# Roundabout

Newsletter of the IPENZ Transportation Group

Issue 141 September 2014

## Roads? Where we're going we don't need roads!

1984 Roundabout revisited



Also in this edition: Curitiba's transport woes / Moving beyond mediocrity Urban change: evolution or revolution? / Putting traffic signs inside cars

## **Contents**

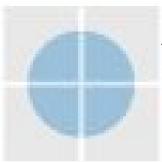
- 3 Editorial
- 4 Chair's Final Chat
- 6 Letter to the editor
- 7 Auckland's CRL ditches a station
- 8 SNUG Workshop 2014
- 10 Conference review
- 12 Moving beyond mediocrity
- 15 Fundamentals courses
- 16 NZMUGS 2014 Conference update
- 17 ITE update
- 18 Conference update
- 20 UK to allow driverless cars on public roads
- 21 Traffic signs to be displayed inside vehicles
- 22 Call for IPENZ Fellows and AITPM abstracts
- 26 Cover story: The way we were Roundabout Sept 1984
- 30 Portland builds 'bridge for the people'
- 32 Cycling Times From Yesteryear
- 34 Traffic hobbles renowned bus system
- 37 Google's self-driving cars won't work in heavy rain
- 39 How would Salvador Dali go as a roadmarker?
- 40 Interested in road ecology?
- 41 The Road Not Taken
- 42 Part political broadcasts
- 46 Branch updates
- 50 Roundabout of the month
- 52 Urban change: evolution or revolution?
- 57 Electric rail conference
- 58 Caption competition
- 59 RASCals update
- 60 Transportation Research Hall of Fame
- 64 SH20 Waterview update
- 65 Photo competition Narrow hedge
- 66 Transport advice for dummies
- 67 Group contact details
- 68 Kids explain traffic engineering

"The Snoopy page also welcomed "yet another Minister of Transport - chap by the name of Prebble"

"You are absolutely correct in every respect other than you are completely wrong."

p70

"The hazard is seals on chipseals."



"Modelling the Zombie Apocalypse"
Cemetery burial capacity is of grave concern for cities worldwide.

p12

2

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, and contributions are due by the 10th of each publication month.

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

If somehow you have come to be reading Roundabout but aren't yet a member of the IPENZ Transportation Group, you are most welcome to join. Just fill in an application form, available from the Group website: <a href="http://ipenz.org.nz/ipenztg/files/TGApp.pdf">http://ipenz.org.nz/ipenztg/files/TGApp.pdf</a>

ISSN 01 1 3-9053

## **Editorial**



30 years on and what has changed?

Due to the IPENZ head office relocating and having a clean-out, I was the lucky recipient of several boxes of past Roundabouts, dating all the way back to September 1980 (Issue 21).

And what an absolutely fascinating treasure trove of transportation history it is!

I chose, for no particular reason but maybe because it was exactly 30 years ago, to look through Issue 32 September 1984. I go through the contents in detail on page 26 but some things stood out to me.

For a start, just as today, the Group was agonising over howor whether - to make it's voice heard in transport policy matters. The question posed in the editorial of the time was whether to 'do more than just respond, and actively promote change' or to 'be content to remain as "technical experts". The National Committee Chairman of the time, Malcolm Douglass, noted that 'we live in rapidly changing times and ... wish to keep ahead and lead in these discussions'.

Another relevation to me was how many of the issues of 1984 remain topical after 30 years. The editorial notes increasing vehicle costs and 'a more sympathetic attittude' towards public transport. Though there was also a reference to removing lead from petrol, so maybe we have moved on just a bit.

The Hevaletter of the Transportation and Traffic Group of the Institution of Professional Engineers of New Zealand

There was a transport-related crossword (not sure if that will make a revival), a list of new Group members, a conference ad, a couple of technical papers and a traffic survey of community halls.



Happily, some things look like they will always remain the same - the conference organiser is crying out for more papers, new technology promises benefits for the future, and Roundabout contains a healthy range of amusing photos and snippets.

I'm also impressed - or is it dismayed - by seeing some familiar names cropping up: Brett Harries, Peter McCombs, Don Houghton. How were they able to join the Group when they were surely only children in 1984?

I am still missing the first few Roundabout editions up to Issue 21 as well as 23, 24, 27, 31 (although there appear to be two Issue 30s), 32 and 35. If you have any of these very early editions, all from the mid-1980s, please let me know.

### "We live in rapidly changing times and wish to keep ahead" - Malcolm Douglass, September 1984

In coming issues we may again delve into the past. Peruse the 1984 material on page 26 and compare it to the rest of this edition of Roundabout. How far have we come? Have we really changed much at all?

This is a bumper issue of Roundabout, and as this is Dave Wanty's final edition as Group Chair, a big thanks to Dave for all his hard work and enthusiasm over the last two years. The National Committee won't be the same without his sparkling wit leading the way.

**Daniel Newcombe Roundabout Editor** 

## **Chair's Final Chat**



It is logical to expect that as departing National Chair I should consider how the Group is doing and how my efforts may or may not reflect the desirable attributes we seek (for more on this, see the article on page 8).

As members are aware, the National Committee comprises the five branch chairs (elected for varying periods by the branches), and the Deputy, current and immediate past chairs (nationally elected for two year terms).

The National Committee is smaller than the branch committees and the subgroup committees (typically members) and we conduct our business on your behalf mainly via a monthly conference call and by email. I initiated sub-groups attending our calls every three months and Daniel as Editor and Awards convenor has also made valuable input, greatly appreciated.

Having a two year term and two year "apprenticeship" I think is better than one year term basis, as we are voluntary members and achieving matters takes time, and retention of institutional knowledge is a real concern. I've had the pleasure of trying to make matters more systematic, and I hope that under Pravin's future reign our records will be centralised and administered by a contracted assistant, as envisaged in our Strategic Plan that should drive our

I hope the same applies to membership such that the role of Membership Secretary might be relinquished or passed onto the Deputy Chair's role (along with disciplinary matters and of incorrectly membership status). On these matters, the Rules and membership process have been refined and simplified. So, while outcome might have been mediocre, the intention was not, effort hopefully not, and importantly the trend is an improving outlook in my view.

### I am the Chair and not the 'Dictator'

We have refined the criteria for study awards and grants and these are documented, albeit probably not yet on our websites, since the research subcommittee will be reviewing them. After two years the research subcommittee (RASCals) has finally taken root with its Terms of Reference approved so that they will now hopefully undertake awards/grants

> reviews along with conference abstracts/papers reviews as part of their responsibilities.

> You can personally help us beyond mediocrity becoming a Cals "friend" bv RASCals and contribute to efforts. course this applies calls for e, be it to all assistance, national, from branch or sub-group committees.

We have recently scheduled monthly two with staff from NZTA as culmination

myself and Roger, who really has been an amazing right hand man at moving matters along (thanks are also owed to the support provided by his employer 41 South and to Roger's wife and family).

Likewise we have scheduled sixmonthly meetings with the MoT, which, like the NZTA meetings, focuses on the standards development and ownership components of our Strategic Plan, albeit more Rules and Regulation focussed and providing input to MT future directions planning.

In terms of submissions, we have done a reasonable job in my view as one of the two convenors, although I confess to not actioning input from one this year (but no members have raised it outside of National Committee). Some submissions are jointly with IPENZ (thanks owed to Tim Davin) and in one case a Parliamentary Select Committee member valued our particular input, which we had raised as a result of a Roundabout article (possibly an invited one?).

In terms of my personal aspirations in originally nominating myself for Deputy Chair (they were put on our website at the time), I have achieved some but not others, mainly I would say to being too busy with higher priority issues and that I am the Chair and not the 'Dictator' so suggestions offer and ideas consideration. I would have liked to see more input and use made of our retired members, and more attempt to engage our overseas members.

### I look forward to handing the reins (or in his case handlebars) over to Pravin

personally think our National Committee is too small and should coopt more, consider restructuring the way we handle our meetings, and a few other matters over to Pravin to consider. I look forward to handing the reins (or in his case handlebars) over to his capable direction and focussing my priorities.

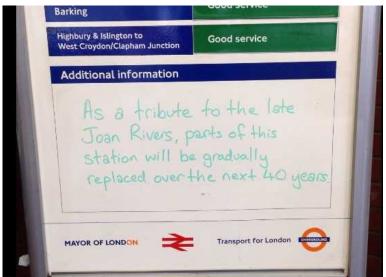
I would appeal for younger members to nominate themselves for branch committees and for every member to wishing you all the best.





Christchurch is rebuilding. How will it look in March 2015?
Find out. Be there for the 2015 IPENZ Transportation Group conference.

Details coming soon!



@byronhamburgers pic.twitter.com/HuUlgLtOpZ



### Letter to the editor

Dear Editor,

The TV3 Campbell Live article last night (10/07/2014) got my hackles up. After observing how well the traffic flowed in Auckland during the school holidays, the presenter automatically assumed the answer to congestion was to get more children walking and cycling instead of being dropped off by car. They went on to report on schools who were training young people to ride bikes in the expectation that more would then ride to school.

Children ought to be dropped off by car because generally they are less visible, slower and their road skills aren't as developed compared with older road users. They are precious and their safety should not be sacrificed in order to reduce congestion. It seems a no brainer to me that the emphasis should be on getting children to school safely, by car if necessary, and getting everyone else out of their cars.

Cheers

Brad Hayes Senior Civil Engineer Hamilton

Do you have a view on this? Write to: <u>daniel.newcombe@aucklandtransport.govt.nz</u>

## The continuing 'women in engineering' debate

Last edition's letter regarding the on-going discussion on the role of women in engineering (and the various articles previously that started it all) prompted a few more responses.

One of the brighter notes was some material sent in by Martin Huang (Traffic Ops, Tauranga City Council) from a recent event in Tauranga which showed that females continue to enter the industry. So maybe all isn't lost, after all.





Shannon Bell, the 2014 winner of Tauranga City Council's Heath and Safety award, from a Fulton Hogan/HEB TEL project.



Auckland Transport (AT) has decided to redevelop the existing Mt Eden Station and connect it to the plannned City Rail Link (CRL) rather than build a new underground station at Newton.

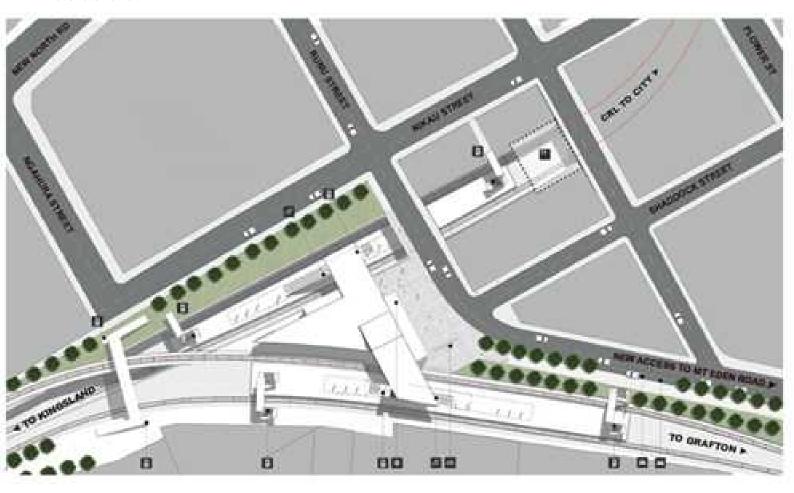
Since the CRL's concept design was developed two years ago, AT says there has been concerted effort to optimise the design and drive value for money. The on-going design improvement process included a comprehensive review of all project elements by an international "challenge team" of experts.

The improved design will connect passengers at Mt Eden Station to the CRL which previously bypassed them and improve operational reliability through the provision of a separated east-west junction so train lines won't need to cross over each other.

The change will save \$124M by removing the very deep Newton station, which will also reduce construction disruption in upper Symonds St by 12 to 18 months.

AT says the changes also will result in an improved customer experience with the CRL platform at Mt Eden now to be built in a trench similar to the New Lynn station, and be open to the sky, rather than deep underground as was the case for the proposed Newton station location. This open air location and the separated train junction will also lower operating costs.

Changes in the rail track alignment will also reduce vibration and noise effects on surrounding properties and improve travel times. In addition, fewer surface properties will be required.





SNUG is a subgroup of the IPENZ Transportation Group for the advancement in the fundamental knowledge of the art, science and practice of design, operation and maintenance of traffic signals.

Following the successful 2013 Workshop the Signals NZ User Group (SNUG) will hold their 2014 Workshop on 6 and 7 November in Christchurch at the Christchurch City Council Function room on level 1. The workshop dinner will be held at the Novotel, Cathedral Square on the 6 November. There is also a Technical Tour on the afternoon before the workshop on Wednesday 5 November.

The field of Traffic Signals and Traffic Systems Control is moving rapidly and the SNUG Workshop is an opportunity for Traffic Signal Engineers, Clients, Traffic Systems Specialists, Contractors, Consultants and Intelligent Transport Systems practitioners to discuss current developments in Traffic Signal and Traffic System Control.

**Registration** is now open, you can either use the form on the following page, or go direct to the link at the bottom of the SNUG IPENZ page at: <a href="www.ipenz.org.nz/ipenztg/Subgroups/SNUG/Events/Workshops/2014/">www.ipenz.org.nz/ipenztg/Subgroups/SNUG/Events/Workshops/2014/</a> Registration is priced at \$380 for the entire workshop, including both days, the Technical Tour and the dinner at the Novatel Hotel. Please note accommodation is always an issue in Christchurch and it is vital that you <a href="book your rooms ASAP">book your rooms ASAP</a>. Our Christchurch based members have indicated that their spare bedrooms are already taken! Suggested hotels are listed at the bottom of the registration form.

The **Technical Tour** is planned the afternoon prior to the workshop on 5 November. The activities for the technical tour (subject to final confirmations) are as follows.

- Pickup from CCC building about 1:30pm.
- Gold Sponsor Spunlite factory tour 2pm 3pm.
- Lyttelton Tunnel Operations Room visit 3:30 4:30pm.
- Bridge St bridge re-levelling / repiling 4:50 5:30.
- Back to CBD / Hotels around 6pm.

**The Programme** is currently under development, the presentations include papers from many enthusiastic experts from New Zealand and afar. The following list also includes the many subjects that the workshop will provide opportunities for discussion on.

- 1. RCA/area updates on how Signals, Traffic Systems and SCATS are being used
- 2. Update on the revision to the National Traffic Signals Specification
- 3. Asset management systems and practices
- 4. Christchurch rebuild projects
- 5. Presentations from our Sponsors
- 6. Intelligent Transport Systems
- Getting the most out of SCATS
- 8. Network Performance, measuring, reporting, planning, improving and managing
- 9. Route Optimisation
- 10. High performance surface mounted LEDs (HPSM) and the draft standard for them
- 11. Dual Pedestrian Crossing System (DPCS) Trial
- 12. Innovations and current issues from the ITE Conference
- 13. Technology for Advanced Public Transport Priority
- 14. Separated Bicycle Facilities at traffic signals
- 15. Poles colours around NZ
- 16. "Mutable" audio tactile drivers
- 17. Loop feeder cables
- 18. Land Transport Rules
- 19. Vehicle Detector Loop Testing and Condition Rating
- 20. Other international and NZ Innovation
- 21. AGM for SNUG and election of a new committee



#### Final Call for Submissions is 19 September 2014

Anyone still interested in submitting remits or presentations, please urgently send the following information to Sean Lewis at <a href="mailto:Sean.Lewis@tfc.govt.nz">Sean.Lewis@tfc.govt.nz</a> Mobile +64 27 5994584

- Topic
- Author
- Presenter
- 200 word abstract (in Word format)

SNUG Workshop Sponsors have been finalised and we would like to introduce you to them.

Firstly we would like to thank our 3 GOLD sponsors who are:





All our Silver sponsors are welcomed back from previous years: FLIR, HMI, Araflow Also, we would like to thank the Bronze sponsors: CSLI, Advantech, HTS Group and Transmax

Please join our **LinkedIn Group** which can be found by searching for SNUG - Signals NZ User Group.

We look forward to seeing you all in Christchurch.





The IPENZ Signals NZ Group (SNUG) Workshop will be held at: Christchurch City Council, Level 1 Function Room, 53 Hereford Street, Christchurch on 6 and 7 November 2014

#### Please register my participation as follows:

Registrations close on 29 October 2014 SNUG Workshop 2014 Attention: Karla Walker						
IPENZ PO Box 12 241 Wellington 6144	Email: karla.walker@aucklandtransport.govt.nz					
	Tax Invoice – GST registration number 10385 946					
		PERSONAL INFORMATION				
Title Select Title						
First Name:	Last N	lame:				
Position / Title:	1					
Organisation:						
Street address: Suburb: Town/City, Postcode:						
PO Box:						
Telephone:	Mobile:	Office:				
Email:		40				
Name on badge if different from above						
Special requirements - dietary/ disabilities						
If you do not wish for you	ur name to be in	ncluded in the delegate list please check box NO				
	S	NUG COMMITTEE MEMBERS				
Conference Programme	sean.lewis@tfc	ean lewis@tfc.govt.nz				
Convener - Chairman	ken.lee-jones@aucklandtransport.govt.rz					
Vice Chair	andrew.prosser@tdq.co.nz					
Treasurer Secretary	matthew.hovle@itoc.govt.nz					
	RE	EGISTRATION FEES (INC GST)				
Full Registration	\$380.00	2 day workshop – includes dinner ticket (Novotel)				
Day Rate	\$195.00	An individual day rate to the workshop excluding the dinner				
Dinner Ticket	\$80.00	For single day attendees (or partners – A separate form MUST be used for each attendee)				
½ Day Technical Tour 5 <sup>th</sup> November	No Charge	Pickup from CCC building at 1:30pm Spunlite Factory Tour Lyttelton Tunnel Operations Room Visit Bridge St bridge re-levelling / re-piling Back to CBD / Hotels around 6 pm				
Please indicate if you w	ould like to prese	ent and provide brief details to <u>sean lewis@tfc.govt.nz</u>				
☐ If you are willing to prov	ide spansarshin	for this event please contact matthew.hovle@itoc.govt.nz				

If making one payment for multiple attendees please ensure that separate forms are completed for each person

PAYMENT SUMMARY						
Method of payment Select Payment Method						
Please check if you will on the Technical Tour	be Technical Tour		5 November (no charge)			
Registration Fees Sub Total	Registration Type	\$				
Please check if you will be attending the Dinner (this is including in your Full Registration)		☐ <b>Yes</b> , I will be attending the dinner	No, I won't be attending the dinner			
Extra Dinner Ticket(s) (for single day attended or partners)		\$				
	TOTAL (incl GST)	\$				
PAYMENT OPTIONS						
If paying by direct credit or credit card please credit the IPENZ bank account no. 03 0518 0134476 00 and include the following details;  SNUG 2014  Attendees Name(s)  Company Name  Please make cheques payable to IPENZ – postal address shown above  If you require an invoice please contact Karla, karla.walker@aucklandtransport.govt.nz  If a Purchase Order number is required on the invoice please include this - PO number						
Please tick card type Select Card Type						
Name on Card	- Colour Guila Type	* * * * * * * * * * * * * * * * * * *				
Card Number		Expiry Date MM/YY				
Signature	1					
CVV Number – 3 digit number on back of car						
Please email completed registration to karla.walker@aucklandtransport.govt.nz						
Please note the cancellation policy as outlined below						
SNUG reserves the right to refuse entry if payment has not been received prior to the workshop.  Should you be unable to attend once you have registered, you may reassign your registration to another person, please note you must advise Sean Lewis; <a href="mailto:sean.lewis@tfc.qovt.nz">sean.lewis@tfc.qovt.nz</a> Registration cancellations will not be accepted unless made in writing. Cancellations made on or before Wednesday 29 October 2014 will be refunded less 30% to cover administration costs. No refunds will be given after this date.  If, for reasons beyond the control of the organizing committee, the workshop is cancelled, the registration fee will be refunded after deduction of expenses already incurred.						
Hotel accommodation will need to be booked and purchased separately. You will need to book asap due to the shortage of accommodation in Christchurch.						
Novotel - Cathedral Square, Ph 03 372211 from \$249						
Novoter -     Ibis -		107 Hereford St, Christchurch Central, Ph 03-367 8666				
The Rendezvous	[2] 전에 있는 전에 보면 보다 보다 있는 것이 없는 것이 없는 것이 없는 것이 없는 것이 없다.	166 Gloucester St, Christchurch Central, Ph 03-943 3888				
Rydges -	30 Latimer Square, Christchurch Central, Ph 03-379 6760					
The Heritage -	28 - 30 Cathedral Square, Ph 03-377 9722					
The George -		50 Park Terrace, Christchurch Centre, Ph 03-379 4560				

## Moving beyond mediocrity An opinion piece by outgoing Chair Dave Wanty

## Mediocrity Excellence

I started this in mid-July when my consultancy was not busy but events in the world were happening aplenty. Since it's my last contribution as Chair, I want to cover many bases:

#### PART A: State of the Sector AIR TRANSPORT

I've been contemplating what might next befall Malaysia Airlines (bad things happen in threes). MAS offered full refunds for the week after the MH17 shooting and its major shareholder is buying the rest of the company and will delist and make wholesale changes including Government agreement to cut onerous conditions (something Qantas are also complaining about as causing them big losses).

Air NZ is soon to be the first airline with the Dreamliner 797. I've flown the China Southern Air 787 from Auckland to Guangzhou and it was a nice plane. I'm still not convinced that Dreamliner services will eventuate were extended Wellington airport currently 300m (I recall attending an informative IPENZ TG presentation by the WIAL chief executive many moons ago), and I consider any decision to do so should be made on a national, not regional basis and an indicative BCR of about 1.5 based on costs that inevitably would significantly increase, is tenuous in commercial terms.

#### **SHIPPING**

Of course the Government decided to axe the creation of the Clifford Bay terminal (already with granted resource consent) with a revised BCR of about 1.5. Since then there were significant problems with the Interislanders and their propellors. At the RTSA session at our March conference the impact cost of the Aratere incident was stated as roughly \$30 million but with the refit of its original smaller propellers it takes another 15 minutes longer, threatening its current scheduling (6 one-way 3 hour journeys with 1 hour turnaround). By comparison, diverting around Ukraine is said to add another 10 minutes to say a 12 hour flight and cost another \$1500 in fuel. Doubling that for other costs would mean roughly another over \$100 per passenger with about 280 passengers.

shipping, Lyttelton Port announced the BCR ratio was not sufficiently over 1.0 to provide berthing for cruise ships in its medium-long term plan, without additional funding from other parties. In the past three weeks (and next two weeks) there have been agreements announced between Maersk, Kotahi and the Port of Tauranga which "will deliver a 'step-change' for New Zealand's \$95 billion international trade (26/6/2014)and it announced (16/7/14) that Maersk saying its larger Southern Star service will go

back to Tauranga and its smaller Northern Star service to Auckland, with a new service to be imminently How these affect the announced. outcome of the (MoT) freight demand modal for the strategic northern NZ is a question worth considering.

In its July budget the Government announced substantial additional funding for the KiwiRail 'Turnaround' programme, which I presume is in accordance with that well described at the RTSA session at our March 2014 So it's refreshing that conference. engineering-based evidence sometimes holds sway.

#### **PUBLIC TRANSPORT**

Aucklanders got some new rail services underway (with a minor delay). Over a recent weekend I was scanning the NZIE proceedings from 1973 for transportation papers and came across many interesting papers including a special panel discussion on the symposium paper by I. A. Mead entitled "Some aspects of planning and design of Auckland Rapid Transit", which starts off in its synopsis with "For many years, the region of Auckland has been concerned with the growing problems of traffic congestion and the need for an effective public transportation system". Included where three colour plates (see example below) so I hope someone in Auckland can compare with current plans and provide comment (and hopefully too provide me with an electronic copy or link to the original symposium paper).

CITY LOOP
WALKING TIME CONTOURS

Description

Proposed dispersed

Of course Auckland is faced with many medium-long term future projects being dropped by AC / AT and I believe the SH1 busway extension north is/was one of the projects. Living in Wellington I haven't heard much more on the 2020 design life of one of the AHB clip-ons, which were suddenly expected to drop off and were closed on my birthday many decades ago when I was supposed to be having a job interview with the Auckland City traffic engineer who was somewhat then preoccupied. Incidentally I have asked an octogenarian FIPENZ member to write a column on some interesting aspects relating to the AHB.

#### ROADING

On 21/7/2014 I read that a new hazard is happening on Northlands roads besides major slips between Wellsford and Kawakawa closing SH1 again. The hazard is seals on chipseals. As it so happens the Board of Enquiry decision on the Puhoi to Warkworth RoNS was soon thereafter (go-ahead given) and now planning for the Warkworth to Wellsford and consideration of options for linking and extending to Whangarei will proceed.

Of course the government also announced additional funding for bringing forward 14 regional projects, but these are all state highway projects, as noted in the joint IPENZ / IPENZ TG submission on the draft 2015

Policy Government Statement (GPS) on land transport (which notes the scrapping previous ofthe regional funding mechanism). I've observed that the document is GPS broadly the same as the 2012 GPS and talks about long-term without ever defining or stating "what is long-term the horizon?". Best guess is 2041/2042 (both dates mentioned downwards revision of the future road freight demand, viz 58% increase over 2012 values).

The decision on the contentious Basin Reserve Bridge was announced and as you know this was the first case of the NZTA and its partners being setback by the decision, and currently there is no Plan В. Having privately attended

the open day and some of the BoI sessions I was not surprised and I sincerely hope that all parties involved learn from this on move on constructively.

### **PART B: Our profession(s) - Moving beyond mediocrity**

A year ago I removed a paragraph from my draft Chair's Chat lamenting that it seems as New Zealanders we had moved to accepting mediocrity. I often remark, there seems to be a general malaise that people and organisations do what is easiest rather than do what is best, and it is often only fortuitous coincidence if both are the same. But possibly things are improving and wishing to be more constructive, allow me to wax lyrical.

#### **Observing**

We seem to be too desk-bound, some would say too pen-pushing and run by policy created by an abundance of policy analysts in deference to technologists. Recently I was amazed to hear reported in the media that a respected colleague was stunned at the amount of red-light running revealed from specially commissioned surveys. So my provocative question is "how do we move beyond driving around with our eyes closed? Or stuck in office meetings all day?

My view is that we must get out on site more (not rely on Google streetview even though it's great) and instead of spending monies arguing about model outputs, put more into getting good model inputs to avoid the analysis and argumentative costs later. 'Penny wise, pound foolish' a precious generation or two might say.

#### **Planning**

I would advocate that moving beyond mediocrity means undertaking more forward thinking, strategic encouraging proactiveness in a positive way rather than being reactive. Yes we've all heard this but events are happening that are shaking the status quo and our fundamental assumptions. Recently I saw on a discussion forum the question raised about future regional modelling with respect to the effect of autonomous (driverless) vehicles Yet less than two years ago when I asked an MoT official at a safety conference about why licencing of driverless cars was not on their agenda / five year planning framework I got a blank response. By contrast on 10/7/2014 the Associate Transport Minister announced



the timetable for all imported cars to actually included. With many ways now have mandatory electronic stability control, after earlier consultation this vear.

#### Analysing

In our data rich, computerised world there are algorithms and devices analysing everything, whether in stealth (big daddy is watching you), hidden (in car computers) or openly ('your speed is We all analyse and even if creating policy we are hopefully aware of the implications of policy from I perceive a risk analysis reports. nowadays that our data and analysis that might have been appropriate to the envisaged "horses for courses" approach can be used for other purposes for which it was not intended or foreseen, with or without our knowledge.

Moving beyond mediocrity, I consider that we should ensure we know more about and document the data we collect and the data we rely upon from other sources, which are integral to our analyses. We should conduct sanity checks on the reasonableness of the analysis inputs and sensitivity tests of key inputs.

#### Reporting

Recently I was stunned when I received a PDF report with all the appendices to download large files there is no excuse not to check that the appendices are included, or worse to ignore reminders to please send them.

There is however too often a reluctance to include sufficient technical detail in appendices, or to make the effort to ensure other reports are and can be made available which have the details. With project managers nowadays often not having the technical depth, and likewise limited technical input from steering group members, the detail is needed to show technical competence and appropriateness that would stand up to a rigorous (I'm not talking about rudimentary) peer review. necessitates that project costs should include necessary allowance for peer reviews. Moving beyond mediocrity then, project managers should insist on an appropriate level and scope of peer review and value this as adding value (in dollars and reducing potential later embarrassment) rather than view as merely a necessary sign-off procedural

#### **Evaluating and monitoring**

A respected member notes the date when he installs lights at home and evaluates their performance when replacing, which then influences his

future purchasing decision.

In our busy ever changing world however, it seems that evaluation and monitoring is overlooked or not high enough up the priority scale in our personal lives and so is perhaps then reflected in our professional lives. In research before and after studies are integral and the prestigious 2014 3M award was related to the safety trials by the NZ Transport Agency and their monitoring and evaluation of these Safer Journeys initiatives. Unfortunately such good examples are not so visible elsewhere, and recommendations for future monitoring often not actioned or implemented on a regular basis staff and organisational surviving changes.

Moving on, clients and project managers should initiate ways to fund future evaluation and monitoring as an integral part of the transport projects and policies they are managing.

#### **Feedback**

We do not give enough feedback - I hope to receive some re this article and my final Chair's Chat and your helpful comments on how we can continually improve.

14

davidwanty@clear.net.nz



## Fundamentals of Planning and Design for Cycling





ViaStrada is offering this one-day course, which introduces the principles of planning and design for cycling in New Zealand. The course is aimed at anybody planning, designing or reviewing roads or other facilities used by cyclists. This includes planners, general roading engineers and road safety practitioners. A number of local body politicians, people involved in the health sector, and cycling advocates have also attended the course. To date, over 1000 people have attended Fundamentals of Planning and Design for Cycling and the associated Advanced courses. The content of the cycling training courses was completely revised and restructured earlier in 2014.

All participants will receive a set of presentation slides for note taking, the NZ Supplement to Austroads Guide to Traffic Engineering Practice Part 14: Bicycles, and other reference material. Handouts and information from the new Austroads series will also be provided. The day includes lectures, discussions, and a practical exercise.

Course presenters will be ViaStrada Director Axel Wilke and Senior Engineer Jon Ashford. Axel is well-known in New Zealand for his expertise in sustainable transport and especially cycle planning and design. Jon is experienced in cycle facility design, cycle facility safety auditing, and recently completed his Masters in Engineering Transportation (MET).

### Fundamentals of Planning and Design for Walking





There are many reasons why New Zealanders need to start walking more and more often. Just a few of them are congestion, pollution, peak oil, the obesity epidemic, climate change. Yet many barriers exist to discourage people from walking – physical, social, cultural and institutional.

Engineers, planners and members of walking advocacy groups are invited to attend a one-day Fundamentals of Planning and Design for Walking course. You'll learn about the policies and practices that can make our towns and cities better for walking from Tim Hughes and Peter Kortegast.

Guidance and tools published by the Transport Agency enable better practice in meeting user needs. This course aims to ensure participants are inspired, understand the key principles behind the new guidance, and are equipped with the basic skills needed to apply them. The issues will be illustrated in practice by an audit of existing conditions for walking in nearby streets. Participants will work on project examples, choosing the appropriate pedestrian facilities and grappling with those "devil in the detail" design issues that make all the difference.

Tim Hughes has over 25 years' experience as a road safety engineer, managing projects to provide guidance on provision for pedestrians with different needs and auditing new works to assess walkability and ensure that they are walking friendly. Peter Kortegast is a practicing transportation consultant and passionate sustainable transport advocate. He has a particular interest in urban form and safe designs that create slow speed environments and encourage safe walking and cycling.

## Further information and registration

To find out more or register for one of these courses:

Contact Helen Woodhouse at ViaStrada: T: 03 366 7605 E: <a href="mailto:helen@viastrada.co.nz">helen@viastrada.co.nz</a>
Visit the ViaStrada training page: <a href="http://viastrada.co.nz/training">http://viastrada.co.nz/training</a> where you will find links to course information and registration forms.

## **NZMUGS 2014 Conference update**



The 7th Annual NZ Modelling User Group (NZMUGS) Conference was held in Christchurch on the 8th-9th September.

It was great to be back in Christchurch after 4 years away and fascinating to see how the city has changed post-quake. We had a good turnout of attendees with 67 registrations from both consultants and local authorities and also a number of international attendees.

This year a key part of the conference was discussing the NZMUGS Modelling Guidelines which are being incorporated into an NZTA document and will provide new model calibration criteria. Thanks to all those who provided feedback on their experiences in using the Guidelines as getting a better understanding of how the new criteria are working will help NZMUGS improve the Guidelines.

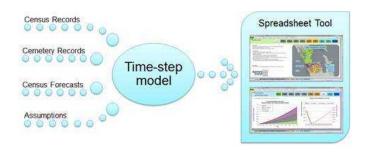
As per previous year's there was a wide range of interesting and topical presentations and there was quite a bit of competition to win the best presenter and best young presenter awards for 2014.

All presentations will be up loaded to the NZMUGS website and a notification will be sent around once the presentations are available. However to give you a taster we have a couple of abstracts from the awards winners, Michelle Ye from AECOM and Tim Wright from QTP.

#### Michelle Ye (AECOM) – Best Young Presenter "Modelling the Zombie Apocalypse"

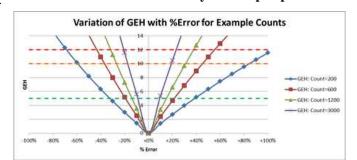
Cemetery burial capacity is of grave concern for cities worldwide. Inspired by the 4-stage transport model, AECOM created a tool for Auckland Council to forecast burial demand and capacity requirements at public cemeteries in Auckland. It was a very interesting application of a "standard" modelling process by the presenter Michelle, and showed how modelling

#### Investigation & Methods

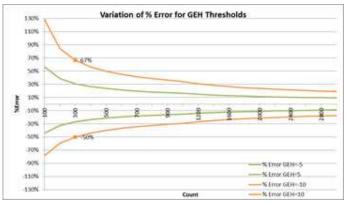


concepts can have numerous applications beyond the traditional transportation field. The presentation was also regarded as having the best title at the conference.

## Tim Wright (QTP) – Best Presenter "Model Measures – Are they fit for purpose?"



The NZMUGS group has recently achieved a landmark in developing the Draft Transport Model Data Comparison Guidelines which it has jointly issued with the NZTA. The Guidelines include criteria for a number of model statistical 'measures' that are commonly used around the world to assist in identifying if a transport model is 'fit for purpose'.



Tim Wright's presentation challenged the long-accepted measures themselves, providing diagrammatical interpretations of what the measures are actually telling us and examples of their pitfalls. Tim's suggested modifications to the statistical measures include generous quantities of GnT and getting MAD. The NZMUGS group is now considering conducting further research into the appropriateness of the long-adopted measures and the modifications suggested by Tim



#### Institute of Transportation Engineers

#### A Community of Transportation Professionals

The Institute of Transportation Engineers (ITE) is an international association of transportation professionals.

Through its global professional network and the large number of products and services it offers, ITE promotes the professional development of its members, supports and encourages education, develops public awareness programmes and serves as a conduit for the exchange of professional information, not only for it members but also exchange with other professional organisations such as IPENZ TG.

Many IPENZ TG members will be aware of the ITE Trip Generation Manual as well as numerous others guidance documents and practice manuals resulting from the inputs of its many members throughout the US and across the world. Some of ITE's NZ based members have recently participated in the sharing of knowledge and experience through those technical guidelines such as the Trip Generation Manual/Handbook and the Traffic Engineering Handbook.

TRIP GENERATION MANUAL

9th Edition • Volume 1: User's Guide and Handbook

ITE has an international membership of over 17,000 members, across more than 70 local and regional sections, plus more than 90 student chapters. These

groupings within the ITE family the ITE Australia New (including Zealand Section) provide additional opportunities for information exchange, participation and networking. The Australia and New Zealand Section of ITE (ITEANZ) exists within ITE's International District, geographically covers the world outside North America (and is host to 70 of the countries making up ITE's International membership!)



ITE members across the globe benefit from:

- an on-line, fortnightly, ITE Connect enewsletter
- a bi-monthly electronic ITE Journal bringing technical articles, research, news and opinion from across the globe
- specialist training and skill development webinar courses available "on-demand" 24/7
- access to the ITE Community website
   a useful and highly popular
  communication forum across a range of
  both technical and broader interest
  communities (including the Traffic
  Engineering Council, Pedestrian and
  Bicycle Council and the Simulation and
  Capacity Analysis Group to name a
  few)
- electronic publishing of all ITE reports, documents and presentations from all ITE Section, District, National and International meetings. This is likely to mount to several hundred

documents and is due to be delivered to ITE members during September/October this year.

Within Australia and New Zealand ITEANZ organises a seminar and presentation series with a selection of the latest seminar offerings being:

- Promises, Promises (August 2014) a particularly relevant and thought-provoking series of perspectives given by industry leaders dealing with Melbourne and Victoria's growth, development and transport issues
- Growing Geelong Transport Challenges and Opportunities(July 2014) saw a range of regionally focussed presentations followed by lively discussion amongst not only ITE members but also allied professional organisations including AITPM and Engineers Australia

A little closer to home, ITEANZ and IPENZ Transportation Group are working towards a range of collaborative events and presentations on this side of the Tasman including cobranded seminars and hosting of international visiting speakers.



For more information on ITE and the benefits you can receive from being part of this 17,000 strong professional network take a look at either the ITEANZ website (<a href="www.ite.org.au">www.ite.org.au</a>) or the ITE website (<a href="www.ite.org">www.ite.org</a>). Feel free to contact the ITEANZ NZ Representative Don McKenzie (021 656 191 or <a href="mailto:don.mckenzie@tdg.co.nz">don.mckenzie@tdg.co.nz</a>)







# IPENZ Transportation Group 2015 Conference

Rydges Hotel Christchurch

22 - 24 March / 2015

ipenztg2015.co.nz



**Key Note Speakers** 

Chris Bennett Senior Transport Specialist, World Bank



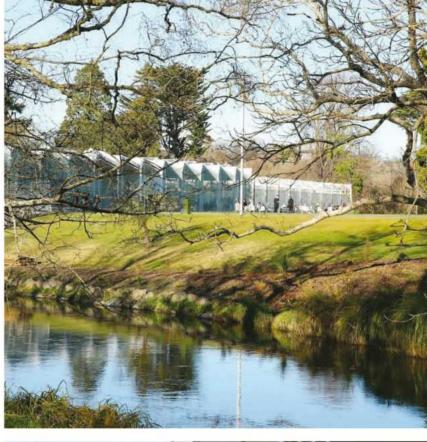
Rose McArthur Technical Director and Travel Demand Management Practice Leader, Jacobs Group (UK)



Antoine Hobeika
Professor of Civil and Environmental
Engineering, Virginia Polytechnic
Institute and State University, USA



Craig Burrell and Suzi Shaw Lyons
Operations Director, AECOM and
Smarter Cities Portfolio Executive, IBM
'Bringing Smarter, Safer Transport to NZ'.







### The Conference theme is, "World Class Transport — Smarter, Stronger, Safer"

Transportation is crucial to any developed economy. It influences everything we do, and we rely on it every day to transport people and products worldwide. In line with many other economies in the world, significant investment is being made throughout New Zealand's transport network now and in the near future. Therefore we are at a crucial time to ensure we create and provide for World Class Transport systems that are Smarter, Stronger and Safer as well as meeting the changing needs of the transport users.

More than ever before, the world is a global marketplace; yet New Zealand is a small, isolated island nation. If we are to thrive amongst larger, better-connected nations, every facet of our economy needs to be truly World Class, including our transport systems.

The 2015 IPENZ Transportation Group conference will provide delegates the perfect chance to discuss the catalysts for creating and sustaining smarter, stronger and safer transport systems and how they can be, or in some cases are being, applied to New Zealand's transport network. It will also provide the opportunity to showcase 'world's best practice' for transport, be it here in New Zealand or overseas.

#### **Venue and Accommodation**

Rydges Latimer Christchurch is a 4.5-star hotel that has undergone a complete rebuild so that guests experience top-of-the-line features and amenities, all 100 percent compliant with the latest building code requirements.

#### Early Bird Room Rate:

\$179 per night incl GST (prior to 22 February 2015)

#### Room Rate:

\$199 per night incl GST (after 22 February 2015)

#### Registration

Click here to visit the registration page for fees.

#### Sponsorship

The sponsorship prospectus is now available with a wide variety of options for sponsors and exhibitors. Click here to view.

#### **Call for Papers**

A call for paper has been released. Click here to view more information:

#### Smarter

- Making best use of existing transport assets by efficiently managing their operation and maintenance
- Using Intelligent Transport Systems to respond to and manage various road user networks more effectively
- Better understanding road user behaviour to inform transport planning decisions

#### Safer:

- Identifying best-practice methods for meeting the objectives of the Safer Journeys road safety strategy
- Improving the actual and perceived safety of active modes like walking and cycling
- Assessing the relative effectiveness of speed management treatments and policies on safety outcomes

#### Stronger:

- Developing transport systems that are more resilient to potential disruption by natural/man-made incidents
- Planning transport networks and corridors that provide for future changes in land use and human behaviour
- Investigating cost-effective pavement construction and maintenance treatments

#### **Key Dates**

Close off date for submitting Abstracts 3 October 2014

Notify successful authors 24 October 2014

Papers written and submitted for peer review 28 November 2014

Peer Review comments returned to authors 17 December 2014

Revised papers (if required) received (for inclusion in Conference Proceedings) 30 January 2015

Presentations prepared and submitted 27 February 2015

### UK to allow driverless cars on public roads

The UK government has announced that driverless cars will be allowed on public roads from January next year. It also invited cities to compete to host one of three trials of the technology, which would start at the same time.

In addition, ministers ordered a review of the UK's road regulations to provide appropriate guidelines. The Department for Transport had originally pledged to let self-driving cars be trialled on public roads by the end of 2013.

Business Secretary Vince Cable revealed the details of the new plan at a research facility belonging to Mira, an automotive engineering firm based in the Midlands.

"Today's announcement will see driverless cars take to our streets in less than six months, putting us at the forefront of this transformational technology and opening up new opportunities for our economy and society," he said.

UK engineers, including a group at the University of Oxford, have been experimenting with driverless cars. But, concerns about legal and insurance issues have so far restricted the machines to private roads.

Other countries have, however, been swifter to provide access to public routes. The US States of California, Nevada and Florida have all approved tests of the vehicles. In California alone, Google's driverless car has done more than 300,000 miles on the open road.

2 WALKAND CYCLE

communities
on the move

## 2014 CONFERENCE Nelson, 29-31 October 2014

Nelson is a community on the move and is considered by many as the walking and cycling capital of NZ. Experience how active transport can succeed in NZ by being part of the second 2WALKandCYCLE Conference. The programme is available now at: <a href="http://tinyurl.com/2014C-WNZ">http://tinyurl.com/2014C-WNZ</a>

We invite you to join us at the conference and:

- meet fellow professionals
- be inspired by New Zealand success stories
- share in the 2014 walking and cycling awards of excellence
- learn from international technical experts
- see the latest design technology and innovations
- take part in practical field trips.

Come along and experience how the 9% modal share of cycling and 10% modal share of walking shapes the Nelson community. This conference will also showcase the recently opened regional NZ Tourism Great Taste Cycle Trail.

Go to: www.2walkandcycle.org.nz

In 2013, Nissan carried out Japan's first public road test of an autonomous vehicle on a highway. And in Europe, the Swedish city of Gothenburg has given Volvo permission to test 100 driverless cars - although that trial is not scheduled to occur until 2017.

UK cities wanting to host one of the trials have until the start of October to declare their interest. The tests are then intended to run for between 18 to 36 months. A £10m fund has been created to cover their costs, with the sum to be divided between the three winners.

Meanwhile, civil servants have been given until the end of this year to publish a review of road regulations. This will cover the need for self-drive vehicles to comply with safety and traffic laws, and involve changes to the Highway Code.

Two areas will be examined by the review: how the rules should apply to vehicles in which the driver can take back control at short notice, and how they should apply to vehicles in which there is no driver.

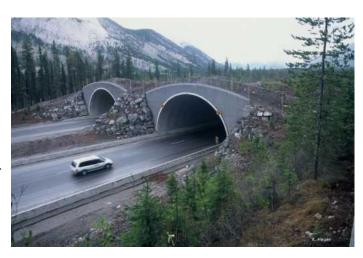
BBC News



## **Highway Wilding:** the movie

Highway Wilding is a documentary resulting from a 15-year research project into getting wildlife safely across highways. Bruce Conaghan came across it at the Inaugural ANET Conference in Sydney in July (Visit <a href="http://ecoltrans.net/">http://ecoltrans.net/</a>). The documentary helps demonstrate that wildlife crossing structures are effective at both reducing wildlife-vehicle collisions and ensuring that animals are able to move freely throughout their habitat. To watch, go to:

www.highwaywilding.org/hw movie.php Also see page 40

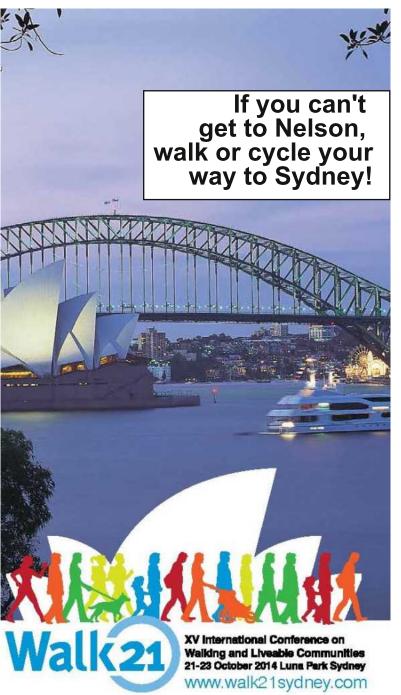


## Traffic signs to be displayed inside vehicles instead of on the road?

Researchers at the Virginia Tech Transportation Institute are in the early stages of a novel idea to move stop and yield signs, among other posted traffic signs, from the side of the road into the car itself, where a dashboard screen will automatically alert the driver of what actions to take, if any. The new angle: If no other car is present at the intersection, the will driver would be allowed to pass through and go on.

"The idea is there would be no physical stop or yield signs on the side of the road, but they would be inside the vehicle," said Alexandria Noble of Newark, Delaware, a master's student with the Virginia Tech Charles E. Via Jr. Department of Civil and Environmental Engineering.

Noble is spearheading the proof of concept adaptive stopyield study with funding from the U.S. Department of Transportation.





The project directly ties into the institute's growing studies into connected-vehicle technology, a futuristic intranet-like grid system where "smart" cars and other vehicles will be able to communicate not only with each other but other infrastructure to help prevent car crashes and ease congestion.

"This is part of our efforts to integrate more revolutionary safety concepts with the growing field of connected-vehicle technology. While a relatively new area of study, adaptive stop/yield signs have the potential to be a long-term solution for not only minimising traffic problems experienced on increasingly congested roadways, they may also help mitigate negative environmental impacts."

Noble recently finished a 17-week closed experiment at the Virginia Smart Rd, directly behind the institute's main base, involving dozens of local test participants in cars outfitted with small GPS-like dashboard screens that would alert the driver with a flashing display to either stop or yield, and proceed through the intersection. Additional cars at intersections during the tests were driven by institute researchers trained to safely interact with the participant driving test vehicles.

Test subjects were filmed by cameras set up inside the institute-provided test vehicle, capturing images of the motorist's upper body, line of sight, the dashboard, and the vehicle itself. Also part of the test, according to Noble: Scenarios where the automated sign technology was allowed to fail, leaving the test subject to act on their own accord.

"This study was set up to take place in a future where all static traffic control infrastructure, such as stop signs and yield signs, are no longer needed, and you have an adaptable invehicle display telling you when you need to stop and when a stop is unnecessary," said Noble.

"The deployment of this technology in the real world would involve a whole re-working of the transportation system and is not likely to be deployed in the near future. However, this study will be useful in developing future connected-vehicle applications in a general sense and demonstrates that this is possible and how well it is received by naive drivers with minimal training on the subject."

The project is only beginning. It has not been tested in real traffic environments. Hours of footage of tests subjects will be reviewed and compared to that of drivers filmed during naturalistic conditions in separate institute studies. As well, the technology could change as the concept develops: Imagine augmented-reality images appearing on a windshield, replacing dashboard screens. Fail-safe measures also would have to be in place. As of yet, intersections involving physical signs have been tested, not traffic lights.



## Call for abstracts for 2015 AITPM conference

The 'Call for Abstracts' for the 2015 AITPM National Traffic and Transport Conference is now open.

The 2015 conference will be held in Brisbane at the Brisbane Convention and Exhibition Centre from 29-31 July 2015.

The conference streams include:

- Traffic Engineering
- Transport Planning
- Transport and Land Use Modelling
- Road Safety
- Freight and Logistics

For more information and to submit an abstract please visit: http://tinyurl.com/AITPMabstracts

Submissions must be received by Friday 28 November 2014.

### Call for IPENZ Fellows

IPENZ Fellowship nominations are open during the month of September. If you wish to nominate someone you consider deserving of this honour, go to: http://tinyurl.com/IPENZfellows







AITPM has been building a new website to better provide news and vital industry information as well as give easy access to events and reference information. AITPM is pleased to announce that the website is now live and invite you to visit it and have a look around.

The website has been built with members in mind and once you're logged in, you will find that content is customised to prioritise news and events in your area (e.g. NZ).

On the homepage, you will see a grey member login box. Members will have been sent an email with login details. On your first visit, you will be prompted to create a new password and then are free to explore the site.

Go to: www.aitpm.com.au











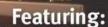
The New Zealand

## ransport Fuels

29 & 30 October 2014, Pullman, Auckland

Help set the future direction for transport fuels in New Zealand

Fuel efficiency • Fuel margins and pricing outlook Security of fuel supply . Engine and fuel technology trends



Featuring:
EECA \* Refining NZ \* Gull Petroleum \* Air NZ \* MBIE \* MoT
Fonterra \* CSIRO \* ANZ \* NZDF \* CNH Industrials \* Mitsubishi Motors NZ
PwC \* The Treasury \* KiwiRail \* Commerce Commission \* APEV
Farmlands Fuel \* Gasoline Alley Services



























Sponsored and Supported by:









## **Transportation Engineering Postgraduate Courses 2015**



Department of Civil & Environmental Engineering University of Auckland For Master of Engineering Studies (MEngSt) in Transportation and Postgraduate Certificate in Engineering (PGCertEng), or for one-off Certificate of Proficiency (COP).



New Admissions for Semester 1 / 2015 should be undertaken as soon as possible – for non-University of Auckland BE(Hons) Civil students, this normally takes several weeks.

Enrolment in a particular course, which follows Admission, is undertaken on-line.

#### Courses to be offered in 2015

Semester 1 (Mar-June '15)

CIVIL660 – Traffic Engineering and Planning (mixed mode with Civil 758)

CIVIL762 – Transport Planning (2 x 3 days)

CIVIL765 – Infrastructure Asset Management (2 x 3 days)

CIVIL769 – Highway Geometric Design (2 x 3 days)

CIVIL770 –Transport Systems Economics (3 x 2 days)

#### Semester 2 (July-Oct '15)

CIVIL661 - Highway & Pavement Engineering (mixed mode with Civil 759)

CIVIL763 – Transportation Networks Analysis (2 x 3 days)

CIVIL766 – Road Asset Management (2 x 3 days)

CIVIL771 – Planning & Managing Transport (3 x 2 days)

CIVIL772 – Public Transport – Planning & Operation (2 x 3 days)

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

## THATSPORTATION AND THAFFIC

September 1984

No 32

Cover story



The Newsletter of the Transportation and Traffic Group of the Institution of Professional Engineers of New Zealand

## The way we were: Roundabout September 1984

The first thing you notice about the September 1984 edition of Roundabout is that is looked like a bunch of clippings and photos glued together and then photocopied - which is because that's exactly what it was.

Although the issue we'll look through, Number 32, is a photocopy, other editions from the Roundabout archive include the original versions, complete with yellowing sticky tape holding smaller pieces of paper together to form the pages. Hand-drawn pictures, newspaper clippings, photos and typed articles. All assembled by hand and photocopied to form the Group's official newsletter - and it's still going strong 30 years later. Albeit today's version uses desktop publishing software and much less sticky tape.

The editiorial of the day touched on the fact that the country was in a time of change, having just been through July's snap election which saw the beginning of the Fourth Labour Government, with David Lange's Labour Party defeating long-serving Prime Minister Robert Muldoon. Little did the Group - or the country - know of the changes in store. Deregulation, Rogernomics, and for the first time Auckland's population exceeded that of the South Island.

The editorial noted that the Group had the opportunity to help the new Government shape transport policy, and had recently developed an open speed limit policy for submission to a Select Committee.

As part of this, the Roundabout editor (Brian Hasell) pondered the implications of the Group more actively promoting change.

"There are dangers in a wider role." he noted, "The issues are never simple, many positions are well-entrenched and a superficial approach can easily be rubbished. However, if we are prepared to do the work needed to prepare a case based on factual material I think we can only do good."

Not only is that a well-considered position, it remains relevant for the Group today, as the current National Committee ponder the best way to manage the Group's executive levels and communicate our opinions in a way that makes meaningful improvements.

Malcolm Douglass' Chairman's Comment (more formal than a Chat, I suppose) covered recent activities by was then known what Management Committee - unresolved issues from the open speed limit and noting submission that Government was intending to establish a Transport Research Advisory Committee.

that remains both relevant and challenging for the Group even today.

"We wish to welcome those with special interests in transportation as full members of the Group while at the same time keeping a link out into a wider circle of friends who while they may not be members of the Group should be invited to more significant functions."

#### EDITORIAL

#### EDITORIAL

It is a time of changing attitudes, or at least the promise of change. We have a new Government with a new transport policy, so far only lightly sketched in. There is a suggestion of higher costs for road goods vehicle operators, a more sympathetic attitude towards public transport and a committment to lead-free petrol, so long as it is 91 Octane.

What changes would we like to see? One of the objectives of the Group is to act as an informed lobby, presenting submissions to Government on their proposals while they are still in the formative stage. Our submissions on the open speed limit were published in the last Newsletter and will be presented to the newly reconstituted Select Committee shortly. Thank you to all who contributed.

Should we do more than just respond, and actively promote change? Many of us do this already for our employers, proposing remits to the Municipal Association, Traffic Institute etc. The combined voice of the membership of the Group, under the IPENZ umbrella, would carry significant weight. Perhaps we should consider this more active role, applied to matters of transport policy. Or should we be content to remain as "technical experts" commenting only within the strict limits of our training and expertise?

There are dangers in a wider role. The issues are never simple, many positions are well-entrenched and a superficial approach can easily be rubbished. However, if we are prepared to do the work needed to prepare a case based on factual material I think we can only do good. What do you think?

Brian Hasell

Anyone involved in helping organise one of the Group's conferences will find familiar the plea by Peter McCombs for more papers for the upcoming 1985 conference. The Management Committee had decided for the first time to have three levels of conference papers:

- significant papers as part of the main programme
- briefer papers
- papers included in proceedings but not presented

Happily, there is no mention of Glenda Harding in the conference material, so she must still have been at primary school...

Interestingly, Malcolm noted that the membership was expanding from it's core engineering constituency, an issue One element of the 1984 edition that the current Roundabout has failed to maintain is Snoopy, which was "News from our intelligence network" on movements within the industry.

The September 1984 edition noted:

- Jenny Adams had left TDG (again) and gone to university as a planning student
- Anatole Sergejew (MoT, Wellington) was off to Canada to study for a Masters
- Nigel Williams (Christchurch City Council) was joining Grant Smith, John Winter and others at Gabites & Partners
- Gary Hunter had returned to Christchurch after three years with the Hong Kong government
- "Mrs" Denise Anderson (Ministry of Works and Development, Dunedin) had returned from course in highway planning at University of New South Wales

Amusingly, the Snoopy page also welcomed "yet another Minister of Transport - chap by the name of Prebble".

The main article of the day was on a trial of the Multafot red light surveillance system (i.e. a red light camera). This trial originated from a NZ businessman receiving an infringement notice in the post after driving through a red light in Europe. "Impressed by the efficiency of the process" he arranged for the Multafot system to be sent to the MoT in NZ to trial. Well, why wouldn't you?

The article describes use of the Multafot camera (a \$40,000 camera unit containing 17m of film) on the apparently notorious Worcester/Barbadoes St intersection in Christchurch. There was a fair amount of trial and error, with the night-time flash unit operating during all light conditions and startling drivers, as well as the loop sensor picking up vehicles 'cutting the corner' from a side road. 216 vehicles were photographed over the four months the system was in place.

Businessman."

Of course, red light cameras are now commonplace in NZ, so the "businessman" can rest assured.

The edition welcomed new members (John Williams, Brent Harries, Tom Greenwood, David Silvester, Richard Clark and Stephen Isaac) and encouraged others to apply. "The only requirement for membership is that the person is active in the traffic and transportation field, generally as part of their job. There is no academic requirement". Later on in the edition, a please was put out to help find missing members (R. J. Ward, I. P. Torelainen, S. J. Tidbury, I. H. Bone). They were to contact Bill Greenwood at MoT, presumably for a telling off and a new membership invoice.

The 1984 edition also contained a crossword puzzle, or at least a completed one showing the solutions to the previous edition's crossword. All answers were transport-related (one answer was 'old moped'; goodness knows what the clue was).



"Among these vehicles were quite a number (notably buses and taxis) whose drivers seemed to like having their photo taken and some who found that reversing backwards and forwards over the loop at night produced a spectacular display of flashes from the equipment.

Although the presence of the equipment was publicised in newspapers and on radio there was no evidence that it either reduced the number of accidents or the number of red light violations."

"MoT enforcement staff", presumably police officers of some kind, were "not impressed" with the system, as there was no provision for owner liability from the photos and there was a reluctance to prosecute motorists who had merely stopped slightly beyond the limit line (this technically being an offence).

The article contained no photos or tables, but displayed a good degree of honesty, as it concluded:

"It is quite hair-raising lifting up to 13kg of equipment out of the cabinet and carrying it down a ladder. Some special vehicle or alternative would be desirable to assist in this operation.

Although the unit is advertised as being bullet-proof it was not rock-proof as several locals found when they managed to break the glass on the front and spring open the door of the cabinet to get at the goodies inside.

Conclusion: The MoT did not fancy the amount of effort required to achieve the efficiency that impressed our

There was an ad for the upcoming 1985 Group conference in Wellington, but no photos or fancy logos were necessary for organiser Peter McCombs. He even enforced a strict 25-word outline limit (25 words!) for submitted papers. The ad highlighted the \$150 AA prize (now worth \$800) and the \$50 Chairman's prize, and that "the subsequent published proceedings provide an authoritative summary of current NZ activity". Woe betide anyone who submitted frivolous material.

The edition also contained a, if one is honest, very dry article

# The article contained no photos or tables, but displayed a good degree of honesty

on a road safety evaluation by David Harte of MoT, complete with equations, tables and not even a funny photo to break up the material. Informative, yes. Engaging, not so much.

By comparison, the article on the Guide to Urban Roadmarking described it as "well set out and clearly illustrated, and a credit to the hard work of the Group members" who produced it. The Guide, published by the National Roads Board, was developed in numerous versions over time and several Group members – John Toomath, Peter Atkinson, David Murray, Don Houghton and Ross Hill – were

picked out for thanks.

Perhaps expectations were lower in 1984, but in the next article Brian Neill thanked the six members who responded to his roadmarking questionnaire. Six! I'm not sure that is a valid sample size, though Brian was continuing to seek contributions.

Pleasingly, the edition contained a short article and hand-drawn sketch from one Chesterfield Wellington) on an unusual overhead Give Way sign at Spring Creek, north of Blenheim. This gave a succinct outline of the problem (a plethora of signs "all lined up like tin soldiers" meaning the Give Way sign was obscured) and thanked Stuart Cross of the AA and Blenheim Borough Council for their A quick look on Google ingenuity. Street View shows the overhead sign is no longer in place (anyone know why it was removed?) but that many of the 1984 features (nearby hotel, powerpoles, etc.) are exactly as they were 30 years ago.

Bob Gibson then wrote a short piece on the National Research Advisory Council 1984 and the Group's general support of the formation of a Transport Research Advisory Committee. He noted the significant amount of research underway around the country and the lack of a coordinated programme, as well as highlighting that the Group was well placed to have a role on the Committee. He also noted, however, that the Group had reservations about the need for a Transport Research Association, as there was already a Road Research Unit within the National Roads Board, and the Management Committee intended to make submissions to support its views.

The "Dunedin Section" of the Group advertised upcoming meetings, including one by Gerry Bealing (General Manager, Harding Signals Ltd) on 'Traffic Signals - State of the Art' and another by Hank Geerlofs, Keith Willis and Chas Forsyth (MWD) and John Hallett (Dunedin City Council) on 'Computer systems for road maintenance management'. Little more material is provided on these presentations but it would be fascinating to compare the technology and scope they discussed with that currently used.

Two pages (of the 18 page edition) is then given over to a humorous exchange of letters between a fictitious (I hope) "Ms Crispan Gaylord Trotfast" and the Christchurch City Council regarding a parking infringement notice she received. Her explanation involved a "hairless African Zambizo bird" and

# The Snoopy page also welcomed "yet another Minister of Transport - chap by the name of Prebble"

being distracted by "a strange mating action" it developed whilst taking it to a local pet store. If that wasn't odd enough, the Council's response is written as a ten verse poem, finishing with:

"I am sorry about your problem
But you will have to pay the fine,
How else can the Council be refunded
For your letter and this rhyme?"

Anyone who says that today's Roundabout pushes the boundaries for what our Group stands for obviously overlooks such classic material.

The cost of the prizes was raised by selling promotion packages to local retailers, as well as sponsorship from Trusteebank Canterbury, Mobil Oil and Kentucky Fried Chicken. It was thought that this was the first time in Australasia that such a ticket game had been used for promoting bus patronage. The promotion resulted in 135,000 extra passengers on CTB buses and \$47,000 in additional revenue. It is unclear how much additional Kentucky Fried Chicken was consumed.

The final page of the edition was an offer to purchase conference

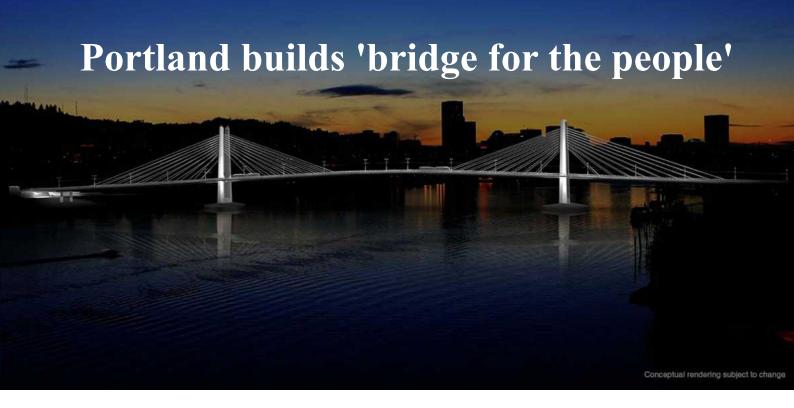


The humour is then quietly put aside for a detailed summary, by Peter Atkinson and Sue Iverson, of community hall parking surveys in the Canterbury area. The authors recommended, using results from 18 surveyed halls, that 50 parking spaces be the standard, although if the hall was situated at a church then two standards should apply. Graphs and regression analysis was provided, for those who doubted the results.

Under the banner of "New Idea!" was an article on a promotion from the Christchurch Transport Board (CTB) to increase bus patronage and awareness of its services. The six week long "Bus 'n' Win" promotion had run earlier that year and involved every bus passenger being given a "crimped-edged ticket which revealed three panels; a coloured dollar amount, a discount coupon from a local retailer and a bus stop number. The idea was to collect three different coloured tickets with the same amount to win the cash."

proceedings from previous years – bulk packages of 1975-1980, 1975-1983, or specific years from 1980. The ad quoted "This is a genuine offer so be in quick to qualify", so apparently there had been previous cases of falsely promised conference proceedings and members being tricked into sending their \$2 per issue.

All in all, it is fascinating to compare the content and scope of the September 1984 Roundabout to today's edition, 30 vears later. The names of some members have passed, but pleasingly some remain active today. interestingly, the issues of concern changes in transport policy, membership of the Group, technological advances, etc. - remain as relevant today as they were in 1984. And Roundabout itself was clearly a useful tool to share Group information, updates and amusing thoughts – something that hopefully also remains relevant in 2014.



In 2015 Portland will complete the Tilikum Crossing Transit Bridge, a critical component of a new 12km light rail route that will connect Portland suburbs with the downtown area and the regional transit system.

At more than 500m in length, the bridge will be the largest car-free transit bridge in the US, carrying light rail trains, buses, streetcars, cyclists and pedestrians.

The bridge will add capacity to the region's overall transportation system, with more light rail connections creating better access to important destinations and reducing commute pressure on other bridges.

In Portland, "the city of bridges", this will be the first span built over the river since the addition of the Fremont Bridge in 1973. Whilst the bridge will not accommodate private vehicles, the structure will be designed to allow emergency responders to drive on to it if necessary.

The name is a word from Chinook Wawa, a language used by first Oregonians, and later spoken by explorers, fur traders, settlers and the first few generations of Portlanders. Chinook Wawa is still spoken today. Tilikum means people, tribe and relatives and has come to mean friendly people and friends.

#### **Bridge features**

Type: Four-pier cable-stayed bridge (2 piers on land, 2 in the water at the towers)

Length: Approximately 525m

Width: Mostly 23m; 34m at the towers

Spans: Five

Towers: Two, each 55m high

Cable: Approximately 5.6km of cable

Paths: Two 4.5m-wide bicycle and

pedestrian paths





New Zealand's largest specialist transportation engineering consultancy is growing. TDG is seeking qualified professionals with energy and passion to create remarkable journeys with us for an extensive range of projects and developments.

Transportation Engineer/ Transportation Planner (Hamilton, Christchurch)

3+ years specialist experience. Opportunity for technical and professional advancement. Senior Transportation Engineer/Transportation Planner (Christchurch)

8+ years. Leadership, business development, project direction. Senior Transport Modeller (Auckland, Wellington, Christchurch)

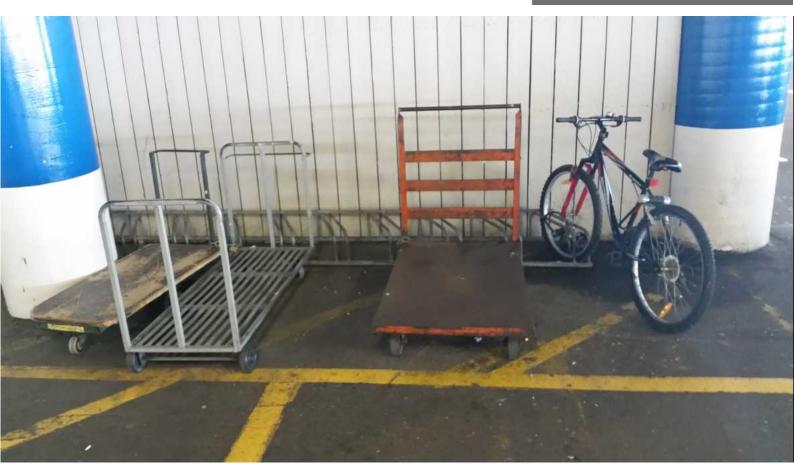
6+ years. EMME modelling expert. Undertake /supervise all aspects of modelling.

Find out more at:

ww.tdg.co.nz

or apply direct to:
john.knudsen@tdg.co.nz





### How not to use a bike rack (New Lynn, Auckland)

## Cycling Times From Yesteryear



POPULARITY OF THE BICYCLE AS A MEANS OF TRANSPORT IN CHRISTCHURCH. That the day of the "push hike" is by no means over in Canterbury's "City of the Plains" is well demonstrated by this great congregation of machines "parked" in the grounds of Christ's College during a recent inter-school Josthall match.

Sir George Grey Special Collections, Auckland Libraries, AWNS-19290717-48-5

#### BICYCLING ON FOOTPATH AT REMUERA ROAD.

(To the Editor.)

Sir,-I wish through the medium of your paper to call the attention of the proper authorities to the danof the proper authorities to the dan-gerous practice of bicycling on the footpaths in the Remuera district, with a view to having a stop put to the same. This is now carried on to such an alarming and increasing, extent that the path by the side of the main road more resembles a bicycle region track than the purpose bicycle racing track than the purpose for which it was originally intended, and I consider that the Road Board would be only doing their duty to-wards that part of the public who use the path for its legitimate purpose to at once make an example of the offenders, by having them brought before the magistrates and fined.

When Mr Northeroft was R.M. here he made the remark that "he would increase the fines of persons brought before him for this offence until he did put a stop to the practice." It is did put a stop to the practice." It is quite a pity he is not here now. It is quite a usual thing to see, any morning from five to twenty cyclists riding between the children going to school and compelling them to move out of their way, or risk being ridden over 1 can state, without fear of contradiction that there is more riding on the Remuera footpaths than all the diction that there is more riding on the Remnera footpaths than all the other paths in the Auckland district put together. There is not the slightest excuse for this, as the roads are thoroughly well looked after, and in good condition. It is really a scandalous thing that it should have been permitted to continue so long as it has.—I am, etc.,

PEDESTRIAN

Auckland Star, 21 February 1900



THE FIRST BICYCLE IN AUCKLAND Our readers have already heard a great deal about velocipedes coming into use in other colonies and provinces, and no doubt will be glad to learn that at last Auckland can put in a claim to the possession of a bicycle. Messrs. Cousins and Atkin have been lately engaged in the manufacture of one of these, and which was sufficiently completed last evening to allow of a trial. It was taken up to the top of Grey-street about nine o'clock, and Mr. Cousins mounted the "saddle," and made his first public essay upon the two-wheeled vehicle. Since Greystreet has been metalled and improved, there are few better roads in the province; and its gentle lope towards Queen-street must prove of great advantage to the tiro in making his first ait-mpt at mastering the new iron horse. The night was bright moonlight, and Mr. Cousins managed to get the machine in motion and keep it going for two or three hundred yards, when, finding he was likely to come to grief by losing his balance, he judiciously placed his feet astride as far as possible, and so prevented Several other attempts were equally successful, and we may congratulate Mr. Cousins on the chance of his speedily becoming an adept at the kind of work. Two of his employes likewise tried their prowess, and succeeded pretty we'l for begin-ners. After the "velox" (the latest name given to it, as a contraction of the word velocipede, which is found to be too long) had been fairly tested, it was taken back to the workshop, where it will receive its finishing touches in the course of a few days. We understand that it has been made to order, and no doubt others will soon follow. The cost of manufacture is, we believe, about £14; and the weight of the "velox" 40lb. The front wheel—the "guider" -is 3 feet 4 inches, and the hind wheel 2 feet 8 inches, in diameter. Both wheels are of woodlancewood, we believe-with iron tires, and the spokes are very light, but very durable. The rest of the vehicle is of iron. We hear that Mesars, Cousins and Atkin have offered a very handsome premium to

Daily Southern Cross, 24 August 1849(?)

any of their employes who can first bring it safely

along Queen-street without a "spill."



Left: Man with bicycle.1861?-1942 Alexander Turnbull Library http://natlib.govt.nz/records/22867137





## Traffic hobbles renowned bus system

A growing population combined with an influx of cars has slowed the traffic and caused congestion in the streets of Curitiba.

The city's Bus Rapid Transit system, or BRT, serves as a transportation model for the world, but it may not be a model that works for Curitiba as it grows and moves forward in the coming years.

Urban planners and city transportation officials flock to Curitiba to study the BRT, which has been implemented in 140 other cities throughout the world.

What makes the city a pioneer in transportation is how it links its BRT system with land use throughout the metropolitan area (see image below).

Bus corridors were built along highdensity axis, with traffic lanes and building height in correlation. A bus lane is at the centre of the axis and is flanked by a lane for slow moving cars.

The city's tallest buildings surround this main axis. Moving outwards, there are four lanes for fast moving cars and slightly smaller buildings, and then another bus lane with fewer lanes for cars near the smallest buildings. The pattern repeats for each of the main axis.

The theory when the first BRT ran through the streets of Curitiba in 1974 was that the buses would be easily accessible to people in busy city centres, where most of the people lived.

"It was working very well for nearly 40 years, until the 90s, early 2000s — until we had an increase in car ownership here," said Fabio Duarte, a professor of urban planning at Pontificia Universidade Católica do Paraná.

"That's a problem for us because as we have this kind of land use where we can build high-rise buildings along the corridors, and for safety reasons people here in Brazil prefer to live in towers than in houses," he said.

"Middle class people, or rich people, don't use public transportation. So now we have a very hard issue. We have good transportation in place, but those who use the system are not those living along the corridors."

The original transportation and urban planning system was developed for a city of 1 million people, but now Middle

Problems are developing in Curitiba because the rich citizens living in the city centre have their own vehicles, causing

there are over 2 million.

congestion in areas where there are more bus lanes than car lanes.

This slows the buses, which are already too crowded because they are transporting people to and from the 28 suburbs around the city. In rush hours, 6 to 7 a.m. and 5 to 7:30 p.m., the buses reach full capacity.

"What to do with this good system that is not as good as it used to be 10 years ago?" Duarte posed. There is no definitive answer at the moment, but lots of possibilities.

Curitiba has been considering the implementation of a subway system for a few years, but has not broken ground because of a lack of stable political backing.

"We have the project for the subway, the whole thing is already designed," said Daniele Coutinho Moraes, architect and advisor of foreign affairs at IPPUC, Curitiba's Institute for Research and Urban Planning.

"We have the budget to implement the subway project, we have received some subsidised finance from the federal government, from the state government, and everything was set for this project until last year. Then we had a change in our municipality."

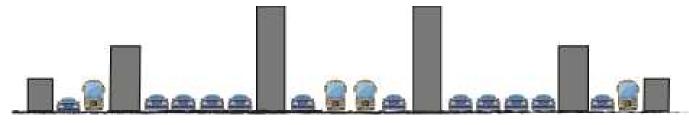
Middle class people, or rich people, don't use public transportation. So now we have a very hard issue.

When a new mayor took office in Curitiba, he halted the plans for the subway.

"It's a very, very very political project," Moraes shook her head. While collectively they agree that a change needs to be made, politicians, scholars, transportation and urban planning directors all have different views of the subway system.

Many people, including Duarte, are concerned that the cost of the subway is too high and it's not practical for their still developing economy.

Duarte also believes that the problem lies not with the BRT system itself, but with the lack of a metropolitan government.





The red buses stop at each bus stop in the city centre, but the blue buses only go to the main bus stations and are efficient for people traveling farther distances to the suburbs around the city. The blue buses are also eco-friendly, running off of both biodiesel and gasoline.

In the state of Paraná, city governance takes precedence, meaning that each suburb around Curitiba has its own transportation regulations.

If Curitiba tries to pass a new transportation plan, to add more BRT lines or integrate other buses into the main system, each suburb has to also pass this initiative.

If one of the 28 suburbs doesn't follow the new plan, the whole idea collapses and the quality of transportation continues to decline.

"It's radical but it's simple," said Duarte

Curitiba needs a mayor who will take a stand, he explained, and form an all-encompassing metropolitan agreement, then threaten to cut bus systems entirely if the plans are not instated in each suburb.

Moraes believes the answer lies in investing in the current BRT system.

"We are creating more BRT lanes in Curitiba, more axis of development, because we think that transportation is about a grid, a network of transportation," she says. "It doesn't work if you have just one line, just one axis of BRT."



The city is currently instating a sixth line running parallel to the main north-south axis and connects to many smaller bus systems in the suburbs

"I agree that a subway would solve many problems for us, but I'm very hesitant to talk about that because I am very proud of our system and what we have in Curitiba," she said, so she can't imagine the city replacing the system that made them so famous.

From: www.datelinebrazil.org

www.conferenz.co.nz/aktransport



2014

## Auckland Transpor

Adapting our transport system to meet a future of change

20 & 21 November 2014, SKYCITY Convention Centre, Auckland

#### KEY THEMES:

- Envisioning a future Auckland transport system
- · The economics of transport policy
- · Key transport systems and projects
- · Aucklanders' needs for public transport systems

Auckland Council \* Auckland Transport \* NZTA \* NZIER RTFNZ \* Transport Blog \* Heart of the City \* PwC

KiwiRail \* Carr & Haslam \* Ngāti Whātua Ōrākei Trust

SPONSOR











SUPPORTED BY







**EXHIBITOR & PEN/PAD** 

NETWORKING DRINKS SPONSOR

# Google's self-driving cars won't work in heavy rain. Or on most roads.

It seems that Google may be facing a bumpier ride with self-driving cars than initially expected.

An MIT Technology Review report released earlier this month said that the cars rely so much on maps and detailed data that they can't drive themselves around 99% of the US. It's not a promising outlook for Google's new project.

Although the vehicles have already driven 700,000 miles safely, there is clearly still a lot of testing still to do. The cars have yet to drive in snowy conditions and it's not yet safe to drive in heavy rain either. Many of the problems arise from how good the detection technology is on the car and how well it is able to discriminate between different objects in view and between different weather conditions.

The vehicle's video cameras can detect the blink of a traffic light, but Google is still working on trying make sure the cameras aren't blinded by sunlight. There are also countless other unexpected obstacles the cars may face — potholes, pedestrians running on roads, and parking.

Chris Urmson, director of the Google car team, acknowledges that the cars still had a lot of navigation problems. Illustrating

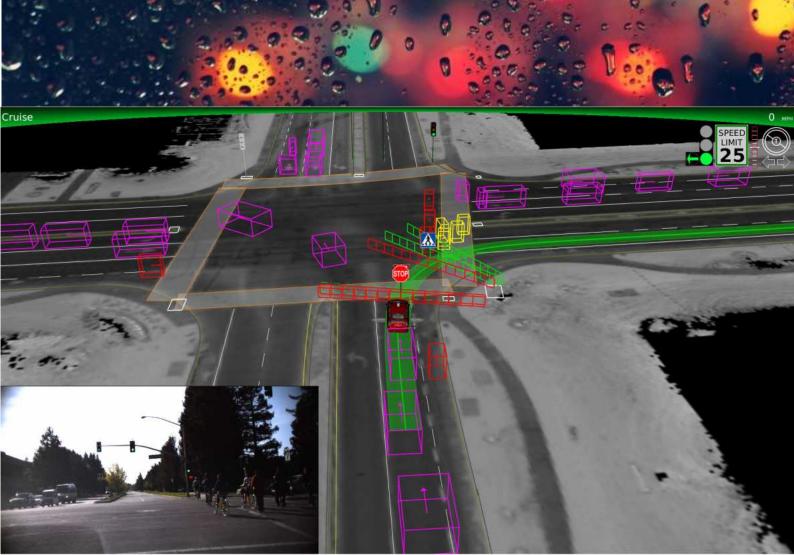
the point, he told MIT Technology: "I could contruct a construction zone that could befuddle the car." The cars detect pedestrians as moving, column-shaped pixels. Urmson recognises this could cause problems. For example, the cars wouldn't be able to spot a police officer by the side of the road waving for traffic to stop.

It is not just during the journey when the cars may be having problems. Before setting off on a journey, the machine needs to form a detailed route of where it plans to go. The process is far more complicated than the process in which Google Maps finds out a route or gives you directions. A Google car would not know if a new traffic light or stop sign appeared that wasn't on its programmed map.

Google is doing what it can to address these problems. When a Google car encounters new street signs and lights, it sends feedback to update the mapping software.

As a final insult, the California Department of Motor Vehicles has just introduced regulations to make having a steering wheel a necessity as of September 16.

Business Insider Australia





#### **Transportation Engineering Postgraduate Courses** - 2nd Semester 2015



#### **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) ~ four courses
- Master of Engineering Studies (MEngSt) ~ eight courses
- Master of Engineering in Transportation (MET) ~ up to six courses plus research project/thesis

Domestic student fee per course in 2015 is \$988 (except \$874 for ENTR401) incl. GST, + Student Services levy (up to \$372/semester).

ENTR600-level courses run in "block mode" to enable part-time and distance students to easily take part. Block course dates are given below. 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**

Anytime (contact Department)

**ENTR401: Fundamentals of Transport Engineering** (Self-study at home with 1-day

tutorial at UC, date TBC)

Semester 1 (Feb-Jun 2015)

**ENTR611: Planning and Managing for Transport** 

(Block dates: 2-4 Mar, 4-6 May)

**ENTR616: Advanced Transport** Planning & Modelling

(Block dates: 9-11 Mar, 11-13 May)

**ENTR617:** 

Traffic Engineering and Design (Block dates: 16-18 Mar, 18-20

May)

Semester 2 (Jul-Oct 2015)

**ENTR 604:** 

**Road Asset Management** (Block dates: 12-14 Aug, 14-16

Sep)

**ENTR613:** 

**Highway Geometric Design** 

(Block dates: 27-29 Jul, 5-7 Oct)

**Transport and Freight Logistics** 

(Block dates: 20-22 Jul, 28-30 Sep) major research project.

**DESCRIPTION** (more detailed Flyers available on website)

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}

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.

Urban transport planning process; Geographic information systems; Travel demand modelling and prediction; Project appraisal; Advanced transport

modelling.

Traffic flow & queuing theory; traffic study design and analysis; local area traffic management; traffic signals; intersection safety; parking planning and

design; traffic detection; intelligent transport systems.

Road asset management concepts, levels and functions; data requirements; evaluation of functional and structural performance; intervention criteria; deterioration models; rehabilitation and maintenance strategies and priorities.

Human and vehicle factors; sight distance; horizontal and vertical alignment; cross-section design; design plans; land use access; signs, marking, delineation; intersection design; major design project.

Urban goods movement; transport/freight logistics; supply chain management; planning/design for other transport modes (rail, air, sea);

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:

Dr Mofreh Saleh

Phone: (03) 364-2987 Email: mofreh.saleh@canterbury.ac.nz

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

## How would Salvador Dali go as a roadmarker?



If you're a fan of the Salvador Dali 'melting stuff' artistic conceit, check out the weirdly melting line markings on this bridge in Centreville, Virginia, USA. The clock on the right has been added for effect. Just in case you were wondering. *From Jalopnik.com* 



## **Update from IPENZ**

The following message was sent out by the Interim Chief Executive of IPENZ (Institution of Professional Engineers New Zealand), Kieran Devine, regarding proposals to strengthen regulation of engineers and may be of interest.

"You may have heard recent announcements from the Minister of Building and Construction, the Hon. Dr Nick Smith, on proposals to strengthen the regulation of engineers.

The Government's proposals result from recommendations of the Canterbury Earthquakes Royal Commission and a review of the existing professional engineers' regulatory system during 2013 and 2014 by officials from the Ministry of Business, Innovation and Employment.

The five key elements of the proposals are:

- The introduction of a requirement that certain types of buildings be designed and certified by a Chartered Professional Engineer

- A requirement that professional engineers notify the consent authority of observed breaches of a building consent or building code

- The introduction of more rigour in the assessment of engineers and the publishing of more detailed information about their competency

- Widening the current Registration Authority to reflect a

broader range of professional engineers and interest groups. This Registration Authority would propose occupational rules and standards and also take action on less serious complaints

- The establishment of a new construction industry

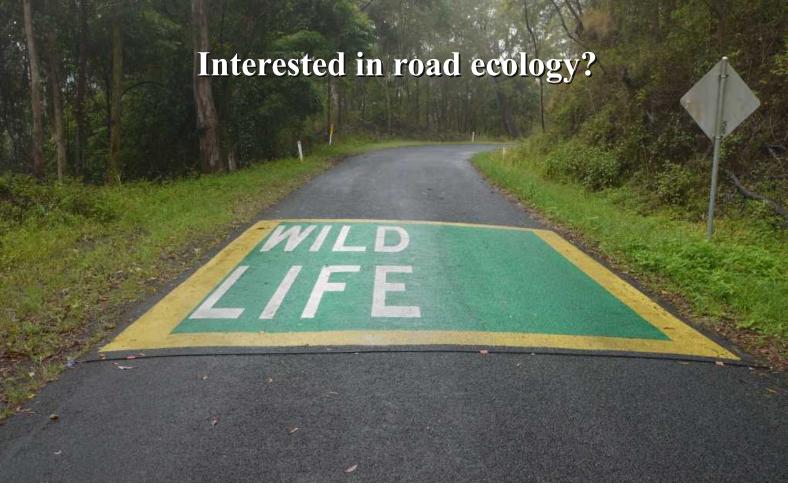
- The establishment of a new construction industry occupational monitoring body that would approve occupational rules and standards and hear serious complaints.

To access the consultation document online go to: <a href="http://www.dbh.govt.nz/occupational-regulation-of-engineers">http://www.dbh.govt.nz/occupational-regulation-of-engineers</a>

Submissions close on Friday 31 October 2014, and IPENZ will be seeking Member comments on a full submission.

If you have any initial comments, please send them to Tim Davin at <a href="mailto:dir-er@ipenz.org.nz">dir-er@ipenz.org.nz</a>





"Good and bad Places for Roads: Effects of varying Road and Natural Pattern on Habitat Loss, Degradation, and Fragmentation" by R.T.T. Forman

Improving ecological conditions around the road network is emerging as a significant objective of transportation, along with providing safe and efficient mobility.

Reading landscape patterns is a key to success. The prime goal of this article is to identify ecologically appropriate and inappropriate locations for road construction, removal, and mitigation in the network. Other goals include understanding the effect of road location between two large natural patches, and progress in developing an ecologically optimum network form.

Simple spatial models are used with three independent variables: (1) road size or connection, (2) road location relative to natural patch or corridor, and (3) size/width of patch or corridor. Dependent variables are habitat loss, degradation, and fragmentation. Modeling results suggest that in a landscape of dispersed natural patches and corridors, by far the greatest road effect (ecological impact) results from a highway that bisects or highway network that subdivides a large natural patch.

Overall, effects are greatest where a road crosses or is alongside large patches and wide corridors. For both types, the least effect is where a small road is alongside the margin. Road effects are relatively low around narrow corridors and lowest around small patches. Model results indicate that the probability of species crossing between two large natural patches is lowest where a highway slices across near the midpoint.

A highway network has a greater effect on habitat conditions in a natural landscape than in an agricultural or suburban landscape. Habitat degradation appears to have a greater ecological effect than does habitat loss or fragmentation in the landscape.

An ecologically optimum road network contains: a few large roadless areas; a few busy roads rather than many lightly used roads; and perforated roads (for species movement) between the large roadless areas.

In conclusion, a simple patch-corridor analysis of a landscape points to clear solutions for locating road construction, removal, and mitigation to maximize ecological benefits. The two overarching principles are minimizing roads in and around large natural patches and maximizing effective habitat connectivity between the large natural patches.

http://escholarship.org/uc/item/8xb0z15w

#### "From roadkill to road ecology: A review of the ecological effects of roads" by A.W. Coffin

Transportation infrastructure affects the structure of ecosystems, the dynamics of ecosystem function, and has direct effects on eco-system components, including their species composition.

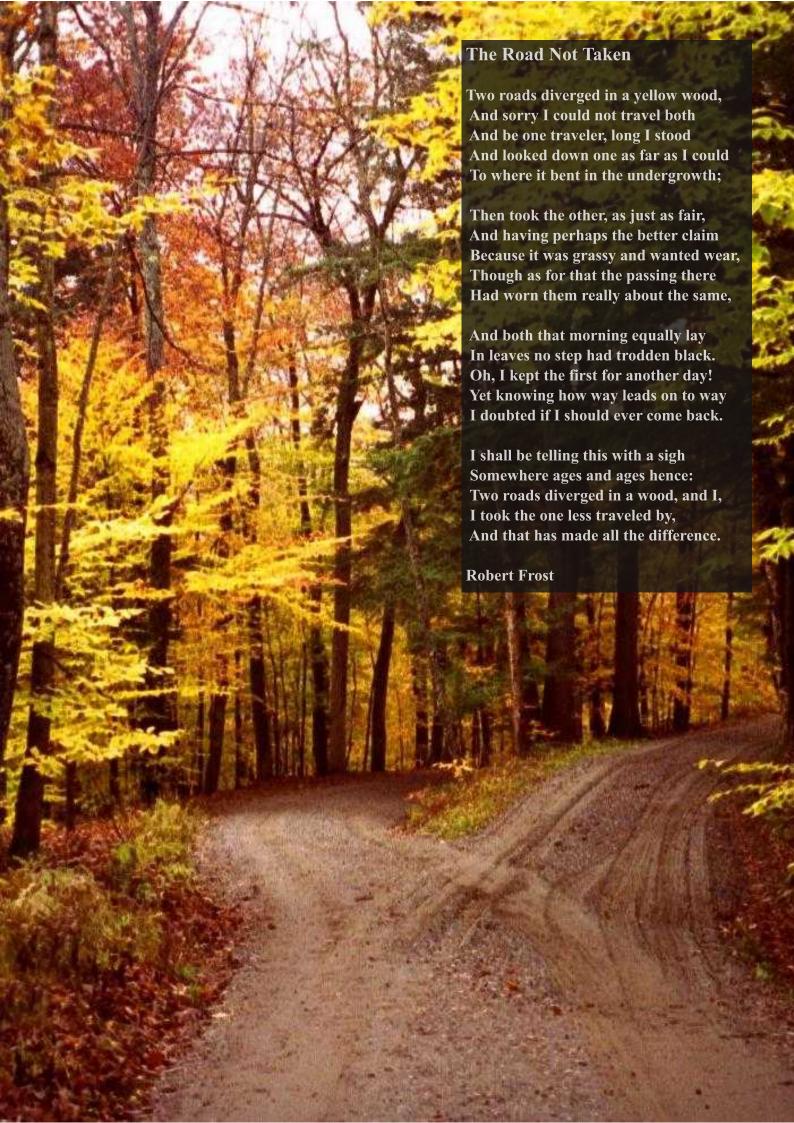
Clearly, the construction of transport lines results in the direct destruction and removal of existing ecosystems, and the reconfiguration of local landforms. However, transportation systems, and more specifically, roads, have a wide variety of primary, or direct, ecological effects as well as secondary, or indirect, ecological effects on the landscapes that they penetrate. The effects of roads can be measured in both abiotic and biotic components of terrestrial and aquatic ecosystems.

The nature of road systems as network structures renders vast areas of the landscape as road-affected, with small patches of isolated habitat remaining beyond the ecological influence of roads.

The increasing attention of scientists to the unintended ecological effects of roads has resulted in the emergence of the science of "Road Ecology," marked with the publication of a multi-authored volume, Road Ecology: Science and Solutions, in 2003.

http://www.lauxen.net/conecte/referencias/Coffin\_2007a.pdf

Material supplied by Bruce Conaghan.



## Warning! Warning! Party political broadcasts



## Transport policies of the main political parties

It's election time and the political parties want your vote. The following is a summary of the transport policies of the main parties, in the order that they are ranked in the polls at time of writing. For fairness, the policies are taken from the websites of each party, under what pops up when 'Transport policy' is searched. Some parties dripfeed their policies so didn't offer a full transport policy at the time of writing. Some policies had to be shortened for brevity sake. Some parties didn't have transport policies at all. This is not intended to be an exhaustive summary, but it was exhausting to collate.



National is investing \$212m from the Future Investment Fund in a package of 14 regionally important State Highway projects. Along with Roads of National Significance, these projects will ensure people and freight reach their destinations quickly and safely.

Our transport focus is on supporting our regions, improving road safety, and delivering value for money. This investment is on top of the extra \$360m we've already proposed for regional

roading. Together, that's nearly \$600 million extra for roading projects to keep our regions moving in the right direction

National will:

- Invest \$80 million to accelerate five critically important regional projects reducing time for construction to begin from 2020 to 2015.
- Commit \$120 million to fund six projects with construction expected to begin within three years.
- Make a further \$12 million available to accelerate investigation and design of three large projects in Hawke's Bay, Nelson and the Bay of Plenty.

This funding package also strongly complements the Government's Roads of National Significance programme; ensuring people and freight reach their destinations quickly and safely. National will also:

- keep supporting KiwiRail's "turnaround" plan, and Auckland's electric trains, but concentrate on the main trunk rather than regional lines.

- spend \$100 million over four years on urban bikeways, in addition to \$127m on walking and cycling nationally.



Transport is at the heart of a modern economy, connecting producers to markets and offering communities opportunities for economic development.

It is also a significant cost: the country spends over \$20 billion a year on transport including \$8 billion a year in oil imports and \$3 billion a year in

expenditure by the government through the National Land Transport Fund (NLTF).

Under the current government, the value for money taxpayers receive for their transport taxes has fallen dramatically.

Rather than work on improving the whole transport system as an integrated, multi-mode network, the current government has been obsessed with a handful of hugely expensive projects that it selected for political reasons.

Labour will rebalance the government's transport expenditure away from low-value projects chosen for political reasons towards the investments that will best improve growth, reduce congestion, and move our transport system on to a more sustainable footing.

#### Labour will:

- Build a 21st century transport system that provides choice and is cost effective Rebalance the transport budget away from the current government's exclusive focus on motorway projects towards a more rational investment in the most efficient and sustainable combination of transport modes. For freight this means investing in roads, rail, our ports, and coastal shipping. In our cities it means a greater emphasis on public transport, and walking and cycling
- Invest in the Congestion Free Network for Auckland
- Reduce congestion in Auckland by building the City Rail Link immediately, funding it 50:50 with Auckland Council
- Eliminate an unnecessary hassle by removing the annual registration charge for light trailers and caravans
- Reduce congestion and make the roads safer by requiring trucks to not drive in the fast lane on three and four lane motorways
- Reduce costs for motorhome and campervan owners by reversing changes made by the current government that



have doubled their Road User Charges

We can give people more choices, and make our streets safer. Smarter transport will be better for economy and our environment. We can have healthier and more vibrant communities as well as cheaper, easier and greener ways of getting around

#### Vision

- New Zealand has a sustainable transport system that supports liveable, people-friendly towns and cities, and enables the movement of people and goods locally, regionally and nationally

- at least social, environmental and financial cost.
- People of all ages and abilities have access to safe, reliable and convenient transport.
- Traffic on roads and roading is reduced as other modes of transport are preferred. Road traffic is predominantly low or zero-emission vehicles.
- Public transport in urban and rural areas is widely available and extensively used.
- Walking and cycling are a popular transport choice, facilitated by a nationwide web of safe and attractive cycle and walkways.
- Transport infrastructure provides access to provincial areas and supports regional development.

Key Principles: A sustainable transport system for New Zealand will:

- Take into account both the needs of future generations and the urgent need for immediate improvements.
- Prepare for and adapt to constraints imposed on travel and transportation by peak oil and climate change.
- Serve all New Zealanders and support vibrant and liveable communities.
- Minimise harm to people.
- Safeguard all aspects of the environment and minimise greenhouse gas emissions.
- Use energy and other resources



efficiently and sustainably.

- Be financially responsible.

NZ First will ensure development of a comprehensive NZ Transport Strategy to transport planning investment, with the goal of building an integrated transport system which will be cost effective, efficient, safe, secure and future proofed, and which will be economically socially environmentally sustainable, with costs fairly charged to users and others who benefit, and using positive incentives as well as supporting regulation to ensure that New Zealand's long term transport needs are met.

NZ First will:

- Not allow our roads to be privatised or corporatised.
- See that whole road network is properly maintained so that farmers will be able to get their produce to the ports or processing plants on well-maintained roads, and so that regional NZ does not lose out in favour of the insatiable demands of the main centres.

- Balance the roading needs of the main centres with the need to reduce the ever growing dependence on the motorcar. We will support practical and socially supportive and economically feasible demand management options, including affordable and convenient park and ride facilities, road space prioritisation measures, parking management and pricing incentives and disincentives, and differentiated road pricing options on major arterial routes.
- Seek to increase funding for well-designed cycling and walking commuter routes in the cities, and to and from schools and tertiary institutions.
- Ensure that all the funds raised through fuel excise taxes and Road User Charges go into the National Land Transport Programme.
- Replace Road User Charges with a diesel excise tax for all light diesel vehicles less than 12 tonnes, to be added at the pump in the same manner as for petrol.
- Introduce road pricing measures over time, especially for motorways and major arterials, while phasing out fuel taxes where possible, so that the economic viability of the Land Transport Fund is maintained at an adequate level in the long term.
- Make excellent quality public transport for people in all major population centres, and in regional areas where there is a need, a major priority.
- Seek to encourage the greatest possible use of public transport, especially at peak times, for people to commute to work, to school, to hospitals, and to meet their other transport needs.
- Make greater use of the Land Transport Fund and other sources of revenue to ensure that public transport is well resourced.
- Subject every major new urban roading project to a requirement that its transport objectives cannot better be achieved partly or wholly through an alternative public transport option or options taking account of regional or national transport strategy criteria as well as a wide range of cost/benefit considerations including externalities and socio-economic considerations, as well as city/district and regional plans. Light rail, ferries, buses with traffic propriety measures, and off road and on road cycling and walking routes must form a part of these considerations.
- Prioritise public transport vehicles and services in favour of electrification over liquid fuel powered vehicles and services, and in favour of high capacity vehicles and services, and in favour of high frequency services at peak times.
- Prioritise 200km of median barriers or safety treatments to be implemented on high volume, high speed roads over the next three years.
- Require the NZTA to develop a National Safer Cycling Strategy aimed at reducing the number of serious cycling accidents.
- Require the NZTA to develop a national strategy for speed limit setting

43

that sets out guidelines for local authorities to follow.

- Ensure that none of New Zealand's railway lines and other strategic infrastructure will railways privatised.
- Run passenger train services along all rail routes between the main centres, with connecting coach services linking outlying areas or running services between centres which don't have a railway line.
- Develop a programme of railways of national importance (RONI) to ensure that better use of our railway network services is achieved, improvements and extensions where there is opportunity to significantly reduce dependence on the roading network, especially for heavy freight and bulk freight services, but also where passenger services can be redeveloped to attract sufficient demand over time.



Zoning should be relaxed along major arterial transport routes, increasing the land available for residential housing. The natural environment and resources of New Zealand should be used responsibly future ensuring that generations inherit an environment that is clean and safe. Sorry, that's all there



This is going to be awesome whanau!

No specific transport policy but the promise of cheaper, faster internet. Yay!



ACT believes that Roads, and the public and private transport that they facilitate one of the most important infrastructural assets that New Zealand Unfortunately regulatory restrictions and poor funding models have restricted road building below optimal levels, imposing large time costs on personal and business trips.

ACT supports reducing the regulatory building, on road particularly by way of RMA reform. ACT believes that road user charges should be implemented so that roads are used more efficiently, so that more direct price signals are provided for the building of additional roads, and so to provide revenue for public private partnerships.

New Zealand needs an efficient road infrastructure – one which can safely

handle current and future traffic ACT: By the same logic, bus volumes for essential growth, rising living standards, and our external because they aren't clogging competitiveness. The costs to the

country and individuals inadequate of an infrastructure, and the resulting congestion, pollution, and travel time delay are immense.

Road infrastructure, because of the social obligations it meets, the long term nature of the investment and low return, and the invasive nature of new roading developments on private property means that the Government needs to be involved in the supply of roads. However the principle of providing motorists with the roads that they are willing to fund should prevail. Plainly, it is not now, with motorists facing long delays in congested traffic. Increasing traffic flows should not be seen as a negative factor because the more road users there are, the more funding there is to build and maintain roads.

revenue should more see infrastructure built to cope with increasing traffic. However unless changes are made, investment decisions will continue to be driven by political funding limits and imprecise cost benefit calculations, rather than through informed commercial (price responsive) decisions.

There also seems to be a perception that we cannot just keep building more roads and more lanes. This is used as an argument for better public transport options, yet improving public transport will not reduce the need to build more roads, it may just reduce the rate at which they are built. This is consistent with the principle of supply and demand because the better the public transport, the less the need for roads but also the less revenue collected from road users to pay for them.

Regardless of what public transport developments occur, as the need for roads grow, so should the ability to meet that need. This ability should not be restricted by a misplaced perception that building more roads or wider roads is a bad thing. The outcome should always be that motorists get value for their money by being able to use an efficient roading system.

ACT favours an increase in the use of funding options that better reflect the principle of user pays, such as toll charges on new and existing roads. It also supports the use of private public partnerships and private investment to fund and maintain new infrastructure so long as risk is shared in the same proportions as the investment. With a

heavy reliance on fuel tax to fund roads. cars that use less fuel or no fuel are being subsidised by vehicles that use more fuel. Using tolls on

existing roads more, and fuel tax less, is a way to achieve better alignment between road users and charges Another option could be toll lanes as well as toll roads in the way bus lanes are used. With appropriate cost analysis and construction road and recovery, maintenance should be self funding. The more motorists the more funds.

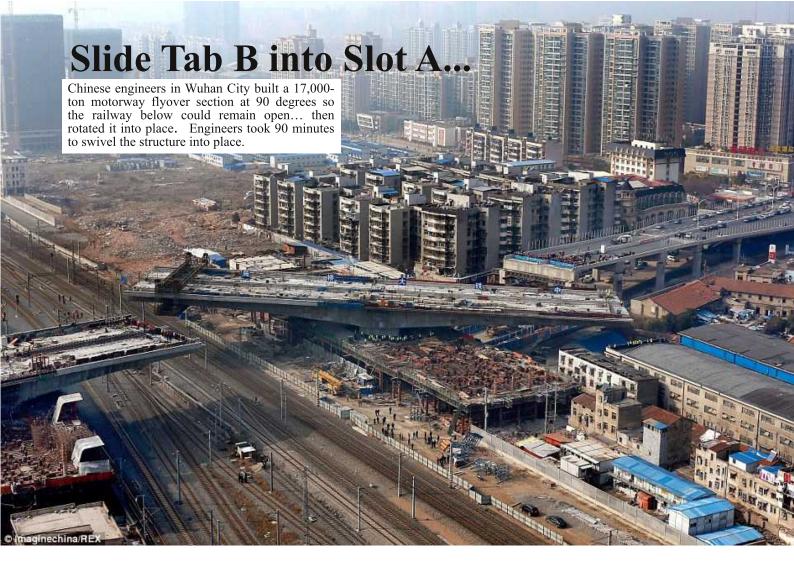
ACT does not support the use of revenue collected from motorists to pay for public transport, including the building of exclusive bus lanes. If public transport needs to be subsidised it should be by the rate payer or tax payer. To argue that road users benefit because better public transport means less cars on the road does not justify charging motorists. By the same logic bus users should subsidise motorists for not using buses, thereby congesting bus lanes or motorists should pay for the unemployed to stay home because they are not clogging up the roads going to work?

users should pay for the

unemployed to stay home

up roads

- Encourage private sector investment in road construction, both through direct ownership and through partnerships with central and local government.
- Use toll charges on new and existing roads to better meet the needs of the motorist.
- Broaden the base of revenue collection to include congestion charges, peak time charges and preferential lanes.
- Protect road user interests by encouraging competition between routes and by long-term contracts. Road users rightly do not trust monopolies, government-owned or otherwise
- Establish out local authority owned local road network companies so that the governance of these networks is a more transparent, commercial structure.
- Overhaul the RMA so that valid environmental concerns raised by road development are addressed but that development does not face unacceptable delays or costs.
- Not use revenue collected from motorists to fund public transport, including exclusive bus lanes.
- Reverse the 2003 changes to the Transport Act by reinstating the goal of an efficient transport network as the prime consideration for allocating funding to roading projects.
- Seek to relate spending on buses and suburban rail more closely willingness to pay.



Below: One of Auckland's new electric trains travels alongside Tamaki Dr on a clear winter morning.





## IPENZ Branch updates PENZ TRANSPORTATION GROUP



#### Auckland/Northland Branch

In July the Branch submitted on Auckland Transport's Draft Parking Discussion Document (DPDD). Overall the Branch was supportive of the intentions of the DPDD and agreed with the principle of developing an Auckland Regional parking policy. Developing a single cohesive approach to parking throughout the region will not only assist with the management of this important resource but also provide a more consistent approach which will be easier for users to understand. submission was high level in keeping with the Branch's role.

On Friday 25 July the Branch in conjunction with NZTA hosted a presentation and site visit of the new Grafton Gully Cycleway prior to its The NZTA provided a opening. sumptuous breakfast along with the presentation which put everyone in good stead for the subsequent site visit. This was a great chance to get up close and observe the finer details of this complicated project.

Then on Tuesday 5 August the branch hosted its annual debate on at the University of Auckland. This was our fourth year of this very successful event where we take a transportation topic of interest and debate its merits. year's moot was 'Cars are So Last Century'.

Like our past debate topics 'Are We Making Drivers Dummies', 'Should Pedestrians and Cyclists Obey the Road Rules' and 'Great Scott! Intelligent Transport Systems: Gift or Gimmick?' this was a chance to have a fun and light hearted look at the role that cars have in the formation of transportation networks over the past 100 years and what the future holds.

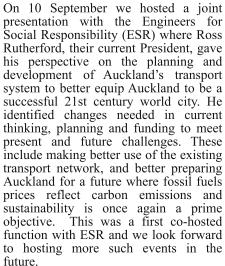
We had a good turnout for this event of over 70 people with a mixture of IPENZ TG members, students and members of the public. The evening was a great success and very entertaining with some excellent points made by both teams. We would like to take this opportunity again to thank the team members on the Affirmative Team – Pippa Coom, Matt Hinton and Darren Davis, on the Negative Team – David Mitchell, Rachel Blewden and John Mauro and of course the wonderful MC Patrick Reynolds from the AkTransport Blog.

Following on from the debate we had an interesting technical presentation from the NZTA and Auckland Transport on 26 August covering the initial consultation phase of the East West Connections programme.

The programme identifies the current and future issues on the transport network in the Onehunga, Penrose, Mt Wellington, Mangere, Otahuhu and East Tamaki areas and look at how these can be addressed over the next 30 years.



There was some contentions as to who won but congratulations to the Negative Team whose arguments about the mobility and freedom that cars provide won it on the night. We are in the process of getting the video edited to up load to the IPENZ YouTube site and will let you know when it is available.



We have a number of potential events coming up in October and November. We are still ironing out the details but these may include a combined Pub Quiz event with NZPI similar to the event we hosted last year and a presentation from Daniel Sauter who is a keynote speaker at the forthcoming 2Walk & Cycle Conference in Nelson.

We are also planning an exciting Christmas function in late November in conjunction with some specially organised site visits by NZTA to key





## Branch updates



projects underway in Auckland. Watch demands and identify route choices at this space.

Waikato/Bay of Plenty Branch

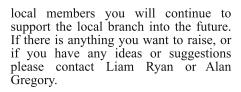
The branch hosted our first annual dinner at the Classics Museum in Hamilton on Friday 29th August. We had a good turnout with 35 members, partners and other people who have an interest in transport. We even had a group from Taumarunui!

The retro-styled Jukebox Diner is a great setting and we were well looked after by the staff who opened specially for our event. Our speaker was Leo Tooman QSM, former Police Inspector, city councillor and road safety guru, who gave a humorous and thought-provoking speech on the history of road policing, which was well received.

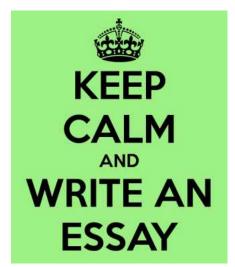
railway stations, airports and on roads in NZ and around the world.

Future planned events include an update presentation for Southern Links and the Waikato Expressway, to be held after the hearings are complete. Also a visit to the Cambridge bypass site in conjunction with the main branch; and a social event in Tauranga in October.

The branch committee are currently organising a number of initiatives to both promote the industry and help our professional members with development. We are working with Sam Charlton at Waikato University, looking at co-funding some research into local behaviour which examines perception of speed driver people's perception speed



**Central Branch** 



**Essay Competition** 

The Central Branch is offering members the chance to write a short (500 word) essay either in favour of or opposing the following hypothesis:

Removing car parking to build cycle lanes is a sensible approach.

The two best essays (one for, one published against) will be quality Roundabout (subject to checking!) and the writers will receive a Whitcoulls voucher as a prize. To enter, send your essay please to Josephine.draper@nzta.govt.nz October 2014

You may write both a for and against essay if you wish.

**Upcoming Site Visits:** 

Memorial Park Alliance Walk Through and Drinks - 17 September 2014, 4 PM - MPA Offices at Taranaki/Buckle St.

Works on the underpass are ahead of original programming, with the tunnel expected to be open to traffic in late September. The MPA alliance will be hosting a guided walking tour of the newly completed Memorial Park tunnel. Full PPE will be required. A limited amount of equipment may be available borrow; however, there is no guarantee of availability and it is highly recommended that you source your own gear. While the RSVP deadline was last please eliza.sutton@tdg.co.nz ASAP if you are interested to see if there is still space available. All are invited to the post-visit free nibbles at The Southern Cross (from 5pm). The nibbles are co-sponsored by TDG and Engenerate.



The evening concluded with a tour of the classic cars in the adjacent museum, which is well worth a visit. Thanks to Sue Philbin for suggesting the location and booking us in. And thanks to everyone who turned up.

We have had a reasonably good active quarter with some interesting events and activities that were well attended by our members. In July we were visited by Pieter de Haan (Knowledge Center Shared Space, NHL Leeuwarden). Pieter is a behavioural scientist and shared space expert from the Netherlands, with reviews of locations in Hamilton and Auckland together with presentations to local transportation groups in both locations. There will be a write-up in the next Roundabout.

August we co-hosted CONNECT (Women in Engineering and Construction) presentations on 'Wireless Journey Monitoring' at Diggers Bar in Peter Knudsen (CEO of Hamilton. Richard BlipSystems in Denmark), (Beca), Leanne McAdams Young (Leanne McAdams Consultant) and Ke (NZTA) shared their of Bluetooth experiences using technology to identify incidents, monitor environment against actual conditions within the region. This will valuable information understanding how our roads are used and the attitude local drivers have to speed. Research will be made available We are also in to our members. discussions with Jean-Paul from the CILT and forging links to share experience and events.

Our mentoring "match up" is ongoing, with members offering their experience expertise to assist development within the region. If you are interested in becoming a mentor or if you are looking for one please contact Shaun Lion-Cachet. Norm Robins has organised a centenary-themed poster competition for local primary schools. The idea is to get them thinking about the history of transport in Hamilton and how it has shaped the city in the last 100 years. Years 3 to 6 have been invited to submit posters by the first week in December, with prizes for the best three. A parallel competition is being run for of Plenty, focussing on Tauranga.

Overall we have been more active than in previous years and we hope that as



## PENZ Branch updates PENZ TRANSPORTATION GROUP





End of Year Mackays to Peka Peka Site Visit and Food/Drinks Scheduled for December 2014 – M2PP Site

As final event for 2014, the M2PP alliance will be hosting a tour of the Mackays to Peka Peka construction site inner workings. This will be followed by an end-of-year/Christmas social event with food and drinks either at the Waterfront Bar or a BBQ on-site after hours. This will be a great way to celebrate the end of 2014 and upcoming holiday season. Keep an eye on this space for more details.

Quiz Night Recap:

The IPENZ Transportation Group Central Branch held its annual quiz night last night at the Greenman. It was a great night with teams representing: Greater Wellington, Opus, Beca, TDG, NZTA, MWH, 41South and GHD. Congratulations go out to team Beca who walked away with the Trophy and the honour of organising next year's event (see above photo).

There was a wooden spoon award also. Instead of naming and shaming the team, we will leave them to think about what they have done, and practice for next year! A big thank you goes out to MWH (especially Glen Prince and Andrew McLeod) for sponsoring, organising and MC'ing the event. They brought a lot of fun and variety (including prizes) to this quiz, and have raised the bar for next year's event.

#### **Upcoming Lunchtime Sessions:**

- ICC Cricket World Cup 2015, Antony Crummy and Michael Rawlings - 15 October 2014 – Location TBA

This will be a presentation about the challenges from a logistical and transport perspective in pulling the tournament together and what is needed to make the event a success.

MoT Transport Mega Trends Scheduled for October 2014 – Location

- NZTA 'Safety Research' - Topic and presenter to be confirmed - Scheduled for November 2014 – Location TBA

#### **Upcoming Evening Session:**

- 'Is walking transport?': Perceptions and Policies of Walking – Daniel Sauter, Urban Mobility Research Switzerland -3 November 2014, 5:30-7:30 PM -Wellington Central Library in the mezzanine meeting room

Daniel Sauter has been active in the past 25 years as a sociologist and researcher in the promotion of walking, road danger reduction, the analysis of mobility patterns and the creation of inclusive public spaces and their related policies.

Walking is just as much about inspiration and imagination as it is about infrastructure and institutional set-ups. On the other hand: facts and data are as important as ideas. Daniel's talk will touch on these subjects and take you on a little journey through some planning and implementing experiences as well as old and new understandings of walking and public space. All of this with the goal in mind: how to create an active walking culture and more liveable communities. A discussion is likely to follow to include something interactive about Wellington (ie, what now after the Basin decision?).

This event is hosted by Living Streets Aotearoa, and is one of the stops Daniel will make in his speaking tour around New Zealand following 2WalkandCycle conference in Nelson.

#### Canterbury/West Coast Branch

Over the last few months the Branch Committee met on the 11 July, and 27 August 2014. The Committee focus over the last quarter was to remain up to date with progress on 2015 Conference organisation and bring on more Member presentations.

There were a few Local Branch events but overall things are ticking quietly along for the main Branch activity.

We held two Local Speakers (from the Velocity Conference 2014, Adelaide) Events on 8 and 22 July – thanks to Aurecon for hosting both of these. The Branch was lucky enough to have most Christchurch based presenters offer to reprise their recent offerings to the Conference. There was a good Branch turn-out to hear:

Tuesday 8 July:

- Glen Koorey: High visibility and cycling – balancing safety and culture

- Axel Wilke: Dunedin – leading the way in cycle planning in New Zealand
- Tim Hughes: Safety marking of the

- door zone in cycle lanes
- Shane Turner: Measuring crash risk for cyclists in Australia

Tuesday 22 July

- Simon Kingham: Will Christchurch be rebuilt as a cycling city: progress and reflections three years on
- Helen Fitt: The image of cycling and its impact on choosing to cycle
- Ruth Hudson & Michael Ferigo: Breaking new ground in Christchurch after the earthquakes
- Jillian Frater: Is it all about fitting in? Teenagers, social norms and cycling for transport.

Thanks to all the presenters and there was some real insight here to inform the Christchurch opportunities in cycling as part of the Earthquake rebuild. There is still so much planned and starting to gain momentum in Christchurch we have a broad range of options ahead and hope to bring these out as they come into public view.

Coming up we have our next Branch event with Urban KiwiRAP & TDB Update - Thursday - 18 September including:

- Paul Durdin discussing the Urban KiwiRAP project using estimated DSi (Death or Serious injury) casualty equivalents as a means of calculating the risk of fatal and serious crashes occurring in the future at both intersections and along corridors.
- Stuart Woods giving a summary of Trips Database Bureau (TDB) activity.

We have a terrific Sub-Committee very busy at present bringing together the 2015 IPENZ TG Conference, in Christchurch. This Subcommittee is meeting weekly now and making progress led by Kerstin Rupp as Chairperson. Bringing it all together is a huge challenge and any ideas or other support in this respect please send this or your contact details through the normal Branch contacts and we can let Kerstin and the team know. Look out for a call for papers for the Conference coming



## 2016 Asia Pacific Student Excellence Scholarship Programme

The Scholarship Programme is provided by ITS Australia to sponsor up to 10 students from participating ITS Asia Pacific Associations to attend the 23rd ITS World Congress 2016 in Melbourne.

The Programme was created to support and encourage student participation, not just attendance, at the World Congresses globally; to recognise and showcase student excellence from the Asia Pacific Region; and was promised as part of the 2016 ITS World Congress Melbourne bid.

http://www.itsworldcongress2016.com/home/student-scholarships

#### Prize

There can only be one winner (scholarship recipient) from each of the below participating ITS Asia Pacific Associations, up to a maximum of 10 overall.

#### Each winner receives:

- Award and Recognition to be presented at the ITS World Congress 2016 Awards Ceremony in Melbourne.
- Complimentary Student Registration to attend the Melbourne 2016 World Congress.
- Call for Papers Invitation an invitation to submit a paper during the Melbourne 2016 World Congress Call for Papers.
- AU\$5,000 Scholarship Funds a lump sum of AU\$5,000 cash, to be used towards expenses in attending the ITS World Congress 2016 in Melbourne.

Each winner should make and pay for their own arrangements (for example flights, accommodation, transfers and other arrangements as required) from the AU\$5,000 scholarship funds – any associated costs over this amount are the winner's own responsibility and expense.

#### Eligibility to apply

To apply, you must be a current senior undergraduate or post graduate student studying ITS or a related discipline and you must be from one of the following regions:

China
 Hong Kong
 Indonesia
 Japan
 Korea
 Malaysia
 New Zealand
 Singapore
 Taiwan
 Thailand

#### **Definition of Student**

A current senior undergraduate or post graduate student studying ITS or a related discipline.

#### Language

All submissions must be in English

#### How to apply

Step 1. Register for e-news and ensure you tick 'yes' to 'I would like to apply for the ITS World Congress 2016 Asia Pacific Student Scholarship'. In due time you will receive an email with the application form included.

Step 2. Complete the form and send it to your respective association contact listed in the email and on the form (not to ITS Australia)

Step 3. If you do not receive a reply within 7 days, please follow up on your form to ensure it has been received

#### Submissions closing date

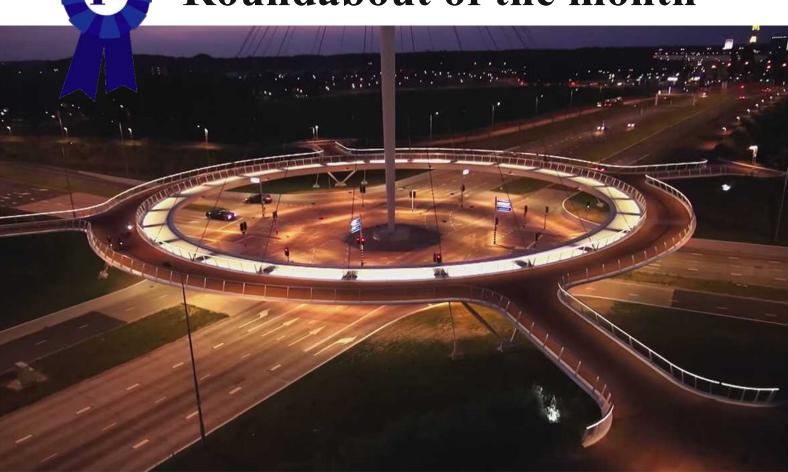
Submissions close 1 November 2014 and Winners will be notified 28 February 2015 by ITS Australia.

#### More information

http://tinyurl.com/2016APSESP









This circular cycle bridge - yes cycle bridge - roundabout in the Dutch city of Eindhoven is proof that transport infrastructure can also be beautiful. The Hovenring, as it is known, replaces the usual at-grade cycle paths and crossings, providing total segregation from traffic for pedestrians and cyclists. Seen a better one? Email <a href="mailto:daniel.newcombe@a.aucklandtransport.govt.nz">daniel.newcombe@a.aucklandtransport.govt.nz</a>



# Abley Transportation Consultants have opened a new office in downtown Auckland

Our transportation planning, engineering and GIS services continue to be in high demand. We have a number of roles available for professionals with local experience who are looking for new challenges.

If you have ambition, want to be an important part of an established growing business with a vibrant personable culture unlike any other, and enjoy exploring new approaches to solve our client's problems; contact us today.

#### To be successful in this role you will have:

- work experience within an Auckland transportation consultancy or a clear understanding of how consultants work and their business objectives
- the proven ability to develop and nurture client relationships
- · a clear history of providing the best quality advice, both technically and professionally
- experience understanding and solving complex transportation problems and presenting clear outcomes to decision makers
- · a tertiary qualification relevant to traffic engineering or transportation planning
- at least 3 years relevant experience as a specialist with an appropriate relevant professional qualification (or be in the advanced stages of achieving one).

Prospective applicants can obtain a full position description from Steve Abley (steve@abley.com or 021 556 864)

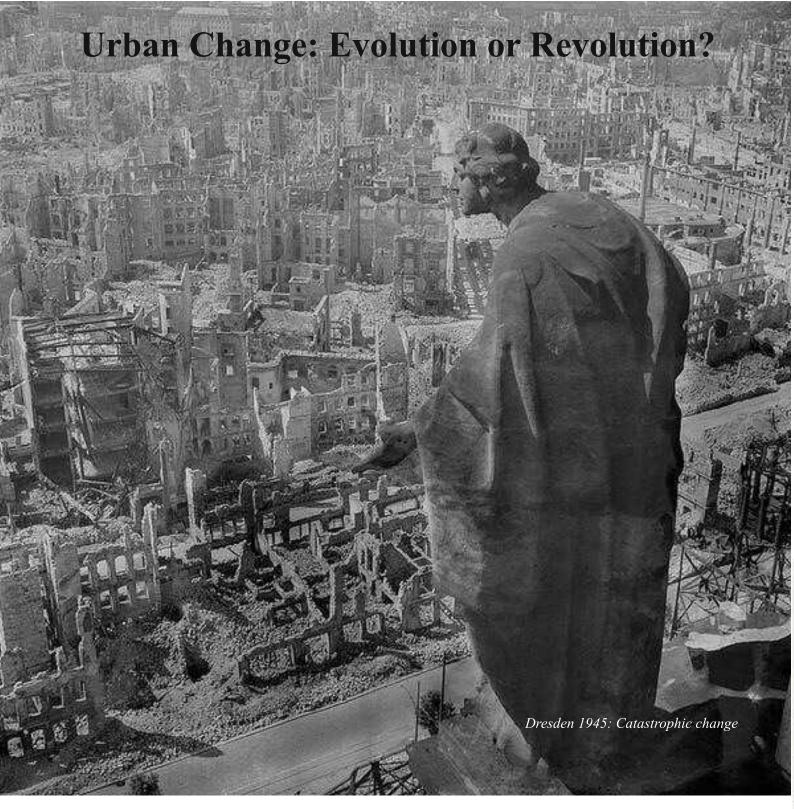
www.abley.com

This incredible pole outside Linwood E. Howe Elementary school in Culver City, California has had so many signs added to it that it now stands at around 5m tall.

The signs, which covered everything from tow-away zones to permitted parking to the "student valet service", were – as you'd expect – a tad confusing. Mayor Meghan Sahli-Wells got involved, and the sign was promptly halved. Except, the size was cut in half, not the amount of elaborate restrictions...

There are still around 20 different regulations to abide by, which makes this less of a win for parking parents and more the removal of a potential wind hazard. From Jalopnik.com







Opinion piece by Patrick Reynolds (www.transportblog.co.nz and www.patrickreynolds.co.nz)

Life is nothing but change, and cities being concentrations of human life manifest this fact in their physical fabric: They are constantly changing, always incrementally, sometimes abruptly. Positively and negatively. Investment versus entropy. Governments, local and central, are charged with understanding the forces at work behind this law of life and responding wisely with our taxes to attempt to maximise the potential positive outcomes within this reality for all citizens.

There is plenty of evidence that suggests there is a need for substantial change in transport infrastructure investment now in Auckland. This evidence is broad based and essentially adds up to the fact that the conditions that set the policy of the last 60 years no longer hold:

- It is clear that demand growth is shifting away from driving towards the Transit and Active modes
- It is clear that spatial arrangements are shifting including a substantial revaluing of the centre
- It is clear that demographics of the city are changing to smaller households and denser communities
- It is clear that the city's growth path is continuing; Auckland now is already city sized and getting bigger
- It is clear that environmental and geographical constrains are tightening; resource constraints in Transport sector ever more pressing

- It is clear that the urban motorway programme of the previous era is nearing completion; we are in a new phase
- It is clear that newer generations just don't share the older ones' ideas of what is important in urban form and how to move

It is in this context that we have developed our Congestion Free Network summarised here: (http://tinyurl.com/oc5cu4j).

However while there is clear evidence that we live in a period of discontinuity from the previous era this does not mean that what was built up during this era should be abandoned or not maintained. Quite the contrary in fact.

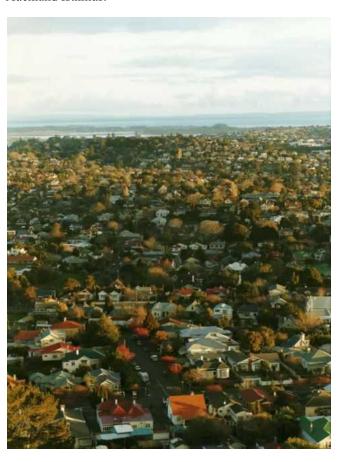
One of the primary aims of shifting our capital investments away from the urban highway network is to build up the complementary networks to such an effective and attractive level that will keep the highways functioning well and with more efficiency. And in this our programme is not only low risk and high value but also very different from the late 20th revolution that it builds on.

If there is one lesson to learn from the last great shift in transport investment in Auckland it is to be sure to keep what you already have and build on it; not to disregard the last system in order to focus totally on the next one.

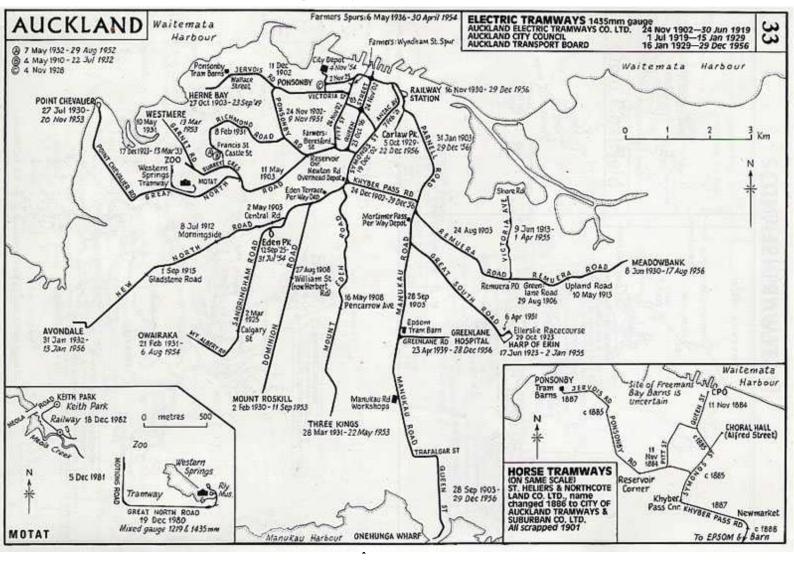
Let's have a look back.

The decision last century to invest in a system of urban highways for Auckland became over time a total commitment. We not only invested nearly every penny of new investment into this system starving any alternatives we also actually removed existing alternatives.

Here is a view of the leafy and desirable old suburbs of the Auckland Isthmus:



And here is a map of the system that made this urban form:



After the second world war Auckland faced the three interrelated problems. It was growing, there had been little investment in infrastructure for decades, and it lacked financial resources.

To that can be added that capital investment was dependent on a suspicious government that faced, as ever, competing demands.

One critical area that this came to a head was our electric tram system. While by any measure it was a huge success, carrying huge numbers of people and at around a net operating profit, it was in desperate need of catch up investment both in the machines themselves and extension to new areas.

In the context of the times the car offered a way out of this problem. There were very few of them in the 1950s, and while their uptake was expected to grow this was also expected to remain manageable.

It was argued that buses could replace the trams with the advantage of operating without fixed routes and be more easily extended to new areas and at lower capital cost to public finances.

All true. But really this was a way to give Auckland's relatively narrow roads over completely to private vehicles, as no priority was allowed for the tramreplacing buses.

Contrast with Melbourne: where they not only kept the more appealing trams but took advantage of wide boulevards allowing separation of trams and traffic on many routes, plus tram priority systems at intersections where they are mixed.

Relying on the car could be rationalised as cheaper too, simply because the machine and fuel costs were privatised, and that petrol taxes were to be the source of road funding.

Lost in the reasoning was the fact total reliance on driving is the most expensive way of ordering a city's movement. So while the car/road system had a good funding mechanism [fuel excise] this does not mean it is the best system economically, and this is still true today.

It would require ever more enormous sums and in fact add to the ratepayer burden and not relieve it as road taxes have never covered all road costs. Let alone other burdens of this system like parking and the loss of rateable land etc.

And motorways are subject to the laws of inverse success over time: they are best when they're new, they never get better as they attract more users. Below, rural Penrose with new motorway 1963-nice flow.



Road traffic, new Southern Motorway, Penrose, Auckland. Whites Aviation Ltd :Photographs. Ref: WA-59290-G. Alexander Turnbull Library, Wellington, New Zealand. http://natlib.govt.nz/records/23080156

Part of the world view of Modernism was a faith in the completely fresh start: The Brave New World. This is evident in art movements, new philosophies, individual building projects, but also at the urban planning level. That there was a huge desire for new beginnings is not surprising after the experience of the first half of the century with two extremely destructive world wars and a devastating Depression.

Auckland, although it didn't come out of the war with whole areas of the city wiped clear by bombing it did have plenty of proximate bare land, and in the city itself the buildings and structures of the colonial era were now ageing and dated compared to what seemed possible in the new Americanstyle future. It was ripe for this ideology of 'rip it up and start again'.

We took our lead from the zeitgeist, and the zeitgeist was all California [well, the Autobahn, actually, but no one was admitting that].

Furthermore the beginning of this new project coincided with a rise in prosperity, price controls being lifted from private car sales, and the price of crude oil fell every year from 1947-1970 in real terms.

Driving boomed in New Zealand as it did all across the western world and use of the new bus network declined proportionately. And then fell into a downward cycle of falling investment, declining quality of service, and uptake. The buses were never as accepted as much as the trams and nor could they ever command the control of the road as well either.

So when in 1976 Prime Minister Robert Muldoon exploited the divisions in the

many local authorities in Auckland to kill Auckland Mayor Robinson's 'Robbie's Rapid Rail' Auckland was committed, by central government, to a bold 'double-down' on an urban motorway centred road only transport network.

What had began as a just part of the city's movement systems as advised by North American consultants in the 1960s became an extreme and monotonal driving-only all-in bet.

Bold, ambitious, and in terms of the communities and places in its path; pitiless. All directed by central government, with local concerns overruled.

Whole areas of the city have never recovered from the burden of hosting this land hungry and severing system; in the most affected areas land value still remain low and land use poor.

They have been sacrificed for the convenience of those from other, further out parts of the new city. Around 50 000 people were relocated and 15 000 buildings removed. This was a revolution, with winners and losers.

Meanwhile investment in complementary systems froze. The bus network was stuck in aspic; even though it began carrying ever more people from the mid 1990s as the city grew and began to exhibit the kind of urban realities that make driving less optimal for more and more citizens.

Each time the rail network won hard fought and tiny investments; second hand trains from Perth, Britomart Station, ridership leapt in response. But still no meaningful investment in extending these parts of systems into an

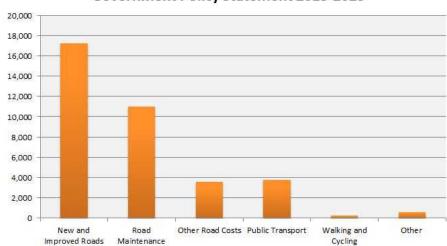


actual Rapid Transit Network has been able to be wrestled from successive governments this century.

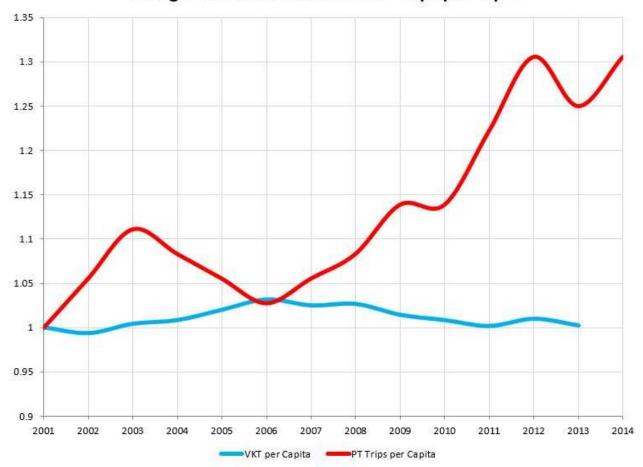
Although important steps towards such a system were undertaken first by the last Labour led government by funding Project Dart, a long overdue upgrade of the rail network, and the construction of the Northern Busway, and the current National led government by enabling electrification to follow through a mixture of grants and loans to Auckland Transport.

And, critically, AT and AC's multi year overhaul of the bus system and introduction of the integrated ticketing. The future still looks no different: [whole country]

#### **Government Policy Statement 2015-2025**



#### Changes in Auckalnd VKT and PT trips per capita



Despite the huge sums spent on more lane space the growth in driving has stalled, in contrast to uptake in the underfunded Transit mode: [VKT: Vehicle Kilometres Travelled]

It is time to build balance into our city's movement options and to do this we need a change in where spending is directed. And properly understood this is not another revolution but rather a return to moderation and balance and away from the current orthodoxy which is lopsided in the extreme.

The current policy of investing so disproportionately in the driving mode is a revolutionary policy, but not seen as such because it has become an orthodoxy.

We shouldn't be surprised with its extremity as it is a 20th Century programme, from that age of extremes and extreme ideologies. Which while at times exhilarating, it also meant much was lost, like Auckland's tram network.

Our position is that this kind of lurch is not what Auckland needs now but instead we should build on what we have by adding to the underdeveloped Active and Transit modes while maintaining and more efficiently utilising the mature driving resource.

Above right is a comparison of the proposed Green Party and National Party transport policies [for the whole country].

Note that the major difference is about what to build next, and that both plan to maintain current assets. We can change from extremity to balance without losing what we have. And it is long overdue...

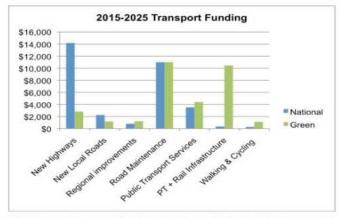
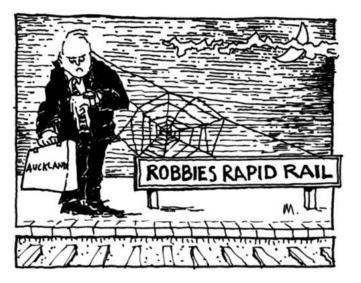


Table 1: Ten-year Government Policy Statement on Transport Funding for National compared with the Green Party.





## ELECTRIC RAIL

#### **Building Auckland's Future**

Rendezvous Hotel, Auckland 3-4 October 2014





#### **ELECTRIC RAIL-BUILDING AUCKLAND'S FUTURE**

### 3-4 OCTOBER 2014, RENDEZVOUS HOTEL, AUCKLAND

Your Continuing Professional Development and Networking opportunity for 2014

Register for the Electric Rail – Building Auckland's Future.

- 2 October ATP Seminar Members \$230
- 2 October ATP Seminar NON Members \$345
- \* Includes New Zealand's GST of 15%

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.

Preceding this conference on the 2 October 2014 will be the ATP Seminar Principles of Automatic Train Protection Operation.

#### Who will benefit from 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.

The seminar will benefit Signal and Telecommunications engineers who wish to gain an understanding of ATP systems, their major elements as well as their advantages and disadvantages. It is also appropriate for engineering managers who may need to make decisions on the implementation of these systems in the future. The seminar will also be of interest to rail operators and rolling stock providers looking to understand ATP and the associated operational implications.

This conference is recognised for IPENZ CPD Hours and EA CPD Hours. Business development and networking opportunities will be available throughout the conference.

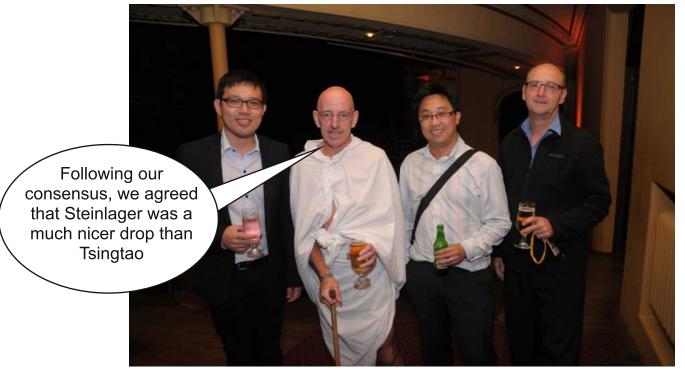
www.aucklandrailconference2014.org.nz







## **Caption competition**



The above caption, of last edition's photo, was suggested by Bruce Conaghan.

This edition's competition is on the photo below, with the man wearing/riding the odd contraption.

Who knows what this early adopter is saying? A suggestion has been made.

If you think you know better, send your suggestion to daniel.newcombe@aucklandtransport.govt.nz



## Transportation Group Research Advisory Sub-committee (RASCals) Update



The Research Advisory Subcommittee (RASCals) exists to support and promote transportation research among the Transportation Group.

Regular group meetings began this year. Current tasks include promotion of quality New Zealand transport research; developing guidelines to support emerging researchers; helping with conference technical paper peer review; consideration of the best ways that the Group can support members' or organisations' research financially; and developing a framework to prioritise transport industry challenges that would benefit from research funding.

In future issues of Roundabout we plan to let you know about how these tasks are progressing. Part of the first task (promotion of quality kiwi transport research) is presented below for your researching pleasure.

We hope that this will become an annual listing, of local transport research that has featured on an international stage.

The criteria for making this list are that the main author is a New Zealander; the research is transport-related (in a broad sense); and it was either presented at an international conference, or published in an international iournal.

Authors do not need to be members of the Transportation Group. If you know of local research that has missed the list, please let us know.

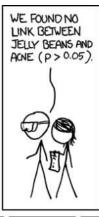
For more information about RASCals or to join our 'Friends of RASCals' email list. contact convener Bridget Burdett.

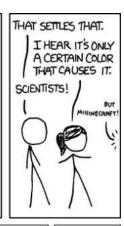
She loves to chat.

bridget.burdett@tdg.co.nz

027 5493219











WE FOUND NO



LINK BETWEEN

PINK JELLY



WE FOUND NO







WE. FOUND NO





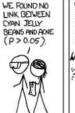


















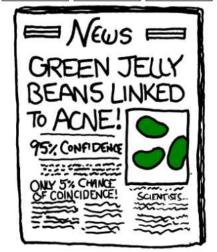












## New Zealand Transportation Research 2014



In addition to the research listed below (in reverse alphabetical order by author), the following international conferences hosted in New Zealand and Australia featured several papers by New Zealand authors. Consult the conference websites for paper listings:

2013 Australasian Road Safety Research, Policing and Education Conference

http://acrs.org.au/publications/conference-papers/database/

Velo-City Global 2014 Cycling Conference, Adelaide, Australia <a href="http://www.velo-city2014.com/">http://www.velo-city2014.com/</a>

Asia-Pacific ITS Forum & Exhibition <a href="http://www.itsasiapacificforum2014.co.nz/">http://www.itsasiapacificforum2014.co.nz/</a>

Yin, J., Wong, S.C., Sze, N.N. and Ho, H.W. (2013) A continuum model for housing allocation and transportation emission problems in a polycentric city. International Journal of Sustainable Transportation 7, 275-298.

Yang, T., Yang, H., Wong, S.C. and Sze, N.N. (2014) Returns to scale in the production of taxi services: An empirical analysis. Transportmetrica A: Transport Science 10, 775-790.

Yan, W., Wong, S.C., Zhang, L., Li, Y.C., Sze, N.N., Yan, X. (2014) Young driver distraction by text messaging: A comparison of the effects of reading and texting in Chinese versus English. 93rd Transportation Research Board Annual Meeting, 12-16 January, Washington D.C., United States.

Yan, W., Wong, S.C., Zhang, L., Li, Y.C., Sze, N.N., Yan, X. (2013) Young driver distraction by text messaging: A comparison of the effects of reading and texting in Chinese versus English. 18th International Conference of Hong Kong Society for Transportation Studies, 14-16 Decmeber, Hong Kong.

Sze, N.N., Wong, S.C., Lee, C.Y. (2014) The likelihood of achieving quantified road safety targets. 93rd Transportation Research Board Annual Meeting, 12-16 January, Washington D.C., United States.

Sze, N.N., Wong, S.C., Lee, C.Y. (2013) A binary logistic regression model for the success of road safety target. 18th International Conference of Hong Kong Society for Transportation Studies, 14-16 December, Hong Kong.

Sze, N.N., Szeto, W.Y. and Wong, S.C. (2013) Editorial, Special issue: Transport geography in Asia. Asian Geographer 30, 85-86.

Pel, A.J. and Nicholson, A.J. Network Effects of Percentile-Based Route Choice Behaviour for Stochastic Travel Times under Exogenous Capacity Variations. Proceedings of 8th TRISTAN Conference, San Pedro de Atacama, Chile, 4-9 June 2013: 4pp.

Pel, A.J. and Nicholson, A.J. Network Effects of Percentile-Based Route Choice Behavior for Stochastic Travel Times under Exogenous Capacity Variations. Proceedings of 16th International Conference on Intelligent Transport Systems, Institute of Electrical and Electronic Engineers, The Hague, 6-9 October 2013: 6pp.

Pei, X., Wong, S.C., Sze, N.N., Yao, D. (2014) Differences in the effects on different crash types in Hong Kong: Application of bootstrap resampling approach. 93rd Transportation Research Board Annual Meeting,12-16 January, Washington D.C., United States.

Pei, X., Wong, S.C, Sze, N.N. and Yao, D. (2013) Disaggregated crash prediction models for different crash types using joint-probability model. 2nd International Conference on Transportation Information and Safety, 28 June-1 July, Wuhan, China.

Nicholson, A.J. Travel Time Reliability Benefits: Allowing for Correlation. Research in Transportation Economics. Elsevier; in print.

Nicholson, A.J. Risk Management and its Application to Transport Network Management. Proceedings of 4th Jordan International Conference & Exhibition for Roads and Transport. Jordan Engineers Association, Amman, 12-13 March, 2014: 15pp. [Invited Keynote Paper]

Nicholson, A.J. Estimating the Travel Time Reliability Benefits of Projects. Proceedings of 13th World Conference on Transport Research, Rio de Janeiro, 15-18 July, 2013: 17pp.

Mackie, H. W., Charlton, S. G., Baas, P. H., & Villasenor, P. C. (2013). Road user behaviour changes following a self-explaining roads intervention. Accident Analysis & Prevention, 50, 742-750.

Li, Y.C., Wong, S.C., Sze, N.N., Yan, W., Tsui, K.L. (2013) The effects of alcohol on driving performance in Chinese adults measured by a driving simulator. 18th International Conference of Hong Kong Society for Transportation Studies, 14-16 December, Hong Kong.

Li, Y.C., Wong, S.C., Sze, N.N., Tsui, K.L., and So, F.L. (2013) Experimental study on the temporal profile of breath alcohol concentration: preliminary findings. 10th International Conference of Eastern Asian Society for Transportation Studies, 9-12 September, Taipei, Taiwan.

Li, Y.C., Wong, S.C., and Sze, N.N. (2013) Effective measures to combat drink driving offences: an attitudinal model in Hong Kong. Paper presented at the 20th International Council on Alcohol, Drugs and Traffic Safety Conference, 25-28 August, Brisbane, Australia.

Li, Y.C., Sze, N.N., Wong, S.C., Tsui, K.L. and So, F.L. (2013) Effects of drink driving on crash risk based on random breath test data. Hong Kong Journal of Emergency Medicine 20, 146-154.

Li, Y.C., Sze, N.N., Wong, S.C. (2014) Effective measures for combating drink-driving offences: An attitudinal model for Hong Kong. Transportmetrica A: Transport Science 10, 722-739.

Li, Y.C., Sze, N.N. and Wong, S.C. (2013) Spatial-temporal analysis of drink-driving patterns in Hong Kong. Accident Analysis and Prevention 59, 415-424.

Li, J., Wang, W., van Zuylen, H.J., Sze, N.N., Chen, X. and Wang, H. (2013) A predictive transit signal priority strategy at fixed-Time signalized intersections: A case study in Nanjing, China. Transportation Research Record 2311, 124-131.

Koorey, G.F., McMillan, S. and Nicholson, A.J. Incident Management and Network Performance. Proceedings of 4th International Symposium on Transport Simulation, Ajaccio, 1-4 June, 2014: 16pp.

Koorey G.F., Wong W.K. (2013) Is Cycling a Safe Mode? Comparing Apples with Apples, 16th International "Road Safety on Four Continents" Conference, Beijing, China, 15-17 May 2013, 12pp.

Koorey G., Leckie A., Chesterman R. (2013) Assessing the Environmental Capacity of Local Residential Streets. 92nd

Transportation Research Board (TRB) Annual Meeting, Washington DC, USA, 13-17 Jan 2013, 17pp.

Kingham S., Koorey G. (2013) Cycling in a rebuilt city: the role of cycling in the renewal of earthquake damaged Christchurch Asia-Pacific Cycling Congress, Gold Coast, Australia, 10-13 Mar 2013.

Kim, H.C., Nicholson, A.J. and Kusumastuti, D. Freight Transport Mode Choice and Mode Shift in New Zealand: Findings of a Revealed Preference Survey. Transport and Sustainability: Sustainable Transport (Eds. Ison and Shaw). Emerald Publishing; in print.

Kim, H.C. and Nicholson, A.J. Determinants of Freight Transport Mode Choice in NZ: Findings of a Revealed Preference and Stated Preference Survey of Shippers. Proceedings of 13th World Conference on Transport Research, Rio de Janeiro, 15-18 July, 2013: 17pp.

Jackett, Michael and Frith, William (2013) Quantifying The Impact Of Road Lighting On Road Safety — A New Zealand Study ITASS Research 36(2), 7pp.

Clark, H. E., Perrone, J. A., & Isler, R. B. (2013). An illusory size–speed bias and railway crossing collisions. Accident Analysis & Prevention, 55, 226-231.

Charlton, S. G., Starkey, N. J., Perrone, J. A., & Isler, R. B. (2014). What's the risk? A comparison of actual and perceived driving risk. Transportation Research Part F: Traffic Psychology and Behaviour, 25, 50-64.

Charlton, S. G., & Starkey, N. J. (2013). Driving on familiar roads: Automaticity and inattention blindness. Transportation research part F: traffic psychology and behaviour, 19, 121-133.

Burdett, B.R.D. Measuring Accessible Journeys: A Tool to Enable Participation. Municipal Engineer. ICE; in print.



If your research has been left off this list, please contact RASCals convener Bridget Burdett: bridget.burdett@tdg.co.nz 027 5493219





#### Traffic Engineering, Planning and Management

The aim of this five-day programme is to provide you with a solid grounding in the principles, tools and methods of traffic engineering, planning and management, and the contextual issues related to traffic engineering and planning and to managing traffic operations.

#### Date and Venue

Monday 9th to Friday 13th February 2015, inclusive. Waipuna Hotel and Conference Centre, Auckland.

#### Price (ex GST)

Standard fee - \$2,450 Early Bird fee - \$2,200 (for enrolments more than six weeks before the workshop)

#### Description

This is an experiential programme, with cases, examples and discussions, underpinned by solid information and best practice tools and methods. Take-away resources include a substantial course reader that will be an invaluable workplace reference.

The programme draws on the nationally recognised expertise of **Alan Nicholson**, University of Canterbury, **Roger Dunn**, University of Auckland, **Glen Koorey**, University of Canterbury, and **Doug Wilson**, University of Auckland.

It is hosted at Waipuna Hotel, Mount Wellington for driving proximity for Auckland and Hamilton participants, and for airport proximity for participants from other New Zealand centres.

This Auckland occurrence from 9-13 February 2015 will be the only occurrence for calendar 2015.

#### **Target Audience**

This programme is for practitioners or any other professionals who are involved in traffic engineering, planning or management. You will be engaged in policy-making, planning, consenting, consultancy, design, and construction or operation of traffic systems. You may be qualified in policy, planning or engineering; seeking either a solid introduction to traffic engineering, planning and management, or a tools and methods refresher.

#### Learning Outcomes

By the end of this programme, you will be able to:

- understand the basic theory and principles of good traffic engineering, planning and management
- apply these basics in your workplace practice
- analyse your and others' experiences relative to these basics
- analyse and deal effectively with situations where standard methods are unlikely to work well.

#### Presenters

**Alan Nicholson** is Professor and Director of Transportation Engineering and a former Head of Civil and Natural Resources Engineering at the University of Canterbury. He holds BE (Hons), ME and PhD degrees in Civil Engineering, and an MSc degree in Transportation and Traffic Planning. He is a Fellow of the Institute of Professional Engineers NZ (IPENZ), and was National Chairman of the IPENZ Transportation Group from 2003 to 2006.

Alan has over 35 years of experience in transportation engineering, including five years as a senior engineer in the Ministry of Works and Development, and has been an advisor on transport research to the NZ National Roads Board, Transit NZ, Transfund NZ and Land Transport NZ, plus several overseas organisations, since joining the University of Canterbury in 1981. He was a consultant to the New South Wales (Australia) Road Traffic Authority, for the preparation of their first Strategic Road Safety Plan in 1990, and has worked with several NZ consultants on the development of procedures for the economic



evaluation of transport projects in NZ. In 2010-2011, he was an independent expert advisor to the Nelson City Council for their arterial road study, and in 2010 was a member of the Board of Inquiry for the SH1 (Transmission Gully) project plan change.

Alan's teaching and research interests include transportation system planning and management; accident analysis, reduction and prevention; transport network reliability; risk management; transportation project appraisal and evaluation. He has presented invited lecture series and keynote papers on several of these topics at universities and international conferences in NZ and several overseas countries, including the UK and Australia.

**Roger Dunn**, BE (Civil), BSc (App. Maths), MEngSc (Transport), and Dip TP (Planning), FIPENZ, FITE, is an Associate Professor in the Department of Civil and Environmental Engineering and Director of Transportation Engineering at the University of Auckland. He has won numerous teaching awards including the Inaugural Faculty of Engineering Sustained Excellence in Teaching Award, 2007.

Roger has undertaken a wide range of research and consulting projects - the latter have included assignments overseas as well as in New Zealand. He is a member of the Editorial Panel for Road and Transport Research Journal. He has strong interests in traffic operations and management, and intelligent transport systems. Roger has represented New Zealand on several ITS standardisation committees and has been instrumental in setting up ITS NZ.

Prior to joining the University of Auckland in 1972, Roger worked for the NZ Ministry of Works and Development in Palmerston North and Wellington and then Freeman Fox Wilbur Smith and Associates in London, UK.

Roger is a Fellow and Life Member of the Institution of Transportation Engineers (USA), a Fellow and Life Member of IPENZ, a past Chairman of the Institution of Professional Engineers New Zealand (IPENZ) Transportation Group, and a past Fellow of Institution of Highways and Transportation (UK).

**Glen Koorey** is a Senior Lecturer in Transportation Engineering at the University of Canterbury. He holds BE(Hons) and ME degrees in Civil Engineering, a PhD in Transportation Engineering, and a BSc in Computer Science.

Glen has over 20 years of experience in transportation and traffic engineering, including ten years working as a consultant and researcher for Opus International Consultants before joining the University of Canterbury in 2004. Glen's main teaching and research interests include sustainable transportation (particularly walking and cycling), road safety analysis, speed management, and rural highway design and operations.

**Douglas Wilson** is the Transportation Engineering Group Leader / Senior Lecturer in Transportation Engineering in the Department of Civil and Environmental Engineering and a founding member of the Transportation Research Centre (TRC) at the University of Auckland. He holds a PhD in Transportation Engineering, a BE(Hons) degree in Civil Engineering and an NZCE (Civil) qualification and is a full member of IPENZ.

Doug has had over 15 years of consulting engineering experience in New Zealand in the area of transportation and highway engineering. He has over 14 years lecturing experience at the University of Auckland in the Transportation, Highways and Traffic Engineering areas.

Recent consulting experience includes: Travel Demand Management study for Auckland Council and Auckland Transport; Cost of Congestion Study for NZ Council for Infrastructure Development; road pavement surfacing characteristics and pavement material investigations / data collection / testing systems, skid resistance, road, road and rail asset management systems, highway geometric design, crash investigations, traffic impact assessments, crash reduction and prevention studies, road safety auditing and expert evidence preparation for hearings / Environment Court.

#### Information and Registrations

Website: www.odi.org.nz Email: info@odi.org.nz Phone: 03 943 2373

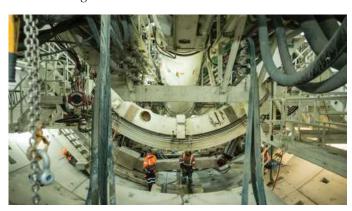


Hooray for tunnels! On the very day that the Lyttelton Road tunnel celebrated 50 years as New Zealand's longest road tunnel, the Waterview Connection tunnels actually inched past it in length. NZTA have now completed 2km of tunnel, just a tiny bit more than Lyttelton's 1.994km.

If you want to find out a bit more information on the project, visit: <a href="www.nzta.govt.nz/projects/waterviewconnection">www.nzta.govt.nz/projects/waterviewconnection</a> or <a href="www.facebook.com/AliceTBM">www.facebook.com/AliceTBM</a> for regular updates and some great vidoes.



Above: Lyttelton tunnel. Right and below: SH20 Waterview tunnel







Taken or seen photos you want to share? Send them to: <u>daniel.newcombe@aucklandtransport.govt.nz</u>
and win the adoration and begrudging respect of your peers.

This photo from Mt Eden, Auckland, shows the difference an encroaching hedge can make in the usable width of a footpath. Time for the Council's maintenance team to bring out the hedgetrimmers, perhaps?

Seen a worse example? Send it to:

daniel.newcombe@aucklandtransport.govt.nz



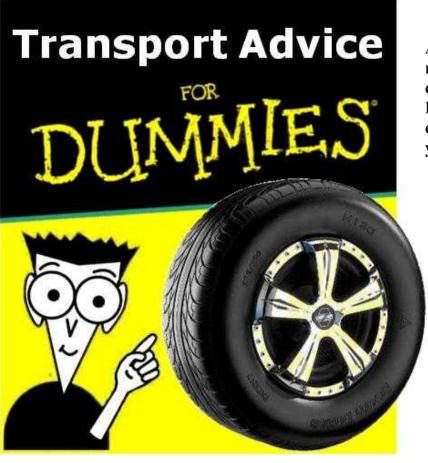
## **Recruiting engineers? Think French**

The École Nationale des Travaux Publics de l'État (ENTPE) is an engineering school that is part of the French Grandes Écoles under the supervision of the Ministry of Ecology, Energy, Sustainable Development and Sea, and part of the University of Lyon network. If you wish to offer a work placement, an internship and/or a final year project in the fields of transport, civil engineering, construction, environmental sciences or planning please send your offer or requirements to stages@entpe.fr indicating:

- · Your needs,
- · The tasks to be performed,
- · Contact details,
- Dates



Please use PDF documents. For recruitment ads for permanent or short term jobs e-mail: <a href="mailto:aitpe@entpe.fr">aitpe@entpe.fr</a>



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

#### **Dear Transport Guy**

I've noticed that every three years, around election time, a lot of new transport projects get announced. Is there any reason for this? Why aren't announcements spread out over time?

Edward, Bulls

#### Dear Deadhead

Well spotted. It's the old trick of 'offering to do the thing you promised three years ago, after three years of not doing it'. Which is almost as good as the old 'we don't have the power to do it, but if we did we almost certainly would do it' trick. There is also a correlation between marginal electorates and transport projects, but I'll be blowed if I can figure out what it is.

~Transport Guy

#### **Dear Transport Guy**

With the rise of new gadgetry, I think a lot of our traditional traffic engineering will soon be outmoded. For instance, we create large splays at high speed locations so that drivers have lots of time to see and

avoid other vehicles, but once autonmous vehicles are the this for us and we can tighten roads right up!

fluid, connected by brainwaves to a main computer that does everything for them - teaches them, medicates them, entertains them - whilst robots carry out all of the tasks that would otherwise have required the humans to move.

You are absolutely correct in norm, computers will do all every respect other than you are completely wrong.

Eventually humans will become so immobile and dependent computer that we will become helpless to their control

eventually become slaves to their artificial intelligence. Bah! Enough of the future! Have you seen that new app from Google?

~Transport Guy

A lot of our road designs are based on human vision and depth perception and need for leeway in case they make mistakes. In the future all that will be unnecessary. Shouldn't we be planning for that now?

Sean, Wellington

#### **Dear Shame**

You are absolutely correct in every respect other than you are completely Future wrong. profoundly technology will change transportation planning and traffic engineering, mostly by making it redundant.

In the future, people won't move They all. will remain motionless in a pool of warm



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



# Group Contact Details



Transportation Group National Committee National Chairperson, Submissions Coordinator, Membership Coordinator

David Wanty davidwanty@clear.net.nz

Vice Chairperson, Treasurer: Pravin Dayaram

Pravin@t2engineers.co.nz

Immediate Past Chair: Mark Apeldoorn mark.apeldoorn@tdg.co.nz

Auckland Branch Chair: Matthew Hinton

matthew.hinton@aecom.com

Waikato/Bay of Plenty Branch Chair: Alan Gregory

alan.gregory@opus.co.nz

Central Branch Chair, Administrator: Stephen Carruthers

Stephen.Carruthers@nzta.govt.nz

Canterbury/West Coast Branch Chair, Technical Subgroup

Coordinator/Liaison: James Park James.Park@opus.co.nz

Southern Branch Chair: Phil Dowsett Phil.Dowsett@nzta.govt.nz

Website Administrator: Liam Ryan liam.ryan@tdg.co.nz National Committee Minutes Taker: Michelle Bound

ipenz.auckland@gmail.com

#### **Branch Administrators**

Auckland: Stephanie Spedding stephanie.spedding@beca.com Waikato/Bay of Plenty: Liam Ryan

liam.ryan@nzta.govt.nz

**Central**: Josephine Draper josephine.draper@nzta.govt.nz

Canterbury/West Coast: Jared White jared@abley.com

Southern: Lisa Clifford lcliffor@dcc.govt.nz





#### Roundabout Editorial Team

Editor: Daniel Newcombe

daniel.newcombe@aucklandtransport.govt.nz

Immediate past editor and dogsbody: Bridget

Burdett bridget.burdett@tdg.co.nz

## Kids explain traffic engineering

Traffic lights:
Check twice because
you might forget what
colour it is.

