
Report 6
(1215/52/IM)

2006 NZ TRAFFIC INSTITUTE (TRAFINZ) CONFERENCE – REPORT BACK

1. Purpose of Report

To report on the 2006 NZ Traffic Institute (TRAFINZ) Conference, themed 'Sustainability, Our Choice Our Future.'

2. Recommendation

It is recommended that the Committee:

- 1. Receive the information.*

3. Background

The 2006 TRAFINZ conference was held in Queenstown from 6 – 9 August and Wellington from 7 – 10 August, and attended by some 150 delegates. TRAFINZ has a focus on Road Safety, Traffic Management, and Transport Strategies.

The theme of the 2006 conference was 'Sustainability, Our Choice Our Future.' Speakers focussed on sustainability and on transport safety.

There were 5 international keynote speakers:

- Jorg Beckman (Executive Director of the European Transport Safety Council)
- Kate McMahon (recently retired head of UK Department for Transport's Road Safety Strategy Division)
- Ian Johnston (Professor of Psychology, Monash University)
- Superintendent Harry Hayes (Victoria Police)
- Anders Lie (Swedish Road Administration)

There were also a wide range of New Zealand based speakers.

Overall the conference had excellent speakers, a great programme, and clearly from the feedback the delegates both enjoyed it and found it highly motivating and enlightening.

4. Discussion

Speakers were focussed on safety and sustainability. The quality of speakers and the information presented was almost universally very high.

The conference provided for several panel discussions and interactive workshop sessions. It included a workshop to give direct feedback to the Ministry of Transport on the 'See You There – Safe As' consultation process (part of the review of the 2010 Safety Strategy).

A particularly powerful presentation was the play 'It's All About Choice', telling the story of four teenagers killed in 2004 when their car hit a Manukau traffic light at high speed. The play was followed up by an equally powerful and emotional talk by one of the teen's fathers.

Safety - repeated themes were:

- a. Road deaths and injuries are a huge health issue. The cost is considerably greater than the cost of congestion.
- b. We've made good progress on safety but it's slowing and we still lag well behind world leaders.
- c. There was debate about where investment should go. The majority of presenters proposed more money going to safety engineering such as median barriers and urban traffic calming, while a couple (AA and Dr Brash) focussed on expanding roading capacity.
- d. Greater safety doesn't threaten mobility (notably Jorg Beckman and Ian Johnston).
- e. There is strong public support for enforcement (came through several international and NZ speakers presentations).
- f. Speed reduction/appropriate speeds for the environment are key (e.g. Rob Pope, Ian Johnston, Darren Goulding). Speed zoning was mentioned frequently (e.g. Harry Duynhoven).
- g. The need for a Vision and for organisational and political champions was frequently covered by speakers and in workshop sessions.
- h. The need for data and research to drive policy.
- i. A wide range of suggestions were made for enhancing safety including increasing driving age/tougher testing, investment in engineering such as median and edge barriers and urban traffic calming, better vehicle standards, employer responsibility.
- j. There were lessons for WCC particularly from the European experience of urban traffic safety engineering.
- k. Safety and sustainability must work together not in competition.

Sustainability –Repeated themes were:

- l. Again there was debate over where investment goes. Dr Brash and the AA proposed more roading capacity, and reforming the RMA. Tim Brown (Infratil), David George (On Track) and the International keynotes said that would be money badly spent.
- m. Public transport providers are committed to enhancing services. Tim Brown noted the financial challenges presented by trolley buses in Wellington.

- n. MOT/LTNZ view of sustainability seems to be very much about supporting the economy while encouraging mode shift, land use (paying true costs) that reduces transport costs, peak spreading, safety culture, reduced emissions etc.
- o. There was a divergence of views on replacement energy options. Liz Yeaman (EECA) saw considerable potential at least at the margins for biofuels. Susan Krumdiek in a very interesting presentation argued that none of the possibilities are likely to 'save us' and urban form is critical in ensuring that large numbers of people do not become isolated by high transport costs.
- p. Susan Krumdiek's presentation on urban form was particularly challenging and I would recommend that our officers talk to her/University of Canterbury about applying their model in a Wellington context.

On the basis of the presentations and discussions, my overall impression is that the general direction Wellington City has been taking for many years is sound with respect to safety initiatives, support for public transport and active modes, and a generally compact urban form. The initiatives underway or contemplated in transport and urban form seem to build on those strengths.

In a New Zealand context there seem to remain challenges in safety around leadership, and willingness to adopt best practice approaches in any area other than enforcement. The current review of the 2010 Strategy may address this.

There also seems to be some misalignment between strategic thinking and investment allocation.

5. Conference Report

I attach in Appendix One a summary of the points made by each speaker. Further information on most of the speaker's presentations can be found on www.trafinz.org.nz/conferences.

6. Conclusion

This report provides feedback on attendance at the 2006 New Zealand Traffic Conference.

Appendix One

Sunday Opening of Conference

TRAFINZ President Andy Foster noted that despite progress the national cost of road trauma still considerably exceeds congestion. He suggested that proposed investment focus is probably somewhat misdirected. Also noted growing understanding of the twin challenges of expensive energy and climate change.

Clive Geddes – Mayor of Queenstown Lakes – talked of the challenge of protecting the landscape ‘which is our sole asset’ in face of predicted doubling of local population in next 20 years, and of accommodating current 1.5 million visitors on a population of just 35,000 (current). Makes ‘no apology’ for ‘the toughest District Plan in NZ’ and for saying no to consents where the wrong things are in the wrong place.’ There was applause for his statement that “The Plan is the Plan is the Plan.’

Annette King – Minister of Police and Transport – ‘Can have a safe transport system that isn’t sustainable, but can’t have a sustainable transport system without it being safe.’

Noted the road toll can change quickly – this weekend saw a horrific 10 deaths. Said progress has been made, which she attributed mostly to increasing effectiveness of Police. She rejected recent ‘mindless debate around traffic tickets.’

Still worried about youth road toll. As a parent nothing is more distressing than the death of children/young people.

Noted we are driving slower, therefore safer, and more sustainably. 102 kph down to 97 kph – open road speed average. Noted 110 kph takes 13% more fuel than 100 kph.

Noted issue of drunk pedestrians – especially young men – being killed walking home. Toll up from 16 to 24 in YTD. Need to educate, and also ensure good PT and good urban planning. Labour investing \$360m pa into PT compared with \$40m in 1990s National Governments.

Noted emerging motorcycle issue with fuel costs and ‘born again’ 50 year olds. 150 motorcycle deaths in 1990 down to 30s now. However motorcycle registrations have gone up 5 fold recently.

Monday

Jorg Beckmann

Jorg discussed the various structures in Europe and the role of the ETSC. It is an NGO, bringing together c200 experts from across Europe, publishing policy papers etc. undertaking programmes often partnering industry. easing number of programmes. 2007 budget of 1 million Euros. 6 active working parties of experts – e.g. looking at motorcycle safety, injuries etc. Developing partnership with industries.

Currently 41,000 road deaths a year in Europe. EU 15 on track for 50% reduction in fatalities by 2010, EU 25 is improving but new countries need to do a lot better.

Death rates per million population – Sweden/Netherlands/UK at about 50, NZ about 100, a bit worse than Italy and France but better than the new EU Eastern nations.

ETSC initiatives include aiming to harmonise things like Blood Alcohol limits, urban speed limits, review of enforcement including cross border. Vulnerable road user safety, NCAP ratings, new vehicle technology, reviewing infrastructure – safety audits.

Jorg said safety does not threaten 'auto mobility' - in fact strengthens the car's role.

He encouraged safety and sustainability campaigners to work together rather than seeing themselves in competition, and failing to transfer knowledge. Noted that the SUV is changing this – Greenpeace is reporting for the first time a safety issue – deaths from SUVs. Jorg wants road safety and environmental community to work together. Resolve the mismatch.

Effective enforcement is the most effective mechanism for bringing down the road toll. 14,000 lives, 680,000 injuries, could be saved if best practise enforcement adopted throughout Europe. France dropped road deaths by 21% from 2002 to 2003 just by following President Chirac's edict to enforce properly.

76% of European drivers are in favour or strongly in favour of stronger enforcement.

Discussed speed control technology, both cameras and in car, and GPS based maps.

ETSC produces comparative performance tables of countries, car manufacturers, etc. developed a Road Safety Performance Index (PIN). Noted the key is political will. This is missing in many countries. Need to convince politicians that safety is a way to boost political careers. Not everyone has a Jacques Chirac.

His advice for New Zealand –

An NGO needed to highlight successes and failures. 10 deaths over the weekend. Noted there was no comment by any organisation to further road safety.

A Vision – 'reflexive mobility', 'Vision Zero'

Integrate sustainability and safety

A priority managing speed and promoting ISA

Bringing down the average age in the road safety community.

www.etsc.be.

Tim Brown – Director of Infratil/Stagecoach – P.T. and Sustainability.

Essentially Tim was promoting buses – however some very interesting data. Nov 2005 acquisition of Stagecoach for \$252 million. 8% pre tax return. Aim to double the business from 1023 buses and 9 ferries through further investment. Infratil expected higher energy prices and Government policy making PT increasingly attractive. 8% growth in PT use in Wellington driven by petrol prices. Didn't expect the speed of petrol price rise but did expect it would happen.

Noted the 10x rule: PT uses 10 times less energy/emissions and is 10 times safer than private transport. Buses much cheaper than road or rail.

Wellington 2001 – 16 million people – to 2006 - 20 million in 2006 number of rides. Wellingtonians 100 bus rides a year, compared with 40 in Auckland – direct impact on congestion. But could do more. In the last year, Wellington road usage up 1.5 % but congestion up 15%. PT use up 3.1%. Auckland static in last 5 years bus/ferry use.

GWRC - \$43m - \$92 per capita in running PT (rail and bus), committed to \$1000 per capita rail upgrade. TGM \$2500 per capita.

Discussed trolleys vs diesels. Fuel – Govt sets the standard. New low sulphur diesel cost 8 cents per litre more. Euro 4 bus produces only 2%-18% of various particles of non Euro registered buses (i.e. most of NZ buses) Euro 3 to Euro 4 costs \$18,000 more per bus engine. Gas buses available, again economically challenging. Electricity drives about 1/3rd of bus trips in Wellington. Noted there remains a funding gap for trolleys.

Noted a major qualitative improvement in buses required to get more people using them. Electorate wants a lot more roads at present. Infratil thinks that is a mistake.

David George – OnTrack – The Challenge of revitalising Rail

Said rail is on renewal internationally. Ontrack is an unashamed advocate for the revitalisation of NZ's rail system. Rail is inherently sustainable, and very safe.

Network is underutilised at a time when we are seeking to tarmac New Zealand. Staff 780, 900 freight trains a week, 3400 passenger trains. 4000 km of track. 150 tunnels, 1787 bridges, 12000 culverts. Manage 18,000 hectares of land.

Biggest challenge is financing rail. NZ has a challenging topography and underinvestment history. Have spent most of the \$200 million Govt commitment, and Toll's \$100m. Continuing negotiation re access charges.

Noted Tranzrail's lack of investment – a lesson for Asset Management Plans. Should have put in 45kms of new sleepers p.a. and were putting in 10. Even selling new sleepers to garden centres to pay the wages. Bridge collapses ! Tranzrail were slowing down the railways by reducing speeds as a consequence.

Environmental benefits of rail. Road transport uses 92% of fuel but carries only 60% of freight. Rising fuel costs help rail. Expect this to continue. 4x as fuel efficient as large trucks. Freight volumes predicted to double in 20 years. Road congestion slowing the passage of freight.

Benefits for emissions – noted unheard of temperatures in Europe this year. Auckland 4% increase in PT would cut congestion \$200m costs pa, save 52m litres of fuel, 7% road fatalities cut, cut roading costs by \$3.8 billion. Also about 10 times more efficient in land space per person travelling than motorways. Need to protect the future. 11 year old daughter tells him 'your generation is making life very difficult for ours'.

Safety – rail easily the safest. Two areas of concern are level crossings, and suicides. Working hard with Toll and TLA's to reduce level crossing toll. Want Councils to recognise Ontrack's role as a key provider. Need co-operation on adjacent land use and appropriate zoning.

Jacqui Dean – MP for Central Otago - standing in for Don Brash – having driven from Oamaru through the snow. Was Deputy Mayor of Waitaki District.

Argued for balance between economy and outstanding environment
Main recommendations were the need for more roading capacity to reduce emissions, enhance economic performance and improve safety. Asserted that roading projects have good BCs. Repeat the call to reform RMA to speed development up. Dismissed Peak Oil.

John Allard – Ministry of Transport – General Manager Strategic Directions

Discussed sustainability in context of NZTS.

Published the Transport Sector Strategic Directions Document in December – sitting directly below the 5 NZTS objectives.

Looking 40 years ahead. Strategic Transport Futures project – looking at peak oil and global warming so we take account of the uncertainties going forward.

- i. Developing research and information programme.
- ii. Supporting Economic development
- iii. Looking at land use – are developments fully internalising their costs ?
- iv. Working on TDM, and supporting more PT and cycling and walking.
- v. Development of a safety culture by users and designers – value of life being reviewed.
- vi. Environmental sustainability – looking at energy, emissions, effect on stormwater, minimising impacts on biodiversity,

Sustainability is a long term process. We are leading in some areas, but a long way to go. Sustainable transport will give a long term benefit to the economy and will not cost more. All the costs are born somewhere already – better if people understand

Panel Session – post lunch – International Speakers panel

Q & A

How much can you reduce the road toll?

Jorg argued there is no limit to reducing the road toll.

Kate and Ian argued to raise driving age, and ensure new drivers are better prepared. Jorg noted the need for decent PT if you are going to raise the driving age.

Anders argued for a Vision Zero approach and the need for leadership at central and local government level.

Anders said they report every crash so SRA staff have crashes in their face, not buried in the newspapers. Cultural impact on SRA so they take personal responsibility.

Harry said Victoria has real time direct entry data re crashes from mobile data terminals. This changes responsiveness to crashes. Kate said with 43 police forces in UK they only get decent numbers at the end of the year.

How do we generate Political courage and leadership ?

Ian J – Advocated a NGO, a body with a mission to get debate going and put pressure on politicians. Very disappointed by Brash speech – said you won't get anywhere defining balance in political terms – needs to be non aligned, public intellectual.

Kate – totally agrees – Discussed PACTs which is the precursor to the ETSC – PACTS talk directly to parliamentarians. Political leadership is essential. Don't wait for the public to demand it. Barbara Castle wanted to get tough on drink driving – was hated for a while, but people eventually came round to it. Speed cameras have got a lot of flack from the popular press. A really good report showing benefits helped them stand firm. The countries with targets, strategies and political leadership are the ones that are doing well.

Jorg advocated research as a way to help support leadership. New performance index will be a key means of getting people and politicians onside.

Anders said the general public is much more supportive than people might think.

Question about induced demand from building new roads.

Jorg – 'yeh that presentation (to laughter) – a simple minded way backwards.' Private sector involvement is fine provided there is a level playing field with true costs. An ongoing fierce debate in Europe.

Kate – we've at last realised that building new roads generates more traffic. Putting bypasses in to take traffic out for safety reasons, often need to reduce capacity inside the town or city to compensate –example of London.

London – traffic levels down, motorcycles, cycles, walking all up, safety results excellent. More pleasant place. Major impact. Politicians are now talking about road pricing nationally, recognising roads are close to capacity.

Policing priorities – crime vs traffic

Ian thinks we've got it right in NZ. Kate says that it is hard work to get UK Police to focus on traffic policing, and that breaking traffic law is 'real crime.' Level of drink driving enforcement has plummeted. Anders says in Sweden the SRA has a very good relationship with Police. SRA tells Police how many lives they have saved.

Harry – Victoria has developed an excellent data base, covers all offences – traffic and general.

Question about the most important things that can be done to make sure that the increase in cycling and walking doesn't lead to increase in casualties.
Ian advocated separating the modes.

Kate advocated reducing speeds in residential areas – 20 mph zones working well. UK target to double cycling.

Mike Noon – Sustainability – the AA Perspective

Argued for increased investment in roading, especially motorways – safer, faster, more energy efficient. Says we've had decades of failure in infrastructure investment. Sees the RMA as an impediment. NZ planning cycle of 10 years is too short when best practice is about 25-35 years.

Sees PT as limited only to major cities and carries only 12% mode share.

Argues for personal mobility. Noted that all new cars will be low emission by 2014.

AA philosophy – safer drivers in safer cars on safer roads.
He believes we can become more fuel efficient and safer drivers.

Mark Kunath – QLDC – The challenges we face

Discussed Queenstown's planning and transport issues. Noted QLDC is the leader in freshwater tourism. It's waters are of national importance. Their Transport/Parking Strategy – 'Future Link 2005 Strategy' - adopted a level of service D (exceeded to E in peak) where F is congestion a la Auckland peaks, and A is best possible. A is unaffordable and unsustainable. Initiatives on Frankton Road include HOV lane, looking at parking charges and tolling options. Traffic calming CBD. Working with Transit on a bypass from the South around the airport/mixed use Remarkables Park. Don't want development beyond the Shotover River.

Elizabeth Yeaman – EECA – 'Biofuels – A Seamless Transition to Renewable Transport Fuels'

Biofuels – argued for a seamless transition to renewable fuels.

42% of all energy in NZ is transport (fossil fuels), almost half of that is private cars.

Why biofuels ? Climate change and renewables. In most other countries the driver is support for agriculture – subsidies!

Two main biofuels – bioethanol made from any sugar – originally sugar cane, corn but now also wood, straw, paper etc – Brazil is the world leader by far in this.

Other alternative is biodiesel made from things like vegetable oils – many European countries have blended biodiesels.

Says we have significant biodiesel and bioethanol potential in NZ. Progress won't happen without Government encouragement/legislation. Suggesting target obligation on companies by 2008 0.2% to 1%, 2012 1-4% of fuel.

Bringing in mixed fuels/flex fuel vehicles is the way to have a seamless transition. Flex fuel vehicles – can take petrol and ethanol. No additional cost to ordinary cars. 5 million in US now, 75% of new cars in Brazil within 3 years. Says will be a marketing advantage as fossil fuel costs rise.

Anna Percy – Sustainable Transport Manager – ARTA

Travelwise programme - 5 projects – very early days. Currently 125,000 people involved to some degree. Involves walking school buses, travel plan schools, business travel planning, transport modelling etc.

- i. Grassroots – 5-7 year olds want to walk, cycle, scooter, car is only 4th choice. Parents make the choice because they think it's safe. By 8-10 children and parents have changed places! Sustainability means being safe for 5 year olds to walk to school.
- ii. Travel planning is a bigger initiative – involve all the children identifying their problems. Try to involve as many parents as possible. Urban design, severance is key.
- iii. Transport modelling – indicates savings in congestion, emissions and injuries compared to roading investment.
- iv. Launch into Big Business – working with businesses in developing travel plans. Early days but Waitakere City has been the best to date.

Making sustainable modes safer is the way of the future.

Wayne Donnelly – CEO – LTNZ - Sustainable and Safe – a new paradigm

Discussed LTNZ role. On vehicle standards noted that even the much maligned Holden Barina exceeds the standards – which says a lot about the standards. Need to make sustainable and safe understandable to staff and to various publics.

Objectives

Energy efficient, non polluting, safe, compatible with liveable cities etc, reliable, secure, affordable, able to meet needs long term and able to be provided long

term. Noted all objectives are 'wired to each other' – lots of synergies between safe and sustainable.

Trends that will indicate sustainability:

- i. Freight industry where productivity is improving and higher % carried by rail / sea.
- ii. Commercial operators adopting practices that are safer and produce less emissions
- iii. Land use and development patterns reduce need to travel & make active modes safer and more popular
- iv. Reduced expenditure by businesses and households on land transport.
- v. Traffic flows are more reliable – use the network we have better
- vi. Less vehicle use in congested times
- vii. Reduce fatal and serious accidents
- viii. More use of PT and shared transport.
- ix. More services for the transport disadvantaged.

Discussed our ability to meet needs long term.

Ageing population is catching up with us. USA is now seeing the first people who have been totally dependent on the car for mobility now losing their licenses. That leads to real social problems. Fuel prices are also really biting now.

Likely to have more light mobility scooters – a real infrastructure and licensing issue. Haven't started thinking about that. Does everyone go on the same network?

More motorcycles being registered. What will that do to our accident record?

Global Trade flows – We have 13 ports. There's a challenge with larger ships being built and expectation they will visit fewer ports. How are we set up to accommodate this in our urban form and land/rail transport links?

Workshop Session

Much of the discussion focussed on the need for an entity / people to champion road safety. Should be data led, working with partners, and able to support or criticise the Government as appropriate (i.e. non partisan).

Tuesday

Kate McMahon

Discussed the UK approach to road safety. UK has a vision. Not Vision Zero. Lots of targets, strongly data led. UK is pretty well on track

2010 Target (compared with 1994-8 average base)	Target	2005 result
Killed and Serious Injury	40% reduction by 2010	33% reduction to date
KSI (children)	50% reduction	49% reduction to date
Minor Injury	10% reduction	22% reduction to date (may be a reporting

		issue)
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Major reductions in pedestrian and cyclist fatalities – mostly urban traffic safety improvements. Problem with resurgent popularity of motorcycling.

2005 vs baseline 1994/8	Deaths	Serious
Pedestrians	-33%	-39%
Cyclists	-20%	-38%
Car	-5%	-40%
Motorcycles	+22%	-1%
All	-11%	-34%

UK Strategy covers 10 key areas

- i. Children and novice drivers – child pedestrian training, more road safety education, improve school travel (safer routes) inc 20 mph zones, child road safety audits
- ii. Driver training – voluntary logbook for learners, hazard perception test, improving instructor standards. Every Local Authority must have a child safety programme.
- iii. Alcohol, drugs and fatigue – Bill will bring in roadside testing. Research on drugs, New powers to drug test, lots of advertising re fatigue. (thinks 20% of motorway crashes are fatigue) Blood Alcohol level is 80 but breaches carry heavy 12 month disqualification penalty.
- iv. Infrastructure – increased roading investment in remedial measures, local road safety schemes absolutely vital, Traffic Control officers (civilians) introduced by highways agency, Euro Road Assessment programme.
- v. Safety Camera programme, (funded out of fine income, all fine income went back to safety cameras. From April 2007 fine income will go into safety partnerships – she thinks will be more publicly acceptable), Speed limit setting programme, Urban 20mph zones very successful and widespread. Next challenge is rural roads.
- vi. Motorcyclists – very high risk. Motorcycle strategy, advisory group for motorcycling, improve rider training and testing
- vii. Pedestrians and cyclists – strategy is to increase walking and cycling. Home zones, promoting cycle helmet wearing (no compulsion), cycle training especially on road.

Kate discussed the 3 E's – the UK approach to education was particularly interesting.

Education – UK appears to have an impressive range of education programmes:

- i. **Preschool** – focus on parental information, traffic clubs (adopted from Europe - a series of booklets sent to parents – drawing attention to risks, also includes games and puzzles etc delivered via the network of health visitors. It's helped a lot e.g. with young children darting out from between parked cars), Child restraints – very high levels of compliance – info on best ones and how to fit them. "Think !" publicity campaign. One Step Ahead campaign.
- ii. **Primary School** – crossing road, hedgehogs adverts/games etc, cycling proficiency, lesson plans/activity books for teachers (not part of the national curriculum but integrated into maths, science etc)
- iii. **Secondary School** – says they probably need to do more here.
- iv. **Driving Tests** – allow mopeds at 16, cars and motorcycles at 17. Then get provisional license just by applying. Can then only drive if accompanied by somebody over 21 who has been licensed for at least two years. Tough testing regime encourages better training. 98% of learners take professional lessons, averaging 45 hours tuition. Poorer drivers tend to have more lessons! Theory Test and Computer Based Hazard Perception Test taken simultaneously. 70-80% pass rate. Looking to make it harder. When those two tests are passed, you can book the Practical test – approx 6 week wait. 35 minute driving and manoeuvring test – only 46% pass rate. When pass you have a license without restriction. Testing is done by Civil Servants. Still have a youth driver problem. Need to do more pre driver education at school.
- v. **Experienced Drivers** – remedial courses, (avoiding demerits) Driver has to pay for them. Working closely with employers on workplace safety including trip to and from work. Saves insurance costs for business.
- vi. **Brand "Think"** (road safety) – now one of the best recognised brands in the UK.

Successes

- i. Higher profile for road safety
- ii. Culture change on drink-driving and seat belt wearing
- iii. Engineering in urban areas
- iv. Great results on child safety
- v. Improved driver testing regime
- vi. Sound research / data based policy

Continuing problems

- i. Antisocial behaviour
- ii. Deaths of car occupants have plateaued
- iii. Motorcycling resurgence is a safety risk
- iv. Resurgence in drink-driving especially of young men (high risk youth drivers)
- v. Resistance to safety cameras – think getting over this one

- vi. Decline in visible police enforcement. Police backed off, leading to increasing levels of alcohol offending. Politicians wanted 'real crime targeted.'
- vii. Complacency – more focus on rare rail accidents when roads kill 9 per day.

Kate proposed a new systems approach – 5 star cars, 5 star roads, 5 star drivers, 5 star speed limits.

WHO report 2004 says 1.2 million people die on roads each year – 90% in developing countries (very poor cars and very poor roads) – expect that to rise 60% by 2020. Advocated a systems approach based on human vulnerability. Report says crashes are predictable and preventable.

UK - Robertson Report – called for much more money to go into road safety. Suggested 10% of roading infrastructure budgets.

Kate argued for an integrated approach involving traffic management, infrastructure (so not just for capacity), land use, health, education, vehicle manufacturers. Noted that Health could eliminate waiting lists if they got the road toll down.

Kate finished by discussing urban safety projects: Demonstration projects – Gloucester – Stg 5 million. By 2002 crashes down 38%. Managed by a steering group in the community – some tension – eg speed humps, but very successful.

Mixed priority routes – eg urban arterials – 5 schemes implemented. 5 under construction. Will lead to guidelines of do's and don'ts from DfT to Local Govt. Birmingham inner city project – Stg 6 million over 6 years from DfT. Big research component included.

Says pushing from the top by a person or organisation is 'absolutely vital.' UK has done well in urban areas with widespread traffic calming and 20 mph speed areas, and excellent motorway system. Problem still with rural roads, winding and hard to make safe. Looking at doing a rural demonstration project, just as Gloucester was an urban demonstration project. Confirmed success of Hull's work.

Superintendent Harry Hayes – Victoria Police

Covered a brief history of Victoria's enforcement initiatives. Death toll of 1061 in 1970 down to 348 in 2005. Even at current levels the cost of road crashes is estimated at over \$4 billion exclusive of loss of enjoyment of life costs to the injured/families. Continuing enforcement efforts and taking partnerships up a notch.

Victoria's Road Safety Strategy 'Arrive Alive' expires next year – working on replacement.

Enforcement - Roadside alcohol tests. Added drug testing from Dec 2004. 38,000 drug tests found 500 drug affected drivers.

Speed cameras – campaign has reduced number non compliant (over 10kph over limit) from 2.5% in 2000 to 1 % approx. Still haven't won the hearts and minds of the public.

Boy racer legislation allows vehicle confiscation for 48 hours (1st offence), 3 months, then permanent confiscation. Can also confiscate for excessive speed. Over 50% seized for excessive speed.

Nationally predicted gains from road safety measures

- Safer roads - 47.5%
- New technology to reduce human error - 5%
- Improved road user behaviour – 22.5%
- Improved vehicle occupant protection - 23.5%

“Wipe off 5” campaign. Advertising shows people the consequences of behaviour

One of big problems in Victoria is the rural road toll which won't move.

Harry showed a super graph of drivers' crash record post licensing. Shows drop by approx 66% in first 3 years.

He extolled wire median barriers as “the greatest thing that's ever been made”

Rob Pope - Deputy Commissioner (Operations) NZ Police

Rob said TRAFINZ conference is rightly acknowledged as one of the key traffic events of the year.

Road Policing represents about 25% of Police budget.

On traffic 'quotas' – he said Police aim is to save lives and we don't shrink from that commitment. Police do profile risk areas and deploy resources accordingly. Warnings have little impact so we do need to issue tickets. Drivers must have opportunity to explain at the roadside but the threshold for the explanation is pretty high.

Need to check individual officer performance too. However there is not a targeted output per officer. Revenue is not an issue in setting police priorities.

Road policing has significant benefits for other crime detection. 'All criminals are drivers'. Criminals are more likely to offend against driving rules, and are often picked up. Example Oklahoma bomber, Timothy McVeagh caught for speeding and not having a license. There is a compelling rationale for joining up traffic and general policing. Rob's personally solved two homicides through vehicle evidence.

What does sustainability mean for the Police ?

Maintaining policing pressure on the driving public.

Strong public involvement in road safety noted in NZ.

3Es have pulled down the road toll by 500 per annum.

A success is the change in attitude to drink driving – now socially unacceptable.

Welfare on the roads is a primary fear of our community.
Public support enforcement – survey showed 38 % want even more enforcement, 48% want to maintain enforcement levels.

Rob discussed future options

Speed – he'd like a more mature public debate around speed.

Thinks 'See You There – Safe As' will provide a platform for public input.

He would like to look at Demerit Points for camera infringements. Personally he'd be happy to go for demerits instead of fines. The 'anywhere – anytime' approach has worked. Currently tickets are 75,000 down this year – speeds have reduced. Winter mean open road speeds down from 103 in 2000 – to 97.1kph. last year. Urban speeds down 7.1%.

Red light cameras suggested including demerit points. Technological opportunities – trialling automatic number plate recognition. Intersections are an increasing challenge.

Blood Alcohol limits – he suggests we should go for a lower limit.

Darrin Goulding – ACC - General Manager Injury Prevention

Discussed speed

2005 – speed caused 33% of fatal crashes, 16% of injuries, and cost ACC \$41 million.

Motor vehicle claims can run for 40 – 50 years. Some of these claims cost \$2.5 million (lowest) up to \$30 million. These costs aren't stable either – they are growing at a rate faster than inflation. Health expenditure grows 4-5% faster than CPI.

ACC costs \$200 per car per annum and 5 cents a litre.

Many people think they can deny the physics – but you miss cues, more likely to miss corners, stopping distance increases, less time to react to the changes which happen all the time, higher likelihood and severity of crashes.

Many people think they can speed safely – but the number has dropped from about 25% to 16% - mostly young males. All 3 Es are important.

Discussed \$400,000 – “Drive to the conditions campaign” – which says the posted speed limits aren't always safe. e.g. Crown Range as 100kph.

Speed zoning – many NZ roads not built for the speed they are zoned for – need realistic speed limits. Driving in Norway. They have better roads with 80kph limits – felt a lot better to drive on. This is also true of urban areas. Praised WCC's Lambton/Willis 30kph zoning. Speed zoning run by LTNZ trial only taken up by 6 councils to date.

Anders Lie – Swedish Road Administration - Vagverket

A Swedish perspective – Vision Zero

Road Safety is a major international health issue. The West has a responsibility to help the rest of the world.

Vision Zero advocates that it is the right of the citizen to be able to survive on the road transport system. It advocates a systems approach rather than 'blame the driver' approach. It requires leadership. Anders said that we all have our own Vision Zero every day. (ie we expect to survive it) NZ for the sake of mobility we accept that some people will die on the roads. Sweden does it the other way around – aims for zero and then asks what level of mobility is achievable.

440 people died on Sweden's roads in 2005 (population 9 million). Was 1300 in 1967 when started thinking road safety and 900 in 1988.

Oct 9 1997 adoption by Parliament of Road Traffic Safety Bill founded on Vision Zero. Long term goal that no one is killed or seriously injured. Approach to learn from each and every crash.

Vision Zero has 5 dimensions

- i. Vision for many stakeholders – a powerful tool to focus people
- ii. Ethical platform – human life is paramount and not tradable against mobility.
- iii. Shared responsibility – not just blaming the driver. Road users are required to obey the rules. However system owners must ensure safety even if the drivers fail to comply. Even if the drivers are responsible for 100% of crashes we shouldn't be trapped into thinking we can rely on fixing the drivers.
- iv. Safety philosophy - People will make mistakes. Blaming the driver is a catastrophe for prevention. The stories that cross Anders' desk are of 'people like us'. There are employer responsibilities. Human has certain biomechanical tolerance. Focus is on injury prevention rather than crash prevention – e.g. median barriers will see more crashes but they won't hurt people. Graph - 30kph pedestrian – 10 % die, 50 kph 80% die. Human brain doesn't understand the risk – so design safely.
- v. Driving force for change – Swedish population is demanding more and more interventions. The system designers will have to co-operate. The system designers are working really well together – when they meet everyone is asked to come up with what they are going to do. E.g. Swedish taxi companies management have agreed to be the best road users – want intelligent speed adaptation, alcolocks, retrofitting seat belt reminders for drivers.

Road Engineering

- Intersections – traffic lights reduce crashes, roundabouts reduce injuries.
- 2+1 rural highways – mass use of wire rope median barriers. Quick, cheap, effective – up to 25% of fatalities were head on collisions on state roads. Virtually eliminated these crashes. If building a new road median barriers would be 1% of cost of the new road. Retrofitting is a bit more expensive. Much better investment than motorways which have been put in where we don't need them. We have built a Mercedes for one person, instead of a Fiat for hundreds.

Side barriers on roads where roadside risk.

Speed limits must be appropriate to the roads.
Urban areas very common 30 kph use.

Vehicle Engineering

- A lot of effort into Euro NCAP.
- A lot of effort into intelligent safety belt reminders. 92% seat belt use for drivers tested at road side, but only 50% of those who have died had seat belts on. Seat belt reminders changed use level from 86% to over 99%.
- Company/employer responsibility – local authorities are putting demands in contracts that transport must be safely delivered – e.g. have alcolocks, driver been through traffic safety course. Rental cars – Hertz marketing that they have SRA as a client and how demanding SRA is on safety etc.
- Excellent alliance with Occupational Safety and Health.

Vehicle Engineering.

- It is the component that changes the most – roads and people last 80-100 years, cars only 10-15. Car industry never blames the customer 'we try to make you as safe as possible because we know you will crash it.'
- Speed limit systems for modern cars – 30kph where vulnerable users present, 50kph side impact, 70kph head on impact – above 70kph should have median barriers.
- 1980-84 car ten times risk than modern cars. (Folksam research) Getting all cars up to best practice would cut the road toll by about 50%. New car technologies are contributing even more than roading investment.

Whole range of vehicle improvements – Passive Safety:

- Whiplash – former PM heading an anti whip lash committee – Swedish leadership
- Impact improvements
- Pedestrian impact safety
- Child safety – rearward facing is a 90% risk reduction, compared with 50% if forward facing. Done in Sweden since 1964. Child 'experts' saying children don't want to be rearward facing.
- Car manufacturers (except BMW) happy to have airbag front passenger able to be turned off to allow children to be in the front seat.
- A lot of work required on trucks (add ½ metre of deformation to protect cars). Manufacturers are asking for better legislation.
- Also need to work on different vehicle sizes.

Active Safety improvements

- ESC (Electronic Stability Control) system – individual braking of wheels helps the driver. All crashes drop 17% and 22% of severe and fatals were avoidable. Almost 50% reduction in snow and wet. July 2003 15% new cars in Sweden had ESC, now 89% just through marketing.
- Helping driver – Seat belt reminders, intelligent speed adaptation, alcolocks (huge movement for alcolocks – because buyer and sellers of vehicles want sober drivers –Police also able to relax on some companies. Companies and drivers love it), Fatigue warnings will be a big thing.

Driving forces – market competition. French have decided to target safety, others have responded. Good consumer information. Really strong use of car fleet buyers, and OSH. Toyota lost SRA contract for 40 SUVs because only 4 star.

Sweden this year 50% of new car sales are 5 star, last year 35% - safety does sell.

www.vv.se; www.euroncap.com; www.folksam.se; www.av.se

Professor Ian Johnston – Monash University

Great safety progress made in all Western countries, but we are flattening out. The things that are needed all are really hard because there is a lot of opposition.

The public policy environment is more complex – a whole range of silo thinking – safety vs. environment vs. mobility vs. economic prosperity etc. These objectives should not be antagonistic to each other. Must get out of the silos.

1960s and 1970s – looked at specific technical challenges – and countermeasures – e.g. seat belt to stop impaling themselves. Then co-ordinated efforts – realise road safety is very complex. Evidence based and then doing it really well. Largely responsible for gains from the last decade. Then move to system-wide thinking – not too many countries are at that level. To get there we need to address the fundamental cultural issues.

Case study around speed management because it is the single most important issue, and it is hugely controversial.

Robust rule of thumb – huge scientific literature, and peer review – says 1% average urban speed reduction gives 2% reduction in injury crashes and 4% in fatalities. Royal Automobile Club of Australia hired a top scientist to try and roll this conclusion. He ended up agreeing with the guts of the relationship.

Prevailing view that faster speed reduces journey time. Ian challenged whether that it is true in the urban environment.

We have a deep seated feeling that fast aggressive travel must get us there faster/we feel superior to the lights, to another driver etc.

What difference does speed make to journey time? There is very little data.

- French Study – heavily congested roads at peak with traffic lights. One group tried to go 50kph, the other not to exceed 30kph. 50 kph group averaged 19kph vs. 30 kph group averaging 16kph.
- Royal Automobile Club of Melbourne study – aggressive group (more acceleration and braking) got 5 minutes quicker than smooth driving group over 60 kms. They used 30% more fuel.
- Melbourne study looking at reduction in speed from 60 to 50 – difference would be 8 to 9 seconds in an urban journey.

Related the story of a courier company giving the drivers a bonus for conserving fuel. It worked and also saved on insurance premiums.

Ian said moderating urban speed saves fuel, is safer, reduces pollution, and doesn't meaningfully increase journey time.

However there is cultural and sectoral opposition. He said we glorify speed, in magazines, movies, motorsport, motoring media – manufacturers think their market is the motoring journalist not the public. Authorities send conflicting messages about tolerance for speed over the posted maximum and sets different penalties for being clocked by a camera and by a policeman. 80% of the travel time savings in BC ratios are on very small time savings. In Sweden on the journey to work they don't value travel time savings below 45 minutes.

The auto industry is totally schizophrenic – keen to make cars safe, but not to reduce acceleration performance and top speed. These are not controlled. Design of speedo going up well over 200, and where is the 100 level? Speedos should be fit for purpose so sensitive enough at lower speeds. Advertising is mostly on power and performance. Take current Ford advert so that the car won't leave the road on corners of a race track – dreadful message. Companies respond to what they think the market wants.

Works Infrastructure – Sean O'Neill

Discussed safety on our roads from a contractors perspective. How to keep staff and public safe. Have run excellent campaigns. There is a real risk especially from speed on the work site. Works end up cleaning up a lot of the mess from road trauma. Talked about the emotion of cleaning up especially when there are children involved.

Q and A - Panel Session

Harry Hayes, Rob Pope, Ian Johnston.

Agreed that all 3 E's are important. Ian said we should opt for at least a 10 year strategy not 5. Short term drives you towards reliance on enforcement.

Q - Should we go for roads like Europe?

A - You can't afford it – think smart – use wire rope barriers. Where can't treat them you should reduce the 100 kph one size fits all speed.

Q - Should we raise the amount that can be spent on minor safety works?

Ian – minor safety works have been hugely successful. Not sure what the \$ should be.

Q – Is road safety political or non partisan?

Harry – disappointing that after a long time of being non partisan, opposition parties have started to politicise road safety, and enforcement.

Q – Could we expand the reduced tolerance following the school trials to 55kph across the board?

Rob – a good indicator for the future.

Rob – young drivers – adamant need to deal with youth, tie up with substance abuse. Next 5 – 8 years will be a youth bulge and consequent challenges.
Harry – NGO – 10 deaths at the weekend – you need to seriously think about this - somebody to be the champion. Take the ASH model and change the word smoking to road safety.

Q – Quality of vehicles

Ian – Australia doesn't have the large volume of used car imports but problem that the market wants cheap cars - 5 star European cars are despecked to meet Korean imports on price.

Q – What sort of investigations do we have of serious and fatals?

Ian – Police look at it from prosecution point of view. Vic Roads has started to look at roading environment. In Sweden the SRA has a really good look at the roading environment/vehicle.

Harry – Police do look in a cursory fashion at the roading environment and make recommendations to the road controlling authority. Noted that the coroner doesn't take kindly to still having problems unaddressed when they look at the case months later (e.g. a tree left uncut, a stop sign broken etc)

Q – Is there a champion in Australia?

Ian – no champion. 8 States make it hard. Victoria is blessed by having leadership from the top in cabinet. Don't need an NGO when Government is committed. Other States are not so fortunate.

Sees definite merit in an ETSC type Australasian modal. We need to get the debate started. A politician started Vision Zero – drafted by SRA. Hasn't had great success yet but it takes time. If it takes an NGO to start the debate 'bring it on'.

The Australasian College of Road Safety could be the body. Needs to be a non aligned body.

Harry Duynhoven – Minister of Transport Safety

Speech discussed the importance of engaging the community in finding solutions if we are going to markedly improve safety. 'See You There – Safe As' consultation.

'See You There – Safe As' – focussed on speed, alcohol and young drivers, but the Minister's speech noted feedback had also highlighted infrastructure, vehicle fleet standards, and fatigue in particular.

Under speed he discussed the idea of speed zoning and setting speeds to the conditions of the road.

Under young drivers, driver training appears a major focus. Seemed reluctant on raising the minimum age, despite noting that 15-19 year old drivers are 7 times more likely to crash per 100,000km than 45-49 year olds. Under alcohol he noted that progress had stalled in recent years.

Peter Kortegast - Nelson City Council – Transport Engineer
Cycling is safe, sustainable and important ingredient in the transport Margarita

Graph showing % who cycle to work according to census. Nationally has declined from 5.8% to 3.1% between 1986 and 2001. Nelson is at 7.6% and looking to grow.

Nelson has run innovative campaigns - the 0800 Crash Line (cyclists complaint line – noted that it got 7 times as many reported crashes as official data!), new cycle paths and sheltered cycle parking.

Stoke Cycleway – annual trip benefits \$1.4m, big community building, cost \$1.2m for 9 kms. 20% premium on property values. Railway reserve. CYPTED – so houses look out over the cycleway. The elderly especially love it. Crosses roads on elevated platforms. Cars have a give way. 60% of Broadgreen students cycle – highest in NZ – 800 pupils. First trial of a ‘cycling train’ (replicates the walking bus approach).

Public satisfaction with Nelson cycleways from 72% in 1998 to 96% in 2005, following \$1.2m investment. Obtained \$750,000 from LTNZ. Got 20km of off-road cycle tracks.

9km railway reserve cycleway completed. Ajax Ave riverside shared track. When get new subdivision Council tells them how to lay out they roads – so they connect with the cycleways.

Health benefits outweigh the risks by 20 to 1.

Flo and Slo – safety characters.

Children in 2005 survey said they’d choose to cycle or scooter to school because it is fun. – even got that response in schools where there was little cycling.

Henriette Rawlings – Dunedin City –Advisor Road Safety

Engaging with young people – 15-24s.

Stacey and Susan – under Young Enterprise Scheme – they developed a road safety product to help with fatigue. “Awakening” won the national awards Best Business Plan. Best oral presentation.

How to alert drivers – steering wheel with heart rate sensor to alert driver with an alarm, powered off cigarette lighter. Wireless transmission.

Worked with Dr Margot Skinner to see whether heart rate is a reliable indicator. Apparently it’s not bad. Supported by DCC to develop a prototype. Support from South Pacific Electronic Design Associates. Est. \$40,000 to get it to final design.

Jo Robertson – Central Otago and QLDC co-ordinator

Jo introduced “*It’s All About Choice*” a very powerful drama telling the true story of 4 teenaged boys who died in a 28 Jan 2004 crash, in Manukau, as a result of excessive speed. The play has toured in Otago/Southland and in Auckland.. Lindsay, the father of Logan, one of the boys killed also spoke which

was exceedingly powerful. A display including the wrecked car was shown outside. Policeman, City Councillor and TRAFINZ Executive member Alf Filipina was one of the first on the scene

Workshop – See You There – Safe As

An opportunity for delegates to provide feedback to Ministry of Transport.

New suggestions included:

- NGO – a champion
- Legislate a vision based on an ethical position
- Basis on human tolerances
- Acknowledge systems responsibility – not just blame the driver
- \$\$ into road safety engineering esp median barriers, edge barriers – demo projects. Set a clear national programme to deliver that programme.
- Speed limits set to the road conditions
- Speed cameras – demerits, more of them, \$\$ into road safety. 10% speed tolerance.
- Driver age and licensing and offender retraining
- Vehicle standards – and more promotion of the better vehicles- also has biosecurity and pollution benefits
- OSH employer responsibility partnerships
- Encourage new vehicle technologies
- Sharing best practice and supporting best practice.
- More investment in PT
- Standards for safe urban design as reference to help TLAs with planning documents
- Demonstration projects in urban and rural areas
- Requirement for systems owners to respond
- Rewards programmes for good drivers
- Support from judiciary and penalty system
- Multi-party support – take (especially enforcement) off the political football
- Support for public transport and for freight movement by rail
- Apply true costs to motoring – could be up or down

www.safeas.govt.nz

Wednesday

Dick Waters – NZ Motor Caravan Assn

NZMCA Founded 1956.

29,000 family group members – up from 6000 in 1998 to 16500 in 2006.

Average growth 14.5 % pa. By 2012 expect 60,000 members.

Talked about their needs, environmental standards, active purchasing of camps under a five year plan. Members get favourable rates. Tui Glen (Henderson), Takapau, New Plymouth, Tauranga, Hanmer, 300 plus park over properties – free of charge Agreements with members. Negotiated arrangements with RSAs etc.

Self containment started in 1973. Minimum requirement of 3 days. Waste disposal sites needed. QLDC doesn't have one. New Hamilton state of the art

one funded by NZMCA (\$12,000 signage), HCC, and Kia. Information package for every member. Clean green is absolutely vital for NZMCA.

Average member spends 70 days per annum in their motor caravan. Motor caravan tourists value of over \$80 million to economy. Private and rentals over 1.7 million motor caravan nights per annum. Value per motor caravan \$72 for rallies. Average spend otherwise is \$47.

**Dr Susan Krumdieck – University of Canterbury – ex Colorado
Emerging trends in technology towards sustainable transport systems**

This was a really interesting presentation suggesting alternative fuel technologies won't save us from the end of cheap energy, and that Urban Form is critical to sustainable society.

Susan lectures in mechanical engineering.
She discussed emerging vehicle technologies. Doesn't see a great future in any of the alternative fuels – biofuels, hydrogen, electric fuel cell

What are the problems?

- i. She showed a Climate Change graph showing max level of 280ppm CO₂ in any of 4 cycles in last 450,000 years. Now we are at 380ppm and rising fast.
- ii. Assumption that we are at peak oil. Therefore the problem is likely growing gap between supply and demand.

Solution?

How do we manage fuel use down?

First response is managing our activities.

One initiative is looking at import standards – “NZ is currently Japan's tip yard for their rubbish cars”.

“Urban form turns out to be critical”.

Applied a software model 'RECATs' to various urban form strategies –

- i. BAU including Greenfield development in new satellite towns like Pegasus Bay and Rolleston – risk 133 (high),
- ii. Concentrated urban form densification mostly in central and inner suburban Christchurch - risk 104 (moderate).
- iii. Village – Intensive mixed use/employment centres with residential in nodes inside Christchurch, plus several new towns with mixed use/employment – ie not dormitories like BAU approach – risk 66 (low),
- iv. Sprawl – spreading residential footprint - risk 213 (highest)

The higher the risk, the higher the dependence on expensive energy, the higher the percentage of trips that people would like to make that they are compelled to forgo by economic necessity. The model predicted likelihood of sprawl induced ghettos.

Conclusion – probably new systems rather than new vehicles will be the answer.

Peter Doupe – Astucia (Aust) Pty Ltd.

Talked about technologies in dynamic lane marking, intelligent systems,

solar powered LEDs in road, which have good safety benefits.

Panel Discussion: Jorg, Kate, Anders

Discussed the process for establishing an NGO, it's value.

Also discussed the value of looking behind comparative indicators. Performance Indicator is helpful in the league table. Comparisons – look beyond the headlines to see what has been done - if took the best of each country would have a superb outcome. E.g. Sweden – people and culture, UK motorways, Netherlands urban areas – varying child safety performance. Discussed the linkages with public health.

Ian Johnston - summary

- i. Safety does not compete with the other legs of the sustainability stool. All must work together, and look for win win wins. Safety doesn't prevent automobility.
- ii. Must create a market for road safety.
- iii. Targets are valuable.
- iv. All about leadership – if you can get the drive then the mechanism will follow.
- v. Many of us are constrained by the institutional arrangements we worked in.
- vi. Criticism of Don Brash's speech – sustainability is clearly not non political. The political leaders aren't leading in the transport sustainability debate.
- vii. NZ making progress – we know where we should go – it's about getting there faster.