

# Safe Speed in the International Context

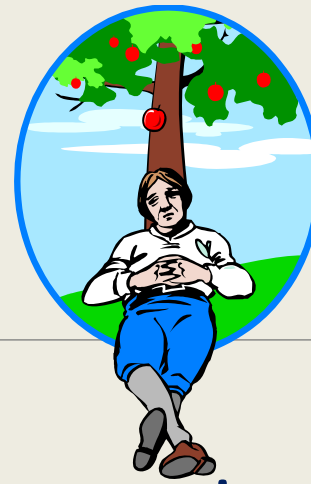
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$$E = \frac{1}{2}mv^2$$



Kinetic energy is **the** injury agent

-  $\therefore$  managing energy exchange is our principal prevention tool (thank God for Newton!)



← Safer Users

# Safer Vehicles

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## Active Safety

- ESC
- intelligent cruise control



## Passive Safety

- belts/airbags
- crumple zones



# But, no safe speed system

- No design rules for top speed, acceleration, power/performance



Speedometer  
not “fit for purpose”

# Safer Roads and Roadsides

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## Passive Safety

- roadside barrier
- end treatments



## Active Safety

- intersection design
- pedestrian treatments







# Safer Users

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Speed is “logically related to mobility – go faster and get there sooner – and subjectively related to pleasure”. (David Shinar, 2007)

Speeding is the “everyday crime of the law-abiding; normal deviant behaviour”. (Helen Wells 2011)

Most people admit to “speeding” at some time, nearly half admit to having received a speeding ticket, yet almost all consider themselves law abiding.

Despite the scientific facts we struggle to have people accept that low-level speeding is dangerous. Speed enforcement has a bad name!

# We have only ourselves to blame!

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1. The way we traditionally set speed limits
2. The traditional enforcement targeting of only high-end speeders
3. The traditional enforcement tolerance (of around 10%)
4. Media coverage of high-end speed in crashes or enforcement





# Why people speed

( the dilemma of the commons all over again)

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1. Instant rewards – passing, clearing intersection, pleasure
2. Vehicle design promotes speed
3. Vehicle advertising promotes speed –despite codes of practice
4. Internalised speed limit – a product of enforcement tolerance and risk perception (risk –at individual trip level is very low)

# Magnitude of problem = risk x frequency

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“Major” speeding offences  
(>15 km/h over limit)

- quite rare
- high or extreme risk

➔ significant safety problem

“Low range” speeding (<15 km/h over limit)

- very common
- substantial risk

➔ very significant safety problem

# Population level change: “Fair” Vs “Unfair”

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# Objects of Derision



# Populism overrides science

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- \* UK ceased its direct support for national camera program in 2010 and the Minister said: “Another example of this government delivering on its pledge to end the war on the motorist”.
- \* Cameras and enforcement tolerance an election issue in Victoria in 2009 (with some clever political dancing at a later date)
- \* the Mornington Shire case in Victoria

# How to win “hearts and minds” (1)

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- \* Public education to explain mismatch between speed limits and levels of protection using “blatant” examples
- \* Extensively publicise risk ratings of NZ roads
- \* Transparently set speed limits to match risk levels of road lengths and publicise plans to raise limits again (where they have been lowered) as soon as upgrades are achieved
- \* Ensure all limits are well signed – drivers must be aware of limits at all times, cost of signing cannot be a factor as credibility is crucial to compliance

# How to win “hearts and minds”? (2)

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\* Enforcement must remain risk-based (ie population level) but we have to sell it differently by:

- transparently choosing enforcement sites related to risk
- transparently hypothecating fine revenue to road and roadside safety, especially to upgrading roads where speed limits were lowered
- appointing a “speeding ombudsman” to have transparent fairness
- better matching penalties to level of speeding

# How to win “hearts and minds” (3)

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Shift the focus of public education from crash consequences and personal risk (which have no credibility for low-level speeding ) to:

- publicising reductions in travel speeds and linking trauma reductions to them
- praising compliance
- demonstrating mismatch between some limits and roadside safety



# How to win “hearts and minds” (4)

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- \* promote ISA systems for vehicles (especially retro-fitted options), including possible subsidy programs
- \* control vehicle advertising to eliminate the promotion of speed

In Short, we need to re-think our whole approach to speed moderation.

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It is our only viable holding strategy until we can fully implement the Safe System

Safer Users

