

The Journey towards Safer Sustainable Transport

Andy Foster 4 December 2009

The Cost of Road Injury in NZ

Approx 400 deaths per annum
C 14,000 injuries per annum
\$4.5 billion (over \$1000 for every single New Zealander)
2.5% of GDP

 Far exceeds cost of congestion to economy let alone personal cost



NZ National Safety Strategy

 2000 Target to reduce to 300 deaths and 4500 hospitalisations by 2010

 Currently deaths at 397 last 12 months and generally hovering around 400

United Kingdom 2000-2010 Strategy

2000 new strategy and targets for 2010.

- Target 40% reduction in killed or seriously injured compared with 1994-98 average
 - achieved 40% by 2008.
- 50% reduction in children killed or seriously injured – 59% achieved
- 10% reduction in minor casualties per 100 million vehicle kilometres - 36% achieved.

United Kingdom

 The number of people killed in road accidents fell 14 per cent from 2,946 in 2007 to 2,538 in 2008.

 In accidents reported to the police 28,572 people were killed or seriously injured in 2008, 7 per cent fewer than in 2007.

An Ugly Comparison

UK 61.3 million population (2008) – 2,538 road deaths in 2008 = 1 in 24,153 (48.6% of NZ rate)
Sweden 9.3 million (2009) – 397 deaths in 2008 = 1 in 23,425 (50% Of NZ rate)
Was 541 when Vision Zero was adopted in 1996
NZ 4.3 million (2009) – 366 road deaths in 2008 = 1 in 11,749

What are your chances ?

- (397 = 1 in 10,831. 1 in 138 in lifetime of 78 years.
- I in 4 chances of significant injury



2010 – Open Road Speed Management

Up to 19% saving in social costs
Enforcement intensified
Speed camera demerits
Open road speed limit 90kph



Expanded road construction

- Up to 18% saving
- Retrofitting safety features (median barriers etc)
- Vast majority of increased investment spent on capacity



Light vehicle standards

15.5% reduction in social costs

- Improved quality of vehicle fleet.
- Impact standards
- 2007 fleet purchase scheme
- 2007-8 'Right car' scheme



Other Recommendations inc.

• Urban speed management – 5.3%

- Better road construction 5 %
- Reduced BAC 4.5%
- Enforcement restraint wearing 4.2%
- Compulsory breath testing 3.3%
- Raising driving age to 17 2.6%
- Blackspots 2.1%
- Safety Management Systems 2%



What went wrong in New Zealan

Limited political priority – doing all right

- Public resistance speed, traffic calming, enforcement
- Government agencies limited capacity to advocate



Wellington City Transport

- High pedestrian volumes 19% journey to work
- Relatively small but growing cycle numbers various measurements. 2-2.5% journey to work
- Cycle cordon counts up to 400% growth over the decade
- Recreational growth
- High PT use almost 2/3rds of journey to work is by sustainable modes



Urban Form

- Containment since 1994
- Rapidly growing CBD 12,000 people
- Population growth 2001 2006 almost 10% (16,000)
- 2006 deliberate policy of intensification around suburban nodes and key PT routes
 Moving to implementation



Urban Form





Wellington City

- 1980's worst performer of big cities
 Sustained programme of kerb extensions
 - blackspot treatment etc
- Review in 2000/1
- Aim reduce social cost by 1/3rd





Safety assessment 2000/1

- Half crashes occur away from CBD and main arterials.
- Safety performance varies significantly on different arterial routes.
- Wet and night time accidents are higher in many of the residential areas.
- Pedestrian risk in CBD.
- Crashes on arterials and SH1 occur predominately at intersections.



Adopting best practice

 Matching the vehicle speed so that it is appropriate to an area to reduce number of crashes.

 Objective is to get the operating speed to a speed people in that environment can sustain and live if struck by a vehicle



Safer Roads

- 2003 approve programme intended to cover whole city by 2010.
- 15 areas and 5 routes.
- \$20 million
- Mixed engineering, education, enforcement
- Aim 1/3rd reduction in social costs
- Consultative process
- Proactive approach rather than reactive
- Fit into other projects hospital, town centres, urban development projects etc



Safer Roads progress

- Tawa
- Ngaio-Khandallah
- Northland-Wilton-Wadestown
- Thorndon
- Karori
- CBD
- Newtown





Safer Roads

- Engineering speed calming, roundabouts, traffic lights, pedestrian refuges, road markings etc
 Safer routes to schools
- Driver feedback signsSpeed limit changes





Consultation Process

- Meetings ID identify community problems
- Technical analysis
- Feedback possible solutions – meeting(s)
- Formal feedback
- Adopt programme
- Site specific consultation





Speed Limit Changes

- Legislation power to set speed limits fit for the road
- Rural area 50 and
 60 kph
- Lambton- Willis 30kph
- Takapu, Ohiro, Hutt
- Newtown 40 kph
- Future ??





a sensible step. We thank you for always looking for new ways to make our beautiful city an even safer city.	CLEMENGER BBDO
chance of surviving, at 80 km/h this rises to 30 percent, and at 45km/h the chance of survival rises to about 70 percent. Lowering the speed limit is a bold stap;	
officers and parents, we appreciate that the absets where we live will be unpuestionably safer. The facts are a pedestrian struck at 60 km/h has a ten perpert	
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At Clemenger 18000, we've always had an unshakeable faith in Wellington, the a fertuantic city. We're proud to live,	work and bring up our families have. As an Advertising



Speed Limit Changes – Future

 Suburban Centres Tinakori Road Aro Valley Prioritised programme School zones Central City – 30 kph **Golden Mile** Rest of CBD ?

A sign that will make our city safer.



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Challenges



- Karori whole proposal
- Speed humps
- Tawa speed limits
- Budget reduction
- Newtown support
- CBD support







Cycling and Walking Plans

Safer and more convenient Challenge to promote cycling - safely • Cycle network – Great Harbour Way Speed limits on key routes Greater visibility – hire schemes, events, Forum to champion and identify issues Thorndon Quay



Is it working?



Tawa Vs Miramar Social Cost



Newtown

Advised a big reduction in operating speeds

Urban treatment

- What are the best ways to improve road safety by controlling that energy?
- Barriers and roundabouts and design for pedestrians have been the most important. The idea of "shared space" between pedestrians and vehicles has been trialed successfully in Gothenburg and other cities, as long as the environment has been redesigned for slow traffic.

 We have also adapted two-lane roads—real killers—into roads with two lanes in one direction and one lane in the opposite direction, the 2+1 system. But the real trick was a crash barrier between the lanes, which saves approximately 50 to 60 fatalities per year.

European Examples

- Goteborg
- Koln
- Gloucester











































Future issues

- Budget challenges to Safer Roads
- Not taking available Government safety money – FAR change to 75% ?
- CBD speed limits
- Bus lane programme
- Cycle and walking plans



Review with NZTA

 Debate about effectiveness of Safer Roads vs black and grey spot treatment
 Derek Bullen and now Steve Abley review

Safer Roads

 A work in progress in context of Transport and Urban Development Strategies

Biggest Challenge

- Government Transport investment priorities
- Safety
- Sustainable modes
- Local road maintenance