New Zealand Cycling Safety Panel

Draft recommendations to make on-road cycling safer in NZ

Safer Journeys

NZ TRANSPORT AGENCY WAKA KOTAHI

Ministry of Transport TE MANATŪ WAKA

Cycle Safety Panel task

Develop an innovative, comprehensive and practical set of recommendations for how central and local government can ensure that on road cycling is provided for as a safe transport option

Cycle Safety Panel Members

Richard Leggat (Chair) Board Member of Bike NZ and Chair of New Zealand Cycle Trail

Sarah Ulmer 'Ambassador' for the New Zealand Cycle Trail, Olympic Gold medallist

Professor Alistair Woodward Professor of Epidemiology and Biostatistics at the University of Auckland

Marilyn Northcotte Regional Coordinator of Pedal Ready –cycle skills training programme

Dr Glen Koorey Senior Lecturer in Transportation Engineering at the University of Canterbury

Mike Noon General Manager Motoring Affairs, Automobile Association

Dr Hamish Mackie Human factors specialist

Simon Kennett Active Transport and Road Safety Coordinator at Greater Wellington Regional Council

Dr Alexandra Macmillan Senior Lecturer in Environmental Health at the University of Otago's Department of Preventive and Social Medicine

Axel Wilke Traffic engineer and transport planner specialising in sustainable transport

Panel Activity

April 2014 Cycling Safety Summit - Broad exploration of cycling safety issues

May Panel Meeting – Rural specific issues

June Panel Meeting – Urban and School specific issues

July Panel Meeting – Legislative and investment processes

August

Working draft of recommendations

Consultation with Local Government New Zealand and Police

Panel Meeting & Cycling Advocacy Groups – prioritisation of recommendations

September Progress briefing for the Associate Minister and early feedback

25th Draft report is released to the cycling community & key stakeholders

October Cycling Reference Group Summit to discuss the draft report

24th Written submissions close

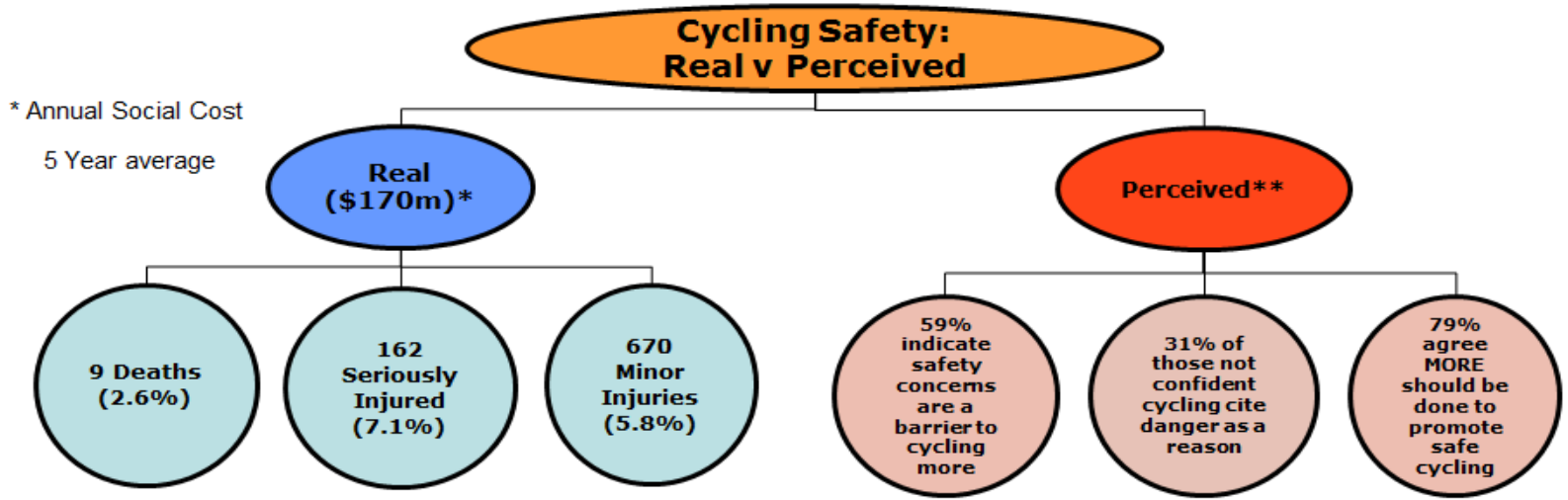
Mid November Final report and recommendations submitted by panel to clients

December Government response

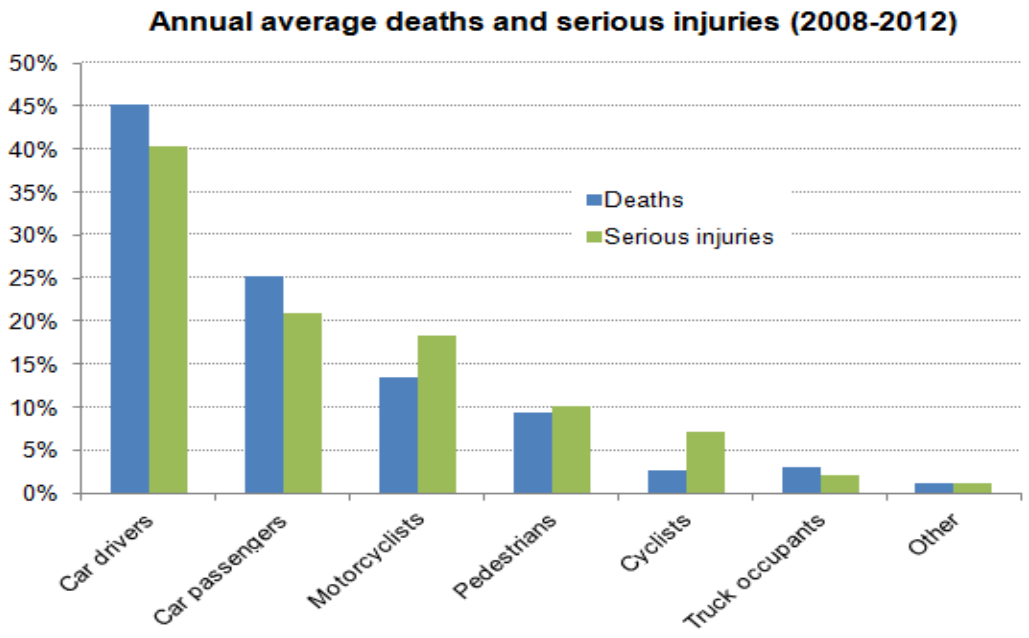
2015 onwards monitoring recommendations in final report?

The Cycle safety problem in NZ today?

- Cycling deaths over the last decade averaging 9-10 annually
- Approximate 3% of fatalities – disproportionate to participation where cycling is 1.6% of total travel time & 1.3% of trip legs



How safe is cycling in comparison to other modes?



- 3% of fatalities and 8% of serious injuries are cyclists
- 14% of fatalities and 18% of serious injuries are motorcyclists
- Car drivers and passengers account for 70% of fatalities and 61% of serious injuries

Social cost
(cycling crashes with motor vehicles)

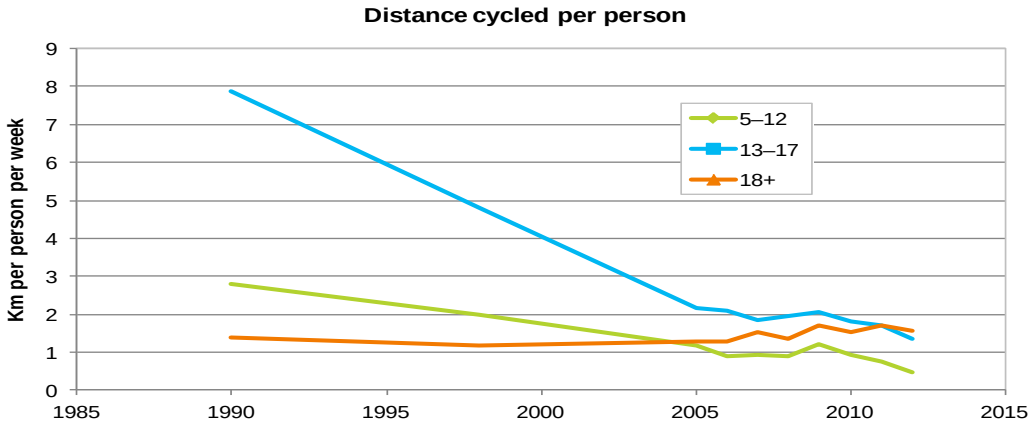
- Include loss of life and life quality, loss of economic output, medical and legal cost
- Average social cost around (2013 dollars):
  - $3.9m per fatality
  - $700,000 per serious injury
  - $50,000 per minor injury

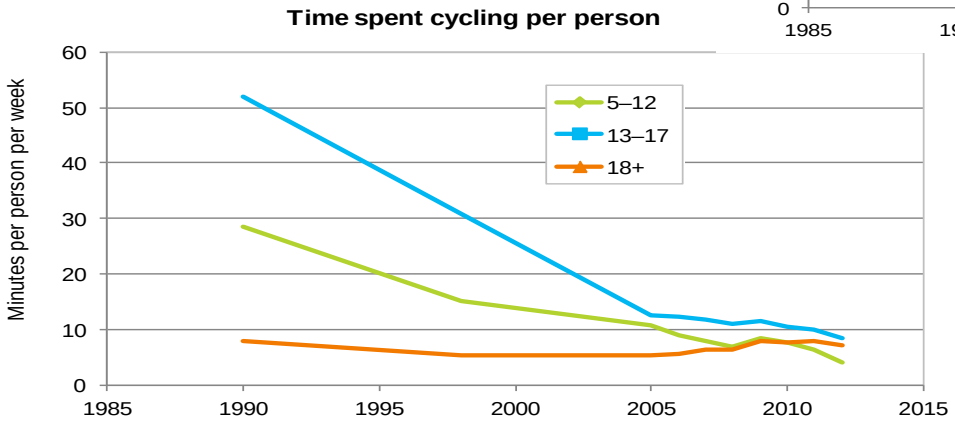
Cost to ACC

- Costs to ACC over 5 years (2008-12):
  more than $162 million
- Number of cyclists hospitalised from non-motor vehicle crashes 2.7 times higher than from collision with motor vehicles
- Cyclists involved in crash with motor vehicle stay on average 1 day longer in hospital

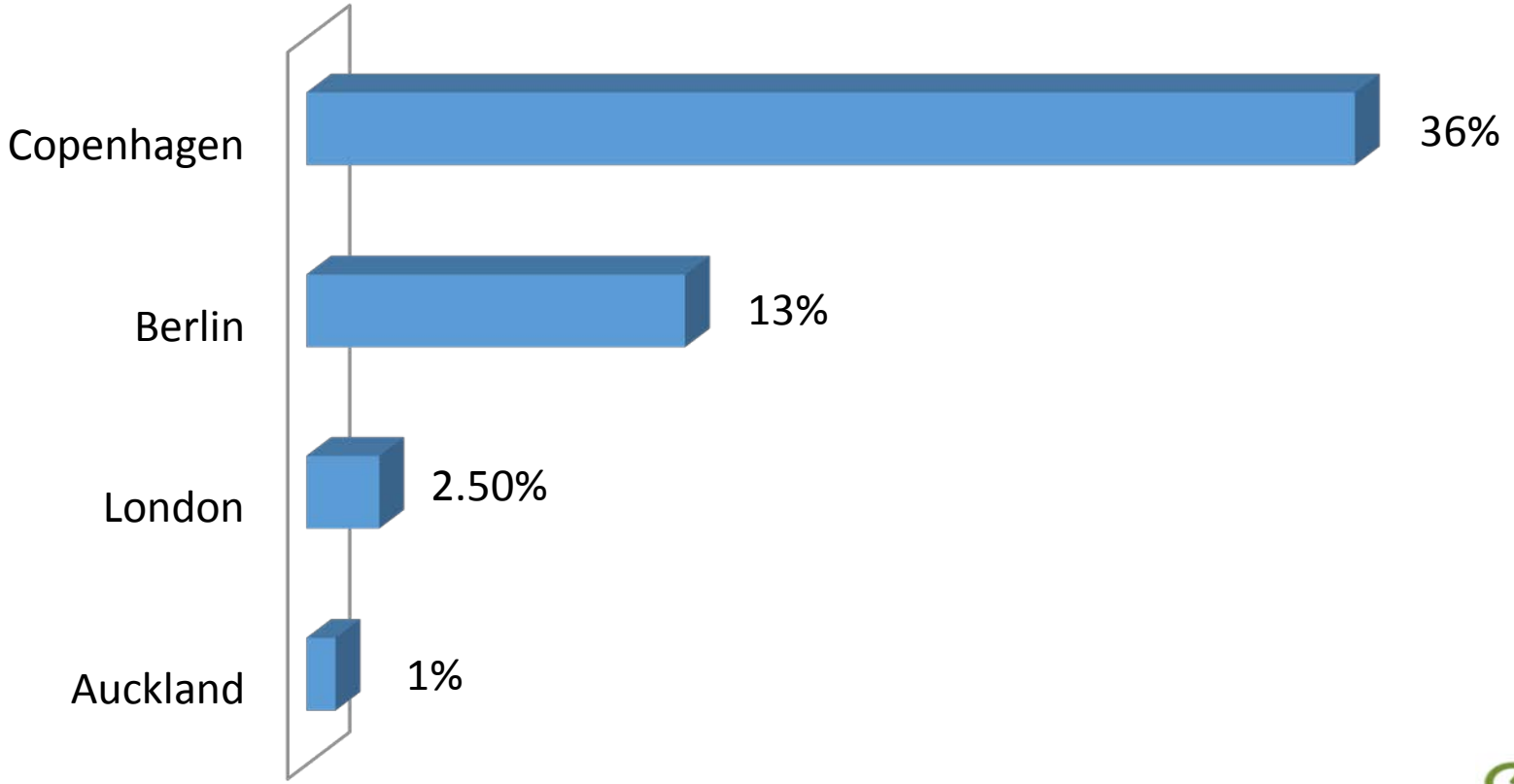
Overall trends

- Decline in youth cycling
- Cycling by adults slowly increasing from 2003





Cycling Commuters as a % of all Commuters

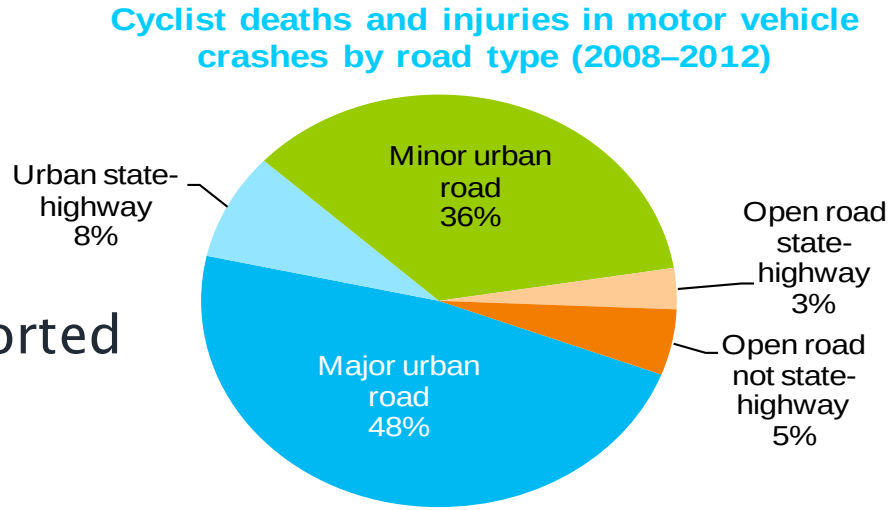


The London Example

- **October 2012-** The City of London 35% of morning peak hour traffic were cycles.
- **April 2013-** Central London bridges % cycles of morning peak hour northbound traffic

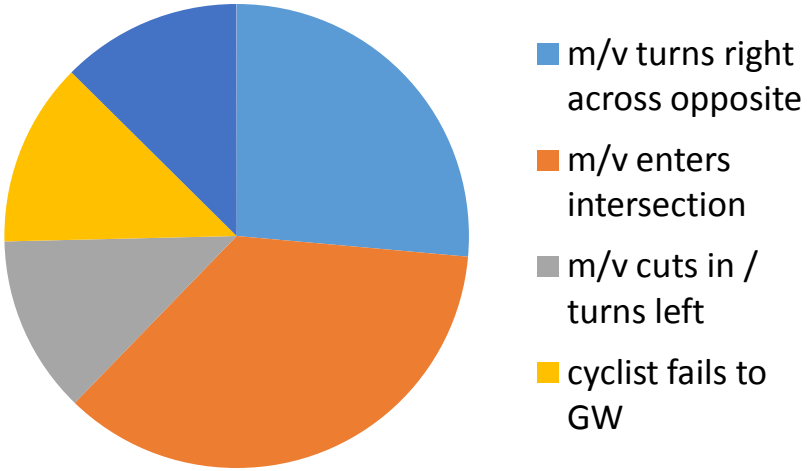
Where do crashes happen?

- Highest risk of injury on busiest urban roads
- Lowest risk on quieter minor rural roads
- Approximately 90% of reported cyclist casualties occur on urban roads
- But: over half of cyclist deaths occur on open roads

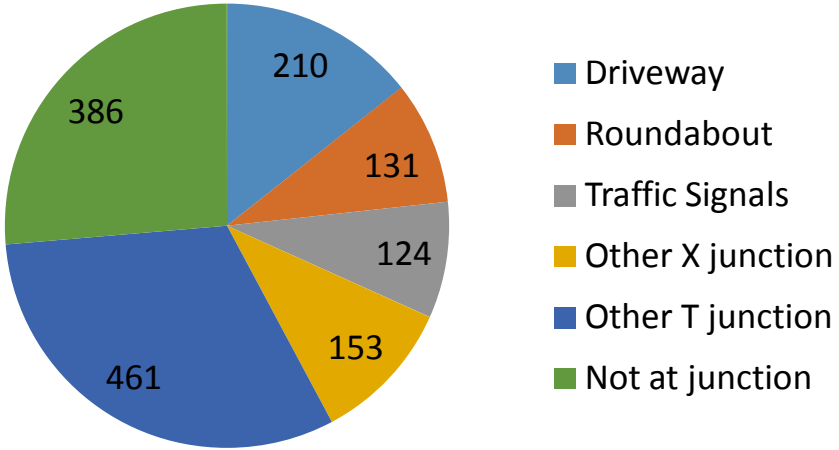


Where do crashes happen?

Crash type in urban fatal and serious intersection and driveway conflicts.



Junction type in urban cyclist fatal and serious crashes 2003-12



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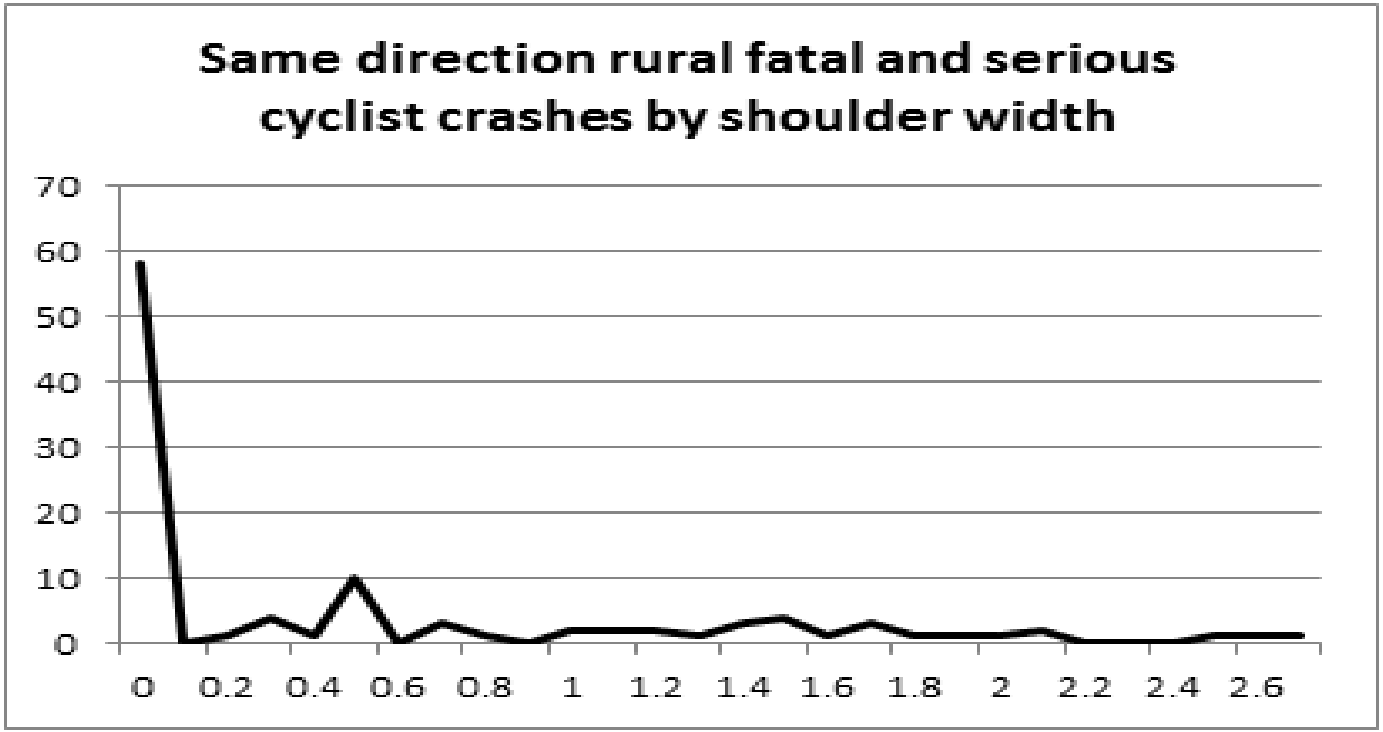
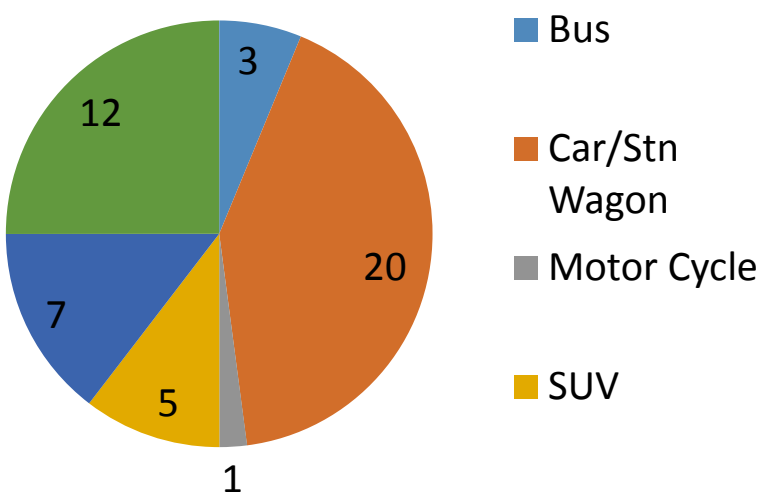


Crashes between cyclists and motor vehicles

Vehicles involved in rural cyclist deaths 2003-12



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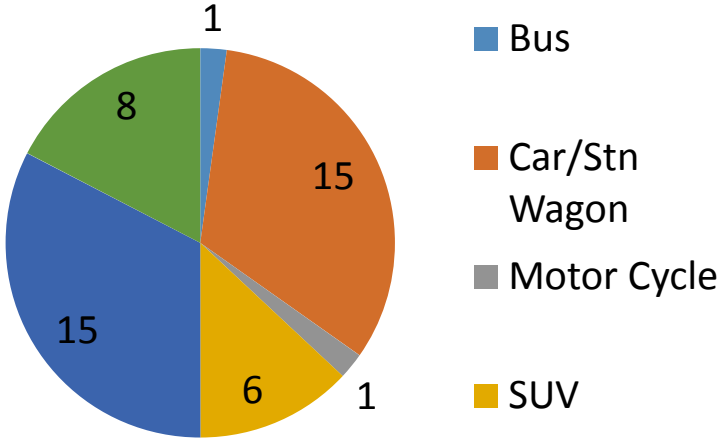


The Panel's application of the Safe System

The recommendations are framed around the Safe System elements and principles

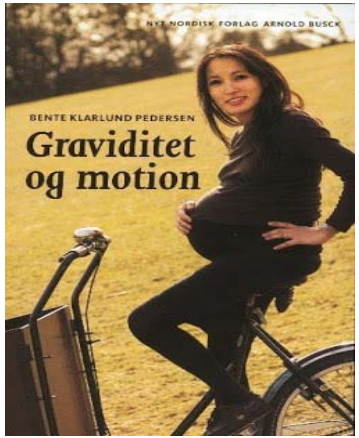
1. People make mistakes
2. People are vulnerable
3. We need to share responsibility
4. We need to strengthen all parts of the system

The Panel's early thinking

Cycling is normal, everyone can cycle

…not just lycra-clad super heroes

The Panel's early thinking



We'd like to be like Copenhagen … but aren't ready for this level of devotion

1. A Safe System approach is applied to active transport at all stages of road transport planning and investment

i. Greater visibility and priority in strategic documents.

ii. Cycling is reprioritised from ‘medium’ to ‘high’ in the Safer Journeys Strategy. High personal risk is reconciled with collective risk when prioritising projects.

iii. Making it easier for cycle projects to meet high strategic fit and for the Network Operating Framework to make provision for cycling.

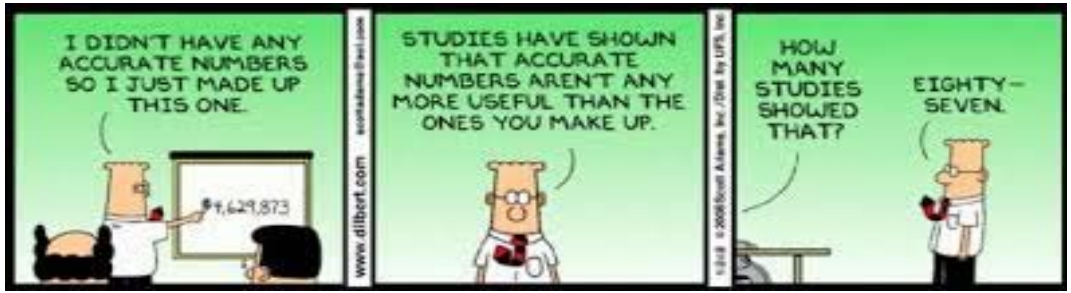
Safe System Principles

2. Improve and expand information collection systems relating to cycling safety

i. More sophisticated data collection processes that accurately measure usage through hours and kilometres cycled.

ii. Infrastructure stocktake with consistent definitions and standards.

iii. Improve cycling crash reporting by recording more latent contributing factors. Greater use of hospital and ACC cycling injury data.



3. Strong leadership and accountability practices for safe cycling

i. A dedicated portfolio with senior leaders, staff and funding.

4. Conflict (crash risk) is minimised between cyclists and other road users (especially trucks)

i. Identify urban and rural freight routes and provide alternatives for cyclists.

ii. Connected and completed urban cycle networks.

iii. Safe provision for cyclists at roundabouts and other complex intersections

iv. Rural space management, which includes shoulder widening, road markings, maintenance and regular debris removal on key cycling routes.

5. Endorse the Safer Speeds Programme i.e. Appropriate speed limits that aim to minimise crash risk and severity

i. Reduced vehicle speeds around key destinations, such as schools and shops, and along key cycling network routes where separated facilities are not present.

ii. Reduced and more appropriate speeds on rural roads where cyclists are at risk.

6. Mandatory minimum passing distance

i. Legislate for a minimum of 1 metre when vehicles overtake cyclists at or less than 60 km/h, and 1.5 metres when over 60 km/h.

7. Increase support for school travel planning and cycle skill delivery

i. Increase cycle skills training in schools (as per Safer Journeys). Focus on Grade 2 and above to school aged children

ii. Encourage wider delivery of 'Bikes in Schools'

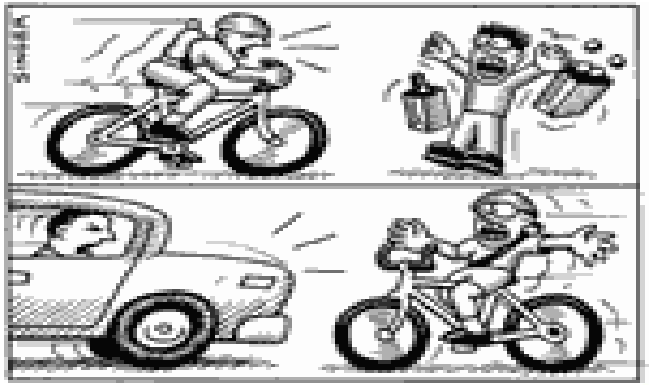
iii. Encourage active partnership between schools, communities and Councils and make travel planning guidance more accessible to schools and

iv. Cycle training for adults – practical, theoretical, awareness of high risk situations

8. Improve road user (driver and cyclist) behaviour and awareness

i. Encouraging drivers and cyclists to share the road safely.

ii. Driver licensing – add questions to the driver licence test regarding passing cyclists and interaction with pedestrians and cyclists. Investigate if driving instructors are appropriately qualified, and have relevant resources, to teach young drivers to be mindful of cyclists.



9. Corporate responsibility for employed drivers and contractors

i. Employees who drive a vehicle as part of their employment receive cycle safety specific driver training

ii. Training for truck and other professional drivers and cyclists on mutual awareness and risk reduction

iii. Reward corporate responsibility through reduced ACC levies and insurance premiums

10. Side under-run protection and other features on trucks

i. Investigate the cost-effectiveness of truck side under-run protection, collision detection systems, additional mirrors, cameras or other technology.

Side underrun protection

Chassis skirt

11. Improve bicycle light standards & adopt EU e-bike standards

i. Bike lights be visible from 200m at night, while a new international ISO standard is being developed

ii. Adopt the European standard for e-bikes – no greater than 300 watts, power assist cuts out at 25 km/h

Desired Outcomes

- Zero cycle related fatalities
- Reduced cycling related injuries
- More people cycling

Potential benefits of cycling

- Reduced congestion at peak times in major urban centres
- Affordable travel
- Health benefits, particularly reduced obesity and improved cardio-vascular health
- Reduced vehicle emissions
- Reduced road maintenance costs
- Improved people-friendly environments