

# Investing on road safety in NZ – challenges ahead

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## As investors, what are our key challenges?

1. We need to determine whether we are under or over investing in road safety
2. We need to determine whether our road safety investment is as efficient and effective as possible
3. We need to re-examine our investment vehicles, drivers, tools and processes in order to give effect to safer systems approach

## What are our key investment vehicles?

1. Government Policy Statement (GPS) on Land Transport Funding, the National Land Transport Programme and Regional Programmes
2. Road Policing Programme
3. Long Term Council Community Plans
4. Licensing and Registration revenue - compliance
5. Road safety and community trusts
6. Associated expenditure from ACC, Justice, NZ Police, Education, Health

Government Policy Statement (GPS) on Land Transport Funding, the National Land Transport Programme and Regional Programmes:

1. Dedicated: Road User Safety (or DMCP) activity class
2. Shared: State highway and Local Road activity classes; Walking & cycling, Public transport and Transport planning activity classes

## What are our key investment drivers?

1. Injury Prevention strategies
2. Transport regulations and rules
3. Government Policy Statement (GPS) on Land Transport Funding
4. Safer Journeys strategy
5. NZTA's Investment & Revenue Strategy
6. Regional and local road (safety) strategies
7. LTCCP's
8. Road Policing Programme's investment strategy
9. Road safety actions plans

## Challenge 1

What is the optimal level of investment?

## Why do we invest in road safety?

1. To increase average life expectancy and reduce levels of harm from injury in New Zealand
2. To help achieve our various economic and social goals through an effective and efficient land transport system

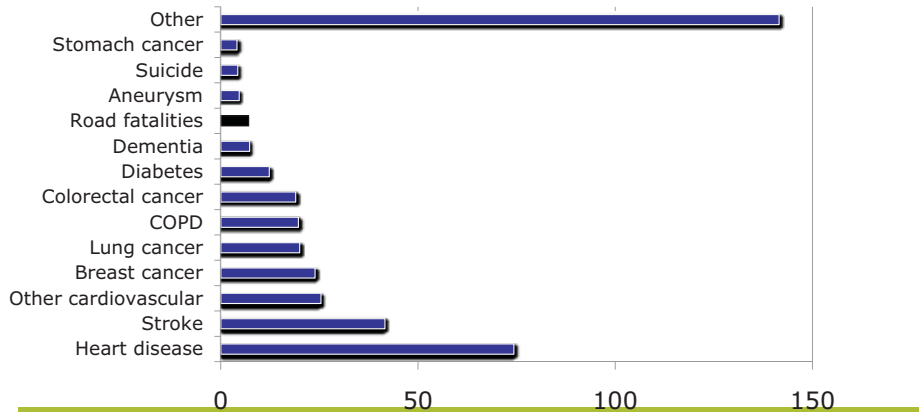
## So what needs to be optimised?

Investment in road safety vs.

1. All other means of increasing average life expectancy and reducing or preventing injury
2. All other means of managing and developing an effective and efficient land transport system

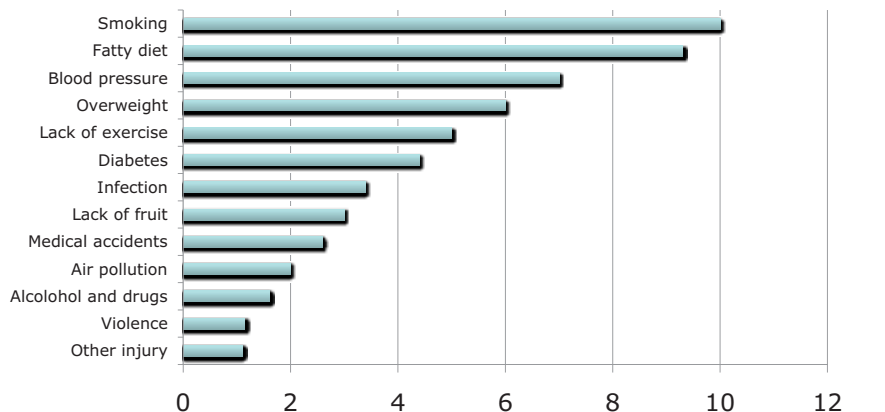
## What kills New Zealanders?

Cause of death per 100,000 population (2006)



## Road fatality vs. other causes of death

Mortality burdens compared to road traffic crashes



## Other desired transport system impacts

Investment in road safety vs.

1. Accessibility
2. Journey time reliability
3. Congestion relief
4. Unlocking areas of economic potential
5. Avoiding or mitigating environmental and social effects e.g. water pollution

## What then is the optimal level?

- Our stated national aim is to achieve an (unspecified) reduction in road fatalities and injuries over time
- Some regions and TA's have specific targets
- We know that the cost of a 'zero' number of road fatalities would be close to infinite
- But we often do not know the marginal cost of a reduction - compared to the marginal costs of other interventions

## What guidance did NZTA receive?

- The Government Policy Statement of Land Transport Funding has road safety as one of eight desired impacts
- The priority of road safety (in relation to the other desired impacts such as travel time reductions, congestion relief and a lowering of environmental effects) is not set out
- The 2009-12 NZTA Investment Strategy therefore assigned a 'medium' strategic fit priority to road safety

## Our challenge as investors...

We have to determine whether we are as close as possible to an 'optimal' level of investment in road safety:

1. compared to other mortality and health risk factors, and
2. compared to other transport goals.

## Challenge 2

What investment mix is the most efficient & effective?

## How do we allocate safety funds?

In New Zealand we use:

- Political judgment/community preferences
- 'Strategic' packaging
- Benefit-cost ratios
- Benchmarking
- Effectiveness or best practice measures
- Risk measures e.g. between modes or communities or user groups

## What is driving investment re-allocation?

2009

- Focus on economic growth

2010-2012

- Focus on Safer Journeys first actions and high priorities

2012-2015

- Align safety investment more firmly with Safer Journeys strategic intent

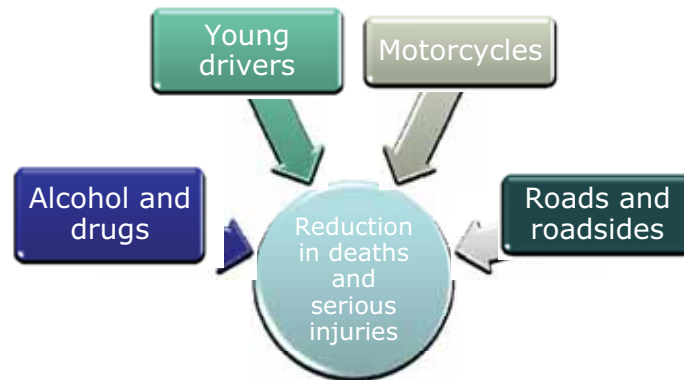
2015-2020

- Plan for future opportunities and technologies

## What is NZTA doing to improve effectiveness and efficiency?

1. Delivering on Safer Journeys first actions
2. Reviewing the 'Road user safety' activity class
3. Reviewing the Road Policing Programme
4. Reviewing all other activity classes

## Safer Journeys priorities and first actions



## Young drivers

- Improved licensing and training
- Road User Safety
  - National advertising and education
  - Local programmes
- 2010/11 Road Policing Programme
  - new focus – dedicated 8%
- Local investment responsive to local risk

## Alcohol and drugs

- Road Policing programme
- Road User Safety
  - Advertising, education, local programmes
- Targeting to risk
  - More emphasis on high risk groups, higher penalties
  - Interlocks and zero blood alcohol for offenders
  - One off implementation costs

## Motorcycles



- New focus for road policing
  - 3% of 2010-2011 allocation
- New focus in Road User Safety
- NZTA Partnering with ACC in approach to the motorcycle safety levy
- New licensing and training regime presents a funding challenge

## Road and roadsides



- Safer Journeys focuses on high risk rural roads/intersections
  - Head on crashes
  - Run off road crashes
  - Intersections
  - Vulnerable users
- NZTA developing guidelines to identify and treat
  - Investment priorities aligned

## Road user safety activity class

New allocation of road user safety funding to approved organisations:

- Investment in activities that promote, educate, advertise or raise awareness of the safe use of transport networks
- Focus on Safer Journeys high priorities and initiatives
- Local flexibility for communities at risk

## Road policing programme

- 2010-11 allocations reflect Safer Journeys high priorities
- 58% allocated to Safer Journeys high priorities,
  - Main allocations where enforcement will make a difference: alcohol, speed, visible road enforcement
- New allocations to young driver and motorcycle safety

- Purpose of the review is to shift from funding road policing FTEs to funding for outcomes
  - Policing outcomes defined and contexted within the safe system approach
  - More flexibility to respond to local risk
  - Better definition of services being purchased and price accountability

## Research

- Safety Research topics are expected to make a significant contribution to a high priority in Safer Journeys. Current focus areas:
  - Point to point cameras
  - Prevalence of drugged driving
  - Trial and initial applications of Intelligent Speed adaptation (ISA)
  - Research to establish the level of risk posed by drivers with blood alcohol between 0.05 and 0.08

## Other activity classes

- Training
  - Provision for safe system capability training if required
- Transport planning:
  - expectation is that safety considerations are integral components of all regional and sub regional strategies and plans.
- Public transport investment also has safety co-benefits

## Our challenge as investors...

We have to ensure that our expenditure on road safety is the most effective and efficient it can be:

- Aligning to Safer Journeys is a very helpful start
- Testing old assumptions and beliefs is helpful too
- Making sure there is a clear intervention logic
- Applying best practice helps to ensure that we are effective
- 'Actual risk' is a better guide to efficient investment than moral imperatives

## Challenge 3

How do we invest in a safe system?

## Context: safe system approach

Infrastructure planning, maintenance, and operation

Licensing, training, advertising, education, rules, regulation and road policing



Speed limit setting, road design, advice and cues

Vehicle safety cost, availability, choice and maintenance

## 2012-2015 safe system



- Injury prevention approach requires flexibility to balance interventions across the system

More emphasis on proactive approach

- eg KiwiRAP emphasises routes rather than black spots

## Our challenge as investors...

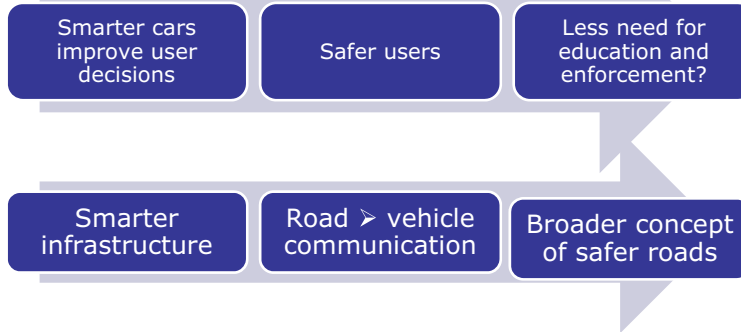
If the safe system approach is to be successful, we (as investors) need to:

1. Streamline our investment drivers and vehicles
2. Better understand risk across the system
3. Improve our investment tools
4. Revised investment processes

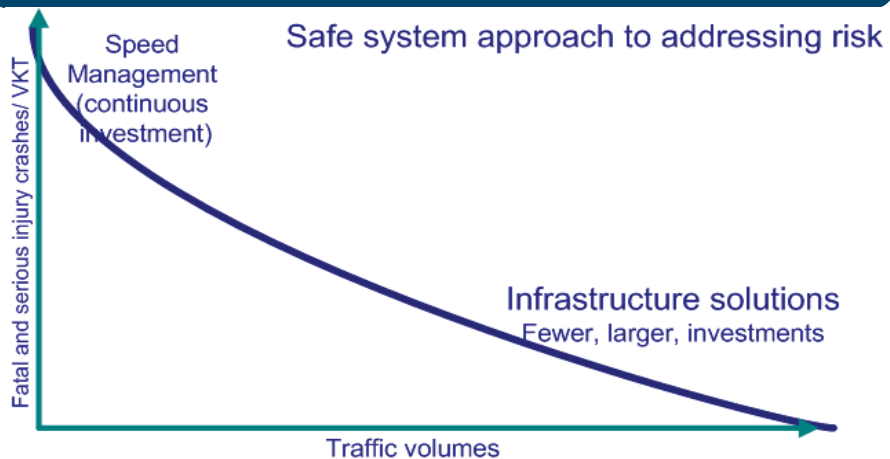
## Streamlined investment drivers

- Place Safer Journeys within the broader family of Injury Prevention strategies
- Integrate regional and local safety strategies with Safer Journeys, and better understand different strategic directions between communities
- Some of our transport regulations and rules generate cost for very little safety benefit

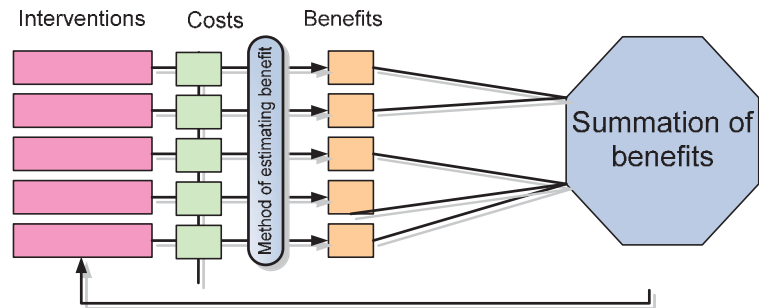
## Streamlined investment vehicles



## Better understanding of risk



## Better investment tools



## Revised investment processes

- We need improved national safety planning practices that compare benefits from:
  - National activities/ local activities
  - Different types of interventions
- We need stronger local co-ordination to address local priorities and issues:
  - Bring together all elements of the safe system at a local level
  - Empowering regions and locations to make the optimal (and most efficient and effective) investment
  - A renewed mandate for Road Safety Action Planning?



## Smart investors! Our task is:

1. To determine whether we are under or over investing in road safety
2. To determine whether our road safety expenditure is the most efficient and effective investment package possible
3. To re-examine our investment vehicles, drivers, tools and processes in order to give meaningful effect to the safer systems approach