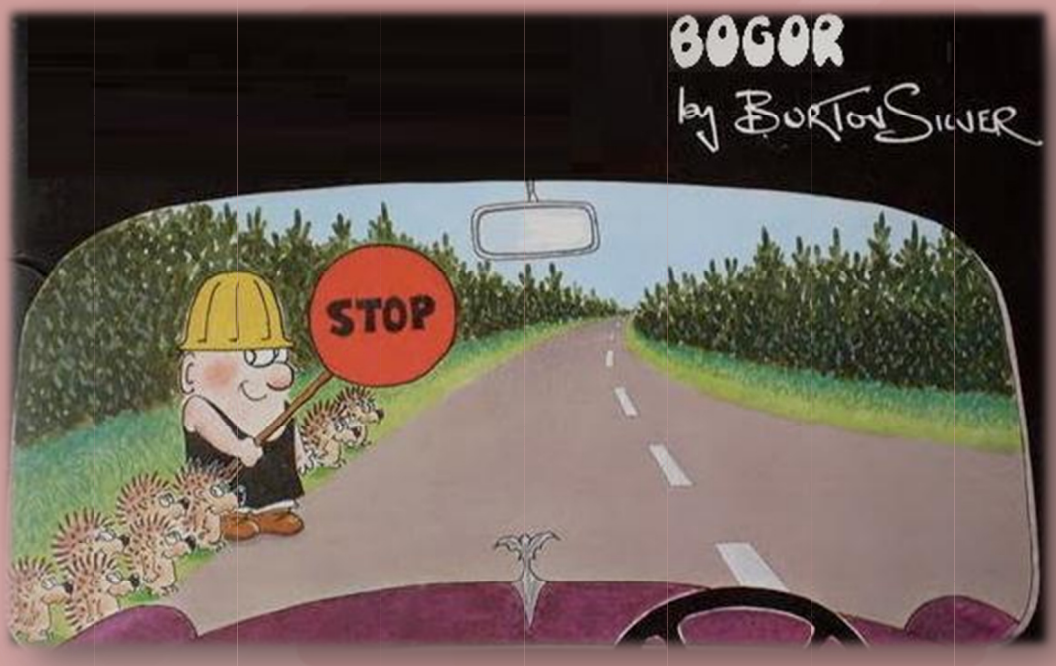
IPENZ TRANSPORTATION GROUP

Issue 130
December 2011



Roundabout

The Newsletter of the IPENZ Transportation Group

www.ipenz.org/ipenztg

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Chairman's chat

Thanks to many of you who turned out for the AGM meeting, a successfully coordinated video conference link up across five centers, and very kindly sponsored by NZTA. Thanks and appreciation need to go to NZTA, and also to Roger Burra for the substantial investment of time in making this as well coordinated as it was.

The committee elected to seek to comply with the IPENZ rule requirements to have the AGM within three months of end of the financial year. The committee also chose to manage it principally as an administrative affair, and we are intending to hold a discussion forum of sorts, at the conference, to engage with members more particularly about development of the strategic plan and related directions matters. We would hope you look for and make an effort to be there for that. Based on the comments and feedback from the AGM, there is continued interest in the activities of the Group and its administration, and this provides for a healthy, active and progressive Special Interest Group.

The committee is intending to publish the minutes of the AGM. I would encourage you to review them to keep abreast of key happenings and lines of discussion. One particular area of interest related to the Group accounts, as it often does. I am pleased to advise a healthy position for the Group based on the last 12 months. The national committee has taken a strategic approach to finances, with an intention that the reserves continue to grow over the next 10+ years. The objective is that membership subscriptions will fund branch activities and administration, and that our other principal income source, interest, will provide a basis for funding current and future investment in awards and other areas that are focused on advancing the knowledge and experience of the profession. Key financial determinations from the AGM included a commitment to undertake a financial risk analysis, to understand the potential risk and exposure of the Group's finances, and for a summary of accounts to be published. It is hoped that these can be published in the next issue of Roundabout, following the independent audit of IPENZ accounts.

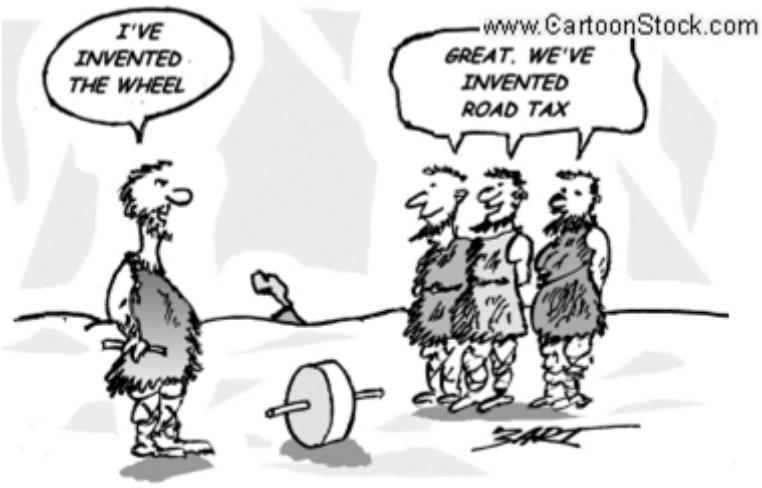
Well the elections have come and gone. I must say, I quite like the condensed timeframe, following the Rugby World Cup, for all the huff and puff. It will of course mean a continued commitment to deliver on pathways of investment that had been committed by the previous Government. It will be good to see these commitments completed and delivered, however I know and recognise that the current strategies have come at some pain in other transport investment areas. I will be particularly interested to see how forward planning and investment evolves over the next election period, and how we might consider, contribute to, and influence these.

The current global financial crisis seems to roll on, and has led to changes in the way many organisations now view their selection and expenditure. It would seem quite a different marketplace is evolving for us all. Have we got it right? There are cross sector concerns it seems, about developing inwardly focused policy and practice in these areas. Perhaps a forward looking strategic approach, considering in part the opportunity for structuring and contributions to national productivity in line with the objectives of the Productivity Commission is warranted? 2012 may well be a year where these changes are tested and refined?

For many, it is that busy final few weeks in the year again, and a time when we all look forward to a well-earned break over Christmas. On behalf of the national committee, we all wish you a great Christmas and a tremendous start to the 2012 year.

Mark Apeldoorn

December 2011



Government - the early days

Editorial

I attended the Trafinz conference in Hamilton in November. Trafinz represents local authority views on road safety and traffic management in New Zealand. I almost started this editorial with the phrase 'like many of you…' but there is always a notable lack of traffic engineers (and even fewer transport planners) at Trafinz. In fact, the first time I went to a Trafinz conference, I sat next to someone I didn't know, and here's the conversation I expected to happen:

Other Person: "so what do you do?"
BB: "I'm a traffic engineer"
OP: "Me too" …end of conversation.

In reality, it went like this:

OP: "so what do you do?"
BB: "I'm a traffic engineer"
OP: "oh how interesting! What does that involve?"
BB: "pardon? I thought everyone here would be a traffic engineer?"

… and so began my education in understanding that a thousand engineers and transport planners do not an industry make. It is a beautiful thing that Trafinz does. The Platinum sponsor of this year's conference was Safer Journeys, the government's Road Safety strategy to 2020. It was a great fit because the Safe System approach, which underpins Safer Journeys, encourages us all to think beyond our site-specific safety problems, and consider wider issues and effects. While our Transportation Group conference is comparatively more technically focussed, with its own fabulous outcomes, we tend as transportation professionals to look into a problem and tease out a specific, technical solution. Safer Journeys – and, I would argue, the collaborative 'Trafinz vibe', encourages looking out from where we are, to see our role as part of a much wider network of people and organisations. It's forest and trees stuff. So if you're working on some sort of a transportation problem, and it's next to a lake, for example - gaze for a while at the lake.

I will arise and go now, for always night and day
I hear lake water lapping with low sounds by the shore;
While I stand on the roadway, or on the pavements gray,
I hear it in the deep heart's core.

William Butler Yeats

Have a safe and restful Christmas.

Bridget Burdett, Roundabout Editor

Roundabout is the newsletter of the IPENZ Transportation Group, published quarterly. It features topical articles and other relevant tid-bits 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.

Many thanks are due to Opus International Consultants (see their advertisement on p37), who sponsor the printing of *Roundabout* for those members who prefer to receive a hard copy.

Correspondence welcome, to bridget.burdett@beca.com
Or c/o Beca, PO Box 448, Hamilton 3240

Issue contribution deadlines and publication dates for the coming 12 months are:

March 2012: Contributions due 5th March for publication by 15th March

June 2012: Contributions due 5th June for publication by 15th June

September 2012: Contributions due 5th September for publication by 15th September

To join the IPENZ Transportation Group, fill in an application form, available from the Group website:

http://ipenz.org.nz/ipenztg/files/TG-App.pdf

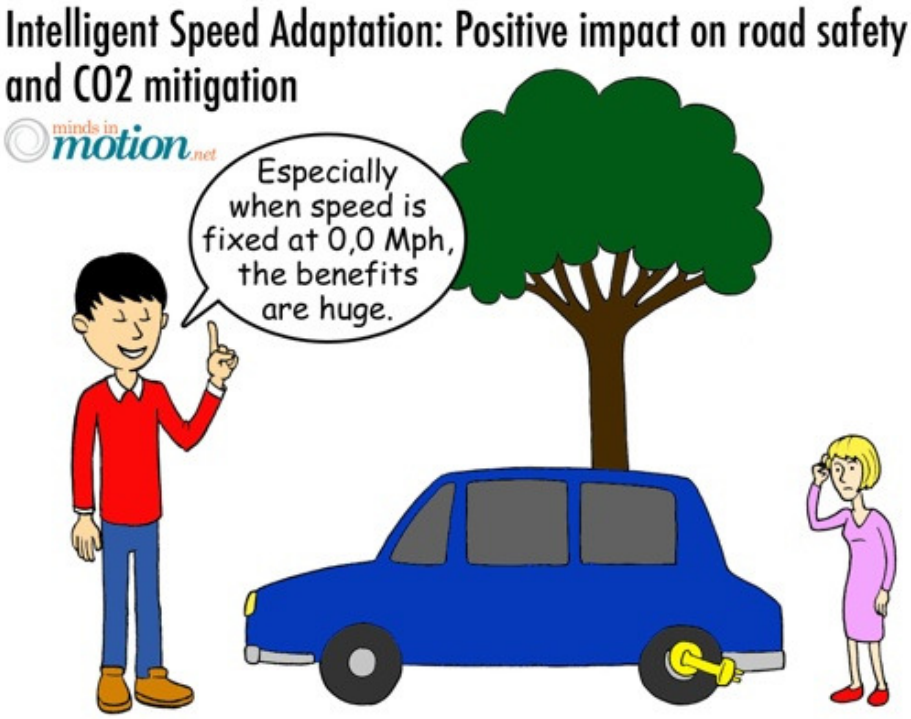
"Police Navidad!"

Annual General Meeting: Notice to Members

The Transportation Group AGM was held by video-conference on Wednesday 23 November 2011 . 34 group members attended at five sites throughout the country. Thanks are due to the NZTA who allowed us to use their video-conferencing facilities in Auckland, Hamilton, Wellington and Dunedin. An outside provider was used for the Christchurch venue. The draft minutes of the AGM can be accessed from the IPENZ Transport Group website / members only area:

http://www.ipenz.org.nz/ipenztg/members_area/group.cfm

This was the first time the AGM had been held via video-conference. It was very much a trial. It allowed the group to comply with IPENZ rules which require us to hold the AGM before the end of December. The National committee are looking to provide an opportunity for members to have another, face-to-face discussion forum at the conference in March 2012.



Snoopy (New News on Old Members)

Dr Glen Koorey has been appointed to a permanent senior lecturer position in transportation engineering at Canterbury University.

Dr Kenneth Kuhn is leaving the transport engineering team at Canterbury to pursue opportunities in the USA.

Katy Marriott is moving to Christchurch in late January 2012 with her family. Her email address remains unchanged katy@marriottconsulting.co.nz and she is available for coffee after the school year starts!

New Members

New members May – September 2011:

Richard deWitt, Zaid Essa	Auckland Transport
Theekshana Morapaya	Aurecon
Reena Solanki, Graham Bell, Jimin Hong	Beca
David Thomas	Carter Holt Harvey-Lodestar
Michael Jongeneel	FLOW Transportation
Ben Dodgshun	Fulton Hogan
Martin Gribble, Dumindu Sundarapperuma	GHD
Gina Waibl, Dhimantha Ranatunga	MWH
Maggie Buttle, Rowan Oliver, Lynette Billings	NZTA
Samuel Pasley, Natasha Elliott	Opus International
David Sears, Achini Liyanagama	SKM
Thanura Rabel, Ruby Mak, Thanura Rabel	Traffic Design Group
Tracy ten Hove	Transfield Services
Mingyue Sheng (Selena), Paula Schubster, Chao Yang (Carol) Han	University of Auckland
Colin Dumbleton, Benjamin Grupes, Elliot Smith, Luke Reeves, Peter Cockrem, Jeffrey Fulei Peng, Wendy Wee, Julia Toner, Martin Zhao, Amy Xu	University of Canterbury
Stephanie Timm	URS NZ Ltd

Obituary: Ross Hill

I'm sad to announce the passing of well-known Fellow of IPENZ Ross Hill, who passed away in September, aged 70, after what was a most remarkable and brave fight with cancer.

Ross was well respected by his peers, being described as a 'Transportation Guru' and 'probably one of the best traffic engineers in NZ', and who was enthusiastic about transportation modelling. A number of former colleagues noted his unreserved willingness to spend time to pass his skills and knowledge on to younger engineers, including as a mentor. As a manager, he was known for always having time for his staff, and his door was always open for staff with work or personal issues.

He was admired his problem-solving skills and ability to systematically breakdown a complex problem and solve it mathematically – he was described as the sort of person that doesn't stop thinking about the problem until he could come up with a solution. He was responsible for the development of the Auckland Subregional Traffic Assignment Models (ASRTAM) and his work became the foundation of traffic assignment modelling in Auckland/NZ. Ross even wrote papers to improve the Sidra modelling software and the creator was so impressed that Ross was invited to present his thoughts at the Emme International Conference in Canada.

Ross may be best known to IPENZ Transportation Group branch colleagues from his various roles at Auckland City Council and then Waitakere City Council, where he developed parking space ratios and general traffic engineering design guidelines. Ross was integral in the redevelopment of New Lynn town centre as a Transit Oriented Development and the Metropolitan Urban Limit shift in the Hobsonville area, as well as the Waitakere City Council relocation to Henderson town centre.

He was also a consultant and a previous recipient of the Best Paper award at IPENZ Transportation Group conferences.

He is recalled as always being full of energy and, even past his retirement age, he was still passionate about his work.

Our condolences go out to his wife Angela and children Reghan and Carrick.

Daniel Newcombe

IPENZ Transportation Group Auckland Chair

Obituary: Chris Bishop

Earlier this month Chris Bishop died suddenly his wife in a motorcycle accident in Nepal. Chris was 59 when he died and sharing his honeymoon with his wife of only two months.

Earlier in his career, Chris was an enthusiastic supporter at the very beginnings of the Transportation Group. In the early 1970's, Chris joined Head Office of the Ministry of Transport, later joining the newly set up Wellington Regional Office Traffic Engineering team of the MOT in Pearce House. He was a frequent attendee at workshops around that time, often organising them himself. Chris worked in the Regional Office of the Land Transport Safety Authority until the early 1990's.

His contemporaries remember Chris as someone that understood people well and was interested in hearing their experiences. His passion for understanding ideas and concepts, and then explaining it to others was something he enjoyed and was good at. He was seen as a true free spirit which was why the traffic engineering profession didn't ever get to hold onto him for too long.

Above all, Chris is known for his passion for motorbikes and his ability to get from A to B in a very short time, even when he had a leg in plaster.

Photo: www.stuff.co.nz

Intersection Performance and the New Zealand Left Turn Rule

Anna Wilkins
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Introduction

On 25 March 2012 New Zealand will change its unique give way rules so that left turning vehicles no longer have to yield priority to vehicles turning right into the same road. This will bring New Zealand into line with the rest of the world, and reverses a change implemented in 1977 as part of a wider series of changes that were meant to clarify and more clearly define the country's intersection priority rules.

Intersection crashes actually increased after the adoption of the New Zealand give way rule and there has been pressure to change the rule back to the more widely recognised situation of right turning traffic giving way to left turning vehicles ever since. The rule was almost changed in the Land Transport (Road User) Rule 2004 but didn't quite make the final version.

Safer Journeys, New Zealand's Road Safety Strategy published by the Ministry of Transport in 2010 estimates that reversing the New Zealand give way rule will lead to a saving in accident costs of $17 million annually.

This article summarises a research thesis undertaken at the University of Canterbury from 2007-2008 that used S-Paramics microscopic simulation modelling to look specifically into the intersection performance implications of changing the rule. The thesis was completed under the supervision of Senior Lecturer Glen Koorey and Associate Professor Alan Nicholson. The research was purely an academic exercise, kindly supported with data and advice from Christchurch City Council and the then Land Transport Safety Authority. Software and technical support was provided by Traffic Design Group Limited.

The research subject was topical when it was completed in 2007/2008 and has become topical again as New Zealand prepares for the change next year.

Research Approach

Ten intersections in Christchurch were selected for analysis, representing a variety of intersection types and layouts. S-Paramics models of the intersections were built and calibrated to existing conditions. The intersections were tested under both give way rules using an extensive range of traffic volumes. Their performance was compared using journey time and queue length indicators.

The research also looked into implications for the use of shared turning and through lanes and used the Christchurch Central Business Districts (CBD) S-Paramics model to assess the effects of changing the rule on an entire network.

Intersection Analysis Results

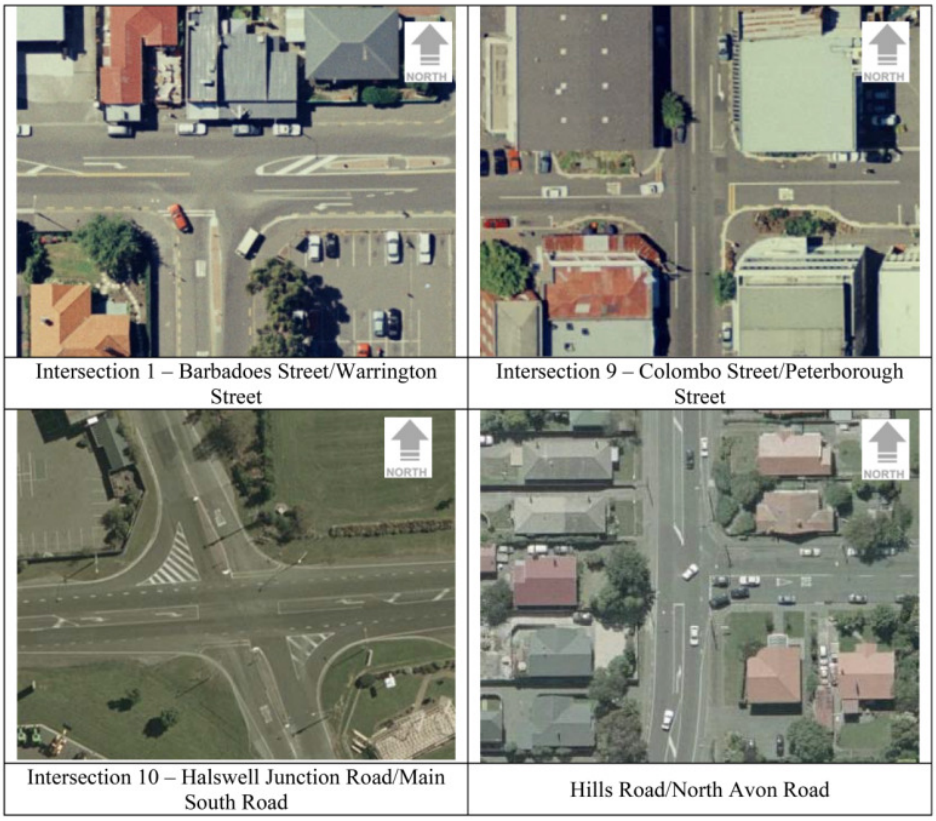
The research found that intersections generally fall into four groups in terms of the effect of the rule change. Two groups are 'affected' by the rule change and two are 'unaffected'. The 'affect groups and some examples are described below.

Affected Give-Way and Stop Controlled Intersections

These sorts of intersections:

- Have higher traffic volumes and commonly occur on either busier local roads or collector and arterial roads.
- Have approaches commonly featuring dedicated turning lanes.
- Are controlled by either give way or stop signs.

Some examples are shown below. (Note: "Intersection X" denotes an intersection that was studied in the research):



Intersection 1 – Barbadoes Street/Warrington Street

Intersection 9 – Colombo Street/Peterborough Street

Intersection 10 – Halswell Junction Road/Main South Road

Hills Road/North Avon Road

The following observations were made about 'Affected Give-Way and Stop Controlled' intersections:

- The changed rule reduces the journey time and queue length for left turning movements. However there is a corresponding increase in journey time and queue length for right turning vehicles that is greater than any saving for left turners.
- Three-arm give-way or stop intersections are susceptible to deteriorations in performance following the rule change.
- Increased journey time and queuing for vehicles turning right off the major road limits the ability of right turners to leave the minor road and consequently minor road delays increased significantly.

At these intersections the rule change may generate the need for:

- Earlier installation of traffic signals where the current intersection is operating at or near capacity or where turning volumes are high.
- Longer right turn queue storage on the major and minor road.
- Widening on the minor road approach so left turn vehicles are not delayed by vehicles waiting to turn right out of the minor road.

Affected Traffic Signal Intersections

These sorts of intersections:

- Are in the lower range of volumes for signalised intersections.
- Are typically found on the collector and arterial network.
- Feature elements such as shared through and turning lanes, short turning lanes and right turns that do not have dedicated right turn signal phases.

The following observations were made about these intersections:

- The changed rule reduces the journey time and queue length for left turning movements. However there is a corresponding increase in journey time and queue length for right turning vehicles that is greater than any saving for left turners.
- The changed rule highlights the already critical nature of some right turns that do not have dedicated signal phases, but only when there is a high level of interaction between left and right turning vehicles.
- Intersections with short right turn bays were susceptible to deteriorated performance as these tended to overflow and block adjacent lanes more frequently.
- Tests of intersections with shared through and left lanes showed potential for improved performance resulting from more even lane use.
- Tests of intersections with shared through and right lanes showed worse performance.

Some examples are shown below. (Note: "Intersection X" denotes an intersection that was studied in the research):

At these intersections the rule change may generate the need for:

- Longer right turn queue storage.
- Separation of right turning and through vehicles.
- Introduction or lengthening of dedicated right turn signal phases.

These sorts of intersections are not expected to be susceptible to changes in performance following a rule change.

Lane Use Analysis Results

The research looked into the effect of the rule change on lane use of multi-lane roads leading to the following conclusions:

- Analysis of a three-arm signalised intersection with a two-lane major road approach featuring a shared left and through lane showed that the changed rule offered performance benefits due to the more even use of the two lanes by through traffic.
- As long as the opposite approach had adequate queue storage for the right turners, the overall delay at the intersection reduced by around 10%.
- The opposite effect occurs where a shared through and right lane situation was considered. As expected, right turn delays increase and consequently lane use by through vehicles becomes less even and the overall operation of the intersection became less efficient.

Network Analysis Results

The research used the calibrated Christchurch CBD S-Paramics model to look into the effect of the rule change on a whole network, with the following conclusions:

- Overall the network showed a decrease in average journey time of 4% during the morning peak and 6% during the evening peak with the changed rule.
- There was some redistribution of traffic around the network and evidence that some right turns became less attractive and some left turns more attractive.
- Of all intersections in the network that would be affected by the rule change, around 30% were modelled as performing better under the changed rule and 15% performed worse. The remainder were unchanged.

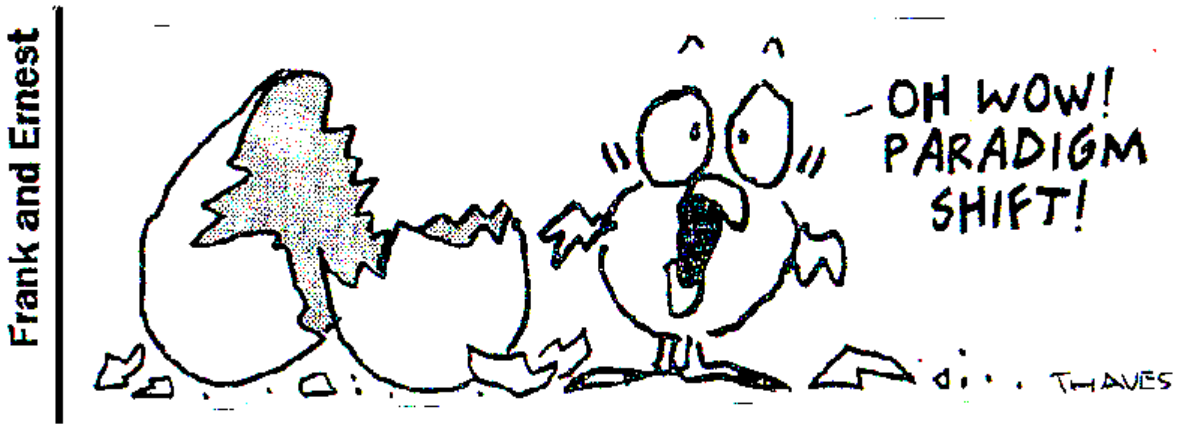
Conclusion

The research showed that typically the increase in journey time and queue length for right turning vehicles exceeds any corresponding decrease for left turning vehicles, but there are exceptions.

The change at each intersection could be positive, negative or not even perceptible depending on the individual characteristics of each intersection and the pattern of traffic moving through it. Overall the research suggested that road user cost implications would remain secondary to the road safety side of the debate. This is consistent with the position that has emerged three years after the research was completed, with road safety benefits being the primary driver for the change.

Since the research was completed, the focus of road controlling authorities has moved from assessment to implementation. Come 25 March 2012 some intersections will become more efficient and others will become less. Traffic movement patterns may change if particular movements become significantly easier or harder for drivers.

At present the give way rules are maximising the capacity of some right turns and limiting the capacity of some left turns and some shared through and left facilities. Road controlling authorities should pay particular attention to three-arm priority intersections and smaller signalised intersections, and be prepared to implement operational or layout changes to support the rule change.



How to Make Buses More Conspicuous from the Front

Christopher E Harris

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Introduction

Lately, there have been a host of reports of buses striking pedestrians in Wellington, especially in the former Manners Street Pedestrian Mall. Some of these problems may be due to short pedestrian signal times, which, as Jan Gehl pointed out in 2005, tempt the pedestrian to 'jaywalk'. Other reasons may include the use of earphones and general background noise, which leaves peripheral vision as the sole warning of the bus's approach.

Unfortunately, vision itself is often compromised by pavement clutter and by other factors. In this paper, I would like to focus on what is perhaps the most subtle and least obvious contributor to such accidents. This is the fact that the *frontal* visibility (or conspicuity) of buses is often surprisingly low, compared to their conspicuity as seen from the side or the rear.

'You may be run over by a bus tomorrow'

The frontal conspicuity, and overall pedestrian safety, of the urban street bus often leaves something to be desired, as the expression 'you may be run over by a bus tomorrow' tends to suggest. Part of the reason for this, apart from the bus's size, is the fact that the bus is operating in the most pedestrian-intensive areas of the city, namely:

- At bus stops where the footpath may be crowded and where half the passengers will wish to immediately cross the road as well
- In shopping high streets, where there is normally much foot traffic
- Close to schools and other important destinations

Unlike the tram, which always goes straight ahead on visible tracks, the bus swings unpredictably from side to side, pulling into the bus stop and then pulling out, changing lanes and overtaking traffic and parked cars.

And again, unlike the tram, which normally runs in the middle of the road, the bus skims along the kerb. One step puts one in front of the bus, and the angle of vision by which it may be seen is also much more peripheral. Of course one might step out for a tram and be hit by a car. But in any case, it is surely obvious that this argument reinforces the case for buses whose fronts can easily be seen out of the corner of the eye.

Bigger Windscreens, Lower Headlights

In past decades, bus windscreens were generally small, and the headlights were located up high, in the middle of a front panel that was itself fairly easy to see. Over the years, the windscreen was made larger, partly so that the driver could see out more easily, and partly also because a big windscreen, without struts and sharp corners, presents a safer and more yielding surface for any pedestrian that the bus runs into.

But this has created a new problem, whereby the larger windscreen appears as a 'black hole' in the visual field of the pedestrian. The headlights, too, are pushed down until they become more like footlights. The nature of the problem is suggested by the next photograph. The front of this bus is much less conspicuous than the sides, which may actually lull the pedestrian into a false sense of security.

The problem is only partly due to the expanding windscreen itself. The problem is made much worse by the fact that the transparent part of the windscreen is surrounded by extensive black areas that are part of the wider windscreen assembly. There is no reason why these have to be black, other than that this presumably blends into the black windscreen rubber.

The next pair of photographs shows what happens when such a bus is seen from the pedestrian's point of view with the sun behind. The first photograph is

largely unmodified other than to remove details of the number plate, *etc*. The second simulates a situation in which all black areas round the windscreen have been coloured the same yellow as the rest of the bus, as far as it is feasible to do so.

It can be seen that colouring unnecessarily blackened areas around the windscreen yellow make the front of the bus much more visible. However, as this photograph of the same type of bus in sunshine show, high visibility colours like yellow work best if they are *brightly illuminated*:

With the sun in front, even the scant yellow area on the front of the bus can be seen a long way off. With the sun behind, the bus in a similar view is almost invisible even with headlights on.

Furthermore, yellow is a best-case scenario. Many other liveries are not so intrinsically visible. The following would present a challenge in evening half-light, for example.

A Feasible Solution

Where is this all leading? The answer, it would seem to be, is that the front of each bus should be made yellow over a large area—on those parts where to do so would not detract from visibility—and that, furthermore, the front of the bus should be positively illuminated with LED "wall washers" or panel illuminators, to increase its panel brightness to whatever level is needed to make it stand out at all times, in the way that bright yellow does in full sun.

With sufficient brightness, there would be no need to have a simply monotonous yellow surface, however. For instance, the front of the bus could look like the image at left, day or night. It has been given a blue surround in this image, to simulate evening conditions.

A further advantage of positive LED illumination of the whole surface is that it could be pulsed in order to draw attention to the bus, perhaps, for example, if the driver braked hard. For school buses, the rear should also receive this treatment, perhaps by way of a removable panel.

Lastly, certain additional possibilities, such as the illumination of the shadow area under the bus with downward-pointed LEDs, could also be considered.

Greenfields: Spotlight on Young Transportation Professionals

The Hume Fellowship for 2011 has been awarded to Courtney Groundwater, who works for Abley Transportation Consultants Ltd as a transportation engineer. Courtney will use her Fellowship to study for an MSc (Eng) in Transport Planning and Engineering at the UK University of Leeds in the 2012/2013 UK academic year.

The Hume Fellowship was established by Henrietta Hume in 1988. Henrietta's late husband Harry Hume led a distinguished career in the Ministry of Works from which he retired as Chief Civil Engineer in 1966. The Fellowship provides financial support for young civil engineers under 35 years of age to undertake specialist study overseas. Courtney is the 14th recipient of a Hume Fellowship. Although civil engineering is predominantly a male profession, it is significant that of the 14 awards, seven have been to very talented women civil engineers.

Courtney is looking forward to her time away at Leeds where her 12 month Masters course will consist of five compulsory taught courses, 3 optional taught courses and a masters dissertation. The programme is also an ICE accredited course. The great thing about the University of Leeds is that the MSc (Eng) in Transport Planning and Engineering is offered by the Institute for Transport Studies (ITS) which takes a multi disciplinary approach to transport. Therefore a range of taught courses are available to students is vast as there is some crossover between disciplines. The MSc (Eng) in Transport Planning and Engineering course provides students with core technical skills and allows them to select optional courses which support their thesis from a range of subjects including (but not limited to); "Analysing Transport and Society", "Global Issues in Transport", "Green Logistics", "Safety of Road Transport", "Transport Investment Appraisal" and "Public Transport Planning and Management". More information about the courses offered as part of the MSc (Eng) in Transport Planning and Engineering course is available at: http://www.its.leeds.ac.uk/courses/masters/msc-transport-planning-engineering/ .

Courtney is very grateful of the Hume Fellowship for making this aspiration possible. Ultimately she intends to return to Abley Transportation Consultants Ltd where hopefully she can assist with making a positive difference to the transportation system in New Zealand.

University of Canterbury: Special Report

Professor Alan Nicholson
Civil and Natural Resources Engineering
University of Canterbury

The first term had barely started when the 22 February earthquakes struck. While I had missed the 4 September earthquake, which resulted in a one week closure of the University, I did not miss the clean-up, as that earthquake caused my office floor to be covered in books and documents to a depth of about 10cm. The effect of the February quake was much greater, causing a three week closure, and a 15cm deep layer of books and documents on the office floor. The main problem was damage to our lecture theatres, especially the large ones, and we were forced to find alternative venues. The Avonhead Baptist Church Hall was used for undergrad lectures and most postgrad block courses.

A block course had been scheduled for the week before the Church Hall became available, and the visiting academic (Professor Martin Snaith, University of Birmingham) was unable to change his travel plans. The University would not make a room available, so that block course was held in a meeting room at a local pub. It proved to be an ideal place for discussions (of the lecture material, of course) at the end of each day. When the University management learned that we planned to run other block courses at the same venue, they 'changed their tune' and made rooms on campus available.

The undergrad and postgrad teaching programmes had to be rearranged extensively, and this proved to be a very big job. The Department was decided to have no final exams, and to have a series of tests and assignments instead. We were concerned that if assessment were to be heavily based on a final exam, and that exam were to be disrupted by an earthquake, then we would have little information upon which to assess student performance. As it happened, the June earthquakes, which caused another closure of several days, occurred just after the last round of Semester 1 tests had been completed. It should be noted that having a series of test proved to have several benefits and many courses will continue to be assessed that way.

Earthquakes were not the only cause of disruption, as we had two heavy falls of snow within a few weeks during Semester 2 (the sort of falls that generally occur once every 25 years or so), with the University being closed for 1-2 days on each occasion. Those snowfalls, which some people labelled the 'icing on the quakes' had quite an effect on block courses.

It has been a difficult year for staff and students, with a large increase in the number of students applying for aegrotats on the basis of stress-related issues. The time available for research has been reduced substantially, due to the increase in teaching-related work, including course and programme administration. Staff have also been involved in rescue, response and recovery activities in Christchurch, including participating in workshops and forums related to preparation of a new City Plan.

In conclusion, my colleagues and I are looking forward to a good and well-earned break during the Festive Season.
Alan.

PS. Many readers will recall the building known as The Mushroom, which contained the E1 lecture theatre. Unfortunately, it was so severely damaged during the February quakes that it was recently demolished.

Alternate block course venue: PUB101

Branch updates

Canterbury/West Coast Branch **Chairman – James Park**

There is now alot of activity within Christchurch with the Canterbury Earthquake Recovery Agency (CERA) and associated Stronger Christchurch Alliance becoming more active in road management around eastern Christchurch. The City Council and NZTA continue to face new challenges as demand on traffic routes changes with the Central City gradually opening up again.

The Branch Committee has been invited to join a consultative group supporting CERA representing local professional organisations including IPENZ, NZIA (Architects), NZPI (Planners), NZIQS (Quantity Surveyors), and NZILA (Landscape Architects). We are glad to see this coordination developing and hope we can contribute positively through this mechanism.

From the Branch forum meeting held 6 Sept 2011 a submission was made to the CCC Central City Plan process on16 Sept 2011 discussing the key transportation issues and options indicated within the draft plan. The Branch Committee will remain interested in the progress on this Plan as it is finalised and implemented into 2012.

The Committee met 5 October 2011 and 16 November 2011, with a Special Committee Meeting held to confirm the submission content on 12 September.

The Branch AGM was held on 27 October and attracted a good turn-out of 21 members. Mike Blyleven from NZTA gave a very informative presentation on "Keeping Christchurch Moving: Post EQ Traffic Management." Four new Branch Committee members were attracted and the Committee remains active and strongly resilient. The Branch is moving ahead with a lot of confidence and energy.

From a number of ideas to include our West Coast colleagues, we have now been able to combine a visit from Canterbury based members with an event in December in Greymouth (in conjunction with IPENZ West Coast Branch). This event has been brought together to encourage more to join and there is a possibility that this could become an annual event.

The Committee has confirmed further presentations before Christmas:

- Mike Smith on "Taking Road Safety to the World" – Tues 6 Dec.
- "Earthquake update from Christchurch" and "Transport in District Plans" Jeanette Ward and Lisa Williams, from Christchurch, speaking in Greymouth – Wed 7 Dec.

There was disappointingly a very small attendance to the Group AGM teleconference base in Christchurch on 23 November. The technology worked well and hopefully we will see more members getting involved if this system is used again.

The Branch Committee members are looking forward to a well earned break before we start again in February with our 2012 programme.

Next Committee Meeting is planned for 14 December 2011.

Happy Christmas and a safe New Year to all Branch and Group members.

Auckland/Northland Branch **Chairman Daniel Newcombe**

The Auckland/Northland branch has run several technical meetings since the last edition of Roundabout. The September event was a well-attended (over 100 people) presentation on the launch of the Auckland Council's City Centre Masterplan. It was quite a coup (and a good deal of luck) having the meeting date coincide with the date of the Masterplan launch, so it was a very topical topic. We intend to hold a follow-up event in the New Year once the Masterplan has been revised, to see it's final shape.

The October event was on the largest, non NZTA-directed transport (and land use) project in New Zealand - the Auckland-Manukau Eastern Transport Initiative (AMETI). Dan Ross, from Opus, outlined the upcoming construction phase beginning at Christmas and the rest of the work package that will improve connectivity for public transport, cycling, pedestrian and vehicles throughout Panmure and eventually Pakuranga. Future project components include the proposed Panmure Busway, New Zealand's first urban arterial busway.

In November, NZTA's Tunnel Alliance Team Leader, Mark Johnson, gave a presentation on the SH20 Waterview Connection, the most complex roading project the NZTA has ever undertaken. The project includes the largest road tunnels in New Zealand and will provide the final link in Auckland's Western Ring Route, enhancing capacity and safety by reducing dependence on State Highway 1, and reducing travel times. One of the government's seven Roads of National Significance (RoNS) projects, the project cost is anticipated to be over $2 billion and will be completed by mid 2017.

This month we've put aside learning, in favour of professional networking. The annual branch Christmas function was held on December 1st in the Council Chambers of the Auckland town hall. This prestigous new venue for the event was topped off by a hilarious stand-up comedy routine by international comedian

Simon McKinney. Simon's range of jokes and mimicry stretched to over an hour after his watch stopped and he didn't realise how long he'd been talking.

The Auckland/Northland branch has recently prepared its forward programme of topics and events for 2012, with a range of types of events in different locations and times of the day, to appeal to the different needs of branch members. We hope the branch has served members well, we look forward to a greater variety of events next year and wish all branch members a happy festive season.

Central Branch **Chairman - Roger Burra**

Central Branch – Call for Help!

Central Branch covers a large geographic area from Marlborough to Hawkes Bay and west to Taranaki. The majority of our members are based in the Wellington area and therefore in the past the focus of our event has been Wellington and the Hutt Valley. However, geographical location of these events has meant that attendance is only really viable for 60 – 70% of our members. The table below shows where central branch members are located

Area	**Proportion of Central Branch Members**
Wellington	52%
Hutt Valley	15%
Hawkes Bay	10%
Marlborough	8%
Porirua-Kapiti-	7%
Wanganui - Manawatu	6%
Taranaki	2%
Other	1%

Central Branch has had a successful year with well attended lunchtime events every month. The committee also organised two visits to NZTA's Regional Traffic Operations Centre in Johnsonville and a lively evening discussion forum and networking function. However, we are conscious that we have an opportunity to reach out to the wider central region in future.

In the coming year we will continue our programme of lunchtime events in Wellington and plan to hold an evening debate session. A priority will be to make sure we better serve branch members further afield. Ideas we are currently investigating include a visit to the Manawatu Gorge slip rehabilitation works as well as funding for seminar events outside Wellington.

We are therefore looking for Transportation Group members who are willing to help us organise events, particularly in places like Hawkes Bay, Marlborough and the Manawatu. We will also look at opportunities to fund the travel expenses of specialists that present outside Wellington. To make this happen we need local contacts that we can work with and who would consider being co-opted onto the branch committee.

Anyone who would like to become involved or who has some ideas of events that IPENZ Transportation Group should be organising, please contact:

Roger Burra, 04 471 7404, roger.burra@opus.co.uk

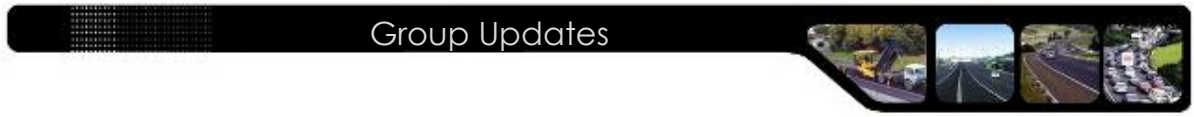
Jo Draper, 04 894 5432, josephine.draper@nzta.govt.nz

Waikato/Bay of Plenty Branch **Deputy Chair – Adam Francis**

The Waikato/Bay of Plenty committee have been steadily progressing with the organisation of the Transportation Conference being held in Rotorua, 18 – 21 March 2011. In between organising this we have held a number of technical presentations, with these alternating between the Hamilton and Tauranga centres. These included:

- Steve Abley presentation on Integrated Transportation Assessments, 15th June 2011.
- Tauranga Eastern Link Presentation: 11th August 2011
- Te Rapa Bypass and Kopu Bridge Visit – Combined with the IPENZ branch: 19th September 2011
- Alan Bickers Presentation: "Techniques for delivering expert evidence to RMA hearings" 27th October 2011.

With his election to Chairperson of the National Committee, Mark Apeldoorn unfortunately tendered his resignation as Waikato/ Bay of Plenty Branch Chairman back at the end of June. Robyn Denton was duly elected as the new Waikato/BOP Branch Chairperson.

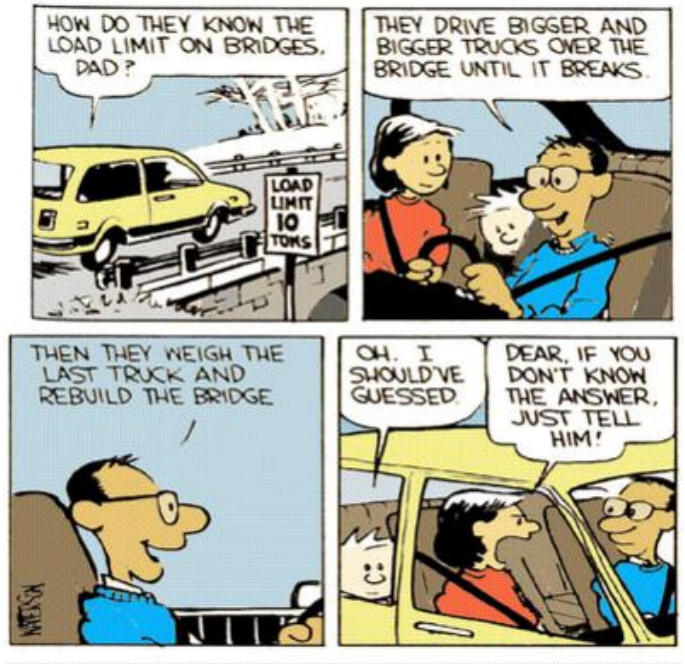


TRIPS DATABASE BUREAU

A TECHNICAL FOCUS GROUP OF THE IPENZ TRANSPORTATION GROUP

Trips Database Bureau supports and develops a Parking and Trips Rates Database for different land uses for the direct benefit of its member organisations and indirect benefit of the profession at large.
Data includes both New Zealand and Australian information, including the RTA database. TDB also has arrangements with TRICS (UK) for inquiry into United Kingdom data of trip generation, parking, mode split and travel demand information on a site by site basis.
TDB is involved in undertaking transportation and trip generation research on behalf of its membership. This has included several comparative research projects on trips, travel profiling and integrated transportation assessments. These research projects have been supported by grants from the New Zealand Transport Agency's national research programme.

We welcome new member organisation enquiries at all times from both sides of the Tasman. By joining, you become a member and a colleague of a growing focus group of engineers and planners from over 65 member organisations.
If you are interested in finding out more about Trips Database Bureau, please check out our website www.tdbonline.com or email us at admin@tdbonline.com



NZMUGS Annual Report 2011

By Gavin Smith, Administrator, NZMUGS Committee

INTRODUCTION

The New Zealand Modelling User Group (NZMUGS) is a sub-group of the IPENZ Transportation Group that was established in 2008. The group is dedicated to promoting the interests of traffic and transport modelling within the transport industry in New Zealand. It is the intention that the group represents all aspects of modelling, from micro-simulation through to wide area/strategic modelling, as well as emerging areas such as pedestrian and accessibility modelling.

It is intended that the group takes an even handed approach to all modelling software and the committee is made up of a number of key modelling people from a range of consultants and local government clients.

MEMBERSHIP

We currently have 95 members, from a variety of consultants and local and central government authorities, from throughout New Zealand and Australia. The only requirement for membership of NZMUGS is membership of the IPENZ Transportation Group.

NZMUGS PROJECTS

NZMUGS is current working on the following projects;

- Modelling Peer Review Guidelines (completed and passed on to NZTA and IPENZ Transportation Group for comment);
- Guidelines on issues relating to traffic and transport forecasts;
- Micro-simulation Modelling Guidelines (including model calibration/validation criteria). This paper went through a first review to selected members and the NZMUGS Committee.
- A paper setting out suggestions for improvements to the Economic Evaluation Manual on matters relating to base model validation tests, including matrix estimation and matrix checks, has also been prepared.

The papers for discussion have gone out to the NZMUGS members for feedback and input. The feedback period closed in November and the Committee is currently collating and addressing those comments. A big thank you to those members who did provide feedback.

CONFERENCE 2011

The fourth NZMUGS conference 2011 was well attended with 60+ attendees. We allowed a number of "floating" registrations to be issued which enabled a number of graduate and younger staff members to attend various presentations across the day, to give them some exposure to an NZMUGS conference.

It was noted that the conferences are the major generator and consumer of NZMUGS funds. We were fortunate to acquire a number of sponsors which assisted in covering much of the conference related costs.

Thank you Aurecon, Opus, and TEAM for their continued support as major sponsors in 2011.

The committee made an award for best presentation to Duncan Tindall of Beca and the runner up was Bevan Wilmshurst of Traffic Design Group.

CONFERENCE 2012

We are planning the fifth NZMUGS conference, to be held in Auckland in 2012. It is intended that this conference will be held in September / October 2012 with the date to be finalised early 2012.

Prepared by Gavin Smith, Administrator
Reviewed by Ian Clark, Chairperson

December 2011

Some other NZ Mugs

Transportation Engineering Postgraduate Courses 2012

Dept of Civil & Natural Resources Engineering
University of Canterbury

NZ TRANSPORT AGENCY
WAKA KOTAHI

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 five courses
- Master of Engineering Studies (MEngSt) ~ typically ten courses
- Master of Engineering in Transportation (MET) ~ up to six courses plus research project/thesis

All courses run in "block mode" to enable part-time and distance students to take part; dates on the website.

All candidates with relevant degrees and/or suitable transportation work experience will be considered.

2012 Fees are **$703 incl. GST**, plus a Student Services levy (some rebates available).

Note: Programme may be subject to change; check with the Dept or our website for confirmation.

COURSE	DESCRIPTION
Anytime (contact Department)	
ENTR401: Fundamentals of Transport Engineering	A self-study programme in: Transportation planning; Road link theory and design; Intersection analysis and design; Traffic studies; Accident reduction; Sustainable transport planning and design; Pavement design; Road asset management. *{bridging course for non-transportation students}*
Semester 1 (Feb-Jun 2012)	
ENTR611: Planning and Managing for Transport	Road/transport administration in NZ; Transport legislative environment in NZ; Communication/presentation skills; Public consultation; Traffic surveys; Transport assessment and economics; Demand management and tolling; Construction planning and contract management.
ENTR602: Accident Reduction & Prevention	Impact on society; Data analysis and interpretation; Hazardous location identification; Road environment factors; Problem diagnosis; Treatment options; Treatment selection; Economic appraisal; Evaluation and monitoring; Safety auditing.
ENTR612: Transport Policy and Demand Management	Transport economics; Travel demand and supply management, congestion pricing; Transport policy objectives and instruments; Traffic management modelling.
Semester 2 (Jul-Oct 2012)	
ENTR603: Advanced Pavement Design	Stresses, strains and deflections in flexible and rigid pavements; Pavement materials characterisation; Mechanistic and mechanistic-empirical design methods; Pavement performance and evaluation.
ENTR614: Planning & Design of Sustainable Trpt	Pedestrian planning and design; Planning and design for cycling; Audits/reviews of walking and cycling; Public transport operations, scheduling and network design; Travel behaviour change and travel plans.
ENTR615: Transport Network Modelling	Principles of transport modelling; Road network modelling; Macro-simulation and micro-simulation; Traffic intersection modelling; Transport network analysis and reliability.

Other relevant courses at Canterbury (e.g. Risk Management and Construction Management courses), Auckland Univ. or elsewhere may also be suitable for credit to a PGCertEng, MEngSt or MET. Special Topics and small research projects may also be available to some students – contact the Department.

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***

Transportation Engineering Postgraduate Courses 2012

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 '12)	
CIVIL660 - Traffic Engineering & Planning (extended mode)	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)*.
Civil 767 – Advanced Pavement Engineering (block mode)	Pavement construction materials, Analytical and empirical pavement design methods, Pavement maintenance and rehabilitation techniques, Data collection methodologies for the assessment of pavement performance.
CIVIL770 - Transport Systems Economics (extended mode)	Fundamentals of transport economics incl. supply, demand, pricing, congestion and other externalities; principles of economic evaluation in transport planning.
Civil 772 – Public Transport – Planning & Operation (extended or block mode)	PT Data Collection; Frequency and Headway Determination; Alternative Timetables; Vehicle and Crew Scheduling; Short-turn Design; PT Network Design; Reliability; Design of Shuttle and Feeder lines; Bus priority and BRT.
Semester 2 (Jul-Oct '12)	
CIVIL661 - Highway & Pavement Engineering (extended mode, integrated with 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).*
CIVIL761 – Planning and Design of Transport Facilities (extended mode)	Selected topics from: traffic signal practice/safety audits, two way highways planning, arterial traffic management, modelling and simulation and traffic flow.
CIVIL765 – Infrastructure Asset Management (block mode)	The 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.
CIVIL769 – Highway Geometric Design (TENTATIVE) (block mode)	The geometric design of highways including; user, vehicle, road environment, sight distance, vehicle speed, design consistency, horizontal & vertical curve and cross-sectional design, design plans, signs & marking.
CIVIL 771 – Planning & Managing Transport (extended mode)	Integrated planning of transport and land use, Outline of transport planning modelling, District Plans, Requirements of the NZTS, LTMA and RMA, Travel, trips and parking. Integrated transport assessments with multi-modal transport, Travel demand management, Intro to Intelligent transport systems.

Other relevant courses at Auckland or Canterbury or elsewhere may also be suitable for credit.

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

http://www.cee.auckland.ac.nz/uoa/home/about/ourprogrammesandcourses/courses-details

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Fundamentals of Traffic Engineering

THE UNIVERSITY OF AUCKLAND
CENTRE FOR CONTINUING EDUCATION

www.cce.auckland.ac.nz/trafficengineering

Introduction

Auckland 13 - 17 February 2012
Advance Notice

The University of Auckland and the University of Canterbury are pleased to jointly offer a five-day course covering the Fundamentals of Traffic Engineering. This is the 16th time the course has been offered. The 2010 course was held in Christchurch during February. The course covers a wide range of topics including material on Transport Policy, Transport Sustainability, Travel Demand Management and Public Transport.

Course Objectives

The course will:

- provide participants with a solid grounding in the fundamentals of traffic engineering and contextual issues related to planning and managing transport operations
- develop participants' practical skills and knowledge of how and when they should be applied
- cover the theory of good traffic engineering practice
- enable participants to recognize and deal effectively with situations where standard methods are unlikely to work well

Presenters

The course is to be presented by:

- **Roger Dunn**, University of Auckland
- **Alan Nicholson**, University of Canterbury
- Other staff from the University of Auckland

Who Should Attend?

The course will benefit practicing **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 & Technicians

C

Course Inquiries

Roger Dunn
Email: rcm.dunn@auckland.ac.nz

Registration of interest

Anne Cave, Centre for Continuing Education
University of Auckland, Private Bag 92-019, Auckland
Phone: 09 373 7599 ext 89541 Fax: 09 373 7419
Email: a.cave@auckland.ac.nz

Price: $2200 + GST

2012 Training Courses

SIDRA SOLUTIONS

SIDRA INTERSECTION Advanced Workshop

Akcelik and Associates are holding an Advanced SIDRA INTERSECTION workshop in Auckland in March 2012.

City	Level	Date
Auckland	Advanced	Thursday 15 to Friday 16 March 2012

Further information on the workshop and how to register can be found on the SIDRA SOLUTIONS website http://www.sidrasolutions.com/Training/TrainingDirectory or through the ViaStrada SIDRA training page http://viastrada.co.nz/sidra_training

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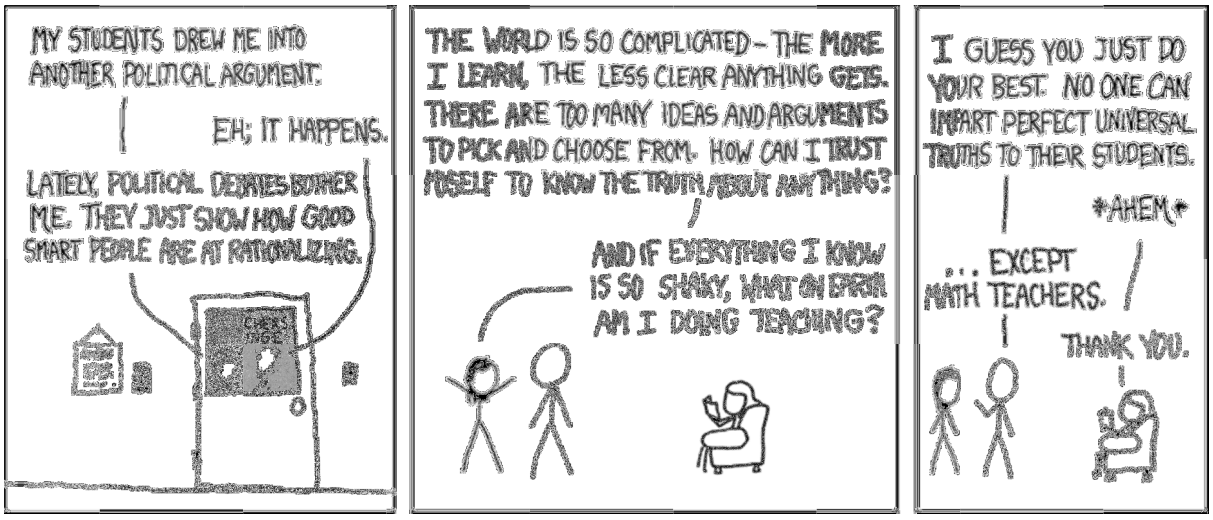

www.xkcd.com/263

Stand & Deliver

IPENZ TRANSPORTATION GROUP

IPENZ Transportation Group Conference
Rotorua
18 – 21 March / 2012

Venue

The IPENZ Transportation Group Conference will be held in Rotorua at the Rotorua Energy Events Centre. The Rotorua Energy Events Centre is located in the midst of Rotorua's downtown business and retail area. It is just a few minutes walk from major hotels, shops, bars, restaurants and the lakefront.

Accommodation

We are have rooms available at the Millennium Hotel Rotorua, Sudima Hotel Lake Rotorua and The Regent of Rotorua. Each of these properties are within walking distance of the venue and bus transport will be provided to the conference venue and social functions.

Registration

Early Bird closes 3 February 2012.

Click here **for more details.**
On the registration page you will find a link to the online registration form. The below rates include GST

	Early Bird Prior to 3 Feb 2012	Standard After 3 Feb 2012
Conference Registration Fee	$875.00	$985.00
Single Day Registration Fee**	$415.00	$525.00
Exhibitor Registration Fee**	$475.00	$575.00
Life Member	Comp	Comp
Student Registrations - Single Days**	$ 34.50	$ 34.50
Student Registrations - Full Conference**	$103.50	$103.50
Young Professionals**	$ 34.50	$ 34.50

Social Programme

Welcome Function
The welcome function will be held Redwoods Forest. It is an outside venue so please wear warm clothes and comfortable shoes.

Conference Dinner
The Conference Dinner will be held at Blue Baths and is 'An evening in Las Vegas so please come along dressed to theme.

Programme

A fantastic programme has been designed with great key note speakers include

- **Dr Susan Krumdieck** (Canterbury University) speaking on the Dunedin Peak Oil vulnerability study and strategic transition plan
- **Dr Sam Charlton** (Waikato University) talking about What are Safer Speeds?,
- **Amanda Douglas**, (Wynn Williams) speaking on Case Law; Stand & Deliver Expert Evidence; and
- **Matt Barnes** (NZTA) speaking about the transport logistics for the rugby world cup.

Visit the conference website for more details.

Harding Consultants: W: www.hardingconsultants.co.nz/ipenz2012 E: glenda@hardingconsultants.co.nz
PO Box 5512, Papanui, Christchurch. P: 03 352 5598 F: 03 352 0197

2 WALK AND CYCLE
2012 CONFERENCE creating smarter connections

HASTINGS DISTRICT COUNCIL

HAWKE'S BAY REGIONAL COUNCIL




Hastings - 22 to 24 February 2012

In February 2012 the first ever 2 Walk and Cycle Conference will be held in Hastings, New Zealand at the Hawke's Bay Opera House, with an expected 200 delegates. Home to one of the country's Model Walking and Cycling Communities, Hastings and the greater Hawke's Bay area provide outstanding examples of walking and cycling opportunities for you to enjoy and learn from.

KEY NOTE PRESENTERS:

Roger Geller

Roger has been Portland, Oregon's Bicycle Coordinator since 2000 and has been with the city's Bicycle Program since 1994. He has 17 years of experience managing bicycle capital, planning and policy projects.

His position requires an in-depth knowledge of design, policy, planning and maintenance relating to bicycle transportation.

Professor Billie Giles-Corti

Professor Giles-Corti recently joined the McCaughey Centre in July 2011. For the last 15 years, Professor Billie Giles-Corti has been at the forefront of developing a new field in health promotion, focussed on understanding environmental factors that contribute to community wellbeing and which influence physical, social and mental health.

Nigel Latta

Nigel is a registered clinical psychologist and author. Upon completion of his masters degree at Otago, he relocated to Auckland where he trained as a clinical psychologist and worked there for a period of some seventeen years in a number of agencies - Drug and Alcohol rehabilitation, Sex Offender Treatment Programmes, Family Therapy agencies, Child Youth and Family, Probation Services, as well as in private practice.

Alistair Woodward

Alistair Woodward is Head of the School of Population Health at the University of Auckland. He trained in medicine at the University of Adelaide, and worked as a hospital doctor and general practitioner before specialising in public health. His research and teaching are concerned with the links between good health and the environments in which people live, work and move around.

To register to attend this conference click here
Early Bird Registrations close 21 December 2011

For further details go to:
www.2walkandcycle.org.nz

Harding Consultants Ltd, PO Box 5512, Papanui, Christchurch
P: 03 352-5598, F: 03 352-0197, info@2walkandcycle.org.nz

Branch Contacts

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daniel.newcombe@aucklandtransport.govt.nz
Secretary: Doris Stroh
Doris.Stroh@ama.nzta.govt.nz

Waikato / Bay of Plenty
Chair: Robyn Denton
robyn.denton@hcc.govt.nz
Secretary: Bridget Burdett
bridget.burdett@beca.com

Central
Chair: Roger Burra
roger.burra@opus.co.nz
Secretary: Joshua Wright
joshua.wright@tunnelsalliance.co.nz

Canterbury / West Coast
Chair: James Park James.Park@opus.co.nz
Secretary: Ann-Marie Head ann-marie@abley.com

Southern
Chair: Phil Dowsett phil.dowsett@nzta.govt.nz
Secretary: Lisa Clifford lcliffor@dcc.govt.nz

Management Committee

National Chairperson, Treasurer, Conference Liaison:
Mark Apeldoorn mark.apeldoorn@tdg.co.nz

Vice Chairperson, Membership Coordinator, Submissions Coordinator:
Dave Wanty David.K.Wanty@nz.mwhglobal.com

Administrator, Website Administrator:
Roger Burra roger.burra@opus.co.nz

Technical sub-groups liaison:
James Park James.Park@opus.co.nz

Awards Coordinator, Roundabout Coordinator
Daniel Newcombe daniel.newcombe@aucklandtransport.govt.nz

Image courtesy Zoran Bakovic