Roundabout

Magazine of the IPENZ Transportation Group

Issue 148 June 2016

Auckland's City Rail Link launch - Was a detonator a good idea?

Also in this edition:

- Why engineers should not design streets
- Heaps of trains
- Fining cyclists
- GPS-enabled shoes

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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.

Many thanks are due to Opus International Consultants, who sponsor the printing of Roundabout for those members who prefer to receive a hard copy.

Correspondence welcome, to Daniel Newcombe: daniel.newcombe@aucklandtransport.govt.nz or c/o Auckland Transport, Private Bag 92250, Auckland 1142

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

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

If somehow you have come to be reading Roundabout but aren't yet a member of the 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

Everyone has ideas – some good, some bad.

Just like everyone thinking they are above-average drivers (which is obviously statistically impossible), I expect most people think they have a bunch of good ideas, better than other people's, that would sort out many of the world's problems – if only someone would seek their opinion.

The reality is that our ideas probably follow a bell curve of quality – a small number are great, a similar number are terrible, but most of them are sitting in the middle, as what is best described as 'average'. These ones won't ruin the world but they won't fix it either.

I was thinking about this idea of ideas recently following the Transport Minister's announcement of a range of incentives for electric vehicles (EVs). Some of the ideas seem good, and it must be said that all of them are well-intentioned – if you agree that replacing fossil fuel burning vehicles with electric vehicles is a good thing.

But I have to think that one of the (well-intentioned) ideas is terrible.

The proposal to allow EVs to use bus lanes and busways just seems – to me – barmy. I'll admit a bias, that my day job includes expanding Auckland's public transport network, so I have a fondness for a well-functioning bus lane.

The proposal to allow EVs to use bus lanes and busways just seems – to me – barmy

The other EV-promoting ideas seem to come without many trade-offs, but this bus lane one seems to come at the expense of a big chunk of the public transport system, i.e. the users.

We have enough trouble keeping cars out of bus lanes – and explaining the benefits of a free-flowing, empty-looking bus lane – without adding confusion and temptation for drivers by allowing some – but only some – cars in.

Many Auckland bus lanes are reaching the point where there are so many buses in them – upwards of 100 buses per hour – that they are becoming less and less efficient, as the buses get in each other's way.

We're progressively converting to double-decker buses, to increase passenger capacity whilst limiting bus volumes, but to insert a bunch of additional vehicles – even sustainable ones – seems misguided.

There are bound to be some bus lanes where a limited number of EVs could happily be added without much impact on bus operations, but how will we define and identify them whilst keeping other ones restricted? And what happens when there are too many EVs to accommodate? Seems problematic to me.

I reckon the 'EVs in bus lanes idea' is a classic example of an idea from someone without first-hand experience in public transport. Someone who sits in traffic and sees 'empty' bus lanes next to them, but is quite keen on sustainability and EVs. From that perspective, it seems like a great idea. But it's not.

Hundreds or thousands of bus passengers will end up getting a slower journey, so that a comparatively tiny number of EV drivers can avoid traffic congestion. I hope this idea is investigated, assessed and discarded forthwith.

Fortunately, with a bit of effort, we can identify some great ideas and promote them. This is what we hope to have done with this and future editions of Roundabout.

We have asked some of the winners of categories from the IPENZ Transportation Group 2016 Conference to provide versions of their winning papers and ideas.

I hope you find their ideas compelling and maybe they will stimulate some new ideas of your own, or change some you already had.

I'd also like to welcome John Lieswyn from ViaStrada in Christchurch to the small but perfectly formed Roundabout editorial team. I know John has some good ideas – he was one of the award winners at the conference this year – and I look forward to those ideas being expressed in Roundabout in the future.

I also want to thank the Wellington office of Opus, who for many years helped print copies of Roundabout for our members without email or internet access. Due to changes from IPENZ head office, we won't be able to provide this service anymore (so if anyone needs a hardcopy, ask a friend or colleague to print it out at work) but it was a dwindling requirement so we won't bother Opus anymore.

Daniel Newcombe
Roundabout Editor
@newcombe_dan

Chairman's Message

In the usual struggle of having to meet the editorial deadline (and having set aside many 'allocated times' only for these to be always overhauled by other priorities, demands and deadlines) I am wondering (probably like everyone else) just where the first part of 2016 has gone? Of course, the interruptions don't stop even during the attempt to complete this task!

It seems that all aspects of our discipline and industry in general is experiencing the same level of busyness and urgency. Long may it last.

However, judging from the responses of people, the associated stress levels are very high too. A number of our colleagues are addressing this issue by locking in a well-deserved break and ensuring they take time out from the ever-increasing treadmill speed.

Suffice to state that no one is indispensable and that the world will keep on spinning. Take that break and come back reinvigorated and refreshed. Also, stay incommunicado!

Following on from the above, the National Committee members are similarly struggling to find time to allocate to Transportation Group affairs. There is lots to do but little spare time. We are hoping to set aside a day later this year to at least complete a few tasks together as a group. These tasks are generally related to the Group's strategy and the way forward.

The Branches in the less densely populated areas are still struggling to retain and maintain attendance at committee meetings and presentations.

There has been a shift in that more presentations are being undertaken in conjunction with the respective IPENZ branches and other organisations such as the New Zealand Planning Institute, Chartered Institute of Logistics and Transport, Urban Design Forum and New Zealand Institute of Landscape Architects.

These joint presentations do seem to have a positive outcome with regard to attendance and interest in the topics.

As noted in my previous message, I was going to continue with the theme from Conference 2016. However, the Conference report in the last issue of Roundabout comprehensively covered this issue. I won't be able to any justice to that by adding anything further.

Of late, the key topics of discussion have been the National Policy Statement on Urban Development Capacity and the Government's package on electric vehicles. With regard to the latter, the issue is that of permitting electric vehicles on busways, bus lanes and HOV lanes.

Details of further information are as follows:
- NPS: http://tinyurl.com/gnrse2l Submissions close on Friday 15 July 2016.
- EVs: http://tinyurl.com/zczc8eh There does not seem to be any information on the consultation process.
These are important issues. Please take this opportunity to have your say.

On a personal note, with winter now on us (well mostly anyway) I have to pull out all my wet weather gear and paraphernalia for my daily cycle commute. This winter it has taken some getting used to after the long summer and extended and warm autumn. On some of the warmer days, we do seem to be overdressed and generate more perspiration (or sweat as others refer to us smelly cyclists!).

Over the years I have noticed an increase in cycling through the winter. In the past, there was a noticeable drop (almost down to zero) of commuter cyclists during the winter months. These days, I seldom find myself as a sole cyclist at most of the intersections. It is great to be among all the flashing lights!

The one curious thing is that cyclists don't seem to like greeting each other. Many of my 'hullos' or 'good mornings' are met with a stony silence. Not sure if cyclists are too engrossed with their journey, putting in a huge effort, concentrating/worried being in the traffic or if it the world famous Kiwi characteristic of being the 'strong silent type'.

I have also noticed a somewhat reasonable increase in cycling since the cycle lanes have been installed. Another noticeable phenomenon is the increasing number of electric bikes we are seeing. I believe that this assisted cycle, together with the extension of the cycle network, is enabling a greater number of 'interested but concerned' cyclists to commute.

It is tough struggling up a hill and being easily passed ('smashed' in cycling terms) by a pedaller on an electric bike. It is nevertheless pleasing to see and is, I believe, a revolution waiting to happen.

I have heard first hand of the 'interested but concerned' cyclists making recreational trips into the Auckland CBD to view these new facilities.

The 'Pink Cycleway' has certainly generated a huge level of interest. Some of my friends and colleagues (also 'interested but concerned') have started commuting by cycle using all the new facilities.

The upgrade of the Northwestern Cycleway has definitely increased cycle numbers. The parts of this facility that have already been completed are great. When the entire facility has been completed it will significantly increase the attractiveness and feasibility of the cycle commute between the west and the CBD. It is pleasing to see this busy 'cycle highway' even on weekend recreation rides.

This catchment will be extended with the completion of the Waterview Shared Path/New Lynn to Waterview Shared Path/Te Whau Pathway.

Not forgetting the east, I am expecting the Glen Innes to Tamaki Drive link to increase the numbers of commuting cyclists just as much as we have seen in the west and in the CBD.

Until next time.

Pravin Dayaram
National Committee Chair

Letter to the editor

Hi Daniel,

Great job with the conference, and I enjoyed this issue of Roundabout! [Ed: Flattery will get you everywhere, including a role on the editorial team...]

Re. City Lab interpretation of the recent sharrows study [Roundabout, March 2016], I prefer the conclusion offered by Streetsblog, a quote from Dutch bike planner Dick Van Veen told Streetsblog about sharrows in the Netherlands: They should be used in tandem with significant traffic-calming measures — on a street with fast traffic, to put down sharrows alone would be considered "unethical."

I agree with this and I have found that sharrows are useful in two situations - bicycle boulevards / neighbourhood greenways and low speed town centres (like where I lived in downtown Davis, California). I would hazard a guess that the Chicago streets that were analyzed in the Ferenchak and Marshall study looked at many streets where they should not have been installed, rather than just the streets where they are most appropriate.

Regards
John Lieswyn, MET, PTP
Senior Transportation Planner
ViaStrada, Christchurch

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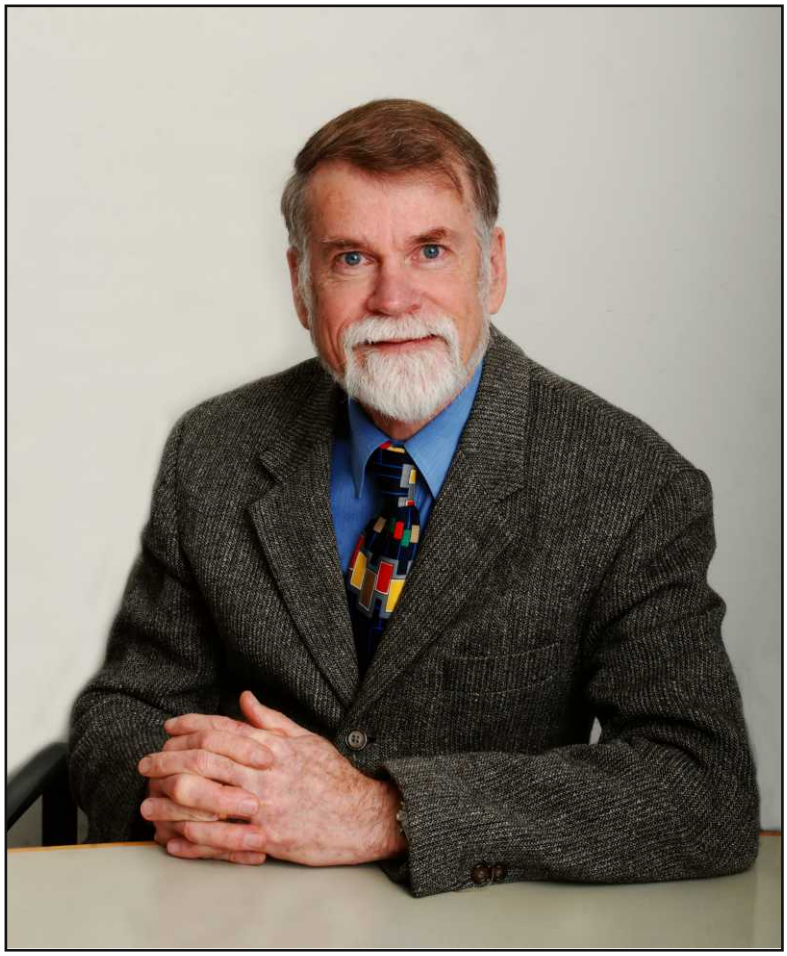


Obituary - Dave Petrie

In a feeling shared across all of those who have known and worked with Dave Petrie over the course of his career, it was with considerable regret that we learned of his untimely death early on Sunday 15 May 2016.

Dave began his career in 1971 with the Ministry of Works working across a range of civil engineering design and construction projects in Rotorua, Hamilton and Auckland.

In 1983, Dave's abilities were recognised in the award of a National Roads Board Scholarship to the University of California at Berkeley where he undertook and completed his Master of Engineering studies. He then worked with Caltrans in a two year assignment on a range of highway projects across California.

Back to New Zealand where Dave's expertise widened to include pavement and road safety studies ranging from research into pavement strengths through to the specialities of building and operating safer highways.

Dave joined TDG in 1989 and through the 27 years since, Dave focussed on traffic and transportation specialising in professional advice and building a much respected reputation across a wide range of projects in both the public and private sectors.

Dave always had a steely determination to get it right. If you had a contrary view, you'd better be able to back it up. As those who worked with him knew, he always insisted on completeness both in the work he was doing and in the work coming in from others – he knew and trusted his judgement, and liked things done properly.

Dave also brought a considerable long-standing reputation to the road safety sector where he established and led safety audit teams throughout all of NZ.

Dave's sense of adventure and fun gave another dimension to his life. He never hesitated to join in any and all corporate adventures and challenges ranging from kayaking to golf, from indoor cricket trials and triumphs through to mountain biking and rafting.

Together, he and Judy travelled widely and pursued many other interests besides ranging from Boston and the Monet exhibitions through to the enviable temptations of food and jazz including in New Orleans and the steamy heat of Louisiana.

For us and all who worked with him, Dave was a true professional in every sense of the word and was well liked by all he met. He will be sorely missed by his family and all who knew him.

Peter McCombs
20 May 2016

3M Traffic Safety Innovation Award

Whatever happened to that 3M Award winner…?

1997 3M Traffic Safety Innovation Award winner - John Janssen

I won the award in 1997 as the project manager and lead writer of an Land Transport Safety Authority (LTSA)-initiated project to encourage the use of, and develop guidance for, rural speed thresholds.

We had a project team of five, the others being Stanley Chesterfield (Transit NZ), Bill Greenwood (Christchurch City Council), Grant Gordon (Waikato District) and John Gottler (Manukau City Council).

The end product was the LTSA's RTS 15 'Guidelines for urban-rural speed thresholds' which was published in February 2002 (between 1997 and 2002 a draft discussion document entitled 'Guidelines for rural thresholds' was widely used – the delay in producing the final product being caused by a shift in LTSA personnel and focus).

The aim of the project was to provide a cost effective means of reducing vehicle speeds as they transitioned from a high speed rural environment into an urban setting and hence reduce the frequency and severity of crashes.

The team researched literature from within NZ and overseas, particularly from northern Europe and the USA, to identify the most effective treatments to achieve this aim, and eventually settled on a number of key elements considered essential to a successful threshold design.

From this base, the guide was developed (other speed management techniques were included in the discussion document but left out of the final guide).

Some work commenced in 2005 to evaluate the effectiveness of the thresholds but unfortunately the restructuring of LTSA into LTNZ (Land Transport NZ) got in the way and the evaluation wasn't completed.

However in 2010 Blair Turner from ARRB in Victoria got in touch as he was researching threshold use for potential implementation in Australia, and subsequently ARRB continued the evaluation which culminated in an Austroads Report titled 'Methods to achieve overall reductions in operating speeds in rural areas – gateway treatments crash analysis'. See: http://tinyurl.com/thresholdsnz

A conference paper written by the report authors which summarises the key findings http://tinyurl.com/thresholdnz2

The overall finding was a statistically significant reduction in fatal and serious crashes of 23 percent and 26 percent for all crashes – the report also details crash results for a variety of threshold treatment features and types.

Blair recently commented to me that rural thresholds are now being rolled out around Australia based largely on the NZ experience. Within NZ, our 2005 data showed that at least 21 Road Controlling Authorities were using rural thresholds at approximately 130 different sites.

Transportation Engineering Postgraduate Courses 2017
(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

Semester 1 (Mar-Jun 2017)

CIVIL758 – Traffic Systems Design (3hr / w for 12 weeks, dates TBA)	Traffic signal timing analysis, gap acceptance parameters, intersection analysis of performance (priority, roundabouts, signals), introduction to transportation planning and modelling techniques, Resource Management Act and other requirements, computer modelling and simulation.
CIVIL762 – Transportation Planning (2 x 3 days, dates TBA)	In-depth exploration of various components of the urban transportation planning process, with emphasis on theories on modelling. The principles of conventional four-stage transport planning model, namely, trip generation, trip distribution, modal split and trip assignment, are covered in detail.
CIVIL766 – Road Asset Management (2 x 3 days, dates TBA)	Road asset management concepts, levels & functions; data requirements; evaluation of functional and structural performance; deterioration modelling; economic evaluation and lifecycle analysis; prioritisation and optimisation; risk management; pavement management systems.
CIVIL769 – Highway Geometric Design (2 x 3 days, dates TBA)	The geometric design of highways including; user, vehicle, road environment, sight distance, vehicle speed, safety, safe systems & design consistency, horizontal / vertical curve & cross-sectional design, plans, signs & marking.
CIVIL770 - Transport Systems Economics (3 x 2 days, dates TBA)	Fundamentals of transport economics incl. supply, demand, pricing, congestion and other externalities; principles of economic evaluation in transport planning.
Civil 772 – Public Transport – Planning & Operation (28, 29 & 30 July and 11, 12 & 13 August)	PT Data Collection; Frequency and Headway Determination; Alternative Timetables; Vehicle and Crew Scheduling; Short-turn Design; PT Network Design; Reliability; Design of Shuttle and Feeder lines; Bus priority and BRT

Semester 2 (Jul-Aug 2017)

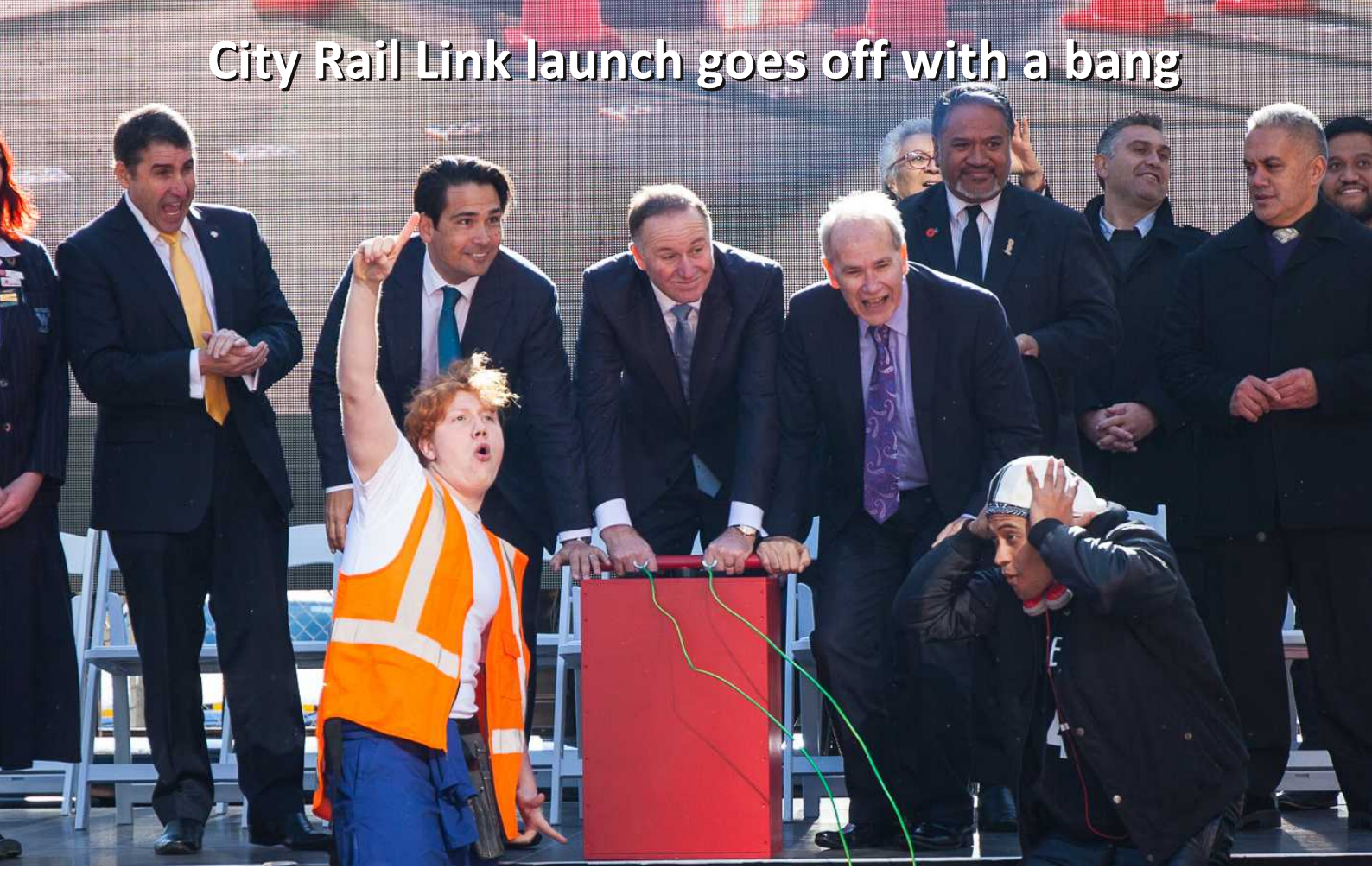
CIVIL759 – Highway & Transportation Design (Mon 11-12 and Wed 12-2 for 12 weeks)	Economic and environmental assessment of transport projects, land transport funding, road safety engineering, crash reduction & prevention, design of at grade intersections, pavement asset management and rehabilitation techniques, heavy-duty pavements, highway drainage.
CIVIL765 – Infrastructure Asset Management (17, 18 & 19 Aug and 5, 6 & 7 May)	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.
CIVIL 771 – Planning & Managing Transport (1 & 2 Aug, 12 & 13 Sept 17 & 18 Oct)	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.
CIVIL 773 - Sustainable Transport: Planning and Design (3 x 2 days, dates TBA) (new course / under development)	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
Phone: (09) 373-7599 x87714 or (09) 923 7714 DDI Email: rcm.dunn@auckland.ac.nz

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

City Rail Link launch goes off with a bang



Auckland's top transport priority has taken a major step forward with the recent ground-breaking ceremony for the City Rail Link (CRL). Mayor Len Brown, Auckland Transport chairman Dr Lester Levy, the Prime Minister and Minister of Transport officially marked the start of the construction.

This was ceremoniously marked with an oversize 'detonator' setting off a fireworks explosion. It certainly was different from the usual sod-turning such events involve.

When completed the $2.5 billion project will mean more frequent trains across the network and more direct services to the city centre. Auckland Transport will be able to grow the present rail network to reach an average better than one train every 10 minutes at peak for most stations.

The CRL will almost double the number of people on the trains to 30,000 an hour at peak times. Dr Levy says, "It will change the look and feel of Auckland setting the city up for future growth."

Auckland will grow by more than 700,000 people in the next 30 years and Dr Levy says the CRL, coupled with bus improvements and major investment in other infrastructure such as roads and highways, is the only way to keep Auckland moving. "The CRL is the bold game-changer Auckland has been waiting for."

Mayor Len Brown says good things come to those who wait. "Auckland, we sure have waited, this project has been debated and tossed around for more than 90 years. It was first flagged in 1923 by the then Minister of Railways. Now we are finally pushing the "Go" button."

Dr Levy says the CRL isn't just about freeing-up central Auckland, it has transport benefits for large parts of Auckland, including road users. "Making public transport a better travel choice will ease pressure on roads for those who need to use them."

During the past decade, rail patronage has increased from three million trips a year to 16 million but further growth of the rail system, including increases to train frequency, is constrained by its dead end at Britomart, this limits the entire network's capacity. The CRL will join up the rail network, allowing trains to run both ways through Britomart doubling the number of trains.

ATRF
AUSTRALASIAN TRANSPORT RESEARCH FORUM

38TH AUSTRALASIAN TRANSPORT RESEARCH FORUM

November 16th-18th, 2016 | Melbourne, Australia

Registration is now open for the 38th Australasian Transport Research Forum (ATRF 2016), which will be held in Melbourne from 16-18 November 2016.

The ATRF is the principal transport research conference in Australia and New Zealand. It brings together transport researchers, policymakers, advisors and practitioners from a range of disciplines to share and build upon the latest research and thinking. Note that the conference will be co-located with the ARRB conference in 2016, allowing ATRF attendees to participate in the activities of both conferences.

Papers will cover a wide range of topic areas, including:

T01: Freight & logistics
T02: Transport modelling, forecasting & simulation
T03: Transport analysis & big data
T04: Active Transport (cycling, walking, etc.)
T05: Public transport
T06: Transport & land use / urban design
T07: Planning & policy
T08: Transport economics
T10: Transport surveys
T11: Safety
T12: Environment
T13: Advanced technology, automation & ITS
T14: Travel behaviour change & demand management
T15: Other transport research

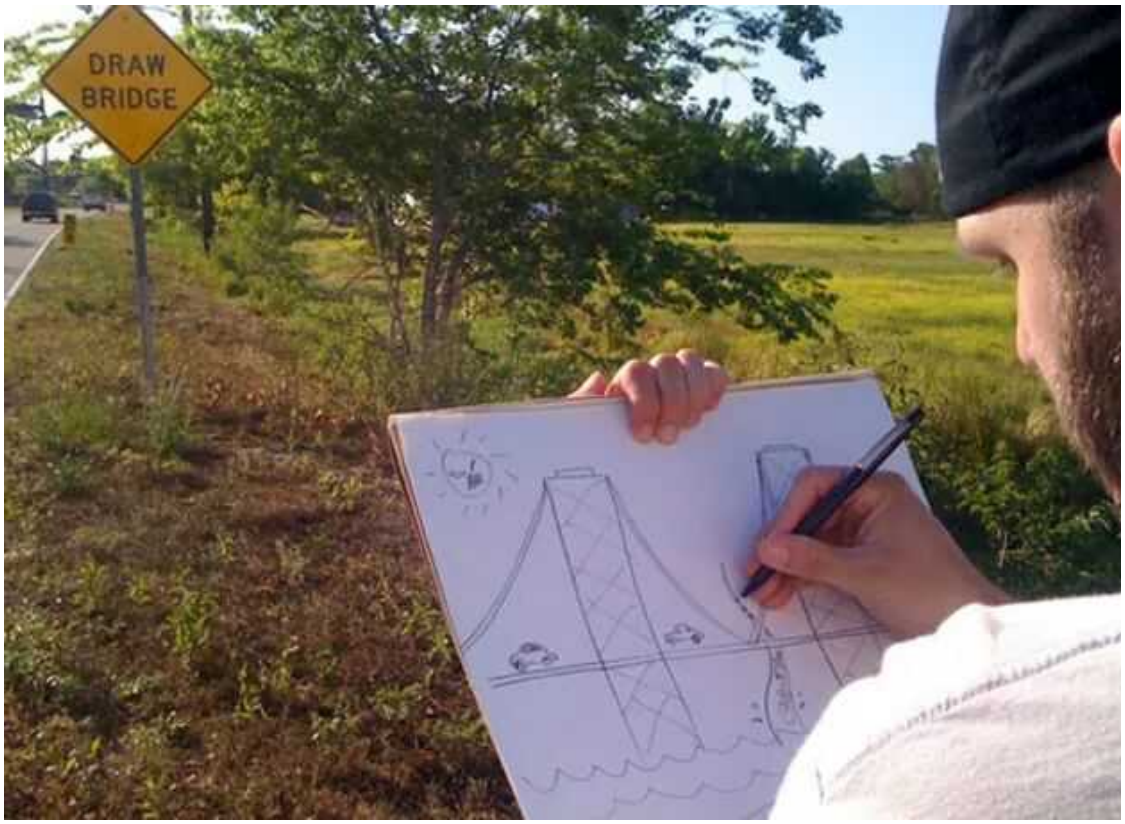
The ATRF conference is cross-disciplinary and includes papers from experts in economics, psychology, engineering, information technology, planning, geography, policy studies, etc. Papers are research based and/or demonstrate the use of innovative or novel approaches to transport issues, behaviour, policy, planning, technology and systems.

The proceedings of past ATRF conferences provide one of the leading repositories of transport research from Australian and New Zealand (see www.atrf.info/papers).

For further information, including details on how to register, refer to http://www.atrf2016.com.au/.

We look forward to seeing you in 2016 in Melbourne!

Professor William Young
Chair, Local Organising Committee
bill.young@monash.edu



2 Walk and Cycle – where did that conference come from?

Many of us will gather at the 2 Walk and Cycle conference in Auckland next month. Readers may be interested in where it came from.

There have been cycling conferences longer than walking or combined walking and cycling conferences. This reflects a truism, which some may see as a problem. Cycling has a more iconic image than walking which, by contrast, is, well, rather too 'pedestrian'.

The first NZ cycling conference was down to the vision of one man – Hamilton engineer Paul Ryan (who was also involved in cycle advocacy). For about a year and a half, Paul pressed on as many professionals and local government people as would hear him, his idea for New Zealand to host what he called a cycling symposium. Paul had visited (and presented at) the 1996 Fremantle VeloAustralis conference, part of the (mainly European) international VeloCity series, and no doubt this fuelled his enthusiasm.

After assembling some support partners, convening a conference committee representing them, and nutting out ideas, the first conference, Planning for and Promoting Cycling in Urban Areas, was held at Waikato University in 1997. More presentations were accommodated than originally expected, but government agencies weren't involved, other than Michael Cummins of Land Transport Safety Authority presenting on government cyclist safety education and other initiatives.

It was agreed that another conference in perhaps about two years' time would be a good idea – although how, where and who to achieve this was left open. The single day format made organising relatively simple – no accommodation and just some finger buffets to worry about.

Two years later, as I was considering applying for the IPENZ Transportation Group Study Award to do my NZ Cycling Strategy Foundation Project, Liz Yeaman of the Energy Efficiency and Conservation Authority (EECA) said she would organise a cycling conference if my application was successful (and sent a letter of support accordingly).

Liz at EECA at the time was pioneering travel planning, travel demand management, and other innovations in the non-motorised transport area, since as yet this had not come under the ambit of the Ministry of Transport or any of the transport agencies (other than LTSA on road safety). At this news, several other players offered to help out on an organising committee.

Christine Cheyne of Massey University offered a venue (Massey's Palmerston North campus), and the NZ Cycling Advocates' Network (CAN; now Cycle Action Network), formed in 1996, were also significantly involved, together with several local authorities. This was two days, in 2000 – significant expansion on Paul Ryan's symposium – and it was run on a shoestring. Accommodation was in student halls, the conference dinner was in the Students Union cafeteria, and it was deliberately held over a Friday and Saturday because many people, most notably cycling advocates, would be attending in their free time which might rule out weekdays.

The keynote presentation also practiced what EECA preached on energy usage. A conference call presentation by John Grimshaw (of Sustrans) and Mayer Hillman (of London's Policy Studies Institute) was given live from York, England. Grimshaw and Hillman both,

on principle, turn down any speaking requests they receive which involves air travel (a great many), on sustainability grounds. This very eco-friendly way of securing international speakers hasn't been repeated at the walking and cycling conferences.

Even at this time, the idea had been mooted and accepted that these conferences should be every two years. There was no formal 'owner', or even 'conference series', each conference being ad hoc and stand-alone, with an organising committee convened

from volunteers. Generally, a local authority took the lead, and absorbed much of the cost.

The Cycling Advocates' Network have always been involved. Government agencies became involved after the 1999 National-to-Labour change of government, and especially after the 2002 Moving Forward policy announcement (which also introduced the first National Land Transport Fund walking and cycling funding).

Three leading figures of the (then) Cycling Advocates' Network, at the 'CAN Do' (and AGM) attached to the 2007 Napier Cycling Conference. From left to right: Liz Mikkelsen, Adrian Croucher, Robert Ibell.

Every two years? The ever-proactive Christchurch City Council felt this was too long to wait and, after a huddle of Christchurch people at the 2000 Palmerston North conference, announced they would host a cycling conference the following year – which happened. After that, the cycling conferences settled down into their two-yearly cycle (no pun intended).

Living Streets Aoearaoa, the walking advocacy organisation, was formed about this time and set up their own walking conferences.

The first one was a single day in Wellington on 2004, tacked onto a major transportation conference (IPENZ's Transportation Conference collaborating with the NZ Institute of Highways Technology and some others), with proactive councillor (now mayor) Celia Wade-Brown taking the lead.

After this, an arrangement was reached that walking conferences would alternate with the cycling conferences, so that one or other would take place every year.

Reena Kokotailo, first a walking advocate and then leading work on the Ministry of Transport's early 2000s Getting There – On Foot, By Cycle strategy, had strongly warned (first at the 2000 Massey conference) not to lump walking and cycling together in a combined strategy or conference, out of concern that their needs are very different from each other, and that walking would be swamped by the more iconic cycling (what she called the "joined at the hip" problem).

At the Ministry, it was a major step forward to have any strategy on non-motorised modes, and to have two separate strategies was perhaps a step too far at this time. Eventually, this argument was lost for the conferences too, and the three-day 2 Walk and Cycle conferences were born. The Friday-Saturday format, which had held since 2000, was replaced with Wednesday-Friday (still the case), perhaps reflecting the growth of attention from government people (who value their free weekend).

The demise of separate walking conferences probably had two causes. Firstly, it's a lot more work for people like official agencies who feel they need to be involved in planning for both modes. Secondly, and maybe more significant, bookings for the walking conferences fell markedly after the 2007 economic downturn (in these circumstances the training and conferences budget tends to be among the first to be cut).

Sometimes attempts have been made to carry branding onwards from one conference to another, but this didn't endure until the 2 Walk and Cycle branding of recent years. From EECA's 2000 conference onwards, the amount of work involved came to be felt, a significant burden if carried by volunteers or absorbed in an organisation's more general budget heads.

In 2000, Liz Yeaman kept an assistant, Sheralee Macdonald, fully occupied for a considerable length of time on conference organising. Eventually, these conferences followed the practice of many other conferences of employing a professional conference organiser – the irrepressible Glenda Harding, familiar to many Roundabout readers from the IPENZ Transportation conferences.

The walking and cycling conferences have become bigger over the years (next month's programme is positively brimming) and have already spawned at least one other.

After the 2000 conference, the Cycling Advocates' Network got together for an afternoon to plan their own strategies in a (nice pun) 'CAN Do'. For a while, the (annual) 'CAN Do's' were always one-day events (plus a bike ride or three!) attached to a cycling conference, in a year when there was one, and stand-alone over two days in a year without a conference, but they have expanded (including, for example, guest speakers). This year's CAN Do was held separately, put together by Hamilton's enthusiastic Claire Sherrington, and has effectively become a conference in its own right.

What of the future? Will 2 Walk and Cycle proceed as it has done? Will it get bigger still, or give rise to other spin-off conferences? Will others set up rival conferences?

I won't speculate, but one thing seems clear: these conferences have grown steadily in content, interest and experience since that first one in 1997. I think we can expect further growth, whatever form that may take.

Roger Boulter
(a member of all cycling conference, and some walking conference, organising committees 1997-2007)

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Footpath biking: should it be allowed?

Original article by Roger Boulter, published by Cycle Aware Wellington on May 15, 2016
https://cycwell.wordpress.com/

Should children and other vulnerable users be allowed to bike on the footpath?

A petition has been presented to Parliament calling for "children under 14 years of age (and accompanying adults), seniors over the age of 65, and vulnerable users (such as those with mental or physical disabilities)" to be able to legally cycle on roadside footpaths.

Lower Hutt mother Jo Clendon, who started this petition, seems responsible and well-intentioned, but I'm appalled and saddened that some CAN members support this.

The well-respected 'road user hierarchy' places pedestrians at a higher priority than cyclists. Pedestrian advocacy group Living Streets Aotearoa oppose this petition.

It gets more serious, though. One of the most important findings in the history of planning for cycling was the 1996 'Five Point Hierarchy of Measures', stating that the most important things which would help cyclists were to reduce the volume and then slow the speed of motor traffic.

This is what needs tackling – not taking an 'easy way out' and transferring the threat onto an even more vulnerable group, people on foot.

This proposal is not just about 'little kids' avoiding busy roads. The wording above includes a very wide range. 14-year-olds aren't 'little'. How many 'accompanying adults', and what relationship to the 'children' (it's not just caregivers)?

How does anyone know who falls into the (rather catch-all, I would suggest) "vulnerable users" category. And, at age 62, will I in three years' time become less of a threat than I am now? No – the very old will become more of a threat.

As for safety, many footpaths aren't wide enough for safe walking, let along cycling too. At intersections, crossing cyclists are towards the edge of a motorists' field of vision, at just the place where motorists will be concentrating on the road traffic, so will be more liable to be hit.

Cars reversing from driveways will be severely constrained from seeing footpath cyclists (sometimes they won't see them at all), who will generally be going faster than people walking, and so less able to stop.

People (notably children) accustomed to riding on the footpath will not acquire the skills necessary to safely interact with motor traffic, meaning they will be more prone to being hit by motor traffic when they do use the roads (as inevitably they will sometimes).

There is a long and sad history of attempts to improve cyclists' safety, and get more people cycling, through providing off-road paths. Off-road paths and 'separated' and 'protected' cycleways have a role, but they only work as part of a wider strategy, the main part of which must be reducing and slowing motor traffic.

Reducing and slowing traffic is why many North European countries, Portland USA, and other places, have succeeded so dramatically, but New Zealand has not followed their lead.

Places which have relied heavily on providing for cyclists off-road, like late 20th century Milton Keynes, UK, and Canberra, Australia, also invariably find strong growth of an aggressive driving culture (e.g. "get these ***** cyclists off my road and onto their paths").

If the petitioners get their way, it will result in more danger, not less. More worrying to me, however, and very saddening, is that some CAN members, long accustomed to seeing themselves as the underdogs on the road, are becoming the new bullies in the playground against a group – people on foot – even more vulnerable that they are.

Footpath-legal bicycle for bold grown-ups

Footpath biking: would someone please think of the children?!

Original article published by Dominion Post on May 8, 2016
http://www.stuff.co.nz/dominion-post/79740894/Parliament-hears-Lower-Hutt-mums-petition-for-cycling-on-footpaths-law-change

A Lower Hutt mum has petitioned Parliament for a law change that would allow children under 14 to cycle on footpaths.

Jo Clendon said all states in Australia allow under 12-year-olds to cycle on footpaths and there is lobbying to raise the age to 16. Tasmania, Queensland and ACT allow adults to bike on footpaths.

Her driving concern is safety. Clendon, who has researched the topic extensively, said studies showed children's peripheral vision and response times are "not that great" until they are 14-16.

Their brain pre-frontal cortex, which helps them weigh up risk, isn't fully developed until they are 20.

We are grappling with an obesity epidemic but too many parents won't let their kids bike to school because of fear they will be hit by a car.

Clendon said data showed 12-19 per cent of kids in New Zealand biked to school in the 1980s (it varied between age groups); between 2010 and 2014 the rate was just 2-3 per cent.

Hutt South MP Trevor Mallard, who tabled Clendon's petition in the House on Tuesday, was impressed by her arguments and research and agreed "we need to get this on the agenda".

The petition will be referred to the Transport and Industrial Relations Select Committee.

It will likely ask the NZ Transport Agency for a report and submissions would be called for if the Government wanted to take it further.

Mallard, and Lower Hutt Mayor Ray Wallace, believed the hot point for debate will be around age.

The MP said the time a child moved from intermediate school to college seemed about right for when they were able to cope with cycling on the road.

Wallace's initial reaction - particularly with elderly pedestrians in mind - was that 12 years old should be the cut-off.

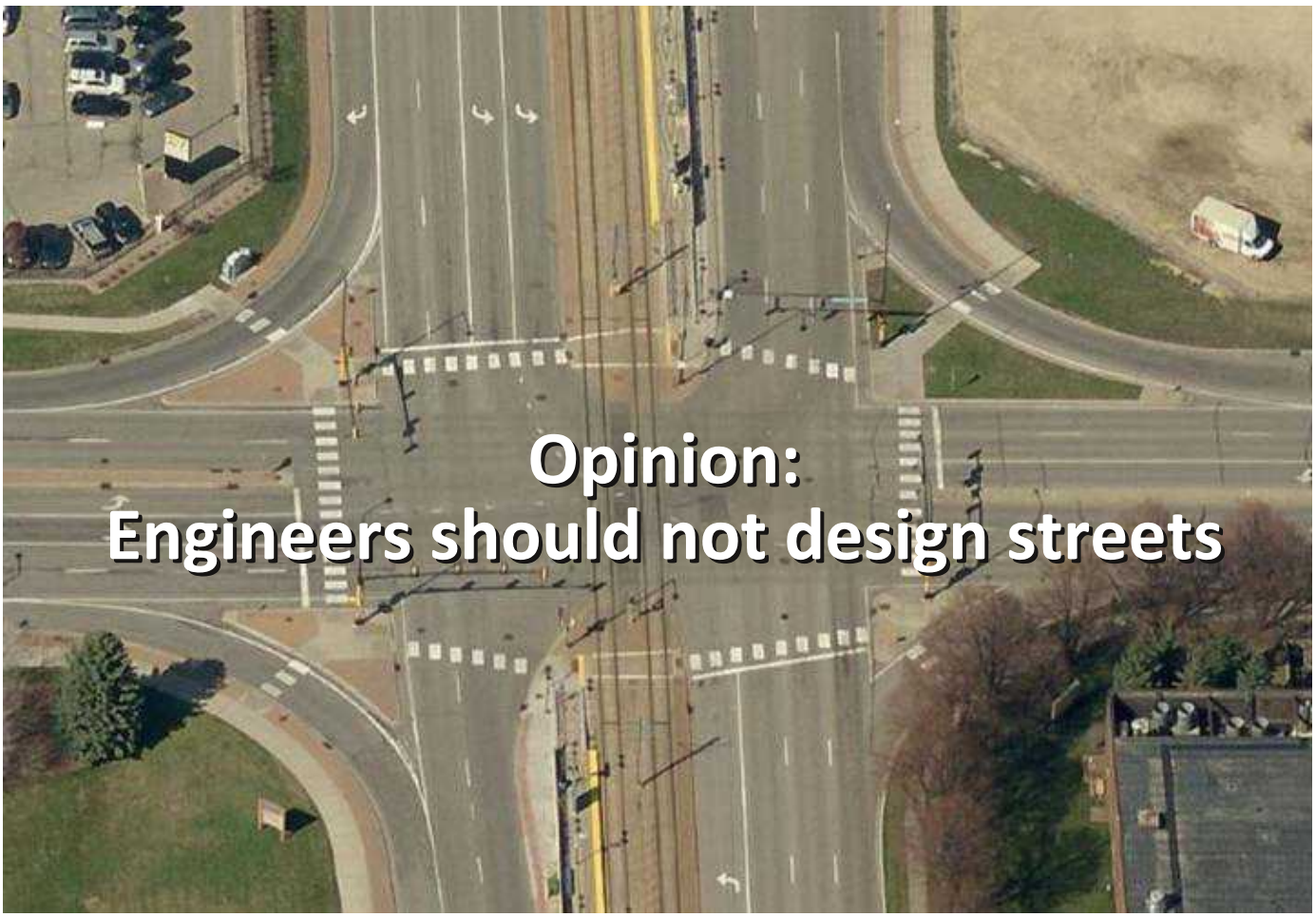
Jo Clendon answers common concerns about cyclists on footpaths

The danger of cars backing out of driveways.
There is a risk, but at least the vehicles are moving much more slowly than they do on the road. The current law provides "a distraction from driver responsibility". Drivers can claim a cyclist on the footpath was acting illegally. If children were allowed to cycle on footpaths, drivers would learn they would have to look out for them.
"At the moment with our footpaths, you could shoot a cannon along them. They're not well used."

A cyclist could hit an elderly pedestrian.
Clendon said one Australian study showed the risk of injury from a plane crash was more likely than injury from footpath cyclist vs pedestrian, and Australia allows kids to cycle on footpaths.
Her petition suggests bells on cycles be mandatory. She also notes that because it is currently illegal for child cyclists and supervising parents to be on footpaths, "parents can't teach them to share with care, and look out for driveways and the elderly".

This is 'helicopter parenting', and wrapping kids in cotton wool.
Clendon said fewer children are cycling because of the safety risk. We don't have the money to put cycle lanes everywhere. The law change would allow more children to learn cycling skills and risk assessment in safety, before they graduate to the road.

Criminals patrolling footpaths of the Hutt Valley.



Opinion: Engineers should not design streets

Last Friday I was participating in the 5th Annual Mayor's Bike Ride in Duluth following a week spent sharing the Strong Towns message on the Iron Range. The friendly woman riding next to me asked me what could be done to better educate engineers so they would start to build streets that were about more than simply about moving cars. My answer rejected the premise of the question: We should not be asking engineers to design streets.

A quick review here. Roads and streets are two separate things. The function of a road is to connect productive places. You can think of a road as a refinement of the railroad -- a road on rails -- where people board in one place, depart in another and there is a high speed connection between the two.

In contrast, the function of a street is to serve as a platform for building wealth. On a street, we're attempting to grow the complex ecosystem that produces community wealth. In these environments, people (outside of their automobile) are the indicator species of success. So, in short, with a street we're trying to create environments where humans, and human interaction, flourish.

Engineers are well-suited to constructing roads. Road environments are quite simple and, thus, lend themselves well to things like design manuals and uniform guidelines. There are only so many variables and the relationship they have to each other is fairly straightforward. In the United States, we have tested, refined and codified an engineering approach to roads that is pretty amazing and, in terms of engineering, the envy of the world.

There are two primary variables for designing a road: design speed and projected traffic volume. From those two numbers, we can derive the number of lanes, lane width, shoulder width, the width of clear zones and the allowable horizontal and vertical curvature.

From those factors, we can specify all the pavement markings and signage that are necessary. We can then monitor things like Level of Service, 85th percentile speed and traffic counts to optimize how the road functions over time. Engineers are really good at this.

Engineers are not good at building streets nor, I would argue, can the typical engineer readily become good at it. Streets that produce wealth for a community are complex environments. They do not lend themselves well to rote standards or even design guidelines. There are numerous variables at play that interact with each other, forming feedback loops and changing in ways that are impossible to predict.

Consider just one variable: the future of the adjacent land. The operative component of building wealth on a street is building. Who owns the property? What are they going to do with it? What is their capacity? Will they stick with it? Will they find the love of their life and move across the country?

Each property has a near infinite set of complexities to it that change and respond to change, each of which is far more important to the wealth capacity of the street than, for example, lane width.

If we're trying to create an ecosystem that results in our indicator species (people) showing up in greater and greater numbers, we can't just focus on one or two variables. It can't be just design speed and volume.

The natural ecosystem equivalent would be an observation that productive forests have trees and so we hire our forest engineers to go out and plant rows and rows of the optimum tree. It's obvious that, absent other flora and fauna, insects and bacteria, sunlight and rain and a myriad of other variables, the trees we are planting just aren't enough to get the ecosystem we're after.

If we're trying to create a natural ecosystem, we first have to recognize the environment we're in. A desert ecosystem will be far different than a northern forest. We then need to seed the basic elements, but we don't direct them day-to-day; we nurture them as they grow.

If we know what we're after -- if we know our indicator species of success -- if we see the experiment getting way off track, we can intervene in small ways to nudge it back on course. We can introduce small changes and see how the system responds. Over time, our natural ecosystem will show us how it wants to grow.

We do a disservice to our communities when we treat streets as if they were roads, when we ignore the complex environments streets are meant to create and treat them as if they were simple throughput models. Streets need to be designed block by block. Those designs need to be responsive and adaptable.

Understanding that 99%+ of all streets that will exist a decade from now already exist today, what we're really talking about here in North America isn't building new streets but making good use of existing streets. The way we do this -- the way we design block by block in ways that are responsive and adaptable -- is to try things and see what works.

Our tools are not traffic counters and code books but paint, cones and straw bales. Before we make any change permanent, we test it -- and possibly other variations -- first to see what works.
So if this isn't the job of an engineer -- and it's not -- who should design streets? The answer is as simple as it is radical: everyone. Building a productive street is a collective endeavor that involves the people who live on it, those who own property on it, those who traverse it as well as the myriad of professionals who have expertise they can lend to the discussion.

Put your least technical person on staff in charge of your next street. Empower them to meet with people, observe how people use the street and then experiment, in a low cost way, with different alternatives.

Keep experimenting until you start to see your indicator species show up (outside of their cars, of course). Now you have a design you can hand over to your engineer to specify the technical stuff -- pavement thickness, paint specs, etc... -- and get the project built.

Engineers are highly competent at building roads. When you are trying to move automobiles quickly from one place to another, put your engineering in charge and do what they recommend. When you are trying to build a street -- when you are trying to make your city wealthier and more prosperous -- make your engineer one small voice in a larger chorus of people whose words and, especially, whose actions dictate what your design should be.

Charles Marohn is a Professional Engineer (PE) licensed in the State of Minnesota and a member of the American Institute of Certified Planners (AICP). Chuck is the Founder and President of Strong Towns. He has a Bachelor's degree in Civil Engineering and a Masters in Urban and Regional Planning from the University of Minnesota.

Cycling fines have surged - but are we feeling safer?

The size of cycle fines is not the only thing to have surged in NSW in the past two months.

So too have the number of infringement notices issued as police crack down especially hard on cyclists who do not wear approved helmets.

The latest statistics show a 56 per cent rise to 1545 in the total number of fines issued in the two months after the Baird government ushered in stiffer penalties for cyclists on March 1, compared with the same period a year earlier.

Bicycle NSW chief executive Ray Rice said he was disappointed that only a few motorists had been fined for driving too close to cyclists.

"We agree that education is the best method but it has to be backed up by a reasonable level of compliance, which is fining people," he said.

"[The number of motorists fined] does seem very low in proportion to the number of cycling fines issued in the same period."

Mr Rice said he was not surprised at the increase in fines because feedback from cyclists had suggested that compliance monitoring had risen in the wake of the government's changes.

Roads Minister Duncan Gay said he had been given no choice but to impose tougher deterrents given the high number of cycling injuries in NSW.

"We don't want cyclists' money – that is not why we increased fines for high-risk and downright stupid behaviour. These changes are about improving safety," he said.

"I don't want to see another dollar in fine revenue but I do hope to see a reduction in cyclist injuries. It is simple: if you wear a helmet, you won't get fined."

However, Greens transport spokeswoman Mehreen Faruqi said the government needed to ask itself whether its punitive approach actually made people safer or would take cyclists off the roads.

"The government justified increasing the fines by up to 450 per cent as a deterrent against what they characterised as unsafe behaviour. But all that's happened is more infringement notices have been issued, as police have gone on blitzes to rake in more revenue," she said.

She said there had not been "any serious strategy" by the government for investing in bike infrastructure.

The stiffer penalties in NSW for cyclists are said to be among the toughest in the world for people who opt for pedal power.

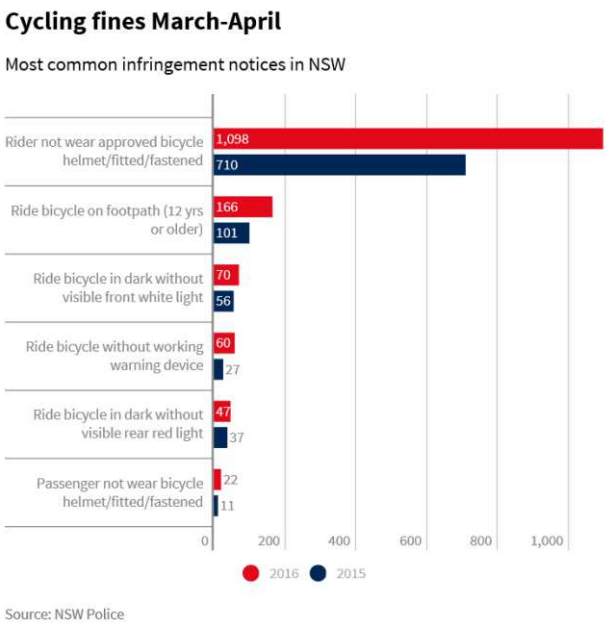
The latest figures also show three people were fined for riding their "bicycle furiously" in March and April, compared with four previously.

Traffic and Highway Patrol Commander John Hartley said police would continue to do whatever was needed to help keep the roads safe for everyone.

"Enforcement will always be necessary to educate road users in NSW. So far this year, one cyclist has died on our roads, compared to two this time last year," he said.

"While one death on the road is one too many, this gives some positive indication that riders and cyclists alike are taking personal responsibility for their road use."

Source: Sydney Morning Herald



Engineers work out how to use old coffee grounds to pave roadways (So that's why they call it a long black.)

When it comes to the topic of coffee and the environment, a few things might spring to the front of your mind. Such as: we're drinking so much of it it's literally running out; the packaging it comes in is evil and should be banned; or there's a gamut of issues involved in producing truly sustainable coffee.

But there's another pressing environmental consequence to people's love of coffee, and it's one that's not quite so obvious. Put simply, once coffee beans are ground up for brewing, what happens to the leftover grounds?

Well, most of the time they're thrown in the bin and ends up in landfill, or otherwise get washed down the sink and end up in the ocean. But what if there were another solution?

Well, engineers in Australia have come up with a unique way of repurposing spent coffee grounds, which in a city the size of Sydney are estimated to produce some 3,000 tonnes of waste annually. Their answer to the problem? Recycle old coffee into the roads we drive on.

Researcher Arul Arulrajah leads the geotechnical group in the Centre for Sustainable Infrastructure at Swinburne University of Technology. This involves looking at how recycled materials such as crushed brick, glass, and concrete can be repurposed for things like road construction. But have we been missing out on another bountiful byproduct this whole time?

"I see the baristas throwing away the used coffee grounds and I think, 'Why not look at this as an engineering material?'" says Arulrajah, who is an avid coffee drinker.

So he and Swinburne PhD candidate Teck-Ang Kua – along with fellow researchers from China and Thailand – set out to investigate whether old coffee grounds were equally amenable to paving the streets outside your house. And it turns out they are.

Collecting used grounds from cafés around Swinburne's Hawthorn campus, a little to the east of Melbourne, the team dried them in an oven for five days at 50°C, then sieved them to filter out any lumps. They then mixed the dried grounds together with slag, the waste product left over from steel manufacture.

The resulting mix – 70 percent coffee, 30 percent slag – was bound together with a liquid alkaline solution and compressed into cylindrical blocks, which in the researchers' testing turned out to be strong enough to serve as the subgrade material that sits under the surface of roads.

"On average the cafés we collect from dispose of about 150 kg of coffee grounds per week," says Arulrajah. "We estimate that the coffee grounds from Melbourne's cafés could be used to build 5 kilometres of road per year. This would reduce landfill and the demand for virgin quarry materials."

If the same approach were adopted worldwide – and admittedly, that's a big if, since it would mean overhauling an entire industry – millions of tonnes of spent coffee grounds annually could be put to good use in roadways, rather than simply being buried in landfill.

"There would be enormous carbon savings, you are ticking all the boxes in terms of sustainability," Arulrajah told Olivia Gibson at Broadsheet. "Essentially, if a road constructor comes along, we have created the recipe for them to use coffee grounds in the road."

Source: ScienceAlert

Walking while texting could mean jail time

Jared Schumacher is one of hundreds of thousands of New Jerseyans who routinely use electronic devices to text, listen to music or do other tasks as they walk outdoors.

If a recently proposed “distracted walking” measure becomes law, the Trenton man and others like him could face fines or even jail time.

“I admit that I’m usually listening to music, talking on my phone or texting while I’m walking around,” Schumacher, 20, said while responding to a text as he walked along a street in the state capital last weekend.

“I’ve never hurt myself, but I’ve seen people walk into poles or trip over a big crack in the sidewalk.”

Experts say distracted walking is a growing problem, as people of all ages become more dependent on electronic devices for personal and professional matters. They also note pedestrian deaths have been rising in recent years. In 2005, 11% of all US fatalities involved pedestrians, but that number rose to 15% in 2014.

The rise in deaths coincides with states introducing bills that target pedestrians and/or bicyclists. For instance, a bill pending in Hawaii would fine someone US$250 if he or she were to cross the street while operating an electronic device. Similar bills have failed in states including Arkansas, Illinois, Nevada and New York.

“Thus far, no states have enacted a law specifically targeting distracted bicyclists or pedestrians,” said Douglas Shinkle, transportation program director for the National Conference of State Legislatures. But he added that “a few states continue to introduce legislation every year”.

The measure recently introduced would ban walking while texting and bar pedestrians on public roads from using electronic communication devices unless they are hands-free.

Violators would face fines of up to US$50, 15 days imprisonment or both, which is the same penalty as jaywalking.

Half of the fine would be allocated to safety education about the dangers of walking and texting, said Lampitt.

Some see the proposal as an unnecessary government overreach, while others say they understand the reasoning. But most agree that people need to be made aware of the issue.

“Distracted pedestrians, like distracted drivers, present a potential danger to themselves and drivers on the road. An individual crossing the road distracted by their smartphone presents just as much danger to motorists

It's No Accident: Advocates Want to Speak of Car 'Crashes' Instead

Roadway fatalities in the US are soaring at a rate not seen in 50 years, resulting from crashes, collisions and other incidents caused by drivers.

Just don't call them accidents anymore.

That is the position of a growing number of safety advocates, including grass-roots groups, federal officials and state and local leaders across the country. They are campaigning to change a 100-year-old mentality that they say trivializes the single most common cause of traffic incidents: human error.

"When you use the word 'accident,' it's like, 'God made it happen,' " Mark Rosekind, the head of the National Highway Traffic Safety Administration, said at a driver safety conference this month at the Harvard School of Public Health.

"In our society," he added, "language can be everything."

Almost all crashes stem from driver behavior like drinking, distracted driving and other risky activity. About 6 percent are caused by vehicle malfunctions, weather and other factors.

Preliminary estimates by the nonprofit National Safety Council show deadly crashes rose by nearly 8 percent in 2015 over the previous year, killing about 38,000 people.

Dr. Rosekind has added his voice to a growing chorus of advocates who say that the persistence of crashes — driving is the most dangerous activity for most people — can be explained in part by widespread apathy toward the issue.

Changing semantics is meant to shake people, particularly policy makers, out of the implicit nobody's-fault attitude that the word "accident" conveys, they said.

On Jan. 1, the state of Nevada enacted a law, passed almost unanimously in the Legislature, to change "accident" to "crash" in dozens of instances where the word is mentioned in state laws, like those covering police and insurance reports.

New York City adopted a policy in 2014 to reduce fatalities that states the city "must no longer regard traffic crashes as mere 'accidents,' " and other cities, including San Francisco, have taken the same step.

At least 28 state departments of transportation have moved away from the term "accident" when referring to roadway incidents, according to Jeff Larason, director of highway safety for Massachusetts. The traffic safety administration changed its own policy in 1997, but has recently become more vocal about the issue.

Mr. Larason, a former television traffic reporter, started a blog called "Drop The A Word" and has led a campaign to get major media outlets to stop using the term. Last year, he enlisted supporters to join with grass-roots groups in urging The Associated Press to clarify how reporters should use the word "accident."

In April, The A.P. announced a new policy. When negligence is claimed or proven in a crash, the new entry reads, reporters should "avoid accident, which can be read by some as a term exonerating the person responsible."

But use of "accident" has its defenders, as Mr. Larason discovered in 2014 when he posted his thoughts on the word in a Facebook group popular among traffic reporters.

"Why can't human error be an accident even if the error is preventable," one person wrote. "What is being solved by having this debate? What injustice are we correcting?"

And when Mr. Larason suggested to officials at the Virginia Department of Transportation that they stop using "accident," he received a note saying that drivers are familiar and comfortable with the word. Virginia officials also wrote that drivers might not consider a minor incident to be a "crash," and so the change could be confusing.

Mr. Larason counters that accident is simply the wrong word. "I'm betting it's one of the most commonly used words that is used inappropriately," he said.

On Facebook, he posted a Merriam-Webster definition that describes accident as "an unexpected happening" that "is not due to any fault or misconduct on the part of the person injured."
Source: NYTimes

SNUG
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ITS World Congress 2016
SNUG Sponsorship Award

After a several weeks of deliberating by the 3 member judging panel, the successful applicants selected to receive SNUG sponsorship of their registration fees to ITS World Congress have been chosen.

The SNUG Chair and wider Committee are pleased and proud to announce the recipients of this great opportunity are:

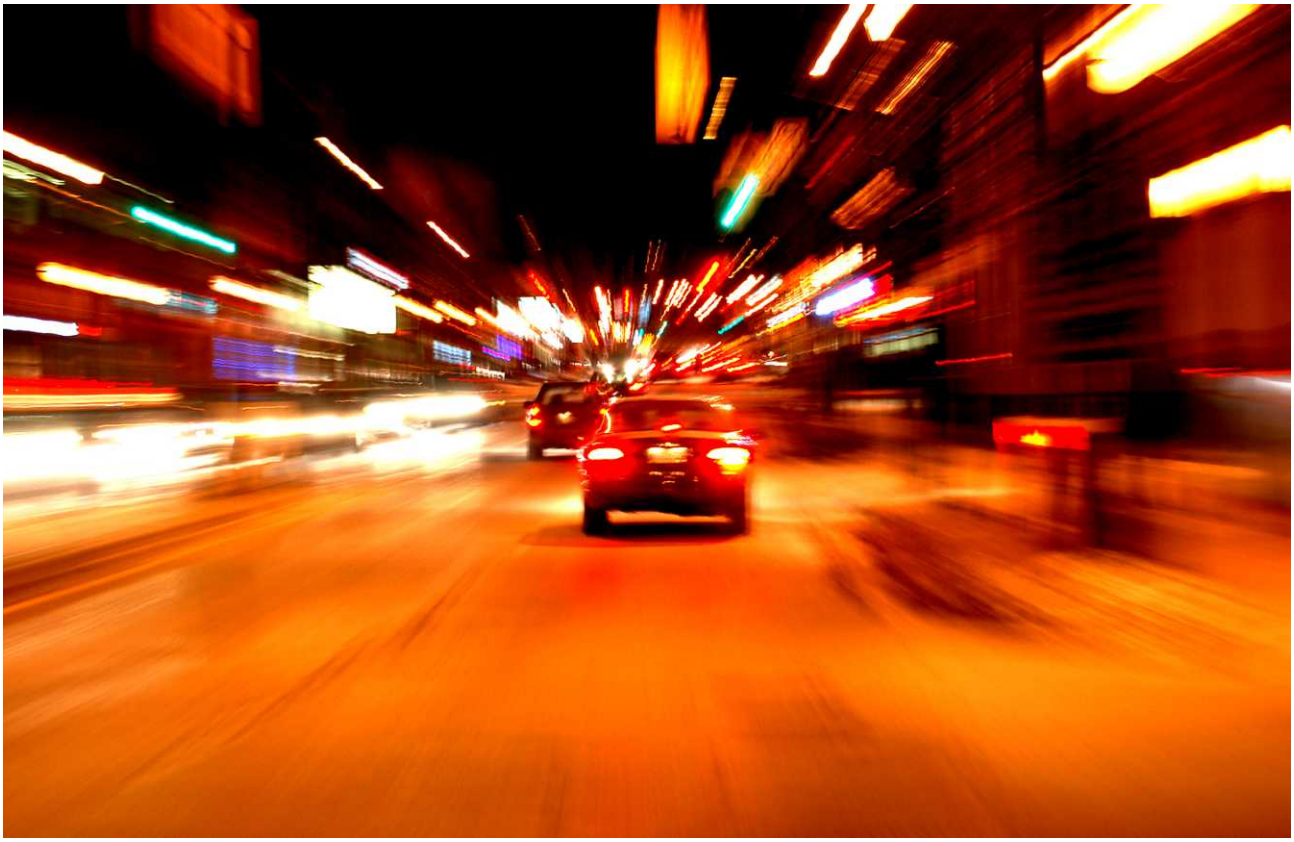
Dan Marsh – Senior Traffic Engineer with Aurecon
Kipi Wallbridge-Paea – ITS Engineer with Auckland Transport
Tresca Forrester – Traveller Information Team Leader with Christchurch Transport Operations Centre (CTOC)

Please join the Committee in congratulating these representatives of our group. We all wish them well and look forward to hearing about the exciting and innovative technologies and ideas from the Congress at SNUG in 2017.

The Committee would like to also acknowledge the support of our fantastic sponsors each year at our annual event, which help to make things like this possible for our members.

Keep an eye on the group's page on LinkedIn and the website for future opportunities around sponsorship, training, the 2017 SNUG conference and much more.

On behalf of Sean Lewis and the SNUG Committee.



Nature always finds a way

Nature reclaiming parts of Japan abandoned after the Fukushima disaster

Grafton Bridge taxis in bus lane trial ends

Auckland Transport began a trial in September 2015 allowing taxis 24 hour access to Grafton Bridge to improve links between the city centre and Auckland City Hospital, Starship Children's Hospital and Newmarket.

Several potential risks were identified with the trial including a reduction in cyclist safety and an increase in bus travel times. As a result strict rules were set for taxi drivers along with some monitoring metrics.

Despite a focus on educating approved taxi organisations and their drivers, the monitoring highlighted a widespread failure to adhere to the 30km/h speed limit on the bridge and the requirement for taxis not to overtake cyclists on the bridge.

These issues were identified as significant concerns at the outset of the trial and a commitment was made to stop the trial if taxi drivers failed to adhere to these conditions.

Auckland Transport has decided to stop the trial and return Grafton Bridge to a bus lane only between the hours of 7am and 7pm. This change was made at the end of April.

GPS Enabled Shoes Help Keep Track Of The Elderly

Japanese company Yamanashi System Inn Nakagomi recently launched a GPS-enabled shoe to help families track the whereabouts of their elderly loved ones.

The shoes look like any other shoe that a senior might wear, but come equipped with a tiny GPS device hidden in the heel of each shoe.

The device will send family members and caretakers a message when the shoe-sporting senior wanders outside of a pre-set geo-fence perimeter.

The designers hope that the device will lend family members peace of mind; studies show that some 60% of patients with Alzheimer's will become confused, wander off, and become lost.

Drunk driving decreases thanks to ridesharing

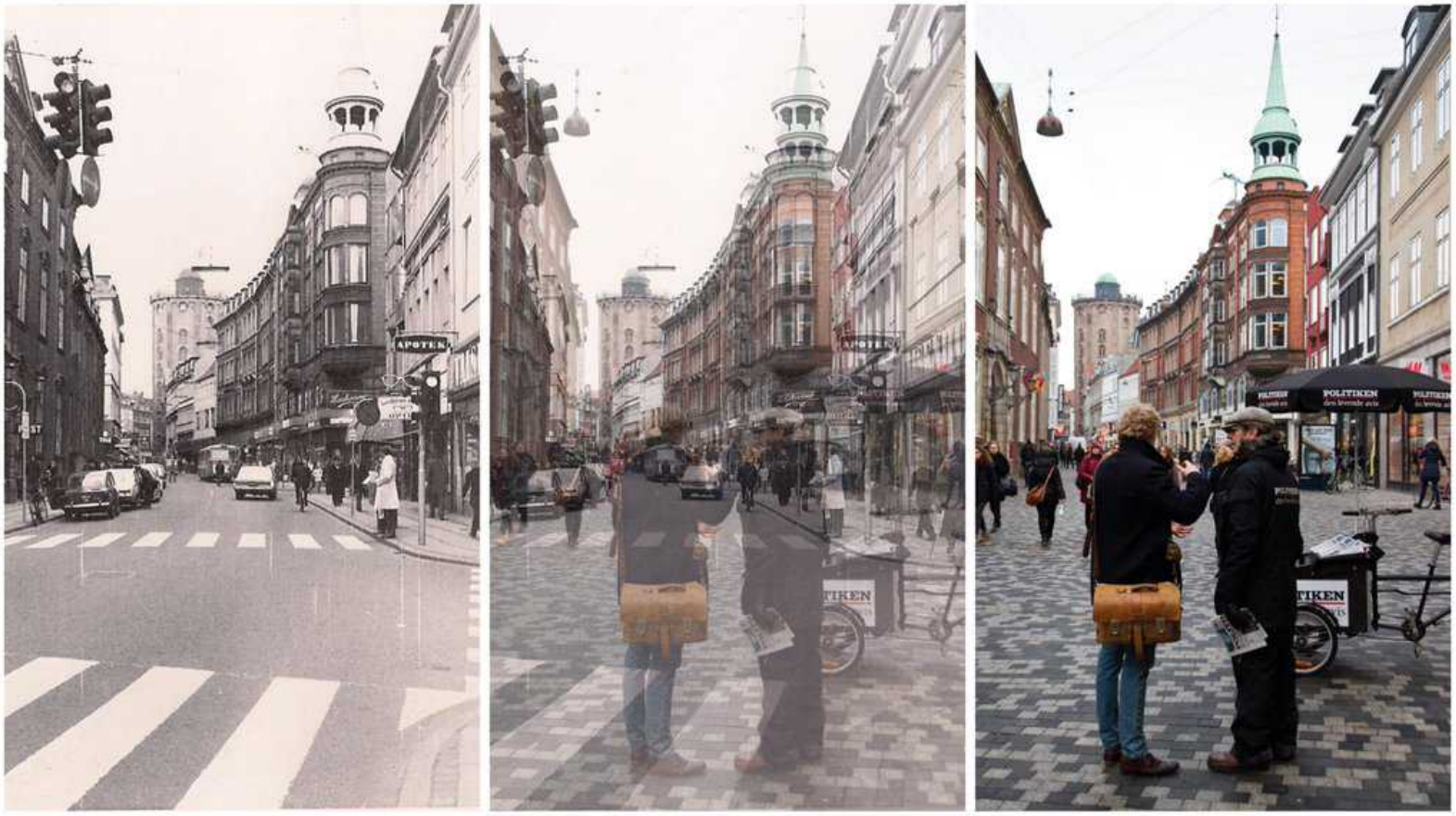
The City of Austin, US, is reconsidering the "onerous regulations" the city council is hoping to adopt to restrict ridesharing companies, such as Uber and Lyft, as these companies helped to decrease the drunk driving epidemic in Austin.

According to local law enforcement, drink driving arrests in Austin increased from 2011 to 2013. In 2013, Uber and Lyft began their operations in Austin, decreasing such arrests over the next two years.

"The number of arrests fell 16% in 2014," says the local sherrif's department. "Drink driving-related crashes fell even more citywide, decreasing by 23% last year."

The department added that while the "causal relationship" between ridesharing and drunk driving requires more study, Uber and Lyft have made safe rides home readily available to residents, thereby making Austin safer.

"Drunk driving in Austin is an epidemic. It is our strong opinion that we such companies remain operational in Austin, as they provide a critical service that is keeping Austin much safer that we were without them," they said.



Planning some cycling facilities and hear from opponents "Our city isn't Copenhagen"? In the 1970's, neither was Copenhagen.

More child road deaths in summer months than winter, says UK report

More children die on UK roads in the longer summer days than in winter, according to research from the RAC Foundation.

The biggest number of child road casualties in Britain were recorded in July, according to research based on a five-year average from 2010-14.

There were 227 under-15s who were killed or seriously injured during this period, from a total of 1,733 casualties in that age bracket.

The lowest monthly averages were recorded in December, when there were 122 children who were killed or hurt out of 1,103 casualties.

The figures show that 2,250 under-15s were killed or seriously injured between 2010-14, when there were 17,755 casualties.

The better weather and longer days mean that more children are playing outside with their friends or perhaps cycling and walking to school, which could potentially mean a greater exposure to risk, according to the RAC Foundation.

It found that 40% of all child road casualties are pedestrians and that 13% are cyclists.

The peak hour for child road casualties was between 3pm and 4pm, but many children were also hurt in the following couple of hours. There is also a spike in the morning between 8am and 9am, coinciding with school rush hours.

Blackpool, Hyndburn, Blackburn with Darwen, Burnley, north-east Lincolnshire, East Lindsey, Boston, Ceredigion, Preston and Liverpool were among the regions with highest child casualties, according to the research.

Steve Gooding, director of the RAC Foundation, said: “Instinctively we think of the dark, cold months as taking the biggest toll on our children. But the opposite is true.

“With the longer, warmer days, children are more likely to be out and about and with that comes a rise in casualties.

“We don’t want to wrap our children in cotton wool, and walking and cycling are generally good for our health, so as adults and parents we need to lead by example whether we are driving a car, crossing the road or on two wheels.

“The more we act responsibly, the faster young children will learn and the more likely they will be to stay safe when they have to make decisions for themselves.”

Pete Williams, a trustee of the RAC’s Road Safety Awareness Charity, said: “It is the responsibility of all drivers to be mindful of the risks of young road users and children playing around and near roads and to reduce their speed and increase their vigilance.

“But more needs to be done to address road safety education in schools and across the board to ensure our young people are alert to the potential dangers.”

Will elderly and disabled gain most from autonomous cars?

The future of autonomous vehicles might give millions of elderly and disabled citizens a chance at driving, but new draft regulations released in December by the state of California point to a long battle for fully driverless cars on the road.

Google's director of the self-driving project, Chris Urmson, said he was disappointed in the draft regulations, which state that the driver must be able to control the car at all times. This is similar to the current laws on autonomous vehicles, which Tesla have already implemented.

Google will still be able to test its vehicles on driverless mode, but a driver is still required to sit in the vehicle. That is a low blow for the company, which might have been hoping for a bit of leeway this year as it prepares to commercialize its self-driving project.

Several organized groups called for a relaxation in the laws and a way for disabled people to control autonomous cars. "If there's an autonomous car, there needs to be a means by which a blind person can operate that car as well," said Parnell Diggs, board member of the National Federation of the Blind to Medill.

"It would behoove the auto industry to certainly keep the elderly and the disabled in mind, as a growing proportion of the American population are aging baby boomers," said Kenneth Jon, researcher at the Texas A&M Transportation Institute.

Autonomous cars remove a lot of the issues some elderly people have in cars, like short sight and slow reactions. All of these improvements are for nought however, if regulations maintain that a driver needs to be inside the car and able to take command at all times.

Full autonomy might not come until 2020, according to Baidu, the Chinese company that is currently working on self-driving cars in Silicon Valley. Others, like Tesla, General Motors, and the PSA Group have similar predictions on when the market will be ready for driverless cars.

Until then, it looks like we're stuck with highway self-driving and self-parking features coming to more cars.

Source: Readwrite

Google patents 'sticky' layer to protect pedestrians in self-driving car accidents

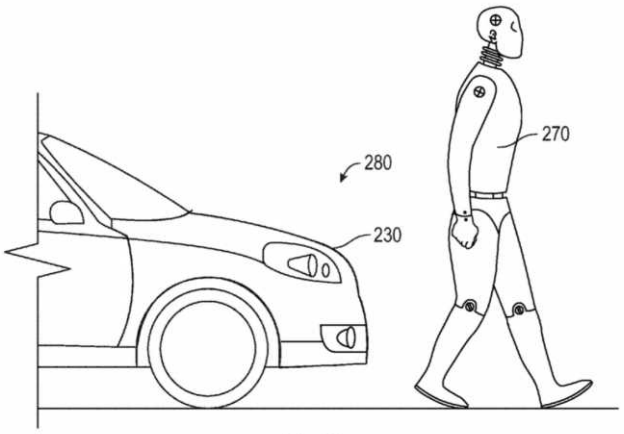


FIG. 6A

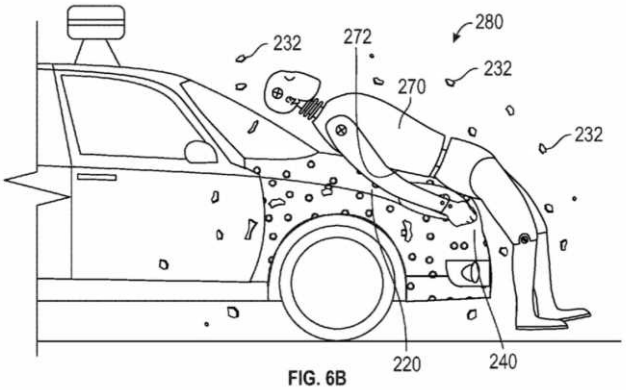


FIG. 6B

Google has patented a new "sticky" technology to protect pedestrians if – or when – they get struck by the company's self-driving cars.

The patent, which was granted on 17 May, is for a sticky adhesive layer on the front end of a vehicle, which would aim to reduce the damage caused when a pedestrian hit by a car is flung into other vehicles or scenery.

"Ideally, the adhesive coating on the front portion of the vehicle may be activated on contact and will be able to adhere to the pedestrian nearly instantaneously," according to the patent description.

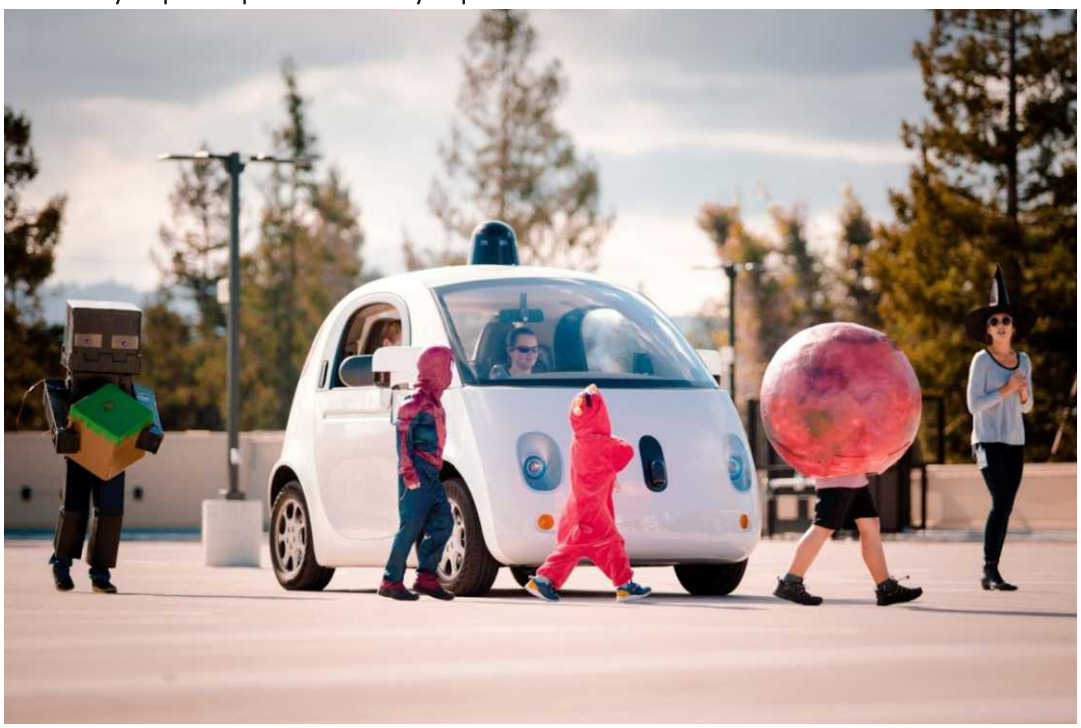
"This instantaneous or nearly-instantaneous action may help to constrain the movement of the pedestrian, who may be carried on the front end of the vehicle until the driver of the vehicle (or the vehicle itself in the case of an autonomous vehicle) reacts to the incident and applies the brakes."

"As such," it continues, "both the vehicle and pedestrian may come to a more gradual stop than if the pedestrian bounces off the vehicle."

The patent describes itself as specifically aimed at self-driving cars but notes that it can be used on any vehicle.

Car companies have already taken steps to protect pedestrians from impact. Citroen and Jaguar use a device that raises the car's bonnet 6.5cm on impact to provide a cushion for impact between the crumpling surface and the solid engine block beneath. Others, such as Land Rover and Volvo, have developed outside airbags that deploy on impact to protect a pedestrian from injury.

However, the patent observes, "existing technology found in production vehicles does little to mitigate the secondary impact a pedestrian may experience".



It is not known whether Google has active plans to install the new technology on their self-driving cars in the future. The company did not respond immediately to a request from the Guardian for comment, but a spokesperson told the San Jose Mercury News, who first reported the story, that "we hold patents on a variety of ideas. Some of those ideas later mature into real products and services, some don't."
Source: Guardian

ITE launches podcasts

ITE is pleased to announce we have launched our podcast "ITE Talks Transportation".

This new element of our Learning Hub professional development program is designed to help keep you in the know about the latest developments in transportation. Our first podcast series is titled 'Conversations with Thought Leaders in Transportation'.

The goal of this series is to bring you insights and perspectives from individuals who are involved in the leading edge of transportation and have something interesting to say about it. We expect you will agree with some of the perspectives and disagree with others. Our goal is to get you thinking and keep you abreast of the latest developments.

This series is being delivered in collaboration with Bernie Wagenblast, founder and editor of the Transportation Communication Newsletter (TCN) and host of Transportation Radio. In keeping with #transportationtuesday, a new episode will be available the fourth Tuesday of every month.

ITE's inaugural podcast episode features long-time ITE member and visionary, Samuel I. Schwartz, P.E., president and CEO of Sam Schwartz Transportation Consultants and author of Street Smart: The Rise of Cities and the Fall of Cars. Listen to Sam's perspectives as a senior leader and entrepreneur in both the public and private sector.

Sam touches on a number of interesting issues including the changing behavior of millennials, trends in VMT, implications of autonomous vehicles, smart cities, and the internet of things. The podcast is available on The Learning Hub at www.ite.org/learninghub/podcast.asp and you can download it at iTunes at https://itun.es/i6Yn6yG

Next up in the series will be Susan Shaheen, Ph.D., adjunct professor of civil and environmental engineering, co-director of the Transportation Sustainability Research Center (TSRC), and director of Innovative Mobility Research. Susan will provide her thoughts on the future of shared mobility services and how the business models in this segment of transportation delivery will continue to evolve.

We look forward to your feedback on the series and your comments on Sam's perspectives.

Staff at Stonehenge moving the giant prehistoric stones to take account of the end of daylight savings.

2016 CONFERENCE
Auckland, 6-8 July 2016

NZ TRANSPORT AGENCY WAKA KOTAHI

2 WALK and CYCLE
moving toward healthy communities

2 Walk and Cycle Conference - register now!

If you haven't already registered for the 2WALKandCYCLE Conference 2016 in Auckland from 5-8 July there's still time.

It's shaping up to be the biggest 2WALKandCYCLE conference yet and this year's theme is "Moving towards healthy communities". The focus on active, human-powered transport to achieve healthier, smarter and more liveable cities. This can be achieved through balancing our extensive car travel network with better provision for walking and cycling. Check out the programme here: http://www.2walkandcycle.org.nz/conference-programme

In recent years, New Zealand has seen a resurgence in walking and cycling and associated infrastructure and investment. This provides significant opportunities for the growing active transport industry. As well as the activity in the model communities we see shared spaces in the CBD's, waterfront promenades and better public spaces.

Sessions will explore how we can use this infrastructure smarter and look at the local examples. These have been delivered by Auckland Council and Auckland Transport in the Westhaven area, while preserving industries intrinsic to Auckland's character such as the fishing and boat-building industries.

In parallel, Auckland Transport and the NZ Transport Agency have invested in new on-road and off-road cycling infrastructure and have repurposed an old motorway off-ramp for the Nelson Street pathway. These innovations are significantly improving the connectivity of active transport in Auckland, accompanied by planned links to the north via the Harbour Bridge SkyPath and to the east along the rail network.

International and national researchers, practitioners, and health professionals will speak about the methods, policies and programmes that have been used to promote walking and cycling both here and overseas that can inform our journey towards better transport systems in the future.

The conference will be attended by engineers, town planners, architects, academics, politicians, advocates and others from a broad range of organisations such as local and central government, consultancies, health boards, universities, and advocacy groups.

You can register here:
https://www.secureregistrations.com/2WALKandCYCLE%202016/index2.cfm?CFID=19057376&CFTOKEN=86873028

2016 CONFERENCE
Auckland, 6-8 July 2016

NZ TRANSPORT AGENCY WAKA KOTAHI

2 WALK and CYCLE
moving toward healthy communities

Humans Are Slamming Into Driverless Cars and Exposing a Key Flaw

The self-driving car, that cutting-edge creation that's supposed to lead to a world without accidents, is achieving the exact opposite right now: The vehicles have racked up a crash rate double that of those with human drivers.

The glitch?

They obey the law all the time, as in, without exception. This may sound like the right way to program a robot to drive a car, but good luck trying to merge onto a chaotic, jam-packed highway with traffic flying along well above the speed limit. It tends not to work out well.

As the accidents have piled up -- all minor scrape-ups for now -- the arguments among programmers at places like Google Inc. and Carnegie Mellon University are heating up: Should they teach the cars how to commit infractions from time to time to stay out of trouble?

"It's a constant debate inside our group," said Raj Rajkumar, co-director of the General Motors-Carnegie Mellon Autonomous Driving Collaborative Research Lab in Pittsburgh. "And we have basically decided to stick to the speed limit. But when you go out and drive the speed limit on the highway, pretty much everybody on the road is just zipping past you. And I would be one of those people."

Last year, Rajkumar offered test drives to members of Congress in his lab's self-driving Cadillac SRX sport utility vehicle. The Caddy performed perfectly, except when it had to merge onto I-395 South and swing across three lanes of traffic in 150 yards (137 meters) to head toward the Pentagon.

The car's cameras and laser sensors detected traffic in a 360-degree view but didn't know how to trust that drivers would make room in the ceaseless flow, so the human minder had to take control to complete the maneuver.

"We end up being cautious," Rajkumar said. "We don't want to get into an accident because that would be front-page news. People expect more of autonomous cars."

Not at Fault

Turns out, though, their accident rates are twice as high as for regular cars, according to a study by the University of Michigan's Transportation Research Institute in Ann Arbor, Michigan. Driverless vehicles have never been at fault, the study found: They're usually hit from behind in slow-speed crashes by inattentive or aggressive humans unaccustomed to machine motorists that always follow the rules and proceed with caution.

"It's a dilemma that needs to be addressed," Rajkumar said.

It's similar to the thorny ethical issues driverless car creators are wrestling with over how to program them to make life-or-death decisions in an accident. For example, should an autonomous vehicle sacrifice its occupant by swerving off a cliff to avoid killing a school bus full of children?

California is urging caution in the deployment of driverless cars. It published proposed rules this week that would require a human always to be ready to take the wheel and also compel companies creating the cars to file monthly reports on their behavior.

Google -- which developed a model with no steering wheel or gas pedal -- said it is "gravely disappointed" in the proposed rules, which could set the standard for autonomous-car regulations nationwide.

Fast Track

Google is on a fast track. It plans to make its self-driving-cars unit a stand-alone business next year and eventually offer a ride-for-hire service, according to a person briefed on the company's strategy.

Google cars have been in 17 minor crashes in 2 million miles (3.2 million kilometers) of testing and account for

most of the reported accidents, according to the Michigan study. That's partly because the company is testing mainly in California, where accidents involving driverless cars must be reported.

The most recent reported incident was Nov. 2 in Mountain View, California, Google's headquarters, when a self-driving Google Lexus SUV attempted to turn right on a red light. It came to a full stop, activated its turn signal and began creeping slowly into the intersection to get a better look, according to a report the company posted online. Another car stopped behind it and also began rolling forward, rear-ending the SUV at 4 mph. There were no injuries and only minor damage to both vehicles.

Robot-Car Stop

Ten days later, a Mountain View motorcycle cop noticed traffic stacking up behind a Google car going 24 miles an hour in a busy 35 mph zone. He zoomed over and became the first officer to stop a robot car. He didn't issue a ticket -- who would he give it to? -- but he warned the two engineers on board about creating a hazard.

"The right thing would have been for this car to pull over, let the traffic go and then pull back on the roadway," said Sergeant Saul Jaeger, head of the police department's traffic-enforcement unit. "I like it when people err on the side of caution. But can something be too cautious? Yeah."

While Google rejects the notion that its careful cars cause crashes, "we err on the conservative side," said Dmitri Dolgov, principal engineer of the program. "They're a little bit like a cautious student driver or a grandma."

More Aggressive

Google is working to make the vehicles more "aggressive" like humans -- law-abiding, safe humans -- so they "can naturally fit into the traffic flow, and other people understand what we're doing and why we're doing it," Dolgov said. "Driving is a social game."

Google has already programmed its cars to behave in more familiar ways, such as inching forward at a four-way stop to signal they're going next. But autonomous models still surprise human drivers with their quick reflexes, coming to an abrupt halt, for example, when they sense a pedestrian near the edge of a sidewalk who might step into traffic.

"These vehicles are either stopping in a situation or slowing down when a human driver might not," said Brandon Schoettle, co-author of the Michigan study. "They're a little faster to react, taking drivers behind them off guard."

That could account for the prevalence of slow-speed, rear-end crashes, he added.

Behave Differently

"They do behave differently," said Egil Juliussen, senior director at consultant IHS Technology and author of a study on how Google leads development of autonomous technology. "It's a problem that I'm sure Google is working on, but how to solve it is not clear."

One approach is to teach the vehicles when it's OK to break the rules, such as crossing a double yellow line to avoid a bicyclist or road workers.

"It's a sticky area," Schoettle said. "If you program them to not follow the law, how much do you let them break the law?"

Initially, crashes may rise as more robot autos share the road, but injuries should diminish because most accidents will be minor, Schoettle said.

"There's a learning curve for everybody," said Jaeger, of the Mountain View Police, which interacts more with driverless cars than any other law-enforcement unit. "Computers are learning, the programmers are learning and the people are learning to get used to these things."
Source: Bloomberg

World's longest rail tunnel opens in Switzerland under Alps

Measuring 57km in length, situated 2.3km deep under the Alps and having cost €11bn (NZ$18bn) to complete, Switzerland's Gotthard base tunnel is more than just the world's longest and most expensive tunnelling project.

At a time of rising nationalism and closing borders, European leaders will also hope it can serve as a reminder that the continent can still smash barriers when it manages to pull together.

It is no coincidence that the German chancellor Angela Merkel, French president François Hollande and Italian prime minister Matteo Renzi have found the time to join Swiss president Johann Schneider-Ammann for the maiden voyage through the rail tunnel, which contains a 152km labyrinth of galleries, cross passages and shafts and has taken 17 years to complete.

Festivities with 1,200 invited guests will mark the opening of the rail tunnel, which will be mainly used for further test journeys until commencing regular service in December 2016.

Once fully functional, the tunnel will not just slice 45 minutes off the journey time between Zurich and Lugano, but also form a central building block of the so-called Rhine-Alp corridor that stretches from the sea ports of Rotterdam and Antwerp via Germany's industrial heartland down to the port of Genoa in Italy.

The new Gotthard base tunnel, which has been in planning since the 1980s, will bypass the old Gotthardbahn rail tunnel, which rises and falls through the massif in a winding route. Unlike its predecessor, which was completed in 1882, the new line will run on a flat low-level route, the first of its kind in the Alps.

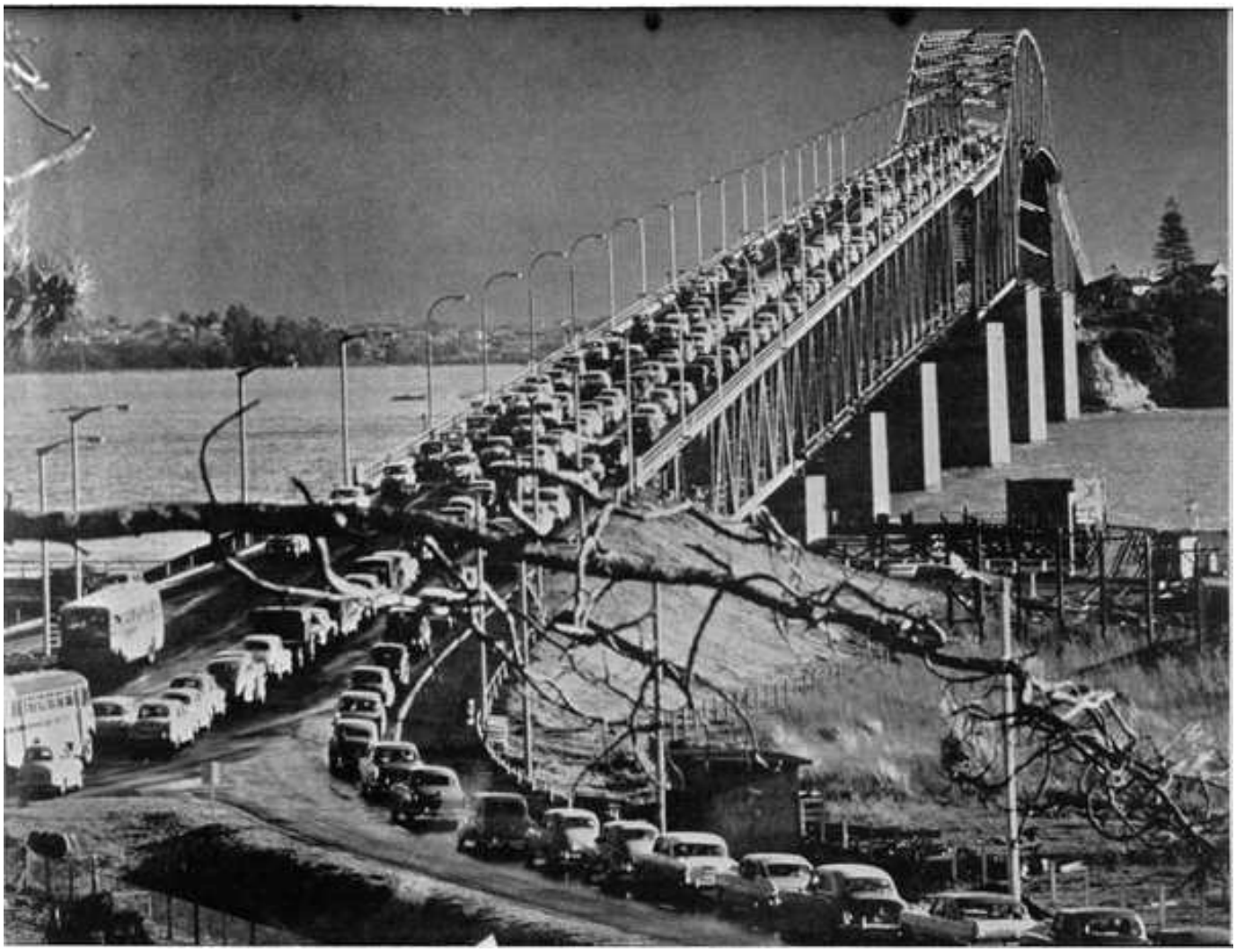
Four giant drill heads were used to cut a path through the mountain range. In the process, almost 30m tonnes of rock and soil were transported from the massif's inner core to the surface via a giant purpose-built lift.

At 57km, the Gotthard base tunnel is 3km longer than the world's current record-holder, the Seikan rail tunnel that links Japan's two largest islands, Honshu and Hokkaido, and 7km longer than the Channel tunnel that connects England and France.

Whether Switzerland will be able to hold on to its title for long is questionable. The Chinese government plans to build a tunnel underneath the Bohai straits measuring 123km – more than twice the length of the Gotthard base tunnel – to reduce journey times between the port cities of Dalian and Yantai from eight hours to 45 minutes.

In Europe, the next alpine mega-tunnelling project is in progress, with a 55km tunnel underneath the Brenner designed to connect Innsbruck in Austria and Bolzano in Italy. A proposed 80km underground train link connecting Helsinki in Finland and Tallin in Estonia is awaiting approval.

In Switzerland, the hope is that the Gotthard base tunnel will not only boost the trade route between northern and southern Europe but also shift alpine traffic from road to rail and reduce CO^2 emissions, thus helping to protect the ecosystem. Sixty-five per cent of the project's construction costs were funded by a tax on heavy duty vehicles, of which about 3,600 used the old tunnel on an average day.



Auckland Harbour Bridge restrospective

Traffic queuing up on opening day (above) and the green oasis that was the North Shore before the bridge was completed (below)

Remotely Controlled Autonomous Vehicles Are Coming – for Better or for Worse

In July 2015, two guys remotely hacked a Jeep Cherokee and took over the controls from miles away. The video of the hack went viral, exacerbating fears about the internet of things, connected vehicles, and – by IoT association – autonomous vehicles.

As interest and development in autonomous cars gather steam, fears about hacking and an IoT takeover build, as well. Connected devices inherently trust each other, creating a scenario where a vulnerability in one device is a vulnerability in all devices.

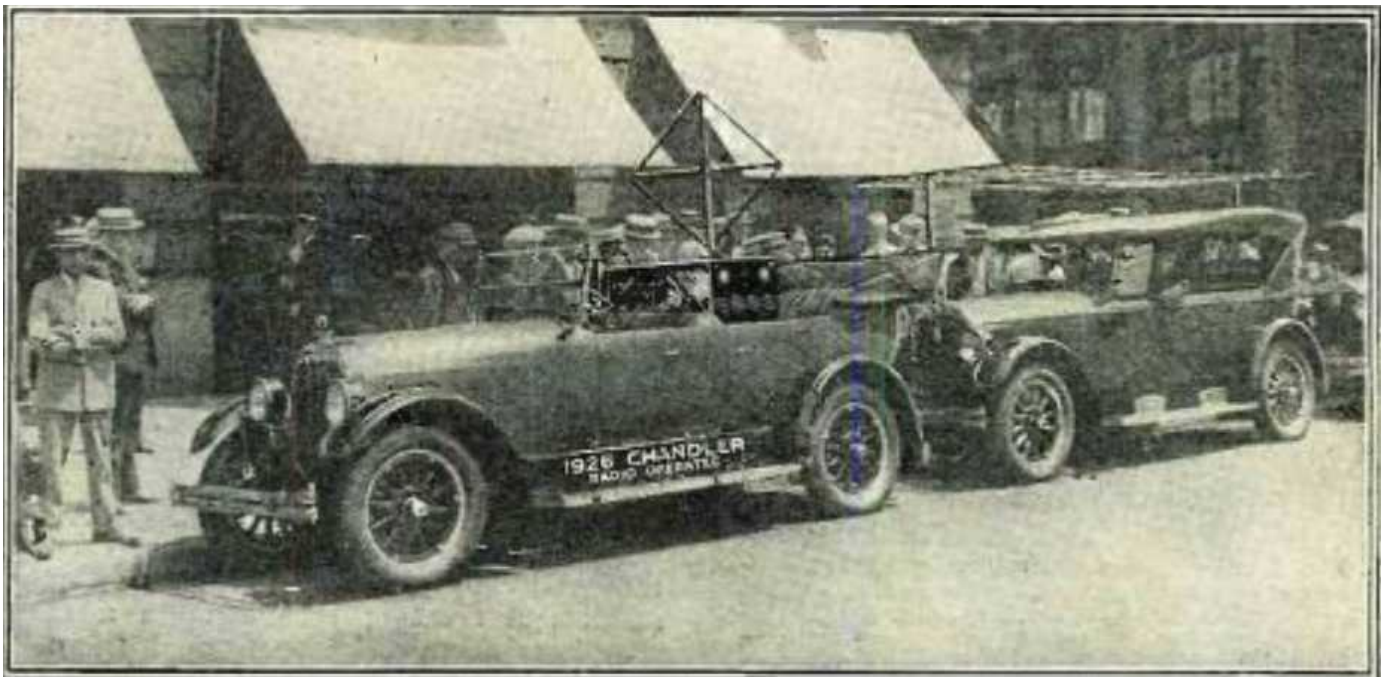
A hacker remotely taking control of your home's autonomous thermostat is one thing, but a hacker remotely taking control of your autonomous vehicle is something else entirely.

But there are still questions that need to be asked and answered. For example: could remote accessibility of self-driving cars be benevolent, or is it always malicious? Also, would the ability to remotely control a vehicle lead to quicker and safer autonomous development?

Surprisingly enough, we can trace the idea of remote controlled automobiles back nearly 100 years.

In 1925, inventor Francis Houdina sent the first driverless car through the streets of New York City.

The 1926 Chandler was modified with a transmitting antenna that pulled in radio signals from a second car behind it (see image below). Houdina took his car up Broadway and then down Fifth Avenue, handling close-knit traffic without incident.



"In the future, the auto tourist, rolling along in strange country, will hear an alarm on his dash sound when he gets off the right road," reads a 1932 issue of Modern Mechanics and Inventions, "for each great national highway will then have its set of code signals flowing through the telephone or telegraph wires at the side of the roads by means of carrier waves."

The magazine illustrated Houdina's idea on a nationwide scale. The cars would still have an antenna on the hood, but they wouldn't need another car guiding them. The telephone wires ("in addition to their usual duty") would send out route signals via radio to each car on the road. Accidents would be avoided because the car in front and behind would be following a different radio route along the same telephone wire.

Houdina's design didn't entirely remove the driver from the car — a person would still have to drive the car when there wasn't a signal, or when they needed to alter the route. All the same, it was the first major step toward full autonomy, even though it remained a proof of concept and never reached a mainstream audience.

Today's self-driving vehicle technology, however, will not fall so quietly into the annals of history, says Michael Clamann, senior research scientist at Duke University's Humans and Autonomy Lab (HAL).

He has a point: Google and other leaders in autonomy (including the director of HAL, Mary Cummings) went in front of Congress in March to guide future federal legislation. Ford says it will have autonomous technology by 2020. There's even plans for an autonomous Formula 1-style race called Roborace.

Autonomous technology is coming, and it will be able to be remotely controlled. Manufacturers just have to figure how.

"That's really what the idea behind autonomous cars is," Clamann tells Inverse. "You're going to be somehow telling it, with outside coordinates, where an address is, and the car is going to navigate on its own to the

location."

The first example of benevolent remote control that comes to mind for Clamann is in the case of a medical emergency. Say a rider is incapacitated and can't direct the autonomous car, but a passenger in a passing car sees that he needs to be taken to the nearest hospital. Someone could access the car and reprogram the navigation.

Another argument for remote control is the rideshare economy. Autonomous cars could severely drop the numbers of car ownership, especially in crowded cities. The car-on-demand model could keep car manufacturers alive, and remote connectivity could keep the car-on-demand model alive.

"There are going to be times when you have to have the car empty to pick up a passenger," Clamann says. "Under those circumstances, someone else may be telling the car: you need to go to X location. Someone, somewhere, has to tell that car where it needs to go, and that could be done with remote control."

Hacking is a fact of modern life. Whether we're talking Sony or Donald Trump, hackers have made their marks. But that doesn't mean the threat of hacking is going to slow down autonomous development.

"Someone can hack my phone, someone can hack my computer, someone can hack Target," Clamann says, "that doesn't stop development of computer systems at these places. Controls can be put into effect, but the fact that people have the ability to hack is not slowing down innovation in these areas, it's just creating another problem."

However, in Clamann's opinion, hackers breaking in and controlling autonomous vehicles remotely is a danger, and should be considered a roadblock in the development of self-driving cars. His concerns echo what Mary Cummings stated in the March meeting in front of Congress — that without proper legislation, autonomous cars will be more danger than they are worth.

John Carlin, U.S. assistant attorney general for national security, stated that he has similar concerns at an automotive conference in April:

"There is no internet-connected system where you can build a wall that's high enough or deep enough to keep a dedicated nation-state adversary or a sophisticated criminal group out of the system," Carlin said.

In short: Development of autonomous technology is moving faster than development of security technology, and it's not stopping any of the manufacturers. It's the same problem that the entire IoT community is having.

"Don't get lost in the hype with how exciting IoT is," Ted Harrington, a cybersecurity expert at Independent Security Evaluators, recently told Inverse, "without balancing it with the risk that comes along with IoT."

Whether we're ready or not, there might not be anyone in the driver's seat of the car next to you sooner than you think.

"As far as autonomous cars go, given the momentum already in the industry, I don't think it's looking like it's going to stall," Clamann says.

In one potential future, development surrounding remote control of autonomous vehicles could chug along at the same pace, the threat of hackers breaking into our Jeeps lurking around the bend.

In another, security could tighten, and remote connectivity could become a selling point for manufacturers.

Remote control of autonomous vehicles is coming, it's just a matter of who will be pushing the buttons.
Source: Inverse.com

Once you get the car there, you may need to stack it.

Transportation Engineering Postgraduate Courses 2016

supported by: NZ TRANSPORT AGENCY WAKA KOTAHI

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/thesis
Domestic student fee per course in 2016 is $1018 incl. GST, + Student Services levy (up to $385/semester).

All courses run in "block mode" to enable **part-time and distance students** to easily take part. In 2016, the contact time will be reduced from **six to five days** (i.e. a 3-day block followed by a 2-day block), 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	**DESCRIPTION** *(more detailed Flyers available on website)*
Anytime (contact Department)	
ENTR401: Fundamentals of Transport Engineering (Self-study course, with 1-day tutorial at UC, date TBC)	Transportation planning; Road link theory & design; Intersection analysis & design; Traffic studies; Accident reduction; Sustainable transport planning & design; Intro to Pavement design. {bridging course for non-transportation students}
Semester 2 (Jul-Oct 2016)	
ENTR614: Planning & Design of Sustainable Transport (Block dates: 18-20 Jul, 12-13 Sep)	Pedestrian planning and design; Planning and design for cycling; Audits/reviews of walking and cycling; Public transport operations, scheduling and network design; Travel behaviour change and travel plans.
ENTR615: Transport Network Modeling (Block dates: 1-3 Aug, 26-27 Sep)	Principles of transport modelling; Road network modelling; Meso-scopic simulation (SATURN); Microscopic simulation (Paramics); Intersection modelling (SIDRA); Road network reliability & resilience.

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:
Dr Mofreh Saleh *Phone: (03) 364-2987 Email: mofreh.saleh@canterbury.ac.nz*
Or visit the website: www.met.canterbury.ac.nz

More Trees, Fewer Cars for the Central Squares of Paris

A long-planned redesign will semi-pedestrianize some of the city's most famous public spaces.

Last year, Paris Mayor Anne Hidalgo promised to makeover seven major Parisian squares. This March, following a public consultation, Paris City Hall came up with the goods, providing detailed plans that will transform these famous, beautiful spaces in the period between now and 2020.

Looking at the details, it seems the city's ambitions haven't so far been diluted. Each square will be semi-pedestrianized—literally so, as a mandatory 50 percent of each square's surface area will be given over to pedestrians.

This means slicing away large sections of space currently allotted to cars, abolishing some lanes and slowing traffic in others. In each square, road vehicles will be restricted to lanes with a maximum width of 12 metres, with the rest ceded to pedestrians and cyclists.

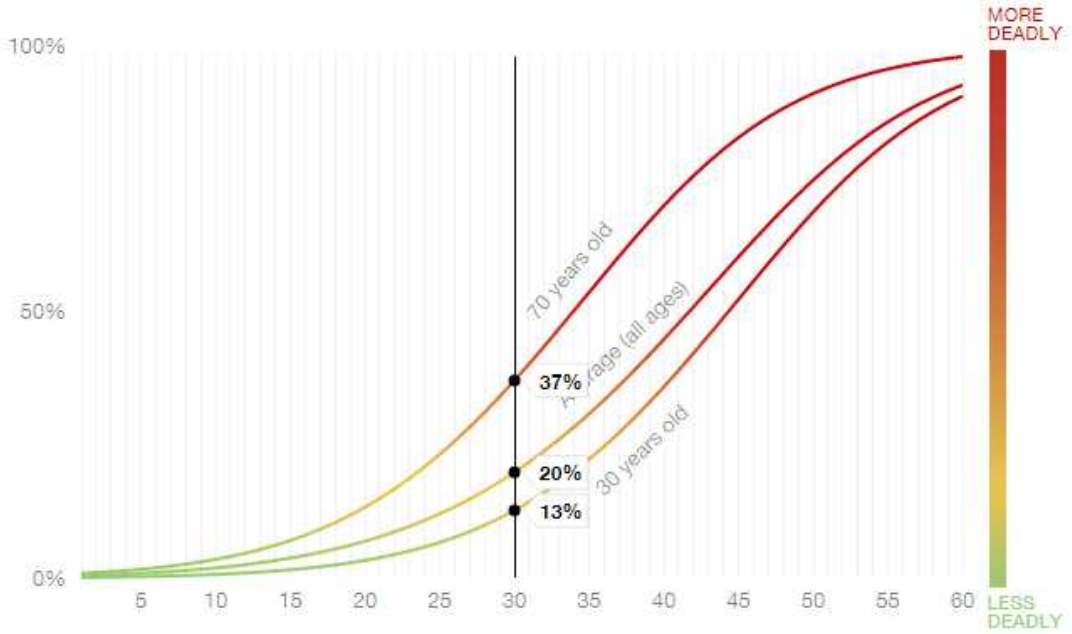
The scope of this semi-pedestrianization is more impressive when you consider what Paris has to work with. These squares aren't quiet spaces hidden away from the city's main avenues. They are the very axes through which most of inner Paris's road traffic is currently channeled. Here we look at three of the seven makeover plans to see how the squares will be re-shaped and given more space to breathe.

Place de la Bastille

In this square built over the site of the Bastille Prison, redesigning the square's layout has prompted a rethink of the way cars will navigate it. As the photo below shows, the square's commemorative column currently stands cut off in the center of a huge roundabout, looking rather like the spindle of a gigantic record player. The effect is monumental, but it renders the heart of the square effectively useless and inaccessible.

In the redesign, the column will be unified with the square's banks, reducing car traffic to a narrower north-south axis, one that swerves to enhance the curved shape of the square's centre. The red lines in this rendering represent new street furniture installations placed on what are currently car lanes, while the green patches show further tree plantings along the square's feeder avenues.

Effect of vehicle speed on ped safety assessed by age



While it might be common sense that faster cars are deadlier, what's particularly striking is how much more deadly they are for older people. A 70-year-old hit by a car going 35mph (56kmh) is about as likely to be killed as a 30-year-old hit by a car going 45mph (72kmh) - in both cases it's about a 50/50 chance.
Source: ProPublica

Recoupling: Reopening disused railway lines

Many railway lines in Britain that were closed in the 1960s are re-opening.

A museum in the centre of Wisbech, a Georgian town of 30,000 souls in East Anglia, proudly displays the original manuscript of Charles Dickens's "Great Expectations". Those were days in which Wisbech prospered. The frenzy of railway building in the 19th century gave the town three stations. Now it has none. The last passenger train left in 1968, five years after the report by Richard Beeching, chairman of British Railways, on the future of rail, which led to the closure of nearly a third of Britain's 17,000 miles of track and a third of its 7,000 stations. The town has suffered economically.

Yet Wisbech, like many towns cut off from the rail network, is now expecting great things. In recent years several hundred miles of railways around the country have been restored. As roads clog up and urban house prices climb, commuters, environmentalists and local politicians are pushing for more old lines to be re-opened. Some 200 proposals have been put forward, says Andrew Allen of the Campaign for Better Transport, a lobby group.

It is a remarkable new trend. After the war, many thought that roads would rule and rail would go the way of canals. When Milton Keynes, a new town, was built 55 miles north of London in the 1960s, it was deemed not to need a station. One was at last opened in 1982. In 2015 6.6m journeys started or ended there. Traffic on other restored lines has boomed, too. The track that re-opened in 2015 from Edinburgh to the Borders expected 650,000 journeys in its first year. Half a million were made in the first five months.

The process of re-opening is laborious. Feasibility studies take years. But with rail journeys doubling in the past two decades, Whitehall now realises it may be easier and cheaper to add rail capacity this way than through pharaonic projects such as HS2, a high-speed link north from London, set to cost over £45 billion ($64 billion).

It is the growth of Cambridge, 40 miles to the south and a centre for high-tech, that has provided the impetus for re-connecting Wisbech. A new station is opening at the Cambridge Science Park and it is hoped that the old line to Oxford will be restored by 2024. The Wisbech rail link would halve travel time to 40 minutes. Cambridge has lots of jobs and Wisbech has cheap houses (the average price is around £150,000 compared with £398,000 in Cambridge), with a recent local plan proposing 10,000 more. If the link goes ahead, the government would meet most of the £100m cost.

Devolution has played a role in recent re-connections. Many of the new lines are in Scotland, Wales or the big cities, which have control over local transport and can push and finance them. In the English shires no single body oversees the process, says Chris Austin, a rail expert. Greg Clark, the secretary of state for local government, visited Wisbech in March and insisted that money for the line was not dependent on East Anglia accepting devolution. Some locals, wary of having foisted upon them the regional mayor that was a condition of other devolution deals, still worry.

With government money tight, other areas are tapping different sources for the cash to re-open lines. In the south-west, Kilbride, a developer, is putting £11.5m towards a rail link into Plymouth as part of a deal to build 750 new homes at Tavistock.

Britain is not expecting another Dickensian railway boom. Perhaps 700-800 miles of lines closed by Beeching will be restored in total, says Mr Austin. But sometimes small amounts of investment can make a big difference.

Source: The Economist

The real point of high speed rail: property development

The real point of a high speed rail line between Sydney and Melbourne is to dramatically recast the population "imbalance" along the eastern seaboard, according to an MP leading the Turnbull government's examination of the issue.

Mr Alexander suggested property in Goulburn now worth $200,000 could be worth $600,000 if it were just a 30 minute train ride from the Sydney CBD

John Alexander, an advocate for fast rail since he entered Parliament in 2010, said high speed rail would "liberate" regional towns, potentially tripling property prices and relieving housing pressure in the capital cities.

The train itself was almost an afterthought in the scenario he outlined to Fairfax Media, in which the train line would spark the growth of six to eight cities along the route, using the resulting rise in land values to fund the project.

"The real purpose of high speed rail is to be able to develop regional areas," said Mr Alexander, who chairs the standing committee on infrastructure, transport and cities. While Sydney and Melbourne were straining to accommodate their growing populations, regional centres were "dying" with very cheap real estate, he said.

"It would appear there's a perfect storm of opportunity to liberate those cities through high speed rail," he said.

New train stations would sit near but outside existing townships, including the Southern Highlands, Goulburn and Shepparton, with the areas around those stations rezoned for higher-density development.

Mr Alexander suggested property in Goulburn now worth $200,000 could be worth $600,000 if it were just a 30 minute train ride from the Sydney CBD. Meanwhile, the newly-connected regional growth centres would act as a "pressure release valve" on property prices in Sydney and Melbourne. Under conservative estimates, 50,000 people could move into towns along the rail line each year, Mr Alexander said.

"You will push up prices enormously around Goulburn, people will be delighted," he said.

Mr Alexander denied the government would face stiff opposition from local councils, but he acknowledged they did not necessarily want a fast rail line to pass directly through their towns.

"They don't want their amenities spoiled," he said. "Goulburn will still be Goulburn and it will have this new part that it eventually grows into."

While the government is a long way from committing to any such plan, the idea of high speed rail - and in particular, the use of land value capture to finance it - does appear to have found favour with Prime Minister Malcolm Turnbull.

Previous efforts under Labor to investigate the cost of a high speed rail link between Melbourne and Brisbane found the bill to taxpayers could be as high as $114 billion.

But using value capture, the project is recast as a giant real estate development, largely or fully funded by the increased land values arising from the new infrastructure. The model is frequently used in the United States and major cities such as Hong Kong.

Mr Alexander said the standing committee has heard from private companies who believe they could fund the entire project using value capture. That claim is disputed, however. Professor of Urban Policy at the University of Sydney, Ed Blakely, told Fairfax Media value capture was an important tool but would not fund the entire cost of such a large project.

"Value capture is not for operating costs, nor for long haul capital costs," he said.

And Infrastructure Australia, the independent statutory body charged with advising governments on major projects, views value capture only as a "potentially useful" source of funding "alongside conventional user charges and taxpayer allocations".

The committee is due to report in June but has already relayed key evidence to Cities Minister Angus Taylor and Major Projects Minister Paul Fletcher.

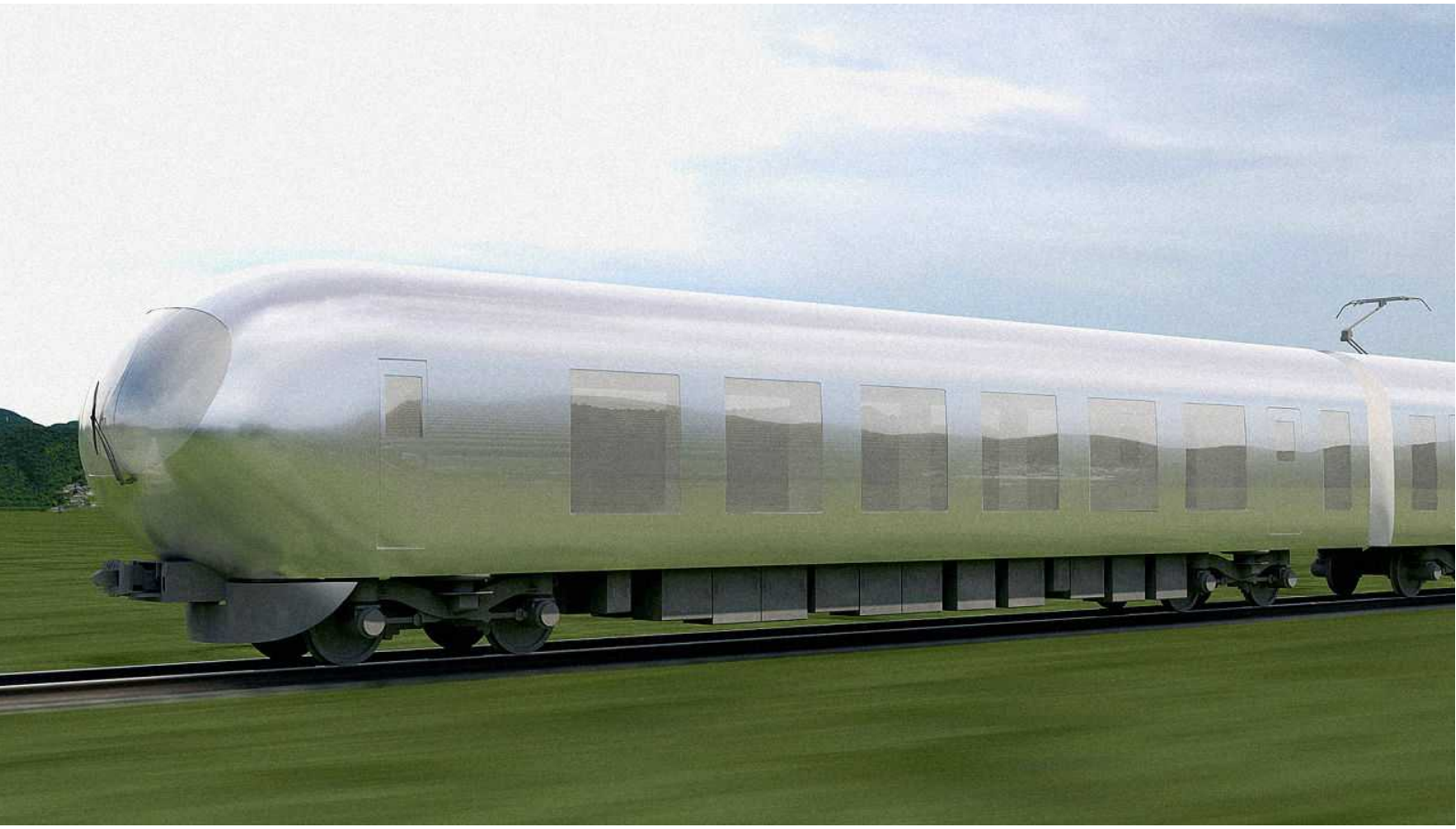
High speed rail has been on various drawing boards since it was first proposed by CSIRO researchers in 1984, and voters have understandably grown wary about rail-related promises - especially in the lead-up to an election.

But Mr Alexander said things were different this time, with the idea gaining traction "enormously" within the government.

"It's being looked at differently," he said, suggesting it could be a reality within a decade. He also conceded the issue was a key point of differentiation between Mr Turnbull and his predecessor Tony Abbott.

"Tony had a preference for roads, Malcolm probably has a preference for rail," he said. "That's the difference between growing up in the eastern suburbs and growing up on the northern beaches."
Source: AAP

Japan's Newest Train Design Will Be Practically Invisible



Japan's speedy bullet trains already move so fast that you almost can't see them coming. The new train being designed for the Seibu Railway Co. by Japanese architect Kazuyo Sejima of Sanaa will be hard to see, even standing still. It's a chameleon-like train that has been designed to blend into the countryside that it is streaking through.

Scheduled to hit tracks in 2018, the new Seibu flagship train cars have an organic shape that is much different from the boxy New Red Arrow trains that currently run limited express services in the Tokyo area. Coupled with a semi-reflective skin designed to mirror the surrounding scenery, Sejima's train was designed with the stated goal to be as fun to watch blend into its surroundings as it is to ride.

The Seibu train will be the first train ever designed by Sejima, a recipient of the Pritzker, often called the Nobel Prize of architecture. It's the latest example of Japan's railways and train services turning to unconventional designers to reimagine the way trains look in the country.

Sejima says that what appealed to her about the project was the difference between designing a building, which is rooted in a single spot, and designing an object that needs to travel through many different environments.

"The limited express travels in a variety of different sceneries, from the mountains of Chichibu to the middle of Tokyo, and I thought it would be good if the train could gently co-exist with this variety of scenery," Sejima is quoted as saying in Seibu's official press release. "I also would like it to be a limited express where large numbers of people can all relax in comfort, in their own way, like a living room, so that they think to themselves 'I look forward to riding that train again.'"

Of course, in a way, a train's appearance probably makes less impact on its environment than anything else about it. Emissions, sound pollution, and the disruption of laying down miles of track are all going to be bigger problems than the sight of a train quickly passing through a given area.

It's fitting, though, watching Japan—long a country that tries to emphasize design harmony with nature—finally apply the same approach to its railroad system. Let's just hope that if Japan is going to have invisible trains, it at least makes sure everyone knows where the tracks are.

Snow art. Unrelated to the invisible train

The 2016 AITPM National Traffic and Transport Conference will be held in Sydney from Tuesday 26 July to Friday 29 July 2016. As the leading traffic and transport event in Australia, the 2016 National Conference is the thirty-fifth to be held by AITPM.

The Conference which coincides with the 50th anniversary of the Institute will be held at the Westin Hotel in the heart of Sydney CBD at Martin Place. The Conference will build on AITPM's reputation for allowing delegates an affordable opportunity to learn of latest industry developments, network with other professionals and gain appreciation of capabilities, equipment and technologies in the industry.

The Keynote Speaker for the Conference is Peter McCombs, the original founding Chairman and now Life Member of the IPENZ Transportation Group.

In alignment with AITPM's Strategic Plan, there will be three streams for the concurrent sessions on Day 1 (Wednesday) and Day 2 (Thursday) as follows:
• Traffic Engineering and Management including Road Safety;
• Transport Planning, Freight and Logistics
• Traffic, Transport and Land Use Modelling.

There will also be the following three Forums on the Friday:
• Active transport including pedestrian and cycling;
• Transport and Land Use Modelling; and
• Multi transport mode tour.

The conference website is **here**. Registrations will be open after Easter www.aitpm.com.au

For further information, please contact our conference convenors Fred Gennaoui (gennaoui1@bigpond.com) and Kevin John (kevinjohn@bigpond.com)

Electric bike wheel fundraiser raises tricky issues

The inventors of a front wheel that turns almost any bicycle into an electric bike has smashed its target on the crowdfunding site Kickstarter, raising four times the initial amount sought in just four days. Potential purchasers would be well advised to check it meets local regulations, however.

Going by the name GeoOrbital, the wheel enables the user's bike to travel at a speed of 20mph (32kph) with a range of 20-50 miles (30-80km), and does not need any tools for installation. More than US$300,000 has been pledged on Kickstarter for the wheel, which will retail at US$950.

It was devised by a team based in Cambridge, Massachusetts, who describe it as "an evolution of the orbital wheel (the wheels on the TRON Motorcycles)."

With little to no pedalling from the user achieves a range of 20 miles, with longer distances possible the more pedalling is done. The 500 watt Brushless DC motoris powered by a 36 volt Lithium Ion battery and activated using a throttle which clips onto the bike's handlebars. It can reach a speed of 20 mph in six seconds.

On the Kickstarter page, the team behind it say: "Because the GeoOrbital wheel when installed on a bicycle is still considered a bicycle*, there's no need for insurance, registration, or even a license." That asterisk is pretty important – the note points out that "State and city rules might vary."

That creates a problem for potential purchasers in the UK and anywhere else that the power output or speed - or, indeed, both - are above the legal limits for e-bikes. Under UK government regulations governing electrically assisted pedal cycles, "the electric motor shouldn't be able to propel the bike when it's travelling more than 15.5mph" and "the motor shouldn't have a maximum power output of more than 250 watts."

The GeoOrbital wheel exceeds both of those thresholds. That wouldn't in itself prevent you from using one on a bicycle in the UK, but because it doesn't meet the EPAC rules it would need to be registered and taxed, the user would need a driving licence to ride one, and they would also have to wear a crash helmet.

The Absurd Primacy of the Automobile in American Life

Considering the constant fatalities, rampant pollution, and exorbitant costs of ownership, there is no better word to characterize the car's dominance than insane.

The car is the star. That's been true for well over a century—unrivaled staying power for an industrial-age, pistons-and-brute-force machine in an era so dominated by silicon and software. Cars conquered the daily culture of American life back when top hats and child labor were in vogue, and well ahead of such other innovations as radio, plastic, refrigerators, the electrical grid, and women's suffrage.

A big part of why they've stuck around is that they are the epitome of convenience. That's the allure and the promise that's kept drivers hooked, dating all the way back to the versatile, do-everything Ford Model T. Convenience (some might call it freedom) is not a selling point to be easily dismissed—this trusty conveyance, always there, always ready, on no schedule but its owner's. Buses can't do that. Trains can't do that. Even Uber makes riders wait.

But convenience, along with American history, culture, rituals, and man-machine affection, hide the true cost and nature of cars. And what is that nature? Simply this: In almost every way imaginable, the car, as it is deployed and used today, is insane.

What are the failings of cars? First and foremost, they are profligate wasters of money and fuel: More than 80 cents of every dollar spent on gasoline is squandered by the inherent inefficiencies of the modern internal combustion engine.

No part of daily life wastes more energy and, by extension, more money than the modern automobile. While burning through all that fuel, cars and trucks spew toxins and particulate waste into the atmosphere that induce cancer, lung disease, and asthma.

These emissions measurably decrease longevity—not by a matter of days, but years. The Massachusetts Institute of Technology calculates that 53,000 Americans die prematurely every year from vehicle pollution, losing 10 years of life on average compared to their lifespans in the absence of tailpipe emissions.

There are also the indirect environmental, health, and economic costs of extracting, transporting, and refining oil for vehicle fuels, and the immense national-security costs and risks of being dependent on oil imports for significant amounts of that fuel.

As an investment, the car is a massive waste of opportunity—"the world's most underutilized asset," the investment firm Morgan Stanley calls it. That's because the average car sits idle 92 percent of the time. Accounting for all costs, from fuel to insurance to depreciation, the average car owner in the U.S. pays US$12,544 a year for a car that puts in a mere 14-hour workweek. Drive an SUV? Tack on another US$1,908.14

Then there is the matter of climate. Transportation is a principal cause of the global climate crisis, exacerbated by a stubborn attachment to archaic, wasteful, and inefficient transportation modes and machines. But are cars the true culprit?

Airplanes, for instance, are often singled out as the most carbon-intensive form of travel in terms of emissions per passenger-mile (or per ton of cargo), but that's not the whole story: Total passenger miles by air are miniscule compared to cars.

In any given year, 60 percent of American adults never set foot on an airplane, and the vast majority who do fly take only one round trip a year. Unfortunately, air travel is not the primary problem, contributing only 8 percent of U.S. transportation-related greenhouse gases. Cars and trucks, by contrast, pump out a combined 83 percent of transportation carbon.

Driving an SUV or even a mid-size car from New York to L.A. is worse for the planet than flying there. This is true in part because cars' fuel efficiency has improved far more slowly than planes', but also because of Americans' increasing propensity to drive alone, which has made car travel less efficient and more carbon-intensive per passenger-mile in recent years.

So cars pose the biggest threat on the climate front, with all the costs that global warming imposes on infrastructure, homes, and lives through increasingly severe storms, droughts, rising sea levels, and pressure on food supplies. If the price of gasoline and the vehicles that burn it actually reflected the true costs and damage they inflict, the common car would go extinct. Gasoline would cost way more than US$10 a gallon. That's how big the secret subsidy is.

And that's not even counting cars' most dramatic cost: They waste lives. They are one of America's leading causes of avoidable injury and death, especially among the young. Oddly, the most immediately devastating consequence of the modern car—the carnage it leaves in its wake—seems to generate the least public outcry and attention.

Jim McNamara, a sergeant with the California Highway Patrol, where officers spend 80 percent of their time responding to car wrecks, believes such public inattention and apathy arise whenever a problem is "massive but diffuse."

Whether it's climate change or car crashes, he says, if the problem doesn't show itself all at once—as when an airliner goes down with dozens or hundreds of people on board—it's hard to get anyone's attention. Very few people see what he and his colleagues witness daily and up close: what hurtling tons of metal slamming into concrete and brick and trees and one another does to the human body strapped (or, all too often, not strapped) within.

In contrast, a roadside wreck is experienced by the vast majority of drivers as a nagging but unavoidable inconvenience—just another source of detours and traffic jams. Increasingly popular and powerful smartphone traffic apps eliminate even those brief close encounters with the roadway body count, routing savvy drivers away from crash-related congestion.

The typical car wreck is becoming all but invisible to everyone but those who are killed or maimed and those whose job is to clean it up. Many are aware at some level that troubling numbers of people are injured and die in cars, but most remain unfazed by this knowledge.

This disparity in attention between plane crashes and car crashes cannot be justified by their relative death tolls. Quite the contrary: In the 14 years following the terrorist attacks of 9/11, there were eight crashes on American soil of passenger planes operated by regional, national, or international carriers. The death toll in those crashes totaled 442. That averages out to fewer than three fatalities a month.

The death toll on America's streets and highways during that same period since 9/11 was more than 400,000 men, women, and children. The traffic death toll in 2015 exceeded 3,000 a month. When it comes to the number of people who die in car wrecks, America experiences the equivalent of four airliner crashes every week.

A normal day on the road, then, is a "quiet catastrophe," as Ken Kolosh, the statistics chief for the National Safety Council, calls it. He ought to know: He makes his living crafting the annual statistical compendium of every unintentional injury and death in the country.

Car crashes are the leading cause of death for Americans between the ages of 1 and 39. They rank in the top five killers for Americans 65 and under (behind cancer, heart disease, accidental poisoning, and suicide). And the direct economic costs alone—the medical bills and emergency-response costs reflected in taxes and insurance payments—represent a tax of $784 on every man, woman, and child living in the U.S.

The numbers are so huge they are not easily grasped, and so are perhaps best understood by a simple comparison: If U.S. roads were a war zone, they would be the most dangerous battlefield the American military has ever encountered.

Seriously: Annual U.S. highway fatalities outnumber the yearly war dead during each Vietnam, Korea, Iraq, Afghanistan, the War of 1812, and the American Revolution. When all of the injuries from car wrecks are also taken into account, one year of American driving is more dangerous than all those wars put together. The car is the star.

Source: The Atlantic

Cool bridges (the below one may be an un-bridge)

Dear Friend,

The 38th Australasian Transport Research Forum (ATRF 2016) will be held in Melbourne from 16-18 November 2016.

The ATRF is the principal transport research conference in Australia and New Zealand. It brings together transport researchers, policymakers, advisors and practitioners from a range of disciplines to share and build upon the latest research and thinking. Note that the conference will be co-located with the ARRB conference in 2016, allowing ATRF attendees to partake in the activities of both conference.

ATRF 2016 is moving into a new era with the development of a co-ordinating Central Committee, ATRF Scientific Committee and Local Co-ordinating Committee. The ATRF Scientific Committee is being formed to take responsibility for the reviewing of papers, with leading experts assisting with coordination of peer-review for abstracts and papers submitted in the following theme groups:

T01: Freight & logistics
T02: Transport modelling, forecasting & simulation
T03: Transport analysis & big data
T04: Active Transport (cycling, walking, etc.)
T05: Public transport
T06: Transport & land use / urban design
T07: Planning & policy
T08: Transport economics
T09: Aviation / Maritime
T10: Transport surveys
T11: Safety
T12: Environment
T13: Advanced technology, automation & ITS
T14: Travel behaviour change & demand management
T15: Other transport research

ATRF accepts papers on any aspect of transport, including work in progress. The conference is crossdisciplinary and submissions are encouraged from across all fields including economics, psychology, engineering, information technology, planning, geography, policy studies and more. We especially encourage practitioners to submit.

Papers can be research based and/or demonstrate the use of innovative or novel approaches to transport issues, behaviour, policy, planning, technology and systems. ATRF provides excellent outlets for publication with strong peer-review processes. The proceedings of past ATRF conferences provide one of the leading repositories of transport research from Australian and New Zealand (see www.atrf.info/papers).

For details go to: www.atrf2016.com.au

Professor William Young Chair,
Local Organising Committee
bill.young@monash.edu

Does fluoro kit actually make cycling safer?

Source: cyclist.co.uk

Flourescent clothing has long been the safety-conscious commuters' choice, and it has enjoyed a recent surge in popularity with fashion-conscious road cyclists, too. But in spite of its obvious attention-grabbing qualities, debate rages about whether fluoro and brightly coloured attire actually makes its wearer safer than a rider who prefers more muted shades.

It might seem intuitive that bright clothing is more noticeable, yet academic studies and empirical evidence suggest it may actually make little difference in the real world, or even provoke a negative reaction in some drivers. In the name of clarity, we decided to examine the evidence on both sides to find out if wearing fluoro really is the sensible thing to do.

Perhaps unsurprisingly, The Highway Code comes down clearly in favour, recommending 'light-coloured or fluorescent clothing which helps other road users to see you in daylight and poor light and reflective clothing and/or accessories (belt, arm or ankle bands) in the dark'. But the reality of being seen out on the road is more complex than wearing yellow Lycra. Gary Rubin, professor of ophthalmology at University College London, says, 'How we perceive colour is determined by photoreceptors in the eye and their connectors in the brain, but colour isn't necessarily the key to being seen.

'Visibility comes down to contrast,' he adds. 'The colour itself makes no difference so long as it contrasts with the background. In a rural setting, such as riding through woodland, white would be the best colour for standing out to motorists.'

So is he suggesting that hi-viz kit is actually irrelevant? 'No, fluorescent kit is important,' says Rubin. 'Fluorescent paint, for example, has the capacity to turn energy from one wavelength to another, so it can appear brighter. It boosts the contrast by amplifying light. Fluorescence applies even more in low light conditions because it reflects what light there is more than ordinary kit.'

It's worth taking a quick look at the latest statistics from the Royal Society for the Prevention of Accidents: 80% of cycling accidents occur in daylight (when most cycling takes place) but accidents in the dark are more likely to be serious; 75% happen at or near a junction; and a quarter of fatalities occur when the vehicle hits the rider from behind.

Fluoro kit won't help around the clock, however. A study in Australia in which drivers were required to spot stationary cyclists on a closed circuit found that fluorescent clothing offered no significant improvement over black clothing at night.

'Fluorescent clothing needs UV rays to be reflective and so doesn't work at night,' says Dr Philippe Lacherez from the School of Optometry & Vision Science at the Queensland University of Technology, who conducted a survey of 184 cyclists who had been involved in a collision with a car. 'Cyclists should add reflective strips to their knees and ankles because the pedalling movement makes light from the headlights bounce back to the driver, making it easier to register they are there.'

‘Reflective kit is even more effective than fluorescent clothing because it fires light back at the motorist,’ Rubin agrees. ‘Shoes with fluorescent or reflective panels would also increase visibility. Movement does capture attention – our visual system is more sensitive to a moving target.’ Case closed, you might think, but in 2014 a study in Canada found that while wearing light (not necessarily fluorescent) clothing decreased the risk of an accident in daylight, wearing fluorescent clothing (and using lights) actually increased the chances of being in an accident at night.

The researchers believe this could be down to ‘risk compensation’ – the fact that cyclists may overestimate how visible they are and the level of protection offered by fluorescent kit and so take more risks in traffic.

And here we find ourselves entering the realms of psychology. When it comes to collisions with vehicles, it’s not simply a case of being seen – sometimes it comes down to how the driver feels about what you’re wearing.

Dr Ian Walker is a senior lecturer in psychology at the University of Bath, and a professional interest in traffic and transport psychology led him to conduct his own experiment into the effectiveness of cycling kit.

Over several months, one cyclist wore seven different outfits on his daily 50km commute between Berkshire and outer London. Using an ultrasonic distance sensor he recorded how much space passing motorists gave him, logging data from 5,690 vehicles. The outfits ranged from racing kit to a vest with ‘novice cyclist’ printed on the back. Some of the outfits included high-visibility jackets and vests, while another bore the legend ‘POLICE’, along with the slogans ‘move over’ and ‘camera cyclist’. Finally, for comparison, one similar high-vis jacket bore the word ‘POLITE’.

One letter made a big difference. Walker’s results found that most of the different outfits had virtually no impact on how close the motorists got, bar one. Only the mock-up police jersey encouraged motorists to give the cyclist a wider berth.

‘It’s striking that driver behaviour to POLICE was so different to POLITE given the key word differed by just one letter,’ Walker says. ‘Not only was passing much closer on average with POLITE, but subjectively the rider reported feeling much more at risk, and encountered overt acts of aggression from several drivers.

‘Based on the data, it’s unlikely that cycling outfits could ever provide a sustainable solution to rider safety,’ Walker says. ‘The optimum solution to the very closest overtakes will not lie with cyclists themselves, and instead we should look to changes in infrastructure, education or the law to prevent drivers getting dangerously close when overtaking cyclists.’

It’s worth thinking about what actually causes accidents, Walker adds. ‘There are only three possible reasons a motorist could hit a cyclist: 1 Failure to spot the cyclist; 2 Saw the cyclist but misjudged the manoeuvre; 3 Deliberate aggression. In the best of all possible worlds, hi-viz could only ever address the first. The fact it doesn’t seem to fix things suggests that most collisions happen for reason number two.’

So should you wear fluoro? The science says it’s more noticeable to the eye but, in the complex world of riding on the road where you are dealing with a variety of human factors, it is not proven to protect you. The bottom line, though, is a bit of fluoro never hurt anyone.

Why Traffic Studies Make Our Cities Worse For Everyone

If the goal is that all development should never increase road congestion, car-centric, sprawled-out cities will never be able to change.

Each time a major building development is planned, a traffic study is carried out. The surrounding roads are redesigned to ensure we can still get around like we could before the project was built, and the costs are shouldered by the developer, not the state. Sounds great, right?

In fact, traffic studies, and the roads they end up creating, make our cities much worse for pedestrians, for anyone not using a car, and for anyone living nearby. They also end up costing the state money, and bring extra congestion to existing highways and city roads. Let's see why.

When a new development is proposed, typically the developer must do a traffic studies, or traffic impact assessment. Because traffic engineers are engineers, they usually over-engineer, and this, combined with the data from the assumptions, leads to huge intersections designed never to choke up. As you can imagine, that's great for cars passing through, but terrible for anyone else.

As the traffic blog Urban Kchoze puts it:
Huge intersections like these tend to result in high-speed travel during most periods of the day when it is not congested, creating noise pollution and having the potential for very dangerous crashes ... Their surplus capacity may also induce more vehicle traffic than would have happened otherwise. Finally, their huge size makes them a barrier to non-motorized travel.

Instead of a relatively small, slow-flowing road that can be crossed, we end intersections with 130-foot (40m) crosswalks, discouraging pretty much anyone sane from trying it. This leads to a self-fulfilling prophecy—future traffic studies assume that all travel is car-based, resulting in more road systems that can only be navigated by car.

This method also leads to sprawl. Because developers have to pay for any redevelopment of the roads, they favor building in areas that need little change. Developing in urban centers costs a fortune when you have to re-route or widen roads, so they look to the edge of town, where the roads aren't yet near capacity.

The irony is that development in central urban areas wouldn't necessarily increase road traffic, because many of the visitors would arrive on foot, or using existing public transit. But by developing at the edges of the city, these developments increase car use, further marginalizing alternate transport methods.

As long as our traffic studies remain so biased towards avoid any possible delay for car users, at the expense of everything else, achieving something better will remain impossible.
Source: Fastcoexit.com

John Cleese Opens 'Silly Walk' Walkway in Eindhoven

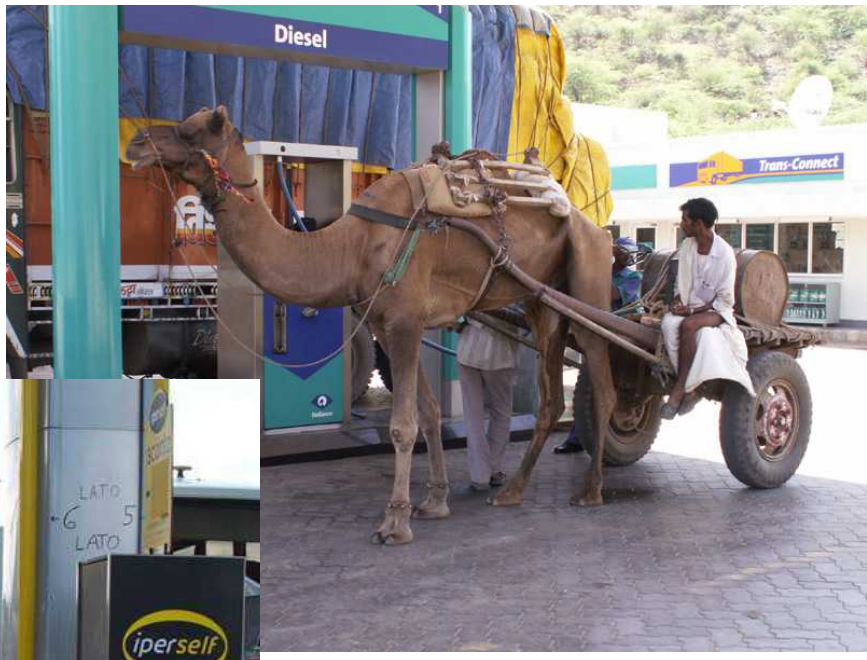
Hundreds of fans gathered recently to see British comedian John Cleese open the "silly walk" tunnel, or the Dommel tunnel, in Eindhoven. The 130m long wall of the tunnel boasts a mural of Monty Python's silly walk.

Studio Giftig from Veldhoven was commissioned to paint the mural. When the job was done, they crossed their fingers and approached John Cleese, who formed part of the British comedy group and performed the original silly walk, for the opening.

As luck would have it, Cleese happened to be in the Netherlands and his management was very willing to have him make a detour. The only condition was that Cleese not be asked to do the silly walk – old bones does not allow it anymore, according to the broadcaster.

Photo Competition

This edition is all about unusual sights at petrol stations. Seen anything more unusual? Send photos to: daniel.newcombe@at.govt.nz



3D painting aims for improved road safety in India

You probably don't think much about speed bumps until you see one coming up, forcing you to slow down and endure that telltale thump.

India is the country with the grim distinction of being world leader in road accident deaths, so they are trying to get creative with 3D painted speed bumps. The Indian government had recently removed all regular speed bumps, after discovering they can pose a serious threat to high-speed drivers.

The first speed bump on record, in New Jersey, was noted in the New York Times in 1906; researchers started assessing the risks more recently. And over 100 years from the first bump, the first illusory versions started being tested.

In 2008 Philadelphia put down 3D decals as part of a punny campaign called "Drive CarePhilly." Everyone's first thought on these, it seems, is that they won't have much lasting effect: Once drivers know it won't damage their car to speed over them, they'll stop slowing down, goes the logic. That proved true of Phoenix's similar experiment. "Initially they were great, until people found out what they were," a Phoenix Police traffic coordinator told AZ Central in '08.

Canada tried to find a way around those diminishing returns by using extremely creepy 3D children who look as though they're playing in the middle of the street. "The girl's elongated form appears to rise from the ground as cars approach, reaching 3D realism at around 100 feet, and then returning to 2D distortion once cars pass that ideal viewing distance," Discover Magazine wrote of this effort in 2010.

There hasn't been any further reporting on the matter, so either they're continuing to work really well or citizens were so up in arms that the government tore them up and apologized for traumatizing everyone.

The 3D speed bumps they're experimenting with in India are more attractive, seemingly made with Instagram in mind. As Mashable writes, "In Ahmedabad for instance, a mother-daughter artist duo has painted 3D crosswalks in the first few months of 2016." But aesthetics are surely last on their minds.

The speed limit in the country where the number of cars has ballooned to 75 million from just 5 million three decades ago is 100 kilometers per hour. And the Times of India reported that nearly 5,000 lives were lost in crashes that resulted from driving over physical speed bumps, making their illusory counterparts a much more desirable alternative.

Fiji road safety signs, from Ngaire Atmore, Hamilton City Council

Branch updates

Auckland/Northland Branch
Committee Updates
Carol Ma has resigned from the IPENZ Auckland Branch Committee to take up a new role in the Waikato region. All the best Carol and thanks for your contributions to the committee!

Wrap-Up of Recent Events

The Auckland/Northland Branch hosted a technical group meeting on 25 May 2016 titled Congestion Pricing and Travel Demand Management for Auckland.

This was presented by Dr Doug Wilson, Transportation Engineering Group Leader, The University of Auckland. The meeting was held as a joint event with Engineers for Social Responsibility (ESR).

The presentation covered a Centre for Infrastructure Research (CIR) project undertaken for Auckland Transport on Travel Demand Management measures and specifically the implementation of road and congestion pricing schemes for a number of cities internationally.

Up-Coming Events
Client Lead Health and Safety in Design
Currently leading the NZ Transport Agency's Zero Harm team, Martin McMullan has introduced a dynamic 'real-world' approach to health and safety in the roading industry.

With more than 15 years' working in the engineering and construction industry, Martin has a well-rounded understanding of what safety means in practice.

Martin's experience, combined with a passion for smart technology, means that he has an innate ability to overcome complex health and safety challenges using practical, innovative solutions.

Martin will be presenting on client lead health and safety in design. Martin will also discuss the potential implications of the new Health and Safety Legislation for the roading industry.

When: Tuesday 21st of June at 5pm
Where: University of Auckland, Newmarket Campus, seminar room (902-402) above reception

Boston's Waterfront Renaissance and South Station Expansion
Boston's world renowned "Big Dig" accomplished many things besides re-knitting together the urban fabric of the city, constructing a landmark tunnel, freeing up downtown open space, and restoring sight lines.

It also linked Boston's downtown to the previously neglected historic waterfront in South Boston with both a new tunnel and new rapid transit service, not to mention physically reuniting the two areas courtesy of the disappearance of the elevated Central Artery freeway.

This public works project truly spurred the rebirth of South Boston Waterfront/Seaport District.

Bruce Kaplan, from Central Transportation Planning Staff, is intimately familiar with both Boston's Waterfront renaissance and recent efforts to rehabilitate South Station.

He will discuss the regeneration of the waterfront as well as the progress of the South Station Expansion project, whose Final Environmental Impact Report is presently under preparation.

When: Wednesday 29th June 1pm (bring your own lunch)
Where: Council Chambers, Auckland Town Hall

Pedestrian and Cycling Interventions – Learnings from Edmonton
This IPENZ Technical Group meeting will be led by Ryan Martinson, Sustainable Transportation Specialist with Stantec, based in Edmonton, Canada. Details will be confirmed and circulated to members at a later date.
When: Tuesday 12th July at 5pm
Where: Council Chambers, Auckland Town Hall

Waikato/Bay of Plenty Branch
The NZPI and IPENZ TG branches of the BOP/Waikato region organised a quiz night for members in Tauranga on Thursday 9th June (photos below).

Branch updates

This was the first joint social event in the BOP for a while and proved to be a great success. With 48 attendees across 8 teams from a mixture of consultancies, local and regional councils, there was a buzz in the air and it was a competitive night.

It was a close call at the end by only half a point, with a speed round to determine the winners. First prize went to 'Non-Complying' (BOP Regional Council team) and second prize went to 'The Dregs' (mixed team).

Thanks go out to AECOM for hosting and sponsoring the food and drink, and to Cathy Stevenson for running the quiz with some fun and challenging rounds!

Central branch
The great 2016 IPENZ transportation debate
The IPENZ Transportation Group Central branch is hosting a debate on whether "The function of the urban transport network is more important than how it feels".

Come and hear our panellists try and convince you one way or the other:
Chair: Glen Prince
Simon Kennett, Cycling
Isabella Cawthorn, Cycling
Guy Marriage, Urban Design
Sam Bourne, Urban Design
Dave Dunlop, Transportation
Adam Nicholls, Transportation

Where: The Guest Room, The Southern Cross, Abel Smith Street
When: 15 June 2016, 5.30 drinks (cash bar) and nibbles for 6.20 start
RSVP: Lesa.Bradley@jacobs.com by 10 June

Gil Penalosa coming to Wellington
July 5th
4pm, Film Archive
84 Taranaki St

The NZ Transport Agency, in partnership with IPENZ and Cycle Aware Wellington, is hosting Gil Peñalosa, "the Pied Piper of sustainable transport."

Gil advises decision makers and communities around the world on how to create vibrant cities and healthy communities for everyone regardless of age, gender and social, economic, or ethnic background.

His focus is on the design and use of parks and streets as great public places, as well as sustainable mobility: walking, riding bicycles, using public transport, and the new use of cars.

Canterbury-Westcoast Branch
In April we held a 'Local Speakers from the Conference' evening (photo below left). This included; 'Finding the right green road for cycle routes' - Mike Smith (MWH); 'Quantifying the likelihood of barrier strike maintenance' -

Carl O'Neil (Abley Transportation Consultants) and 'Planning and design for cycling: A framework of best practice guidance' - Megan Fowler (ViaStrada).

On the same evening we presented an IPENZ Transportation Group prize for the University of Canterbury "Traffic Engineering" course and a traffic-related Honours research project to recipient Jeremy Gall (photo below right). Thanks to Aurecon for the venue.

On June 2 we held an event in conjunction with the Urban Design Forum, this was a presentation on the new Christchurch central city 'Streets and Spaces Design Guide', by Tim Cheesebrough, Dhanesh Amerasingam (Christchurch City Council), Melizza Morales-Hoyos (CERA's Christchurch Central Development Unit (and now works for Otakaro Limited)) and Nigel Harris from the Matapopore Trust.

We also invited NZPI and NZILA to join us as we are all involved in the planning, design and delivery of streetscapes. Thanks to the CCC for the venue.

Southern branch
Will be thinking about hosting the 2018 conference in Queenstown.

Roundabout of the month

We may have already shown this one but it bears repeating. The need for the umbrella remains unclear.
Seen a better one? Email daniel.newcombe@at.govt.nz

Caption competition

This edition's photo comes from a Vietnam correspondent, showing how some routine utility maintenance within the road gets done with a remarkable absence of road cones. Surely it warrants a caption. One suggestion has been made. If you have any other suggestions, send it to: daniel.newcombe@at.govt.nz

flow
TRANSPORTATION SPECIALISTS

Vacancy: Transportation Engineer

Flow Transportation Specialists are seeking a Transportation Engineer to join our vibrant office in Ponsonby, Auckland.

The role is an ideal opportunity for a transport engineer with two or three years of experience in a transport engineering environment. Given the varied nature of our projects, we can offer a superb opportunity to learn and develop a wide range of skills.

For more details of the role, visit www.flownz.com

If you believe you have the skills and experience to be successful in this role, please send a cover letter and CV to maria@vervemarketing.co.nz or call Maria to discuss on 021931164

SH20 Waterview update

Work has started on the pavement works to construct the extension of State Highway 20 in the southern works area of the tunnel project. After the removal of spoil building, segment yard and Alice tunnel boring machine (TBM) parts from the Southern Approach Trench sump, the Well-Connected Alliance (WCA) have moved to establish the motorway from the tunnels to Richardson Road overbridge – a 1.5 km stretch.

After excavation our specialist team move in to construct the structural layers of the pavement before coming back later on to add open graded porous asphalt (OGPA) on top, a mandatory surfacing course for state highways in New Zealand, to complete the motorway pavement.

Our team working on the Hendon Footbridge are making good progress on its construction with the bridge deck almost complete. The 300 metre long footbridge, which will span over State Highway 20, is a pedestrian link to reconnect the local communities of Owairaka and New Windsor, split by the new motorway that is part of the Waterview Connection.

Our team has installed the northern and southern sections of the main deck after the successful installation of the 110 tonnes arch in December last year. Work on installing the supporting steel cables, lighting and handrails on the bridge will occur over the next few months. The Hendon Footbridge will connect to the southern shared path and new sports fields at Valonia Street and Barrymore Road. It is due to open in early 2017.

With the majority of tunnelling operations successfully completed – both tunnels finished, all 16 cross passages built and Alice TBM leaving the project. Our world class tunnelling team are progressively moving on to other projects with our respective Well-Connected Alliance partners.

In their place, the WCA has assembled an equally competent Mechanical and Electrical (M&E) team to carry out the fit-out for both tunnels, Southern Ventilation Building (SVB) and Northern Ventilation Building (NVB). At present the M&E team number around 160 people and will eventually be 200-strong including office support staff.

Their scope of work encompasses just about everything that will make the tunnels safe for drivers – painting the roofs and walls, installing the deluge water system, fitting cable trays and cables, and putting in the lights, ventilation jet fans, signage and CCTV cameras. Last month our M&E team switched on the high voltage power inside the SVB, to supply and control power, communications and control systems to the southern half of both tunnels.

To achieve this feat, our team have had to complete extensive installation of four main electrical switchboards, six distribution transformers (three shown below), 252 batteries that will feed a UPS (emergency power supply), two rooms of high voltage

switchgear plus a server room and over 10 kilometres of cabling in the SVB alone.

The last of four ramps to be constructed as part of the Great North Road Interchange is close to the finish line.

12 of 15 beams on the 481 metre long ramp which crosses over Oakley Creek, SH16 westbound on-ramp and two motorway lanes.

All beam placement for ramp two occurs at night and following its completion, our team will build the northern abutment approach to connect ramp two to SH16 westbound. The connection from ramp two to SH16 westbound will have vehicles driving on two new designated lanes being constructed as part of the Causeway Upgrade project.

This will mean that vehicles will drive straight onto SH16 westbound as they come off the ramp without having to merge with other traffic. Dennis, the 90 metre long gantry specifically designed and fabricated in Italy for this project, will leave the project at the conclusion of ramp two construction. Along with tunnels and the three other ramps on the Great North Road interchange, ramp two is expected to open in early 2017.

Pavement work inside the southbound tunnel rolled ahead last month. Two eight tonne steel rollers and a specialist pneumatic tired roller (PTR roller) are just a few of the machines being used to compact the road surface.

Site Engineer Bradyn Church says that pavement work inside both tunnels will occur in three phases, with the total area paved 209,600 square metres. “Phase one and two consists of laying aggregate and asphalt from the halfway point of the southbound tunnel to the northern portal before returning to halfway and working to the southern portal.”

“The final phase is completing pavement of the northbound tunnel all at once,” says Bradyn. Road side barriers have been installed along the sides of the southbound tunnel, which resembles a tunnel that is soon ready to carry vehicles.

Similarly to the pavement works for the bridges and SH20 extension, an aggregate drainage layer and three layers of structural asphalt is laid for the tunnel road. However open graded porous asphalt (OGPA) won’t be laid inside the tunnels as the tunnel is watertight and won’t be affected by weather.

“With no rain in the tunnel the OGPA is not required for aiding drainage of water off the pavement surface,” says Bradyn. “As many as fifteen crews are working underground. Coordination with these teams has been crucial to get them to complete their work before we could start paving.” Pavement work for the tunnels is scheduled to be complete by late winter. Road markings and motorway signage will be installed prior to the opening of the tunnels in early 2017.

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

Northern Works Area:

1. Alford Street Bridge – part of Waterview Shared Path
2. Northern Ventilation Stack
3. Northern Ventilation tunnel
4. Re-alignment of Great North Road
5. Waterview Reserve rebuild – skate park, BMX track and improved heritage area.
6. Hoist Building
7. Northern Ventilation Building
8. Pavement work on the Great North Road Interchange
9. Eric Armishaw Reserve Boardwalk
10. Maintenance and Operations Building
11. Pavement work on Northern Approach.

Southern Works Area:

1. Mechanical and electrical fit-out inside the Southern Ventilation Building
2. Alan Wood and Valonia treatment ponds
3. Pavement works in Southern Approach
4. Hendon Footbridge
5. Valonia Reserve upgrade – two soccer pitches, volley ball court and ablutions block, half size basketball court and skate park.
6. Barrymore street fields and car parking
7. Rehabilitation work on southwestern motorway (SH20)
8. Maioro Road to Dominion Road motorway widening
9. Installation of precast panels along southbound exit carriageway
10. Landscaping works
11. Pavement work on southwestern motorway.

Fleet Seek
By RTL Australia

Who we are

FleetSeek is Australia's leading telematics company specializing in fleet management. **FleetSeek** has been operating in Australia since 2009 but have amassed over 20 years of experience globally.

Our broad range of experiences have allowed us to acquire a comprehensive understanding of the strengths and limitations of fleet management. Our passion involves using this knowledge to help our clients get the most out of their fleet.

What we do

First of all, we consult with our clients to understand their business objectives. Next we conduct a complete evaluation of your fleet to greater understand it's limitations. From here we work closely with our client to offer a solution catered precisely to their fleet's needs, aimed at optimizing efficiency and minimizing any risks involved.

Our Mission

We are devoted to understanding our client's specific needs to ensure that our services are implemented accurately. **FleetSeek** acknowledges that every business has different requirements, we ensure that we have broadly assessed your fleet and clearly grasp your objectives before we make any recommendations. We want to exceed our customer's business objectives through safe and affordable solutions.

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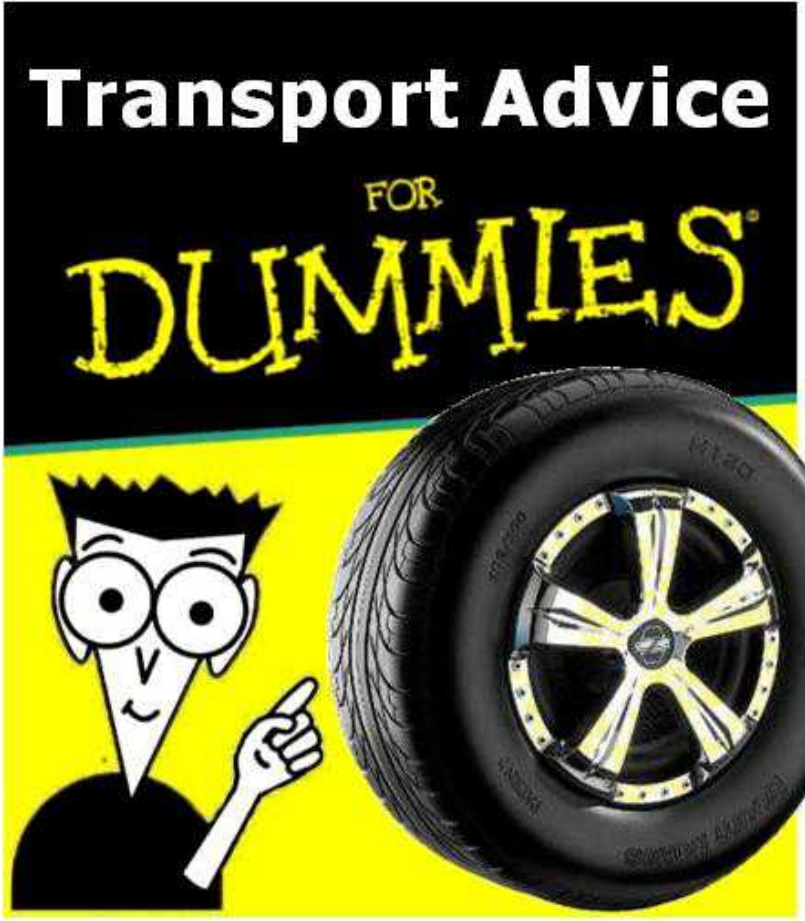


A tongue-in-cheek column on transport matters by The Transport Guy. The contents do not represent the views of the IPENZ Transportation Group, or anyone else for that matter. Follow the advice at your own risk.

Dear Transport Guy
I have a question about the proposal to allow electric vehicles into bus lanes. I think it will incentivise EVs, which is great, but I don't know how we will decide which vehicles will be allowed in. What about hybrids that use both electric and petrol? Will they only be allowed in when running on battery power?
Thomas, Auckland

Dear Thoughtless
You make a fine point. This was clearly well considered before the policy was announced. These things aren't just made up on the spot. EV drivers will be issued with an app - naturally, its a modern world - that will allow them to log in when they are using their vehicles under battery power and then log out when the battery runs low and the petrol engine kicks in. All they need to do is hold their smartphone out the window as they drive down a bus lane so that other drivers and enforcement officers can see that they are legitimately using the lane. They will of course be immediately stopped and fined for operating a vehicle whilst using a mobile device.
~Transport Guy

Dear Transport Guy
This electric vehicle thing confuses me. Sure, EVs don't use fossil fuels and emit nasty stuff, but they still take up space on the road and need parking areas just like any other car.

Why aren't we putting more effort into modes that are not just low-emission but also take up less space, like cycling, walking or public transport?
George, Whitianga

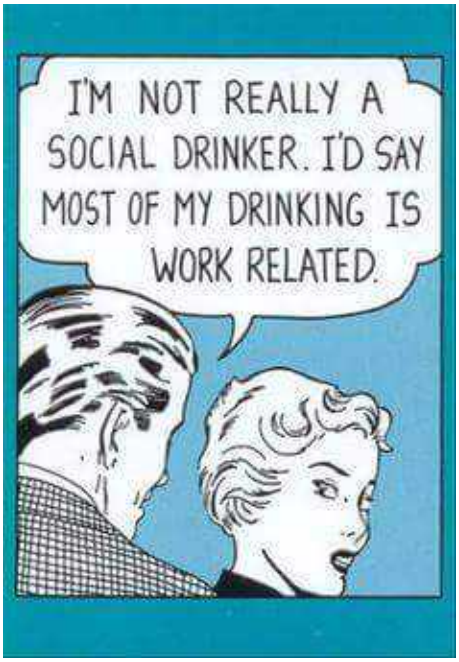
Dear Geospatially Confused
You clearly haven't grasped the purpose of this policy. Whilst reduced vehicle emissions are obviously a nice thing to aim for, in reality this will make bugger-all difference, as most hippy greenies have already bought their EVS and are busy telling their neighbours and colleagues how morally superior they are.

In reality the policy is about experimenting with fragmenting and managing the vehicle system more minutely. First it's EVs in bus lanes, then it's silver vehicles only in lane two of the motorway, then it's only European vehicles are allowed to use even-numbered motorway off-ramps, and it culminates with only four door, hybrid, Japanese-built, 2013-model, dark coloured, slightly muddy, More FM-on-the-radio, Bluetooth-enabled vehicles driven by women who went to university being able to be driven on streets with names beginning with an A.

What happens is everyone is so confused about whether they can drive or not, that they all revert to walking, cycling and using public transport. You see? It's a super cunning plan!
~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...

Group Contact Details



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Kids explain traffic engineering

"Why are stop signs red? Well, red is an angry colour and the the police would be angry if you go through without stopping. If the stop sign was green you could drive through without stopping."