



# Safe System Approach

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# About EASST

EASST is a **partnership** of local road safety organisations:

- Albania
- Armenia
- Azerbaijan
- Belarus
- Georgia
- Greece
- Kazakhstan
- Kyrgyzstan
- Latvia
- Moldova
- Mongolia
- Russia
- Tajikistan
- Ukraine



# The Global Road Safety Plan



## Road Safety Management



## Safer Road Users



## Safer Roads and Mobility

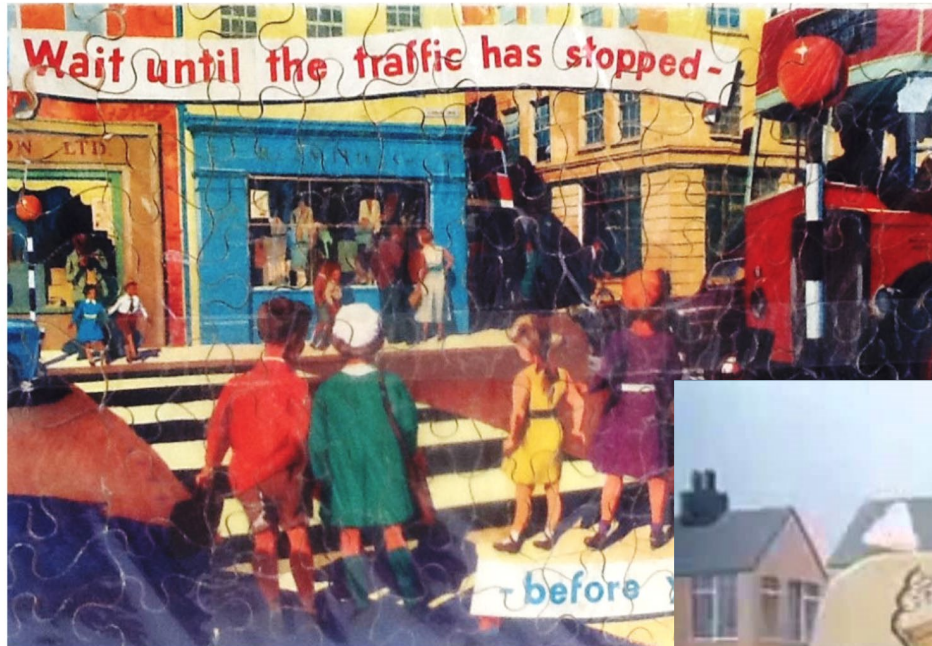


## Safer Vehicles



## Post Crash Response

# Thinking about road safety has changed over time



# 1900-1920



Crash caused by:  
Bad luck

Research into:  
What happened

Measures:  
Ad hoc



# 1920-1950



Crash caused by:  
Really bad drivers

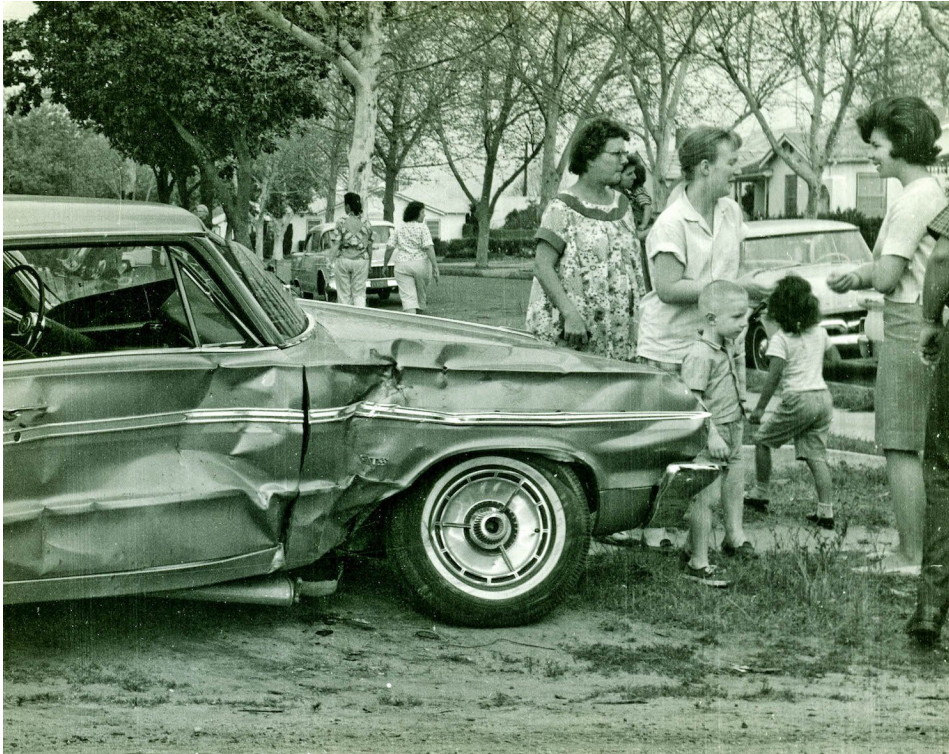
Research into:  
Who

Measures:  
Educate, punish

“The nut behind the wheel.”

*Time periods and their characteristic road safety paradigms (Hagenzieker et al, 2014, OECD 1997)*

# 1950-1970



Crash caused by:  
Road user or  
vehicle or road

Research into:  
The cause

Measures:  
Education,  
enforcement,  
engineering – 3 E's

# 1960-1985



Crash caused by:  
Multi-causal  
approach

Research into:  
Which causes,  
technical  
improvements

Measures:  
Technical  
solutions for  
vehicles and roads

*Time periods and their characteristic road safety paradigms (Hagenzieker et al, 2014, OECD 1997)*



# 1985/90 till now



Crash caused by:  
Result of an  
integral road  
system

Research into:  
Multi-dimensional  
including  
economic analysis

Measures:

**Adapt road system to road user**

*Time periods and their characteristic road safety paradigms (Hagenzieker et al, 2014, OECD 1997)*

# Traditional v Safe System

	Traditional Approach	Safe System
<b>Problem?</b>	Try to prevent crashes	Prevent crashes resulting in death and injury
<b>Goal?</b>	Reduce the number of fatalities and injuries	Zero fatalities and serious injuries
<b>Cause of problem?</b>	Bad road users and rule breakers	People make mistakes and are vulnerable. Quality and design of infrastructure. Speeds. Management and guidance.
<b>Who is responsible?</b>	Individual road users	Shared responsibility – individuals and system designers

# Vision Zero



1997 Swedish Parliament – ‘Putting people first’

# Key principles

Recognise that **People Make Mistakes**





# Key principles

**Human Bodies** have little tolerance for crash forces



# Key principles

Road Safety is a **shared responsibility**



# Haddon's Matrix

PHASE		FACTORS		
		HUMAN	VEHICLES & EQUIPMENT	ENVIRON- MENT
<b>BEFORE CRASH</b>	<b><i>CRASH PREVENTION</i></b>	Information Attitudes Behaviour Enforcement	Maintenance Speed management	Road design Speed limits Pedestrian facilities
<b>CRASH</b>	<b><i>INJURY PREVENTION DURING CRASH</i></b>	Using eat belts & car seats Drink Driving Distraction	Seat belts Car seats	Crash barriers Safe & forgiving roads
<b>AFTER CRASH</b>	<b><i>LIFE SAVING</i></b>	First aid skills Access to rescue aid	Cutting equipment Fire risk	Rescue facilities Congestion

# Forgiving Roads

**Good design can encourage good behaviour**



**Bad design can kill and injure**



# Speed



Pedestrian fatalities  
increase with speed

**5%**  
cut in average  
speed

Can result in a  
**30%**  
reduction in fatal  
road crashes

# Education & Enforcement



Enforcement is not  
about  
**Catching and  
punishing**

It is about  
**prevention**

Should be done  
together



**We all have a role to play  
in reducing road death and  
injury**



Eastern Alliance for Safe  
and Sustainable Transport

Thank you

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