Roundabout

Magazine of the IPENZ Transportation Group

Issue 153 September 2017

Colourful times for ahead for cycling

> RAINBOW AHEAD KEEP LEFT

Also in this edition:

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Roundabout is the magazine of the IPENZ Transportation Group, 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 IPENZ Transportation Group or the editor, except the editorial of course. There is no charge for publishing vacancies for transportation professionals, as this is considered an industry-supporting initiative.

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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 IPENZ Transportation Group, you are most welcome to join. Just fill in an application form, available from the Group website: http://ipenz.org.nz/ipenztg/files/TGApp.pdf

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Editorial



Farewell IPENZ. Hello Engineering NZ.

October From 1st. mothership IPENZ will be known as Engineering New Zealand, and this change will eventually flow on to our Transportation Group. flagged at the last couple of AGMs - for the handful of you who attended - our Group will be looking at changing both our name and our logo. We'll be known as the Transportation Group New Zealand'.

And transport has been front and centre in this election campaign. Some of my own projects have been announced or re-announced by various political parties (which, by the way, makes them really hard to work on without being seen to pick sides, so work virtually grinds to a halt) and I'm now regularly asked how my work is affected, on the assumption that it is.

As professionals we shouldn't be susceptible to the whims of political announcements, but it can be tempting to think this gives added legitimacy or certainty

This will be carefully managed as a transition over the next few months (i.e. we aren't ready yet) but this should all coincide with a new-look website and launch at the conference next year. So keep your eyes peeled, as we move to this bold and colourful new future.

A few years ago it would have been unthinkable for all the major parties to be out-bidding each other on bus or rail projects

Other things happening in the future — a new government? This edition goes out about a week before the national election, and it is still too close to call, so it is not clear how the political environment will affect our profession's future direction.

Drifting sand and wandering camels: transport problems NZ doesn't have

As professionals, we obviously shouldn't be susceptible to the whims of political announcements, but it can be tempting to think this gives added legitimacy or certainty (or the exact opposite) to our projects. It is worth remembering that our funding and approval system is set up to avoid this kind of 'pork barrel' politics, and the Business Case Approach should make all project decisions transparent to everyone. Still, it is nice to be talked about.

One thing I have noticed is that (in Auckland at least) we seem to have moved on from the old 'roads versus public transport' argument. The first and most substantial transport projects of the election campaign were all public transport ones. Sure, roads got announced a few weeks later, but a few years ago it would have been unthinkable for all the major parties to be seeking to out-bid each other on bus or rail projects.

The eventual election victors will set or reinforce our transport future and – no matter who wins - it's an exciting times to be in our profession.

In very sad news, recently the well-respected transport professional Karl Hancock (of Flow Transportation Specialists - see his obituary later in this edition) passed away at a very young age (i.e. he was younger than me). Like most people in Auckland transport circles, I knew and respected Karl for years (you may have met him on a project or at a conference). We worked on the NZ International Convention Centre together, amongst many other projects, and he had a technical competence and friendly attitude that made him a joy to work with. He battled cancer in the last couple of years with a determination and positivity I can only dream of.

Karl was such a talented and friendly person, who clearly touched many people, that it was no surprise that there was a huge turn-out for his funeral — with a large contingent from the transport industry. He was also a well-loved family man, and the Flow team were very much part of his extended family.

My thoughts and condolences go to Karl's family and the team at Flow.

Daniel Newcombe

Roundabout Editor
@newcombe_dan

Chairman's Message



It's
September
already,
where did
the last
three
months go?

As you are reading this we are about to cast our

votes to shape the political future of New Zealand for the next three years, possibly the next six or nine, so what are we going to get?

We have been promised a range of infrastructure policies with significant investment in the transport sector, with public transport looking like a winner whoever gets across the line, but I'll let you draw your own conclusions.

As you all know I am an advocate of public transport and in particular the use of mass transit solutions. Much of our current investment is about relieving congestion and making the freight task more efficient by reducing bottleneck delays.

The elephant in the room is whilst this works well, it has a finite life and when people figure out it is quicker to drive, they drive - right up to the point when it is congested again. Under the current model we will add another two lanes after 20 years until we end up with seven stationary lanes like they do in Los Angeles.

Owning and driving a motor vehicle is a privilege, not a right, we pay for only a fraction of the cost of using the roads, and the daily commute to work could be interpreted as insane when you break it down; drive to work in heavy traffic, leave your car in a space for about 8 hours, drive home in heavy traffic, leave it outside your house for 8 hours, do it all again.

How often do you actually need your car during work? How often do you need a car at all in your normal working week? Try not using it for a week just to see if you can.

Once again I have been pondering the ideas that surround a number of issues and I have some ideas which could be easily achieved with today's technology:

Pedestrian safety is frequently in the news, and so is the phrase "crossing heedless of traffic", I wonder how many people are engrossed in their smart phones or listening to music with headphones to notice a critical change in environment?

Surely we can have an app that gives you a proximity warning when the user approaches a road or rail line, there must be a simple retrofit for pedestrian crossings with a transponder that notifies the user. We were doing the same thing back in the 90's with wayfinding for visually impaired pedestrians at university campuses.

So what I am advocating is a form of smart street signs and on that subject there is no reason that signs can't "talk" to vehicles, using the same technology. Many vehicles are Bluetooth enabled and will show up on detectors which are commonly used to monitor traffic flows by government agencies.

Failing that, the majority of people have a smart phone which will be tracked by Google. This technology can pinpoint your movements with a high degree of accuracy so it would be a simple retrofit to cars to have interactive warnings for low speed corners, stop signs or changing traffic lights.

Maybe it would also help some of the thousands of drivers distracted by their mobile technology in being able to avoid making simple mistakes.

One of the arguments I have seen is that our fleet is too old and it takes something like 26 years for new technology to become mainstream. In May 2011 the NZ fleet was about 3.2 million vehicles, around 20% of those were built between 1995 and 1997, which is roughly 640,000 vehicles.

According to MOT sources these vehicles are probably the most dangerous out there with limited safety features but being reasonably long lasting and relatively cheap. It is no surprise they are overrepresented in terms of crashes and injuries of occupants.

Furthermore it will take 20 years for them to disappear from our roads.

I wonder what kind of safety benefit we could achieve through wholesale removal of the mid-90's vehicles. Perhaps through a scrappage scheme like the European ones in 2009/10?

Whilst this was ostensibly a mechanism to reduce emissions and for supporting a flagging new car market during the GFC, there was a definite reduction in the age of the fleet in Italy and Germany, and reduction in average vehicle age is likely to result in an overall increase in vehicle safety features.

So what? Well if we gave everyone with a roadworthy 90's vehicle a cash incentive to trade it in or permanently remove it from the fleet would we be able to reduce deaths and serious injuries? Hypothetically speaking, if 1 in 10 of the older generation fleet are involved in a crash that results in an injury, with a social cost something like \$500k each time, it is a total cost to the nation of \$32 billion.

If we gave everyone \$10k for their old car it would cost \$6.4 billion, even with this crude assessment that looks like a positive BCR. Plus there would be benefits in emissions and reduction in time for newer technology to become commonplace.

I had another thought this morning: in a relatively short space of time we are likely to see electric vehicle technology surpassing the internal combustion engine. This will work well for land based transport but have we considered what happens to shipping? With the eventual demise of fossil fuel production, how do we power the vehicles that facilitate our international trade?

So, if anyone has any theories, research or articles that answer any of my musings, please share them with Daniel in upcoming issues of Roundabout.

Don't forget to support your local branch and if you want to see us do anything different please let me or your branch chair know.

Alan Gregory
National Committee Chair



Transport Engineers



About Us

With offices across the Asia Pacific region, Calibre is a trusted partner within the resources, urban, technologies, defence, transport and infrastructure markets, bringing together diversified engineering, advisory, project delivery, construction and asset management services. Turning knowledge into value, we deliver positive economic and social outcomes for our clients and the communities in which we work and live.

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Due to the growth of our Calibre Infrastructure team we are now looking for Traffic & Transportation planners and engineers to join our team in Auckland or in Wellington. We have a breadth of local, national and international experience in the areas of: traffic management, multimodal transport planning, integrated transport planning, design and road safety.

Essential Knowledge, Skills and Experience

Ideally you are an intermediate to senior engineer or transportation planner with consulting experience who can:

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- Take a pro-active approach to client's needs
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- Manage and deliver projects effectively and efficiently
- Have experience in either or all : traffic signal design, traffic / transportation engineering, transportation planning, traffic modelling, public transport, road safety and cycling projects
- Ability to undertake and write project business cases as part of a team

What We Offer

We offer a varied role that includes delivery of projects, liaising with clients and project management.

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Calibre has a multi-cultural work force and a friendly and supportive team environment. We also offer support and advice towards a move to New Zealand including visa, relocation and accommodation.

If this sounds like you then apply via our website www.calibreconsulting.co

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Then. Now. Tomorrow.

21 – 23 March 2018 Millennium Hotel Queenstown

IPENZ Transportation
Group Conference 2018

Call for abstracts will be made on 25 September.

www.ipenztgconference.co.nz



DESIGNING STREETS TO IMPROVE WALK ACCESS TO TRANSIT

Areas Accessible in a 10-Minute Walk from Two Transit Stops



Glow-in-the-dark pathways to be installed in Brisbane

Glow-in-the-dark pathways are coming to Brisbane as the city explores new ways to light up darkened paths at night. Recently it was revealed the council would install Moon Deck — a glow-in-the-dark resin — on a pathway at Obrist Place, Rochedale, as part of a 12-month trial. Council officer Coby Grosert told the committee the product could be used on existing as well as new pathways and was designed to benefit people walking and riding.

"It's highly slip-resistant, so during the day it essentially looks like a fine-grade concrete path and at night it luminesces this soft green colour," she said. "Essentially, after dusk the product reaches its peak luminosity in a few hours and maintains its luminosity until dawn the next day."

Ms Grosert said the product, which had been successfully trialled in Canberra in 2015, was used when other lighting solutions weren't suitable. The product has also been trialled at Brisbane's Ferny Grove Cycle Link to segregate the path and mark centre-line

and outer line markings. Feedback from the trial at Ferny Grove said it provided good edge delineation and was effective for walkers and riders with no lights.

The 200-metre path at Rochedale is adjacent to a conservation reserve and residential area and will be installed later this year. The 12-month trial will include different testing at six months, 12 months and community consultation.

Public and Active Transport chairman Adrian Schrinner said the council's lighting program will be ongoing, but some situations are not appropriate for lights. Ms Grosert said the results of the trial would determine if the product was suitable for other Brisbane locations.

Public and Active Transport chairman Adrian Schrinner said there would always be the need for standard lights for personal safety and in places where there were large volumes of pedestrian or cycle traffic.

"Our lighting program will be ongoing, but there are

some situations which may not be appropriate for lights," he said.

"An example would through bushland area where there is no cheap or easy connection to the power. There is also potential impacts on wildlife as well. If you go through a bushland reserve area and light it up like a Christmas tree that affects the way the animals behave in the area."





Finalists announced for NZ's top cycling awards

Twenty nine innovative cycling projects and dedicated people from across New Zealand have been announced as finalists for the 2017 Bike to the Future Awards. The awards, organised by the NZ Transport Agency and Cycling Action Network (CAN), celebrate the people and projects making cycling a better way to get around.

The finalists, selected from a new record of over 80 nominations, range from large scale infrastructure projects such as the Western Rail Trail in Hamilton, to community initiatives including USO Bike Ride, a programme that promotes cycling as a way of keeping healthy to Polynesian males across the country.

CAN spokesman, Patrick Morgan, says that with the sheer number of nominations received compared to previous years, there's no doubt that momentum for cycling is increasing.

"With the Government and councils building new cycleways, investing in skills training for our young people and encouraging more and more Kiwis to give cycling a go, it's getting even easier to get about by bike," says Patrick.

NZ Transport Agency Senior System Design Manager, Brett Gliddon says the future of transport is about providing real transport choices as more New Zealanders look for faster, more efficient ways to get around our towns and cities.

"The Bike to the Future Awards recognise the best new infrastructure, innovative projects and dedicated people who are supporting the Government's goal of making our towns and cities safer and more attractive to get about by bike. I wish the finalists well."

The 2017 Award judges said the number and calibre of this year's nominations are testament to the dedication of so many New Zealanders to sharing the benefits and the joy of cycling with their communities.

The winners will be announced at the Asia-Pacific Cycle Congress awards dinner in Christchurch on 19 October.

This year's finalists are:

Big Bike Bling Award

- Grey Lynn Pump Track; Paul Wacker & Scott Kuegler, Auckland Council, Waitemata Local Board
- Quay Street Cycleway; Auckland Transport, Auckland Council, NZTA
- Spring Creek Cycleway; Marlborough Roads, NZTA
- Western Rail Trail; Hamilton City Council, NZTA

Bikes in Business Award

- Automobile Association (AA)
- Project Tahi; Datacom
- Megan Page; Electric Meg
- Isthmus
- TravelWhiz; Abley Transportation Consultants

Get on Yer Bike Award

- I Love My Ride Campaign; Auckland Transport
- Bikes in Schools Wellington; Wellington City Council, Bike On New Zealand Charitable Trust
- Bikes in Schools Tairawhiti/Gisborne; Tairawhiti Connext Charitable Trust, Gisborne District Council, New Zealand Community Trust, Eastland Community Trust, Bike On New Zealand Charitable Trust
- Richard Barter Puketetapapa Active Transport Haven (PATH), Global Lighthouse, Earth Action Trust, Roskill Youth Zone
- USO Bike Ride
- Megan Page; Electric Meg

Innovation Hub Award

- Major Cycleways Professional Services and Construction Panels; Christchurch City Council
- Cycling in the Waikato Region Programme Business Case; Waikato Regional Council, NZ Transport Agency, Cycling NZ, Sport Waikato, Te Awa River Ride, Hauraki District Council
- Cycling Network Guidance (CNG); NZTA, Abley Transportation Consultants, ViaStrada
- Quay Street Cycleway; Auckland Transport, Auckland Council, NZTA
- Te Ara Mua Future Streets; Mangere-Otahuhu Local Board, Auckland Transport, Future Streets Research Team

Outstanding Contribution to a Bike-Friendly Future Award

- Brett Cotter; The Big Bike Film Night
- Marilyn Northcotte; en Velo
- Peter Atkinson; Queenstown Pedallers
- Teau Aiturau; Time to Thrive (Triple Teez) Trust and Mangere Bike FIT
- Richard Inder; Principal Gate Pa School, Gate Pa Community Cycleway

Taking Communities on the Journey Award

- K Road public consultation; Auckland Transport, Auckland Council
- Northern Corridor Improvements (NCI) Shared Use Path; NZTA, Aurecon, Just Add Lime
- Uni-Cycle Major Cycle Route; Christchurch City Council, Opus, Aurecon, Riccarton Bush Trust, University of Canterbury
- Waipu Cycleway Stage 1; Whangarei District Council, Waipu Cycling and Walkway Trust, Whangarei District Council

Register now for the Asia-Pacific Cycle Congress

There's only one month to go until the 2017 Asia-Pacific Cycle Congress is held in Christchurch from 17-20 October. If you haven't registered yet, get in quickly to secure your spot. Special advocate rates are available on request.

The Asia-Pacific Cycle Congress (APCC) is the southern hemisphere's premier cycle planning and industry conference, bringing together key cycling experts, researchers and enthusiasts from around the world. This year's theme is 'Gearing Up – rethinking our communities for the future'.



As an added bonus, APCC is delighted to be partnering with Adventure South to offer conference delegates the opportunity to participate in pre and post congress cycle trips. These trips are a fantastic opportunity to make the most of your trip to Christchurch and experience some of our world-renowned NZ Cycle Trails at a special congress rate.

Register now: http://www.apcc2017.com/apcc17/attend/registration



There is a colourful new reason to get on your bike in Auckland, with the opening of a rainbow-themed cycle path. The Rainbow Path is part of the north-western cycleway from West Auckland's Henderson to and downtown Auckland, and runs for almost 500m next to the Unitec campus in Mt Albert.

Auckland Transport's Kathryn King, manager for walking and cycling and road safety, said the idea came about as that stretch of the path needed remedial works carried out on it.

"When we looked at what work needed to be done on it, the grey was a coloured texture that was applied and we discovered that we could have any colour on there. It opened us up about thinking about what we could do with it, to make it more attractive to people - particularly as they're coming up on a steep hill there. It's a reward to get up there."

The resin surface is the same as that seen on the well-known and popular pink cycle path on Nelson Street and cost just under \$40,000. It took about two months to complete because of rain, and officially opened to the public just over a week ago.

King said the rainbow-coloured bike path is thought to be the only one of its kind in New Zealand and there would be moves for similar creative ideas to be carried out when it came to public infrastructure in future.



Labor Day weekend in the US delivered record-breaking temperatures to California as a heat wave swept the state, fanning the flames of the largest wildfire Los Angeles has seen in decades. The unusually warm weather bears the mark of climate change, which is fueling record heat around the globe.

While politicians elsewhere waffle on climate change, officials in Los Angeles are tackling the problem head on with a radical plan to lower the temperature of the city. Mayor Eric Garcetti intends to cut the average temperature in LA by 3 degrees F over the next two decades. As part of that effort, LA streets are getting a new coat of paint.



Cities are prone to overheating, thanks to something called the urban heat island effect. Cities tend to be short on trees, which provide shade, and they are covered with black pavement, which absorbs heat from the sun. Think of how it feels to wear a dark shirt versus a white shirt on a sunny day. A black shirt absorbs light, heating you up. But a white shirt reflects light, keeping you cool.

The average temperature in a city of a million or more people can be more than 5 degrees F hotter than surrounding areas. That extra 5 degrees can turn a hot

day from uncomfortable to deadly. As temperatures rise, cities will be an especially dangerous place to be during a heat wave, as sweltering weather threatens heat exhaustion, among other maladies. To protect public health, city officials are going to make the city cooler.

As part of that effort, Los Angeles is coating its roads in CoolSeal, a gray paint that keeps streets and parking lots 10 degrees cooler than black asphalt. Engineers developed the material for military air bases to keep spy planes cool while they rest on the tarmac. This can help them avoid being detected by satellite-mounted infrared cameras, which measure heat.

CoolSeal will help Angelinos save money during the summer, when air conditioning sends power bills soaring. And it will save lives by lowering temperatures and improving air quality. Hot weather worsens air pollution by turning car exhaust into smog, which can make life miserable for people with asthma and other respiratory conditions.

Of course, LA will have to do more than paint over a few streets to cool off the city. Angelinos will also need to plant more trees and apply white paint to rooftops—at least those not already covered in solar panels. While LA is a pioneer of reflective streets, other cities, like New York, are already experimenting with reflective roofs or, like Melbourne, lowering the temperature by planting trees. LA is hardly alone in its effort to stay cool.

"This is an urgent challenge, and it's much bigger than one person," said Mayor Garcetti in a recent statement. "Climate change is a fact of life that people in Los Angeles and cities around the world live with every day."

Source: Popsci.com

Police are pushing prams down pavements to catch

illegally-parked drivers

Police in some parts of the UK have adopted a 'secret weapon' to deter drivers from parking illegally on the pavement.

The new tactic involves pushing a pram down the pavement. If a car blocks the path of the officer and the pram, then they will slap the driver with a fine.

In the UK, parking on the pavement is not a crime unless you drive a lorry, but blocking the path of a pedestrian is against the law.

East Hertfordshire's Chief Inspector Gerry McDonald launched the programme in Herford in August.

Chief Insp McDonald said: "It is about being sensible. The reason we are using a pram as a measure clearly illustrates the issue.

"We are trying to find a balance between the need of everyone but what I can't have is parents and buggies and disabled people being forced into the road and that is why we are using this tool."



Auckland's diesel trains get new life in Mozambique

Some of Auckland's old train fleet is getting a new lease of life - in Mozambique.

Eight sets of engine units and carriages, as well as spare parts, are currently on a ship headed for the small African country where they will be used for passenger travel around the capital city of Maputo.

The old diesel powered trains became surplus to requirements after Auckland rolled out its new electric train fleet in 2014.

Group Manager AT Metro Operations Brendon Main says it's great that the old trains will get a new life in a part of the world that needs them.

"By selling the trains it also reduces AT's costs, as these have been stored in Mount Maunganui since the new electric trains began operating. The diesel trains serviced Auckland well between 1994 and 2014.

With the introduction of the new electric fleet, the diesel trains were retired from the network, except for the ones which currently operate between Papakura and Pukekohe. Since the city's rail network was electrified we've seen incredible growth in patronage, we're nearing 20 million rail trips a year."

There are 104 SA/SD carriages and 6 SX carriages left in storage at Taumaranui and AT has recently entered into conditional sales agreements for 31 of these. Mr Main says there is also interest in the remaining 79 carriages.



The SA/SD carriages were originally built for British Rail in the early 1970s, then in the mid-1990s they were exported to New Zealand, refurbished and then they began operating on Auckland's rail system.



Note: The far right image is not a Dalek



Car navigation tech brings new twists and turns for road network managers

Digital maps that dodge traffic jams are saving time for millions of motorists, but they're also turning some neighborhood streets into headache-inducing escape routes from congested highways.

The unsettling side effects of traffic-tackling technology are popping up more frequently as more drivers depend on smartphones equipped with navigation apps like Google Maps.

Now, automakers are increasingly integrating those tools into dashboard consoles, making it likely that even more drivers will follow directions down roads that they otherwise would never have known.

"People are becoming trained to just blindly follow their mapping apps. The concern is the apps aren't making any distinction between what happens when cars travel on highways and when they travel on city streets by schools and through neighbourhoods," says Hans Larsen, public works director in Fremont, California, a San Francisco Bay area suburb on the fringes of Silicon Valley.

The traffic being diverted off clogged highways during the morning and evening commutes became so insufferable in Fremont that city leaders decided about a year ago to try to outwit the apps. The city started to ban turns at several key intersections at certain times along the shortcuts being touted by mapping services.

Before police began handing out tickets, Fremont even set up electronic signs blinking this admonishment: "Don't Trust Your Apps."

The countermeasures turned the shortcuts into slower routes, no longer recommended as bypasses around

traffic. But the apps have since found other shortcuts, including some that direct drivers down even smaller side streets that weren't designed to accommodate so many cars.

Similar headaches are vexing communities across the country, prompting traffic planners to find ways to make their side streets less convenient alternatives to highways.

The apps plot their routes with computer algorithms that analyze data gathered from users. They then recalculate the best routes based on real-time traffic conditions.

The technology has become so accurate and widely used that some apps suggest they can "eliminate congestion altogether".

Cities need to do their part too. Those steps can include lowering the speed limit, adding speed bumps or banning turns at some intersections to increase the chances that apps won't recommend them as shortcuts.

Apps have done a lot of good by reducing the amount of time that commuters spend on the road, which helps decrease air pollution.

"But no good deed goes unpunished, so more and more communities are seeing more and more traffic because of the way these apps send drivers on to local streets," a spokesman said.

He believes that cities facing technology-driven traffic problems will ultimately need to start charging tolls to use their roads during certain times of day.

Land Transport Rule: Setting of Speed Limits 2017

The new Rule modernises the process for setting speed limits and encourages Road Controlling Authorities to focus speed management toward high benefit opportunities on the road network. It:

- replaces Speed Limits NZ (SLNZ), which reflects a 1960s methodology, with a new approach incorporating new technology and data to assess onroad risk.
- applies the intent of the Speed Management Guide released in November 2016 and the use of the information in the Safer Journeys Risk Assessment Tool maps.
- ensures a more consistent approach to speed limit setting and speed management that continues to ensure communities and stakeholders are able to contribute to decisions that will help make travelling by road safer and more efficient.
- introduces flexibility to the requirements on the placement of reminder (or repeater) speed limit signs.
- allows Road Controlling Authorities to set emergency speed limits following a crisis, such as an earthquake or storm. This will allow for immediate speed limit changes when there is risk to the public.

The new Rule also allows a maximum speed limit of 110km/h on our very best roads, recognising some modern roads can be safely driven at this speed.

It's important to remember that the limit will only be increased on roads which can support higher travel speeds without compromising safety.

These roads will be designed, constructed, maintained and operated to the necessary standards for a 110km/h travel speed. At present only state highways are likely to meet these standards.

The 110 km/h speed limit requires a separate approval and bylaw. The Transport Agency is considering this following the signing of the new Rule.

A draft version of the new Rule was made available to the public for consultation between 4 May 2017 and 16 June 2017. A total of 407 submissions were received.

There were a large number of comments on technical issues around setting speed limits. However, no submitter considered that the new Rule would fail in its key objective of enabling a road controlling authority to set safe and appropriate speed limits.

The new Rule comes into force on 21 September 2017.

You can read more about the new Rule at: https://nzta.govt.nz/speed-limits-2017

It should be noted that Transport Agency notification requirements under the new Rule should be directed to Glenn Bunting, Manager Network Safety, instead of local NZTA offices. Glenn can be contacted by email at Glenn.Bunting@nzta.govt.nz.

We are constantly working to make our roads safer. The signing of the new Rule, together with the implementation of the Speed Management Guide, are positive steps towards achieving a nationally consistent approach to speed limit setting and as a result a safer New Zealand road system for us all.



and a system

Highway to heaven? I wonder what the speed limit is up there?

China to ban petrol and diesel cars



China is joining France and Britain in announcing plans to end sales of petrol and diesel cars.

China's industry ministry is developing a timetable to end production and sale of traditional fuel cars and will promote development of electric technology, state media cited a Cabinet official as saying.

The reports gave no possible target date, but Beijing is stepping up pressure on automakers to accelerate development of electrics.

China is the biggest auto market by number of vehicles sold, giving any policy changes outsize importance for the global industry.

A deputy industry minister, Xin Guobin, said at an auto industry forum his ministry has begun "research on formulating a timetable to stop production and sales of traditional energy vehicles," according to the Xinhua News Agency and the Communist Party newspaper People's Daily.

France and Britain announced in July they will stop sales of petrol and diesel automobiles by 2040 as part of efforts to reduce pollution and carbon emissions that contribute to global warming.

Communist leaders also want to curb China's growing appetite for imported oil and see electric cars as a promising industry in which their country can take an early lead.

China passed the United States last year as the biggest electric car market. Sales of electrics and petrol-electric hybrids rose 50 percent over 2015 to 336,000 vehicles, or 40 percent of global demand. U.S. sales totaled 159,620.

The reports of Xin's comments in the eastern city of Tianjin gave no other details about electric car policy but cited him as saying Beijing plans to "elevate new energy vehicles to a new strategic level."

Beijing has supported electric development with billions of dollars in research subsidies and incentives to buyers, but is switching to a quota system that will shift the financial burden to automakers.

Under the proposed quotas, electric and hybrid petrol-electric vehicles would have to make up 8 percent of each automaker's output next year, 10 percent in 2019 and 12 percent in 2020. Automakers that fail to meet their target could buy credits from competitors that have a surplus.





Electric vehicle news

Aucklanders came out in their thousands recently for New Zealand's first electric vehicle conference, EV World. The busy trade day featured impressive presentations including from international expert and IDTech chairman Dr Peter Harrop.

On Saturday a range of vehicles were on show and outside the venue punters were able to go for a drive with car sellers or enjoy a ride with one of the Better NZ Trust's EVangelists. About 2600 people attended over the two days with close to 500 people getting to drive one of the EVs on offer and a further 400 going for a ride.

EV World award winners:

Most EV Friendly Town of the Year Winner - Christchurch City Council Judges Special Commendation awarded to Hampden Community Energy Inc

EV Champion of the Year Winner - Community EV advocate Mark Nixon Judges Special Commendation - Fraser Whineray, Chief Executive, Mercury Energy

SME-EV Champion of the Year Winner - Blue Cars

Fleet Champion of the Year Winner - Waste Management NZ

EV Sector Sales and Service Champion of the Year Winner - GVI Electric Judges Special Commendation awarded to Volt Vehicles

Christchurch City Council recently announced details of an exciting project being supported by EECA's Low Emission Vehicles Contestable Fund.

The Council and partners will have a 100-strong fleet of electric vehicles stationed at three hubs around Christchurch city from November and these will be made available for use by businesses and members of the public.

The new shared fleet is the brainchild of a Christchurch City Council-led group of organisations with large vehicle fleets that are looking to reduce emissions. The fleet includes Hyundai Ioniqs and BMW13s that will be available through an online booking system run by car share company Yoogo.

In a first for the Southern Hemisphere Waste Management has an electric waste collection truck ready to start picking up residential wheelie bin waste from next month.

Christchurch will be the first city in the Southern Hemisphere to put a 100% electric residential waste collection truck into service. More electric trucks will arrive into Waste Management's fleet in other cities around New Zealand towards the end of 2017.

Waste Management announced its move towards a fleet of electric vehicles in September last year as part of its Sustainability Commitment.



Reflective antlers: safety for reindeer

Flashback: Innovations that changed the car industry

Perhaps the best innovation of all was one that was given away for free.

Volvo engineer Nils Bohlin (right) had spent much of his career in aviation, and used techniques learned in that industry to come up with the idea of a three-point safety belt for cars that would cover the driver's torso as well as their lap.

Volvo introduced the set-up in 1959 and by 1963 it had made it to the US. But instead of exploiting a potentially huge advantage in car safety, the Swedish firm elected to open up the patent so everyone else could offer it too. Millions of lives have been saved by the modern seat belt as a result.

Karl Benz was awarded a patent for his "Motorwagen" in 1886, and by 1888, his wife -- who had actually paid for the development process, but who wasn't allowed at the time to own the patent -- felt confident enough about the vehicle to take it on a journey of around 60 miles.

She innovated en route, in fact, by getting a shoemaker to nail leather onto the brake blocks and invented brake linings as a result.

Even then, Benz's creation was made in tiny numbers. Once more, it took another man, Henry Ford, to work out how cars could be mass-produced. His assembly line technique allowed cars to be build in an eighth of the time required previously -- so they could be made more affordable, as well.

By the time the factory in Dearborn, Michigan had knocked out its 10 millionth example in 1924, half of the cars on the planet were Model Ts.

Proof positive that innovation is all well and good, but a subtle improvement to a good idea can make all the difference.



IPENZ gets one over **REAAA**

On Friday 18 August 2017, at the Wellington symposium of the Road Engineering Association of Asia and Australia (REAAA), Central Branch's very own Thanura Rabel won the Young Presenter Competition.

Although Thanura was up against some strong competition, the depth of his research, clarity of his paper and smooth presentation style won over the audience.

Thanura's research explored alternative ways of measuring the cost of operational resilience. Resilience is a government priority and many of us are looking at ways to respond to

resilience risks on our transport network.

"High Probability, Low Impact" (HPLI) events (including crashes, weather, slips, flooding, etc) regularly cause disruptions putting strain on the economy through lost productivity as well as creating negative social impacts. Thanura's research tested and critiqued two ways to quantify and annualise the effect of such events.

Based on two case studies, Thanura found that resilience cost savings could be in the order of 10% and 15% of the traditional transport benefits (cost savings) claimed for transport infrastructure improvements.

Thanura's research indicates that the forecasting approach needs to be appropriate to the complexity of the situation. He also found that the quality of information about unplanned events (e.g. start time, duration of event, duration of associated congestion) was extremely variable.

Congratulations to Thanura for this achievement and for delivering a fascinating presentation. For more information on his research, contact thanura.rabel@opus.co.nz



Green man road crossings 'too fast'



The green man walking sign on pedestrian crossings may be too fast for elderly people to cross the road safely, suggest new draft guidelines for UK councils.

The UK's National Institute for Health and Care Excellence (NICE) wants to make it easier for people with limited mobility to get out and about.

Most crossings allow between four and seven seconds before the green man starts flashing. But many people are slower than this. The average walking speed for older men has been estimated at

0.9m per second, and slightly slower for older women.

The speed for crossings recommended by the UK's Department for Transport is around 1.2m per second, but local councils can adjust the timing to suit their residents' needs.

The draft NICE guidelines also recommend that councils move bins, hanging baskets and any other obstacles that might get in the way of disabled pedestrians and others who may struggle to get around, such as parents with prams.

Prof Mark Baker, director of the centre for guidelines at NICE, said: "It should not matter whether you are on foot, in a wheelchair, have a visual impairment or if you're a parent pushing a pram.

"If streets, parks and other open spaces are well planned, everyone should be able to get around their local area easily. Safe, accessible streets and well-maintained parks can help people to get active and live longer, healthier lives."

Dr Justin Varney from Public Health England said: "Physical activity benefits everyone at all stages of life. People living with impairments are less active, and this can be due to the way the built environment, including public spaces and transport systems, is designed.

"Making physical activity accessible to everyone when planning spaces benefits communities in terms of health, environmental sustainability and economic regeneration."

Kiwirail safety auditing certification

KiwiRail have introduced a requirement that transport professionals that are involved in safety auditing or risk rating level crossings become certified.

All new or modified level crossings must now go through a Level Crossing Safety Impact Assessment (LCSIA) before being signed off by KiwiRail. The team leader of all LCSIAs must be certified. A least one member of each safety audit team that has to review a level crossing must be certified.

A second certification course is to be held on Wednesday 4th October 2017 in Wellington. This will cover the LCSIA process (which includes an ALCAM assessment), the drawings/plans that needs to be provided on new and modified level crossing designs and the key road safety factors that need to be identified at existing and proposed (designs) level crossings.

The course presenters will be Eddie Cook (KiwiRail) and Shane Turner (Stantec NZ). The certification process include a pre-course test. A minimum mark of 70% needs to be achieved in this test to attend the course and become certified.

Registration closed on Thursday 7th September but you never know your luck. To try to register please send an email to LevelXSafety@stantec.com or ring Sheryl Foster (Stantec Christchurch) on 03 3414-734.



Obituary: Karl Hancock

On 13 August 2017, our industry lost a truly great colleague and outstanding transportation engineer.

Karl Hancock, a Senior Associate at Flow Transportation Specialists, lost a hard fought battle with cancer and passed away peacefully surrounded by his family and loved ones.

Karl has been a dearly valued and much respected member of the Flow Transportation Specialist family for 11 years, and previously also worked at Opus and TDG in Auckland.

His passing is a devastating loss to all of us who knew and loved him. His outstanding contribution to transport planning and engineering is a legacy that will live on for years to come but his absence will be felt in our hearts for far longer.

An outstanding engineer, Karl will be remembered for his technical excellence, professionalism and pragmatism.

He has been responsible for shaping the future direction of Auckland's transport environment through his work completing strategic visions for many of Auckland's main transport corridors and in developing the transport related design matters contained in Section E27 of the new Auckland Unitary Plan for Auckland Council.

He has also been part of design development teams for many of Flow's clients including Auckland University, Todd Properties, Housing New Zealand, the Selwyn Foundation and the Boards of St Kentigern Schools and St Cuthbert's College.

Karl was also a nationally respected expert in cycle planning and design and coincidentally, an avid cyclist who commuted by bike most days.

Karl's positive impact on the cycle network in Auckland cannot be understated, as an example, if you are cycling the Quay Street cycleway, take a moment to thank Karl who project managed the preliminary design for this great facility which is used every day by hundreds of people.



Karl held a Bachelor of Engineering (Civil) with Honours from the University of Auckland and was a Chartered Professional Engineer.

He was also a member of the Institution of Professional Engineers New Zealand, an International Professional Engineer and member of the IPENZ Transportation Group.

Rest in peace Karl, you have made such a positive impact on so many people and we will never forget you. Karl is survived by his amazing wife Maria, and their two young daughters Talia and Anya.

FIOW/ TRANSPORTATION SPECIALISTS

Transportation Engineering **Postgraduate Courses 2018** (provisional)



Department of Civil & Environmental Engineering University of Auckland For Master of Engineering Studies [MEngSt] and Post Graduate Certificate [PGCert], with / without Transportation specialisation, or for a one-off Certificate of Proficiency, COP

CIVIL758 - Traffic Systems Design (12 weeks, 2 + 1 = 3 hrs per week - also Part of **BEHons degree**)

CIVIL764 – Highway Safety Operations (2 x 3-day blocks > dates to be determined

CIVIL761 - Planning & Design of **Transport Facilities** (2 x 3-day blocks > dates TBA)

CIVIL770 - Transport Systems Economics (3 x 2-day blocks > dates to be determined)

Semester 1 (Mar-Jun 2018)
Traffic signal timing analysis, gap acceptance parameters, intersection analysis of performance (priority, roundabouts, signals), introduction to transportation planning and modelling techniques, RMA and other requirements, computer modelling and simulation.

> Topics on the operation of two lane highways including highway capacity, LOS, passing/climbing lanes, & economic evaluation methods. Safer Journeys and Safe Systems, skid resistance, materials & roadside safety.

A range of topics on planning and design of transport facilities including fundamentals of traffic flow, modelling and simulation of transport facilities, macroscopic traffic models and traffic signal safety and operations.

Fundamentals of transport economics including supply, demand, pricing, congestion and other externalities; principles of economic evaluation in transport planning.

Semester 2 (Jul-Oct 2018)

CIVIL759 – Highway & Transportation Design (12 weeks, 2 + 1 = 3 hrs per)week – also Part of BEHons degree)

CIVIL765 – Infrastructure Asset Management (2 x 3-day blocks > dates to be determined)

CIVIL 771 – Planning & Managing Transport (3 x 2-day blocks > dates to be determined)

CIVIL 773 - Sustainable Transport: Planning and Design (new course) (3 x 2-day blocks > dates to be determined)

Economic and environmental assessment of transport projects, land transport funding, road safety engineering, crash reduction & prevention, design of at grade intersections, pavement asset management and rehabilitation techniques, heavy-duty pavements, highway drainage.

Integration of planning and infrastructure asset management, resource management, institutional issues and legal requirements. The process of undertaking asset management plans and specific asset management techniques across all infrastructural assets.

Integrated planning of transport and land use, Outline of transport planning modelling, LTMA and the GPS, District Plans and RMA, Travel, trips and parking. Transport assessments and multi-modal transport, Travel demand management, 'Smart roads', Intelligent transport systems, EV's.

Pedestrian and cycle planning and facility design using best practice (network and route planning, trails, roundabouts, footways, terminals, plazas, footways, escalators, etc.); public transport (bus, rail and LRT) and vehicle operations for compact central urban areas and transit orientated developments, shared spaces and user safety in design assessments.

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

For Admission / Enrolment inquiries contact: Assoc. Prof. Roger Dunn, Director of Transportation Engineering Email: rcm.dunn@auckland.ac.nz Phone: (09) 923 7714 DDI, Mob 021 309 600

Further details, including the course outlines, can be found at: http://www.cee.auckland.ac.nz/uoa/home/about/ourprogrammesandcourses

Our Masters degree Brochure https://cdn.auckland.ac.nz/assets/engineering/for/futurepostgraduates/documents/Transportation final print.pdf Our Transportation Research Centre www.trc.net.nz

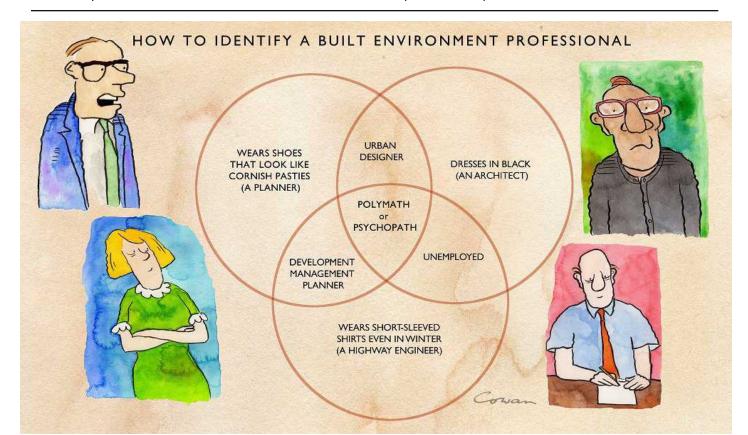
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It is important for planes to do regular test runs. But, let's face it, these routine flights might get kinda boring. But not if you elaborately plan an awesome route across 22 states of the US and leave a really cool test flight record.

That is exactly what engineers at Boeing did recently when they sent out a 787 Dreamliner for an 18-hour

endurance test across America. Instead of doing a loop or a random pattern, the flying route outlines a 787-8 plane.

The plane outline covers 22 states, its nose points towards Boeing's Headquarters in Washington while its wings stretch from Michigan to southern Texas. And, the plane's tail dips into Alabama.





ATRF 2017 Conference Auckland 27th- 29th Nov 2017



As you may know, the 39th Australasian Transport Research Forum (ATRF) Conference is to be held in Auckland, New Zealand from 27th to 29th Nov 2017. Details can be found at the conference website which is updated regularly - http://atrf2017.nz

We look forward to seeing you in November 2017

Doug Wilson and Seosamh Costello Co-Chairs ATRF 2017 – Auckland

Enquiries to:
Bevan Clement
b.clement@auckland.ac.nz





This article, by Abigail Mace, was the winner of the People's Choice Best Poster from the IPENZ Transportation Group conference.

Over 1000 bike share schemes are operating worldwide – bike share has become a must have transit option. The idea is relatively simple; a fleet of bikes are located at docking stations around the city to be rented for short, point to point trips.

Eight international bike share scheme were studied to better understand the operational aspects of bike share and to attempt to identify some findings about what makes a successful bike share scheme.

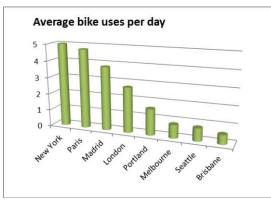
The level of daily use per bike gives a good indication of the success of the scheme. The Velib scheme in Paris achieves over 100,000 trips a day on its fleet of 23,000 bikes. Velib has become embedded as a transport choice for Parisians. Since its introduction there has been a general increase in cycling and car use has reduced by 25%.

A recognised optimum level of usage is between four and eight uses a day, which as the graph shows is not universally achieved. The bike share concept sounds simple, and simplicity of use is a key factor in its success.

However operating a scheme is more involved and the costs in running a scheme extend far beyond the capital investment at the start. In addition to the administration and customer service function; the bikes need to be maintained and 'rebalanced'.

Rebalancing, or redistribution, ensures an adequate supply of bikes as well as spaces to dock them at the end of journeys.

Demand is often tidal so the logistics of rebalancing can be significant, however, if is not carried out effectively the attractiveness of the scheme soon diminishes as



users cannot rely upon finding an available bike place to leave it at the end their journey.

On a summer's day in London, over 3000 of the 10,000 bikes in the fleet are collected and redistributed.

The annual operating cost of London's Santander Cycle scheme was £26.17M in 2015/16. After income from sponsorship and user fees, Transport for London subsidised the scheme by £10.16M, which equates to around 93p (NZ\$1.72) per trip.

Of the eight schemes reviewed, only Citibike in New York operates with no public subsidy. Just like other forms of public transit, bike share requires an ongoing public subsidy.

What about Helmets?



Melbourne, Brisbane and Seattle are all places where cycle helmet use mandatory, just like here in New Zealand. All three of these schemes suffer from a relatively low level of use, in fact the Seattle scheme shut down in March this year after financial difficulties and low daily usage.

Low usage appeared to be due to a combination of factors; the need to

wear a helmet cited as one but also a small deployment area which limited the usefulness of the bikes as well as the steep typography in the city.

All three schemes offer courtesy helmets. Initially these were not on offer in the Australian schemes but once introduced, there was an increase in daily usage of the bikes.

Interestingly, bike share safety generally compares favourably with private cycle safety. A study in London found that people riding Santander Cycles are three times less likely to be injured than other cyclists.

This is likely due to a number of factors; the bikes are heavier and slower than most private bikes and riders have a more stable, upright riding position. The bikes are distinctive in appearance and vehicle drivers are perhaps more aware of them.

In Melbourne, research using geospatial analysis of ridership data has identified that some of the strongest trip patterns occur between stations located in areas of relatively weak public transport accessibility.

In addition, the introduction of the free tram zone in Melbourne has had a negative impact on use of bike share within the free tram zone and a number of bike stations within the zone have been relocated as a result.

The Portland Biketown scheme, which is sponsored by Nike, launched in mid-2016 and utilises a different system to the other case study schemes. The system utilises Social Bicycles (SoBi) and rather than having the hiring technology at the docking station, it is housed on the bike itself, meaning there is no need for standalone terminals or powered docking spaces.

The cost of on the ground infrastructure is reduced and should also mean that expanding the area covered by the scheme will be easier too. The bikes have on-board GPS trackers which make it easier to track down stolen bikes and a phone app lets users know where they can find a bike.



There are a small number of schemes, such as Bicimad in Madrid. which utilise electrically assisted bikes. In a hilly place the advantages are clear and the schemeMadrid achieves solid usage. The bikes are pretty speedy reaching speeds of

25km/h so a higher level of accidents has been observed.

To conclude; some suggested basic ingredients for successful bike share schemes:

Place Specific

- Know the market, engage with stakeholders
- Where helmet use is mandatory, consider how this can be addressed early in the planning stage
- Be aware of local topography and how that might affect where bikes are picked up and returned.

The Vibe attracts the Tribe!

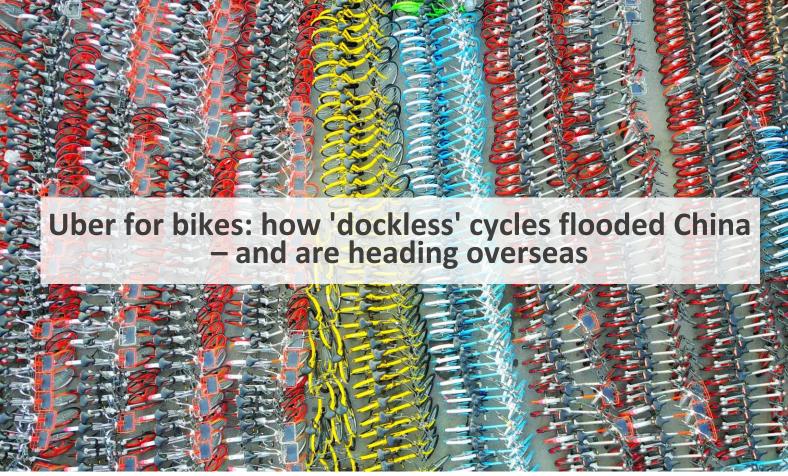
- Create a culture where the bikes are an integral transport option in the city
- Build on a growing cycling trend launch the scheme at a similar time to new infrastructure
- Launch in spring or summer, to get users in the habit of while the weather is best
- High quality marketing for the scheme is essential; creating a brand that residents and visitors are aware of is important and can be helped by having a naming sponsor.

Easy to use

- Just like other transport options, it must be easy to use, ideally with transport smart card operability and no need to pre-register for casual use.
- Good availability of well-maintained bikes and empty docking spaces.
- Conveniently located docking stations
- Large enough deployment zone to enable users to access a variety of locations.

Well planned and supported

- A robust business case with clarity about the likely ongoing public subsidy requirements bike share should be viewed as a part of the public transport network
- Strong, sustained political support is essential.



On a 30ft-wide screen in Hangzhou's public bike share office, the counter ticks up relentlessly: 278,812 ... 278,847 ... 278,883 ... Another 40 cycle rentals every couple of seconds. The system will easily top 350,000 before this bitterly cold winter day is out.

On the left of the giant screen, the world's 15 biggest public bike shares are ranked. Thirteen of them are in China. (Paris is No 5 with 21,000 bikes, and London No 12, with 16,500). Hangzhou — an hour west of Shanghai by bullet train — is slightly larger than London by population, but its share system is five times the size. It comfortably tops the table with 84,100 cycles, almost twice as many as its nearest rival.

In many other large Chinese cities, though, it's not the sturdy, official public hire bikes that stand out. It's the rash of brightly coloured "dockless" share bikes, haphazardly parked on the pavements in their thousands.

Many of these bikes are not working because nobody takes care of them – the city's beauty has been destroyed.

Dubbed "Uber for bikes", they are the product of a whole host of new startups, aggressively competing for territory and investment.

The way it works is simple enough in theory. Users download an app that tells them where to find a cycle, which they unlock by scanning a QR code on their phones or using a combination they are sent. Unlike traditional rental services, however, which require bikes to be returned to a fixed docking station, riders are free to leave the bikes wherever their journey ends.

The scale is simply stunning. In less than a year, Mobike alone has flooded the streets of 18 Chinese cities with what is thought to be more than a million new bikes.

Since last April, the company has placed more than 100,000 of their trademark orange-and-silver bikes in each of the cities of Shanghai, Beijing, Shenzhen and Guangzhou.

In just the three months of 2017, Mobike – co-founded by Hu Weiwei and Davis Wang, former head of Uber Shanghai – has launched in six more cities; Changsha, Hefei and Tianjin were added this past month. Already backed by the Chinese internet giant Tencent, a recent deal with Apple supplier Foxconn has doubled Mobike's production capacity to 10m bikes a year.

Then there's Ofo — which started in 2015 as a Peking University project and now claims 10 million users in 33 cities for its bright yellow bikes — and Bluegogo, Xiaoming and around a dozen more copycat firms, many of which have started up in the past six months

Seven hundred miles to the south-west, on the streets of the fast-growing Pearl River manufacturing hub of Guangzhou, the colourful dockless share bikes are everywhere. They are parked up by the hundred outside shopping malls and metro stations, often blocking the pavement; others, rendered useless by missing saddles, broken locks or scratched off QR codes, are simply dumped in flowerbeds and bushes.

But after decades of decline – when a whole generation of Chinese, embracing economic freedom, worshipped the private car and saw cycling as backward – these sharing apps have clearly made cycling cool again in China. Most users appear to be in their 20s and 30s, many riding one-handed, smartphones glued to their ears.

This popularity is new: the share of trips taken by bike in Guangzhou had dropped from above 20% in the late 1990s to around 5% a few years ago; Beijing's cycle modal share had collapsed from a high of above 60% in

the mid-1980s. No official estimates yet take account of the impact of these new share bikes, but there's no escaping them on the streets of China's big cities.

What's more, they're about to be exported worldwide. Mobike is launching in Singapore this year, while rival Bluegogo controversially started operations in San Francisco without official permission, Uber-style. (The city planning department issued warnings and could prosecute.) Ofo has a container of 500 bikes on its way to Cambridge, and there are rumours Mobike is targeting London, Birmingham and Manchester.

executive of Green Smart Traffic (GST), started China's first public bike share in Hangzhou in 2009, inspired by Paris's Vélib' scheme. He claims his programme cuts fuel consumption by 100,000 tonnes a year (equivalent to around 135m litres of petrol and diesel).

"Hangzhou's population is increasing by 200,000 a year and the roads are blocked," he says. "But the historic centre means you can't just knock down and rebuild, as happens in other parts of China. The public bike share cuts the burden of traffic and promotes an environmentally friendly approach among the people of



"In heaven, paradise; on Earth, Suzhou and Hangzhou," goes an old Chinese saying. Hangzhou's beautiful West Lake draws millions of tourists a year, who visit the nearby plantations growing Longjing green tea and soak up the peaceful provincial atmosphere.

That scenic reputation took a knock when the documentary Under the Dome revealed the city suffered more than 200 "smoggy days" in 2013. Hangzhou's annual average concentration of deadly fine air pollution particulates, PM2.5s, was recorded at 66.1µg/m³ that year – more than six times World Health Organization guidelines.

The city consistently places in the top 10 most congested in China, and in 2013 TomTom ranked it as the worst nationally and sixth worst in world. Most of the city's PM2.5 pollution comes from vehicle emissions, a reflection of increasing incomes and surging private car ownership.

Municipal authorities responded by expanding the metro system – which recently gained approval to build seven new lines – and investing in 3,000 electric buses and taxis.

But public bike share, funded by the city, is seen as playing a crucial part, too. Zhang Li Qiang, the chief

the city. It's a very effective way to solve the problem."

Even in Hangzhou, though – with 3,000 docking stations spaced every few hundred metres – some new dockless share bikes are popping up, mostly provided by the smaller copycat firms. It seems people are prepared to pay the typical one yuan (around 10p) per hour fee for the convenience of being able to drop bikes where they want.

Not everyone is convinced dockless bike sharing is a good idea. Eric Mao, marketing manager at GST, believes the startups are too busy chasing territory and investment to focus on providing a good service: "It's a big problem. You see thousands of bikes parked everywhere around the city and many are not working because nobody takes care of them — the city's beauty has been destroyed."

Tensions spilled over in Shenzhen earlier this year, when huge piles of share bikes began appearing in alleyways and vacant lots, dumped in their hundreds by persons unclear. Fingers were pointed at disgruntled motorbike taxi drivers, private security guards and even rival share bike companies.

In Shanghai, by contrast, I witnessed a more ordered operation. There, users are encouraged to park dockless



share bikes in marked bays, freshly painted on the ground: a simple rectangle of white lines and a bike icon.

The dockless companies seem to be taking the issue seriously. "We are working with local governments in every city we enter to deal with issues such as users parking in the wrong place," says Mobike's head of communications, Xue Huang, who points out that – unlike with public bike share – cities don't pay them a single yuan. "In the Huangpu area of central Shanghai the government has hired maintenance workers at metro stations to call on people to behave properly and keep order. It is a user education process."

That re-education in part relies on a new system of credits to reward good behaviour and punish bad. Mobike users start with 100 credits and can earn more by "informing" — by photographing and reporting badly parked bikes around the city. "Once verified by our staff on the ground, the spotter gets extra credit, while the perpetrator gets docked 20 points," explains Huang. "If a user has fewer than 80 points, the costs of rental are set prohibitively high."

If they can solve the parking problem, sustainable transport consultant Bram van Ooijen, who founded the Cycle Canton tours of Guangzhou, believes the dockless share bike startups are great for the cause of cycling and for China.

"Dockless bike shares have found a niche where they don't have powerful enemies," he says. "Ride apps like Uber and Didi Chuxing upset taxi drivers, who are a powerful lobby group that can hold protests and bring the city to gridlock. The only people who seem to be upset by the new share bikes, however, are illegal motorbike taxi drivers — who are missing out on business from metro stations late at night — and security guards, who don't like mess on the pavement outside their buildings. There is friction, but the groups that are upset aren't powerful enough. So the government doesn't care."

Meanwhile, urban planner Zhu Jinglu at the Institute for

Transportation Development Policy – which set Guangzhou's public bike share and runs its Bus Rapid Transit system would be delighted if the anecdotal increase in cyclists led to better cycle infrastructure.

Development consultant Li Shuling agrees, but is sceptical she will see changes any

time soon. "Every development in the city has slogans about sustainability and green transport," she says. "When thinking about a new road they will make some space for a cycle lane in the design, but it's just a line on the page. When it is implemented you find the detail is poor. They just want to tick the box."

Back in Hangzhou, public bike share company GST is not giving up on its classic docking stations just yet. CEO Zhang admits he is concerned by the popularity of dockless bikes, but points out drawbacks.

"They have solved the problem of empty docking stations, but for them the big issue is the accuracy of GPS. Sometimes users search for a bike and it is not where their smartphone says it is — maybe it's broken or behind a locked gate in a residential compound. That is not a good service. They don't have maintenance teams like we do, they operate unofficially without government support, they are just chasing capital ... it is an unsustainable model."

Zhang, though, realises that with the backing of investors including Foxconn, Tencent and Didi, rivals such as Mobike and Ofo are not about to disappear. "They have problems to solve but they will find a way," he concludes. "They are smart and they've got money."

Then he shows me a video featuring a prototype of a dockless public share bike developed by GST. It uses a QR code, smart lock and GPS technology just like the startups. The new bikes will be trialled in Hangzhou; Zhang hopes they could play a part in GST's first foray overseas, planned for this year. Discussions are under way with cities in Malaysia, Panama and Italy.

"We're going to try new tactics," he adds. "Both systems have virtues and drawbacks so we will integrate the two – docks and dockless – to get the best of both worlds."

One way or another, it seems certain that in the near future dockless share bikes won't just be flooding China.

Source: Guardian





As ride-sharing and electric cars take off, governments are seeking new ways to make drivers pay.

In 1868 the world's first traffic light was installed outside the Houses of Parliament in London. The gaslit signal controlled the flow of London carriages—at least for a few weeks. For, soon enough, the gas ignited. The resulting explosion knocked the helmet off a policeman's head, and left him badly burned.

Efforts to ease congestion no longer literally blow up in your face, but recent schemes have run into trouble, too. In 2003 Ken Livingstone, then London's mayor, introduced a congestion-charging zone (CCZ). Motorists pay up to £11.50 a day (\$15.20) to drive into the centre of the city.

Since 2000 the number of cars entering central London has fallen by nearly a quarter. But congestion is rising again (see chart 1), a result of vans and taxis clocking up more miles within the zone, as well as new lanes for buses and Lycra-clad commuters that have reduced the road space for cars. More minutes are lost to delays



than before the CCZ. The average vehicle speed has fallen from 19.9 miles (32.0km) per hour in 2013 to 17.7mph (28.5kph) in 2016.

In response, London, like other heaving parts of the world, is looking at a more radical approach to reduce congestion. In January the London Assembly, the elected body that oversees the mayor, published a report calling for the city to develop a system of road-pricing that varies by when, how much and where drivers use the roads.

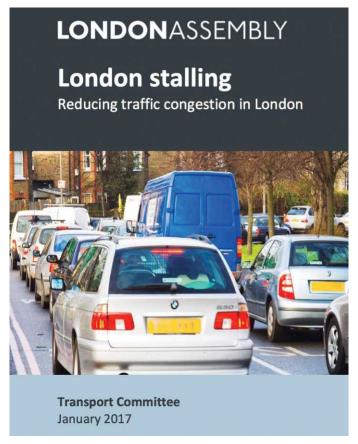
Singapore, which already has the world's most comprehensive road-pricing system, is introducing a new one in 2020 that uses cars' global positioning systems (GPS) to charge motorists more precisely. Other schemes are being tried out in American states such as California and Oregon.

All of which pleases economists. Using prices to ration a scarce resource, such as space on busy roads at busy times, makes sense. Those who consume a good should pay for it.

Road-pricing is also more efficient than the typical ways drivers are charged for imposing costs on others: taxes on fuel and on car ownership. Neither penalises driving in congested conditions, which causes extra pollution and crimps productivity by delaying workers and deliveries, and disrupting supply chains. And although congestion zones help, they are blunt instruments; ideally, road pricing would adjust to traffic flows in real time.

Yet economists are not normal people. Most voters hate taxes on driving. Even if they grudgingly accept existing ones, they squeal about any increases. In Britain, which Margaret Thatcher called a "great carowning democracy", duties on fuel have been frozen since 2011 following pressure from drivers' groups. Nineteen American states have not raised their "gas taxes" in at least a decade; Oklahoma's levy has been frozen for 30 years.

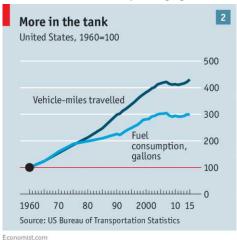
Many drivers would rather "pay" by queuing than through road-pricing. The Netherlands hoped to run a 60,000-vehicle trial of road-pricing in 2011, on the way to a nationwide scheme. But opposition politicians and motoring organisations fought so hard that the plans were dropped.



Governments will nevertheless soon have to find new ways of making drivers pay. That is not because congestion will worsen otherwise—though it will. Rather, tax revenue from motoring is drying up.

One reason for this is the spread of ride-hailing and ride-sharing. In London drivers for firms like Uber can circulate all day inside the CCZ, picking up fares, while being exempt from the charge. The number of private-hire vehicles that entered the zone at least once rose from 50,000 in March 2013 to 85,000 in November 2016. The number of licensed drivers rose from 67,000 to 115,500 over the same period.

(In the future self-driving cars may replace these workers, further depleting government coffers, since



there will be fewer car owners to tax.) In total privatehire vehicles make up 38% of traffic central London, double almost share the of traditional black taxis.

The second reason for dwindling

revenue—increasingly efficient cars—is even more important. Cars' fuel efficiency has roughly doubled in the past 25 years (see chart 2). Partly as a result, the tax take from fuel and vehicle duties in Britain has declined by £812m per year in real terms over the past five years, according to Gergely Raccuja, an economist who on July 13th won the Wolfson prize, an economics competition run by Policy Exchange, a British think-tank, for a paper on road taxation. During the same period the total amount of miles driven increased.

Electric vehicles will further widen the gap between traffic and taxes. Paal Brevik Wangsness of the Institute of Transport Economics in Norway, the country where electric-car ownership is highest, points out that electric vehicles not only incur no fuel duty, but often attract government subsidies.

British drivers, for example, can get £4,500 off the cost of electric cars such as a Nissan Leaf or a Tesla Model X. Even if these types of subsidies fall as cars become cheaper, they will require infrastructure such as charging points and cables.

For Mr Raccuja, a fair and radical way to pay for the costs of car use would be to scrap duties on fuel and ownership, and replace them with a "road tax". His new levy would be a per-mile charge that varied depending on a car's weight and emissions, thereby making drivers with road-crushing and air-polluting vehicles pay more. Mr Raccuja notes that the charge could also be higher in more congested places.

Such schemes will doubtless infuriate motorists. But there are reasons to believe that a shift toward roadpricing is not just increasingly urgent, but also more plausible. London's CCZ was brought in against stiff opposition.

Today just one-fifth of Londoners oppose the idea of a more sophisticated road-pricing scheme, according to the London Assembly. After a seven-month trial in 2006, Stockholm residents voted narrowly by 53% to 47% to make the city's congestion zone permanent. But by 2011 polls showed that about 70% of residents backed the scheme.

Car owners may become less of a political force, at least in cities, as people opt against getting behind the wheel. In many rich countries the share of 20-somethings with driving licences is falling.

The number of car-less households in America declined from 1960, when the US Census began tracking it, until 2010, since when the tally has begun to tick up. McKinsey, a consultancy, estimates that one in ten vehicles sold by 2030 will be for ride-sharing.

Technology will also make it easier to try road-pricing, including in poorer cities like Jakarta and Bangkok, where traffic is horrific. In the past, schemes might have relied on cameras to recognise number plates. Today transponders can ping a radio signal used to track a car's movement. But even that gizmo will soon be obsolete.

Many premium vehicles are already connected to the internet using mobile-phone networks. By 2020 most new cars will come with these connections as standard.

Together with GPS technology that means it will become easier to track the use of vehicles wherever they are.

Singapore is the model others will try to follow. The world's first CCZ was introduced there in 1975. It used paper permits to control access to a central zone until switching to electronic sensors in 2008. If average speeds are deemed too slow over a three-month period, then the city raises the cost of entrance.

According to Woo Sian Boon of Singapore's Land Transport Authority, congestion has fallen as motorists have switched to less busy routes or to the city-state's public transport, or travelled at off-peak times when charges are low.

From 2020 Singapore will take an even more sophisticated approach. It will use GPS to vary the amount drivers pay based on distance, time, location and vehicle. The scheme will reduce the need for the unsightly gantries that log drivers in and out. Drivers will receive real-time information about the cost and busyness of roads, encouraging them to consider other routes.

Although less ambitious than Singapore's plans, several American states are using technology to experiment, too. The likes of California and Colorado have accepted federal grants for trials of various pay-to-drive schemes. The biggest, OReGO in Oregon, started in 2015. Around 1,500 people have signed up.

Drivers have devices fitted in their cars that take data from the engines' computers. The gadgets record the amount of fuel used and distance driven, and transmit the data via mobile networks. Motorists are charged based on how far they drive, with each mile costing 1.5 cents, whatever the location or time. Any state fuel tax

they have paid (30 cents a gallon) is refunded.

The aim of OReGO is relatively narrow: to find a way to protect state taxes on motoring, even as cars become more fuel-efficient. Whether it will replace the state fuel tax is unclear. Nevertheless, innovative schemes such as OReGO may start to weaken the taboo against new taxes.

They also raise concerns about how motorists' data are used. Tech firms and carmakers are competing for access to the reams of data that drivers create. This can be used to sell them additional services based on location (take a journey on a hot day and your car may tell you where to pull in for an ice cream), the state of their vehicle (by using sensors to suggest maintenance) or the way they drive (by sharing data with insurance companies). Firms can also aggregate data to help create the algorithms for driverless vehicles.

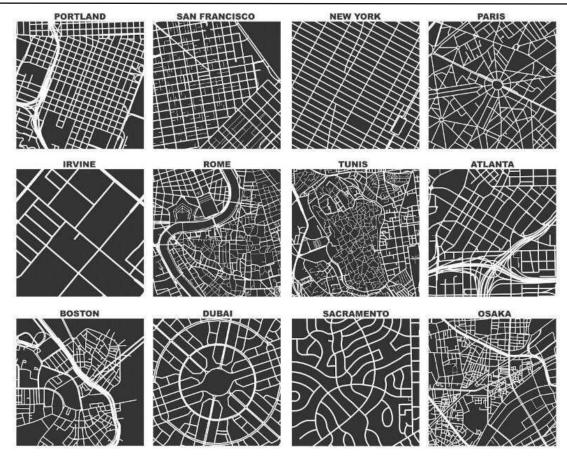
Although Singapore's authorities may not fret much about privacy, others do. The American Civil Liberties Union, an advocacy group, has been active in Oregon; it worries about data leaking or being stolen.

In 2015 the Texas A&M Transportation Institute, a think-tank, pointed out that it is often unclear who owns drivers' data and whether they are anonymised.

Clearing this up is possible. And once motorists have become used to the idea of paying for the road space they take up, rates could be tweaked to account for the noise, pollution and the risk of collisions in each location.

For the time being governments, national and metropolitan, are proceeding cautiously. But as fuel-tax revenues dry up, that is sure to change.

Source: The Economist



IPENZ Transportation Group study grant



Applications are now open for the IPENZ Transportation Group study grant, worth up to \$10,000.

If you are interested, download the full awards criteria and an application from the IPENZ Transportation Group website or contact Awards Convener: Daniel.Newcombe@at.govt.nz

IPENZ Transportation Group Tertiary Study Grant Purpose

To provide financial support for a member of the IPENZ Transportation Group to undertake postgraduate study in transportation at a tertiary institution. The study programme must include a research project worth at least 60 points. The funding is intended to be allocated to course fees or associated costs, such as travel and equipment costs associated with the research project. The study programme must include preparation of a research report or thesis.

It is expected that the recipient of the grant will provide a copy of their research report or thesis, or an interim report if their programme lasts longer than six months. They will also be expected to submit a paper for presentation at the IPENZ Transportation Group conference, and to prepare a summary article for Roundabout. The closing date for Study Grant to **Friday 8th December**

Assessment Criteria

Applications for the Tertiary Study Grant will be assessed by a working group of the Research Sub-Committee. Applications should be on the Application Form available from the IPENZ Transportation Group website, and should include the following:

- Academic record and CV;
- An outline of how the costs will support the student's study
- Reasons for wanting to undertake postgraduate study in transportation and a discussion of the likely benefits to the individual;
- The benefit (to members of the Transportation Group) arising from the knowledge expected to be created and disseminated by the research project;
- The commitment of the individual and their current employer (if relevant) to the study programme;
- The timetable of the proposed study programme.

Notes

- The maximum value of the award will be \$10,000, subject to an adequate application being received.
- The award is to be taken up within 12 months of it being offered, unless agreed by the Awards Convenor and Treasurer.
- Unless agreed otherwise, payment of the award will be made 60% in advance and 40% on receipt of an adequate interim report, research report or thesis, following completion of the study programme.





Ever wondered about the origins of some Tube station names?

Scan a map of the London Underground for the first time, and you'll likely notice that it is more than the ground-breaking design that seems imaginative. The names of the stations, too, can seem curiously, even bizarrely, whimsical. Some seem suited better to a medieval fantasy (Knightsbridge, Queensway) or a children's book (Piccadilly Circus, Elephant & Castle) — and others still make Londoners giggle (Shepherd's Bush, Cockfosters).

But these names weren't chosen simply to give citydwellers an alternate world to imagine as they hurtle beneath the capital. Some of their origins, in fact, date back millennia.

Covent Garden:

The name for this Tube station (as well as the shopping arcade, opera hall and West End neighbourhood) would be almost self-explanatory — if it weren't for the 'n' that went walkabout at some point since the Middle Ages. By the 13th Century, the site was a walled-off area of orchards and gardens which belonged to the monks of Westminster Abbey.

They referred to it as "the garden of the Abbey and Convent" and then, of course, as "Convent Garden". Seized (and given away) by King Henry VIII after the Dissolution of the Monasteries, it later was laid out as a residential quarter — one that had earned a reputation far different from its religious roots by the 17th Century, when it was a notorious red-light district (as enshrined in William Hogarth's engraving of the area's Rose Tavern brothel). Since cleaned up and now one of London's best-known tourist attractions, Covent Garden is home to a Tube stop of the same name which serves the Piccadilly Line.

Elephant & Castle:

One of the more whimsical (and perplexing) station names, this one in south London, oddly enough, most likely comes from the Worshipful Company of Cutlers – a medieval guild of craftsmen who made swords and knives. Granted in 1622, their crest included an elephant... carrying a castle.

It's usually believed that the elephant referred to the ivory that they used for their handles. And the castle? Possibly included to show the scale of an elephant, as few Europeans in the Middle Ages would have ever seen the creature before. Given that the cutlers likely supplied arms to King Henry V at the decisive Battle of Agincourt in 1415, though, there might be an argument that the elephant here, with the tower on its back, is a symbol of support for the state.

Either way, when an inn called the Elephant and Castle operated here by the 18th Century, it was likely in homage to cutlers in the area, writes Cyril M Harris in his book What's in a Name?: Origins of Station Names on the London Underground. The cutlers may be longgone from the neighbourhood, and the pub may have been demolished in 1959, but their influence lives on at the nearby shopping centre — where the pub's old frontage now hangs — as well as in the name of the station, which serves the Bakerloo and Northern Lines.

Cockfosters:

The name may not sound particularly elegant, but its roots are surprisingly royal. The final stop heading north on the Piccadilly Line (as well as the name of the surrounding suburb), Cockfosters was once the location of Enfield Chase, a royal park home to nearly 8,000 acres and 3,000 deer — as well as to foresters, who protected the park from would-be poachers or



woodcutters. The word for the chief forester? Cock forester. The word 'cockfoster' was first recorded in 1524, and in 1613, a house, likely the head forester's lodge, was written down with the same name.

Tooting Bec:

There may be plenty of cars and buses honking in the south London neighbourhood of Tooting (home of the capital's mayor, Sadig Khan). But the area – along with its Underground stations on the Northern Line, Tooting Broadway and Tooting Bec – doesn't get its name from modern noise: it goes back more than 1,300 years.

When the Anglo-Saxons conquered Britain in the 5th Century, they transformed not only its society, but its language - which we now know as Old English. Remnants of their rule remain inscribed in maps of not only London, but Britain; the Anglo-Saxon suffix '-ham' (as in Birmingham) meant homestead, for example, while '-ton' (like Brighton) referred to a farm. The ending '-ing', on the other hand, meant belonging to or associated with someone, or their followers. So Paddington was the farmstead belonging to Padda or his clan, Kennington was that of Cēna's people - and Tooting, first recorded in the 7th Century, belonged to Tota or his friends.

When the Normans invaded in 1066, though, they seized Saxon properties to hand out among their loyalists... and tacked on new names accordingly. One winner in the land-grab was the abbey of Bec-Hellouin, in Normandy, which was granted the land that once belonged to a Saxon chief named Tota. All of which comes bundled in that nonsensical-sounding name today: Tooting Bec.

Knightsbridge:

Today, this area of west London, with the Tube stop of the same name, is known for its pricey flats and upmarket stores (both Harrods and Harvey Nichols have their flagships here). But as appropriately noble as it sounds, the name Knightsbridge - first recorded in 1046 as Cnihtebricge, evolving into Knyghtsebrugg by 1364 recalls a much rougher past.

The word 'bridge' comes from Old English 'brycg', of the same meaning. Here, it refers to a crossing over the

employment. The young men referred to here might have been employed keep up – even defend the bridge. Or perhaps they just loitered: "one explanation for the name Knightsbridge is that it was a place where the local yoof hung out", writes Caroline Taggart in The Book of London Place Names. Things didn't go much better for Knightsbridge over the ensuing centuries,

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River - one of the 'lost rivers' of London, which re-routed

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when it was seen as out of the way enough to house lepers, slaughter animals or – in the 18th Century – for highwaymen to hold up passersby.

Maida Vale:

If the name conjures up images of English milkmaids and lush valleys, you're half-right. The dip in land did strike locals as a 'vale'. But this west London Tube stop and neighbourhood has nothing to do with 'maiden'. (That's probably for the best since, given the English penchant for irony, it should be little surprise that streets like Southwark's Maiden Lane obtained their names thanks to once-numerous nearby brothels).

Instead, Maida was a town in Calabria, Italy that became famous when the English crushed Napoleon's allies in an 1806 battle. (Waterloo Station and Trafalgar Square were named for similar victories). A pub called the Hero of Maida, named in honour of the battle, has gone but not before lending its name to the street and - in 1915 – to the station along the Paddington Line.

Aldgate:

Today, glass-covered high-rises and bustling streets spread throughout Aldgate, the area in the east of the City of London. But the name of both the City ward and of two of the nearby Tube stations - Aldgate, which serves the Metropolitan and Circle Lines, and Aldgate East, along the Hammersmith & City and District – has been passed down from a time when the area would have looked very, very different. Around 190, when London was Londinium, the Romans walled the city; they also built six gates, including one here. Versions of these gates (and of the wall) existed into the 1700s. This one was known as Aldgate.

There are two likely explanations. One is that the name comes from 'all-gate', as unlike the other gates, this one didn't charge a toll (so was 'open to all'). Another is that a pub here served up ale for recent arrivals to the city –

and so came to be called 'ale-gate'. The gates themselves were torn down in the 1760s in an attempt to help congestion. But with the Moorgate and Aldgate Tube stations (not to mention Bishopsgate ward, Newgate Street and Ludgate Hill), they live on in the everyday language of commuting Londoners.

Piccadilly Circus:

Forget acrobats and dancing poodles. This Tube station (and London landmark) doesn't get its name from a long-forgotten fair, but rather from the alternate meaning of 'circus' to refer to a round junction where several streets meet. (This also explains Oxford Circus, the Tube station just a half mile northwest). The other half of its name, meanwhile, is a centuries-old bit of snark.

A 'piccadill' is a large, ruffled collar that was the height of fashion in the late 16th and early 17th Centuries – think portraits of Queen Elizabeth I. Creating piccadills was how one London tailor, named Robert Baker, made his fortune... and funded the construction of his grand house here in 1611. Apparently it was seen as a little too grand for a 'lowly' tailor, since it came to be known as Pickadilly Hall. The witty put-down stuck: when the junction was built here in 1819, it was called Piccadilly Circus. So, of course, was the Underground station when it opened in 1906.

Queensway:

Not named for just any queen, this station on the Central Line was – like the road it is located on – named

after Queen Victoria. As you might expect for the longest-reigning monarch of her time (a record she held until Her Majesty Queen Elizabeth II surpassed her in 2015), she did rather well in terms of etymological homage.

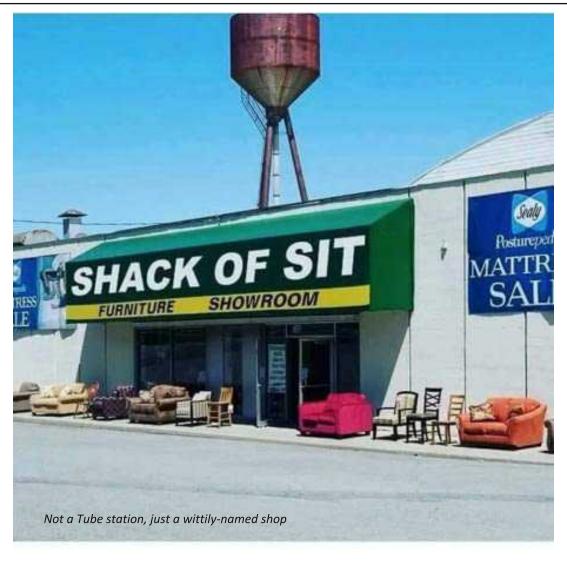
In terms of transport alone, she was also, of course, honoured with Victoria station, the Victoria Line and numerous roads. But Queensway has an especially sweet story: named in her honour soon after she ascended to the throne, the road was where she rode horses as a child growing up in nearby Kensington Palace.

Shepherd's Bush:

This area of west London is home to two Tube stops, Shepherd's Bush on the Central Line and Shepherd's Bush Market on the Circle and Hammersmith & City Lines, as well as an overground station. Despite how busy and well-connected it is today, this was once a rural area far from the centre of London.

This makes one possible explanation for the odd-seeming name remarkably sensible: a 'shepherd's bush' referred to the shelter that a shepherd would make by pruning a hawthorn bush. Some argue, though, that it comes from a personal name (it was recorded as Sheppards Bush Green in 1635) — which begs the question, of course, of who Sheppard was... and what made his bush so noteworthy.

Source:BBC





Learn to tell the difference...

Cycle Planning/Design Training Courses

Do you and your staff know about current best-practice thinking about providing for cycling?

- Who should my target audience be when developing cycle networks?
- When might one-way or two-way separated cycleways be appropriate?
- What is a neighbourhood greenway and where do you use them?
- How do I get cyclists safely across a signalised intersection?
- How do I make shared paths work effectively?
- What's the best way to count how many people are cycling?

ViaStrada Ltd are pleased to announce the delivery of their award-winning cycle planning/design training courses:

27 September, 2017 - Fundamentals (Auckland)

A full-day "Fundamentals of planning and design for cycling" course in central Auckland. This introduces a wide range of aspects related to planning and designing for cycling, particularly for those without any previous specialised training. The course will make reference to various new components of the NZTA Cycling Network Guidance. It is aimed at anybody planning, designing or reviewing roads or other cycling facilities, including planners, road and traffic engineers and managers, road safety practitioners, decision makers and cycling advocates. Practitioners new to NZ may also find it helpful to gain appreciation of local planning and design practices.

17 October 2017 - Advanced intersection design workshop (Christchurch)

Immediately before the Asia Pacific Cycle Congress in Christchurch, ViaStrada will hold a full-day training workshop in "Advanced cycleway design for intersections". This interactive workshop will look at how to incorporate various cycleway treatments (protected, on-road painted, shared street) with different intersection styles (signalised, roundabout, priority).

For each topic, participants will be given a brief presentation, a group design exercise, and an opportunity to discuss the findings. New guidance material from NZTA's Cycling Network Guidance will be referenced. This course is aimed at designers tasked with delivering cycleways with intersection treatments; ideally participants will be familiar with fundamental aspects of simple cycleway design and/or intersection design.

More info and registration details available at https://viastrada.nz/cycling-training or contact Glen Koorey (glen@viastrada.nz, ph.027-7396905).

Cost: \$650+gst / day for early-bird registrations (discounts for community/advocate registrations). Book soon!

Latest evidence on the links between active living and environmental factors from Spain, Canada, USA and NZ



By John Lieswyn

On August 28 to 30, over sixty delegates and presenters from around the world converged on Dunedin to share the latest evidence regarding the strong links between health and environmental factors.

The University of Otago Active Living Laboratory (http://www.otago.ac.nz/active-living/index.html) organised an international symposium entitled Active Living and Environment: Towards a Healthier and More Sustainable Future. Many of the presentations focused on active school travel (AST).

There were many great presenters — the following selection from my copious notes is a fraction of the symposium content. A big thank you to Sandra Mandic of the University of Otago for being the driving force behind this gathering.

Guy Faulkner – Canadian BEAT Study

Guy Faulkner began his presentation with a comic strip showing a parent saying to their child: "I'm not sure if it is safe for you to walk to school – you might meet the kinds of people who walk". Social issues aside, the Canadian BEAT (Built Environment and Active Transportation) study found that:

• The built environment correlates with active transport much stronger near the home than near the

school, suggesting that a focus on deficient infrastructure near the school will not necessarily address barriers to greater use of active modes

- The largest influence on whether students use active modes is (unsurprisingly) trip distance
- Walking is more common in urban areas compared to suburban
- Catholic schools more like to travel by school bus (due to declining enrolment and consequent school closures that increase travel distance).
- Amongst researchers, there is no consensus or solution yet on whether to focus active transportation interventions on the PM trip because children are more likely to need self-directed options (parents at work), or on AM trip because there is less active transportation happening and greater congestion reduction benefits?
- Girls are more likely to never be allowed out by themselves in comparison to boys; girls in suburban neighbourhoods are twice as likely to never be allowed out compared to girls in urban neighbourhoods.
- In this "landscape of fear", gender is perhaps one of the more difficult concepts to unpack and turn into policy, but that doesn't mean we shouldn't try

Palma Chillon - Spanish PACO Study

Palma Chillon presented on the Pedalea y Anda alCOle study of active transport to school, which is continuing to the year 2020. The study investigates a range of

environmental and social correlates to Active School Travel (AST), Physical Activity (PA) and associated health outcomes. The study includes the development of an application for parents to find the safest route to school.

One difficulty was to define the safety variables; one that the researchers are using is the density of traffic violations as a proxy for driver behaviours. Another app is targeted at adolescents and is based on maze game where players real-world steps move their game character through 10 levels to earn rewards at the completion of each level.

Jennifer Roberts – Built Environment and Active Play Study (BEAP) in Washington DC

Jennifer Roberts introduced herself by way of a story about her own travel choices in various US cities. Her current work is in the Washington, DC metro area where there is a heterogenous mosaic of socioeconomic people living. In one study, the travel patterns of primary school age children have been associated with the walkability (measured by "Walk Score") of each child's address and a range of other data obtained through surveys.

Findings included:

- There is strong evidence linking screen time with obesity; "Sitting is the New Smoking" was an interesting way of putting it
- Sedentary behaviour most prevalent with children diagnosed with health issues, white ethnicity, upper income, and those riding in cars a lot www.sph.umd.edu/phoebelab

Tamara Bozovic – Addressing severance of state highways in Hamilton

Tamara Bozovic began her presentation with a meme of Huka Falls and the adage "you don't estimate the potential for a bridge by counting the people who swim". As many Transportation Group members will know, in Hamilton 60% of all trip legs are under 5 km but 90% of trips by car, with the highest use of car of all NZ main urban areas.

Given that 27% of road deaths are pedestrians and people on bikes, there is a need to determine what the issues and solutions are. Walking and cycling is highly correlated with gender and social status – the lowest income households are four times more likely to use active modes. The major arterial streets are about connecting the city, but in reality, they create severance for many people.

Combining infrastructure audits, user opinions, network performance factors and other variables in NZ Transport Agency's MAPHUB and version 6 of the SmartRoads Network Operating Framework, the research found that severance has serious consequences:

- Risk taking road user behaviours, trips not made, or trips made by car only
- Broader issues of equity, reduced transport choice, health impacts, safety impacts
- The tools presented a way of targeting actions

Jo Clendon - Fear and Loathing on the Footpath

Parent and youth footpath cycling campaigner Jo Clendon's presentation was entertaining and thought

provoking. I was reminded of the contrast with another famous parent campaign in 1986/87 by Rebecca Oaten (the "helmet lady").

She noted that for many children cycling is only done in controlled, scheduled situations — making the activity incidental rather than a normal part of life. For some, to go biking you need a car and a bike rack. She wanted to cycle with her kids to school but found that there is an age gap between what is allowed (small wheels only on the footpath) and when children are considered old enough to ride on the road.

Her campaign resulted in a lot of vitriol – are they "kids on bikes" or "lethal weapons"? Wondering about the strong response, Jo suggested that it might be an issue of infrastructure scarcity – people are "fighting over crumbs" in the transport budget. Rather than arguing over crumbs, she suggested we ask for a "bigger bar of chocolate".

She also noted that children don't always understand that older pedestrians need more space and consideration. For example, we teach kids dog safety but we don't teach them about people with vision impairment. Finally, she posited that the dialogue needs to be about reducing traffic speeds and volumes so that more kids can cycle on the road.

Marie Russell - benchmarking NZ cities

Marie presented the results of a benchmarking exercise on six NZ cities with respect to active transportation investment and outcomes. The resultant weighty report is a very good read: http://sustainablecities.org.nz/wp-

content/uploads/Benchmarking-cycling-and-walking-in-six-NZ-cities.pdf

The main issues with the benchmarking included difficulty for city staff to fulfil the data requests and different jurisdictional boundaries (definitions of urban) between agencies/organisations.

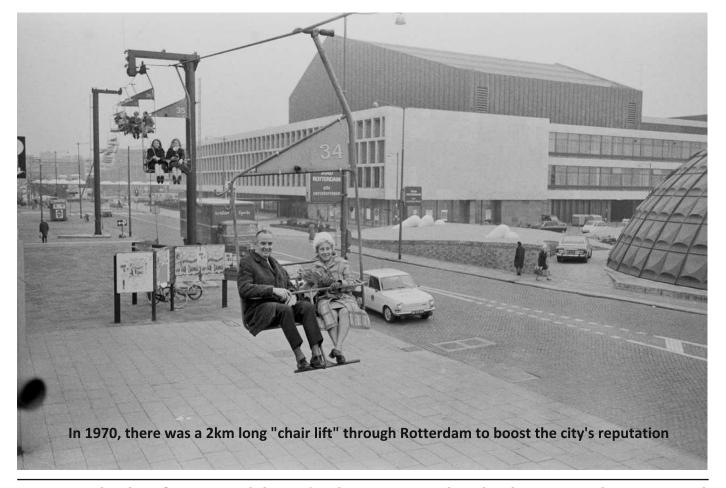
As an aside, Marie noted that most people talk about how low female cycling participation is down to perceptions of safety but it may be concurrent with the emphasis on helmets (i.e. cycling must be unsafe if you need a helmet) and the inconvenience of a helmet for many women's routine.

Melody Smith – Neighbourhoods for Active Kids: Participatory GIS to understand neighbourhood environments for children's activity

Melody's ongoing study hypothesises that "children who reside in neighbourhoods considered highly walkable will be more physically active, accumulate more independent mobility and active travel, and be more likely to have a healthy body size."

The study method includes child surveys using an innovative, child-friendly softGIS application and street audits using the NZ-SPACES tool. Her presentation included a video showing some of the comments from the children, indicating that they clearly recognise the importance of a community in which they can move about on their own. More information on the study can be found in this article:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5013430/



Green light for Auckland electric vehicle bypass lane trial

The NZ Transport Agency last week announced that electric vehicles (EVs) will be allowed to use 11 priority bypass lanes on state highways in Auckland for a 12 month trial, starting this month.

EV T2 Transit Heavy Vehicle Lane sign"Encouraging more New Zealanders to choose an EV for their daily transport needs, rather than conventional diesel or petrol vehicles, is an important step in reducing the amount of emissions produced by our vehicle fleet," says Harry Wilson, Transport Agency Director — Safety and Environment. The Transport Agency is working to support the Government's aim of significantly increasing the uptake of EVs in New Zealand to help reduce greenhouse gas emissions.

"Giving EV drivers the opportunity to use select bypass lanes on motorway on-ramps, providing faster access to the motorway and reducing travel times, is one of a number of incentives to increase EV uptake," explains Mr Wilson.

Recent changes to Land Transport Rules have enabled road controlling authorities, such as the NZ Transport Agency and local and regional councils, to make bylaws to allow EVs to use special vehicle lanes such as transit lanes. As the road controlling authority in control of the state highway network, the Transport Agency has undertaken viability assessments of all special vehicle lanes on Auckland's state highways taking into account potential safety issues and impacts on traffic flow and public transport. Following these assessments, 11 lanes were found to be suitable for this 12 month trial, during which lane performance will be monitored.

Work to prepare the selected lanes with the required signs and road markings will commence in the next week, with all lanes expected to be open to EVs by the end of the month. EV drivers must check the signage at the start of each lane to ensure they are eligible to use the special vehicle lane.

"While the Transport Agency will continue to assess lanes on state highways for suitability for EV access, it will be up to local and regional councils to decide on a case by case basis whether or not to allow EVs to access individual special vehicle lanes on local roads," Mr Wilson says.

EV owners listed on the motor vehicle register will receive an information pack about the trial, including an EV sticker for their vehicle that will help other motorists easily identify that the car is electric.

An EV is a vehicle that is partly or wholly powered by a battery that can be charged by connecting to an external source of electricity. Conventional hybrids that cannot plug-in are not EVs and are not eligible to use special vehicle lanes that allow for EV access.

For more information about the special vehicle lanes that are part of the trial visit www.nzta.govt.nz/ev-special-vehicle-lanes

August saw the registration of 331 EVs in New Zealand – the highest number in a single month bringing the total number of EVs in New Zealand to more than 4,500. It is expected that EV registrations will reach 5,000 before the end of 2017.

AN INTRODUCTION TO THE ACTIVE MODES INFRASTRUCTURE GROUP

For transport professionals, there are a myriad of acronyms that seem to crop up, be they organisations (NZTA, RCAs, IPENZ-TG, etc.) or technical terms (AADT, LOS, RMA, etc.).

For those who are involved with walking and cycling, now you have one more to get familiar with: AMIG.

The Active Modes Infrastructure Group is convened by the RCA Forum and comprises a number of representatives from local councils and the Transport Agency. I was previously involved providing research support, and now act as the IPENZ Transportation Group liaison on AMIG. This report introduces the group and what it does; in the future, I'll provide you updates on latest developments.

AMIG was actually first set up in 2012 as a working group to



consider question of cycle markings for like situations shared lanes; it was from the subsequent trials "sharrow" that markings (left) were ratified for

general use in New Zealand.

Since 2014, the group has taken on the wider remit of considering all aspects of walking/cycling signs and markings, rules, and best-practice design and guidelines. After discussion amongst the group, many of these developments will subsequently end up in guidelines like the new Cycle Network Guidance (CNG, another acronym for you) and/or be included in legislation such as the Traffic Control Devices Rule.

AMIG typically meets about 3-4 times a year at different locations around the country, usually taking the opportunity to have a first-hand look at local facilities, innovations or technical solutions as well. The most recent meetings have been in Wellington in April and Auckland in July; next up is Christchurch in October, ahead of the Asia-Pacific Cycle Congress.

What kind of things are discussed? Here are some of the most recent issues and developments being looked at (by no means an exhaustive list!):



 New signs and markings have been ratified for use on separated cycleway crossing driveways. They'll soon make their way into the TCD Manual and CNG

(http://www.nzta.govt.nz/cng). For now, you'll just have to hunt the details down in New Zealand Gazette, No. 39 (13 April 2017).

- New guidelines for planning and designing pedestrian and cycle rail crossings have now been released for general use (find it at http://www.kiwirail.co.nz/infrastructure). Some AMIG members were on the steering group providing feedback on the earlier drafts.
- Some interesting designs for bus stops alongside separated cycleways have been developed in Auckland, Wellington and Christchurch. Lessons learned from these are being collated for inclusion in updates to the CNG.



- New signs are available to help inform approaching cyclists of the presence of a "hook turn" box at an intersection (left). These are advance boxes that allow right-turning cyclists to make a two-step manoeuvre by keeping to the left-hand sides of the intersection.
- Various trials of shared path signs and markings have been underway around NZ. The consensus now is to

use the Austroads set of path behaviour protocols (keep left, get off the path when stopped, etc) and to allow shared path markings to have the same regulatory status as the equivalent signs. There is also some interest in using joint shared path crossing signals that feature both a pedestrian and cyclist in the same aspect.

• Proposed changes to road rules and traffic control devices have been drafted for where paths cross intersections. In particular, solutions are being developed that would give priority for path users over side-road traffic. There has also been recent research looking into allowing footpath cycling by children, and regulations for electric bicycles and other low-powered wheeled devices, and these have also been





• Trials are currently underway to test cycle directional signals in Auckland and Christchurch. Unlike conventional cycle signals, which allow cyclists to travel in any direction, these signals provide for specific directions only.

So, what can you do next?

For NZTA/RCA staff: If you are involved with the provision of walking and cycling infrastructure in your area then chances are that you will get good value out of attending the regular AMIG meetings (or at least being on the mailing list).

Most of the larger city councils are regularly represented at AMIG, but there is still the opportunity for others to join the group to both learn and contribute to the discussions.

Many new traffic control device and design innovations are also often in need of places to undertake operational trials of them. Contact co-convenors Wayne Newman (RCA Forum) or Gerry Dance (NZTA) to be included.

For consultants and others: You might like to check whether Transport Agency or council staff that you deal with are aware of AMIG and its developments; perhaps they should be encouraged to sign up.

Also, if you have any ideas for introducing new walking or cycling treatments (or amending existing ones), please pass them on to me and I will raise them on your behalf at AMIG.

For more information, you can also check out the group's webpage:

http://rcaforum.org.nz/working-groups/active-modes-infrastructure

Glen Koorey, ViaStrada Ltd (glen@viastrada.nz, ph.027-739-6905)



CHRISTCHURCH NEW ZEALAND

Transportation Engineering Postgraduate Courses 2018

Dept of Civil & Natural Resources Engineering **University of Canterbury**



The courses below are available for full-time or part-time students studying for the following postgraduate transportation qualifications at Canterbury:

- Certificate of Proficiency (COP) ~ for individual one-off courses (great for CPD!)
- Postgraduate Certificate in Engineering (PGCertEng) ~ typically four courses
- Master of Engineering Studies (MEngSt) ~ typically eight courses
- Master of Engineering in Transportation (MET) ~ up to six courses plus research project or thesis Please see the website of the University of Canterbury for fees per course in 2018: http://www.canterbury.ac.nz/courseinfo/MyGetCourses.aspx?course=&year=2018

All courses run in "block mode" to enable part-time and distance students to easily take part. In 2018, the contact time will be four days (i.e. a 2-day block of 2 blocks), and students taking the courses will be expected to do more reading and learning in their own time.

All prospective students must apply to enrol in courses no later than one week prior to the course starting (preferably earlier), otherwise late fees may apply.

Candidates with a Bachelor of Engineering OR other relevant degrees (e.g. planning, geography, psychology, maths), OR non-degree qualification and suitable work experience, will be considered for entry.

COURSE Semester 1

ENTR 401: Fundamentals of Transport Engineering (Self-study course, with 1-day tutorial)

ENTR615: Transport Network Modelling

(Block dates: 5-6 Mar, 7-8 May)

of Sustainable Transport

(Block dates: 19-20 Mar, 21-22 May)

Semester 2

Traffic Management and Monitoring

(Block dates: 23-24 Jul, 17-18 Sep)

ENTR604: Road Asset

Management (Block dates: 30-31 Jul, 01-02

ENTR617: Traffic Engineering and Design (Block dates: 13-14 Aug, 24-25

ENTR616: Transport Planning and Modelling

(Block dates: 20-21 Aug, 15-16

DESCRIPTION (see flyers on website for more details)

Bridging course for non-transportation students: Transportation planning; Road link theory & design; Intersection analysis & design; Traffic studies; Accident reduction; Sustainable transport planning & design; Intro to pavement design. Course coordinator: Dr Kun Xie

Advanced concepts of macro-, meso-, micro-scopic traffic models; Applications of Bayesian estimation techniques for real-time traffic monitoring; Microscopic simulation package (AIMSUN); Model calibration and validation using heuristic optimization techniques. Course coordinator: Assoc. Prof. Dong Ngoduy

ENTR614: Planning & Design Pedestrian planning & design; Planning & design for cycling: Audits/reviews of walking & cycling; Planning & design of bus public transport facilities; Travel behaviour change & travel plans. Course coordinator: Dr Diana Kusumastuti

> Introduction to control theory; Implementation of control theory in traffic control; Large-scale urban network modelling and control; Application of microscopic simulation AIMSUN, Macroscopic or Network Fundamental Diagram; Introduction to motorway control: ramp metering, variable speed limit; Coordinated urban network control, traffic signal design (TRANSYT), traffic state estimation. Course coordinator: Dr Mehdi Keyvan-Ekbatani

Road asset management concepts, levels and functions; Data requirements; Evaluation of functional and structural performance; Intervention criteria; Deterioration models; Rehabilitation and maintenance strategies and priorities. Course coordinator: Assoc. Prof. Mofreh Saleh

Principles of transport network modelling: user equilibrium and system optimum; Basic concept of linear programming and optimization; Traffic Network Assignment package (SATURN); Optimal signal control designs in SATURN. Course coordinator: Assoc. Prof. Dong Ngoduy

Urban transport planning models; Geographic information systems; Travel demand modelling and prediction; Project appraisal; Transport modelling.

Course coordinator: Dr Diana Kusumastuti

Note: Other relevant courses at the University of Canterbury, University of Auckland or elsewhere may also be suitable for credit to a PGCertEng, MEngSt or MET (contact Assoc. Prof. Saleh for approval). For more details contact:

Associate Professor Mofreh Saleh (Ph. 03 369 5118; Email: mofreh.saleh@canterbury.ac.nz)

Or visit the website: www.met.canterbury.ac.nz



I was recently in Queensland for a family holiday but couldn't resist taking a few transport-related photos. I'm sure the rules are slightly different over there but some situations I came across I just couldn't figure out. Taken a photo of something that also raised an eyebrow? Send photos to: daniel.newcombe@at.govt.nz



Green for a traffic island? The same green used for cycle lane surfacing nearby? The contractor must have had a special on.

I stayed near this 'crossing' and couldn't figure it out. It was near a suburban rail station so I presume it had very 'peaky' pedestrian flows, but I can't understand why any other kind of crossing - zebra, signalised, or just a refuge - couldn't have been a better option. I have only seen flashing lights used for fire stations or roads prone to





This sign seems to defy the Dunn-Gottler rule that speed warning signs must end in a '5'. (I don't know the actual name of the rule, but the only people I have asked about it are Roger Dunn and John Gottler, and both professed to have a plausible - but differing - explanation.)





Somebody, somewhere, ticked a box in a form that said: Every narrow accessway must have a sign indicating bi-directional traffic. That person never visited this site.



Branch updates



Auckland/Northland Branch

The inaugural Auckland TG Quiz Night was held on Wednesday 16th August at The Paddington. We had a great turn out, and some good chats with a beer or two.

A big congratulation goes to the winners "Opus - The Marmalade Sandwiches" shown in the photo. They received the trophy, a bar tab and the honour of being in charge for the next quiz night event!



The next major event the Auckland Branch is planning is a "Young Professionals in Transport". This evening will be a joint event with NZPI Young Planners and showcase the achievements of young professionals that work in the transport industry.

It will focus on a series of short presentations to show what working in the industry is actually like, provide some advice on making the transition from university to work, and to find out some of the adventures that our Young Professionals have had in the early part of their careers.

This is planned for the first week of October. If you are a Young Professional and would like to be involved please get in contact with Kathy.Matete@beca.com

In September the committee attended an industry briefing on the new draft Roads and Streets Framework and draft Transport Design Manual. Auckland Transport are currently seeking feedback from the industry on this. You can download the documents at the following links:

Roads & Streets Framework & Transport Design Manual - draft CLICK HERE

Please send your constructive feedback directly by 5.00pm, Friday 23 Sept to Auckland Transport at: rata@crisp.net.nz

Waikato/Bay of Plenty Branch

In hibernation.

Central Branch

Maybe hibernating with Waikato?

Canterbury-Westcoast Branch

Quiz Night

The Canterbury/West Coast Branch enjoyed a great turn out at our annual Quiz Night (see photos) held at the end of July. Congratulations to our top team "Athol's Allstars" who took first place for the evening, as well to the aptly named team "Last Place" who took home the coveted toilet brush award. Special thanks to our guest MC "Mrs. Stig".





ConferencePlanning

We put out the call for people to join the 2018 Queenstown Conference Committee (supporting the Southern branch) and have been enthused with the response of many volunteers, including a couple new faces and people who haven't attended an IPENZ Transportation Group conference before. This is helping us look at the experience with new eyes and we are looking forward to a fresh take on the annual conference in March – see you there! See the below photo of the commitee hard at work.





Branch updates



Southern branch

This branch totally exists.

NZ Modelling User Group

NZ Modelling User Group Conference 2017 recap - Dumb modellers attempt to convince each other they're smarter than the models they use.

This year the NZMUGs group embraced the conference theme "are smart models creating dumb modellers?" Although a number of (soft) Aucklanders may have been put off by delightful spring weather in the Mainland, or a 100% deep fried artery clogging conference dinner, the conference was another raging success.

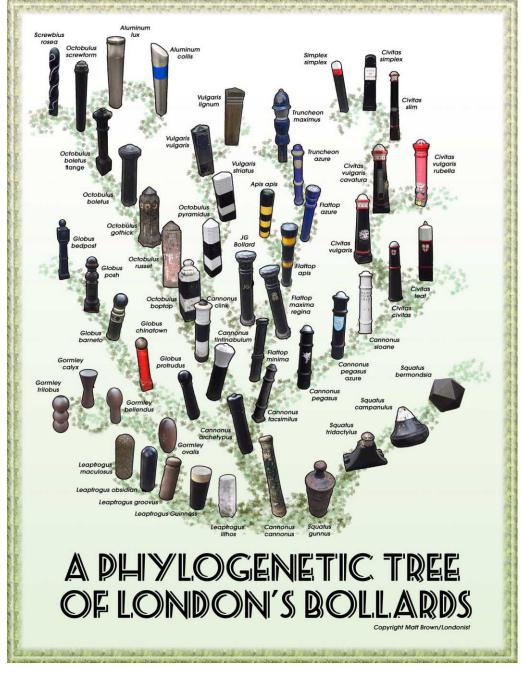
We learnt that people may have had enough of experts, trees cost around \$10,000 each, people that shop online shop a lot, if you don't give Politicians good advice that won't stop them making decisions anyway,

and we all agreed that our models are precisely inaccurate.

We really pushed the boat out this year and include three guest speakers who contributed significantly with diverse and insightful input during presentations and panel discussion (see photo).

Our thanks to Tim Herbert (Ministry of Transport), Rahmi Akcelik (Sidra Solutions), and Peter Nunns (MRC and Greater Auckland). Other presentations ranged in scope from modelling the whole of Europe to the installation of a single traffic light in Christchurch.

The conference was wrapped up by the traditional ribbing of speakers, thanks to our sponsors, and awards to the best presenters. Congratulations and well done to Best Speaker Soumya Subba, and Best Young Speaker Ling Hoong. We look forward to seeing you all next year in Auckland!



1st

Roundabout of the month



The UK Roundabout Appreciation Society has named the famous Titirangi Roundabout the international roundabout of the year. It will be featured in its annual calendar next year, as the December cover. Seen a better one? Email daniel.newcombe@at.govt.nz

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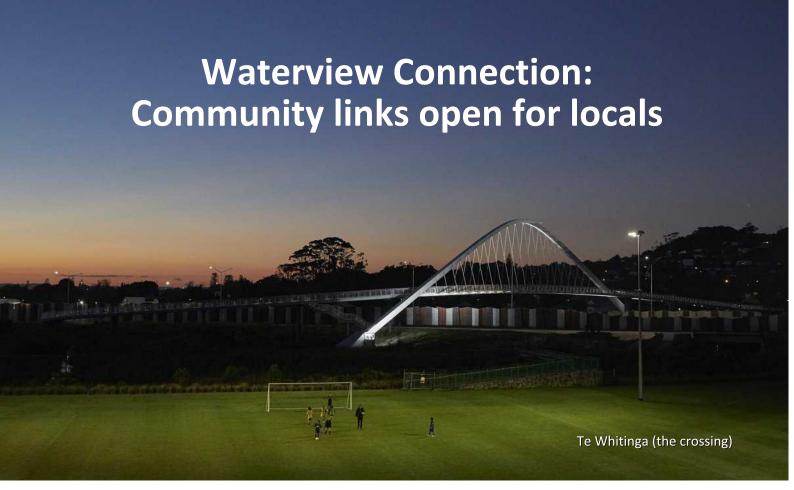
Caption competition



A reader sent in an amusing photo from the conference of our Dear Leader Alan Gregory. A caption has been suggested. If you have any better suggestions, send them to: daniel.newcombe@at.govt.nz



Capitalism at work





Waterview Connection

COMPLETING THE WESTERN RING ROUTE

A collection of community links and spaces officially opened on the Waterview Connection project in late July to provide better access for local people. The Waterview Reserve heritage area, Southwestern Shared Path and Te-Whitinga (the crossing) were opened by elders of Ngati Whatua Orakei on Friday 28 July.

The elders blessed these three areas saying a special karakia (prayer) acknowledging the land of their iwi (tribe) as well as embracing the community facilities built by the Well-Connected Alliance (WCA). They acknowledged the benefits these facilities provide for the community.

Later that day, Transport Minister Simon Bridges and Auckland Mayor Phil Goff opened the first 570 metres of Waterview Shared Path, a walking and cycling route that follows Te Auaunga (Oakley Creek) between the suburbs of Mt Albert and Waterview.

The first section runs between Great North Road at Waterview across the 90 metre-long Alford Street Bridge spanning Te Auaunga, which is 16 metres below, and into the Unitec campus.

The rest of Waterview Shared Path is on track to be opened late winter/early spring. When completed later this year the 2.5km long path, which is designed for walkers and cyclists of all ages and abilities, will connect people to local parks, sports grounds and the Unitec Campus.

The NZ Transport Agency, together with Auckland Transport and the Albert Eden Local Board have contributed funding for the project, which is being built by the WCA.

"Projects like the Waterview Connection are about so much more than roading connections and these shared paths are another way we are working to improve the entire transport network and provide real transport choices," says NZ Transport Agency's System Design Manager, Brett Gliddon.

The Waterview Connection project has won the supreme award at the Civil Contractors New Zealand's (CCNZ) National Awards held in Dunedin on 4 August. Up against the Mackays to Peka Expressway north of Wellington and the Stronger Christchurch Infrastructure Rebuild (SCIRT)and other infrastructure projects in the Hirepool Construction Excellence Awards category for projects worth more than \$100 million.

Judges praised the WCA's design and delivery of the project, which cost \$1.4 billion and is New Zealand's largest infrastructure roading project ever.

The WCA comprises the NZ Transport Agency, Fletcher Construction Infrastructure, McConnell Dowell Constructors, WSP, Beca, Tonkin & Taylor and Obayashi Corporation. It also incorporates Wilson Tunnelling (pre-cast concrete) and SICE (tunnel operations and maintenance) as sub-Alliance partners.

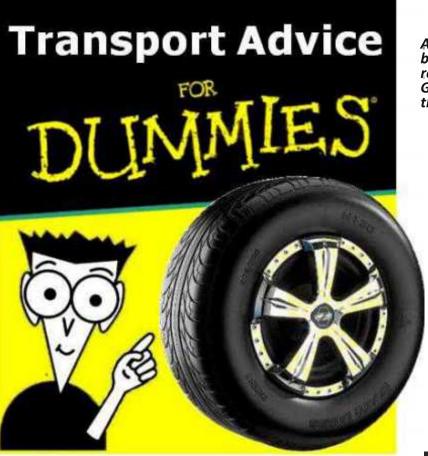
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If you want to find out a bit more information on the project, visit: www.nzta.govt.nz/projects/waterviewconnection

or for regular updates and some great vidoes www.facebook.com/AliceTBM

Sydney tram tracks being removed in the 60s... And being put back in in 2017.





A tongue-in-cheek column on transport matters by The Transport Guy. The contents do not represent the views of the IPENZ Transportation Group, or anyone else for that matter. Follow the advice at your own risk.

Dear Transport Guy

This election thing annoys me. For three years these politicians hold committees and yell at each other in Parliament, and do pretty much nothing else, and then when it's voting time they come up with all these things we want.

What's that all about? Where were those things for the last three years?

Barney, Gore

Dear Barmy

I think you have just described 'democracy'. Don't forget to vote for your favourite bribes. ~Transport Guy

"Those parties not in parliament usually struggle to pass laws."

Dear Transport Guy

A lot of promises have been made by all the political parties during the election campaign. What are the chances of them actually being delivered?

Frank, Waipu

Dear Frankly

Well, the greatest chances lie with those parties which actually get elected. Those parties not in parliament usually struggle to pass laws. And, even then, the chances aren't great. Lower your expectations. ~Transport Guy

Dear Transport Guy

I quite like some of the transport-related projects that have been promised or promoted by various people on the election trail. I do have a feeling however that some of the costs and timeframes may not actually be realistic. What do you think?

Simon, Alexandra

Dear Simpleton

You have spotted a key issue for the voting public - achievability. If the promise requires a change in the laws of physics or looks like it has missed 90% of the actual costs, you are right to be wary. Those physical laws are hard to change - even if you have a strong parliamentary majority.

But it is fairly easy to build something for the promised price. Just stop counting once you reach the desired amount, and all the rest can be 'transferred' to someone else's project, or election.

~Transport Guy



Do you have a dumb question for Transport Guy? Email it to: transportfordummies@gmail.com and he'll do his best to answer...



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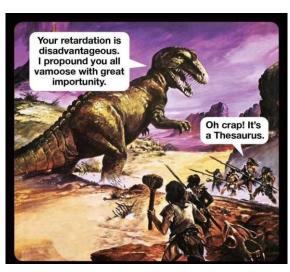
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