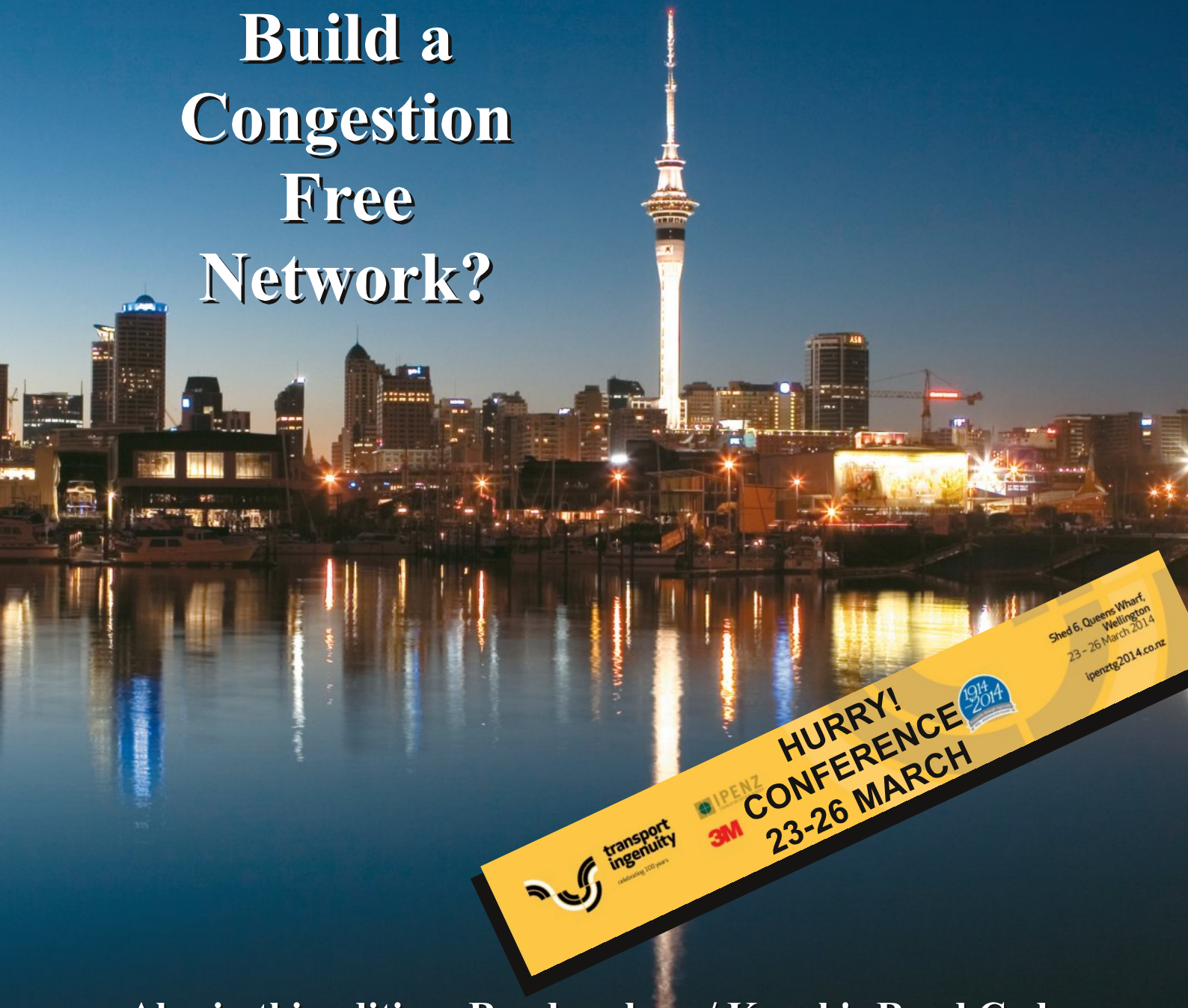
Roundabout

Newsletter of the IPENZ Transportation Group

Issue 139 March 2014

Can Auckland Build a Congestion Free Network?



Also in this edition: Road ecology / Kayak's Road Code
2014 Conference in Wellington / Walking catchments

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Roundabout is the newsletter 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. Contributions are due by the 5th of each publication 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

ISSN 01 1 3-9053

Editorial

So, it turns out that the way to get feedback from readers isn't to provide controversial or topical articles - all it takes is to put an attractive woman on the cover.

Of all the Roundabouts I've been involved in producing over the last few years, the last cover (for Bridget Burdett's 'Women in Engineering' article') has spurred more feedback than the rest of them put together. That's great, it shows people are looking at the magazine. But it's a bit disappointing it takes something trivial like a cover photo to stimulate a response, as opposed to feedback on an important or controversial transport topic (more on that later).

The feedback split predictably into two camps - the blokes who said 'phoar, more of that please!' and the women who questioned the appropriateness of the photo.

I was heartened that some of the female conversations then branched into a discussion of their view of the male-dominated industry (which was what Bridget's article was all about). Some women described being amongst the first women to join a particular company or organisation, and just how far the industry had in fact come.

I did angst over using the photo (and even asked my wife, for comment, if not permission) but the fact that it stimulated those discussions means it was worth it.

Of all the Roundabouts I've been involved with, the last cover spurred more feedback than the rest of them put together.

Back to that important and controversial transport topic. This issue's cover article is the Congestion Free Network (CFN), a remarkable piece of work stemming not from local or central government, but a bunch of transport enthusiasts from the aktransport blog and Generation Zero lobby group.

The difference between this proposal and some other group arguing for a particular piece of transport infrastructure (we all know of lobby group arguing for or against a motorway or road) is the sheer depth and breadth of the material.

Whilst the focus is clearly on public transport, the proponents have delved into the budgets of Auckland Transport and NZTA to show how it could be affordable and deliverable.

Some have dismissed it for being idealogically driven (what transport planning isn't?), whilst others have welcomed it as a breath of fresh air for the transportation planning industry.

Given my day job at Strategy & Planning in Auckland Transport, I'll offer no judgement on the CFN, but I urge those of you with an interest in Auckaland's transport future to read it, consider it and offer an opinion - either to me or on the transportblog.co.nz site. I look forward to the feedback. And welcome to any blog readers who have stumbled across Roudabout and the IPENZ Transportation Group for the first time - we hope you like what you see and you join up to take part in the discussion.

Daniel Newcombe
Roundabout Editor

Chair's Chat

It's only one week to our special annual conference being held in Shed 6, Wellington.

I hope that if attending you will introduce yourself to me if we haven't met, and/or to my fellow national committee members. Everyone can avail of the chance to give valuable face to face feedback to us on the Monday lunchtime but ideally put your concerns to us in writing. Personally I'd suggest grabbing us during the Sunday welcoming events when less hectic, or the Tuesday conference dinner when political activist and heart throb (George someone) might be in town.

Public Transport moves

By George, he even travels by public bus now, something I've been doing in Auckland (November), Christchurch (thanks Glen for the bus card) and Wellington in recent months. So I carry three bus cards on me, but not the rail card. Which leaves me wondering, after 30 years of promises of integrated ticketing in Wellington, and more recently nationally, when will this happen?

Currently a panel of specialist consultants on the matter is being appointed (GETS 41609) but more than that I do not know how things are "hopping" along. Of course, the recent admission that half the posted bus arrival times in Wellington are actually the scheduled times, does not inspire confidence and I have witnessed in all three cities non-arrival of scheduled buses.

Then there is the matter of the squeally new Johnsonville trains. After many years, I caught the midnight one last Friday after my belated MWH farewell shout, since for some strange reason the last bus was around 11pm and the pricey Night Rider starts at 1 am. Well my train stopped down the line due to Telecom or mechanical fault and I fell asleep on the replacement train so maybe the squeals only affect the residents living near the steep, tight sections and not the passengers?

After 30 years of promises of integrated ticketing in Wellington, when will this happen?

Luckily the noise problem should be solved by 2020 according to recent media. And of course major changes are afoot to revamp the rail services and hopefully solve parking at Waikanae and other rail popular rail stations (a new Raumati station is not proceeding).

Another intriguing PT matter relates to quite different Gold Card rules (congrats to my mates Mike and Ken for getting yours) and university student fares throughout the country. My 18 year old son started grizzling about the latter and Wellington may consider granting under 19 year olds a discount fare, which of course even if approved would not apply until after my son turns 19 this Christmas.

What cost democracy, poor optioneering ?

Continuing the PT theme, I have been informed that the Basin Reserve flyover option being heavily debated (at great expense) might now boil down to its utility to allow for improved PT rather than less traffic congestion/travel time per se. Whatever the outcome, I trust that the authorities will honestly evaluate how they can improve and perhaps accept a wider variety of opinion and facts from the (professional) public in the first place?

However, the latest plans relating to the Petone to Grenada link road (for which special Crown funding was designated many years ago) have been ridiculed. As someone who for the past few years has been walking over the hills north of Grenada Village it's almost as if none of the project team have, and Wellington City Council supposedly were not informed either.

My local MP the Honourable Peter Dunne is evidently calling on NZTA to completely drop proposals for the link road "until it gets its act together .. because of its own incompetence" and "these [communications] are inept blunder-buss tactics of the worst type." [Independent Herald, March 5, 2014 p3].

Such strong words from the long serving local MP and senior minister will I hope be taken seriously on their merits in a constructive manner – if anyone wants to comment you have until

the end of March, noting that it is not listed under the www.nzta.govt.nz/consultation page but www.nzta.govt.nz/projects/peton e-grenada-link-road/index.

The FAQ tab also usefully provides a link to another controversial project I previously mentioned, the Wellington to Hutt Valley Walking and Cycling Link, although you need to use the link that works: www.nzta.govt.nz/w2hvlink

Our relationship with the NTZA, MoT and IPENZ

Aha, did anyone spot on page 41 of the NZTA Annual Report 2013 relating to the key result indicator "customer service performance score" that they achieved an "overall rating of state highways of 58%"? This is less than the drop to 59% for Wellington rail commuter satisfaction for 2013, yet was implicitly considered to be a "strong level of satisfaction". As far as I am aware, IPENZ-TG was not one of the customers surveyed and if members (including some within NZTA no doubt) are interested in receiving more details, please let me know so I can request them on your behalf.

So while the public (and some MPs and Councillors) are complaining, we are continuing to liaise in a more positive way with the NZTA and MoT in a number of areas, including the excellent overseas speakers for our Conference. As I write, I have invited Andrew Jackson and Ernst Zollner (who spoke at the Dunedin conference and whom we have met since) to our National Committee catch-up on Sunday before our Conference, as unfortunately no slot was able to be scheduled for them this time around with such an exciting programme.

"these [communications] are inept blunder-buss tactics of the worst type."

We nominated Peter Kortegast to represent us on a cycle working group and congratulate members Axel Wilke and Glen Koorey who have been appointed (refer NZ Herald 28/2/2014) to the NZTA Cycling Panel.

NZMUGS are liaising on a revised EEM model calibration/validation section and SNUG are liaising on a revised National Signals Specification, and I am personally corresponding with the NTZA over the next EEM and the new worksheets they have recently introduced (and for which they have been mildly castigated regarding their inflexibility and state of readiness).

Regarding our relationship with IPENZ, I've been pushing for a comprehensive 2014 centennial events list to be available at our conference, and our branch chairs have been tasked to liaise with IPENZ branches. National Committee has agreed in principle to annually fund a student scholarship and overseas speaker and we (Pravin our Vice-chair in his Treasurer role) are calling for more suggestions for wise use of our funds (besides coming up with great Roundabout captions or photos).

I'll be introducing some of the IPENZ National Office team at our Monday lunch-time conference session so please do come to meet them – you will have 15 minutes to grab some food first.

Feedback

Lastly I want to acknowledge feedback to my last chat from an Upper Hutt member who said that safety projects there were held back, not because of lack of Council funding but rather the NZTA share. I'm always delighted to have feedback and hopefully this Chair's Chat will generate positive debate – contact me at davidwanty@clear.net.nz. And don't forget to post material or links to our Editor to consider – just do it, NOW !

Dave Wanty
National Committee Chair

Keep up to date with IPENZ Transportation Group happenings:
www.ipenz.org.nz/ipenztg
www.twitter.com/ipenztg
www.facebook.com/ipenztg

IPENZ TRANSPORTATION GROUP

IPENZ
TRANSPORTATION GROUP

transport ingenuity

celebrating 100 years

1914 – 2014
Prosperity through Ingenuity
IPENZ - ENGINEERS NEW ZEALAND

3M

We've lined up some really special speakers for this year's Transportation Group Conference in Wellington 23 – 26 March 2014.

Three international thought-leaders are travelling to New Zealand to tell us the future of transportation.

This is a unique opportunity to hear about the latest, cutting edge developments in road safety, transport mobility and also to hear about the Google Driverless Car.

With good representation from local Government and Government agencies, the conference is a great place to network, to share knowledge and to view the latest products in our conference display area.

Dr Soames Job

Dr Soames Job is a world leader in Road Safety. He's advised Governments in almost every part of the world. He's currently advising the Safer Journeys partnership. We all want our transport systems to avoid death and serious injury. Managing speed is a key way to achieve this. We should expect radical changes in this space. Soames will challenge us to understand why speed is at the heart of a safe road system and why we need to focus both on low level speeding and matching speeds to road function.

Sponsored by Safer Journeys

Safer Journeys

Professor Glenn Lyons

Professor Glenn Lyons is a world expert in travel behaviour. For the last decade Glenn has been leading research on transport, society and the three-way links between telecommunications, personal travel and social participation. Glenn is a specialist in the theory of travel behaviour and travel demand management. He will present his research on "Mobility in a World beyond the Motor Age".

Dave Ferguson

Dave Ferguson leads the vision, learning, and mapless driving team for Google's self-driving car program. Dave's talk will discuss the Google Self-Driving Car Project. He will describe some of the underlying artificial intelligence approaches that go into driverless vehicles and some of the potential benefits such vehicles could provide for society.

Sam Johnson

Sam Johnson is a contagiously energetic social entrepreneur focused on finding innovative ways to bring people together, build strong teams and inspire action on the things that matter.

In 2010 Sam started the internationally acclaimed Student Volunteer Army that mobilised 11,000+ students via Facebook to clean up Christchurch following the devastating earthquakes.

Other Plenary presenters include:

Rob Merrifield will explore and expand on the significance of this and some of the impacts on New Zealand, its development, its economy, and way of life since that time, just 212 years ago.

Ron Fisher will provide an informative overview of this critical period of NZ history in the development of NZ's Transport Infrastructure

Geoff Dangerfield,
Chief Executive of
NZ Transport Agency

Steven Newman,
CEO, Eroad

For a full programme visit the website – www.ipenztg2014.co.nz

Shed 6, Queens Wharf, is Wellington's hottest new multi-purpose venue. Located on the gorgeous waterfront, its positioning is perfect for delegates with easy access to the city.

Linked to the TSB Bank Arena by the stunning new 'The Arcade'. Free Wi-Fi will be available to delegates at Shed 6.

Registration Fees	Excl GST	Incl GST
Conference Registration	$943.48	$1,085.00
Life Member Registration	$0.00	$0.00
Retired Member Registration	$430.44	$495.00
Single Day Registration	$565.22	$650.00
Exhibitor Registration *	$586.96	$675.00
Non IPENZ TG Member Surcharge **	$120.00	$138.00

* Excludes Social Function tickets

** Members of IPENZ, Trafinz, ITE ANZ, RTSA, AITPM and CILT are excluded from this surcharge.

Visit www.ipenztg2014.co.nz to register.

Great Technical Tour

Visit the Memorial Park Tunnel Tour a public space initiative to put SH1 into a cut-and-cover tunnel and construct a new public park over the road immediately north of the National War Memorial. This tour allows unprecedented private access to the tunnel construction site, guided by staff working on the project. Learn about the background to the project, the design features and the construction methods used. An afternoon tea will also be provided, followed by transport to the welcome event at Zealandia.

Geocaching at Zealandia

Experience geocaching at Zealandia, a venue with a unique conservation story, that shows New Zealand's amazing natural heritage. Drinks and canapés will be served between 6:00 and 7:30pm; with the Mayor of Wellington City Council, Celia Wade-Brown formally welcoming delegates to Wellington at 6:00pm. Food stations for dinner will open at 7:30pm and for those who are taking part in the kiwi and tuatara hunt a dinner box will be provided.

Famous People from the past 100 years

Famous People from the past 100 years is the theme for the conference dinner, which enjoys an outstanding reputation. St James Theatre built in 1912, is a magnificent theatre, registered with NZ Historic Trust.

Tauren
Road Safety Equipment

3M

Updates

IPENZ Code of Ethics Review – have your say

Since April 2013 IPENZ has been undertaking a review of the codes of ethics for Chartered Professional Engineers and IPENZ Members. The review has been undertaken by a working group reporting to the IPENZ Board.

The review is now at the stage where a draft 2014 code of ethics has been developed that is common for both Chartered Professional Engineers and IPENZ members, and guidelines drafted to help interpret the code. The draft code contains a number of changes to the current ethical obligations and feedback from both key stakeholders and engineers will be important when refining the documents.

As a Member of IPENZ and/or a Chartered Professional Engineer you are invited to review the following documents and provide feedback.
- Draft 2014 Code of Ethics (http://tinyurl.com/ipenzethics)
- Guidelines to Draft 2014 Code of Ethics (http://tinyurl.com/ipenzguidelines)

To assist, a Consultation Paper is provided that explains how the review has been undertaken, what changes are proposed and why certain obligations have been included (or removed) from the code.
-Consultation Paper – Review of the IPENZ and CPEng Codes of Ethics (http://tinyurl.com/ipenzconsult)

Your feedback is critically important and can be provided using the Code of Ethics Feedback online survey. Take the survey - http://tinyurl.com/ipenzsurvey

Your feedback will further guide the review working group before the code of ethics and guidelines are finalised and presented to the IPENZ Board and Chartered Professional Engineers Council for approval. The code of ethics places obligations on all Chartered Professional Engineers and Members of IPENZ. They will affect you and it is important you have your say.

IPENZ ENGINEERS NEW ZEALAND

What's a sharrow?

A 'sharrow' is a shared-lane marking to indicate a shared lane environment for cyclists and motorists. In a New Zealand first, Auckland Transport is undertaking a 12-month trial of 'sharrow' road markings at five locations across Auckland.

The distinctive stencil-style road markings have been used overseas to improve cyclist safety and promote better road-sharing.

Sharrow markings help to position cyclists on the street for better visibility and clear of hazards such as car doors. They can also be used to mark routes for cyclists to use.

AT will be conducting video recording at the different trial locations, as part of a review of road user behaviour. Along with user surveys, this will help determine whether AT will introduce sharrows in other locations.

ITS Asia Pacific Forum, Auckland

ITS New Zealand will be hosting the 13th ITS Asia Pacific Forum. Over three days, from 28th to the 30th of April, Auckland will be hosting industry delegates, speakers and exhibitors from across the region and around the world.

ITS New Zealand invite you to join them at this prestigious event. An opportunity to hear the latest ideas, there will be over 80 papers presented, the newest products and services exhibited and of course networking opportunities for you and your colleagues.

Earlybird registrations close soon, whilst there are options for students too. There are only a few exhibitor spaces remaining for businesses and organisations who may wish to be involved. Please visit the dedicated website for further information and online registrations. www.ITSAsiaPacificForum2014.co.nz

Len gives it the thumbs up

Updates

Garson Bell 1950-2014

Garson Stanford Bell, BE Civil, MIPENZ, CPEng, IntPE, MITE
19 October 1950 – 12 February 2014

Members of the IPENZ Transportation Group will be saddened to hear of the sudden death of Garson Bell, Principal Consultant at Resolve Group Ltd.

Garson studied civil engineering at the University of Canterbury graduating in 1975. Early in his career he worked in local government then spent ten years working for the Hong Kong Government. Upon his return to New Zealand in 1990 Garson held a number of senior positions working on major Auckland projects for Works Consultancy Services and Serco Group New Zealand.

Garson was a founding member of Resolve Group when it started in 2002. As a Principal Consultant and member of the senior management team, he led the provision of contract procurement, Engineer to the Contract and many other consultancy services within the roading, civil engineering and rail industries.

His eye for detail and commitment to achieving high standards made Garson an excellent coach and mentor to younger engineers.

He was an active member of IPENZ and the Auckland Transportation Group who encouraged colleagues to participate in the industry in the widest sense.

He was genuinely interested in all things engineering and will be remembered for his loyalty, hard work, entertaining work stories and sense of fun.

Garson will be greatly missed by his friends and colleagues at Resolve Group and across the wider engineering industry.

Garson is survived by his wife and three adult daughters.

NZMUGS 2014 conference Sept 8-9

The NZMUGS Group 2014 conference is to be held on 8-9 September 2014 at the Rydges Latimer in Christchurch. NZMUGS will soon be calling for papers and welcome all practitioners to submit their interest in presenting.

This year there will be two type of presentation slots - a standard slot of 15 minutes with 5 minutes to field questions from the audience, and shorter "quick fire" presentations of 10 minutes.

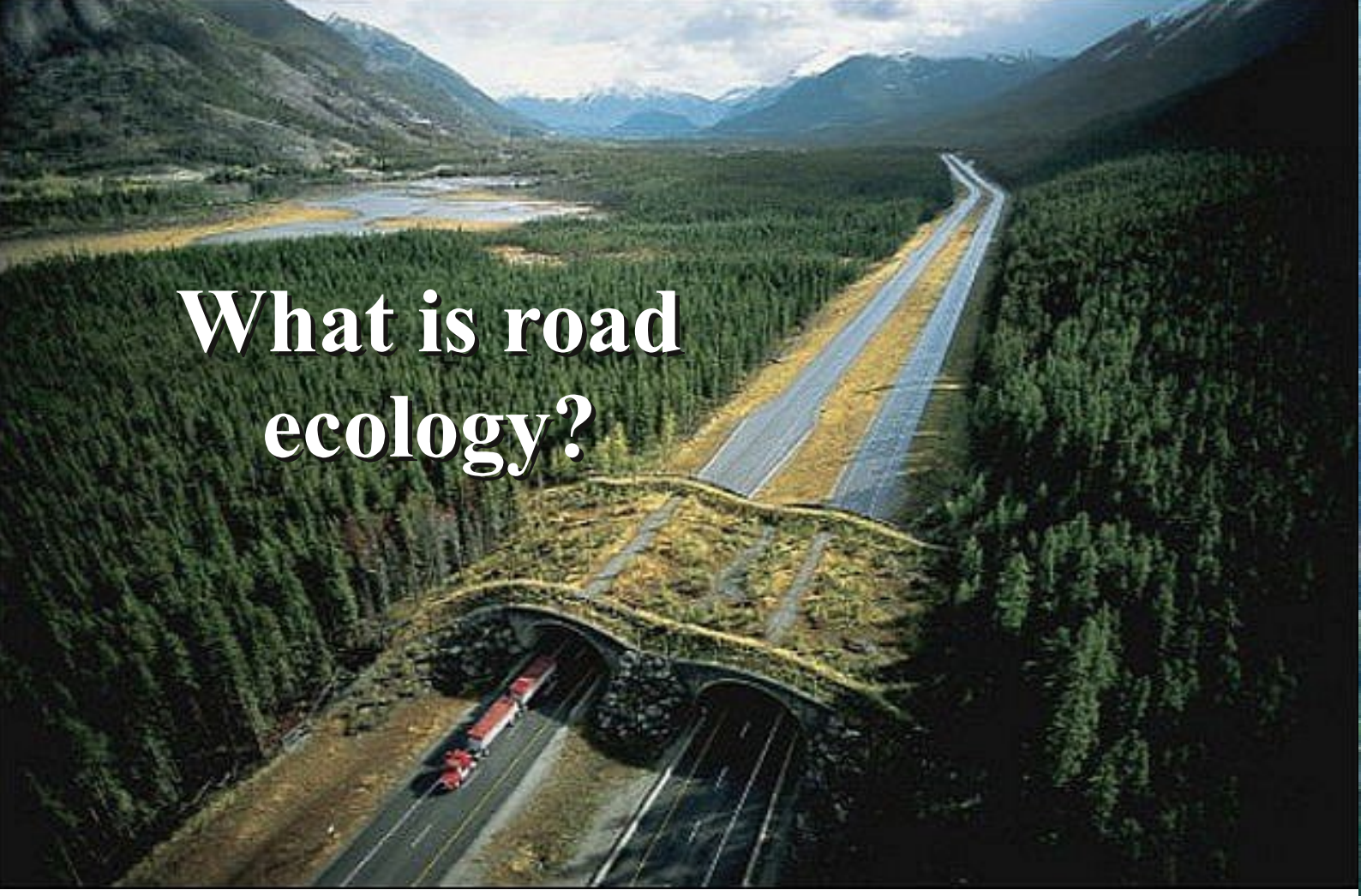
These "quick fire" sessions are a new addition to the conference and are intended for young professionals and students to present to the industry in a non-threatening environment. As in previous years there will be prizes for best presenter and best young presenter. If you have any questions please contact Gavin (NZMUGS Administrator): gavin.smith@opus.co.nz

Survey on high productivity vehicle offences

The NZ Transport Agency and the Ministry of Transport are seeking submissions on proposals for changes to the offences and penalties regime for overweight and high-productivity motor vehicles.

Changes are proposed to Land Transport Rule: Vehicle Dimensions and Mass 2002 and the Land Transport (Offences and Penalties) Regulations 1999.

This link (http://tinyurl.com/HPVsurvey2014) will take you to a consultation document that sets out the background to the proposals and details of the changes that would be made. The consultation material includes Questions and Answers, an online submission form and information about making a submission.



What is road ecology?

Australasian Network for Ecology and Transportation (ANET) is a not-for-profit organisation that aims to promote best-practice in road ecology and the design of environmentally-sensitive linear infrastructure.

The organisation provides a centralised location for the latest evidence on the design, construction and evaluation of environmentally sensitive roads and linear infrastructure. ANET works towards environmentally sensitive roads that will reduce the number of wildlife-vehicle collisions, increasing motorist safety and reducing costs for insurance claims and vehicle repair. This will also better conserve biodiversity by effectively minimising the negative environmental impacts (e.g. reducing the rate of road kill, allowing wildlife to move throughout the landscape)

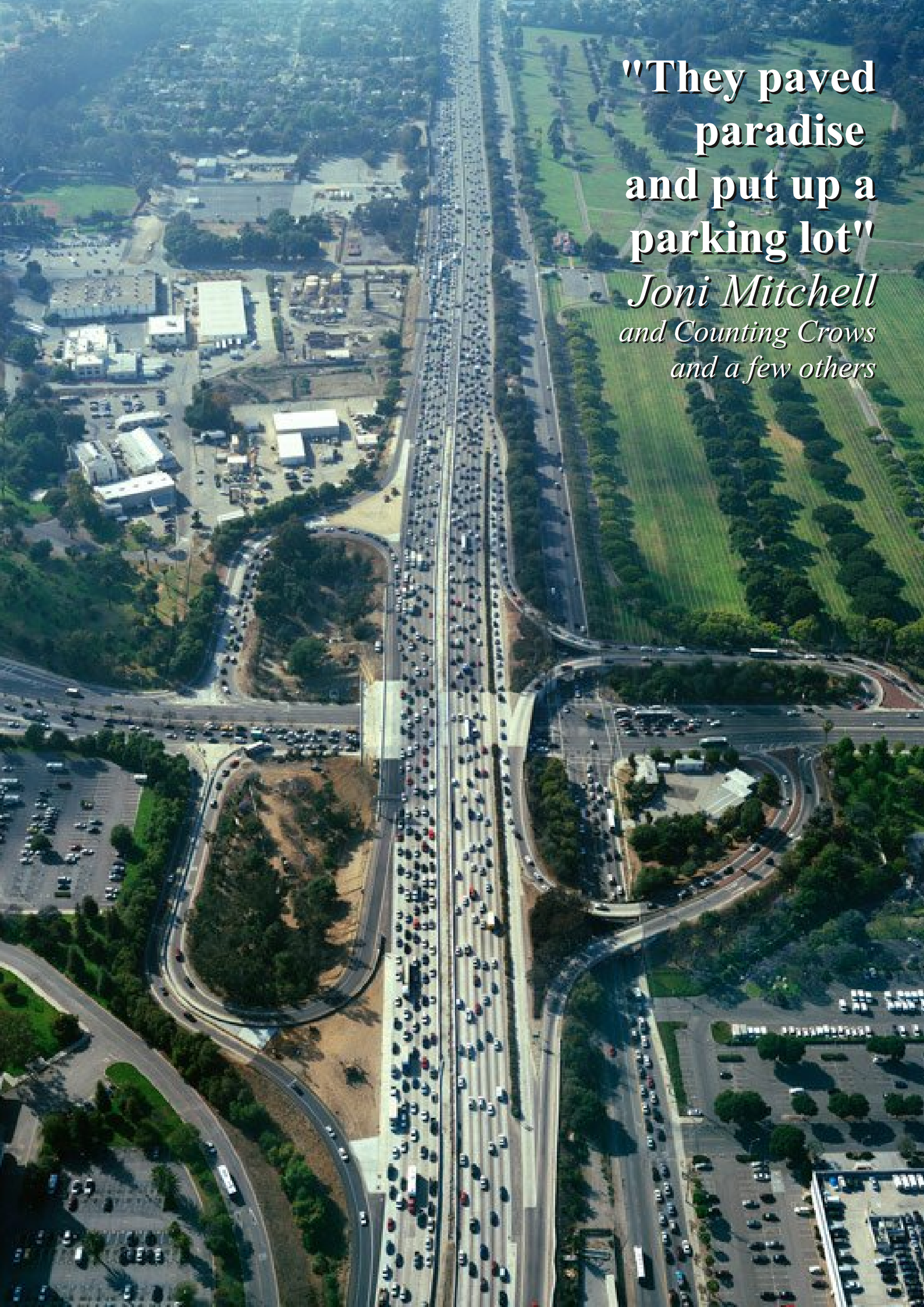
Saving money by ensuring the most efficient and effective methods are considered and implemented early in the planning process, and ensuring unsuccessful measures are not repeated, environmentally-sensitive roads will be cost-effective.

ANET are a professional network dedicated to the research, design and implementation of environmentally-sensitive linear infrastructure (rail, roads and utility easements) across Australasia. ANET acts as a hub, providing links between government, industry, scientists and community groups to ensure all have access to current evidence and best practice

The inaugural ANET Conference wil be held in Coffs Harbour, New South Wales, Australia from 20th – 23rd July 2014. The conference will include talks, field trips and the opportunity to network with industry, government and research professionals from Australasia and across the globe. The conference field trip will visit sites along the Pacific Highway that demonstrate the evolution in best-practice road planning, design and mitigation in New South Wales and Australia, including fencing, underpasses, landbridges, glider poles and canopy bridges.

If you are interested in joining these ANET or the work it does, visit: www.ecoltrans.net

ANET
AUSTRALASIAN NETWORK FOR ECOLOGY & TRANSPORTATION


"They paved
paradise
and put up a
parking lot"
Joni Mitchell
and Counting Crows
and a few others

The Congestion Free Network

Matt Lowrie from transportblog.co.nz writes on the Congestion Free Network, a fresh view of transport planning for Auckland, generated (in conjunction with Generation Zero) from outside of the usual local government processes.

Auckland can be one of the best cities in the world.

We have some of the best ingredients that any city could hope for with a stunning natural environment and a decent climate. While our natural environment is superb, the one area that's let us down has been our urban environment, the way that people interact with the city and its many suburbs.

In recent years we've started to see a change to this and recent projects, as well as some underway, will help to vastly improve the city. We've built some world class public spaces, like North Wharf and the shared spaces that have become destinations in their own right.

By drawing in people they've also been successful economically driving increased retail spending, for example hospitality spending in Fort St increased a massive 400% following the shared space upgrade.

On top of that we're also overhauling our public transport systems, with electrification, integrated ticketing/fares and we're going to be getting a vastly improved bus network that provides frequent routes all across the city.

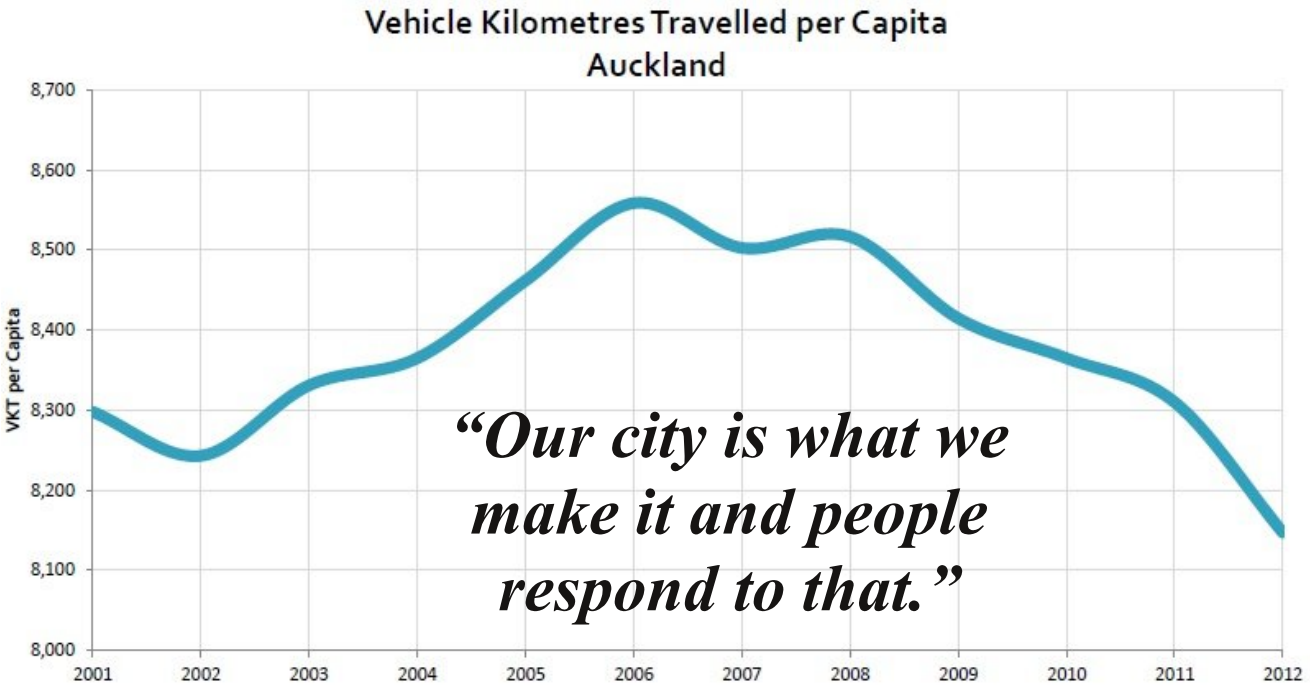
It's these kinds of public realm and transport projects that are helping to make Auckland a more liveable city.

The term liveable city has largely been owned by Len Brown but we want to take the term back. All over the world it is used to describe cities that are vibrant, pedestrian-friendly cities that have good multi-modal transport systems and booming economies.

By making Auckland a more liveable city I believe that we can take it from being one of the best cities to being the best.

The good news is that it can largely be done through the re-prioritisation of existing plans. Even better is that along with improvements happening faster, we believe it can also be done cheaper too. We've put together plan for doing this and we call it the **Congestion Free Network** (CFN).

Overall the CFN enables three fantastic outcomes; it increases liveability and productivity for the whole city, makes better use of our existing infrastructure and solves the problem of the funding gap that could require up to an extra $15 billion to be raised.



"Our city is what we make it and people respond to that."

Before going into more detail about the CFN it's important to highlight a few key trends that we're seeing:

• Car use is falling – people are actively choosing to drive less and many of the vehicle use metrics are below what they were over a decade ago.

• Public transport (PT) use is rising – the comparably modest improvements to PT over the last decade have seen PT use dramatically increase. Access to the Auckland CBD in the morning peak by PT has increase by 56% since 2001, while access by car decreased by 15%.

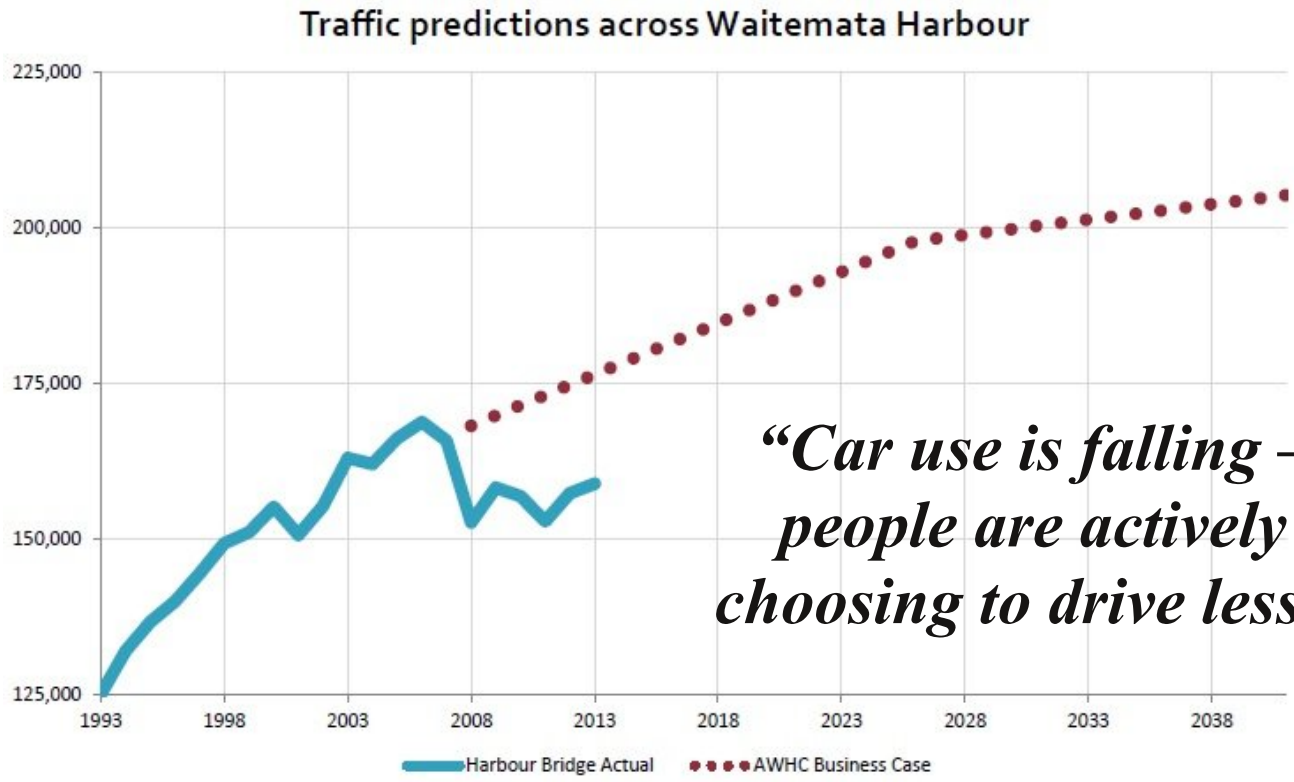
• Walking and cycling are rising – People are continuing to increase the use of active modes and cycle counts have been showing year on year growth of 8% or more for the last few years.

Importantly these trends aren't unique to Auckland and have been seen in many other cities all over the world.

One of the big drivers of these changes are generational differences. Put simply, young people – known as the millennials – are behaving quite differently to the generations that preceded them.

One of the big differences identified has been the use of technology and communication, driving is now a distraction that prevents people from social media or the internet.

The Congestion Free Network is about focusing on taking what has been working in Auckland in recent years - as well as for decades overseas – and expanding on that. The investments in the rapid transit system have shown that if a high quality service is provided, people will choose it, and it helps to free up the roads for those that want to or have to drive.



"Car use is falling – people are actively choosing to drive less."

Outline of the CFN future

By 2015 we will have the bones in place of a good system with superb new electric trains running on the rail network and the northern busway.

2020 sees the most significant and transformative change. The city rail link will have the existing rail network humming with increased frequency, capacity and connectivity.

We've added in a short spur line to Mt Roskill using the existing designation alongside SH20 to help improve connections across the southern isthmus and boost capacity on the inner western line which will have been made much more attractive by the CRL. Electrification of the rail network is also extended to Pukekohe.

The Northern Busway gets extended to Albany, bypassing the bottlenecks north of Constellation, and in the city it is extended to Newmarket.

We recognise that there is still some critical road investment needed – although not to the extent currently planned

On SH16, a busway and the motorway shoulder bus lanes being built as part of the Western Ring Route works creates a high quality corridor from Westgate to the CBD, while a high quality bus service is also added across the upper harbour. In the eastern suburbs, the AMETI busway comes into effect and is extended to Ellerslie and Manukau.

2025 has the Onehunga line extended to the airport, which also helps to connect with the large populations of Mangere and Mangere Bridge, plus the nearby industrial areas. The Northern busway has an extension to Silverdale, the north-western to the growing Kumeu, and in the east another busway connects Howick to Panmure and Ellerslie. Ferry services are also enhanced.

2030 sees rail to the North Shore, possibly using similar technology to Vancouver's Skytrain. The busy Dominion Rd is upgraded to light rail, which also connects in to the Wynyard Quarter.

All of this probably sounds expensive, however luckily many of the projects are already on Auckland Transport's long term plans and so we've been able to cost the proposal using those figures.

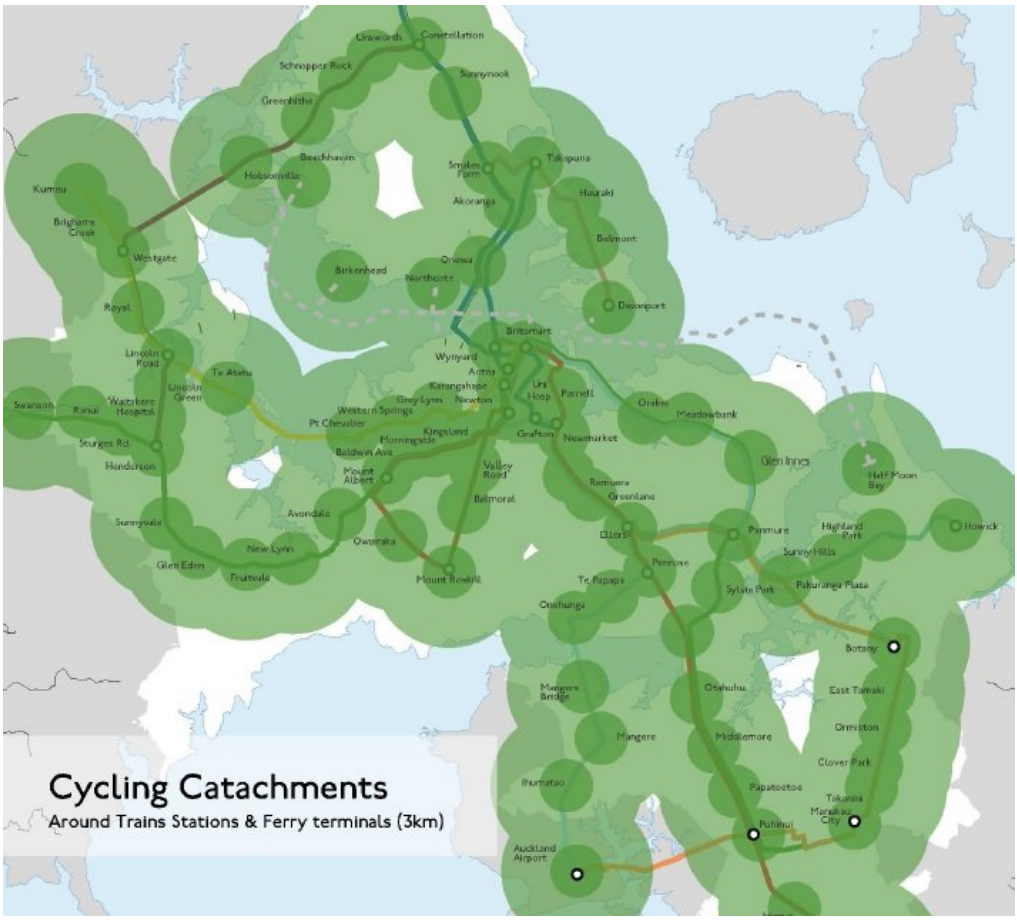

AUCKLAND
THE CONGESTION FREE NETWORK
2020
Constellation
Unsworth
Schnapper Rock
Greenhithe
Hobsonville
Sunnynook
Smales Farm
Akoranga
Onewa
Westgate
Royal
Lincoln Road
Lincoln Green
Waitakere Hospital
Swanson
Ranui
Sturges Rd.
Henderson
Sunnyvale
Glen Eden
Te Atatu
Pt Chevalier
Western Springs
Grey Lynn
Fruitvale
New Lynn
Avondale
Wynyard
Britomart
Devonport
Half Moon Bay
Aotea
Karangahape
Newton
University
Hospital
Grafton
Parnell
Newmarket
Remuera
Greenlane
Kingsland
Morningside
Baldwin Ave
Mount Albert
Owairaka
Mount Roskill
Orakei
Meadowbank
Glen Innes
Ellerslie
Panmure
Pakuranga Plaza
Penrose
Te Papapa
Onehunga
Sylvia Park
Otahuhu
Botany
East Tamaki
Ormiston
Middlemore
Papatoetoe
Clover Park
Puhinui
Manukau City
Auckland Airport
Homai
Manurewa


AUCKLAND
THE CONGESTION FREE NETWORK
2025
Rosedale
Constellation
Unsworth
Schnapper Rock
Greenhithe
Kumeu
Hobsonville
Brigham Creek
Beachhaven
Sunnynook
Smales Farm
Akoranga
Westgate
Birkenhead
Royal
Northcote
Onewa
Devonport
Lincoln Road
Lincoln Green
Waitakere Hospital
Swanson
Ranui
Sturges Rd.
Henderson
Sunnyvale
Glen Eden
Te Atatu
Pt Chevalier
Western Springs
Grey Lynn
Fruitvale
New Lynn
Avondale
Wynyard
Britomart
Half Moon Bay
Aotea
Karangahape
Newton
University
Hospital
Grafton
Parnell
Newmarket
Remuera
Greenlane
Kingsland
Morningside
Baldwin Ave
Mount Albert
Owairaka
Mount Roskill
Orakei
Meadowbank
Glen Innes
Howick
Highland Park
Sunny Hills
Ellerslie
Panmure
Pakuranga Plaza
Penrose
Te Papapa
Onehunga
Sylvia Park
Otahuhu
Botany
East Tamaki
Ormiston
Middlemore
Papatoetoe
Mangere Bridge
Mangere
Ihumatao
Clover Park
Puhinui
Manukau City
Auckland Airport
Homai
Manurewa

We also recognise that there is still some critical road investment that is needed – although not to the extent currently planned – and including that it is estimated to cost $16 billion to 2030. But that's still a lot cheaper than the current plans which would cost around $25 billion over the same time period.

This cost saving is extremely important seeing as the council is about to embark on a discussion about how to raise extra funds to pay for transport projects. By reducing the amount we need to spend, we can reduce or even eliminate the need to raise additional funding.

We also believe that the impact of the CFN can be greatly enhanced by improving how people access stations on the network. Key to that is to make it easy and safe for people to cycle. About 40% of people in the region are within 1km of a station on the CFN however almost all are within an easy bike ride of 3km.



Not only would it improve access to stations but also make it easier and safer for kids to ride to school, something current Ministry of Transport data suggests is a rare occurrence in Auckland, with 0% of 5-12 year old doing so and only 3% of 13-18 year olds.

In some cases this will require officials and politicians to be bold, to remove parking or even traffic lanes. However, we can look to other cities to see impressive results.

New York is one of the cities that has pushed ahead with the roll out of high quality cycle infrastructure. The city is also a good example because the amount of pressure and demands on road space there is at another level to what Auckland experiences.

Our city is what we make it and people respond to that.

If we build a city focused on the movement of private vehicles at the expense of all other modes then that is what we will get. The outcome, like it is now, will continue to be congestion with little in the way of viable alternatives.

If, on the other hand, we prioritise completing the networks for our missing modes of public transport, walking and cycling, we may still have congestion but we will provide people with a realistic choice to avoid it.

What do you think? Send any feedback to daniel.newcombe@aucklandtransport.govt.nz or go to transportblog.co.nz

Generation Zero transportblog.co.nz

Safe System Engineering Workshop 5 - 9 May

On Line Registration - www.conferencebrokers.co.nz - click on Safe System Engineering Workshop and Read More from the home page, for course information and the on-line form.

Only 13 places are left on the current course, scheduled for the Rutherford Hotel, Nelson 5 - 9 May 2014. ONLY 4 WEEKS TO REGISTER by 5 April

Registration, Payment and Accommodation bookings should be completed by 5 April.

Reading Roundabout for the first time?

Visiting from the Transport blog?

Not an IPENZ Transportation Group member yet?

Join up and get Roundabout and all the other member benefits (like invites to branch events on topical transport issues in your area).

Membership is open to anyone with an interest in transportation - you don't need to be an engineer!

Just fill in the form on the following page or go to www.ipenz.org.nz/ipenztg/members to fill it in online.

IPENZ TRANSPORTATION GROUP

APPLICATION FOR MEMBERSHIP

APPLICANT'S FULL NAME: (**Mr / Mrs / Miss / Ms / Dr**)

Preferred First Name: ..... * Date of Birth – for office use only:.....

TELEPHONE (Work/Home): ..... (Mobile): .....

EMPLOYER: .....

CURRENT POSITION (include date commenced): .....

WORK POSTAL ADDRESS: .....

.....

HOME POSTAL ADDRESS: .....

.....

Prefer postal mail sent to: **Home / Work** (delete one)

Preferred E-MAIL: ..... Alternate E-MAIL.....

ACADEMIC QUALIFICATIONS (include Institution and year): .....

.....

Recent Work Experience (include dates) : .....

.....

.....

Are you now, or have you ever been, a paid member of IPENZ? **No / Yes / Pending** (If yes, please provide IPENZ number): .....

Please list membership of any other professional groups e.g. AITPM, ITE.....

Please tick any Transportation Group subgroup you wish to receive communication from:
Signals NZ User Group (SNUG) ☐ NZ Modelling User Group (NZMUGS) ☐

Would you like to receive our Roundabout, our quarterly magazine, by e-mail ☐ or as a hard copy (by post) ☐

PLEASE SELECT YOUR EMPLOYMENT STATUS

Employment Status	Annual Fee	Please select (✓) one
1. Employed	$55.00 ($63.25 incl. GST)	
2. Unemployed	$15.00 ($17.25 incl. GST)	
3. Retired	$15.00 ($17.25 incl. GST)	
4. Full time student	$ 0.00	

You will be invoiced separately by IPENZ.

Send no payment now

Notes: There is an additional IPENZ administration service fee of $45.00 ($51.75 incl. GST) charged to members that do not already pay it as part of their IPENZ membership, except full time NZ engineering students who are not charged. Currently all new members of the Transportation Group receive a free copy of the publication "A wheel on Each Corner" by Malcolm Douglass.

PRIVACY: Please advise if you are **unwilling** to have your name, position, organisation and Transportation Group branch listed on the members' only part of the Transportation Group website by ticking this box ☐

Applicant's Signature: ..... Date: .....

REFERENCE – The Transportation Group is a Technical Interest Group of IPENZ. Please nominate an existing Transportation Group member to act as a referee for your membership application to the Transportation Group. The Group welcomes membership applications from all those interested. If you cannot easily provide a referee then simply send the form in with this section left blank and the National Committee will provide a suitable referee for you.
REFEREE'S NAME: (**Mr / Mrs / Miss / Ms / Dr**) (please print)
By signing as referee, I vouch that to the best of my knowledge, the qualifications and employment status stated are correct and this person is a suitable applicant to become a member of the Group.
Referee's Signature: ..... IPENZ Number: ..... Date: .....

SEND APPLICATION TO: Technical Groups Secretary, IPENZ
PO Box 12241, Wellington 6144
(or email to techgroups@ipenz.org.nz)

Refer to www.ipenz.org.nz/ipenztg
***d.o.b. required for member login (for IT security).**

The 800m circle: does it best represent station walking catchments in Auckland?

Lindsay Wilson, analyst at Auckland Council, investigates the estimated versus observed walking catchment of Auckland public transport nodes.

Introduction

Auckland is a relatively low-density city and a key Auckland Council objective is to reverse this trend by enhancing urban compactness (AC, 2012; AC 2013). The Council policy for a compact city is based on the Transit Oriented Development (TOD) model (Calthorpe 1993; Duany and Plater-Zyberk 1991; Ministry for the Environment 2009).

TODs typically have a centre with a transit station (train station, metro station, tram stop, or bus stop), surrounded by relatively high-density residential development with progressively lower-density development spreading outward from the centre.

Guided by the TOD model, the Auckland Plan identifies a hierarchy of centres that serve as public transit nodes (Table 1). The 10minute/800m walking distance template for walking catchments is based on a 'rule of thumb' practice by New Zealand transportation planners.

In order to validate this planning practice, the Research, Investigations and Monitoring Unit ("RIMU") in the Council undertook a study of walking catchments of a spectrum of town centres listed in the Auckland Plan.

This study may be seen as a simple demonstration of evidence based planning skills planners need. The results are useful in showing how improving the walkability/ permeability of catchment areas can increase catchment areas beyond the 400/800m standard.

The results can be also used to assess investment projects to improve catchment walkability.
(Place Table 1 near here)

Survey Method

Surveys were conducted at three bus stations (Glen Innes, Mt. Albert and New Lynn) along with twelve train stations and five Northern Busway Stations in 2012/ 2013. These were intercept surveys conducted face-to-face, with the questionnaire filled in by surveyors at the train/bus station and a control count obtained to determine the response rate.

The survey team selected relatively high-patronage stations, but with a mix of surrounding land-use conditions to provide a cross-section of station types in Auckland.

Figure 1: Example of a walkable catchment

Source: (Urban Design Toolkit, Min. for the Environment 2009)

A total of 2669 responses were collected from the rail survey and 2205 responses from the busway survey. Of the passengers who walked to the stations, 1249 train passengers and 655 passengers provided their address. Their addresses were then geocoded using the GIS Network Analysis Tool (Figure 1)

Table 1: Auckland Plan Centre Typology

Typology	Land use mix	Housing Types	Primary Access Mode to Station	Role in Transit System
City Centre	Office, residential, retail, entertainment, Civic Uses	High rise	Walk and Bike. Some bus and small park-and-ride, if any	Major transit hub with high degree of intermodal connections, Destination Function but also with high trip generation
Metropolitan Centre	Office, retail, residential	Medium and High Density	Multi-modal overall, bus primarily with some walking and biking, and-ride, if any	Destination function but also with high trip generation.
Town Centre	Office, retail, residential	Medium – low rise, Medium Density	Multi-modal overall, bus primarily with park-and-ride	Origin
Local Centre	Retail and residential	Multi-family townhome and small lot single-family	Walk and bike. Can be bus hub,	Origin

Key Findings

The results of the twelve train station surveys show that (Table 2):

- More than 50 per cent of respondents walked further than 800m to get to a train station at four stations ;
- At eleven stations more than 15 per cent of respondents walked further than 1500m to get to a train stations;
- Walking was the most common mode of arrival at nine of twelve stations. Ellerslie (73%) and Newmarket (69%) recorded the highest percentage of respondents walking to stations. Manurewa recorded the small percentage of respondents walking (41%).
- For trips under 2km, walking was the dominant mode of arrival at four stations; Glen Eden, Henderson, Otahuhu and Newmarket.
- Newmarket Station returned the lowest median walking distance to a train station with 446m. Ellerslie Station recorded a slightly higher median walking distance with 569m. The highest median walking distances were recorded at Papakura with 971m followed by Panmure with 917m.
- On average, median walking distances were lower than those recorded in previous train surveys.

Table 2: Median (50th) & 85th percentile & mean walking distances to train stations

Train Station	Auckland Plan Centre Classification	Mean	Median	85th Percentile
Ellerslie Station	Town Centre	720m	569m	1318m
Glen Eden Station	Town Centre	1035m	722m	1637m
Henderson Station	Metropolitan Centre	861m	756m	1531m
Manurewa Station	Town Centre	1259m	905m	1813m
Meadowbank Station	Local Centre	706m	552m	1074m
Newmarket Station	Metropolitan Centre	879m	446m	1903m
Onehunga Station	Town Centre	1308m	880m	2771m
Otahuhu Station	Town Centre	1262m	791m	2258m
Panmure Station	Town Centre	1014m	917m	1369m
Papakura Station	Metropolitan Centre	1297m	971m	1465m
Pukekohe Station	Satellite	1325m	800m	1468m
Sturges Station	Local Centre	1161m	640m	1171m
Papatoetoe (2010)	Town Centre	1072m	1200m	2180m
New Lynn(2012	Metropolitan Centre	1347m	1125m	2116m
Glen Innes(2012	Town Centre	1015m	943m	1526m
Mt Albert(2012)	Town Centre	952m	826m	1617m

Despite the median walking distances to the Newmarket and Ellerslie train stations being well under the 800m radius distance, a significant number of respondents walked greater distances than 800m to get to the train station.

The results of the five bus station surveys show that (Table 3):

- The median walking distance ranged from 588m at Akoranga to 2727m at Albany.
- Smales Farm had the lowest median walking distance at 588 metres. That is, 50 per cent of the people who walked to Smales Farm train station walked less than 588m, and the other 50 per cent walked more than 588m. Akoranga had a similar median walking distance of 590m. In contrast, the median walking distances to Constellation and Sunnynook were 1199m and 1141m. Meanwhile, the median walking distance to Albany was 2727m.
- Walking was the most significant mode of travel for trips less than 2km at three stations, including Akoranga, Constellation and Smales Farm. In contrast, only a small number of respondents walked to the Albany (13%) and Sunnynook (14%) stations.

Table 3: Median & 85th percentile & mean walking distances to busway stations

Busway Station	Mean	Median	85th Percentile
Albany	2499m	2727m	3378m
Akoranga	764m	590m	946m
Constellation	1000m	978m	1373m
Smales Farm	916m	588m	1293m
Sunnnook	1409m	1141m	2123m

Conclusion

The results support the argument that people are prepared to walk greater distances than the commonly held belief by transport planners of 800m catchment areas.

Accepting the legitimacy of longer walk distances could have implications in a number of areas, for example in the design of feeder bus services, the spatial extent of high density development around stations, and in some cases even the spacing of stations (Davies 2011). But there are other implications of adopting longer walk distances.

Some travelers may decide to drive instead of taking public transport. There are also some groups such as the disabled for whom longer walk distances are a real constraint.

It is imperative that particular needs of these groups are taken into account in transportation and land use planning to enhance intensification.

The Unitary Plan is the main tool for delivering the residential land use intensification objectives in the Auckland Plan.

Under the Unitary Plan, the highest density of development is expected to occur in and around centres and adjacent to the public transport corridors connecting these centres.

The geospatial walking area catchment mapping method presented in this study provides a spatial planning framework for planning better integration of land use and public transport and to configure land use zones in and around around town centres.

References

Auckland Council (2012). The Auckland Plan. Auckland: Auckland Council

Beca Infrastructure Ltd (2010). ARTA Pedestrian Studies – Analysis and Findings, Auckland: Beca Infrastructure Ltd, unpublished report

Calthorpe, P. (1993). The next American metropolis: ecology, community, and the American dream. New York: Princeton Architectural Press

Davies, A. (2011). How far do we walk to the station?. Available: http://blogs.crikey.com.au/theurbanist/2011/11/02/how-far-should-we-walk-to-the-station/. Last accessed 18th October 2013.

Duany, A and Plater-Zyberk, E (1991). Towns and town-making principles. New York: Rizzoli

Ministry for the Environment (2009). Urban Design Toolkit – third edition. Wellington: Ministry for the Environment

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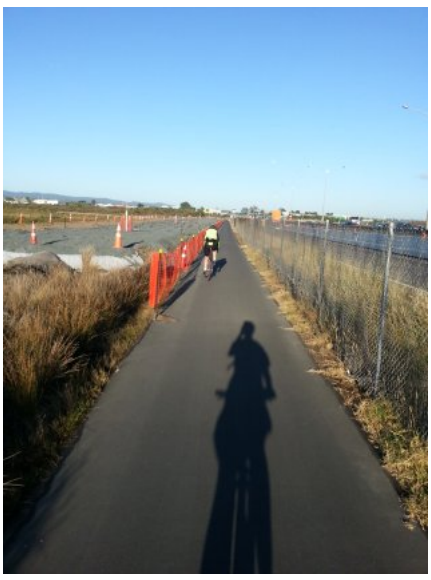
New Zealand Planning Institute
Te Kokiringa Taumata

Does a kayak have right of way on a cycle path?

Auckland's SH16 North-Western cycleway along the causeway, near the perfectly named suburb of Waterview, became somewhat underwater on February 2nd due to a 'king tide'.

Whilst minor flooding at high tide has been a fairly regular occurence for years, it is not usual for cyclists to have to make way for kayaks. The Road Code is not clear on who exactly has the right of way.

Flooding of the cycleway will be a thing of the past soon, as NZTA is raising the entire causeway by 1.5m (see below).



Transportation Engineering Postgraduate Courses 2014

The University of Auckland
NEW ZEALAND

NZ TRANSPORT AGENCY
WAKA KOTAHI

Department of Civil & Environmental Engineering University of Auckland
For Master of Engineering Studies (MEngSt) and Graduate Diploma (GradDipEng), with / without Transportation specialisation, or for one-off Certificate of Proficiency (COP).

COURSE	DESCRIPTION
Semester 1 (Mar-Jun '14)	***Dates of Lectures to be advised later***
CIVIL660 - Traffic Engineering & Planning (mixed mode*, 10, 11, 12 March + Civil 758*)	A range of selected topics in traffic engineering and transportation planning which will provide a basis for extension into further studies. (Diploma course which is a pre-requisite for several other 700 series courses). *** 1 x 3-days + integrated with Civil 758, a BEHons course every Thurs AM.**
CIVIL764 - Highway Safety & Operations (2, 3, & 4 April and 6, 7, & 8 May)	A range of topics on the operation of two lane highways and their safety including highway capacity, LOS, passing/climbing lanes, and economic evaluation methods. Safer Journeys and Safe Systems, Skid resistance, materials and roadside safety.
CIVIL770 - Transport Systems Economics **(20 & 21 March, 10 & 11 April and 22 & 23 May)**	Fundamentals of transport economics incl. supply, demand, pricing, congestion and other externalities; principles of economic evaluation in transport planning.
Semester 2 (Jul-Oct '14)	
CIVIL661 - Highway & Pavement Engineering (28, 29, 30 July + Civil 759)#	A range of selected topics in highway engineering and pavement materials which will provide a basis for extension into further studies. *(Diploma course which is a pre-requisite for several other 700 series courses).* **# 1 x 3-days + integrated with Civil 758, a BEHons course every Thurs AM.**
CIVIL761 – Planning & Design of Transport Facilities (11, 12, 13 August and 22, 23, 24 September)	A range of topics on planning and design of transport facilities including fundamentals of traffic flow, modelling and simulation of transport facilities, macroscopic traffic models and traffic signal safety and operations.
CIVIL763 – Transportation Network Analysis (7, 8, 9 and 28, 29, 30 August)	Introduction to logistics and scheduling; Definitions of graph and network theory; Max-Flow problems; Minimal spanning trees and shortest path; Minimal-cost networks; Location problems.
CIVIL765 – Infrastructure Asset Management (18, 19, 20 August & 29 Sept, 1, 3 Oct)	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 (31 July & 1 August, 28 & 29 August, 9 & 10 October)	Integrated planning of transport and land use, Outline of transport planning modelling, LTMA and the GPS, District Plans and RMA, Travel, trips and parking. Integrated transport assessments with multi-modal transport, Travel demand management, 'Smart roads', Intelligent transport systems.
Civil 772 – Public Transport – Planning & Operation (22, 23, 24 July 21, 22, 23 Aug)	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

Other relevant courses at Auckland or Canterbury or elsewhere may also be suitable for credit.
For course details, please contact the 2014 Course Coordinator: Civil 660 + Civil 758 + Civil 766 + Civil 767 (Dr Seosamh Costello), Civil 661 + Civil 765 (Dr Theuns Henning), Civil 759 + Civil 764 + Civil 768 + Civil 769 (Dr Doug Wilson), Civil 770 (Mr Bevan Clement), Civil 760 + Civil 761 + Civil 762 (Dr Prakash Ranjitkar), Civil 763 + Civil 772 (Prof. Avi Ceder), Civil 771 + Civil 773 (Assoc. Prof. Roger Dunn).

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

Earth-based transport planning not enough for you?

Exploring the Unknown – to Mars and Beyond

Pickering Lecture 2014

Dr Charles Elachi is a space explorer who led the recent mission to Mars with a rover called Curiosity. As this year's Pickering Lecture speaker, he will tour New Zealand giving free public lectures on space exploration and his role as Director of NASA's Jet Propulsion Laboratory.

The internationally-recognised space expert is excited to share his work developing robotics and other high-tech devices to explore the unknown worlds of our solar system. Following JPL's successful mission to Mars in 2012, when Curiosity made a near impossible landing on our sister planet, he has many behind-the-scenes stories to share.

The self-confessed space junkie will present in the following locations:

Wellington
6.30pm 24 March – Shed 6, Queens Wharf, Wellington

Christchurch
6.30pm 25 March – Aurora Centre, Burnside High School, 151 Greers Road, Burnside, Christchurch

Hamilton
6.30pm 26 March – Hamilton Gardens Pavilion, Hungerford Crescent (off Cobham Drive), SH1, Hamilton

Auckland
6.30pm 27 March – Dorothy Winstone Centre, Auckland Girls Grammar School, 16 Howe Street, Newton, Auckland

Free entry. No registration required.
Go to: http://tinyurl.com/Marsandbeyond

NASA JPL IPENZ ENGINEERS NEW ZEALAND

Cycling Safety: Feedback Wanted

The IPENZ Transportation Group has been asked to provide input to the NZTA Investigation into Cycle Safety. The review, which will be led by a panel of cycling safety experts, was recommended by the Coroner's Office in 2013 following a series of series and fatal crashes involving cyclist on our roads. The panel are tasked with developing a practical and sequenced list of actions to put us on a sustained path of improved safety for on-road cyclists.

The Transportation Group will be represented on the panel's reference group by Peter Kortegast (pictured). Peter is an experienced Transportation Engineer well known for his achievements in progressing walking and cycling initiatives throughout the country. Peter will represent the technical and professional view of transportation practitioners in NZ.

The first meeting on Tuesday 15 April will bring together everyone involved in the review to clearly define the key issues for the panel to address. Peter is looking for feedback from the group to take to this first workshop. Consequently he would like feedback on:

- what you see as the safety issues cyclists face on urban roads
- what you see as the safety issues cyclist face on high volume and low volume rural roads
- the correlation you perceive between real and perceived risk to cyclists on New Zealand roads
- the relative importance (priority) of cycling safety issues that need to be addressed
- any local cycle safety issues that should be considered in this review (e.g. seasonal issues associated with winter conditions or holiday traffic etc).

Peter will be collating and presenting all the feedback he receives. He'll also be updating members throughout the course of the review.

Please forward all feedback and comments to Peter by Friday 11 April 2014 at peter.kortegast@opus.co.nz. Or alternatively, catch up with Peter in person at the IPENZ Transportation Group Conference in Wellington on 23 – 26 March. The panel of cycling safety experts will submit its recommendations to NZTA, the Ministry of Transport and Local Government NZ around September.

For more information about the expert panel see: http://nzta.govt.nz/about/media/releases/3223/news.html

Branch updates

Auckland/Northland Branch

Wrap-Up of Recent Events

The Auckland/Northland branch hosted its AGM on the Tuesday 28 January. Given it was the day after Auckland Anniversary the turn-out wasn't too bad (largely due to the quality presentation).

The AGM voted five new members on to the branch committee, Neil Cree (NZTA), Graham O'Connell (NZTA), Tim Brown (Resolve), Mairi Joyce (Flow) and Keshawa Wanigasekara (AECOM). So welcome to the new committee members.

The branch committee pass on a big thank you to the following committee members who have moved on and thank them for their efforts over the last few years: Doris Stroh (ex-committee Secretary), Sarah Dove (Committee Secretary) and Nathan Harper (Treasurer). Nathan leaves the committee in a positive financial situation, a job done well and a challenge for our next Treasurer, who will be voted on at the next committee meeting.

The AGM was followed by a presentation by the Auckland Transport CEO David Warburton on 'The Year Ahead'. David reflected on progress AT has made over the three years since its inception and outlined his vision moving forward. Some of David's key messages were about the opportunities presented by technological advances in vehicle recognition and the need for better transport data to evaluate the need for future transport investment.

Our February technical group meeting was a question and answer session on the draft Auckland Transport's Code of Practice (ATCOP). Entitled '*ATCOP Harmonising transport infrastructure through a single design Code of Practice'* Chris Beasley, Principal Engineer at Auckland Transport, provided a comprehensive overview of the new Code of Practice.

The presentation covered the design standards AT inherited, how these were revised and combined, and the key technical changes and challenges faced. The presentation also covered the steps being taken to integrate with Auckland Council processes.

The subsequent Q & A session raised a number of interesting points and Auckland Transport is very keen to get feedback on the draft. Go to http://tinyurl.com/ATCOPpresentation The submission period is open until 28 March 2014

Up-Coming Events

The Committee is planning an action packed 2014 including events which tie into the 100 year IPENZ celebrations. We have a number of interesting presentations coming up including:

• 18 March, Beca House - *Auckland Airport Masterplan - Making journeys better, today and for future generations.* Refreshments from 5pm presentation at 6pm.
• 15 April, Town Hall - presentation by Auckland Council Transport Strategy department on current planning
• May, June, July – currently loking to provide presentations on the Ponsonby Road Masterplan, East West Link project, Auckland Waterfront and ITS / advances in traffic operations.

Submissions

The Branch also made a high level submission on the Proposed Auckland Unitary Plan. This will be available for members to view on the IPENZ TG website.

A reminder again that we welcome feedback from members on any issues they feel the branch committee could improve on, respond to, or simply ideas for future presentations.

Waikato/Bay of Plenty Branch

Asleep at the wheel.

Central Branch

Upcoming Lunchtime Sessions:

• *Infrastructure Resilience*, Catherine Mills, TDG – scheduled for May 2014

The winner of the entry to the IPENZ conference. She'll be sharing her research on what's needed to develop a network architecture for incorporating electric and hybrid vehicle facilities into our infrastructure.

• *Transport in Fiji*, Fiji Roads/MWH – scheduled for June 2014

Social Events

•*Social Drinks:*
April after IPENZ Conference. Watch this space!

Canterbury/West Coast Branch

Over the last few months the Committee met on the 17 December (which included a guest appearance from our President Dave Wanty), 22 January 2014 and 19 February 2014. The Committee focus over the last quarter was to kick off 2014 and start thinking about the organisation for the 2015 Conference back in Christchurch.

As usual the period over Christmas was quiet and we have had a slow January and February in these parts. Our first presentation for 2014 was Thursday 6 March with David Falconer (CCC Senior Policy Planner - Transport, Strategy & Planning Group) giving a presentation on the "*CCC District Plan Review*" (see photo overpage).

There was a good turn-out considering the week we had of wild weather and flooding. David described the context of the review including the aim of making the Plan operative in 2-3 years whereas the last one took 22 years! The proposed changes to the transport

Branch updates

IPENZ TRANSPORTATION GROUP

rules were outlined, a key change being the removal of minimum parking requirements for major activities (now managed through ITAs) and local and neighbourhood centres.

The review has been split into two phases; firstly focusing on priority agreed actions as noted in the Land Use Recovery Plan (LURP), then secondly on the remaining chapters. Pre-notification consultation on the District Plan Review will occur in late Feb/March 2014 with people able to make comment on the proposed changes prior to formal notification.

March is also heating up with the IPENZ Forum coming to Christchurch on 20-22 March 2014. We understand the National Committee will be represented here and also possibly some local input from the Branch. With the Fellows and Achievers Dinner being in Christchurch on Saturday 22 March and the celebration of 100 years of IPENZ, we are fortunate to have this local opportunity to be involved in a special IPENZ event. Also connected to this don't miss the IPENZ Pickering Lecture on the 25 March in Christchurch as well.

The Branch Committee continues to liaise also with the local IPENZ Branch during this celebration year in an attempt to maximise the joint opportunities to increase the public profile (in a positive sense) of Engineers and engineering achievements.

As noted above Canterbury and West Coast TG Branch are lucky enough to be the hosts of the 2015 IPENZ TG Conference, in Christchurch. To ensure this will be another terrific event we now need to convene a group of 5-10 willing and committed people (we'd prefer Branch Members) who are interested in the experience and opportunities that come with helping organise this scale of event; from theme, branding, venues, field-trips, to reviewing presentation/poster submissions.

Canterbury branch meeting in full swing

This is a chance to work a little outside your comfort zone and be involved with some excellent local people to create a conference we can all be proud of. To showcase what is happening in Christchurch and build on the growing success of past conferences. Please look out for this opportunity coming soon to get involved.

While on the Conference theme, please don't forget the upcoming IPENZ TG Conference in Wellington, 23-26 March 2014. If you can, please take the opportunity to attend and support our local speakers.

Of course ideas from Members for future Committee activities and events are always welcome, to the Chair James Park (james.park@opus.co.nz) or Administrator Jared White (jared.white@abley.com).

Southern Branch

The last presentation, held at the Invercargill City Council on the 6th of March, was very successful. There were 28 attendees in Invercargill including members from the RTA, contractors, consultants, road controlling engineers, heavy vehicle commercial and tertiary education sectors. Five people from Dunedin also joined the presentation via Skype video-conferencing.

The guest speaker was Keith Mason, Fonterra's Edendale Site Manager and the topic was 'A Bigger and Better Dairy Factory'.

Responsible for the safe and efficient collection and conversion of 2.4 billion litres of milk annually from across Southland and Otago, Keith provided the group with an interesting insight into the logistical and operational aspects of the Fonterra milk supply chain process, from farm gate to factory.

"It is 384,000km from earth to the moon. The Fonterra fleet travels 300,000km per day. The combined Fonterra fleet nearly travels to the moon each day". This statement from Keith was one of many that provided much food for thought.

An April meeting of the Branch is being planned with Port Otago Limited and it is hoped to combine a site visit and talk.

In the fast moving export sector the Port must be responsive and be able to rely on resilient supply chains. They must also accommodate a growing number of cruise ship visits. It promises to be a very interesting event.

Are deaf drivers safer than hearing drivers?

It all started with stumbling across an apparently amazing fact in a kid's book called 'Amazing Facts'.

The fact was *"Deaf drivers are safer drivers than drivers who can hear"*. I thought that sounded pretty amazing, so I looked into it further.

There are a number of reasons why hearing impairment could be a factor be an issue for safe driving. These include the inability to hear emergency sirens, car alarms and other important sounds, knowing where a sound is coming from, or - I hadn't thought of this - using hands to sign to a passenger (especially if using two-handed sign language) or lip reading a passenger while driving.

There has been debate whether hearing drivers can have similar problems through activities such as playing loud music and using hand-held mobile phones or other devices. However, there seem to be very few studies into the area.

One study suggested that the use of hearing aids could place the hearing-impaired driver at a higher risk of crashes, as feedback from a hearing aid could cause distractions to the driver. Other studies had mixed and often inconclusive correlations between hearing impairment and risk of vehicular crashes. Based on so few studies, there is little evidence of hearing loss being a risk factor contributing to car crashes.

Every few years, Austroads produces 'fitness to drive' guidelines, the current version of which states that *'mild to moderate hearing loss does not appear to affect a person's ability to drive safely. It may be that a loss of hearing is well compensated for since most people who are hard of hearing are aware of their disability and therefore tend to be more cautious and to rely more on visual cues.'*

Austroads comments that *'while hearing loss is not considered to preclude driving a private car, persons with severe hearing losses should be advised regarding their loss and their limited ability to hear warning signals, etc. Persons with hearing aids should be encouraged to wear them when driving. Engineering solutions such as additional mirrors might also be recommended upon consideration of the needs of the individual driver.'*

So, deaf drivers may not be safer - or more unsafe - than hearing drivers. I'll have to write to the publishers of that kids' book and ask them to revise their 'amazing fact'.

The Editor

Roundabout of the month

This roundabout in the village of Otford, near Sevenoaks, Kentcountry village has been crowned the 2013 Roundabout of the Year in Britain. It was identified as the only one in the country to boast its own duck pond and is also the only one to have been granted listed status.
Seen a better one? Email daniel.newcombe@aucklandtransport.govt.nz

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Ian Appleton took this photo whilst on a tour of Oxford. He wonders whether dogs are allowed on the grass, provided they they are on a leash...

Transportation Engineering Postgraduate Courses 2014

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 2014 is **$950 (except ENTR401 to be $840) incl. GST**, + Student Services levy (up to $362/semester, rebates for some students).*

*All courses run in "block mode" to enable **part-time and distance students** to easily take part. Block course dates would be announced in due course. 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 with 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 at home 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 1 (Feb-Jun 2014)	
ENTR611: Planning and Managing for Transport *(Block dates: 3-5 Mar, 28-30 Apr)*	Road/transport administration in NZ; Transport legislation in NZ; Communication/presentation skills; Public consultation; Transport assessment; Traffic surveys; Demand management & tolling; Project economics; Construction planning & contract management.
ENTR602: Accident Reduction & Prevention *(Block dates: 31 Mar-2 Apr, 19-21 May)*	Impact on society; Data analysis and interpretation; Hazardous location identification; Problem diagnosis; Treatment options; Treatment selection; Economic appraisal; Evaluation.
ENTR614: Planning & Design of Sustainable Transport *(Block dates: 10-12 Mar, 12-14 May)*	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.
Semester 2 (Jul-Oct 2014)	
ENTR603: Advanced Pavement Design *(Block dates: 21-23 Jul, 15-17 Sep)*	Stresses, strains and deflections in flexible and rigid pavements; Pavement materials characterization; Mechanistic and mechanistic-empirical design methods; Pavement performance and evaluation.
ENTR612: Transport Policy & Demand Management *(Block dates: 28-30 Jul, 22-24 Sep)*	Transport economics; Travel demand and supply management; Congestion pricing; Transport policy objectives and instruments; Traffic management modelling.
ENTR615: Transport Network Modeling *(Block dates: 4-6 Aug, 29 Sep-1 Oct)*	Principles of transport modelling; Road network modelling (SATURN); Macro-simulation and micro-simulation (Paramics); Traffic intersection modelling (SIDRA); Transport network analysis and reliability.

Note: Other relevant courses at Canterbury (e.g. Risk Management and Construction Management courses), Univ. of Auckland or elsewhere may also be suitable for credit to a PGCertEng, MEngSt or MET.

For more details contact:
Professor Alan Nicholson, Director of Transportation Engineering
Phone: (03) 364-2233 Email: Alan.Nicholson@canterbury.ac.nz
Or visit the website: ***www.met.canterbury.ac.nz***

Where is Alice?

With more than 450m down and around 2km to go, Alice (the Tunnel Boring Machine - TBM) still has a lot of ground to cover on her marathon journey from Owairaka to Waterview.

But as the above image indicates, steady progress is underway. And as Alice moves forward, the tunnel itself is taking shape, with the precast concrete rings lining up behind her – over 210 have been installed so far.

Alice will be taking a break shortly, when she reaches the 500m mark. The team will use the break to install the specialised 95m long, 400t gantry crane that will install the 2400 culverts that run under the motorway through the tunnel. The culverts will carry the mechanical and electrical services needed to operate the tunnel.

The gantry is a world first, being the first time in TBM history that tunnelling and culvert placement have been separated. Designed by German TBM manufacturer Herrenknecht, the gantry runs independently of the TBM, meaning Alice continues running regardless of what is happening behind her.

Once established underground, the gantry is expected to place up to precast 30 culvert units, supplied by an East Tamaki precast factory, each week. The first stage of backfilling for the motorway will be done behind the gantry, 50 metres at a time and to the height of the culvert (2m).

Austroads Guide to Road Safety Review - user survey

ARRB Group is currently reviewing the Austroads Guide to Road Safety on behalf of Austroads.

The review will investigate who uses the guide and how it is used, with the aim of improving its future content and structure. Your feedback as a user is important.

The survey should take approximately 15 minutes to complete and can be accessed via this link: https://www.surveymonkey.com/s/austroadsGRS

Austroads


NETWORK PERFORMANCE & OPT
INFRASTRUCTURE AS
20 & 21 May 2014, Crowne Plaza, Auckland
Smart. Efficient. Intelligent.
Exhibitor
CoreLogic
Networking Drinks Sponsor
Beca
www.conferenz.co.nz/network

TIMISATION
SSETS

Explore all that goes into ensuring infrastructure networks perform as highly and reliably as possible.

Key topics will include utilising new technology to closely analyse network performance; understanding New Zealand's current infrastructure and funding needs; developing resilience in infrastructure networks; and making the right investment and asset management decisions.

This conference will bring together sectors including local government, transportation, engineering project management, electricity, water services, and telecommunications.

Join us for actionable insight from expert practitioners in the infrastructure industries.

Day One: 20 May 2014

Conference Chair
Jim Bentley, Chief Executive, **Synergine Group**

The state of our infrastructure

Key factors affecting New Zealand's infrastructure networks
Jim Bentley, Chief Executive, **Synergine Group**

National Infrastructure Unit Capital Intentions Plan
Margaret Devlin, National Infrastructure Advisory Board, **The Treasury**

Smart networks

Forecasting and prioritising infrastructure network investment
Haydn Read, Manager Strategic Asset Planning,**Wellington City Council**

Utilising technology in monitoring infrastructure networks

Analysing infrastructure networks from a data perspective
Stephen Witherden, Senior Software Developer, **Beca**

Case Study: Managing consumer demand

Case study: Influencing travel habits for more efficient road networks
Ryan Cooney, Manager, **Christchurch Transport Operations Centre**

Technology: Changing the way we think about government investment in transportation
Chris Vallyon, Senior Transport Analyst, **Beca**

Day Two: 21 May 2014

Asset management strategy

Facilitating a faster consenting process
Luke Hinchey, Senior Associate, **Chapman Tripp**

Funding New Zealand's infrastructure
Ben Gerritsen, Managing Director, **Castalia**

Performance management in the transport sector
Dr Seosamh Costello, Associate Dean Postgraduate, Faculty of Engineering, and Senior Lecturer, Department of Civil and Environmental Engineering, **University of Auckland**

Resilience

Understanding the dimensions of infrastructure resilience
Dave Brunsdon, Chair, **New Zealand Lifelines Committee**
Roger Fairclough, National Infrastructure Unit,**The Treasury**

Growing staff resilience in the infrastructure industries
Sahrah Mai, Director, **Experius**

Infrastructure security in the age of information warfare
Daniel Ayers, Director, **Special Tactics**

Case Study: Investment for risk management
Simon Todd, Principal Engineer, **Transpower NZ**

Conferenz
Connect. Know. Succeed

ELECTRIC RAIL
Building Auckland's Future
Rendezvous Hotel, Auckland
3-4 October 2014

1914 –2014 Prosperity through Ingenuity IPENZ - ENGINEERS NEW ZEALAND

IRSE INSTITUTION OF RAILWAY SIGNAL ENGINEERS

RTSA

ELECTRIC RAIL- BUILDING AUCKLAND'S FUTURE

SAVE THE DATE! 3-4 OCTOBER 2014, RENDEZVOUS HOTEL, AUCKLAND

www.aucklandrailconference2014.org.nz

The Railway Technical Society of Australasia (RTSA), Institution of Railway Signal Engineers (IRSE) and IPENZ bring to you the Electric Rail- Building Auckland's Future conference at the Rendezvous Hotel in Auckland on Friday 3 and Saturday 4 October 2014, which will celebrate and examine the engineering achievements that have helped revitalise Auckland's rail system the over the past decade.

2014 will see the completion of KiwiRail's Auckland Electrification Project and the introduction of Auckland Transport's new electric trains into commercial service, the culmination of in excess of $1.5 billion of investment in the upgrading of Auckland's rail network and passenger services since the opening of the Britomart Transport Centre in 2003.

This has been the biggest investment in New Zealand's rail system in over half a century and has created a 21st century rail system which forms the backbone of Auckland's rapid transit network.

This conference will showcase the contribution that engineering has made to the renaissance of rail in Auckland. It will provide insights of the technical challenges and achievements gained from this significant investment through a series of technical sessions and site visits.

WHO SHOULD ATTEND THIS CONFERENCE?
Professionals working or associated with the rail, engineering and transportation sectors, including rail engineers and operations personnel, transportation engineers, consultants, contractors and suppliers. This is an opportunity for the many companies and professionals instrumental in the design build and operation of Auckland Transports electric train rail network to share lessons learnt and acquired technical knowledge.

Business development and networking opportunities will be available throughout the conference You are invited to express your interest in being advised when registrations open. Click here: https://www.ipenz.org.nz/ei/getdemo.ei?id=277&s=_41C0RM5SH

ELECTRIC RAIL
Building Auckland's Future
Rendezvous Hotel, Auckland
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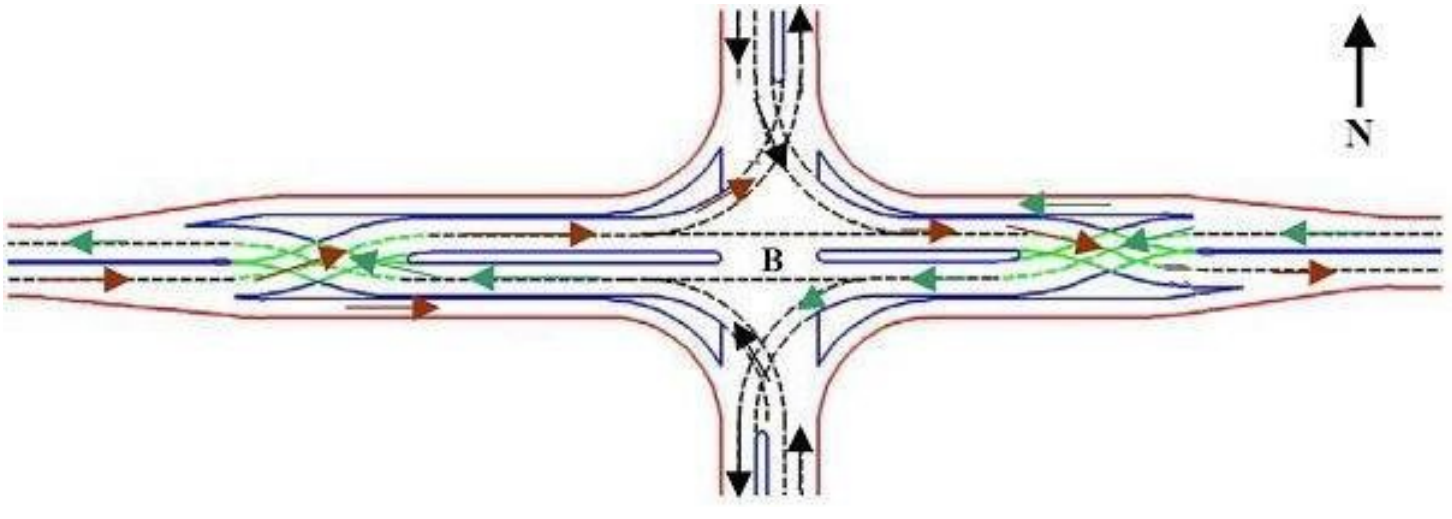
IRSE INSTITUTION OF RAILWAY SIGNAL ENGINEERS

RTSA

Into Alternative Intersections?

The US Federal Highway Administration has published a report titled "Alternative Intersections/Interchanges: Informational Report (AIIR)". It covers four intersection and two interchange designs that "offer substantial advantages over conventional at-grade intersections and grade-separated diamond interchanges". Amusingly - for NZ audiences - it also includes roundabouts, which would not be considered innovative in a NZ context.

Some of the solutions involve traffic crossing over to the "wrong" side of the road before the intersection in order to make a left hand turn (remembering that the US drives on the right hand side of the road). Most of the designs are very car-centric and offer little to pedstrians or cyclists, but are undeniably innovative. If you are into that kind of thing, the full report (some 344 pages) is at http://tinyurl.com/USaltint



Caption competition

An anonymous member of Flow Transportation consultants *cough**Karl Hancock**cough* is demonstrating unusual hand signals. Who knows what he is saying? A suggestion has been made. If you think you know better, send your suggestion to daniel.newcombe@aucklandtransport.govt.nz

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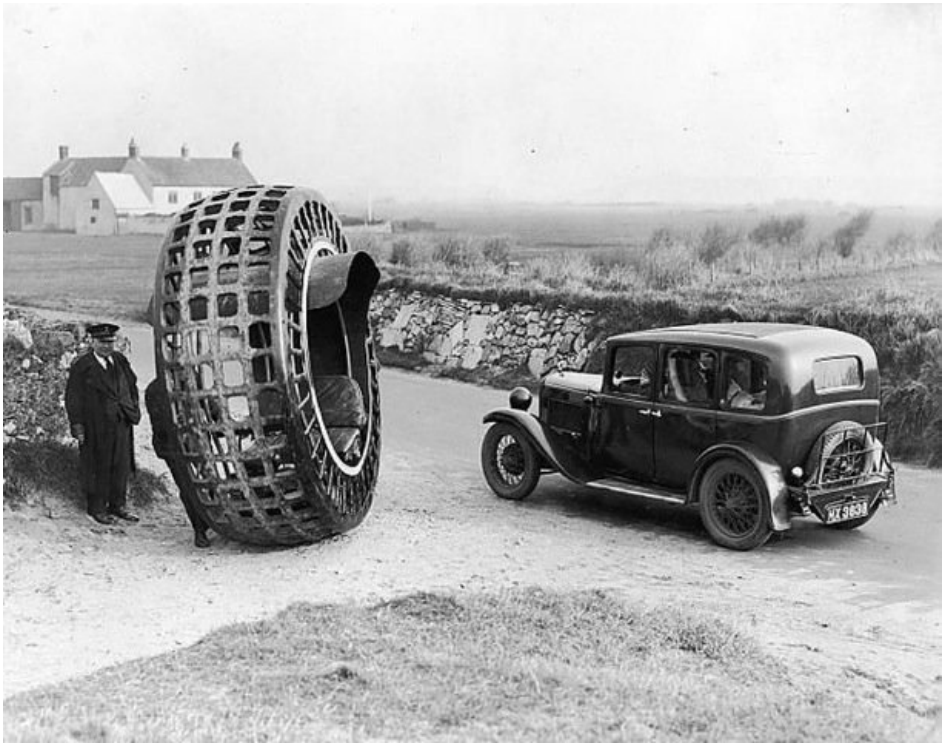
Year in which some traffic-related words were first coined

Traffic jam	1917
By-pass	1926
Car park	1926
Traffic light	1929
Parking meter	1936
Zebra crossing	1950
Traffic warden	1959
Drive time	1975
Wheel clamp	1980
Gridlock	1981
Road rage	1988



Source: Many a True Word, Richard Anthony Baker, 2013 ("New to Me" pages 142 to 151) and thanks to Ross Rutherford for spotting this.

French student seeking unpaid internship

The Group has received an enquiry regarding a transport-related internship for a French engineering student - Gurvan Alligand. If any Group members have an opening, perhaps on a specific transport project, where Gurvan may be able to assist, please contact him. His application letter is below.

Dear sir,

I would like you to consider my application for an internship in IPENZ. Such an internship would be a fruitful opportunity to put into practice all I have learned about transport in the ENTPE, Institute of Higher Education and Research – Sustainable civil engineering, transports and planning.

Currently in fourth year, having a BSc in Engineering, majoring in transport and also a double-degree in political sciences, I think that it could be a very fulfilling experience to do this internship in New-Zealand and especially in IPENZ, which seems to lead a lot of engineering and transports projects with major actors all around the country.

Transport studies at the ENTPE, such as Transport Policy, Transport Economics, Safety of Urban Mobility, Optimizing the Use of Transport Infrastructure, Modeling of Transport and their Uses and also public policy analysis or public economics in which we spoke about the major changes in the Public Service Act since the 1980s in New Zealand offer us a wider picture on transport issues. An internship in New-Zealand, and especially in IPENZ could bring me new interesting ways of understanding the organization of transports.

This is why I am highly motivated in doing my internship in your organization. I think that I could be adaptable and serious-minded in my work and that I could carry out a project in IPENZ during my 20 week long (unpaid) internship from April to August.

I am available at any time in order to discuss my application further. I am looking forwards to hearing from you.

Thank you for your time and consideration,
Yours sincerely,

_____

Gurvan Alligand
Élève à l'Ecole Nationale des Travaux Publics de l'Etat
Engineering student at the Ecole Nationale des Travaux Publics de l'Etat (ENTPE), French Institute of Higher Education and Research – Sustainable civil engineering, transports and planning
gurvanalligand@yahoo.fr or gurvan.alligand@entpe.fr

YES, we DO need to build more roads!

Road are clearly out of fashion in urban planning circles. Conventional wisdom now decries roads in favor of public transit, walking or biking in developments designed to mimic traditional 19th century urbanism.

Common refrains are “we can't build our way out of congestion” or “widening roads to cure congestion is like loosening your belt to cure obesity.” Also frequently noted is the vehicle miles traveled has – at least until recently – outpaced population growth.

But this piece of conventional wisdom is also deeply flawed. It obscures the bigger point that in a growing country we need to expand infrastructure to keep pace. The recent 2010 Census results put this in stark relief. The rate of growth from 2000 to 2010 slowed considerably from the previous decade, but still at a robust 9.7%, or 27.3 million new Americans.

It would have been physically impossible to house all those people in traditional urban communities well-served by transit. The 27.3 million number is more than the combined 2009 population of the cities of New York, Los Angeles, Chicago, Philadelphia, Washington, Boston, San Francisco, Portland, and Seattle.

"Roads are clearly out of fashion in urban planning circles..."

In fact, this national growth is greater than the combined population of the 12 largest municipalities in the country. That's just one decade's worth of growth. America's traditional urban areas couldn't contain this, even if they were emptied of all their current residents. And the United States is projected to add an additional 90 million people by 2050.

Where are all those people going to go? And how would they get to work even if they could live in these cities, given that much of America's job growth has been suburban?

Keep in mind also that much of this urban and transit infrastructure must be seen as more legacy than a reflection of modern choices. It was largely compete 50 or more years ago. Only Portland and Washington, DC have really managed to build new transit friendly urban core cities in the modern era.

And despite their growing populations, these two places can only absorb a relatively small amount of new population every

year. In Washington, it's less population growth than gentrification – the replacement of largely poor African Americans with more affluent whites – that is the most outstanding demographic trend.

That's not to say America can't invest more in transit or build more transit friendly cities. It can and it should. In particular, large, already dense urban areas like New York, Chicago, and Washington with large core area employment require major investment to upgrade their systems.

Even smaller cities need better transit options and more urban neighborhoods. They are simply not well positioned to compete head on with newer suburban areas built from the ground up to support an auto-oriented lifestyle.

But this will be difficult since they will have to build transit largely from scratch, and given anticipated cutbacks in new federal transit funding. this suggests they would be well-advised to avoid costly boondoggle mega-projects in favor of unglamorous but basic activities like running a quality urban bus system.

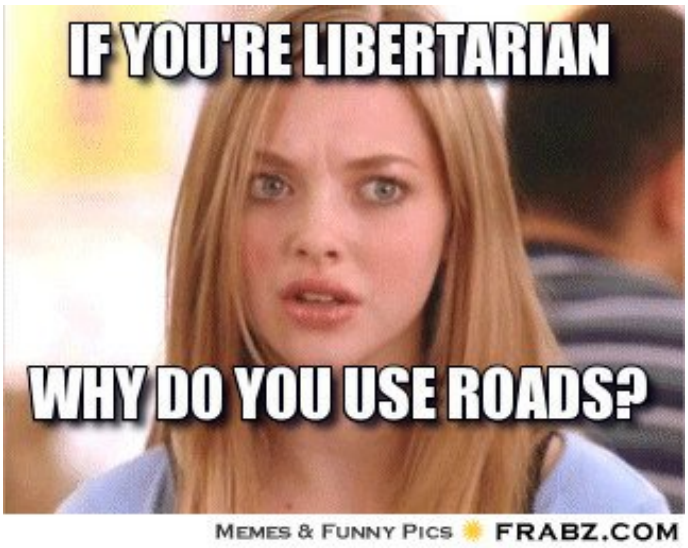
But even if we achieve our potential in transit, America still needs to build more roads. We've got an interstate system originally designed for a 1960 population of 180 million and we are now well over 300 million and going up.

By 2050 we'll have more than double the 1960 population. This will require a major expansion of infrastructure, and that includes highway infrastructure.

Just as one example, consider a moderate growth area like the Indianapolis-Carmel MSA. Its interstate system was mostly designed and completed circa 1970. The region had a population of a bit over 1.1 million then. Today it is over 1.7 million, an increase of 52%, or 596,000 people.

A county the size of that increase would be the second largest county in the state of Indiana, well exceeding that of today's #2, Lake County, a heavily urbanized county in Northwest Indiana.

Yet until recently there had been almost no expansion of the Indianapolis freeway system.



Fortunately, it was over-designed when built, but that is no longer the case. Thanks to a fortuitous lease of the Indiana Toll Road however, over 50 miles of freeway in the region are now being widened. Without this, the region would have faced decades of commuting misery.

Unfortunately, that's the bind where most cities now find themselves: managing growth with funding for roadway expansion and even maintenance running dry nationally.

Keep in mind that tomorrow's roads need not resemble yesterday's monstrosities. The days of simplistically adding lanes while neglecting basics like enclosed drainage, sidewalks and paths, bus shelters, and aesthetics are likely over in many parts of the country.

We need to provide room for the traffic we need to accommodate without excessive over-designs for a 15 minute peak of the peak, or dehumanizing roadway design approaches. Reform of our civil engineering educational system is eminently doable as plenty of great examples of suburban roadway design already exist. Federal standards need a revamp as well. We need to build not just more, but also better roads.

With a botched stimulus, huge deficits at the federal and state level, and a public that has decisively turned against those deficits, a major construction program seems unlikely at this time. But in a couple years the economy should be back and a plan for fiscal recovery put in place and under execution. If not, we'll have much bigger problems than roads.

But assuming we get past this moment, we need to be laying the groundwork for a major continuation of the long history of American investment in infrastructure, from the Erie Canal to the interstate highway system.

This includes not only a significant boost in urban transit spending where appropriate, but also a major program of both roadway repair and quality expansion, particularly in our growing metro regions. And as the Indiana example of a Toll Road lease shows, this doesn't all have to come from tax dollars.

Without this investment, our critical transport networks will ultimately seize up and America cannot hope to be competitive globally over the long haul.

Aaron M. Renn is an independent writer on urban affairs based in the Midwest. His writings appear at The Urbanophile.
http://bit.ly/1fp8Uv7 What do you think? Got a counterview? Send your feedback to daniel.newcombe@aucklandtransport.govt.nz See the following page for a counterview.

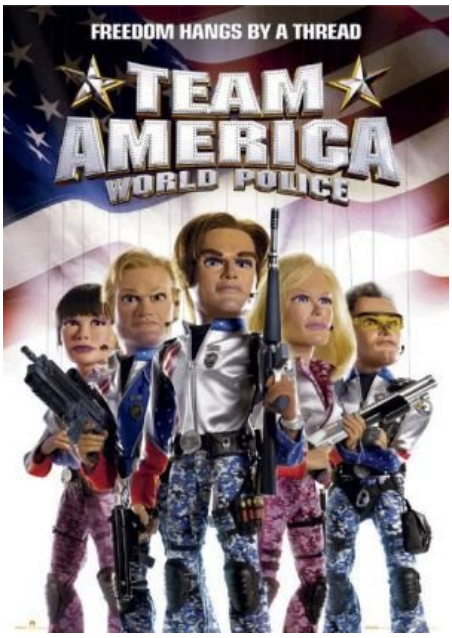
No, DOT Report Overstates Future Increases in Driving

Statement by Phineas Baxandall, Ph.D., Senior Analyst at the U.S. Public Interest Research Group on the U.S. Department of Transportation release of its 2013 Conditions and Performance Report, which provides a baseline for transportation planning and forecasts future highway needs. It estimates a price tag of $123.7 billion to $145.9 billion for annual highway needs.

The US DOT seems to be stuck in a bizarre time warp. For nine years in a row Americans have decreased their average driving miles. We haven't seen an annual increase of even one percent in total vehicle miles since 2004. Yet, US DOT forecasts that total vehicle miles will increase between 1.36 percent to 1.85 percent each year through 2030. That doesn't make sense.

High estimates of future driving have serious implications. They lead to excessive spending on new and wider highways to accommodate anticipated traffic increases. In the face of scarce transportation funds, overly high driving forecasts translate into too little attention paid to repairing the roads we already have and too little investment in other modes of travel.

America has huge unmet needs for transportation investment, but we must be smart about those priorities. We shouldn't assume a return to past travel habits when Americans are persistently driving less and using other forms of transportation more. The number of annual vehicle miles traveled has fallen by seven percent since 2004. On a per-person basis, Americans are currently driving as much as they did back in 1996.



Contrary to USDOT forecasts, there are strong reasons to believe that driving will not increase rapidly in the future:

· The reduction in driving in recent years has been led by younger Americans. People aged 16 to 34 cut their per-person driving miles by 23 percent between 2001 and 2009, with the sharpest reductions seen among the youngest travelers. Millennials are America's largest generation group and represent the largest component of America's future travelers.

· During the coming decades the Census predicts a reduction in the fraction of Americans of prime driving age. Aging Baby Boomers will continue to drive less and Millennials won't start reaching middle age for several years.

· While the post-war Driving Boom was fueled by cheap gas, booming suburbs, and a growing portion of the population in the labor force, those trends seem to have run their course. On the contrary, the Congressional Budget Office this week predicted that slow economic growth and declines in labor force participation will persist at least through the next decade.

· New information technologies have made it easier for people to navigate public transportation and, as well as to stay connected by email or text while safely riding on these modes. Technology has spawned bikesharing and carsharing programs that reduce car ownership and driving

While driving has fallen, public transportation ridership, biking and walking has increased, especially among younger travelers. Americans aged 16 to 34 took 24 percent more bike trips in 2009 than they had in 2001. Similarly, passenger miles traveled per-capita by this group increased by 40 percent between these years.

America needs a frank conversation about our transportation priorities. We need forecasts that take notice of present trends and help us prepare for the future. This doesn't do that.

From: http://bit.ly/1okkaOD

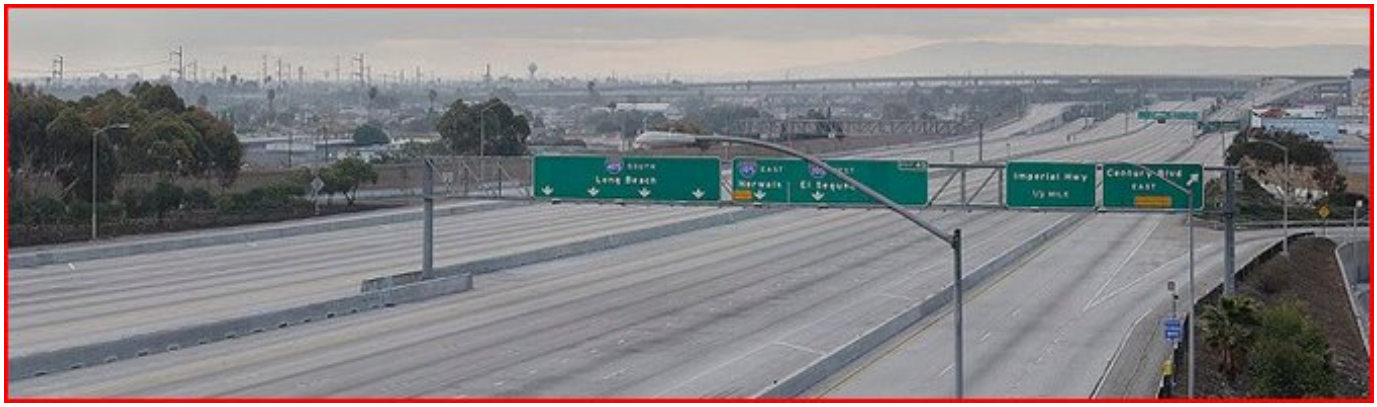
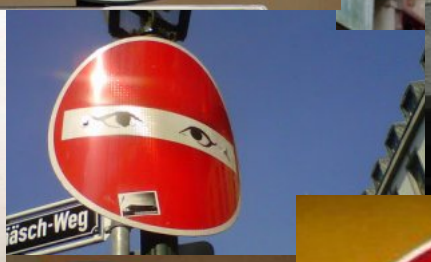
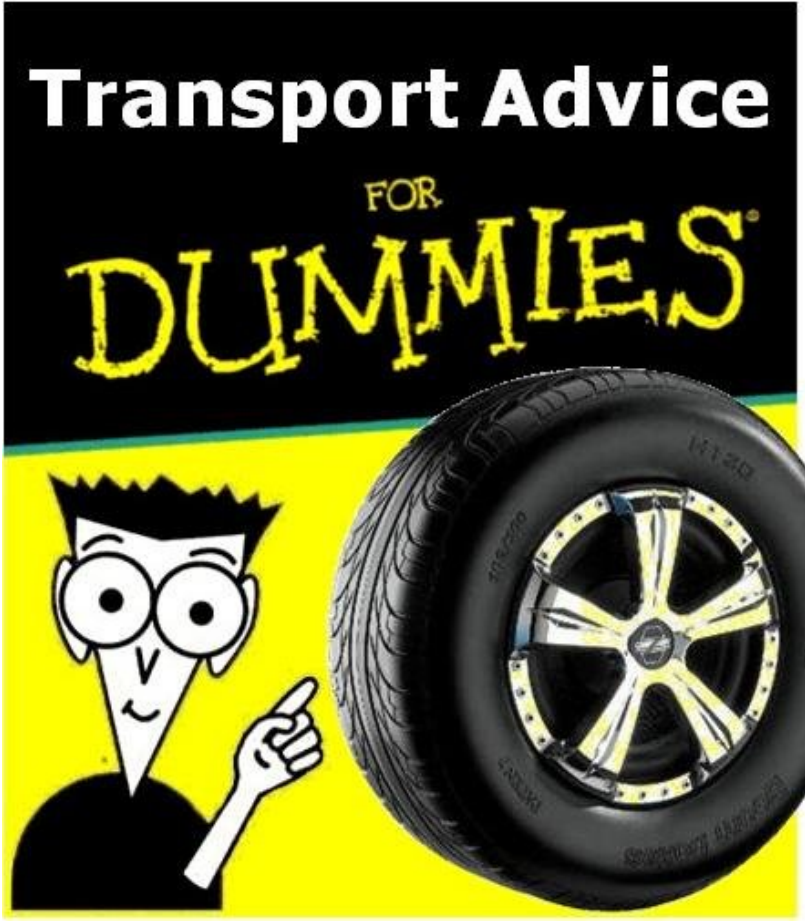


Photo Competition

This is the work of Italy-based French artist, Clet Abraham, who has been hacking street signs all over Europe, injecting a little humour into the streetscape.
Taken or seen other photos you want to share? Send it to:
daniel.newcombe@aucklandtransport.govt.nz
and win the adoration and begrudging respect of your peers.





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
Why do we have to obey traffic lights in the middle of the night when there's no-one around?
Steve, Auckland

Dear Stilted
Because people like you wouldn't take enough care to drive through safely, looking out for other roads users and operating at a safe speed. Much like how you drive for the rest of the day.
~Transport Guy

Dear Transport Guy
Why is it that drivers are fined for littering if they toss an apple core from a car whilst driving in a rural area? Surely the core is biodegradable, so as long as it lands off the carriageway, it will become food for the flora and fauna. If someone throws a plastic wrapper out the window, sure, fine them. But chucking leftover fruit is helping the environment - it's compost!
Oscar, Te Puke

Dear Tosser
You are quite right that a leftover fruit could be beneficial in rural areas. The flesh would decompose or be eaten by bugs, maybe seeds would grow. Over many years, if this approach was encouraged, we could have a veritable orchard along every rural road the country. Don't throw apricot pips. I hate apricots.

Things get trickier in urban areas. Drivers would have to aim for the slim grassy berm and the build up of rotting fruit on the roadside is likely to be considered a health hazard. Instead, I suggest one house in every street be nominated as the 'compost house' and all waste fruit can be thrown into that front yard for collection and composting. The owner doesn't need to volunteer to be the 'compost house', you can just choose an ugly house or the house of a neighbour you don't like.
~Transport Guy

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

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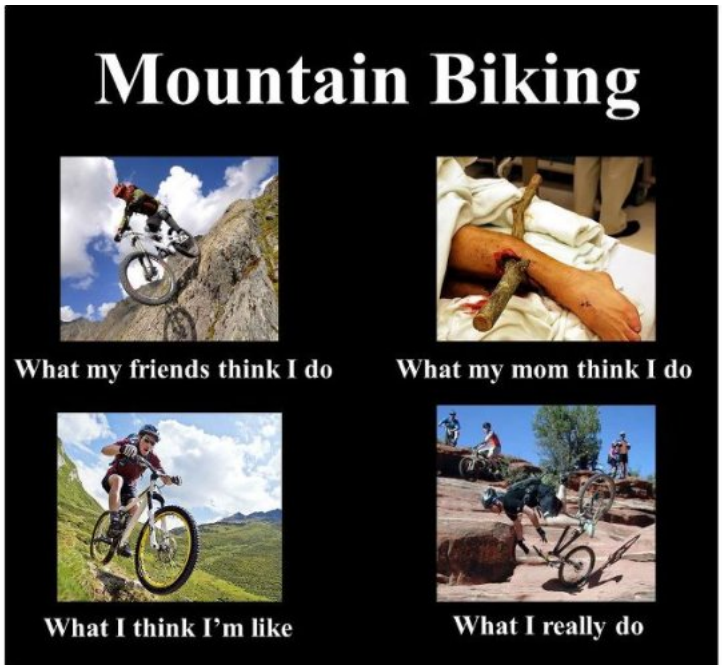

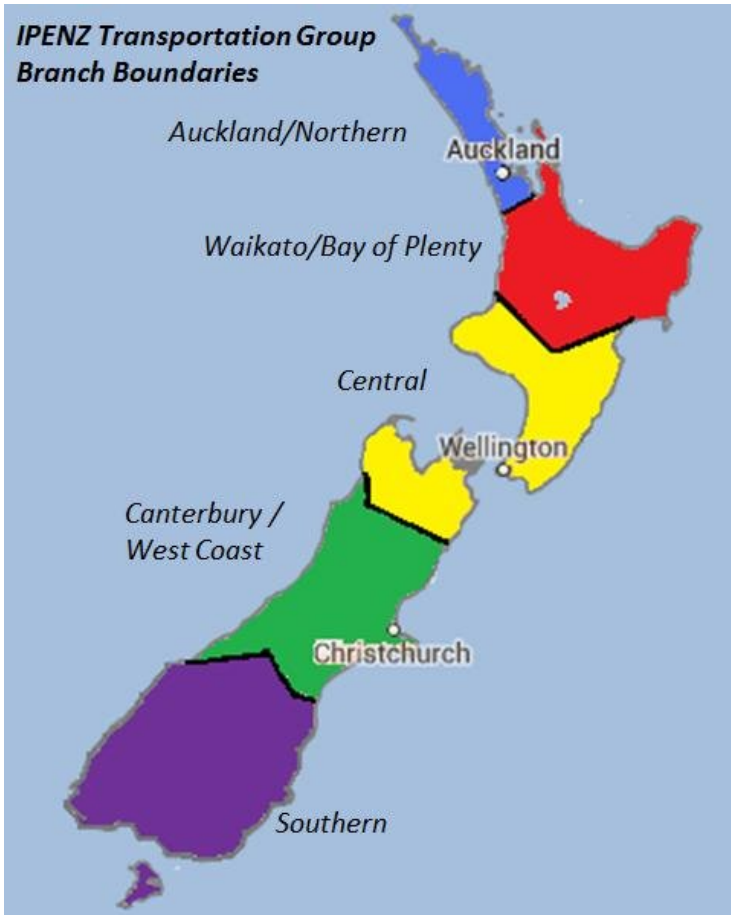

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Kids explain traffic engineering

Pedestrian refuge islands:
"Traffic lights are safer but,
if there are just two of you,
they are safe enough."