
Road Safety in Australia

Putting knowledge into practice

Dr Soames Job

NSW Centre for Road Safety, Australia

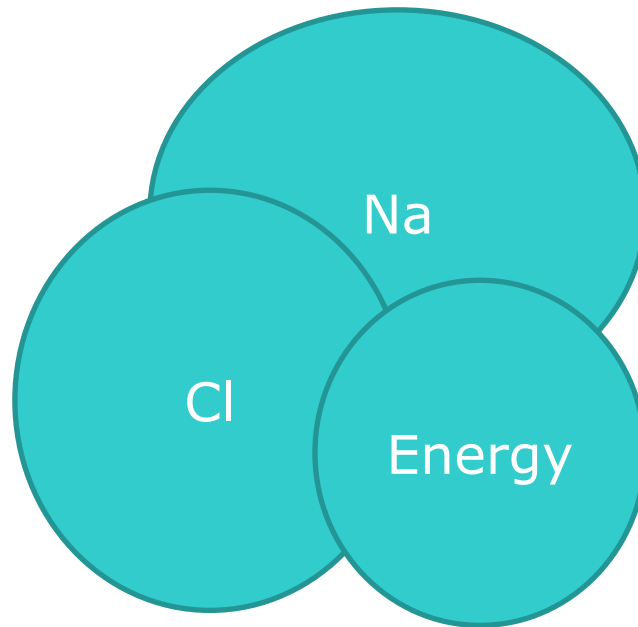


Overview

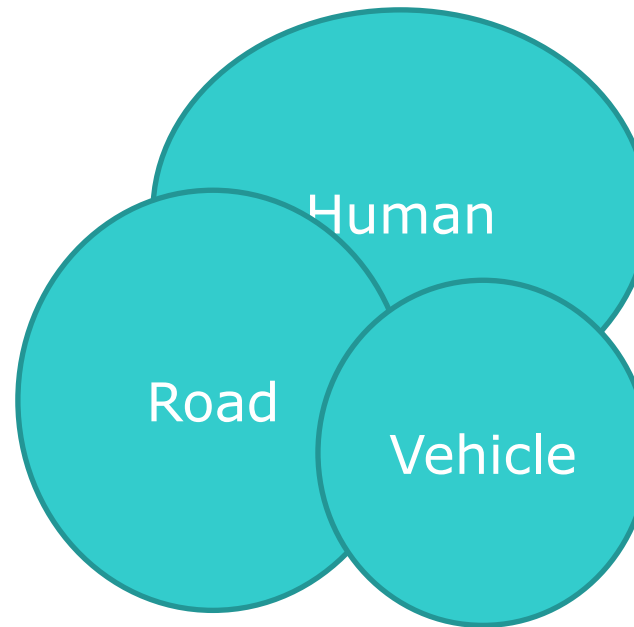
Presentation to cover:

- Making salt
- National Framework
- Strategies
- Current situation
- Key successes
- Technology

Making Salt



Fixing Road safety



Can't focus only on one now but..

Fix- really fix - any one and no more deaths and injuries.

So- which one can we control most directly?



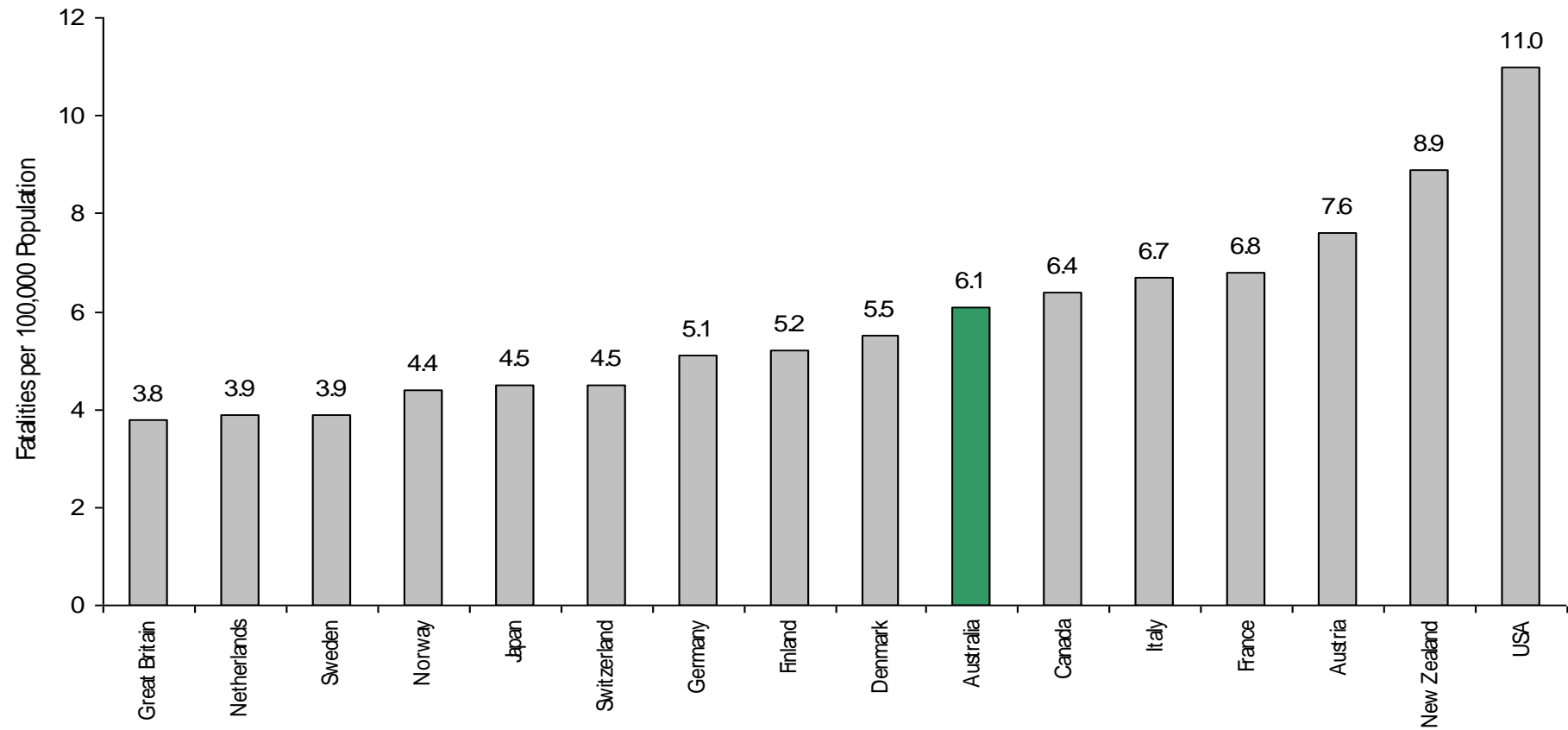
National Road Safety Strategy 2011–2020

Strategies

- Released in May 2011
- Based on Safe System approach
- Vision *that no person should be killed or seriously injured on Australia's roads*
- 10 year plan
- Planned initiatives for the first three years
- Range of options for further consideration

Australian road toll overview

Fatalities per 100,000 Population,
Australia and Selected Countries,
2010p (Australia) or Most Recent (2009)



Current situation



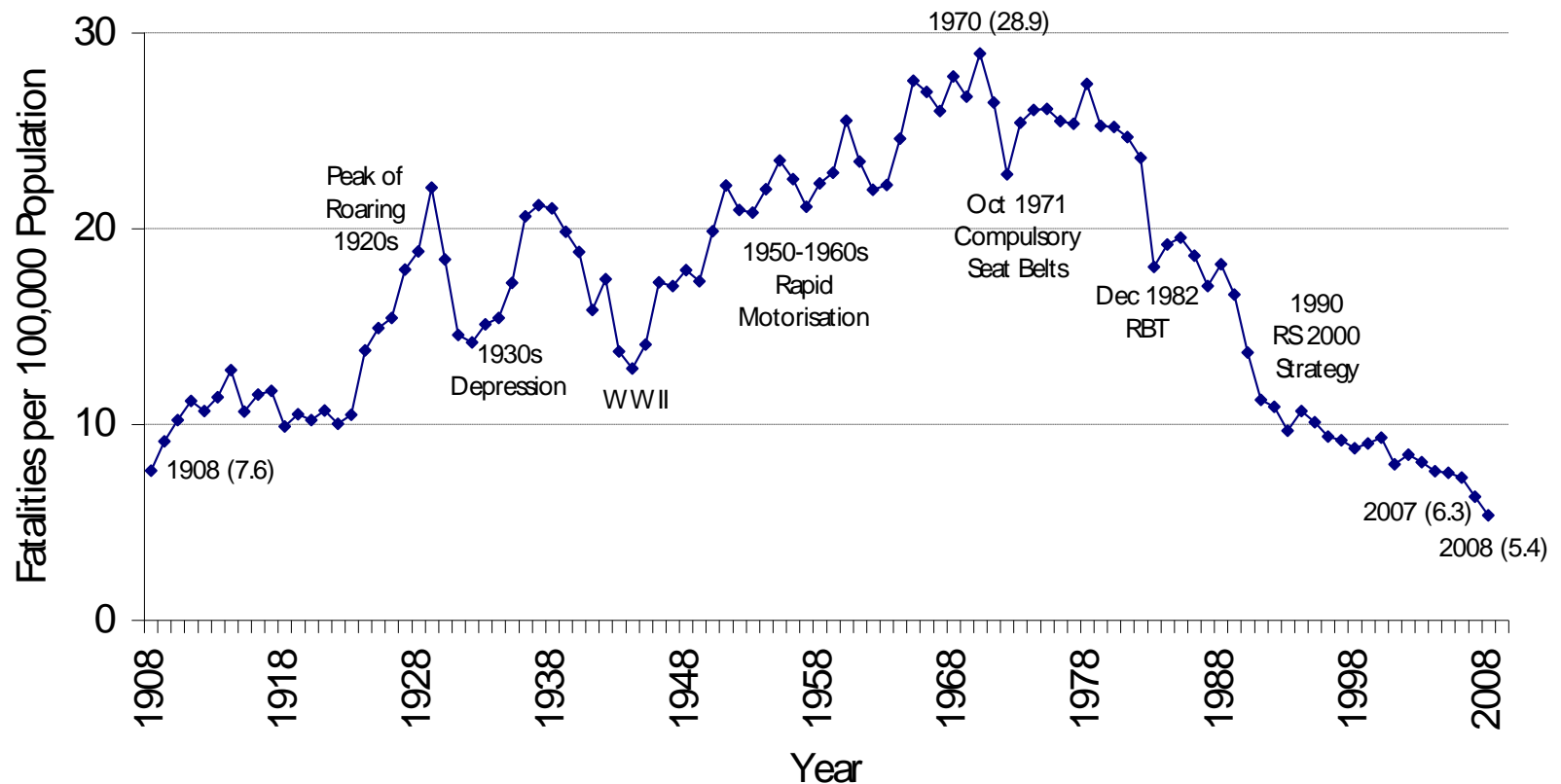
In 1933/34 NSW population was 2.6 million, only 240,000 motor vehicles and around 336,000 licences – Only one motor vehicle per 11 head of population

Fatality Rates per Population

2008 fatality rate per population (5.4) lowest since 1908

Fatality rates per vehicle fleet and motor vehicle travel lowest on record

Road Traffic Crash Fatalities per 100,000 Population,
NSW, 1908-2008





Successes

SPEED:

Safe Speed limits (Victoria & South Australia have done well):

- ⇒ Human tolerances:
 - ↳ 30 km/h pedestrian / vulnerable road users
 - ↳ 50 km/h side collision
 - ↳ 70 km/h frontal collision
- ⇒ Myths associated with speed limits:
 - ↳ Ignored by drivers (changes don't work)
 - ↳ Must be credible (85th percentile speed)
 - ↳ Personal experience

Evidence overwhelming demonstrates: Reducing the speed limit delivers real road safety benefits

NSW Intelligent Speed Adaptation Trial

Quick trial stats

Largest ISA trial in the world outside Sweden

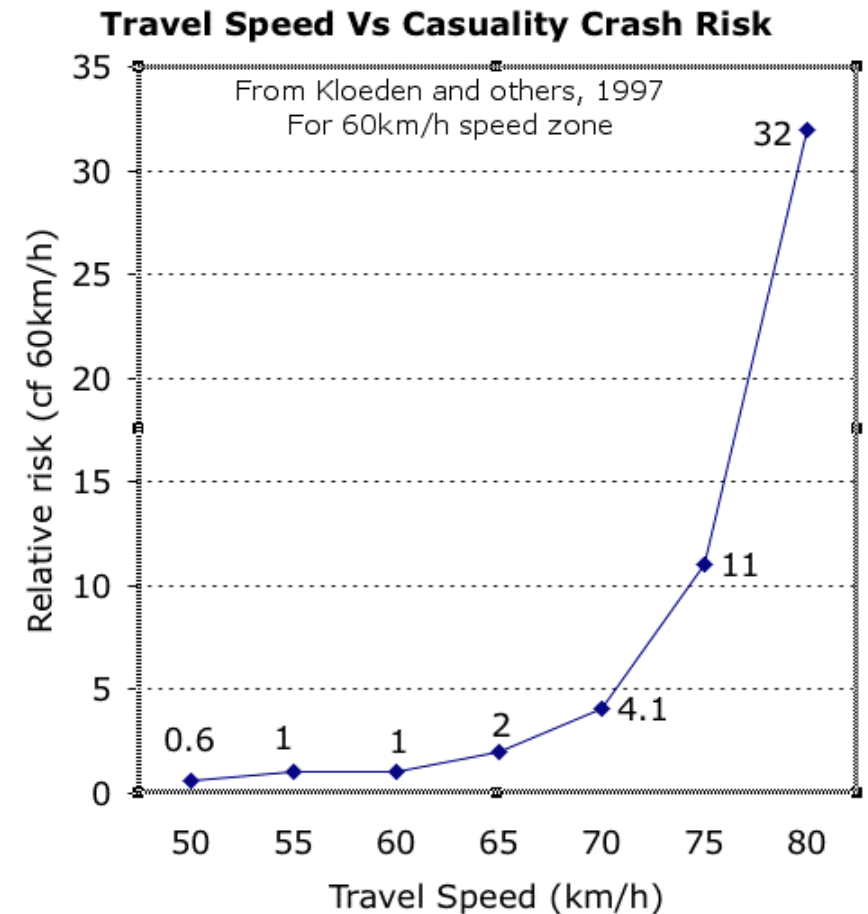
- 7.6 million speed zone compliance records collected
- 1.9 million km travelled by participants in trial
- More than 1,500 surveys administered
- 6 focus groups



Results – *Road Safety Benefits Modelling** - Centre for Automotive Safety Research

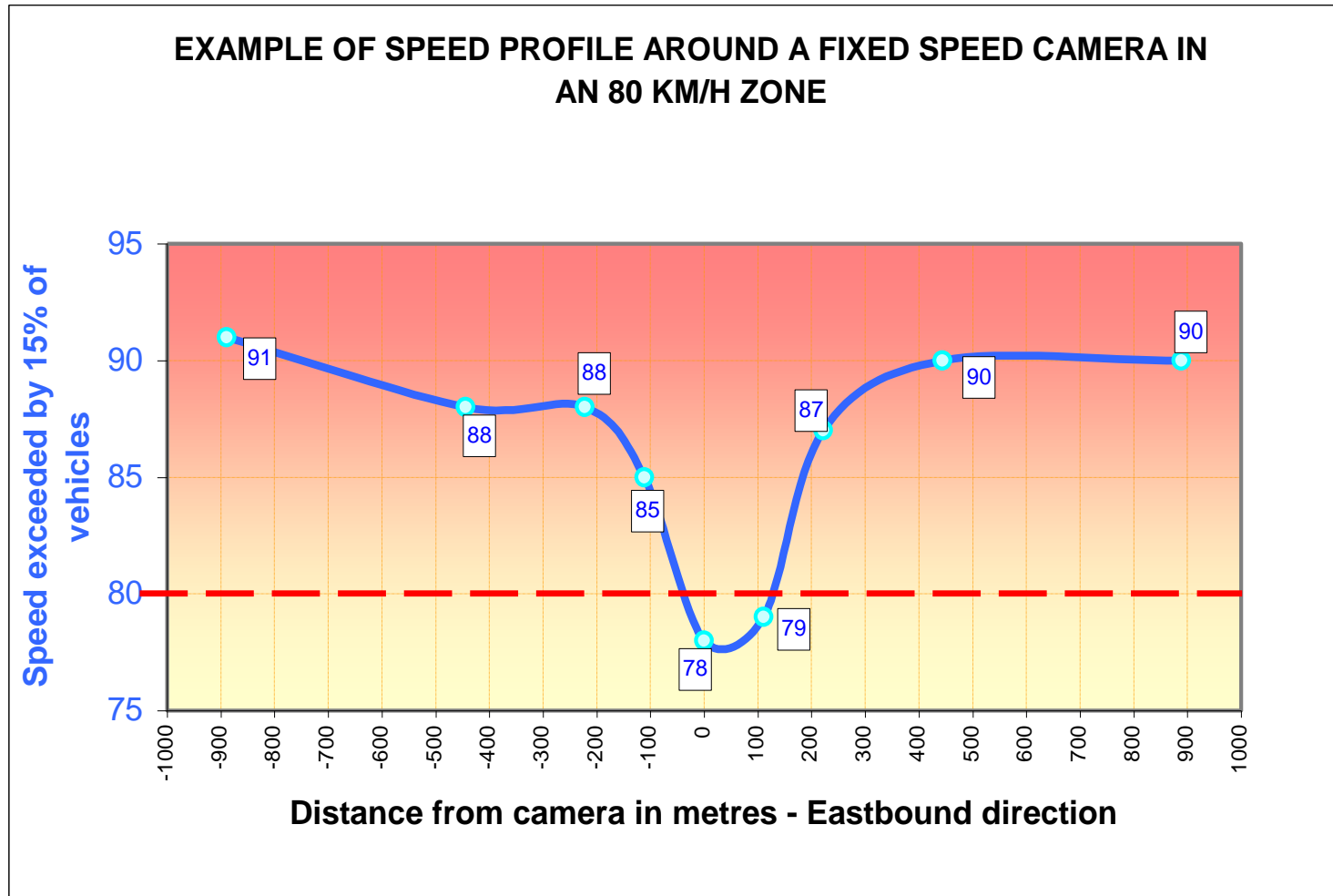
- NSW road safety effect
 - 18.5% reduction in fatalities
 - 19.2% reduction in injured road users

- BUT: acceptability challenges
 - Noise
 - Speed tolerance



*Based on Kloeden's risk curves

Actual speed changes at fixed, signposted speed cameras, NSW





Infrastructure Improvements

Roads

- Victoria – biggest committed spend on road safety on roads.
- Western Australia – best safe system road.
- New South Wales – most innovative retrofit process

Perth to Bunbury Freeway



Innovative Median Separation, NSW



Allows overtaking – same logic as shoulders



Wire Rope Barrier



Guardrail Barrier



Concrete Barrier

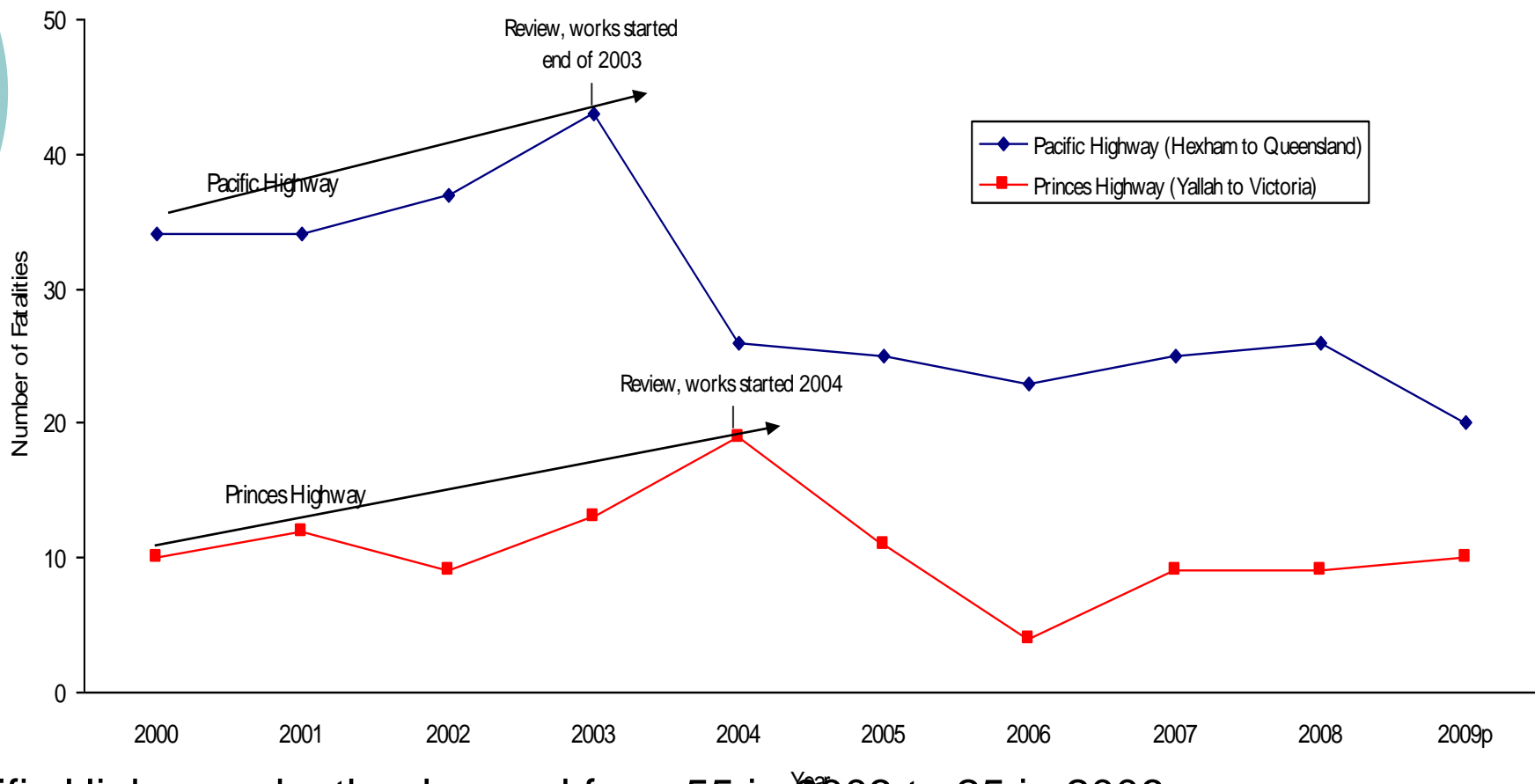
Highway safety reviews

- Focuses road safety effort on high risk locations in a short time frame, rather than treating isolated sites.
- A strategic approach:
 - 'High risk' routes
 - Multi-disciplinary
 - engineering works
 - behavioural programs
 - enforcement strategies
- The program is developed to supplement planned maintenance treatments and precedes longer term and more costly road upgrades.

DOES THIS WORK?

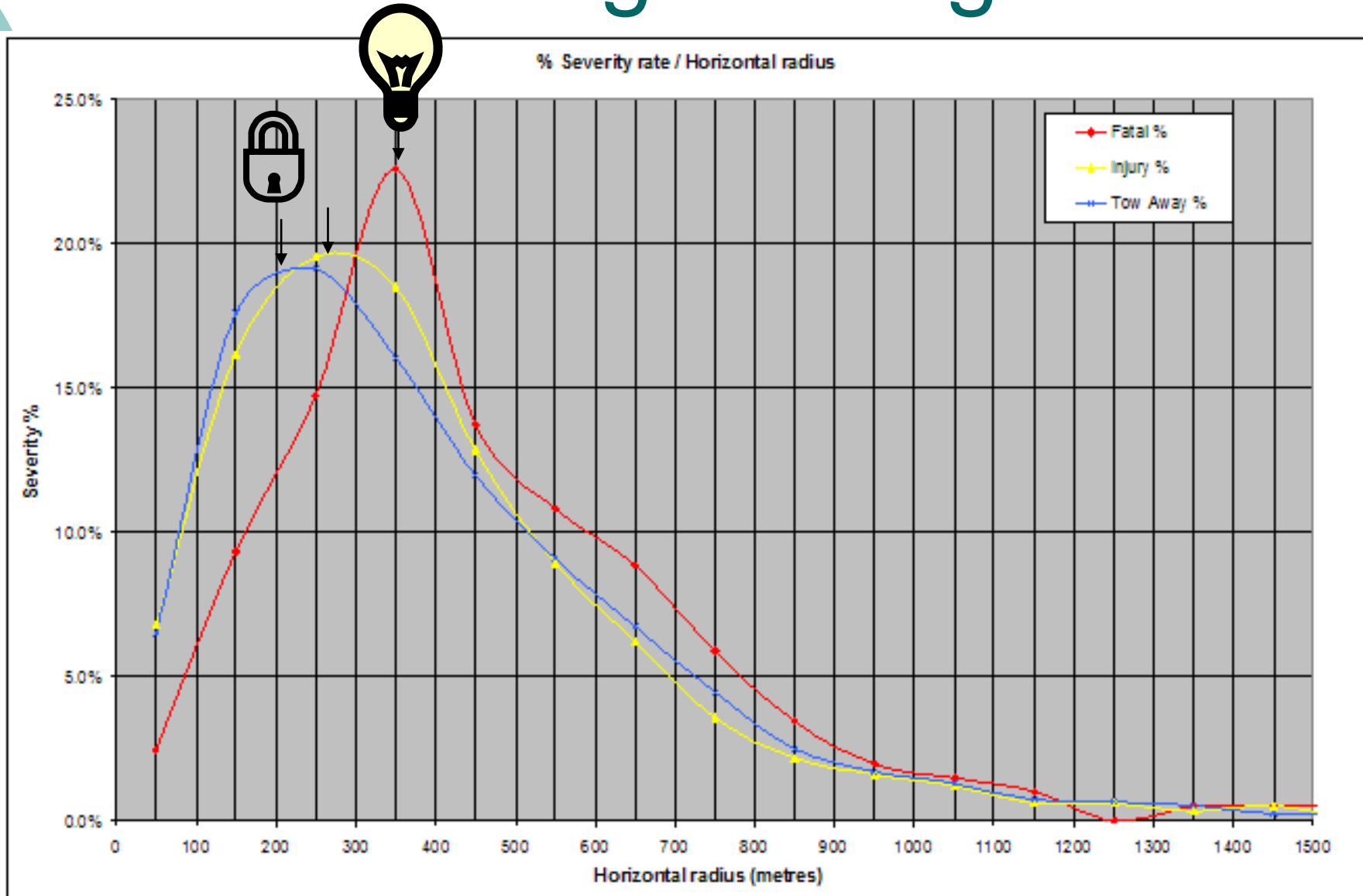
Dramatic Results of highway safety reviews

Fatal Crashes, Pacific and Princes Highways (Route Review Sections), 2000 to 2009p



- Pacific Highway: deaths dropped from 55 in 2003 to 25 in 2006
- Princes Highway: deaths dropped from 24 in 2004 to 4 in 2006.
- **Injuries also dropped on both.**
- **Benefit cost ratios much higher than black spots**

Evolving attitudes to road engineering and



Evolving attitudes to road engineering and road safety

<u>Old Focus</u>	<u>Required focus</u>
Victim blaming	Safe systems responsibility
Legal liability avoidance	Safety improvements
Risk averse	Risk management
Entrenched historical basis	Scientific Evidence basis
Crash prevention (analysis by all crashes)	Injury prevention (analysis of fatal and injury crashes)
Road	Roadsides
Infrastructure	Infrastructure-human interaction



CONCLUSIONS

- We can beat the road toll
- Best focus : roadsides not roads, and injuries not crashes
- Innovative, evidence based treatments are critical
- With precision, we can make big improvements for small dollars.