Roundabout

Newsletter of the IPENZ Transportation Group

Issue 138 December 2013

Women in our industry

Transport models for a 21st century profession

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Roundabout is the newsletter of the IPENZ Transportation Group, published quarterly. It features topical articles and other relevant tidbits from the traffic engineering and transport planning world, as well as details on the latest happenings in the NZ transportation scene.

All contributions, including articles, letters to the editor, amusing traffic related images and anecdotes are welcome. Opinions expressed in Roundabout are not necessarily the opinion of the IPENZ Transportation Group or the editor, except the editorial of course.

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

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

Roundabout is published around the 15th of March, June, September and December each year. Contributions are due by the 5th of each publication month.

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

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Editorial

There are a number of things in life that I don't understand. Egyptian hieroglyphics. Aussie rules. The popularity of *Packed to the Rafters*. Women.

Well, I hope I understand them. I've been married to one for a long time and we have a fairly gender-balanced modern family existence. We have shared domestic chores and child-raising duties - I even took paternity leave to care for my first child, only the second time a male in my workplace had ever used the provision - certainly a far cry from my father's generation.

My wife earns more than me (and I'm quite happy with that), but she doesn't work in engineering and I do wonder how her career opportunities would be different if she had chosen that as a profession. It continuously surprises and disappoints me how few women are part of the IPENZ Transportation Group hierarchy.

At the recent AGM there were only two females present - and one of them was taking the minutes. I don't know if anyone noticed, but it's 2013 and we are meant to have a roughly equal representation of women across all strata of our profession.

I know that there are healthy numbers of female engineers coming out of university but why are they not rising through the ranks of the profession in greater volumes? Is it a time lag as the older male-dominated generation hands over the reins to a younger lot? I hope not, as I've already been a branch committee chair and on the National Committee and handed on the role ot the next lucky candidate, and I certainly don't feel like I'm from an older generation.

The subject of tonight's discussion is: Why are there no women on this panel?

In this edition, Bridget Burdett - already known for her provocative and thought-provoking papers at past IPENZ TG conferences - examines the issues for women in the transportation profession. The article began life as a mentoring topic but quickly morphed into a wider examination of the reasons why so few women appear to rise through the ranks of our industry.

At the recent AGM there were only two females present - and one of them was taking the minutes.

There is a challenge here: occasionally this issue is raised and it is suggested that a 'Women's Rep' be appointed to the National Committee, in order to ensure a mix of genders. I always saw this as tokensim and ignoring the larger problem of why more women weren't naturally coming through the ranks.

I am pleased to note that the Auckland branch committee is roughly 50/50 male and female, and we have a female Deputy Chair (who will become Chair once she bumps off the male incumbent). This isn't a forced outcome, it is the natural result of the transportation profession in our branch. Why isn't that the case elsewhere? Read Bridget's article and let me know what you think.

Daniel Newcombe
Roundabout Editor

Chair's Chat

What's in store for 2014?
Thanks to those approximately 20 members who attended our video conference AGM. For those who couldn't make it, do read the AGM and other reports in the "What's New" part of our website.

Two points I picked up during the AGM were a desire to give more awards or scholarships for younger members and to sponsor (or co-sponsor) more international speakers. Next year, our vice-chair and Treasurer Pravin will be canvassing for ideas on delivering better value for money to all members and more effective spending of our increasing funds.

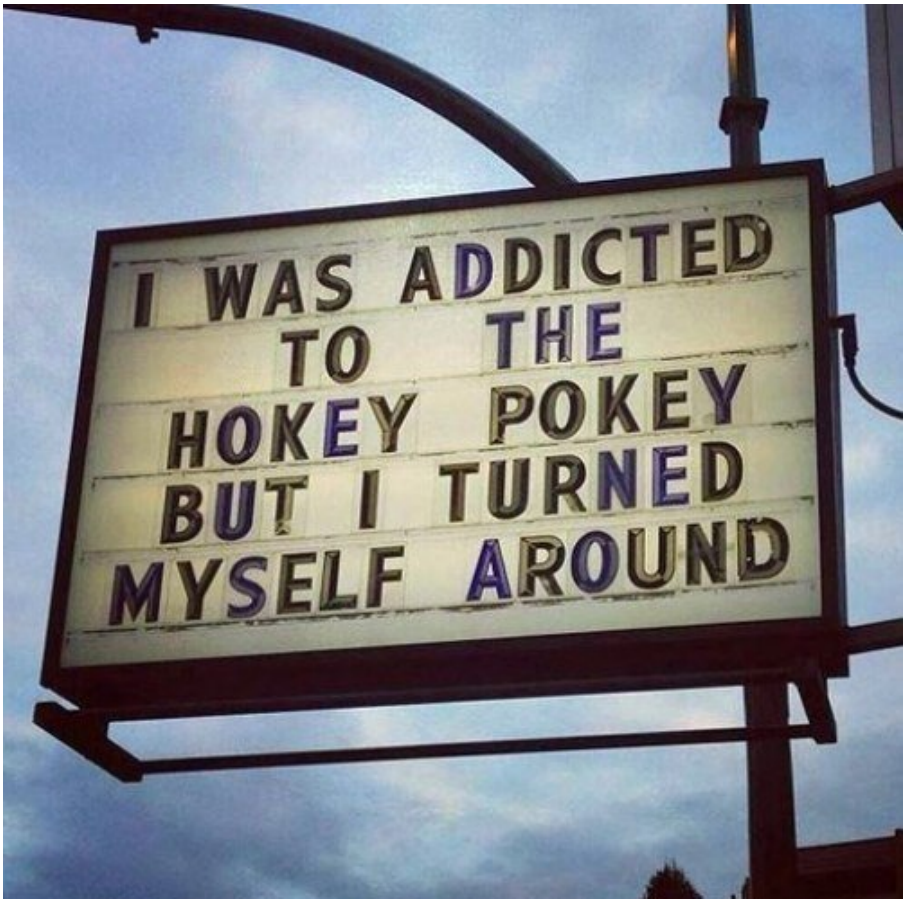
On our website are the branch reports for the past year and in my annual report is included some activities for next year – please read them. And in this Roundabout is our 2014 conference draft programme outline that includes sessions for our sub-groups and other 'sister' organisations joining with us for the special 2014 IPENZ centenary year.

But how about the bigger picture? As I write this, the economy is again in the news, with predictions that economic growth could be higher than forecast, yet at the same time the Government's next planned asset sale will probably be axed due to the current poor share prices for the last three.

Despite large Government spending on roads and infrastructure, the outlook for consultants, who comprise roughly 60% of our employed membership, looks fairly grim in various areas. Nationally, unemployment is falling yet "right-sizing" is occurring among consultancies as I can personally testify.

Aside from Auckland Transport, there seems to be comparatively little Council spending on transport and more undertaken in-house, one possible exception being macro-modelling with councils updating to the delayed 2013 Census year.

The situation across the Tasman is not so promising either, creating issues in other sectors too, and contributing to housing pressure in Auckland.



So what about some win-win ideas? One idea I've heard is that it's about time to start addressing the matter of improving the safety record for local roads. Of course the number of road fatalities has decreased significantly in recent years which is welcome, and all members contributing in even a small way to achieving this result should be applauded for their efforts.

However generally speaking the major engineering related road safety spending has targeted the state highways and many councils do not have their approximately 50% share of funds required to undertake similar improvements on their high risk roads.

Counting on Traffic

Despite almost impossible deadlines, Harding Electronic Systems recently completed a traffic data survey on Auckland's busy southern motorway.

In accordance with Auckland City Council's proposed new connections to the motorway at Mt Wellington, Transit NZ asked Harding to supply them with flow characteristics to ascertain whether the motorway had the capacity to cope with the extra traffic proposed.

Paul Mills, Engineering Manger Golden River UK, visited a number of Transit NZ's vehicle classification sites during a recent visit to NZ. Paul is pictured with Dave Wanty, Transit NZ Head Offiicer, at the Rimutaka telemetry site on SH2 north of Wellington.

December 1993 Harding News cutting Photo by Wayne King

Since 'Safer Journeys' is a Government initiative and the NZTA has a mandate for all roads and not just state highways, the idea I've heard is to create a road safety works category for all roads and Councils could request say 100% funding from this pool.

I'm guessing that it could work similar to the Federal and State Black Spot Programmes Australia successfully operated for many years (and continues to do so). This initiative should help across the board and the majority of our members not directly involved in the RoNS projects that arguably seem to be attracting a disproportionate share of total funds.

Did you know 2014 marks the 30th anniversary of the first telemetry site installed as part of the then Transit NZ's National Traffic Data Collection System. This was installed by what is now HTS Group and is still going strong on SH2 at the foot of the Rimutakas – refer to the above photo taken 20 year ago.

You will recall in my June 2013 Chat that I floated the idea of creating an enhancement of the 1993/1994 inaugural National Traffic Database – in recent discussions with some MoT officials they had never heard of it before and so were quite intrigued.

The retention of institutional knowledge, an issue for many voluntary groups and societies, including IPENZ, seems to ever present in our Government too.

In 2014 we're getting more involved with the NZTA, MoT and Standards Committee on a variety of fronts including ITS, eRUC, cycling and the EEM.

We hope that this increasing consultation continues in other areas and that our Group and sub-Group members continue to volunteer their time to advance our profession in line with our core objectives – thanks to all involved.

Wishing you all Safe Journeys for the summer break (as at 5 Dec we are 5 fewer road fatalities than at same time last year). Come back with some fresh ideas and do let us know!

Dave Wanty
National Committee Chair

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

IPENZ TRANSPORTATION GROUP

transport ingenuity
celebrating 100 years

IPENZ TRANSPORTATION GROUP

3M

1914 – 2014 Prosperity through Ingenuity IPENZ - ENGINEERS NEW ZEALAND

Shed 6, Queens Wharf, Wellington
23 – 26 March 2014

ipenztg2014.co.nz

CONFERENCE 2014 UPDATE

The 2014 IPENZ Transportation Group Conference (23 – 26 March 2014) is now only months away and things are really swinging into shape. A draft programme for the event is available on the conference website at http://tinyurl.com/ipenztg14

2014 is a special year for IPENZ: our 100th birthday! As a leading technical group of IPENZ, we'll be joining the celebrations focussing on "Transport Ingenuity – Celebrating 100 years".

Building on the centenary celebrations, we've woven in plenary speakers to talk about transportation, past, present and future.

- Ron Fisher (B.E, M.Eng Sc, MPENZ), former Director of Roading at the Ministry of Works – *Transition from the Ministry of Works to Transit NZ in the 1980s*;
- Rob Merrifield, IPENZ Member & Rail Historian – *the significance of Rail for the development of New Zealand and its economy*;
- Geoff Dangerfield, the first (and current) Chief Executive of the NZ Transport Agency; and

- Steven Newman, CEO/Director EROAD, one of New Zealand's leading transport technology companies – *how transport technology will change the future*.

Given that most Transportation professionals work in diverse teams, we've also invited Sam Johnson (below), of the Christchurch Student Volunteer Army to talk with us and answer questions about team work, making a difference and his experiences in Christchurch.

The Pickering Lecture, which is free to everyone to attend, is also being held at the conference venue on Monday evening. Dr Charles Elachi, Director, NASA's Jet Propulsion Laboratory will talk about the current United States space programme and mission to Mars. New Zealand's Sir William Pickering headed the NASA Laboratory for 22 years and pioneered the United States exploration of space.

The quality of abstracts submitted to the conference has been high and although it's a three day conference, we've had more proposals than we can accommodate. Following some tough decisions, we're confidently expecting a varied and interesting range of oral, round-table and poster presentations.

As this is a special year we've made sure we have a good representation from across the transport sector and have organised sessions for our sub-groups and sister organisations including Trips Database Bureau, Signals New Zealand User Group, Modelling User Group, TRAFINZ, CILT and the Railway Technical Society of Australasia. We expect to add details of presenters and their papers to the draft programme before the summer holidays.

transport ingenuity
celebrating 100 years

IPENZ TRANSPORTATION GROUP

3M

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The team have also been working hard on the social programme. Following a visit to the National Memorial Park Underpass, the Welcome Function on Sunday 23 March 2014 will be held at Zealandia (pictured left) which is home to some of the rarest and most extraordinary wildlife on the planet.

The function includes the opportunity to compete in a friendly geocaching (futuristic GPS orienteering) competition. Those of you that want to make the most of your visit can also pay for a close-up close kiwi encounter!

Any self-respecting conference dinner should involve dressing-up, although this is optional of course.

The theme for the conference dinner on Tuesday 25 March 2014 is **"famous people from the past 100 years"**. We guarantee some memorable entertainment!

We're blessed that our conference venue is located in the heart of the city's vibrant waterfront. This will make it easy for you to catch-up with old colleagues or have impromptu meetings with new contacts.

Shed 6 is a stone's throw from the city's main hotels as well as any number of cafés, bars and restaurants.

Visit the conference website (http://tinyurl.com/ipenztg14) for a range of hotel options that have been arranged for you. There are also maps for each choice, showing their location to Shed 6.

On-line registration is available at https://www.secureregistrations.com/IPENZ14/

To book your flights, also visit the website by clicking here http://conf.hardingconsultants.co.nz/ipenztg2014/transport/. If you wish to use another mode of transport the website also gives you all those options too.

Updates

Feedback sought on Local Area Traffic Management

ARRB (Australian Road Research Board) Group is seeking input from practitioners in the roads and transport sector in Australia and New Zealand, as part of a project for Austroads to review and update the Guide to Traffic Management Part 8: Local Area Traffic Management (LATM).

If you are a practitioner of LATM and traffic calming in a local and neighbourhood area and/or could submit relevant information to the review of the Guide, ARRB would appreciate your feedback. Familiarity with the Guide is not essential. Please feel free to forward the below survey link to contacts that also may be able to provide relevant input.

The survey can be completed online at: https://www.surveymonkey.com/s/JZJZ2LY. Completion will take about 10 to 15 minutes. Please complete the survey before 17 January 2014. If you have any questions or prefer to respond directly, please do not hesitate to contact ARRB on 08 9227 3053 or edmundsalt@arrb.com.au.

Rolleston New Town Proposal 1972-74

A research project has begun on the proposal to create a new town at Rolleston in the early 1970s. Any planners who may have had involvement with this project or who know of retired planners and others who were similarly involved can contact at C.L.Miller@massey.ac.nz or (06) 3569099 ext. 83631

What causes traffic? Ask the internet

Forgotten what you learned at University? Tom Vanderbilt, author of Traffic, has given a great 20-minute overview on the counterintuitive science of congestion. Click the link below.

'Turns out a lot of the problems we ascribe to poor roads or other drivers are really our own fault. The individual driver cannot often understand the larger traffic system,' says Vanderbilt.

"A big reason for traffic is that too many cars are trying to occupy too little space on the road, but that's not the only problem. A human inability to maintain a steady speed and following distance on the highway makes traffic a lot less smooth than it could be."

http://www.planetizen.com/node/65238

Study Award applications close 20th

The IPENZ Transportation Group aims to advance the knowledge base and practice of the transportation profession in New Zealand.

Each year the Group provides a Study Award worth up to $10,000 for a Group member(s) to undertake study in New Zealand or overseas, to learn about issues that are important and topical in the transportation area, and then to spread that useful and usable knowledge to peers.

If you believe you can help the profession learn more about important transportation issues, apply now for the IPENZ Transportation Group Study Award.

The essential requirements are that the study area is relevant to the interests of the Group, and that you document and disseminate your new found knowledge to your Group peers. **The deadline for applications is Friday 20th December 2013**. The winner of the award will be announced at the 2014 Group conference.

For details go to the 2014 Group conference website http://tinyurl.com/ipenztg14. If you have any queries please contact the IPENZ Transportation Group Awards Co-ordinator at: daniel.newcombe@aucklandtransport.govt.nz

Transportation Engineering Postgraduate Courses 2014

The University of Auckland
NEW ZEALAND

NZ TRANSPORT AGENCY
WAKA KOTAHI

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

COURSE	DESCRIPTION
Semester 1 (Mar-Jun '14)	***Dates of Lectures to be advised later***
CIVIL660 - Traffic Engineering & Planning (mixed mode*, 10, 11, 12 March + Civil 758*)	A range of selected topics in traffic engineering and transportation planning which will provide a basis for extension into further studies. (Diploma course which is a pre-requisite for several other 700 series courses). *** 1 x 3-days + integrated with Civil 758, a BEHons course every Thurs AM.**
CIVIL764 - Highway Safety & Operations (2, 3, & 4 April and 6, 7, & 8 May)	A range of topics on the operation of two lane highways and their safety including highway capacity, LOS, passing/climbing lanes, and economic evaluation methods. Safer Journeys and Safe Systems, Skid resistance, materials and roadside safety.
CIVIL770 - Transport Systems Economics **(20 & 21 March, 10 & 11 April and 22 & 23 May)**	Fundamentals of transport economics incl. supply, demand, pricing, congestion and other externalities; principles of economic evaluation in transport planning.
Semester 2 (Jul-Oct '14)	***Dates of Lectures to be advised later***
CIVIL661 - Highway & Pavement Engineering (28, 29, 30 July + Civil 759)#	A range of selected topics in highway engineering and pavement materials which will provide a basis for extension into further studies. *(Diploma course which is a pre-requisite for several other 700 series courses).* **# 1 x 3-days + integrated with Civil 758, a BEHons course every Thurs AM.**
CIVIL761 – Planning & Design of Transport Facilities (11, 12, 13 August and 22, 23, 24 September)	A range of topics on planning and design of transport facilities including fundamentals of traffic flow, modelling and simulation of transport facilities, macroscopic traffic models and traffic signal safety and operations.
CIVIL763 – Transportation Network Analysis (7, 8, 9 and 28, 29, 30 August)	Introduction to logistics and scheduling; Definitions of graph and network theory; Max-Flow problems; Minimal spanning trees and shortest path; Minimal-cost networks; Location problems.
CIVIL765 – Infrastructure Asset Management (18, 19, 20 August & 29 Sept, 1, 3 Oct)	Integration of planning and infrastructure asset management, resource management, institutional issues and legal requirements. The process of undertaking asset management plans and specific asset management techniques across all infrastructural assets.
CIVIL 771 – Planning & Managing Transport (31 July & 1 August, 28 & 29 August, 9 & 10 October)	Integrated planning of transport and land use, Outline of transport planning modelling, LTMA and the GPS, District Plans and RMA, Travel, trips and parking. Integrated transport assessments with multi-modal transport, Travel demand management, 'Smart roads', Intelligent transport systems.
Civil 772 – Public Transport – Planning & Operation (22, 23, 24 July 21, 22, 23 Aug)	PT Data Collection; Frequency and Headway Determination; Alternative Timetables; Vehicle and Crew Scheduling; Short-turn Design; PT Network Design; Reliability; Design of Shuttle and Feeder lines; Bus priority and BRT

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

For Admission / Enrolment inquiries contact: **Assoc. Prof. Roger Dunn**, Director of Transportation Engineering
Phone: (09) 373-7599 x87714 or (09) 923 7714 DDI Email: rcm.dunn@auckland.ac.nz

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

Swedes develop invisible bike helmet

"If people say it's impossible we have to prove them wrong."

Design students Anna and Terese took on a giant challenge as an exam project. Something no one had done before. If they could swing it, it would for sure be revolutionary.

What is one of the annoying things about riding a bike? Having to wear a bike helmet. Sure, they keep your brain from getting splattered, but they take a lot of the open-air-joy out of things, and they're not comfortable.

A pair of Swedish women have developed a remarkable solution: the invisible bike helmet. The above and below photos are from an advertisement for the product.

Tired of strapping ugly, uncomfortable styrofoam-and-plastic turtle shells to their heads, the pair came up with a pretty revolutionary solution.

It manages to give you full head protection without, remarkably, wearing anything on your head.

I'd like to just tell you the secret of how their Hövding helmet works, but this video does such a nice job of building suspense I don't want to ruin it. Click the link to their site and be impressed.

Once you see how it works it all makes sense, and is a very clever solution that draws from a number of technologies that are well-established and familiar in the transportation industry.

http://vimeo.com/43038579

Fundamentals of Traffic Engineering

Organisation Developme
Capable people, capable organisatio

Advance Notice
10–14 February 2014, Auckland

Roger Dunn, University of Auckland and **Alan Nicholson**, University of Canterbury, with Glen Koorey, University of Canterbury and Doug Wilson, University of Auckland, are pleased to jointly offer a five-day programme covering the Fundamentals of Traffic Engineering.

Following a comprehensive review, including an online needs survey across the traffic engineering sector, this programme has been recrafted to enable participants to check their learning and practice new skills in the workshop in preparation for supported application back at work. The programme now incorporates examples, case studies and industry speakers.

Aim
The aim of this five-day programme is to provide you with a solid grounding in the fundamentals of traffic engineering and the contextual issues related to planning and managing transport operations, and to support you to transfer your new knowledge and skills into your work practice.

Learning Outcomes
By the end of this programme, you will:
- understand the fundamentals of traffic engineering
- understand the theory of good traffic engineering practice
- apply the fundamentals in your workplace practice
- analyse your and others' experiences relative to the fundamentals
- analyse and deal effectively with situations where standard methods are unlikely to work well.

Target Audience
This programme is for practising engineers, technicians, planners and designers with relatively little or no formal training in traffic engineering and transport operations. Previous participants have been from a range of occupations such as:
- Traffic / Road Safety / Highway Engineers
- Traffic Planners / Transport Managers
- Land Use / Resource Planners and Engineering Consultants
- Transport Policy Analysts, Design Engineers and Technicians

Further Information
www.odi.org.nz Click on Short Courses tab, view by category, then scroll down to Management Skills

Course Inquiries
Cathy Anderson, Organisation Development Institute
PO Box 20395, Bishopdale, Christchurch 8453
Phone: 03 943 2373
Email: cathy.anderson@odi.org.nz

Fee
Standard fee $2,450 + GST
Early Bird fee $2,200 + GST (for enrolments prior to 20 December 2013)

Women in our industry Transport models for a 21st century profession

A recent article in the Daily Mail highlighted the issue that male supermodels are paid a small fraction of what their female counterparts earn. Gisele Bundchen (pictured; not a traffic engineer) earns an estimated 40 million US dollars annually. The top male models earn just over one million per year. So, men and women in the 21st Century Transportation workforce… where's the problem? Bridget Burdett (traffic engineer; reluctantly pictured) investigates.

Times, they are a-changin'. Over the last 70 years, the proportion of the workforce that is female has altered dramatically. In 1945, 25% of the paid workforce was female. That had risen to 47% by 2006. This article discusses the nature of life as a transportation professional in the twenty-first century, whether or not there are any issues for transportation related to encouraging women to join and stay with our profession, and the role that mentoring can play in supporting the professional development of us all.

Interviews with transportation professionals… the good news

Despite rapid increases in the proportion of women in professional careers generally, engineering in particular is suffering a lack of prominence of females, particularly in mid to senior-level careers. Around 20% of our 1200 IPENZ Transportation Group members are female, but all of the eight members of the national committee are male. So is it up to school-leavers to recognise the value of a career in transportation; is it just that boy brains work differently to girl brains and there will never be equal numbers in some careers, or are there changes that could be made within our organisations and as an industry, to better foster engagement by female professionals?

In researching this article, I sent an email questionnaire to a number of men and women working in transportation. Some women feel that it can be an advantage being female in the male-dominated engineering industry. A competent and confident female engineer may be more conspicuous, in a good way, than a male of similar experience. Women in transportation

who work fulltime often feel that they are valued equally with their male counterparts, and have comparable opportunities. An interview respondent noted that "I've always felt very supported and encouraged working in this industry, and haven't come across any negativity. It's great to see more senior women working in the industry as our generation, the first where women went to engineering school in large numbers, move through the ranks."

It seems from the interview responses that there are two main types of person in the professional world. There are confident, self-motivated, competent people who live by their own definition of success, and work consistently to meet those goals. These people, male or female, will generally find their success because they have the resources to source what they need, and to chart their own path. These people will find the mentors that they need, formally or otherwise. They will have a strong network of professional and personal support, and will contribute to the health of the transportation profession.

Then there are the others. Though the proportion of graduates who are female has not changed significantly in the last twenty years, there are still markedly fewer women than men in mid-career and senior positions in our consultancies and public sector organisations. The responses to the survey highlighted some possible reasons for this that are worthy of more explanation.

… the bad news

Every female professional interviewed expressed awareness of their minority position in the profession. Comments included:

"I think we still have some way to go to encourage women in our industry. I have always stood up for myself and made the most of professional opportunities, but I think someone less confident would not have had the same opportunities as I have had. In my office I would currently feel uncomfortable working part time and from time-to-time I get tired of the comments about females in the industry."

"I see no distinct or significant differences between how the industry fosters engagement for females relative to males."

"Mostly all the people I deal with in my day to day job are great, but I have been horrified on occasion (at conferences in particular!) at the sexist attitudes of some male engineers towards women, as highlighted in comments/jokes made during workshops sessions and especially after a few social drinks."

"NZ faces the same challenges that many countries do in first attracting women into engineering-based professions and then keeping hold of them once they've got them. The degree of 'wastage' around those 'family' years is huge and I think there is a common view that engineering and part time working/being 'Mum' don't mix. Personally, I think there are lots of women out there who disprove that point to perfection but we have to get better at getting that message out there."

"For some reason we seem to be well behind other professions. You can go to a law conference for example and the gender balance in the crowd and on the stage is really even. Go to an engineering conference and there might be 10% females. I don't have the answer to it but there is clearly some significant change required if we are going to be an industry that fosters diversity.'

It seems that unsurprisingly, issues to do with women in engineering are of more interest to women than to men. When replying to my email survey, the average number of words used in response was 60% higher for women… as they are less likely to be personally affected by any issues, men seemed to note fewer issues, and to explain them more simply. Comments from males included:

"I see no distinct or significant differences between how the industry fosters engagement for females relative to males."

"Differences do arise as a result of personal decisions based around family."

"Women I know of who work part-time don't seem to have any problems."

These responses indicate that the understanding of issues around women in engineering for most men in transportation relates directly to their experience of working with women. They notice the women in their professional network who are successful and balancing work with other commitments.

The issue then is that if there are women who leave the profession, for example after work experience overseas, or after having a baby, that they do not figure in most men's assessment of how the profession looks after women, generally. Women are active and engaged, in which case they are noticed, or inactive and disengaged, which is not seen as a problem because its effects are invisible to the majority of (mostly male) professionals.

What about part-time?

Clearly employers get more dollar-value out of a full-time than a part-time employee. In consultancy, profit share and bonus schemes are often directly linked with productivity and performance, so there are transparent links between the value that a professional brings to an organisation, and that employee's personal, financial reward.

Part-time workers generally accept this approach because they have made a specific decision to prioritise time away from work over full-time commitment to their career. In many cases, employee engagement among part-time workers is high because they value employer support for their flexible working arrangements over other factors such as bonuses or promotions.

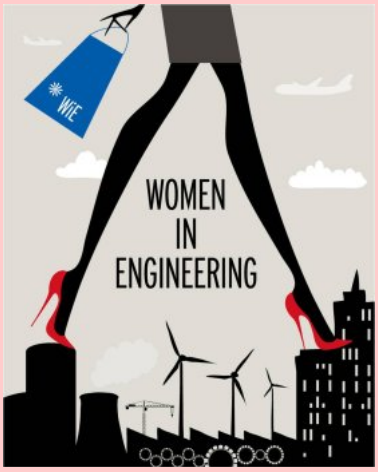
What is important is that working parents in particular are empowered to make decisions about the extent of their involvement in the profession for themselves, and not feel pressured to have the decision made for them by industrial or commercial imperatives. It is known that there is a significant drop in the numbers of females working in engineering after they become parents, and this may be influenced by a view that some roles require fulltime work, or that a particular business unit cannot maintain 'too many part-time staff'.

Women in particular who leave the profession are difficult to track. If not offered part-time or otherwise flexible working conditions after maternity leave, some choose to look for alternative work that does meet these conditions, whether or not that is within the profession of their training and pre-motherhood career.

Though on the surface many organisations promote themselves as offering flexible arrangements and being family-friendly, like many aspects of engagement it often comes down to an individual relationship between an employee and their manager. The law requires employers to retain an employee's job for them after a period of parental leave, but there is no requirement for this job to be offered in any way other than its original conditions dictated. Since 2008, New Zealand law has stated that an employee who has responsibility to care for a child has the 'right to request' flexible working arrangements, but there is no guarantee that such arrangements will be offered.

Of the female transportation engineers interviewed for this article, those who work full time tended to note a requirement that to advance their career in the same way as men, they needed to adopt the same practices as men, that is, work fulltime and to generally fit in to the

IPENZ has an interest in the development and retention of female professionals. A recent report into the experiences of graduates from 2000 and 2005 reached similar conclusions as intimated by the survey findings for this article:



The key factor that affected the careers of the female engineers was having children. Starting a family did not have the same effect on men, as it did on women. Women were more likely to take time out of the work force to have children, and to return in a part-time capacity (sometimes at a lower work level).

Working part-time, in particular, has an impact on career progression (engineering firms often structure career progression around hours worked). Employers can make a difference in making the return to work easier for women, through flexible work practices.

Flexible work is widely available but there is significant variation in practices and attitudes to flexible work in businesses. Despite the availability of flexible work practices, working long hours still seems to be the way people progress into management positions, and engineering companies are male dominated at management level.

From http://www.ipenz.org.nz/IPENZ/Career_development/Barriers-to-women-in-engineering.cfm

way that business has traditionally been done. One of the respondents from the IPENZ survey noted that

"I have found that adopting a more male mentality – swearing, drinking, having banter with people, can get you a lot further in engineering."

The clearest implication of women's choices in valuing family time over full-time work is that fewer women advance to management positions, which are almost exclusively seen as fulltime roles. For as long as this is the case, there will likely be more men in management than women, in transportation and elsewhere. The consequence of dominance of males in management is that the culture, policy and practices designated by management will therefore necessarily be biased (consciously or otherwise) towards the experiences, attitudes and opinions of men who have worked fulltime for all of their careers.

It is therefore important for the overall health of this diverse profession that women who are driven to be leaders and managers are ably supported, and also that people other than managers have an influence on organisational culture, policy and practices. Rise, women with a brain and a voice!

In researching this article, I came across several stories of women in particular, who started off in our profession, but who have left due to insurmountable struggles. They may be less confident, or have less professional support. They may not have had formal mentoring in the early years of their career, and have not built networks to navigate professional challenges. More than one woman stated that their employer simply did not allow them to return to work part-time after maternity leave, despite using their legal entitlement to request a flexible arrangement.

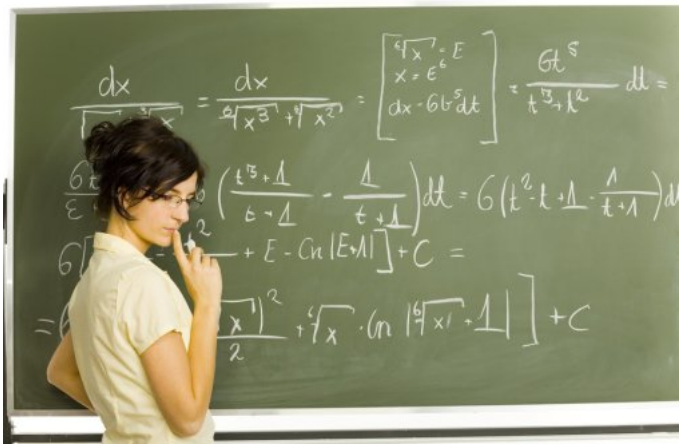
It seems that for professionals willing and able to work fulltime, the workforce can more or less provide jobs to suit their skills. For those men and women who want to work part-time, it seems that the burden of proving their value lies with them. The recruitment website 'Seek' (www.seek.co.nz) lists thousands of jobs currently open for application in New Zealand. A search by keyword 'Transportation' came up with 95 vacancies. Of these, 7 were part-time, and none of these were professional transportation roles. Searches for 'traffic engineer' and 'transport planner' came up with 45 and 22 jobs respectively. None were part-time (see picture above).

While there may not be any jobs advertised as part-time in our industry, the dozens of part-time staff are testament to it working at least for a minority. All of those working part-time who were interviewed for this article started off fulltime, and at some stage in their career managed to negotiate part-time hours.

Mentoring… more than just graduates

One way to provide support for all transportation professionals, empowering them to make their own choices about work hours and balance, is to build a culture of mentoring within our industry. Literature around mentoring and leadership emphasises that a mentoring relationship is all about trust. People interviewed for this article expressed appreciation for their professional relationships, and a number of respondents had a range of formal and informal mentoring experiences, for example:

"I have another female principal here



and we tend to mentor each other to some extent. There are several industry peers that I consider mentors but they may not realise that!"

"Everyone in our office is very supportive of each other and there is often informal mentoring and guidance happening daily when we work together."

"No formal mentoring, but there are a number of senior engineers that I look to for support and guidance. I feel very supported in my job from senior people."

"I had formal mentoring relationships when I was younger and they were good. These days they are more casual. I have a good relationship with a local Director that I use to learn, vent and hopefully keep progressing as a professional."

As all of these respondents can reasonably be described as 'active and engaged' professionals, it begs the question as to what level of mentoring and support is offered to those who don't actively seek it out. It may be that those women in particular who have left the profession, did not have the confidence, or luck in terms of meeting the right people, in the early stages of their career to build up necessary support networks. Transportation is not a tertiary-specific profession. We have people from a vast array of disciplines. It is important that as an industry we are welcoming and supportive; that we offer networks and professional guidance by default, and not just to those who actively seek it.

It may be that as an industry group, we can build up a network of mentoring that can be continuous over a person's career. Internal and formal mentoring can be great within an organisation, but seems to work best when both the mentor and mentee stay in that organisation long-term.

With industry mentors, it may be easier for people to stay connected and engaged, even if they are on a break from work. The better we can support and engage all of our members, the healthier our profession will be in the long term.

In summary, the main issue with all of this is that there are problems in the way that we support all professionals, and there are opportunities to address these for the long-term health of our industry.

To risk mass generalisation, men seem to look at the standout women and assume that because they are star performers, all women in engineering are star performers and have surmounted any hurdles they might have encountered. As for the women, my conclusion is that women are complex.

This is a good thing for transport, because transport is complex, and women tend to be good at not only understanding complexity, but communicating it and analysing it for balanced, achievable outcomes.

To improve the engagement of women in our profession, particularly at mid-career and senior management levels, there are two practical steps we can take at organisational and industry levels:

1) Organisations must do all that they can to support the choices of female professionals in terms of work/home balance, including balance between work and family and study and any other life-supporting options that women value. Naturally, the same ought to apply for men, but it is probably easier to make change by applying a model based around family choices, and then spreading this model beyond working mothers.

2) As an industry we can provide mentoring options, for continuity for all professionals as they change roles, organisations, and even across career breaks. Transportation group mentoring can support members across all stages of their careers. It is not graduate-specific. In fact, graduates are the best-mentored, and most-engaged professionals among us. We cannot rely on a five-year process to keep good people contributing for a 40-50 year career; we need to support and engage people for all of those decades.

If any readers have made it this far and are interested in helping to form a Transportation Group Mentoring Club, please be in touch with me. I will collate any feedback, and solicit more, and discuss with all of those interested over a Skype meeting sometime in the new year.
bridget.burdett@tdg.co.nz

Learning to drive around the world

Learning how to reverse around a corner or parallel park on a busy high street might sound treacherous and fraught with moderate levels of danger. Possibly even ridicule. But spare a thought for those poor learner drivers over in Brazil.

You see, in Brazil, carjacking is so prevalent, would-be drivers are taught defensive driving techniques should they be set upon Grand Theft Auto style. Makes those pesky hill-starts included in the UK driving test seem easy, right?

Well, it's not as easy at it sounds. We decided to look into how the rest of the world deals with learning to drive. And the results are quite surprising...

• In Finland, it takes a minimum of two years to obtain a full, unrestricted driving license. Learners are subjected to skid-pan sessions and night-driving courses. Difficult as it is to compare driving tests, Finland is, anecdotally at least, considered to have a world-class standard of driving.

• Some states in the US can issue 'driver's permits' to teen drivers as young as 14 and half; for example the Idaho Transportation Department requires the completion of a six-month 'Graduated Driver's Licence' programme to anyone under 17 who has not been issued a full driver's licence, the terms of which include being accompanied by a supervising person who's at least 21.

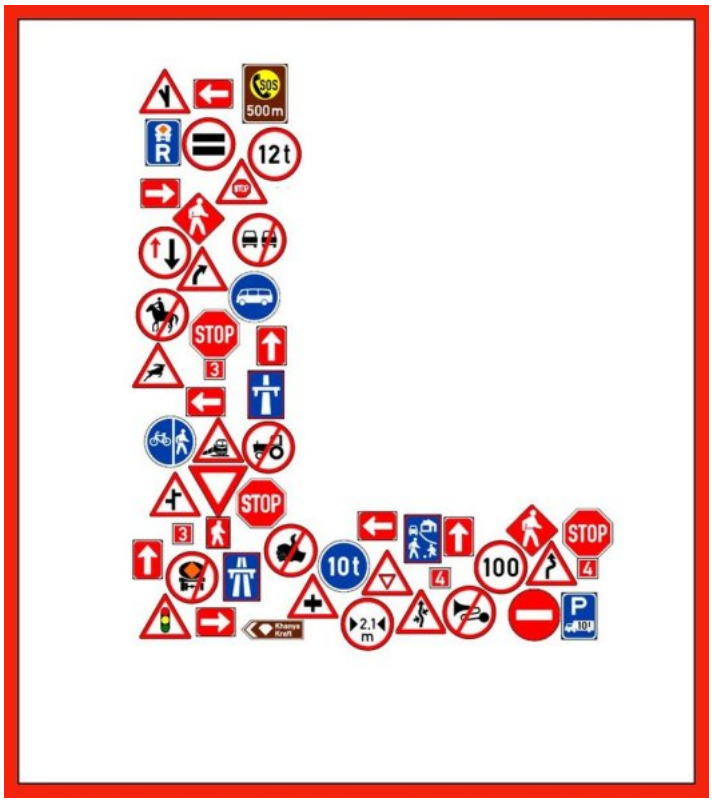
• No country requires you to be over the age of 18 to obtain a driving license, although some US states will not grant you a full, unrestricted license until you are 21. Most US driver's licenses are valid for between four and five years.

• Driving tests in Japan are also conducted off-road, but on purpose built courses with simulated roads, rather than in a deserted car park.

• In Saudi Arabia, women are not permitted to hold driving licenses.

• In some countries it is illegal to drive on a foreign license. The punishment for doing so in Vietnam is a fine of 1000dong, or $9.50.

• Provisional license holders in France are required to have completed a minimum of two years worth of training, covering no less than 3000km. They are also subjected to reduced speed-limits (110kph rather than 130 on the Autoroutes, for example.).



• In many countries, new drivers are required by law to pass a medical, and must have had their eyes examined by an approved practitioner (In UK, the instructor will informally ask you immediately before the examination to read a number-plate from a distance of approx. 20 metres. You can hold a driver's license in the UK and be legally blind).

• Until recently, India's driving test consisted of driving forwards through a pair of cones, and then reversing straight back through said cones. Some regions substituted cones for painted lines on the tarmac, as they were getting through too many (today, India's driving test is more conventional).

• Only recently has Nigeria made taking a driving test compulsory. Previously, licenses could be obtained for a fee of $30.

• In the Philippines, a full-license is called a 'Professional License'.

• Australia's Northern Territory limits learners to 80kph in all instances.

• Restricted License holders in New Zealand are allowed to drive unsupervised between the hours of 0500 and 2200, and carry only specific passengers like their spouse or parents.

• A Norwegian 'S' license permits its holder to drive snowmobiles specifically.

• The waiting time for a driving test in some large South African cities is more than four months.

• Some countries require drivers to study first-aid. The Swiss must complete a first-aid course before they're able to apply for a provisional license.

• In Russia (incidentally, one of the very first countries to adopt the driving license), drivers must possess a 'certificate of mental fitness' and not have a history of substance abuse. Similarly, in Brazil, drivers have to pass a psychological exam before obtaining a license.

• As car-jacking is so prevalent in Brazil, learners are taught defensive driving techniques. Like the UK, Brazil uses a points-based system. Offences are separated into categories, earning the driver anywhere between three and seven points. If a driver accumulates more than 20 points in the space of a year, they are disqualified for between one and 24 months.

Top Gear.com (noted by Chris Bennett)

Transportation Engineering Postgraduate Courses 2014

supported by: NZ TRANSPORT AGENCY WAKA KOTAHI

Dept of Civil & Natural Resources Engineering
University of Canterbury

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

- Certificate of Proficiency (COP) ~ for individual one-off courses (great for CPD!)
- Postgraduate Certificate in Engineering (PGCertEng) ~ typically four courses
- Master of Engineering Studies (MEngSt) ~ typically eight courses
- Master of Engineering in Transportation (MET) ~ up to six courses plus research project/thesis

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

*All courses run in "block mode" to enable **part-time and distance students** to easily take part. Block course dates would be announced in due course. All prospective students must Apply To Enrol in courses no later than **one week prior** to the course starting (preferably earlier) – otherwise late fees may apply.*

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

COURSE	**DESCRIPTION** *(more detailed Flyers available on website)*
Anytime (contact Department)	
ENTR401: Fundamentals of Transport Engineering *(Self-study at home with 1-day tutorial at UC, date TBC)*	Transportation planning; Road link theory & design; Intersection analysis & design; Traffic studies; Accident reduction; Sustainable transport planning & design; Intro to Pavement design. *{bridging course for non-transportation students}*
Semester 1 (Feb-Jun 2014)	
ENTR611: Planning and Managing for Transport *(Block dates: 3-5 Mar, 28-30 Apr)*	Road/transport administration in NZ; Transport legislation in NZ; Communication/presentation skills; Public consultation; Transport assessment; Traffic surveys; Demand management & tolling; Project economics; Construction planning & contract management.
ENTR602: Accident Reduction & Prevention *(Block dates: 31 Mar-2 Apr, 19-21 May)*	Impact on society; Data analysis and interpretation; Hazardous location identification; Problem diagnosis; Treatment options; Treatment selection; Economic appraisal; Evaluation.
ENTR614: Planning & Design of Sustainable Transport *(Block dates: 10-12 Mar, 12-14 May)*	Pedestrian planning and design; Planning and design for cycling; Audits/reviews of walking and cycling; Public transport operations, scheduling and network design; Travel behaviour change and travel plans.
Semester 2 (Jul-Oct 2014)	
ENTR603: Advanced Pavement Design *(Block dates: 21-23 Jul, 15-17 Sep)*	Stresses, strains and deflections in flexible and rigid pavements; Pavement materials characterization; Mechanistic and mechanistic-empirical design methods; Pavement performance and evaluation.
ENTR612: Transport Policy & Demand Management *(Block dates: 28-30 Jul, 22-24 Sep)*	Transport economics; Travel demand and supply management; Congestion pricing; Transport policy objectives and instruments; Traffic management modelling.
ENTR615: Transport Network Modeling *(Block dates: 4-6 Aug, 29 Sep-1 Oct)*	Principles of transport modelling; Road network modelling (SATURN); Macro-simulation and micro-simulation (Paramics); Traffic intersection modelling (SIDRA); Transport network analysis and reliability.

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

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

Global warming? Sea level rise? No problem

These vintage photos (courtesy TPC's Anatole Sergejew) show a range of innovative ways to not let a little water get in the way of a good day's driving. In future years we may need to revisit these...

Branch updates

Auckland/Northland Branch

Wrap-Up of Recent Events

The Auckland/Northland branch hosted its annual debate on Tuesday 8 October at the University of Auckland. This year we took a light hearted look at how technology is playing an increasing role in the transportation sector with the moot *Great Scott! Intelligent Transport Systems: Gift or Gimmick?* questioning whether these technologies will live up to their hype and present potential solutions to various transport issues or not. We had a great turn out for this event of over 80 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 - Wei Song, Stuart Donovan and Sahan Lalpe, on the Negative Team – Bruce Walton, Matt Lowrie and Ming Yun Chan and of course MC Daniel Newcombe (aka Roundabout Editor).

Congratulations to the Negative Team who won the evenings debate with an argument about the contradictory and commercial nature of some of the technologies that are emerging. To check out the full debate please go to http://youtu.be/B3acT73rCB4

Following on from the debate in late October we co-hosted an event with the NZ Planning Institute to hear Brent Toderian, an internationally respected urban planning practitioner, speak on how Auckland can learn from what is happening in Vancouver. After six years at Vancouver's Chief Planner (2006-2012) where he earned a reputation as a hands-on visionary leader, Brent has some interesting and useful insights into how we can translate and apply the integrated land use and transport approach into the Auckland context.

Up-Coming Events

Our Branch Christmas Party was held 12 December at CAC Bar in Mt Eden. We changed the venue this year to try out something different and are looking for feedback from attendees on how it compared to previous years.

We have an exciting line up planned for 2014, which also marks the 100 year Anniversary for the larger IPENZ organisation. Along with our regular technical meetings, we will be hosting some specific events to celebrate this landmark event. We are keen to hear from members on ways that we could celebrate this landmark, so please contact the branch chair (matthew.hinton@aecom.com) and pass on your ideas and views.

Events currently being planned for early next year include:

- On 28 January we will be combining our AGM with a presentation from David Warburton, CEO of Auckland Transport to discuss the year ahead. More details to come.
- Update on City Centre master-planning and transport futures, presented by a well known planner from Auckland Transport.
- Presentation on emerging transport technologies to coincide with the ITS Asia Pacific Forum in April 2014.
- Joint IPENZ TG and IPENZ networking and social events to celebrate the IPENZ Centennial year.

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

Waikato/Bay of Plenty Branch

Well it is a year since I took the reins of the Waikato/Bay of Plenty Branch of the Transportation Group and it looks like no one else wanted the job, so you are stuck with me again.

It has been a challenging year for the Committee with a significant increase in work and personal commitments overshadowing the time available to carry out group activities. However we have managed to achieve a number of initiatives which we hope will get people interested and involved through the coming months.

Thanks to everyone on the committee who have remained dedicated to making our branch a success.

As the only branch to be split geographically in two, it is difficult to find a balance between the Waikato and Bay of Plenty participation; this often leads to a duplication of events, or a lower turnout due to the distance between the two regions.

We have recently introduced a mentoring initiative that identifies professionals who wish to act as mentors to junior staff, regardless of their employer or affiliation outside of the group; whilst this is in its infancy we are confident that we can make this a successful and valuable career development asset. Anyone interested in becoming a mentor or looking for one should contact Shaun Lyon-Cachet in the first instance.

The Branch AGM was held on 22 November, apart from some minor changes, the committee remains largely the same for 2014. Although I would like to welcome Shane Elliott form Tauranga who has volunteered to take up the challenge of Bay of Plenty event coordinator, so expect to hear from him soon.

2014 is a big year for IPENZ, with the centenary celebration, and we are planning to hold a number of themed events. If you have any ideas or want to get involved please get in touch with Liam, or me or any of the committee members.

Finally, if you have any comments about the branch, how it operates, or communicates, please let us know, we are your committee, we here for you, and if you don't talk to us we can't change things.

Have a good Christmas.
Alan Gregory

Central Branch

Recent Event

Memorial Park Alliance Site Visit, 4 December 2013: A key element of this RoNS project is to put Buckle Street underground in a cut and cover tunnel to remove the traffic that currently separates Memorial Park from the National War Memorial. Development of the Park is a key part of the Ministry of Culture and Heritage's commemoration of the centenary of the First World War, and the completed New Zealand Memorial Park will be in place by ANZAC Day 2015.

The Memorial Park Alliance team (MPA) hosted lunch and a brief presentation by Ryan Dunn (TDG) and Richard Galloway (Downer) giving an overview of the project and some of the interesting details. Afterwards, smaller groups with tour guides from MPA

Branch updates continued

walked around the site inspecting progress.

Meeting Location Update
Since the WCC Chamber closed for refurbishment we have tried a few new venues including Beca offices, St Johns in the City, the MPA Site Office and the Williston Conference Centre. Any members suggestions for a new home are welcomed! The new venue ideally should be free or low cost.

Higgins Sponsorship Winner
Catherine Mills of TDG has won the Higgins sponsorship award to attend the 2014 IPENZ Transportation Group Conference.

Catherine is a Transportation Engineer keenly interested in research and "outside-the-box" thinking. This award was offered on behalf of Higgins and IPENZ Transportation Group in return for a conference presentation addressing "Infrastructure Resilience – Past/Present/Future". Catherine will address the need to "take action now to develop a network architecture for incorporating electric and hybrid vehicle facilities into our infrastructure". She has agreed to present her findings at an IPENZ Central Branch meeting in the new year and prepare an article for Roundabout.

A special thank you goes out to Higgins for their sponsorship of Catherine to attend the conference. Their financial support will allow Catherine's research to be shared with the wider transport community and leaders in the industry.

2014 IPENZ Transportation Group Conference
The 2014 Conference will be hosted in Wellington between March 23 and 26 with the theme "Transport Ingenuity – Celebrating 100 Years".

The Conference programme is now available at http://tinyurl.com/omruutz. It will be packed with a range of speakers and we will also be running parallel sessions hosted by MUGS, SNUGS, TRIPS, RTSA and TRAFINZ, round table events, and a poster session.

We have a keynote motivational speaker of Sam Johnson who helped to organise the Student Volunteer Army in the wake of the Christchurch earthquakes.

The Social programme is also looking exciting with a welcome event at Zealandia featuring geocaching (using technology to locate hidden items) and a conference dinner with a theme of famous people from the last 100 years. Early bird registrations are now available at a discounted price.

Canterbury/West Coast Branch

Over the last quarter the Committee met on the 18 September then prepared and ran the Branch AGM on 21 November 2013. The Committee focus of the last quarter was to round off the financial year and planning for the AGM.

The Branch AGM was held at Aurecon's Office in Central Christchurch in conjunction with a presentation from Angus Bargh from SCIRT. Angus gave an overview of his recent investigation into the most significant risks or 'unknowns' for SCIRT - exactly how much construction activity could be supported by the transport network before it broke.

"Burning platforms, Olympic lanes and new trams – Learning lessons from overseas to assist the Christchurch rebuild' brought out some interesting learnings from the UK in the area of travel demand management in particular. We will of course be watching this space to see how SCIRT actually does impact the ongoing situation around Christchurch streets.

We were very lucky to largely retain the same committee into 2013/14. James Park is continuing as the Branch Chairman for a fourth but likely final year. It is good to see we have one new member (Kirsten Rupp from SKM) joining the Committee to fill the vacancy with Les Dowdle leaving. Thanks to Les for his active participation in the Committee and we hope to see him again of course at future TG Branch events.

As noted at the Branch AGM 2014 is the celebration of 100 years of IPENZ. The Committee intends to build a stronger relationship with the local IPENZ Branch to maximise the joint opportunities stemming from IPENZ plans to increase the public profile (in a positive sense) of Engineers and engineering achievements.

The next and last meeting of the Committee for 2013 is intended to be on 17 December with the current National Chairman of the Transportation Group, David Wanty, while he is down on a short visit to Christchurch.

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

Nearly the end of 2013 and on behalf of the Committee I'd like to wish all of our local Branch Members a Happy Christmas and safe travels over the New Year break. 2014 is sure to bring new challenges and new opportunities for the Branch so we all look forward to a successful and engaging IPENZ celebration year.

Kia kaha – and thanks for your support in 2013.
James Park

Southern Branch

Got distracted whilst watching the test match and missed sending a branch update.

NZMUGS 2013 Conference Review

The sixth New Zealand Modelling User Group (NZMUGS) conference was held in Wellington in September. There were 64 conference attendees from local and regional authorities, NZTA, consultants, software suppliers and even an urban designer.

Over the two days a vast array of topics was presented and Gavin Smith (above left) and the oddly hairy Darren Fidler (above right) wrap up the action.

We would like to thank Ian Munro from Urbanismplus Ltd who was our key note speaker, with his insights on taking transport modelling beyond the traditional focus on travel time savings.

The following link will take you to all of the 2013 conference presentations: http://tinyurl.com/nayoyxp

The following are extracts from two of the key presentations, which the NZMUGS Committee believe will be of interest to the wider IPENZ Transportation Group:

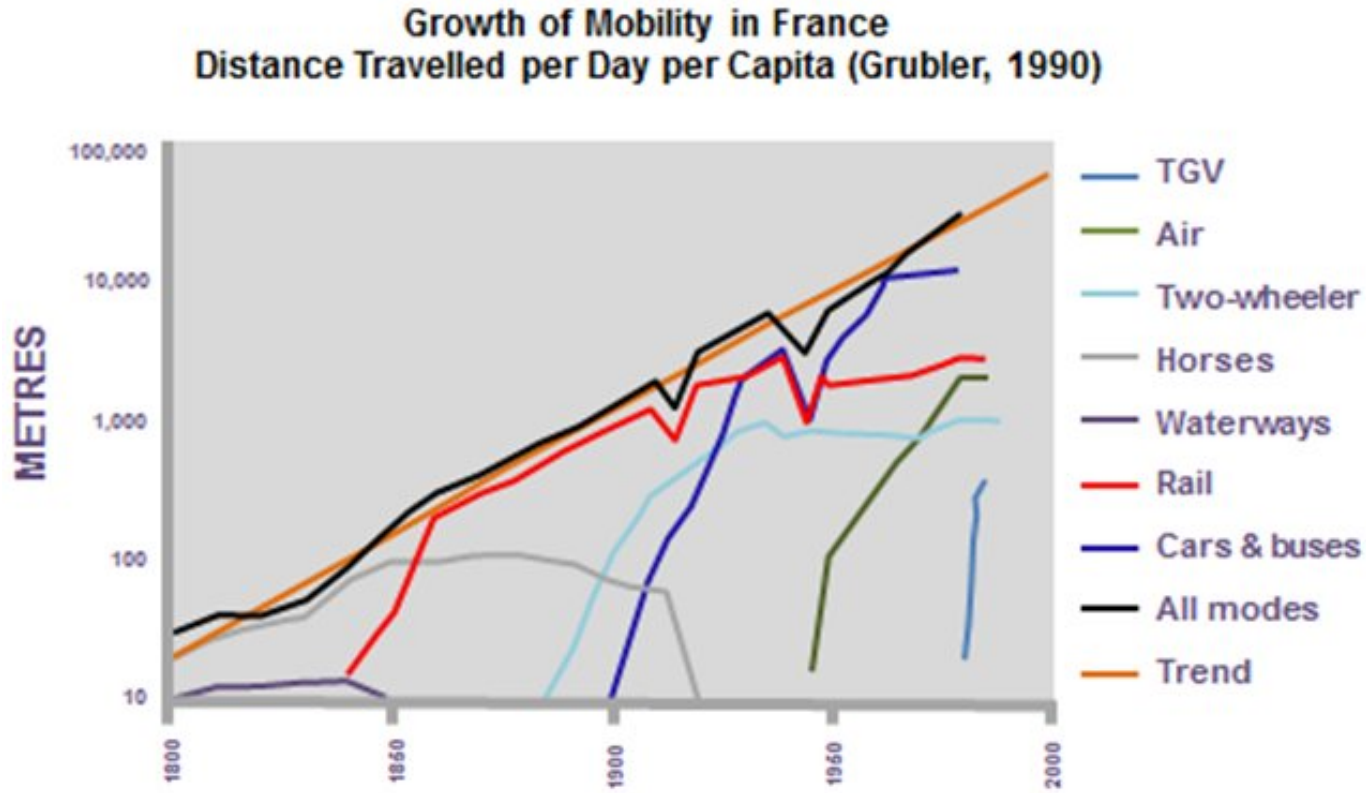
- The development of guidance on transport models; and
- Consideration of the theme of this year's conference: "Beyond travel time savings.

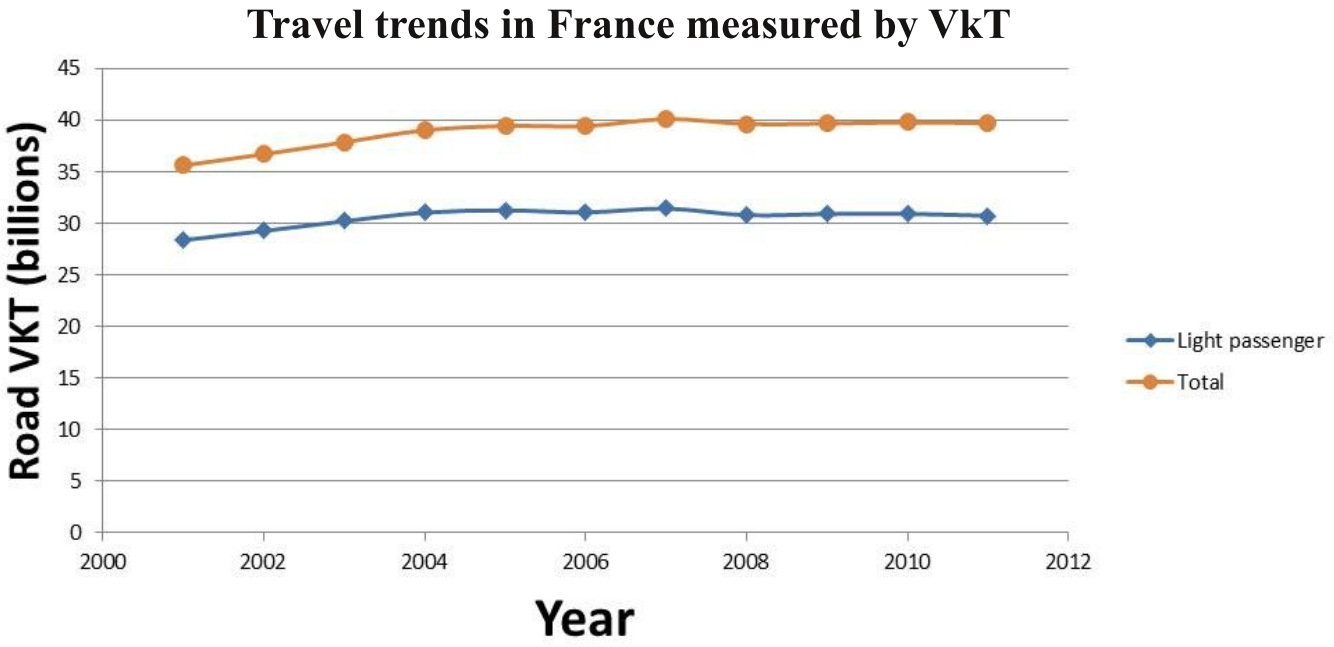
Jimin Hong (pictured right) from Beca won the award for the best young presenter, while John Falconer of QTP won the award for the best presentation. A summary of John's presentation is on page 28.

NZMUGS Projects - Industry guidance on Transport Modelling.

NZMUGS and NZTA are working together to produce industry guidance on Transport Modelling. The overarching aim of this work is to improve the quality of transport modelling and the delivery of projects in NZ. The guidance focuses on the comparisons that are undertaken between Observed and Modelled data – commonly known as Calibration and Validation checks.

Components of this work have been initiated by the NZMUGS Model Data Comparison document. This represents the cumulative effort of the NZMUGS committee over a period of time, led by Bevan Wilmshurst of TDG. The outcome is a 'live' document which has been through a review and update process via the wider IPENZ Transportation Group.





A key aim of this document is that target comparison levels are applicable to all forms of transport models, across a range of projects (model size, application etc.). The latest document can be found here: http://tinyurl.com/nvkgf65

The above document and review process was presented at the conference and the process for collaborative work with NZTA was mapped out. Work is currently underway to combine the NZMUGS document with work completed by NZTA on the application of transport models to NZTA projects. This work has similar objectives to the NZMUGS guidance and it shares a lot of common ground. NZTA has considered elements relating to the scoping and development of models, the relationships of those involved in a modelling project, and components affecting the application of models.

The aim of this combined effort is to produce concise industry guidance covering the model data comparisons, key decisions and relationships in a modelling project, and elements to consider in the development and application of models.

Beyond travel time savings

The NZMUGS conference has traditionally been about innovation and developments in modelling techniques, with two days filled with 20-30 minute presentations, mingled with discussion sessions. We are acutely aware that the transport modelling that we do is only one small part of a decision making process, providing decision makers with information regarding the likely impact of land use and infrastructure changes.

The modelling represented at the conferences over the years has included consideration of a range of modes (from public transport to private vehicles, from freight to pedestrians), a range of techniques (from back of the envelope calculations to bespoke software, from spreadsheet analysis to generic software packages) and included all stages of the modelling process (from data specification and collation, to data analysis, to system modelling, to output analysis).

A large part of the modelling process has been geared towards looking at the likely impact of schemes on travel times, whether these are time savings for freight, public transport, private vehicle or active modes. This is partly due to the NZTA's Economic Evaluation Manual (EEM) scheme appraisal guidance which links travel time savings to economic benefit.

Both internationally and locally, there is recognition that whilst it makes sense for transport infrastructure to operate as efficiently as possible, it's not always clearly defined what "efficient" means. There are also a number of limitations with the existing appraisal methodology, which are discussed here.

First of all, with the introduction of a 40 year appraisal period with a reduced discount rate, costs and benefits of transport systems in the future have a more significant impact on the total net present value of the costs and benefits of the scheme.

Darren Fidler provided the conference with data from France (pictured on the previous page), which shows that over a scale of centuries, the use of different modes has changed significantly, noting that there is a logarithmic scale on distance travelled per day indicating an approximately 10 fold increase in distance travelled each 50 year period.

Whilst Darren has not been able to source equivalent data for New Zealand, over a shorter timeframe it appears as if the total vehicle kilometres travelled (VKT) have remained relatively static (pictured above). With population increasing, this data (NZ MoT TV002) would indicate a slight downward trend in private vehicle VKT. This of course doesn't reflect that there may be some areas of the country where VKT are

increasing and some decreasing.

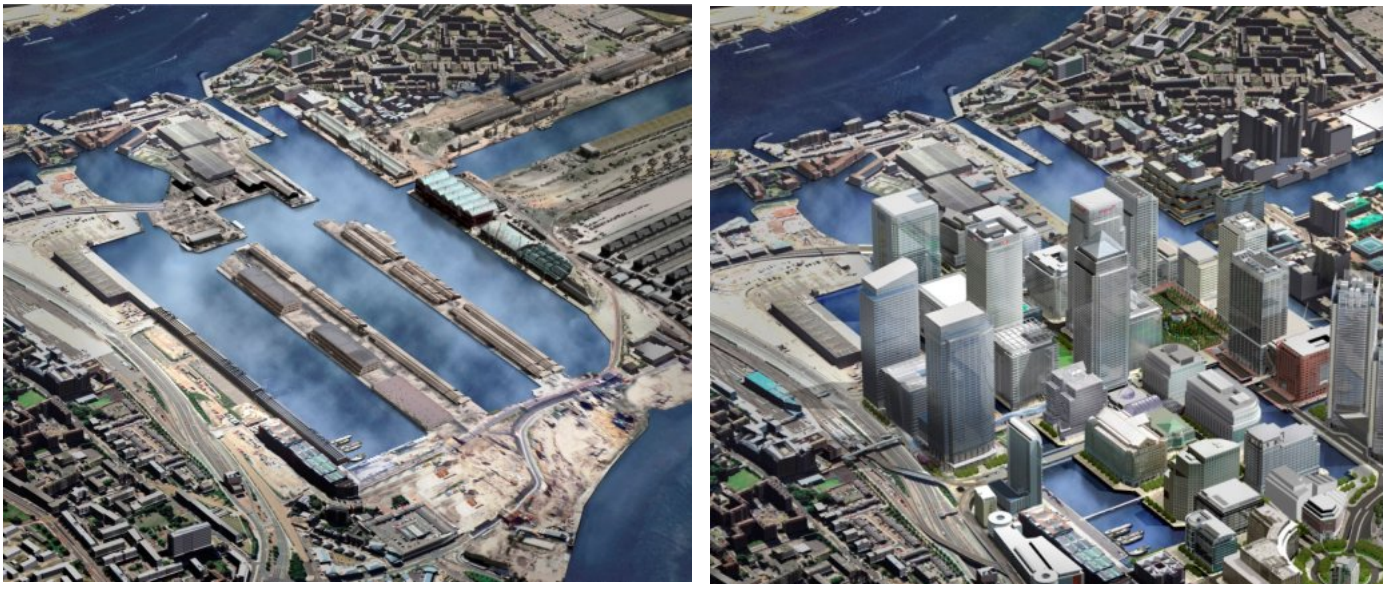
We then come to the issue of travel time savings as a concept. It seems relatively straightforward that if time is valued at $20/hour and one person saves one hour then that's $20 benefit. Really?

Don't we need to consider how that hour is comprised? What about:
• Two people saving half an hour each?
• 3600 people saving a second each?
• 60 people saving a minute each on a 30 minute journey?
• 60 people saving a minute each on a 3 minute journey?
• An employer's business trip in Gore saving an hour?
• An employer's business trip in Wellington saving an hour?
• A commuter on a bike saving an hour?
• A commuter in a car saving an hour?

So now we come to the potential impacts of time savings. Whilst it makes sense for infrastructure to operate as efficiently as possible, it's not always clear on what efficiency means in this context.

There is a wealth of data regarding the benefits of agglomeration (see example below), with people working more closely together being more productive for a range of reasons. If productivity is what you're after, then improving the accessibility for people will increase employment density, which will increase productivity.

This image is unrelated to the traffic modelling article. Although the Tauranga driver may well have been thinking about traffic modelling whilst trying to park.
BOP Times Nov. 28



Canary Wharf, London - Before and after Docklands Light Rail

Where the transport infrastructure is the bottleneck in the system, removing that bottleneck can have profound impacts on employment density as can be seen above in at the Canary Wharf development in London between 1980 prior to the opening of the Docklands Light Railway (1987) and 2010 with the Dockland Light Railway and Jubilee Line Extension in place, and Cross Rail linking Heathrow to Canary Wharf being proposed.

While fixing the bottlenecks in the system can lead to travel time savings, improving the attractiveness of an area (the "quality of the place") is also an important consideration. . In order to establish the true impact of transport investment, it is becoming more and more clear that a wider, sometimes more qualitative, view is required, which considers more than travel time savings.

Transport infrastructure can be considered as part of the puzzle with regards to the attractiveness of a village / town / city to live in. Generally, cities are more productive (with regards to GDP per capita) due to agglomeration impacts so if the transport costs of bringing people together can be reduced it can have a significant impact upon overall productivity.

Traditional modelling techniques are still invaluable in understanding the likely impacts of changes in capacity on different modes, as demonstrated to the conference by Ian Clark, referring to the assessment of Quay Street in Auckland. The Auckland Council City Centre Masterplan seeks to change the emphasis of Quay Street from a traffic dominated environment into one with more balanced treatment of alternative modes (see left).

This requires transport modellers to look "beyond travel time savings" (the theme of the conference), and to consider the various effects of options on all modes of transport. Modelling tools can still be used to consider travel time effects, for each mode, but models should also be used to assess other matters, such as the likely impacts of rerouting and redistribution of traffic, mode shift and ultimately land use changes resulting from changes in accessibility for each mode, and the change in the quality of the place.

In summary, the NZ transport modelling community is working collaboratively with the Transport Agency (and others) to use the tools available to us to help inform decision making processes, and look beyond travel time savings.

When a 130km/h speed limit isn't enough

Outback speed limits will be abolished on a 200 kilometre stretch of the Stuart Highway as part of a 12 month trial that starts in February 2014.

Northern Territory transport minister Peter Styles says the outback drive between Alice Springs and Barrow Creek was an ideal place for the trial.

“The Territory has a unique road network with a low traffic volume and this section of road has been identified as an appropriate trial section,” he says. “In the ten years between 2001-2011 there wasn’t any speed related fatalities on this stretch of road.”

The current maximum speed limit throughout the Northern Territory is 130km/h. Mr Styles says the limitless road was not an invitation for people to drive recklessly.

“We are bringing responsibility back to motorists – they need to be able to drive to the road conditions and their capabilities,” he says. “Be warned, police will continue to prosecute those who drive in a dangerous manner, and will be increasing enforcement of the non-wearing of seatbelts and drink driving which remain the major causes of fatalities and serious injuries on Territory roads.”

Learner and provisional drivers will have to adhere to limits placed on their licences, and heavy vehicles will continue to face restrictions. The Country Liberal Party currently holds power in the Territory, and it has moved to overturn blanket speed limits introduced by previous Labor leadership.

NT Chief Minister Adam Giles told Fairfax Media in May that reviews of speed limits will be evidence-based. Mr Styles says authorities will study the outcomes of the 12-month trial that starts on February 1, 2014.

Ray Wyatt, branch secretary for the Transport Workers’ Union in South Australia and the Northern Territory, did not welcome news of the trial.

“Life is more valuable than people going quicker from A to B,” he says. “The faster you go, the more damage will occur in an accident. It raises the risk.”

Andrew McKellar, executive director of the Australian Automobile Association, told the ABC that the move was a step backward.

"Increasing the speed limits will increase the risk and more people will die as a result," he says. "It's gambling with people's lives... it is absolutely inevitable that people will die as a result."

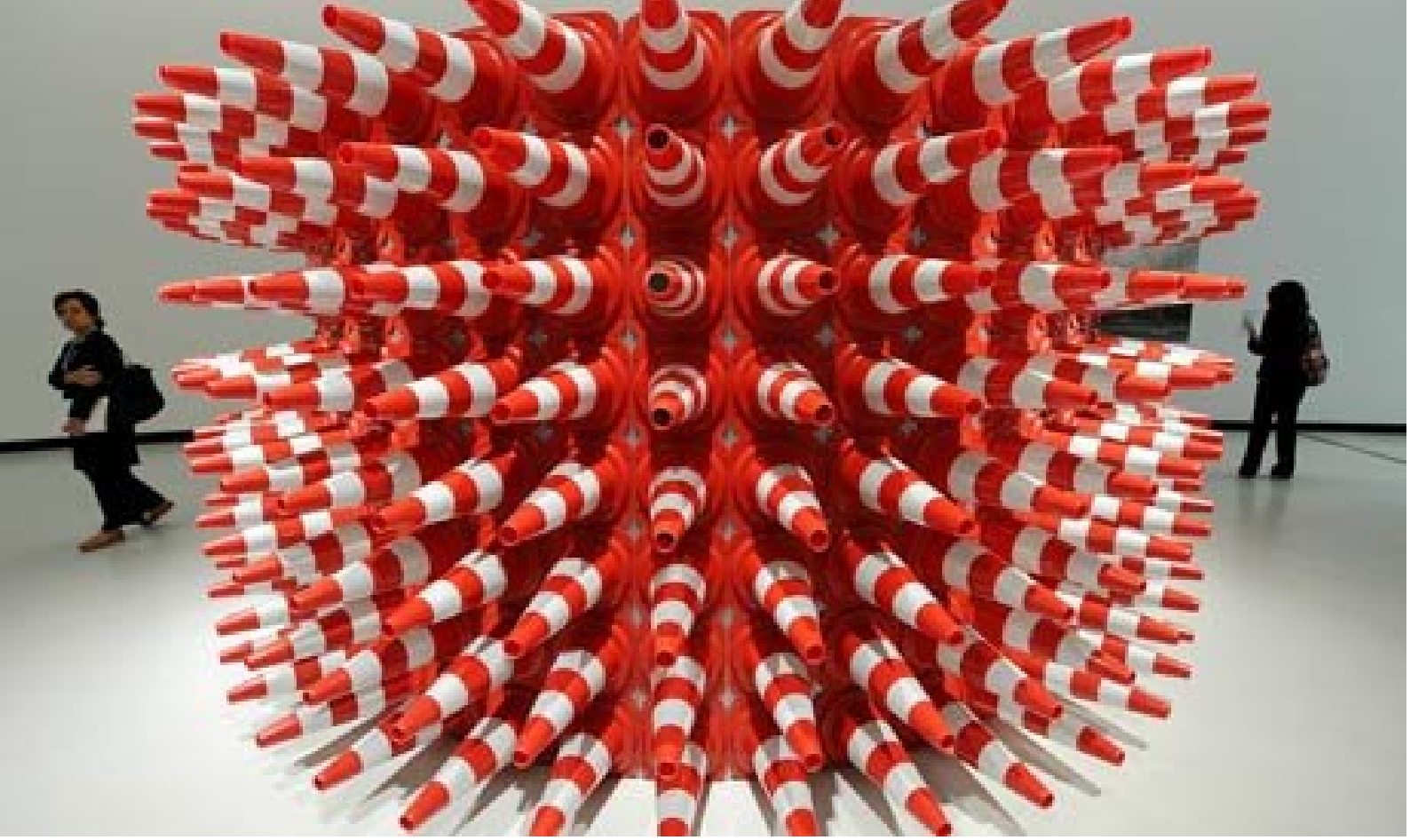
Open speed limits were abolished by the former Territory Labor Government in 2006 and replaced by a maximum limit of 130km/h. From that time until 2012, more people died on Northern Territory roads (307) than in the six years before the change (292).

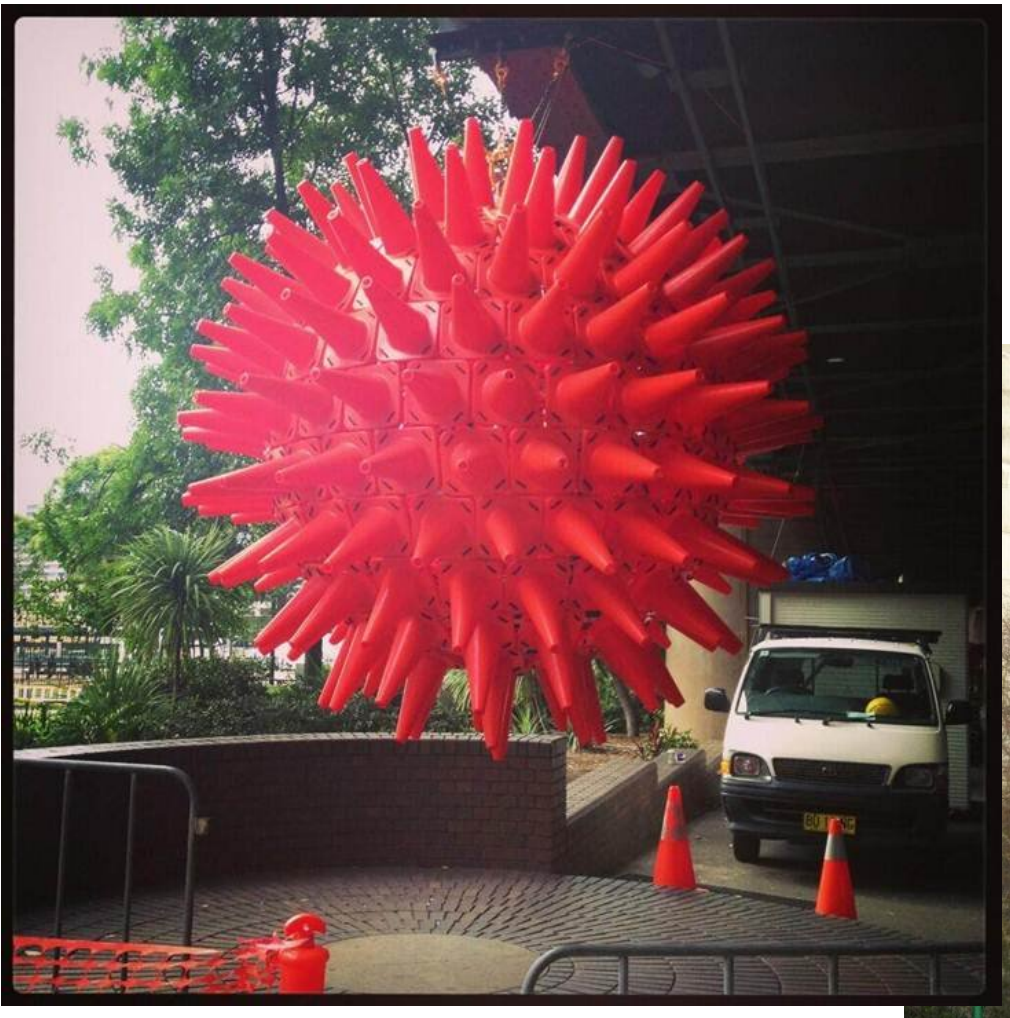
The Territory isn't alone in considering raising speed limits - nearly 2000 Queenslanders petitioned their state government for increased maximum limits earlier this year.
Sydney Morning Herald

Sometimes 'no stopping' lines are unnecessary

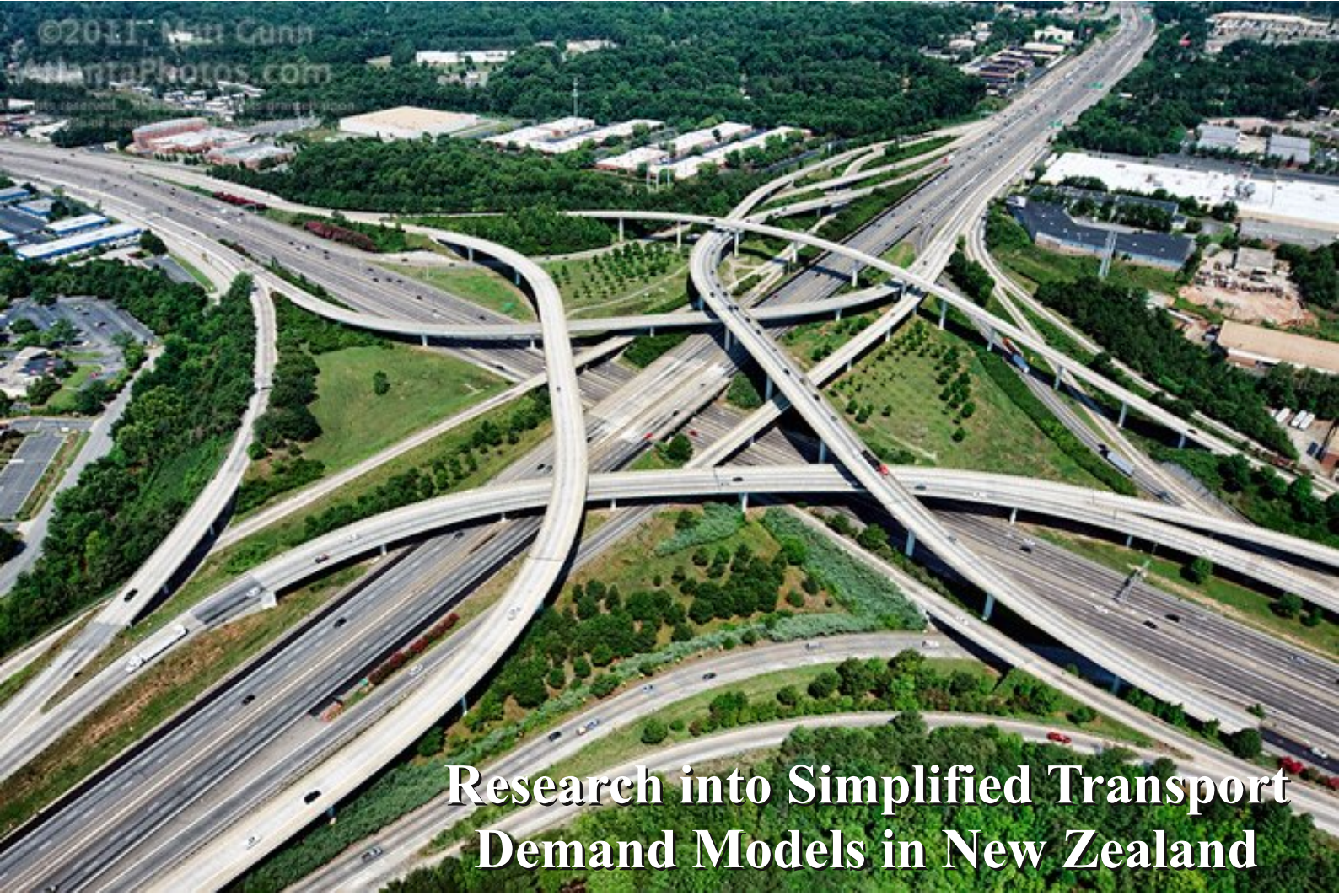
Double yellow lines signify an area where parking is not allowed at any time on a UK road although this narrow stretch in Swindon measures a mere 330mm wide which is insufficient even to allow most motorcycles to pass through.

Following widespread and stinging criticism, the council has since repainted the lines black: *Image courtesy of World Highways readers Dr John Bullas and Len Searle*





Road cone artwork



Research into Simplified Transport Demand Models in New Zealand

The following is a summary of the paper by John Falconer (QTP Ltd) which won the Best Presentation award at this year's NZMUGS Conference.

Based on my experiences of building, applying and reviewing transport models within NZ, I had formed the view that many transport demand models being used in NZ are perhaps more complex than they needed to be.

Some of the factors contributing to this view include the following:

- It appears that most transport model builds in NZ attempt to follow 'International Best Practise', which is typically complex, as required to address very large American cities and/or very dense European cites.
- When applied within the NZ context, difficulties in forecasting key input variables and other uncertainties related to scarcity of data tend to undermine much of this complexity.
- Most cities in NZ are relatively small by world standards, so a high level of complexity is not necessarily required to achieve the desired model outcomes.
- Where high levels of complexity have been included in models, typical day to day applications of the model seldom capitalise on these complex elements.
- Rather than being integral to transport models, some complex transport issues might be better addressed using other methods, perhaps with support from simple transport models.
- Other simplified assessments (e.g. ITAs using observed trip rates or other simple relationships) often yield results that are generally consistent with significantly more complex models.
- Simplistic models have less development time, freeing up more time for assessment, potentially including a wider range of sensitivity tests to overcome the lack of complexity.
- A shift to the 'business case approach' by NZTA (and others), where the strategic aspects of projects are to be considered in advance of detailed assessments.

Perhaps the most significant of the above issues (in the NZ context) is the difficulties in obtaining robust inputs to models. Even with some of more commonly used complex traffic models, a perverse situation can arise where some of the input variables are actually more difficult to predict than attempting to directly estimate typical model outputs.

For example, predicting the future number of households in a given area by multiple life-cycle and vehicle ownership categories is perhaps more difficult than directly forecasting traffic flows (by some other means)!

Another consequence of complexity is that models are generally expensive to build, maintain and apply in an environment where budgets are under increasing pressure. Many smaller towns in NZ do not have the resources or justification to build comprehensive 4 step models, instead requiring some pragmatic (often simplistic) basis for traffic assessment.

I therefore see an opportunity (outside of the main centres) for increasing the use of simplified demand models to add significant value to many Road Controlling Authorities. This is in contrast to other new approaches (overseas) which rely on ever increasing in complexity facilitated by continuous advances in computing power.

So, what level of simplification (with reduced cost and resources) would still achieve adequate performance in terms of typical decision making outcomes associated with most common modelling applications?

I attempted to investigate this further (as part of Continued Professional Development) and then shared my findings at the NZMUGS conference (Wellington, September 2013) with a presentation titled "Simplicate and Add Lightness". The title is taken from a quote often used in the aerospace and motor industry, where less complexity results in less weight and less things to go wrong.

For planes or cars (and with me drawing a parallel with transport models), less 'weight' generally translates into better 'performance'. A copy of the presentation (and all other NZMUGS presentations) can be found by following this link: http://tinyurl.com/nayoyxp

As part of my research, I set about creating the most simplistic traffic demand model that would achieve a reasonably similar level of validation to an existing comprehensive 4-step model, representative of a complex model following international best practice, which has been adopted as the current regional model for Christchurch.

I was very surprised by the level of simplification that could be achieved to produce results that were very consistent with the complex model. I was expecting that a wide range of 'trip purposes' would be required to ensure appropriate matching up of trips between distinct land use activities and providing a mechanism for achieving a reasonable mix of trip lengths.

Instead, a simple model utilising just four trip purposes (internal-internal trips and external based trips each for light and heavy vehicles) was found to reasonably replicate the benchmark model, which by contrast utilises eleven trip purposes. In particular, the travel patterns revealed using select zone analysis (displaying paths from sample origin zones to all destination zones) indicated a good level of correlation.

For some applications within NZ however, I expect that it may be appropriate to have trips segregated by urban and rural purposes (although this could still easily qualify as a simplified model).

A limitation of my research is that it currently only covers peak periods, where movements of trips between households and jobs dominate. I intend to eventually extend my research to the Inter Peak, and also demonstrate geographic transferability by further testing the validation of my simplistic model by applying it in other locations outside of Christchurch.

Despite the above limitations, the research has provided some useful insights into the balance between model cost vs. complexity and complexity vs. transport decision outcomes. It indicates that there is indeed potential for innovative simplistic approaches to be adopted within NZ under many circumstances. I acknowledge that others have previously built and applied simplistic models in NZ; but without comparison with a suitable benchmark, there has always been some doubt about the effectiveness of these models.

Complex transport models will still always have their place within NZ however, noting somewhat ironically that my research of simplistic models relies heavily on using a complex model as a performance benchmark!

My main recommendation is that modellers and those that commission modelling always strive to use an appropriate tool that is 'fit for purpose' for the particular task at hand, but also keep an open mind about adopting a simplified approach where there is limited choice of available tools and/or time and resources are constrained.

Why has India's Kolkata city banned cycling?

Every morning Raju Sapui cycles to his employer's home in the eastern Indian city of Kolkata. Mr Sapui works as a driver, but like most people in this teeming city, he cannot afford to buy a car or two-wheeler to commute. But things have suddenly turned difficult for Mr Sapui.

In a surprise move, authorities have recently banned cycles - along with hand carts and other non-motorised vehicles - from 174 key roads and streets in the city during the day.

"This is making my life very difficult . Every time I get on my cycle I am scared that I will be fined as I have to break the law and go on some of the banned roads to get to work," says Mr Sapui.

He is not the only one who is unhappy about people being told to get off their bikes. Commuters make more than 2.5 million trips on bicycles in Kolkata every day. It is also the only major city in India where the number of cycle rides is greater than the number of car journeys.

So, at a time when most cities across the world are encouraging their citizens to get on their cycles, why are the authorities in Kolkata telling people to get off them? The answer, according to the police, is the growing traffic.

Kolkata may have less cars than the cities of Mumbai, Delhi and Chennai but its narrow and congested roads cannot cope with the different types of vehicles that use them. Cars, cycles, buses, auto-rickshaws, motorbikes, cycle-rickshaws, hand-pulled rickshaws and tramcars jostle for space. Average traffic speeds are down to 8mph-11mph (14-18kmph), compared to India's average of 13mph (22kmph).

"There is just not enough space for all kind of vehicles," says Dilip Kumar Adak, deputy commissioner of the city's traffic police department. "Cycles slow down traffic and removing them will make the streets safer and traffic speedier. It's not a blanket ban. People can still cycle on smaller streets."

No wonder cyclists are up in arms against the new rules. Cycling groups have launched what they have called a cycling satyagraha (people's movement), pushing their cycles through the city and organising protests against the ban.

"The new laws are crazy," Gautam Shroff from one such group, Ride 2 Breathe, says. He feels "pollution is increasing every day here so we should be encouraging people to take up cycling. Instead we are punishing them for helping improve the environment."

Mr Shroff describes the police claims that the new laws will make the streets safer as "nonsense".

"If cyclists are a nuisance, so then are pedestrians, motorcycle riders and car drivers. Why does the government not take them off the roads?"

For Mr Shroff cycling is a hobby. For many others in the city, it's the only way they can get around. The police have already started fining those who are cycling on the main roads and have warned persistent offenders that they will confiscate their bikes.

But if you walk or drive around Kolkata you will still see many cyclists on the city's major roads. Like Raju Sapui.

"I will continue to use my cycle until the authorities take it from me. If they want me to stop riding, maybe they should buy me a car," he says defiantly.

BBC News

Health and Safety 101

When using large and dangerous demolition equipment in a public place like a footpath, the most important action a safety-conscious worker can take is.... ~~use warning signs and cones to keep the public away.~~ ...sweep up the dust to keep the place tidy.

Photo taken recently by the editor in Newmarket, Auckland

Caption competition

Here is our illustrious leader at the height of the shoulder-pad 1980s. Who knows what he is thinking? A suggestion has been made. If you think you know better, send your suggestion to daniel.newcombe@aucklandtransport.govt.nz

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Giant bus which drives over cars planned in China

Too many buses clogging your roads? Put them over the road!

This proposal from China is for a huge vehicle as wide as two traffic lanes and 6m tall, carrying more than 300 passengers per bus, and with an electric motor run partly on solar power. Its designers say it can reduce traffic congestion in China's crowded cities by as much as 30 per cent.

Song Youzhou, the chairman of Shenzhen Hashi Future Parking Equipment Company, the firm behind the buses, says: "The main innovation of the straddling bus is that it runs above cars and under overpasses. Its biggest strengths are saving road space, efficiency and high capacity."

The bus will need to have the roads it runs on redesigned - either with rails for the bus to run on, or simple white lines that an automated system can use as guides. The rails would be more expensive, but Mr Youzhou says they would make the buses a further 30 per cent more efficient.

Building the buses and a 40km (25 mile) track for it would cost 500 million yuan ($100million), about 10 per cent the cost of the equivalent distance of underground railway.

'City on a ship' plan refloated

Back in the 1990s, a team of visionaries started planning a floating city of 50,000 to 100,000 people, with shops, restaurants, and other amenities, that would travel the globe and let people spend their entire lives at sea.

Named Freedom Ship International, the project was the brainchild of a Florida engineer named Norman Nixon. “As soon as we get this joker built we're going to retire and live on it for two years,” he bragged in 2002. That never happened. The ambitious project struggled to attract venture capital and was abandoned after the financial crisis. Nixon himself passed away last year.

Things could be about to change for Freedom Ship International, however. Roger Gooch, part of the original team that worked with Nixon, recently sensed a change in the economic climate and decided to try to revive the idea.

Gooch explains the company needs to get past the biggest hurdle — the truly astronomical price tag of the Freedom Ship. Gooch estimates that the project would have a budget of $US9-10 billion, but he says it would provide a good return on investment.

Gooch says a number of private investors have contacted him about the idea, though no venture capital firms have reached out so far. He says his team is now interested in partnering with “notable or established private maritime entities” and has also floated the idea of what he called a “constructive equity capitalisation” — wherein the vendors he would use to construct the Freedom Ship would be given equity in the finished product for discounts of services and goods.

The plans for the Freedom Ship are certainly audacious. The 1.6km-long and 25-storey-high ship would circle the planet every two years, spending roughly 70 per cent of its time moored outside major cities and ports (it will be too big to enter most ports, so residents can fly to and from the shore from the Freedom Ship's onboard airport).

On board, the floating ship would have its own economy, with tens of thousands of people working in shops, bars, and other businesses, and everyone on board paying a maintenance fee to support infrastructure such as security services and fire fighters.

Gooch is adamant, however, that the project is feasible, and points out that technically the idea of a city on a boat is a misnomer — the Freedom Ship is actually a “super platform”. “There are super platforms now in the world, they're just not mobile platforms or floating cities,” Gooch explains. “There's a large platform Japan uses as an airport. Super platforms are not the question, the question is whether an autonomous city circumnavigating the world can be economically viable, and we truly believe it can.”

Even if Freedom Ship can raise the money, there are a lot of complications. For example, CNBC's Roger Gooch points out that the floating city might be considered a tax haven. While Gooch himself acknowledges that some passengers might be able to work out some tax benefits, that isn't the intention of the boat, and he expects most will have to pay taxes in their country of citizenship. The question of legality onboard is a little murky too, though the Freedom Ship will likely have to operate under the laws of the country whose flag it flies.

Still, Gooch remains hopeful. “The question is if there's enough interest globally,” he says. And does Gooch want to live on the Freedom Ship himself? “Absolutely,” he replies immediately. “I've been sold on the concept. The first time I heard about it, I thought, if you guys can build this I would live on it.

“I would like it to happen in my lifetime,” he says before laughing. “It better hurry up.”

Sydney Morning Herald

Photo Competition

This edition's theme:

Best Road Safety Ad

Seen a better one? Send it to:
daniel.newcombe@aucklandtransport.govt.nz
and win the adolation and begrudging respect of your peers.

Next edition's theme:
Best placement of a sign

Got a great photo?
Send it to:
daniel.newcombe@
aucklandtransport.govt.nz

Annual General Meeting minutes

28 November 2013

1. Present

Daniel Newcombe, Ken Lee-Jones, Bruce Conaghan, Matthew Hinton, Pravin Dayaram, Pippa Mitchell, David Wanty, Roger Burra, Jo Draper, Joanna Towler, Ian Appleton, Nick Sargent, Phil Dowsett, James Park, Bill Rice, Bill Greenwood, Grant Smith, Stuart Woods, Barry Dowsett, Alan Gregory, Liam Ryan, Michelle Bound – minute taker

2. Apologies

Angie Crafer, Bridget Burdett, John-Paul Thull, Craig Nicholson, Andrew Edgar, Brian Ward, Tony Sizemore, Darren White, David Cook, Nathan Harper, Ian Clark

Moved: that the apologies be accepted

Wanty / Gregory

Agreed unanimously.

3. Obituaries

John Fulton

A moment's silence was observed.

4. Minutes of Previous Meeting

Moved: That the minutes of the previous National Committee Annual General Meeting of 7 December 2012 were accepted as an accurate record of that meeting.

Appelton/Park

Agreed unanimously

5. Matters Arising

Linkages with various IPENZ Branches

- Bruce Conaghan asked if this is in place.
- Chairs have been requested to contact local IPENZ Branches.
- To be raised with IPENZ for Chairs to get in contact with Transportation Groups.

Google Car

- David Wanty received a letter from the Government supporting the initiative however securing the car was unsuccessful.
- The Japanese Embassy was contacted for the Honda vehicle – this was unsuccessful as well.
- Pippa Mitchell knows someone at Google NZ. Will provide contact details to Roger Burra and David Wanty.

6. Chairman's Report

The Chairman's Report was distributed prior to the meeting.

Moved: That the Chairman's Report 2013 be accepted.

Burra /Towler

Agreed unanimously.

7. Treasurer's Report

- The Treasurer's Report was distributed prior to the meeting.

Moved: That the Treasurer's Report 2013 be accepted as a true and correct record.

Wanty / Conaghan

Agreed unanimously.

- Discussed the issue of surplus funds.
- Ian Appleton stated that questions regarding this have been asked many times before. The balance has been kept historically in case conferences suffers a deficit.
- Roger Burra advised that the reserve is kept to earn interest. Time has been allocated at the 2014 Conference for a meeting of the National Committee where it will be possible to discuss this.
- David Wanty advised that the Strategic Plan contains some items that could impact on the reserve funds ie Media Liaison. The Study Award could also be presented to more than one recipient.
- Barry Dowsett advised that IPENZ Waikato Branch had surplus funds that went into IPENZ Foundation. Surplus funds were used to support scholarships.

8. Branch Reports
All branches submitted reports prior to meeting.

Southern
- Phil Dowsett advised that the highlight of the year was hosting the Conference. 197 people attended and it attracted 12 sponsors. The Conference exceeded the target of a $10,000 surplus.
- Lessons learnt from the conference included: endorsement of Hardings as Conference organiser, the need for quality papers as there is quite of bit of effort required from the Committee to review abstracts and make meaningful reviews. The roundtable discussions were useful but require some refinements. The two day conference was very tight – three days would be better.
- Branch AGM has been held with Phil retained as Chair for another year.
- Branch has decided to invite representatives from Queenstown and Invercargill onto the Committee in an effort to strengthen the relationship with both centres.

Canterbury/West Coast
- Branch AGM was held last week and James Park was elected Chair.
- Committee consists of twelve people. James thanked Committee for their enthusiasm.
- Two submissions were made.
- There were 9 branch meetings and 7 branch events held during the year that were very well attended. James thanked those organisations that hosted the events.
- Committee are wanting to encourage young professionals for the year ahead.

Central
- Branch AGM was held in mid October.
- Committee has been using a Wellington City Council building for meetings but this is now being strengthened so a new venue will need to be found.
- The Quiz Night and Informal Get Together were well attended. Roger thanked Jo Draper for organising it.
- There is a strong Branch Committee with 11 members, many of which are also on the Conference Committee.
- Branch held 14 technical seminars including two international speakers.
- The year ahead is focused on the Conference and want to continue with social events including re-igniting events outside Wellington.
- Roger thanked Central Members for helping with the Conference Committee including Ian Appleton, Wayne King, Rachel Burrell and Maggie Buttle.

Waikato/BOP
- Alan Gregory advised that the AGM was held last week and a new additional Events Coordinator was appointed in the Bay.
- Fourteen people are on the Committee.
- Branch struggles to get people to attend events with the main reason being the geographical split. They use Beca video conferencing for free – Alan thanked Beca for the use of this service.
- Committee is trying to put together a mentoring programme.
- Alan thanked Liam Ryan, Branch Administrator for his work.
- For the year ahead the Committee would like to build a closer link with the IPENZ Branch and associated organisations. They are planning to promote other organisation's events (e.g. NZPI) and want to engage better with members, increasing numbers at events. They have some good ideas for Centenary events.

Auckland
- Matthew Hinton advised that the Committee consists of 15 members and thanked the Committee and Pippa Mitchell for their help this year.
- Branch held 12 events throughout the year including four international speakers, pub quiz and the Great Debate.
- The AGM will be held 28 January.
- Good attendances have been achieved at events especially when advertised through social media.
- The Branch receives good support from companies for providing venues and direct sponsorship.
- Branch may offer a regional scholarship.

General
- James Park advised that he thought the Todd Litman national tour was very valuable.
Branch Chairs to forward ideas for international speakers to David Wanty. There is the possibility of NZTA, Auckland Council and Auckland Conversations joint sponsorship.

9. Technical Sub-Group Reports

NZ Modelling Users Group (NZMUGS)
- Nick Sargent presented the NZMUGS report.
- The AGM had a healthy election of the committee.
- Highlight of the year has been the helpful cooperation with NZTA.

Signals NZ User Group (SNUG)
- Ken Lee-Jones advised that SNUG has a strong, enthusiastic committee.
- They hold teleconference meetings.
- SNUG has started a LinkedIn group, attracting newer and younger users.
- SNUG has held a number of workshops to upgrade the National Signal Specifications with NZTA attending.
- Group is building a relationship with the Australian Signal User Group with 4 people attending the March meeting in Sydney.
- Links have been strengthened with ITS and NZ has become accredited. ITS NZ will be hosting the Asia Pacific forum next year.

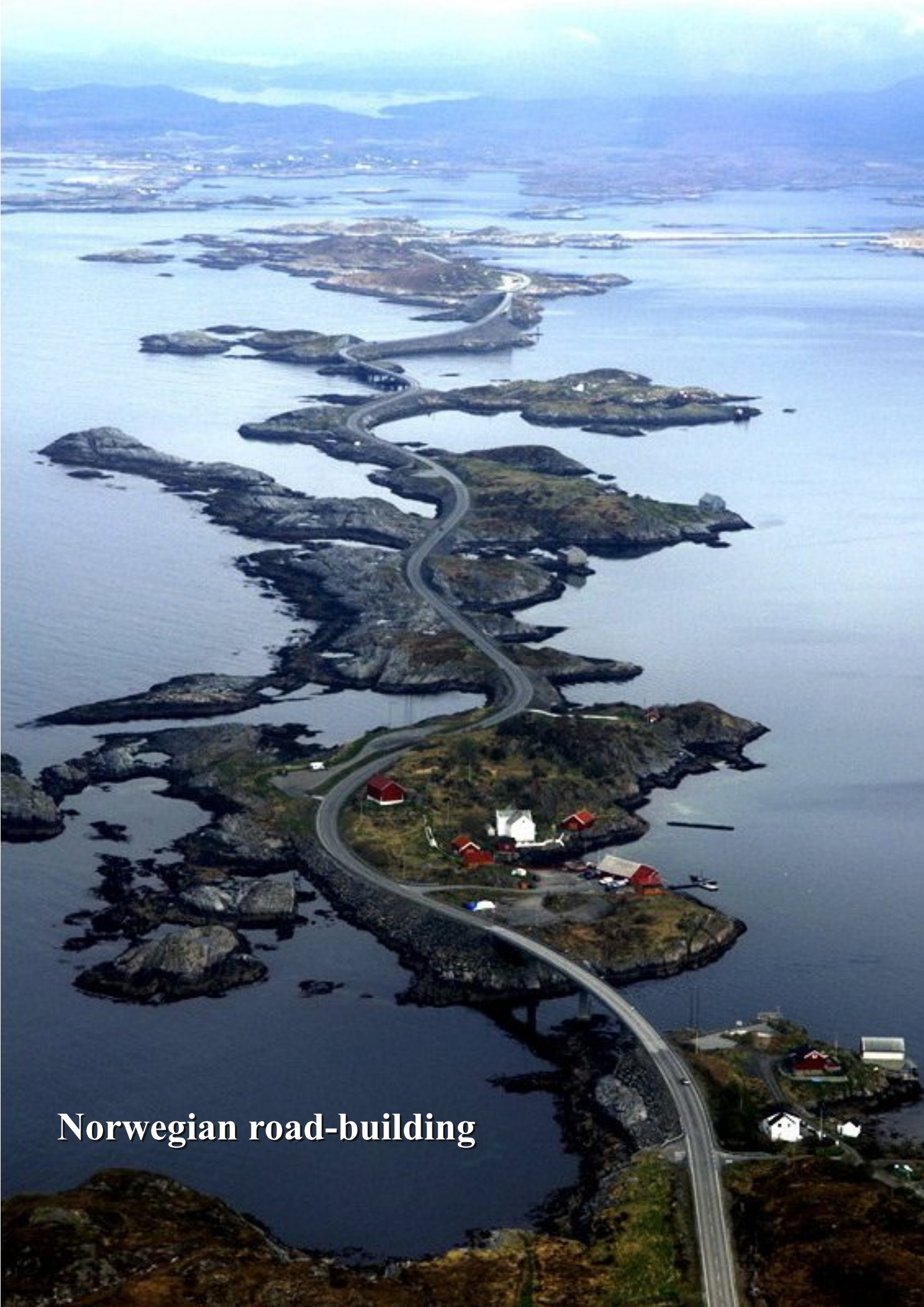
Trips Database Bureau (TDB)
- Stuart Woods advised that TDB are finalising their Strategic Plan.
- Surveys are being done to result in new and refreshed information into the database.

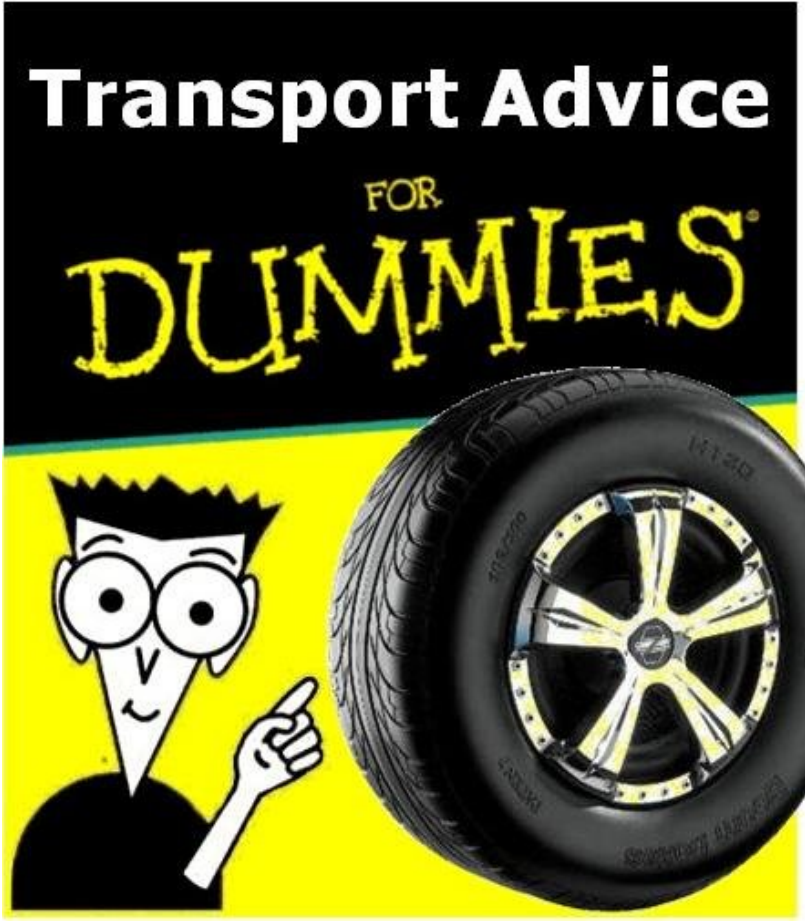
10. 2014 Conference
- Conference dates are 23-26 March.
- The programme will be on the website by the end of the week.
- Committee are working with TDB, NZMUGS, SNUG and Trafinz for slots.
- The social programme includes a visit to the Memorial Park underpass and a welcome function at Zealandia
- Sam Johnston of the Volunteer Army will be a guest speaker.

11. General Business

National Committee
- Has two co-opted members – Daniel Newcombe, editor of Roundabout and Awards administrator; and Michelle Bound, minute taker.
- David Wanty values all feedback, both positive and negative for the Group.
- He encouraged members to use 2014 as a time to celebrate Engineers.
- Bruce Conaghan is IPENZTG representative to the Traffic Control Devices steering group.

"Psst. Zoe! You've got a booger hanging out of your nose!"


Norwegian road-building



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
Given that we have the technology to track things very accurately by GPS, why don't we just make it mandatory to have GPS on your car and then let a computer identify if someone has been speeding. We wouldn't need police officers with radar guns or speed cameras.
Geoff, Franklin

Dear Guff
It is time for me to sadly inform you that you have already had a tracking device on you for years and the government has been recording your speed, fuel economy and use of indicators. The implant was inserted that time you went for a haircut and uncharacteristically fell asleep in the chair. If I were you I'd drive to the speed limit at all times. And wear a tinfoil helmet.
~Transport Guy

Dear Transport Guy
I've been hearing a bit about how travel trends are leveling off and people aren't driving as much anymore. Is this serious for our profession?
Ned, New Plymouth

Dear Needy
Oh, people are still travelling plenty, they just aren't inviting you along with them. But seriously (and I was being serious), the flattening off in travel growth - usually measured in VKT (Vegan Killer Tasmanians) - is mostly the result of petulant teenagers not being bothered with driving. In times past, the first thing a teenager wanted to do when they turned 15 was get their drivers' licence and then go cruising.

Nowadays teenagers just lock themselves in their room with their Xbox and go crusing via Grand Theft Auto. It is starting to affect our industry so significantly that Gerry Brownlee is considering renaming the RONS to *RONS: Rise of the Motorways*, in order to attract the kids back to driving.
~Transport Guy

Dear Transport Guy
In the transport industry, for road safety and the like, we use visual and some audio measures to tell drivers about hazards and general road info. With modern technology, what are the trends towards innovative ways of getting information across?
Shane, Marlborough

Dear Shame
I'm glad you asked that question. I have always thought we overlook the sense of smell as a road safety tool. Your nose is good at cutting through the distractions of the day and telling you 'hey, something is not right'.

In the future I expect GPS trackers to trigger in-car sprays to alert you to certain driving conditions. Rolling hills - strawberry. Flood plains - rotten fish. Dangerous curves - faeces? You have to admit, a fresh faecal smell will be enough to make even the most distracted driver sit up, wind down the window and take notice.
~Transport Guy

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

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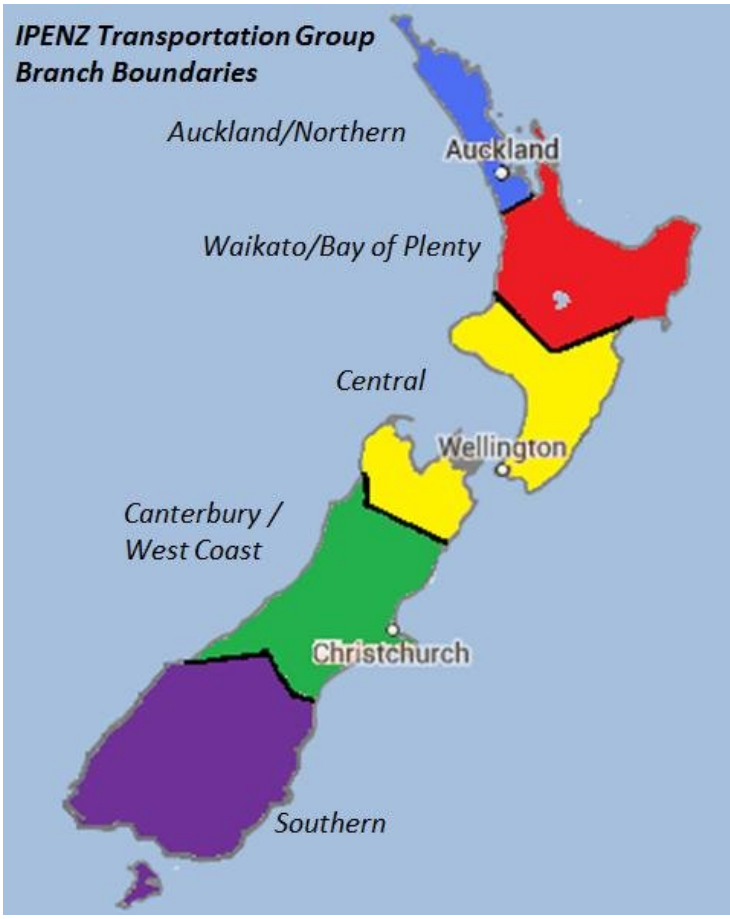

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Kids explain traffic engineering

"We use red for traffic lights because red is an angry colour. Green is nice and means you can go. Orange means wait a minute."