



# Defining Vision Zero and the Safe System Approach

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# Traditional approach to road safety

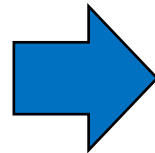
Information

Education

Campaigns

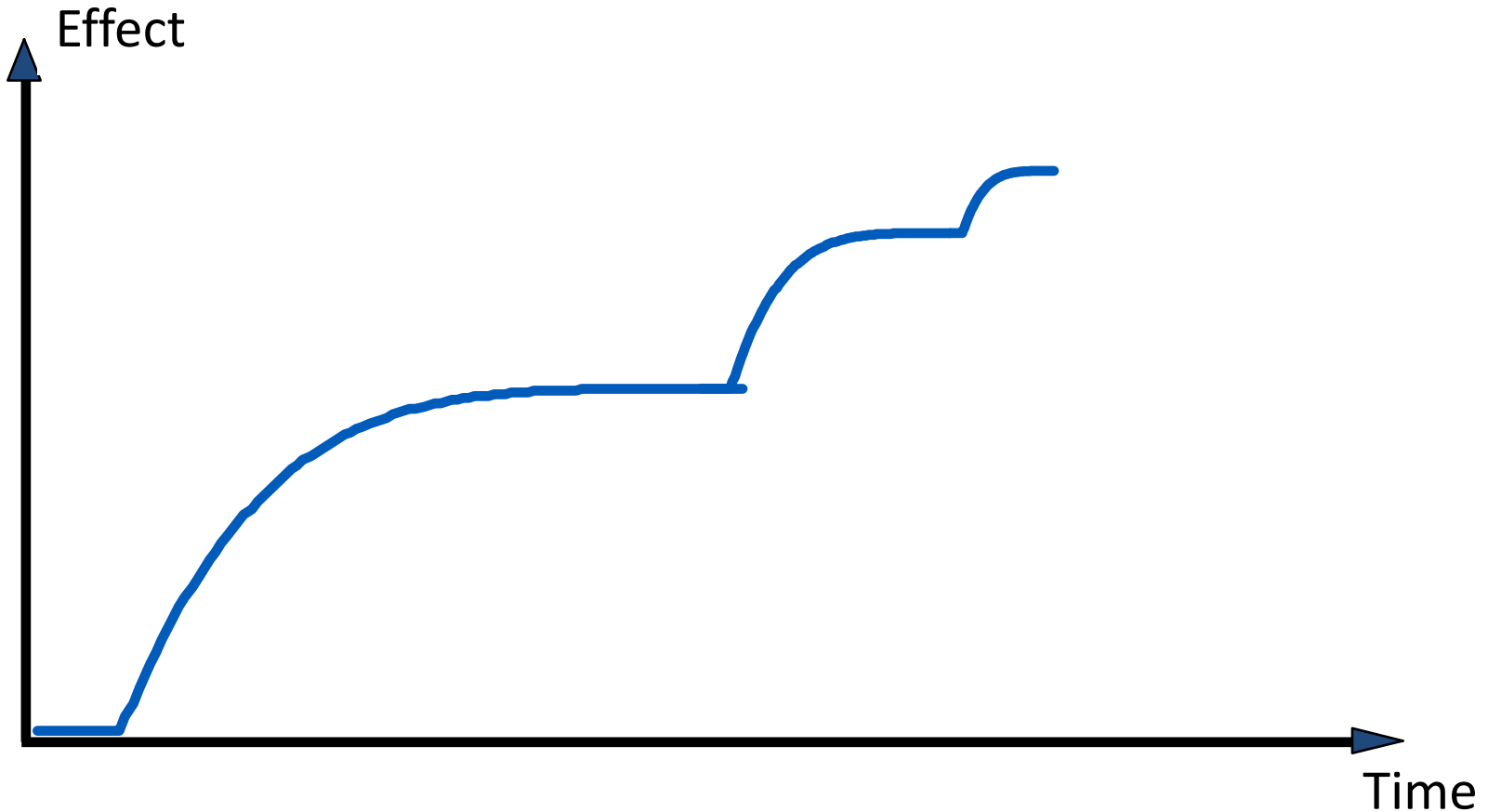
Regulations

Surveillance



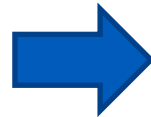
Make the individual road-user behave correctly in traffic (follow the rules)

# The need for a new approach



# Many names

- “Vision Zero”
- “Towards Zero”
- “Sustainable Safety”
- “Safe System”



Similar policies that fundamentally do not accept death and serious injuries as an acceptable product of mobility

# Vision Zero is a concept

**Vision Zero**

**≠**

**Commit to the figure zero and do more of the same**

# “Confounders”

- Vision Zero is not about zero accidents
- Zero deaths and severe (disabling) injuries should be seen as the ultimate long term goal but must be specified by intermediate targets on different levels
- Vision Zero is not focused only on technology solutions mitigating the consequences

# What is it?

**First and foremost Vision Zero should be seen as a vision based on an ethical foundation, creating and supporting a totally new perspective, a paradigm shift, on the road safety problem and the approach to solve it**

# Vision Zero - fundamental principles (I)

- People make mistakes that can lead to road crashes
- The human body has a limited physical ability to tolerate crash forces before harm occurs



The design of the road transport system should guide the road user to an as safe behaviour as possible but still mitigate the consequences of common human errors since they still will occur



# Guardrails



# Median barriers



# Vision Zero – fundamental principles (II)

- All parts of the system must be strengthened to multiply their effect, and if one part fails, road users are still protected



Speed limits and speed management, driver assistance systems, injury mitigating properties of the vehicles etc. must be combined in an optimised way




# Safe pedestrian crossings



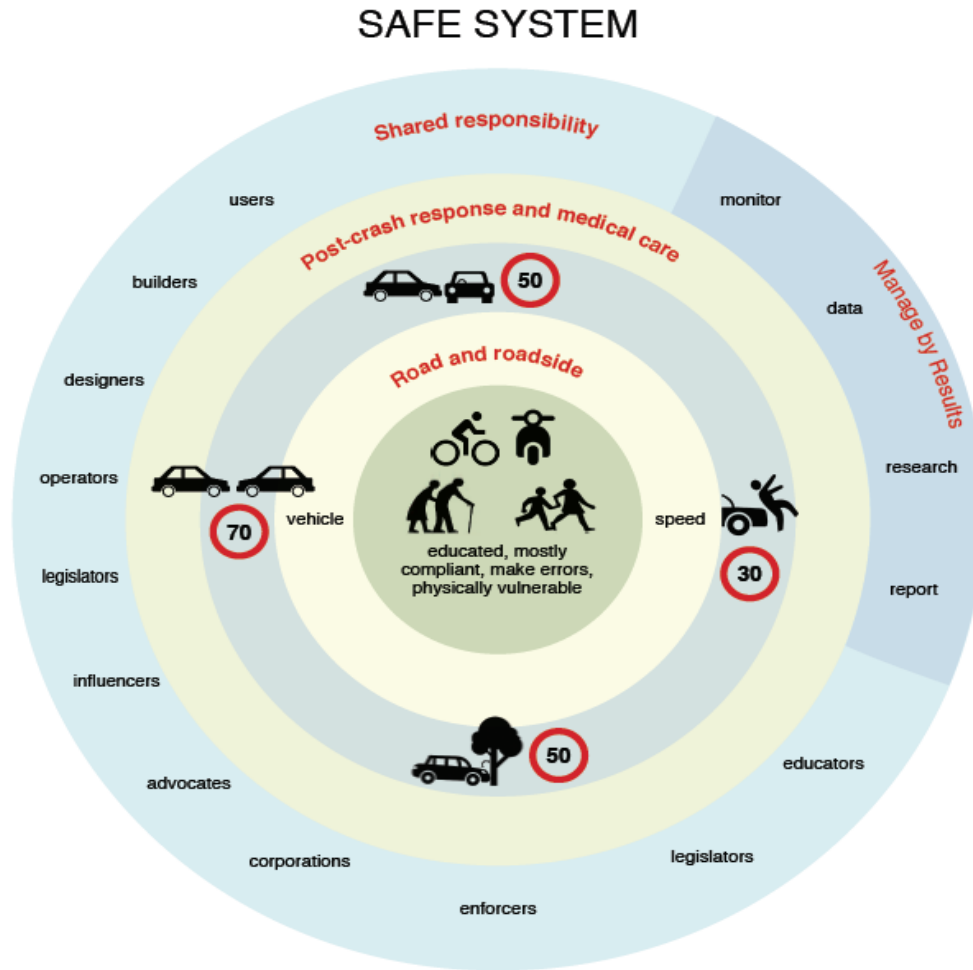
# Vision Zero – fundamental principles (III)

- A shared responsibility exists amongst those who design, build, manage and use roads and vehicles and provide post-crash care to prevent crashes resulting in serious injury and death

# Shared responsibility

1. The designers of the system are always ultimately responsible for the design, operation and use of the road transport system and thereby responsible for the level of safety within the entire system.
  2. Road users are responsible for following the rules for the safe use of the road transport system decided by the system designers.
  3. If road users fail to obey these rules due to lack of knowledge, acceptance or ability, or if injuries occur, the system designers are required to take necessary further steps to counteract people being killed or seriously injured.
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# A systems approach



# Traditional road safety policy vs. Vision Zero

	Traditional road safety policy	Vision Zero
What is the problem?	Try to prevent all crashes	Prevent crashes from resulting in fatal and serious casualties
What is the appropriate goal?	Reduce the number of fatalities and serious injuries	Zero fatalities and serious injuries
What are the major planning approaches?	Reactive to incidents Incremental approach to reduce the problem	Proactively target and treat risk Systematic approach to build a safe road system
What causes the problem?	Non-compliant road users	People make mistakes and people are physically fragile/vulnerable in crashes. Varying quality and design of infrastructure and operating speeds provides inconsistent guidance to users about what is safe use behaviour.
Who is ultimately responsible?	Individual road users	Shared responsibility by individuals with system designers
How does the system work?	Is composed of isolated interventions	Different elements of a Safe System combine to produce a summary effect greater than the sum of the individual treatments- so that if one part of the system fails others parts provide protection.