



NZ TRANSPORT AGENCY
WAKA KOTAHĪ

NZ Transport Agency Waka Kotahi

Introducing the Safe System
approach to road safety



Purpose for today



To provide an overview of the **Safe System** approach to road safety and discuss the way we think about and manage road safety.



The *Safer Journeys* Safe System Vision



Safer Journeys, New Zealand's Road Safety Strategy 2010-2020, envisions:

“A safe road system increasingly free of death and serious injury”

Why we need a different approach



Our current road transport system is not as safe as it could be:

Scandinavian research indicates that even if all road users complied with road rules, fatalities would only fall by around 50% and injuries by 30%.

If everybody obeyed the road rules, New Zealand would still have around 200 road deaths each year.

The Safe System approach



The Safe System approach is about acknowledging:

1. human beings make mistakes and crashes are inevitable
2. the human body has a limited ability to withstand crash forces
3. system designers and system users must all share responsibility for managing crash forces to a level that does not result in death or serious injury
4. it will take a whole-of-system approach to implement the Safe System in New Zealand.



Human fallibility



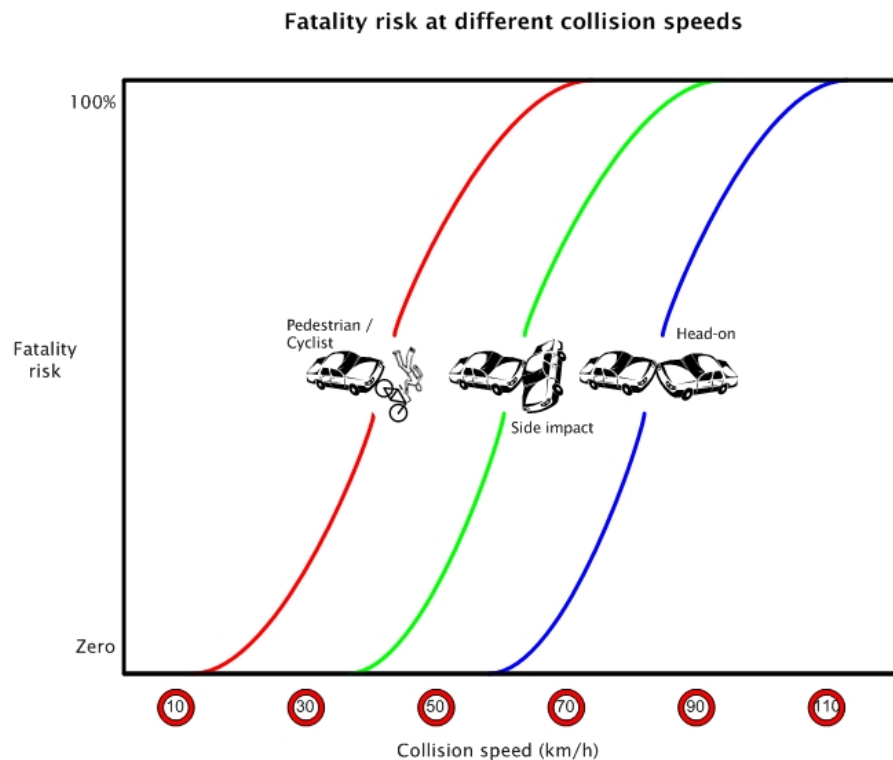
1. human beings make mistakes and crashes are inevitable



Human vulnerability



2. the human body has a limited ability to withstand crash forces



Shared responsibility



3. system designers and system users must all share responsibility for managing crash forces to a level that does not result in death or serious injury

Who is a system designer?

System designers include planners, engineers, policy makers, educators, enforcement officers, vehicle importers, suppliers, utility providers, insurers etc.

Who is a system (road) user?

System users include drivers, vehicle passengers, motorcyclists, cyclists, pedestrians etc.

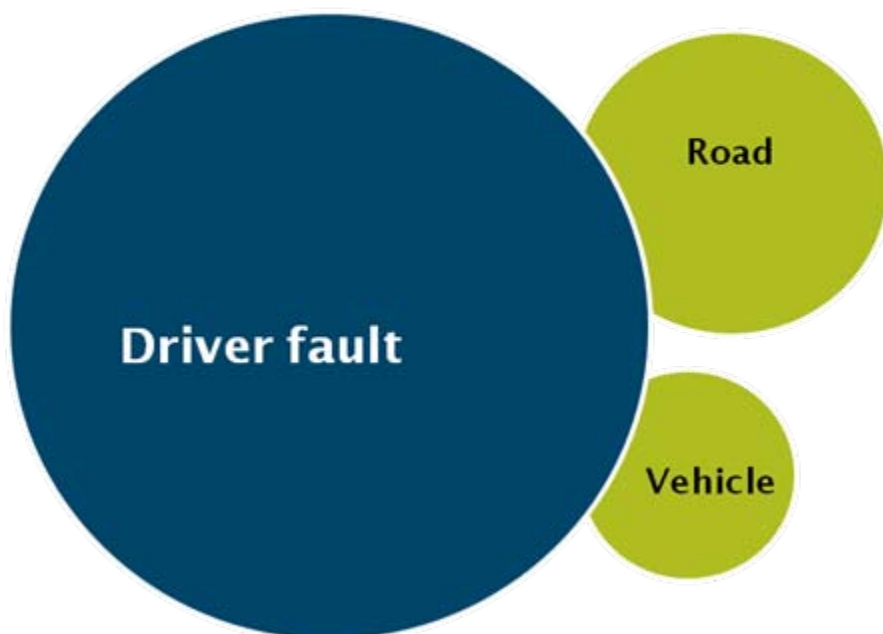


Where responsibility sits



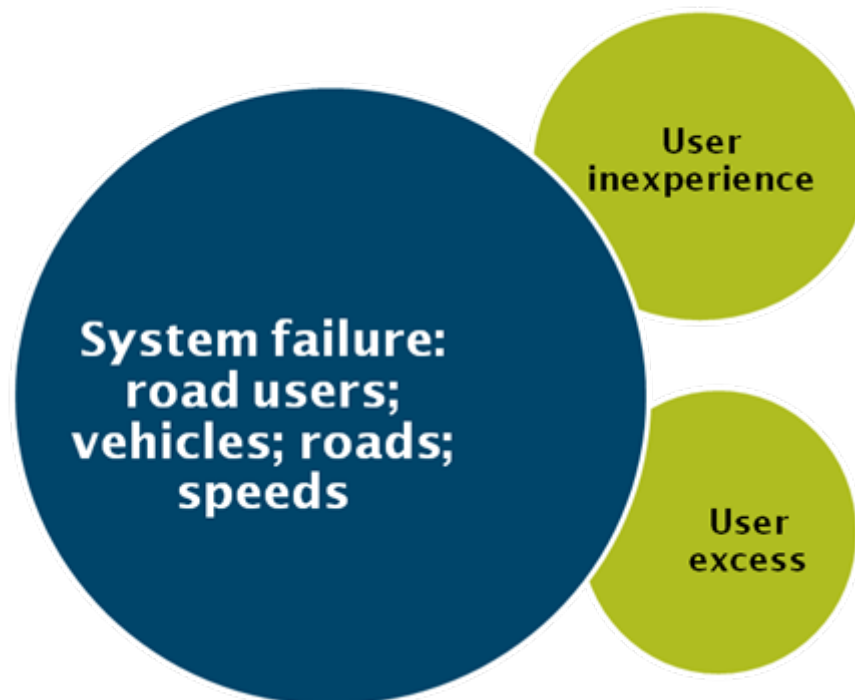
Traditional focus:

- Target driver behaviour



Safe System focus:

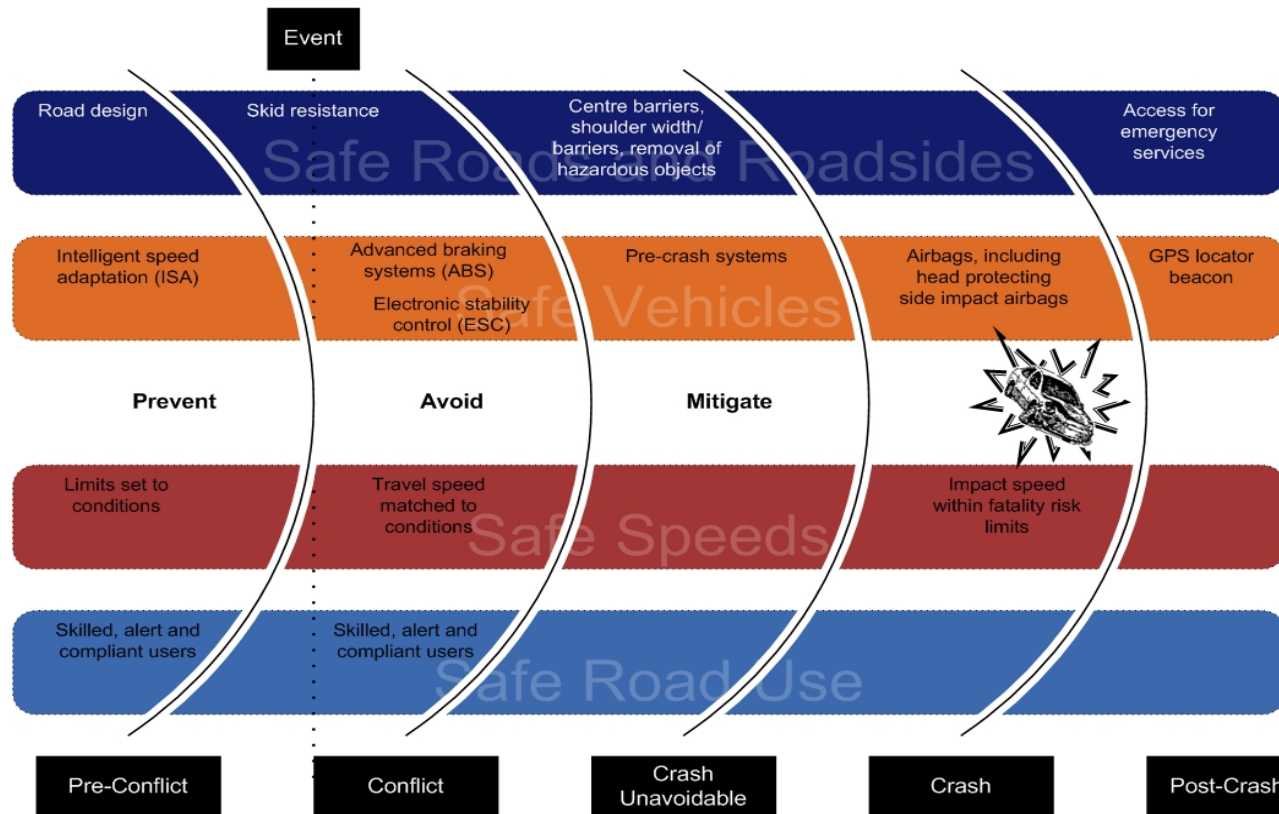
- Improve the system



Whole of system



4. it will take a whole-of-system approach to implement the Safe System in New Zealand.



The Safe System: an example



Why did that silly bugger crash into the pole?



New approach: What silly bugger put the pole where it could be crashed into?



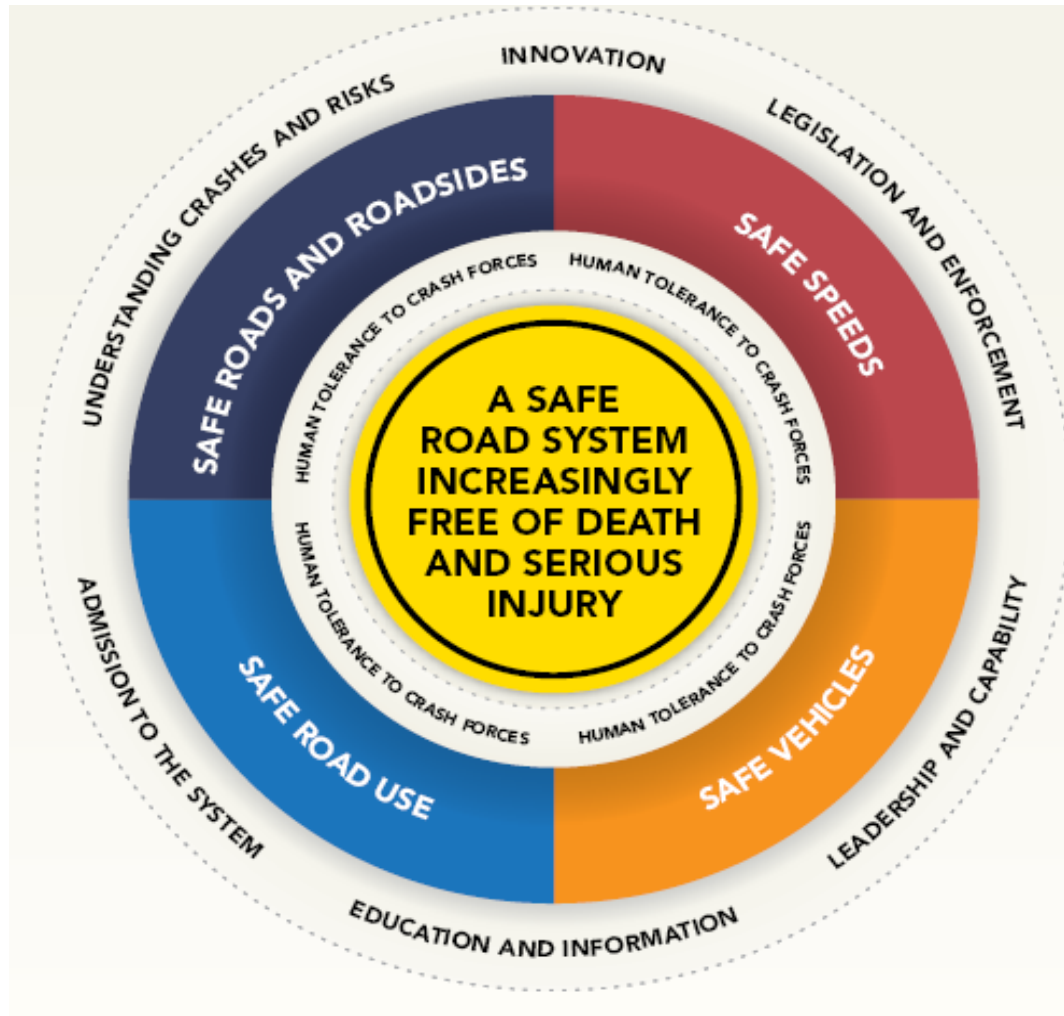


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Key components of the Safe System approach to road safety

The Safe System approach for system designers

The *Safer Journeys* Safe System diagram



Safe road design



Safe roads and roadsides – that are predictable and forgiving of mistakes. Their design should encourage appropriate road user behaviour and safe speeds

- Centre barriers and medians on rural roads
- Roundabout treatments at intersections
- Removal/barrier protection of roadside hazards
- Greater use of rumble strips



Safe speed design



Safe speeds – that should suit the function and level of safety of the road. Road users understand and comply with speed limits and drive to the conditions

- Rural road speed limits based on level of road protection
- More 80km/h speed zones where 100km/h open road limit is not safe
- Encouraging <40km/h in urban zones
- Speed messaging and ISA



Safe vehicle design



Safe vehicles – that help prevent crashes and protect road users from crash forces that cause death and serious injury

- Promoting advanced vehicle safety features to consumers
- Electronic Stability Control and head protecting airbags
- Intelligent Speed Adaption (ISA)

RIGHTCAR 
.govt.nz

How safe is
your car?

Safe road use design



Safe road use – ensuring road users are skilled and competent, alert and unimpaired. That people comply with road rules, choose safer vehicles, take steps to improve safety, and demand safety improvements

- Encouraging a culture of driving to the conditions
- Improving driver skills
- Improving licensing systems



Whole-of-system connections



The Safe System is greater than the sum of its parts.

Even slight improvements across roads, speeds, vehicles and users will lead to proportionally greater safety outcomes.



How do we get there?



From Reactive

Record and analyse crashes

Plan and respond to incidents

Incremental improvement

Auditing and reporting on crashes

To Proactive

Identify and analyse system risk

Sector-wide planning and action targeted to risk

Increasingly system-wide improvements

Auditing and reporting on system performance



What happens next?



The Safe System approach to be incorporated into

- RSAPing
- Road safety reporting
- Crash data gathering and analysis
- Demonstration projects
- Road safety audits

More information:

For further info see www.nzta.govt.nz

Thank you

