted EVs faster than any other country, and is on the cusp of becoming the first to phase out the sale of new fossil fuel cars.

Last year, the number of electric cars on Norway's roads outnumbered those powered by petrol for the first time. When diesel vehicles are included, electric cars account for almost a third of all on Norwegian roads.

And 88.9% of new cars sold in the country last year were EVs, up from 82.4% in 2023, data from the Norwegian Road Federation (OFV) showed.

In some months sales of fully electric cars were as high as 98%, as new petrol or diesel car purchases almost fizzled out.

By contrast, in the UK electric cars made up only 20% of new car registrations in 2024. Although this was a record high, and up from 16.5% in 2023.

In the US, the figure was just 8% last year, up from 7.6%.

Norway is undoubtedly an EV pioneer, but this electric revolution has been three decades in the making.

"It started already in the early 1990s," says Christina Bu, the secretary general of the Norwegian EV Association, as she took me for a spin around Oslo in an electric minivan.

"Little by little taxing petrol and diesel engine cars more, so they have become a lot more expensive to purchase, whereas electric cars have been exempted from taxes."

The support for electric vehicles was first introduced to help two Norwegian manufacturers of early EVs, the Buddy (previously Kewet) and TH!NK City. While they went out of business, the incentives for greener vehicles remained.

"It's our goal to see that it's always a good and viable choice, to choose zero emission," says Norway's Deputy Transport Minister, Cecilie Knibe Kroglund.

Even though it's a major oil and gas producer, Norway aims for all new cars sold to be "zero emission", starting at some point in 2025. A non-binding goal was set back in 2017, and that milestone now lies within reach.

"We are closing up on the target, and I think that we will reach that goal," adds Kroglund. "I think we have already made the transition for passengers cars."

Key to Norway's success has been long-term and predictable policies, she explains.

Rather than banning combustion engine vehicles, the government has steered consumer choices. In addition to penalising fuel fossil vehicles with higher taxes and registration fees, VAT and import duties were scrapped for low-emission cars.

A string of perks, like free parking, discounted road tolls and access to bus lanes, then followed. By comparison, the European Union plans to ban sales of new fossil-fuel cars by 2035, and the UK's current government wants to prohibit their sale in 2030.

Petrol and diesel car sales are still permitted in Norway. But few are choosing to buy them.

For many locals, like Ståle Fyen, who bought his first EV 15 months ago, going electric made economic sense.

"With all the incentives we have in Norway, with no taxes on EVs, that was quite important to us money wise," he says while plugging in his car at a charging station in the capital.

"In the cold, the range is maybe 20% shorter, but still, with the expansive charging network we have here in Norway, that isn't a big issue really," Mr Fyen adds. "You just have to change your mindset and charge when you can, not when you need to."

Another driver, Merete Eggesbø, says that back in 2014 she was one of the first people in Norway to own a Tesla. "I really wanted a car that didn't pollute. It gave me a better conscience driving."

At Norwegian petrol stations many fuel pumps have been replaced by fast-charging points, and across Norway there are now more than 27,000 public chargers.

This compares with 73,699 in the UK - a country 12 times bigger in terms of population.

That means that, per 100,000 people, Norway has 447 chargers while the UK has just 89, according to a recent report.

Tesla, VW and Toyota, were Norway's top-selling EV brands last year. Meanwhile, Chinese-owned marques - such as MG, BYD, Polestar and XPeng - now make up a combined 10% of the market, according to the Norwegian Road Federation.

Norway, unlike the US and EU, has not imposed tariffs on Chinese EV imports.

Ms Bu says there's "not really any reason why other countries can not copy Norway". However, she adds that it is "all about doing it in a way that can work in each country or market".

Norwegians aren't more environmentally-minded than people elsewhere, she reckons. "I don't think a green mindset has much to do with it. It has to do with strong policies, and people gradually understanding that driving an electric car is possible."

Yet Norway is also a very wealthy nation, which thanks to its huge oil and gas exports, has a sovereign wealth fund worth more than $1.7tn (£1.3tn). This means it can more easily afford big infrastructure-build projects, and absorb the loss of tax revenue from the sale of petrol and diesel cars and their fuel.

The country also has an abundance of renewable hydro electricity, which accounts for 88% of its production capacity.

"A third of cars are now electric, and it will pass 50% in a few years," says Kjell Werner Johansen from the Centre for Transport Research.

"I think the government accepts that a few new petrol or hybrid cars will still be on the market, but I don't know anybody who wants to buy a diesel car these days."
Source: BBC

At Norwegian petrol stations many fuel pumps have been replaced by fast-charging points, and across Norway there are now more than 27,000 public chargers

London is Europe's most congested city, with drivers sitting in traffic an average 101 hours last year

In his 1938 novel Scoop, the author Evelyn Waugh satirised Piccadilly Circus' traffic, describing it as "still as a photograph, broken and undisturbed".

Much like its gridlocked traffic, London's position as the most congested city in Europe has remained unmoved, with it coming top of the list ahead of Paris and Dublin.

Drivers in the capital spent an average 101 hours sitting in traffic last year, a 2% increase from the previous year, according to the transport analytics company Inrix.

There has been a consistent increase in congestion in the city in recent years, from 97 hours in 2022 to 99 hours in 2023.

The A40 Westway in London was judged the most congested road in the UK, with 5pm-6pm being its worst time.

Behind London was its Eurostar-connected neighbour Paris, with 97 hours of delays, followed by Dublin in third place with 81 hours.

Inrix estimated the cost to London to be about £3.85bn, which is equivalent to £942 for each of the city's 4 million drivers.

The company said it used diverse sources of data to produce its analysis, including from phones and vehicles.

Bristol and Leeds completed the top three most congested cities in the UK, but were lagging some way behind London with 65 hours of delays and 60 hours respectively.

In Manchester, there was a 13% increase year-on-year in delays. It had one more hour lost to gridlock than Leeds but ranked below it, when taking into account the city's relative size.

Birmingham, however, dropped from the second-worst city in the UK to sixth place, after traffic was moving 10% more freely than a year ago.

Bob Pishue, Inrix transportation analyst and author of the report, said: "While the UK did see a slight increase in congestion again this year, overall congestion has remained steady.

"Roadworks in key corridors such as the M25 Wisley interchange caused considerable traffic on a main artery into the capital.

"Interestingly it was cities outside of the capital that saw the greatest increase in congestion, with Manchester seeing a large increase, up 13%.

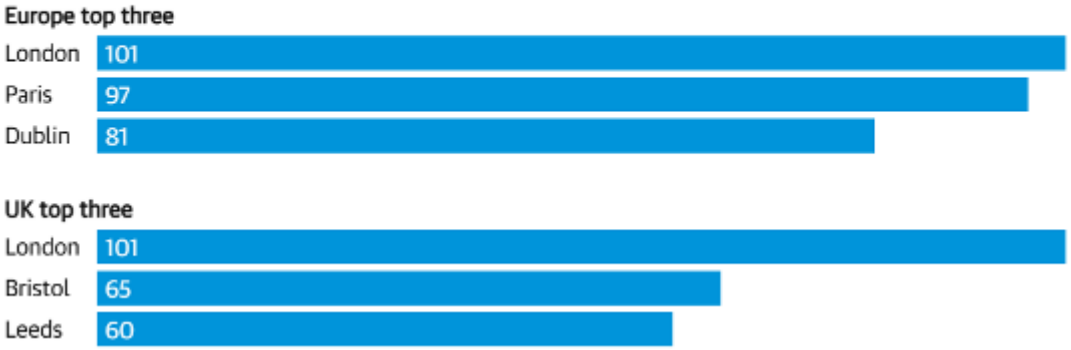
"While London only had a modest increase in time lost, it still represented half of the entire country's delay."

Inrix said London contained most of the worst corridors for traffic delays in the UK because of the "concentration of population, employment and economic activity".

A spokesperson for Transport for London, which is responsible for a network of red route roads carrying a third of the capital's traffic, said: "We are committed to making sure Londoners can move around the capital as safely, sustainably and efficiently as possible.

London is the most congested city in Europe

Average number of hours drivers spent sat in traffic in 2024



"We support the movement of everyone across London and our investment in walking, cycling and public transport is making it easier to choose sustainable ways of travelling, helping to cut congestion.

"Our network includes some of the busiest roads in the country and we continue to invest in world-leading programmes to make sure roads are used as efficiently as possible."

The capital has been renowned for its traffic problems, with Piccadilly Circus becoming a byword for somewhere chaotically busy.

In his 1938 novel Scoop, the author Evelyn Waugh satirised the junction's traffic, describing it as "still as a photograph, broken and undisturbed".

Centuries earlier, the diarist Samuel Pepys had written of an hour-and-a-half's delay to his journey for dinner with Lord Crew in 1661.

The problem of congestion led to the conception in the 1960s of the planned "box" mega motorway that would have resulted in large parts of inner London being demolished to create highways.

It was scrapped after vehement protests by residents whose homes would have been flattened for the 50-mile scheme.
Source: Guardian

There has been a consistent increase in congestion in the city in recent years, from 97 hours in 2022 to 99 hours in 2023.

Time of Use Charging Bill passes first reading

A Bill to reduce travel times, increase efficiency, and help boost economic growth and productivity on our busiest roads has passed its first reading in Parliament recently, Transport Minister Chris Bishop says.

"Being stuck in traffic is a waste of time and money. In any given peak hour traffic jam there are people stressed about running late for work, parents trying to get the kids to school on time, couriers and truckies getting frustrated as their runs get further and further behind time, and tradies losing money because they can't get to as many jobs on time," Mr Bishop says.

"Congestion is a tax on time and productivity"

"Congestion is a tax on time and productivity, and New Zealanders are very over having to pay it.

"A report released by Auckland Council today shows that by 2026, traffic congestion will cost Auckland $2.6 billion per year, and that Aucklanders already sit in traffic for 29 million hours per year, which averages out to 17 lost and wasted hours per Aucklander.

"Frankly, no-one running a business or juggling work and family can afford to lose 17 hours of potentially productive time. Modelling shows that successful time of use charging – charging motorists to travel on certain roads at peak times – will encourage people to change the time or mode of travel, and could reduce congestion by up to 8-12 per cent at peak times.

"Successive governments and a select committee inquiry in 2021 have all agreed that time of use charging is something we need to do to reduce congestion. This Government is getting on with it.

"The Land Transport Management (Time of Use Charging) Amendment Bill will enable the NZ Transport Agency (NZTA) and local authorities to develop charging schemes for our most congested roads.

"The Bill requires NZTA to lead the design of schemes in partnership with local councils to ensure motorists benefit from the design of the schemes across their region's roading network. By enabling local solutions within a nationally consistent framework, we are tackling network productivity head-on while enhancing economic productivity and quality of life for all New Zealanders.

"The legislation is not about raising revenue but maximising the efficiency of the roading network. Any revenue that is collected will first be used to pay for the scheme's costs and then reinvested to improve transport in the region.

"While time of use schemes will help manage congestion and increase productivity in our cities, it is not a standalone solution. The Government will continue to prioritise investment in growing and maintaining our transport network, including through the Roads of National Significance and Regional Significance, and major public transport projects, to enable Kiwis and freight get to where they need to go, quickly and safely."

The Bill will be referred to the Transport and Infrastructure Committee where the public will have an opportunity to make submissions. The Government intends to pass the legislation before the end of 2025.
Source: Beehive

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TRANSPORTATION GROUP NEW ZEALAND

Engineering NZ concerned about decline in engineering roles and pipeline of work

Engineering New Zealand is deeply concerned about the decline in engineering roles in New Zealand as the pipeline of work all but dries up.

"Government's halting of work on infrastructure projects has had a devastating impact on the engineering profession," says Engineering New Zealand Chief Executive Dr Richard Templer.

"Engineers across Aotearoa are struggling – with far too many losing their jobs and leaving for opportunities overseas where demand is immediate. We are worried that we will see another brain drain like what was experienced in the early 2000's. It took years to rebuild the specialist engineering skills that were lost. It's simple – we can't afford to lose more engineers."

Engineers across Aotearoa are struggling – with far too many losing their jobs and leaving for opportunities overseas where demand is immediate.

The risk to New Zealand's development and growth is significant. The engineering profession is critical to the delivery of our essential infrastructure and to our wider economic development. Previous governments have identified New Zealand's infrastructure deficit as well over 100 billion, and without engineers this need cannot be met.

The loss of engineers during the current work slowdown will also exacerbate the looming long-term skills shortage.

"It is very frustrating seeing the loss of engineers in the short term, when we know that over the long-term New Zealand is facing a shortfall of about 2,300 new engineers every year. Without enough engineers we can't build the new roads, hospitals, schools and water facilities our country so desperately needs," says Templer.

"We know that the Government's Fast Track Approvals regime started this month as an important step towards streamlining infrastructure work. Although this is welcome, we remain concerned about losing crucial engineering skills and workforce. By the time infrastructure work once again ramps up, our country may well find itself without the engineers it needs."

Engineering New Zealand is calling for the Government to urgently free up funds for delivery and firm up the infrastructure pipeline.

"We have asked Ministers to include targets for infrastructure delivery in Government quarterly action plans. New Zealand cannot afford to wait – we need to get major project design and procurement underway as soon as possible. The funds for infrastructure projects need to be prioritised and released," says Templer

"New Zealand also needs a clear, committed infrastructure pipeline that outlives each political term. Engineers need to know what is happening, and when. Otherwise, we will keep losing our engineers and will pay the price. An engineering skills crisis is evident – the time to act is now."

This Government has high hopes for productivity and growth – but engineers are needed to help deliver major projects so that New Zealanders enjoy prosperous lives.

engineering new zealand
te ao rangahau

Tunnelling starts for Mt Messenger Bypass

The tunnel will be large enough to accommodate loads up to and including house removals.

Recently NZTA began tunneling the 235-metre-long tunnel for Te Ara o Te Ata – Mt Messenger Bypass in Taranaki.

Following an early morning blessing from mana whenua and iwi partner Ngāti Tama, workers made the first cut using a 110-tonne road header machine, a type of machine that cuts through rock using a head with spikes.

The tunnel is being done in two stages – first, the upper portion (the "top heading"), followed by the bottom section (the "bench").

At regular intervals the cutting is paused to apply shotcrete (sprayed-on concrete) to the crown and walls of the new cuts which supports the structure.

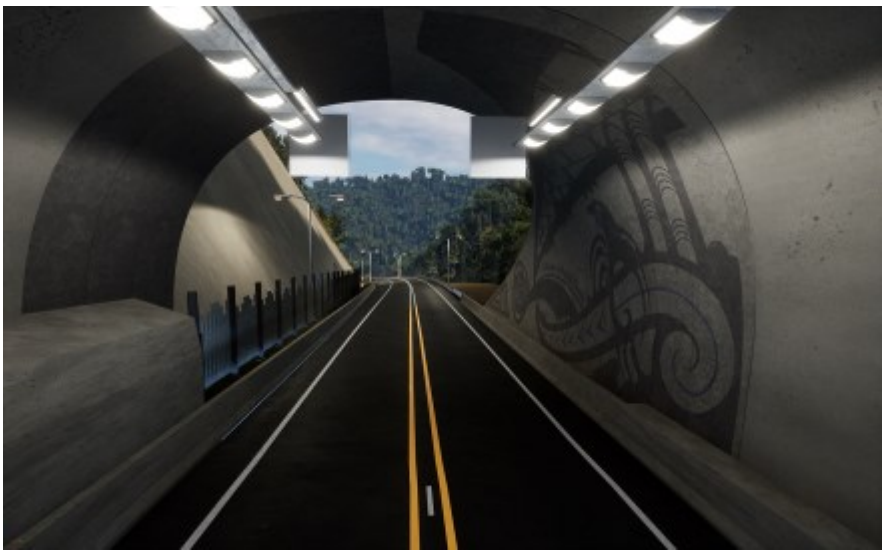
The project has named the road header "Hinetūparimaunga" – the atua (god) of mountains and cliffs.

A design on the side of the roadheader depicts Hinetūparimaunga with outstretched limbs supporting the roof, walls, and floor of the underground space.

A yellow background represents the light that'll flood into the tunnel upon its completion.

The design and construction of the tunnel is similar to the Northern Gateway Tunnel in Auckland.

The tunnel will be large enough to accommodate loads up to and including house removals.



The finished tunnel will incorporate cultural elements acknowledging Ngāti Tama tūpuna – the traditional guardians of the northern gateway to Taranaki.

You can keep up to date with work on Te Ara o Te Ata by signing up to our email newsletter. Visit the website to sign up, more.

‘A Smart car?’: Australia’s tiniest emergency service vehicles

The Australian emergency service vehicle fleet isn't just trucks and paddy wagons. We have found the tiniest first responders Down Under.

A Fiat 500 was recently spotted in Sydney dressed in an official New South Wales Ambulance outfit, prompting questions about how a patient fits in the back of it. The user posted to the r/CarsAustralia Reddit, asking, "What is this? An ambulance for ants?".

It turns out the pint-sized Italian hatch isn't alone in its tiny but life-saving endeavours. Australia has a long history of using small cars for everything from saving lives to putting out fires. We take a look at some of them.

"What is this? An ambulance for ants?"

No, this is not an ambulance for ants. The Fiat 500 Ambulance actually plays an important role in assisting people in need.

This particular Fiat 500, called Beryl, was brought in to navigate the Sydney CBD streets while the light rail was under construction and streets were less accessible. Little is published about the mini-ambo, but other users on Reddit claim that the small car is used as a Paramedic Immediate Care Unit (PICU).

PICUs can often be found in a wide range of vehicles, mostly Holden Captivas, Isuzu D-Maxs, and motorcycles, but the Fiat 500 is the perfect size to slip through city streets like a motorcycle while carrying a life-saving equipment.

Often, the PICUs are driven/ridden by extensively trained Intensive Care Paramedics who can carry out on-the-spot procedures and stabilise patients before they head into the back of a full-sized ambulance. The NSW Ambulance Facebook page states that "with [light-rail] construction now complete, Beryl will sign off from her last shift in December 2023". However, since then she has still been spotted in use around Sydney's CBD.

NSW Ambulance Smart car

Just when you thought an ambulance couldn't get any smaller, NSW went to the next level by employing a Smart ForTwo for its fleet.

First introduced in 2009, the Smart ForTwo was initially used as a PICU at events with large crowds, such as the Sydney New Year celebrations. The then Premier, Kristina Keneally, told the Sydney Morning Herald in a 2009 interview that the FourTwo plays a key role in assisting people in large crowds.

"The advantage of the Smart car is that it will allow our ambulance service to have a quicker response, particularly when it comes to large events," said Keneally.

The Smart showed more of its worth, while Sydney's CBD roads were under construction for the light rail.

"The Smart car is part of the CBD light rail response plan and is assisting us in getting to patients in the CBD as quickly as possible given the road closures," said the NSW Ambulance Facebook page.

The aforementioned Fiat 500 was brought in to replace the aging Smart ForTwo around 2016, which is why the Fiat carries the call sign 'SMART1'.

NSW Police Fiat 500

It turns out that paramedics aren't the only ones who see potential in the Fiat 500 as emergency service vehicles – the little Italian also had a short stint as a police car.

This particular squad car was reserved for community policing, where its less intimidating persona helped make the police who drive it more approachable, allowing them to share road safety messages.

"When it comes to visibility, the Fiat 500 has proven to be an exceptional car, attracting attention and interest like no other car we have used," said Superintendent Wayne Cox, the Leichhardt Local Area Commander, in a 2009 Drive article.

"With its primary role as providing a talking point from which we can discuss road safety and break down any barriers that may exist, the Bambino police car has attracted interest from all areas and all age groups."

It is uncertain how long the Fiat 500 was in use, but it has seemingly been decommissioned, and there have been no sightings of it in recent years.

National Police Minis

Minis have been a big part of the Australian police fleet, and they are particularly popular among QLD and NSW police.

In 1964, Queensland Police purchased 10 Morris Minis to patrol the Hamilton and Banyo districts. NSW Police, on the other hand, got the hot hatch Mini Cooper S. This zippy little car was the first Highway Patrol car to be used for speed enforcement from 1966 until 1971.

It was brought in to replace the solo speed enforcement motorcycles and was also one of the first cars used as an 'unmarked vehicle' with plain-clothed officers.

The Cooper S is now the most desirable of the classic Mini line-up, as it features the 1.3-litre S-spec engine and upgraded suspension.

To make the car even more special, the Cooper S was further tuned from the factory with an upgraded camshaft, twin carburettors, cylinder head modifications and more. Approximately 113 were sold to the public as a Police Pack after the NSW Police Department over-ordered on the vehicle. The Police Pack Mini Cooper S is the most desirable Mini for collectors. An all-original one is on display at the NSW Police Academy.

NSW Police briefly returned to the Cooper S in 2003 with its supercharged engine and again in 2017 with a Mini Clubman for the Newtown area.

The Mini was brought in to replace the solo speed enforcement motorcycles and was also one of the first cars used as an 'unmarked vehicle'

Western Australian Mini fire engines

A few volunteer bush fire brigades in Western Australia have miniature fire engines built on golf cart platforms.

The earliest one we could find was a little engine used by the Singleton Volunteer Bush Fire Brigade. The little truck, endearingly called 'Squirt', was fitted with everything from a two-way radio to a bush fire rake, a working hose reel with a water tank, and even had real lights and sirens. The Bedfordale Volunteer Bush Fire Brigade still uses Squirt for community outreach programs, but it's not the only little tanker.

Wanneroo Fire Support Brigade also added a mini tanker to its fleet in 2021 to educate the public and for community outreach purposes. The pint-sized emergency service vehicle has a home with the Two Rock Volunteer Bush Fire Brigade.
Source: Drive.com.au

Gondolas for mass transit?

Nick Reid
Principal Public Transport Planner at MRCagney Pty Ltd.

Gondolas are often in the news, with manufacturers of ropeway systems proposing them as a modern option for mass transit systems in New Zealand. However, like every next big thing in transport, it's hard to separate the marketing hype from the reality. I recently took a trip on the Maokong Gondola in Taipei, which helped me test some of these assumptions and put some perspective on the usefulness of gondolas for public transport.

Originally used to climb mountains and span waterways, gondolas are increasingly being put forward as alternatives to typical urban transit solutions like buses and trains, even where there aren't steep hills or valleys to traverse. This is because ropeway technologies (variously called gondolas, cable cars and aerial tramways, among other things) offer some tantalising potential benefits for public transport.

- The most visible potential comes from the fact that gondolas are suspended in the air, which suggests they can run direct from point to point, sailing over ground level traffic and congestion, and avoiding the need to repurpose street space or acquire land to build guideways.

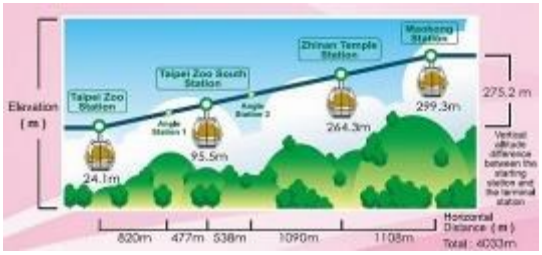
- Another benefit is their near-infinite service frequency, with a continuous string of cabins running a headway measured in seconds rather than minutes. Catching a Gondola is more like using an elevator than waiting for a bus.

- Likewise, the constant cable loop means that a gondola trip should be fast and direct without slowing for intermediate stops, which should result in high passenger capacity. Proposals for eight- or ten-seater cabins departing every twenty or thirty seconds suggest a line capacity of several thousand people per hour.

- Finally, gondolas offer the potential for highly automated operations. The cabins are driverless, being 'driven' by the cable mechanism, which suggests low staffing costs and the potential to run very high frequency departures right across the day and evening.

Back to Taipei, the Maokong Gondola is a good example of a real-world application of a ropeway system in a mass transit configuration, and on paper it offers a lot of benefits. While it does span mountains, this Taiwanese Gondola line is more than a conventional mountain cable car. It runs from a station of the Taipei metro system to the touristy hill town of Maokong, via two intermediate stations serving a dense residential neighbourhood and a temple complex. At 4.03km length it is very long, and it features four stations in total, so it is more of a transit line than a point-to-point shuttle.

In Taiwan, like most places, land ownership is complex and you can't simply string a gondola line over private properties without buying the land or air rights. And there's no escaping the need to buy land and build multi-level station buildings and towers.



My first impression was that, while the aerial views were spectacular, the elevated route was certainly less than ideal for a transit corridor. In Taiwan, like most places, land ownership is complex and you can't simply string a gondola line over private properties without buying the land or air rights.

In practice most run over public waterways, parks or reserves, which means they're often located on indirect alignments and less useful for urban transit than it might appear. The Maokong Gondola isn't a straight line, rather it follows a zig zag path which seems to be based on avoiding private land and locating stations and pylons in places where it was feasible to build them. This is obvious with the main city side station, where the gondola terminus is actually 400m walk away from the connecting metro station that shares its name.

There's no escaping the need to buy land and build multi-level station buildings and towers, which is clear in the Taipei example. This line has four stations, two further angle change stations where the cabins change cables, and 47 support pylons. That's a lot of infrastructure.

So what about the staffing levels? Well. despite the "automated" operation, many staff were active operating the crowded line with queues of passengers stretching out of the station and up the street. The line was very crowded for my trip, which was at peak time during a very busy holiday weekend. So, it was a good test of real-world performance under high demand like you might expect at peak times on a mass transit line.

At the end station there were two staff selling tickets, three more managing the fare gates and queues, and another two staff allocating passengers to cabins on the platform. There was a further staff member managing the lift of the multi-level station, keeping it free for wheelchair and

pram users and sending most people up the stairs. Presumably there were several more staff at the other stations, and at least one in a control room somewhere. Altogether, there must have been at least a dozen people running the gondola line. So much for automation!

In terms of speed, the gondola took 22 minutes to go from end to end for my ride, which equates to 12 km/h for the 4.03km line. This is not very fast, equal to a local bus crawling in heavy traffic. In the mountain context it is undoubtedly quicker than the winding route a bus would need to follow to cross the hills and valleys, but it's a fraction of what a surface rapid transit line usually achieves with dedicated lanes in a city environment.

I timed the headway as one cabin departing every 45 seconds, despite the long queues showing demand for more frequency. This is indeed very frequent for a transit line, but only about half the throughput of the supposed "every 20 seconds" that I see in Gondola marketing. I can only assume that crowding or other operational factors were limiting the real world frequency to 80 cabins per hour each way.

Capacity wise, each cabin has eight seats but in practice the utilisation was low. Despite the long queues, the staff sorting groups into cabins weren't forcing passengers into every seat in every cabin. I guess there was concern about people being trapped with strangers in a small space for over twenty minutes.

Groups of four or five people travelling together got their own cabin, as did anyone with a wheelchair or pram, while they did pair up groups of two or three to share, but not more. In effect the gondolas were running as private cabins, with very little public sharing of the vehicles going on. All up, I estimated the average occupancy was about four and a half people per cabin even under peak conditions, about half the theoretical capacity.

So what does this all mean for the capacity of the line? Well, during that busy peak demand period, there were running 80 gondola cabins per hour each way, and loading an average of 4.5 people on each, which means the functional maximum capacity of this Gondola line was only 360 people per hour. That's about the same as a normal bus route running double decker bus every fifteen minutes, and a fraction of the capacity of a busway or light rail line.

It's also far far lower than the 3,600 people per hour claimed in some proposals for urban transit gondolas. Working back on the maths, it seems these capacity claims are based on ten people in every cabin, and a cabin coming every ten seconds. Maybe this is achievable somewhere, but it certainly wasn't being done in Taipei.

There is one thing with gondolas I could never get my head around: if they have such high frequency and run so regularly, why do I always end up waiting long queue to board one?

I think the answer to that lies in the concept of latency. While gondolas have practically no waiting time with very frequent headways, and very short dwell times at the platform, gondolas have a latency in access. They have a lag in boarding that comes from using evenly spaced vehicles of low capacity and loading them one at a time.

As an example of that, if you have 100 people at a busy bus stop, a double decker can pull up, load everyone on board and be underway again in less than 60 seconds. There's very little lag in that equation. But if you've got 100 people who want to ride the on the Maokong gondola, it will take seventeen minutes to load them, four or five people at a time, into gondola cabins that come once every 45 seconds.

At the connecting metro station, it's perfectly conceivable that a hundred passengers could arrive on a single metro train, and take more than a quarter hour to transfer to the stream of gondola cars

At the connecting metro station, it's perfectly conceivable that a hundred passengers could arrive on a single metro train, and take more than a quarter hour to transfer to the stream of gondola cars. Because they're evenly distributed along the cable there's not really any way to change that. Meanwhile, with a bus line it's a trivial thing to schedule the bus to meet the metro train and transfer everyone across within a minute or two.

I've got two takeaways from this experience. Firstly, manufacturers' claims of maximum capacity and speed for any flavour of transit system need to be taken with a grain of salt. If someone says X can do Y, the reply should be "show me where it actually does this".

But overall, it's clear that cableway transit is something that works well where it works well (like climbing mountains), but it's not a replacement for most regular bus or rail transit routes. It's a niche option, and that niche seems even smaller than you might think.

Engineering innovation to close our roads

Innovation keeps us moving – or in the case of the last Matrix Innovation Award winner, it keeps us moving where we should be, and not where we shouldn't.

In Auckland, an innovative trailer is quietly changing motorway safety, earning Auckland System Management (ASM) well-deserved accolades at the Transportation Group's 2024 conference.

A practical answer to a serious problem

Managing road closures on Auckland's motorway network is no small task. Every night, crews set up closures to create safe work zones, but breaches into these zones are dangerously frequent.

Since its deployment, no vehicles have breached a closure where a trailer has been in place

Whether accidental due to confusion or inattention, or deliberate – the worst are those involving an attempt to evade police – the risks to workers are significant and potentially fatal.

Traditional traffic management solutions like attenuator trucks and cones can be effective in some situations but haven't always been enough.

The Road Closure Trailer developed by ASM offers an innovative solution. Auckland's motorways are managed under the ASM model, an alliance between Waka Kotahi NZ Transport Agency, HEB Construction and Fulton Hogan.

The trailer provides a self-contained, easily deployable physical barrier to secure road closures. It's towed into position, deployed in minutes by one person and forms a highly visible barricade that deters breaches.

The idea for the trailer had been in the works for years. Initial designs involving complex telescoping structures and other technical hurdles prevented practical implementation. The breakthrough came when an airport gate system inspired a folding barrier design that could be mounted on a trailer.

The result? A lightweight and durable aluminium gate system that unfolds to cover up to six lanes and the shoulder, with built-in solar-powered lights, batteries, remote monitoring and an anti-tamper alarm.

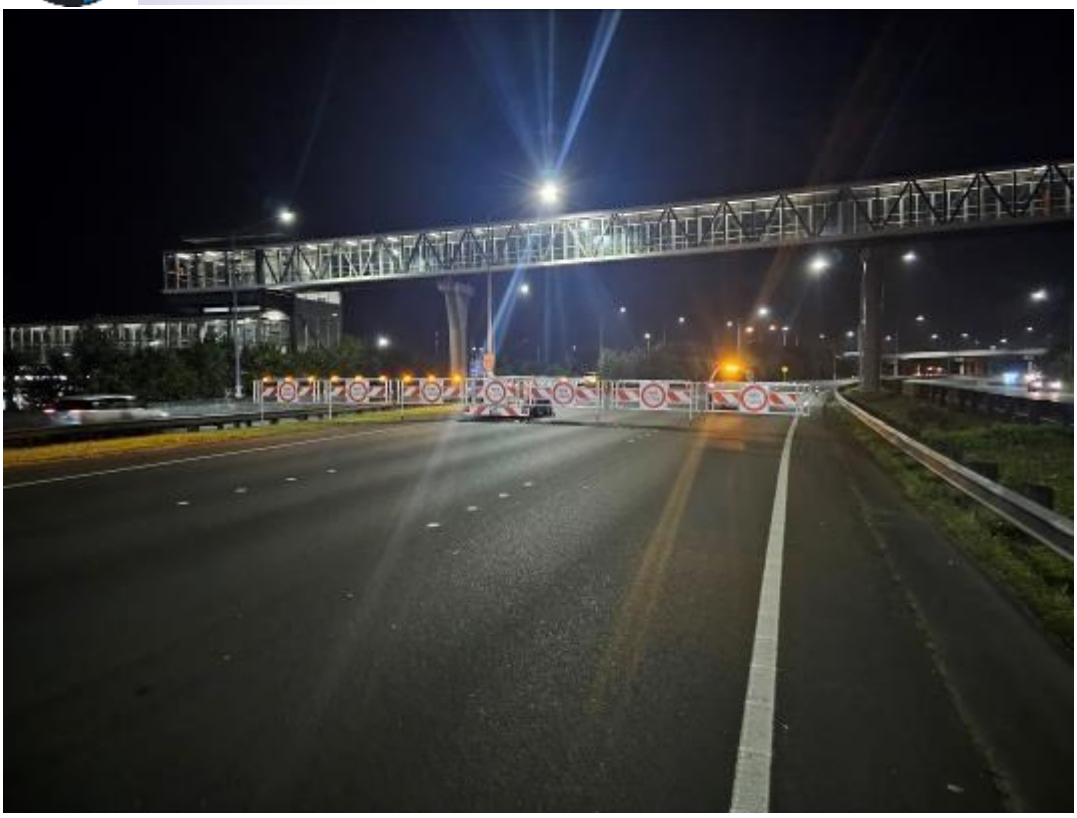
Critically, the system is simple enough for crews to use without specialised training or equipment: an impact driver is all that's needed (to raise and lower the jockey wheel) and even that is optional.

Weighing approximately 1.2 tonnes, a standard ute can tow it and deployment requires no heavy lifting or complicated setup – making it faster, safer and more efficient than traditional methods.

The true measure of the trailer's success wasn't winning the thoroughly deserved Matrix Innovation Award – that was just the icing on the cake. Rather, project leader Jim Bernhard was most fulfilled by the overwhelmingly positive user endorsements.

"When teams started using it and came back saying 'this is great, we want more' – that was the biggest reward."

According to those in the field, the trailer has made a noticeable difference – and there's proof: motorway cameras capturing Road Closure Trail-



Entries for the next Matrix Award will open in late 2025 ahead of the 2026 conference to be held in Wellington.

er installations have shown vehicles approaching, hesitating and turning back, exactly as intended.

Since its deployment, no vehicles have breached a closure where a trailer has been in place.

This success has prompted ASM to expand its fleet, with more trailers in production and potential for other roading managers across Aotearoa to add trailers to their fleets.

The Matrix Innovation Award, presented at the Transportation Group's annual conference, recognises outstanding advancements in transport safety, technology and engineering.

Winning projects like the Road Closure Trailer demonstrate the power of using smart engineering to make a real impact.

Entries will open in late 2025 ahead of the 2026 conference to be held in Wellington in March.

The Transportation Group encourages anyone with a groundbreaking project to apply.

Beyond the accolades, the conference awards celebrate ingenuity and progress – driving the future of transportation forward.

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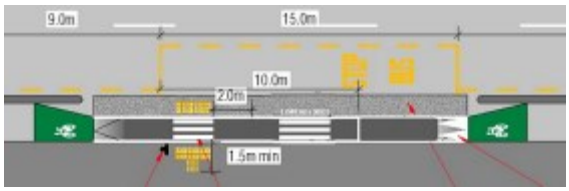
Roundabout of the Month

Amazingly, after years of Roundabouts of the Month, it was pointed out that we have never included the famous Arc de Triomphe roundabout. Many a Kiwi tourist has taken on (and sometimes lost) the challenge of driving through, around, or sometimes just towards the notorious traffic maelstrom of the French capital. So, now its made Roundabout of the Month. Ka pai.
Seen another well-known roundabout we've forgotten? Send them to Daniel.newcombe@at.govt.nz

Active Modes Infrastructure Group (AMIG) Update

Another year and another round of AMIG meetings have kicked off! The first meeting (online) was held on Feb 13th; here's some of the things that were covered:

Further work has been ongoing about design options for **bus stop bypasses** for separated cycleways. A range of different design options were presented, including different alternatives for people exiting at the rear bus door who may not always be aware of the presence of a cycleway going past. The aim is to have some level of consistency across different sites, including questions around surface colours and "LOOK FOR BIKES" wording. The key is making clear to cyclists that they should give way to boarding and exiting passengers.



It's taken some time, but details for potentially trialling **low-level cycle signals** at some problematic intersections around NZ have now been finalised and were presented to AMIG for comment. Several potential sites in Auckland and Wellington have been identified for a two-stage trial of how people respond to having an additional small signal on the nearside to minimise signal confusion and to improve visibility for riders. Some useful feedback was provided and now the next step is to refine the proposal for TCD Steering Group review.

Speaking of trials, Auckland Transport are working on a couple of interesting ones at the moment. The first one is another shared cycle/pedestrian Barnes Dance signal trial, following similar efforts in Wellington, Christchurch, and Dunedin. The other one is a test of a **dynamic bus lane** on Maioro St, using overhead lane indicators to provide a dedicated bus lane during morning peak times.

A major recent milestone in Wellington has been the completion of a **"Dutch-style" signalised intersection** in Kilbirnie. This layout features separated cycleways approaching and interacting through a four-leg intersection. Special pedestrian/cycle signal phases allow active modes to get across and around the various intersection legs safely. Well done to Wellington City for this layout!

It's been nearly six years since **AMIG's Terms of Reference** were last reviewed and updated. Since then, there have been a refinements to how AMIG operates (including greater use of online meetings); the interaction with the TCD Steering Group also needs further acknowledgement. Therefore, an updated Terms of Reference was presented to AMIG for their review and feedback.

Last year's Government Agency restructures saw NZTA create a new Multi-modal and Urban Design team to cover many of the issues pertinent to AMIG. One of the team's jobs will also be to review the **current guides and standards** available to industry. To that end, NZTA will be looking to seek industry feedback on what guides/standards people currently use, whether there are any gaps or overlaps, and what could be improved further. There is likely to be some call for industry comment on these issues in the near future – watch this space…

Other topics discussed at the latest AMIG meetings included the consistency of raised zebra vs courtesy crossings, and sign options for time-dependent bus lanes. 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/***

The next AMIG meeting for 2025; will be in late May. 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

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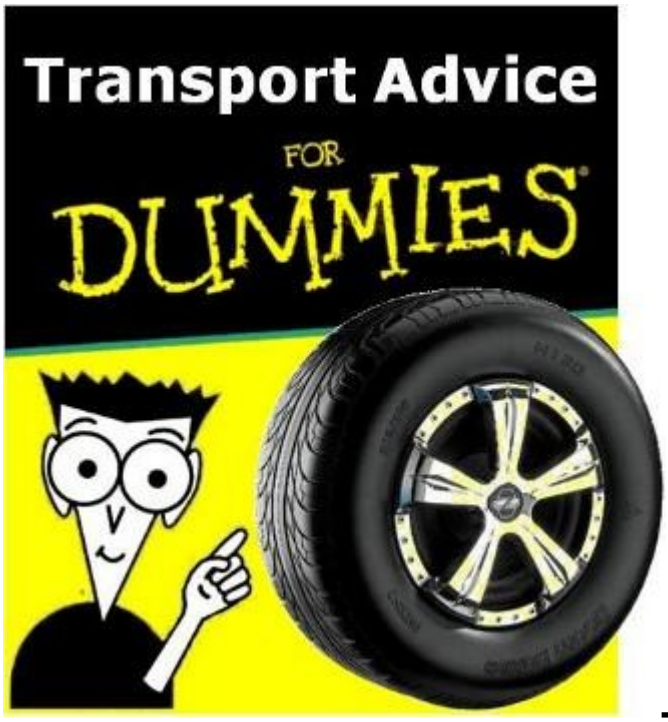

A tongue-in-cheek column on transport matters by The Transport Guy. The contents do not represent the views of the Transportation Group, or anyone else for that matter. Follow the advice at your own risk. If you have a question for The Transport Guy, no matter how stupid, email it to transportfordummies@gmail.com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

Dear Transport Guy

The old Minister of Transport got swapped out for a new one. Was the old one broken? Can we expect a change in transport policy? Can we restart doing what we were doing before the last guy?

Geoff, Dunedin

Dear Goof

Well, we tried turning him off and on again, but it made no difference. Fortunately he was still under warranty so the Government said they were happy to provide a replacement for no cost (other than the loss of safer speeds and funding for active modes, and committing to some giant motorways).

As for whether anything will change, it depends on whether the new model is version 2.0 or still uses the old software. If you are still unsatisfied, I think you'd need to order a new government.

The Transport Guy

Dear Transport Guy

I heard the new Transport Minister start talking about new ways to pay for infrastructure. Do these new tools mean we can finally start to build the things we need when we need them? Or is it going to leave us fighting for the same funding, just from a different place?

Tim, West Harbour

Dear Dim

Everyone is keen on new funding tools. No-one is keen on actually paying for things.

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Central government is happy to tell local government how they should do a bunch of smarter things to get more money, but then criticises local government for loading costs onto development and not spending their money on the right things. This criticism obviously doesn't apply to costs central government loads onto developers or the things they spend their money on.

The announcement that NZ will look into new levies, or—to use the magic phrase—'value capture', gets made every few years, and then the most important thing happens. One of the Big Four firms writes an expensive report setting out the opportunities for value capture, but noting that it requires legislative change and might be hard. Then they point out that attractive overseas cities do it, which is what people want to hear.

Then, nothing happens. Nothing. Well, maybe a couple more expensive reports get written by one of the other Big Four, but no progress is made on the introduction of new funding tools. Then, and this is an important step, central government criticises local government again but in a different way about funding. Around about this time, the government changes, and we start the process over again.

Now, while all this is going on, the need for new infrastructure continues and the cost to deliver it goes up as well. Cue another report from another of the Big Four to highlight the urgency and discuss the need to consider new funding tools.

If we wanted to generate new funding tools, we'd find a way to clip the ticket every time one of the Big Four write us a report on new funding tools.

The Transport Guy

Kids explain traffic engineering

“Learning to drive is hard. Its nothing like Gran Turismo 7.”