

Safety Pays - IRTENZ Convention 2002

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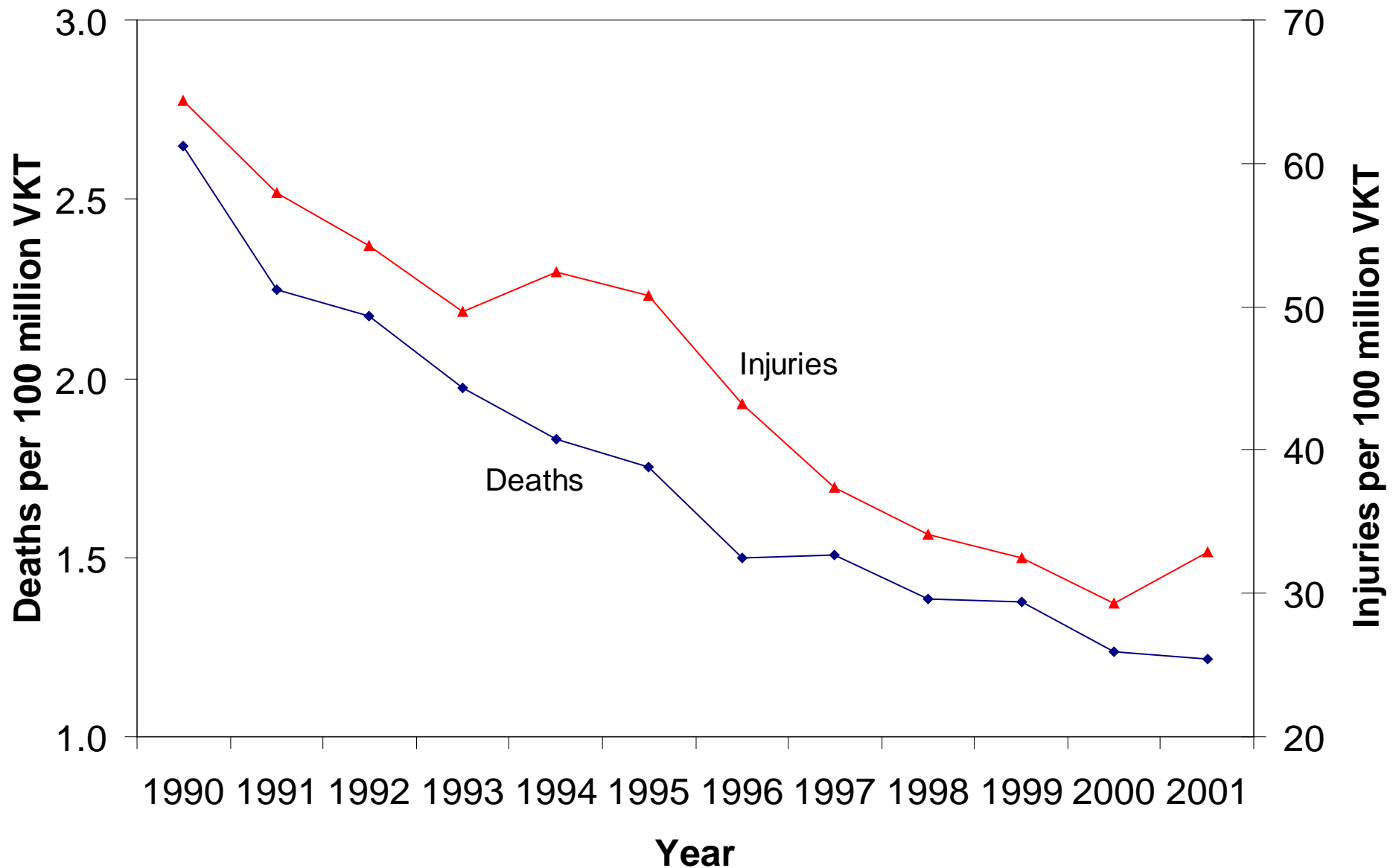
Director of Land Transport Safety

Rotorua - 31 July 2002

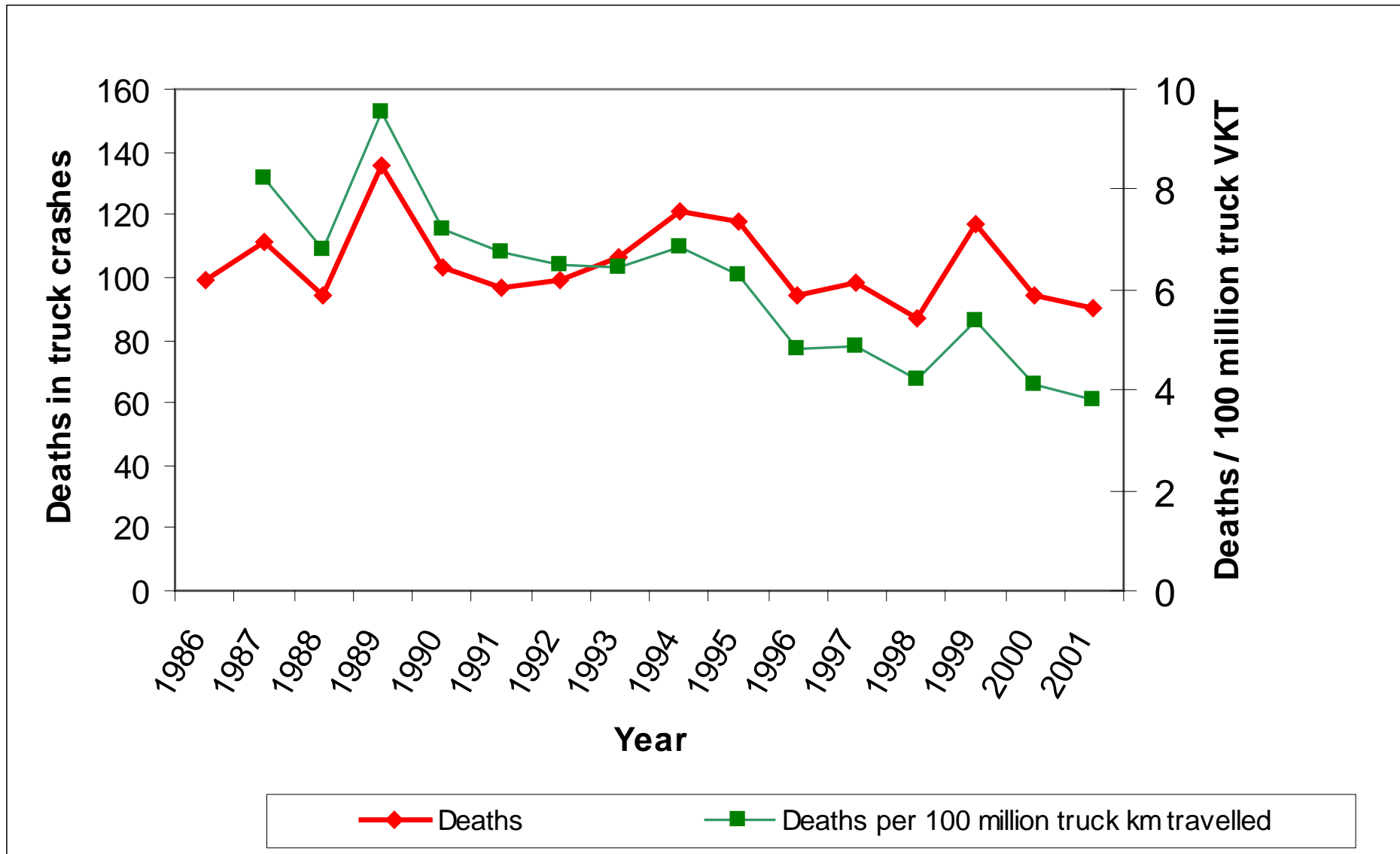
Increasing heavy vehicle safety

- Where are we now?
- How did we get here?
- How do we compare internationally?
- Where are we going?
- How will we get there?

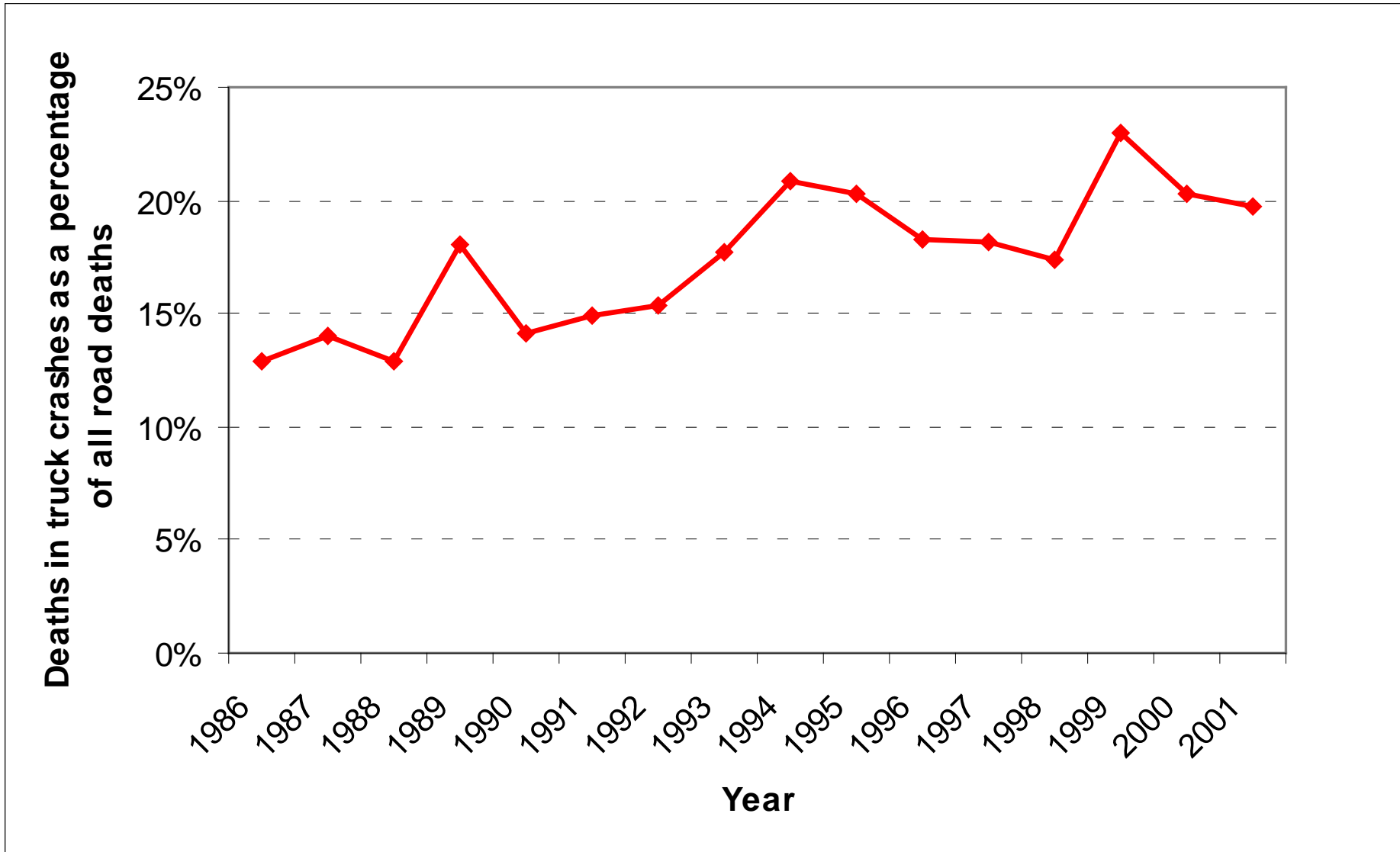
Where are we now? Death and Injury Rates



Where are we now? Truck fatalities



Truck fatalities as a percentage of the total



Fatal crashes - truck driver at fault

Year	Crashes	At Fault	%
1997	85	26	31%
1998	75	21	28%
1999	96	34	35%
2000	75	26	35%
2001	76	27	36%
Total	407	134	33%

Injury crashes - truck driver at fault

Year	Crashes	At Fault	%
1997	697	329	47%
1998	649	288	44%
1999	625	302	48%
2000	545	246	45%
2001	620	307	50%
Total	3136	1472	47%

How did we get here?

- Increase in overall traffic volume
- More trucks on the road, carrying more freight over greater distances
- No significant improvements to the roading network

Fatalities from truck crashes (per 100m truck VKT)

USA	1.7
UK	1.8
Canada	2.1
Germany	2.2
Australia	2.5
France	4.4
New Zealand	5.5

Source: National Road Transport Commission, Australia

A 'Vision Zero' approach

- Ethical approach....zero acceptance of road trauma
- We don't tolerate death in the workplace or other transport modes - why accept it on the roads?
- Long term LTSA vision is “to eliminate deaths and injuries in the land transport system”

Shifting approaches to road safety

- Leading countries are changing their approach
- No longer relying solely on the traditional elements of enforcement, education and engineering
- Adopting a 'systems' approach, with safety built in to the land transport system

Traditional vs 'systems' approach

Traditional approach

- Dominant focus on driver and single crash event

Static interventions

- Engineering
- Enforcement
- Education

Systems approach

- Dominant focus on infrastructure, systems and environment

Dynamic interventions

- Economics
- Ethics
- Emotion







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Shifting approaches...

Heavy vehicle safety

- Safety must be built in to the industry
- Goal is to achieve 'willing compliance'
- Can be done with incentive-based regime

Where are we going?

- 2010 Strategy
- Safety Management Systems
- Operator Safety Rating System
- Fatigue Management Plans
- Vehicle Dimensions and Mass Rule
- Technological vehicle safety advances

Heavy vehicles and the 2010 strategy

- Biggest gains through speed management and an improved roading environment
- Systematic review of the roading environment and how heavy vehicles operate within it needed
- LTSA will be involved in Australian NRTC work on heavy vehicle safety

Safety Management Systems

- Safety should be an integral part of road design
- Self management of risk is a well established and successful principle
- The onus is on operators to build safety into their management systems
- Some road controlling authorities have already adopted this approach

Operator Safety Rating System

- Seeks to effectively monitor the safety performance of licensed transport operators
- Better targeting of Police/LTSA resources
- Identifies and removes unsafe operators
- Recognises best practice standards and good performance
- Encourages operators to take responsibility for their own safety performance

Fatigue Management Programme

- Alternative to current regulated driving hours used to manage driver fatigue for heavy motor vehicle drivers
- Would allow certain operators to set their own LTSA approved work schedules, taking into account known driver fatigue risk factors
- LTSA currently running FMP trial to report to Government on its practicality for New Zealand

Vehicle Dimensions and Mass Rule

- Addresses risks of heavy vehicles in the roading system
- Balances safety and efficiency
- New stability requirements aim to cut rollover crashes

“Intelligent vehicles” and safety

- Collision avoidance (brake by wire, lane change assistants)
- Vision enhancement (radar and cameras)
- Vehicle stability (drive by wire, active body control)
- Driver condition warning devices
- Vehicle-highway interactions (GPS systems, electronic tow bars)

Conclusions

- More trucks on the same roading network = a tough task in terms of improving safety
- Heavy vehicles must be seen in the wider context of the entire roading environment
- Shifting approaches to road safety will mean less focus on the “single crash event”
- Need incentives for good operators - safety pays