19th Transport Sector Coordinating Committee Meeting 19-20 October 2022 • Almaty, Kazakhstan



19-е заседание Координационного комитета по транспортному сектору 19–20 октября 2022 г. • Алматы, Казахстан

# Results focused and proactive road safety management

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## Content

- Safe System Approach the forgiving road system
- Road safety management by objectives
- Using data for safe infrastructure program

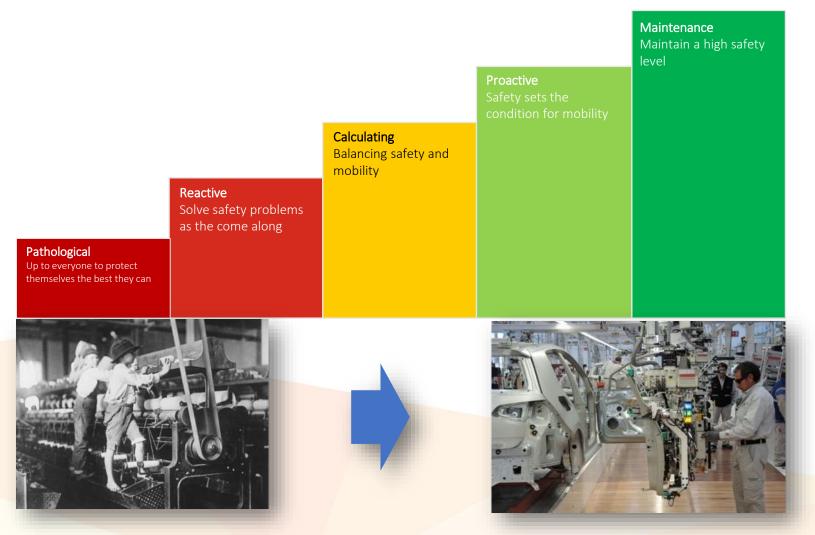
# Inherent risks in the transport system

- Open and complex
- Major mismatch between components of the system
- Unclear responsibilities
- Unclear safety philosophy
- > We need change





# The ladder of safety culture



Source: Swedish Transport Administration



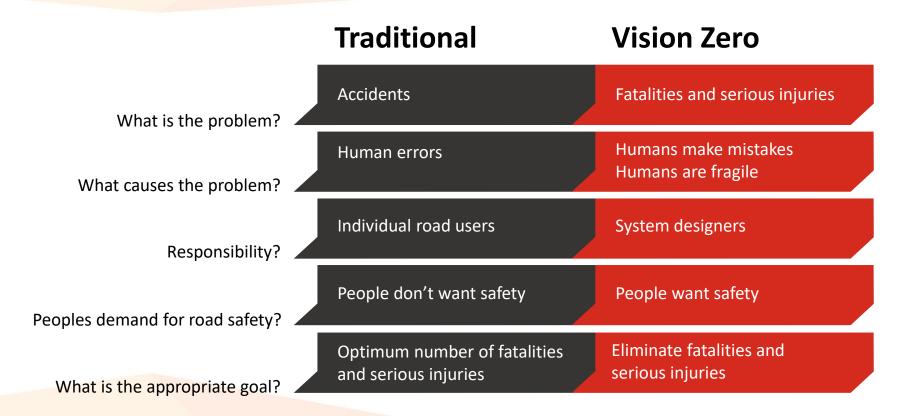
The Vision Zero is an expression of the ethical imperative that **it can never be acceptable that people are killed or seriously injured** when moving within the road transport system



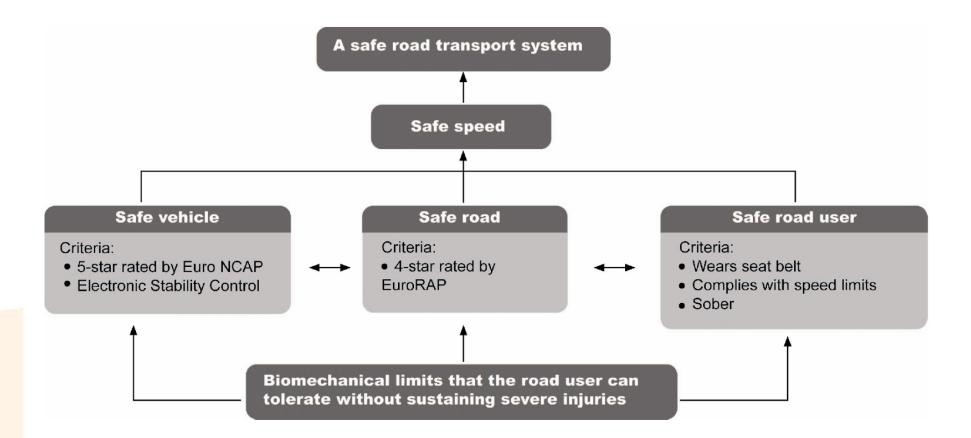
# The Safe System Approach

- A vision of <u>zero deaths and serious injuries</u> on our roads
- Movement should not be produced at the expense of human trauma
- Recognises that <u>people will always make mistakes</u> and have crashes, but the road system should be forgiving and crashes should not result in death or serious injury.
- In addition to road users, <u>system designers have a</u> <u>responsibility</u> to reduce the harm being done





# A model of a Safe System



Managing a Safe System by objective includes:

- The political will and leadership to adopt ambitious targets
- The implementation evidence based interventions
- Ensuring the required management functions are in place





Zero Road Deaths and Serious Injuries Leading a Paradigm Shift to a Safe System

OECD



Research Report

# DECADE OF ACTION FOR ROAD SAFETY 2021 - 2030

The resolution 'proclaims the period 2021-2030 as the Second Decade of Action for Road Safety, with a goal of reducing road traffic deaths and injuries by at least 50 per cent from 2021 to 2030...'.

### **GLOBAL ROAD SAFETY PERFORMANCE TARGETS**



Target 1: By 2020, all countries establish a comprehensive multisectoral national road safety action plan with time-bound targets.



Target 2: By 2030, all countries accede to one or more of the core road safety-related UN legal instruments.



Target 3: By 2030, all new roads achieve technical standards for all road users that take into account road safety, or meet a three star rating or better.



Target 4: By 2030, more than 75% of travel on existing roads is on roads that meet technical standards for all road users that take into account road safety.



Target 5: By 2030, 100% of new (defined as produced, sold or imported) and used vehicles meet high guality safety standards, such as the recommended priority **UN Regulations, Global** Technical Regulations, or equivalent recognized national performance requirements.

**6** 2030 50% Target 6: By 2030, halve

the proportion of vehicles

travelling over the posted

speed limit and achieve

a reduction in speed-

related injuries and

fatalities.

Target 7: By 2030, increase the proportion of motorcycle riders correctly using standard helmets to close to 100%.

2030



Target 8: By 2030, increase the proportion of motor vehicle occupants using safety belts or standard child restraint systems to close to 100%.



Target 9: By 2030, halve the number of road traffic injuries and fatalities related to drivers using alcohol, and/or achieve a reduction in those related to other psychoactive substances.



Ν Target 10: By 2030, all countries have national laws to restrict or prohibit the use of mobile phones while driving.



regulation in this area.

Target 11: By 2030, all countries to enact regulation for driving time and rest periods for professional drivers, and/or accede to international/regional



Target 12: By 2030, all countries establish and achieve national targets in order to minimize the time interval between road traffic crash and the provision of first professional emergency care.

PILLAR 1: Road safety management PILLAR 2: Safer roads and mobility

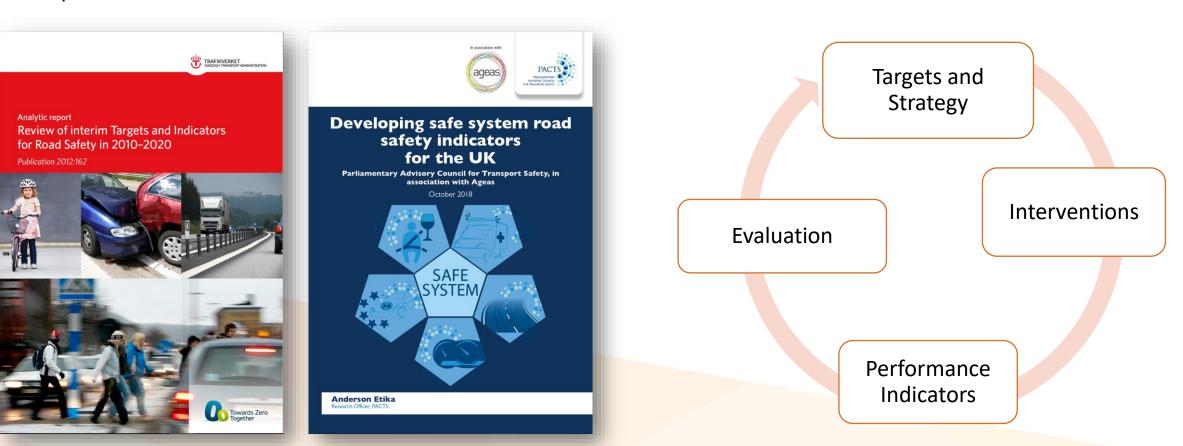
- PILLAR 3: Safe vehicles
- PILLAR 4: Safe road users

PILLAR 5: Post-crash response

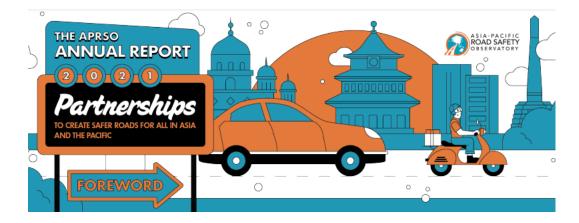
Following the request of the United Nations General Assembly, on November 22, 2017 Member States reached consensus on 12 global road safety performance targets. For more information: http://www.who.int/violence injury prevention/road traffic/road-safety-targets/en/



### Examples



Plan-Do-Check-Act



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### THE SAFETY PERFORMANCE AND MANAGEMENT LANDSCAPE

Beyond looking at crash data, it is important to consider the impact of safety performance and institutional management indicators on road safety in APRSO member countries.



### **Road Safety Management**

Most APRSO member countries have certain foundations of the road safety management system, such as a lead agency and a national road safety strategy - but face challenges in securing funding.



### Speed

All APRSO member countries have a National Speed Limit Law.

### Safer Roads

This refers to enhancements to the road infrastructure that reduce fatal and serious injury crashes. The majority of APRSO member countries currently use road safety engineering tools and also conduct interventions for high-risk locations.



With the exception of Australia and New Zealand, most APRSO countries are not vet enforcing safer vehicle standards set by the O United Nations, Safer vehicle technologies minimize the risk of crashes and the severity of injuries - for instance, helping to prevent skidding, or reducing crash impact.



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### **Drug-Driving**

The majority of APRSO countries have passed a national drug-driving law, but there is currently no information regarding the effectiveness of the legislation or its enforcement in any jurisdiction.

### **Drink-Driving**

Most APRSO member countries have a National Drink-Driving Law, although they lack data on fatalities that involve drink-driving. Most use a blood alcohol content limit of less than 0.05 g/ dL, which aligns with WHO best practice.



### 14 of 20 APRSO member countries have a

law on hand-held mobile phone use while driving, but only a few countries such as Fiji, Kyrgyz Republic, and Turkmenistan extend the prohibition to hands-free phones.

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### Vehicle Fleet Mix

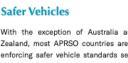
9 out of 14 APRSO member countries with vehicle registration data have vehicle fleet mixes that are dominated by motorcycles. They include Bangladesh, Cambodia, Lao PDR and the Philippines.



All APRSO member countries except Afghanistan have a National Motorcycle Helmet Law which applies to riders and passengers, but only a few of these countries require helmets to be fastened and to be of an



acceptable quality standard.

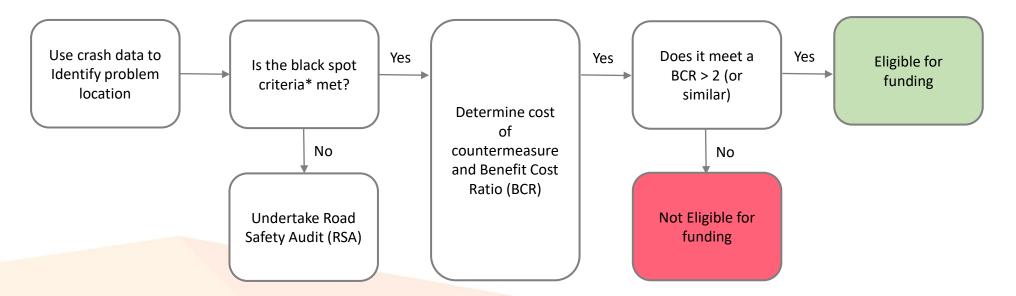


# Using data for safe infrastructure programming

- 1. Reactive approach Black Spot Projects
- 2. Proactive approach Road assessment and infrastructure programs

# Using data for safe infrastructure programming

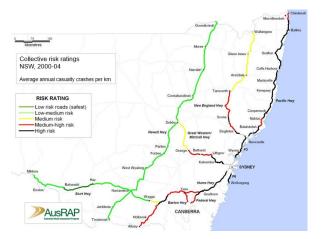
### Generic black spot program



\* Black Spot criteria example: For intersections or mid-Block – 3 casualty crashes in the last 5 years For road length – 0.20 crashes/km/year over last 5 years

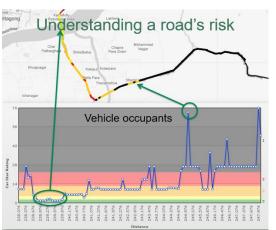
# Using data for safe infrastructure programming

### 1. RISK MAPS



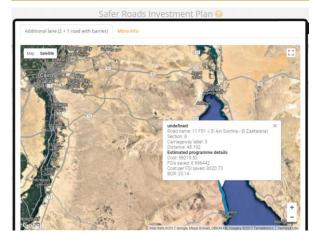
- Colour coded map showing the where people are dying and where their crash risk is greatest
- Can inform priorities across all pillars of road safety action (management, infrastructure, vehicles, road users and post-crash care)

### 2. STAR RATING



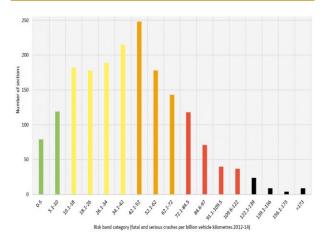
- Based on road inspection data
- Simple and objective measure of the level of safety which is 'built-in' to the road
- Can be completed in the absence of crash data
- Five-star road segments are the safest while one-star are the least safe

### **3. INVESTMENT PLANS**



- Considers 90 proven road
  improvement options
- A Safer Roads Investment Plan (SRIP) priorities and costs improvement options can improve Star Ratings and save lives

### **4. PERFORMANCE TRACKING**



- Regular risk mapping or star rating enables performance monitoring
- Enables celebration of success and action to be taken to address persistently high-risk roads

# Recommendations – key focus

- In road safety management, the coordination of Police and Road Traffic Authorities in using crash data and other evidence to plan road safety activity
- In interventions, stronger focus on pedestrian safety