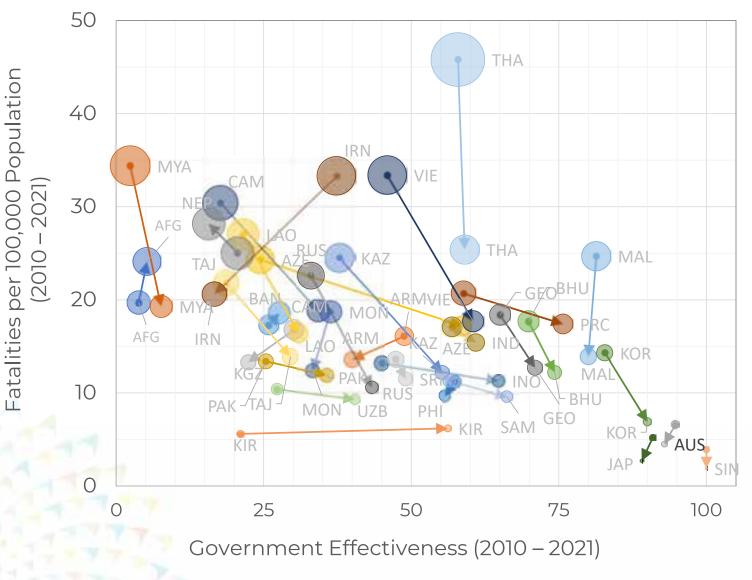
## Data-Driven Road Safety Investments

Leveraging Connections, Collection, and Collaboration

Michael Anyala | Senior Transport Specialist (Road Asset Management), Transport Sector Office, ADB



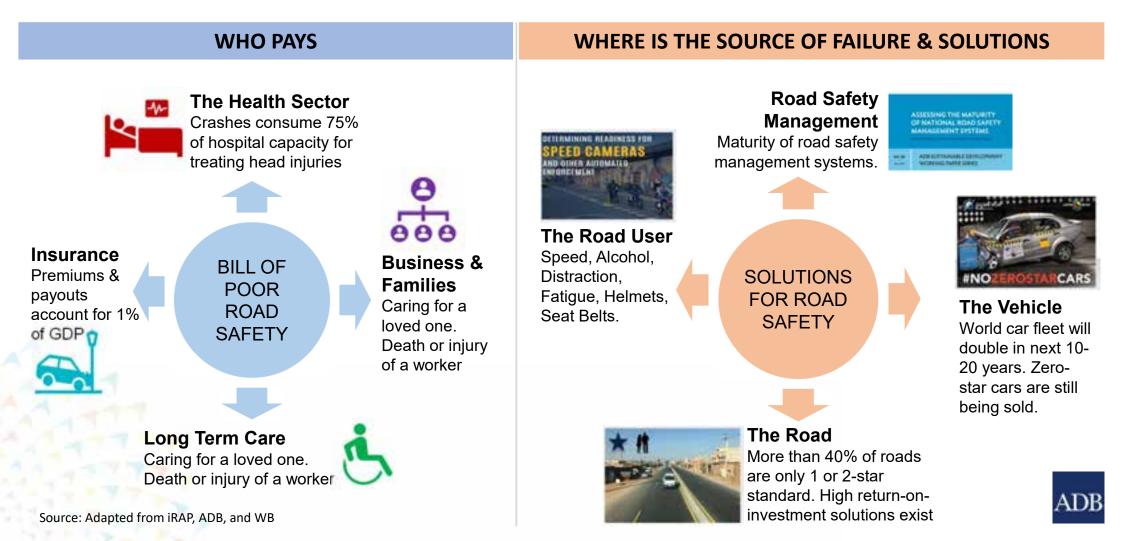
Emerging economies lose 3 – 5% of GDP annually

Just 3% of Current Annual Transport Investment Needs is Needed for Road Safety in Asia-Pacific

(1) ADB (2017). *Meeting Asia's Transport Infrastructure Needs, (2)* World Bank Group (2022). *Saving Lives Through Private Investment in Road Safety.* 

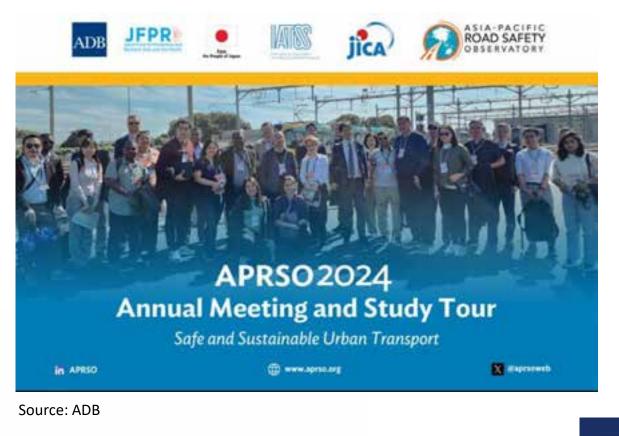
Source: ADB analysis of data from WB and WHO

### **Costs and Benefits of Road Safety are Disconnected**



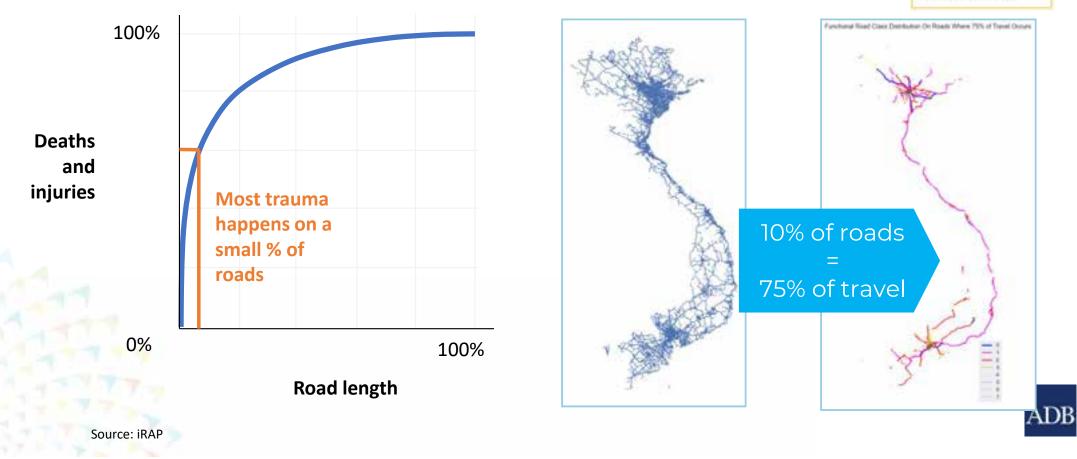
#### Fostering Connections, Collection, & Collaboration through the Asia-Pacific Road Safety Observatory (APRSO)

- Established in 2020 by ADB, WB, UNESCAP, WHO, FCDO, FIA, and ITF.
- Focal hub for connecting road safety stakeholders in the region (27 member countries).
- APRSO has 27 country members
- Supports data collection and studies to impact road safety policies.



#### **Targeted Investment = Large Impact**

Very large impacts can be achieved by targeting a small percentage of a nation's roads



4 2030

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.

## **AI Helmet Detection Study**



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

Country / region	Motorbikes (Millions)	Persons (Millions)	Helmets (Millions)	Helmet use rate (%)
Vietnam	7.42	8.66	6.65	77%
Malaysia	1.06	1.17	0.93	79%
Luzon (Philippines)	3.37	3.97	3.40	86%
Karnataka (India)	0.57	0.67	0.48	72%
Tamil Nadu (India)	0.15	0.18	0.10	57%

Helmet use rate per road type in Karnataka





### Shaanxi Road Safety Demonstration Project

- ✓ USD 344m project implemented by the Shaanxi Provincial Transport Department and Asian Development Bank (ADB).
- Realignments, paved shoulders, safety barriers, reduced speed limits, traffic calming and pedestrian crossings across >800km of roads.









Deaths and injuries down by 33% and 53%

32 lives and 868 injuries saved annually

**3-stars or better roads increased by 52%** 

200 professionals in training

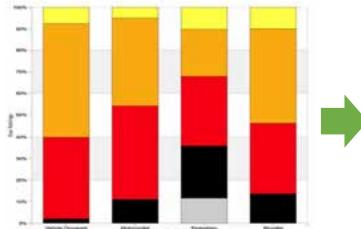
2,400 students, teachers, parents and residents in activities



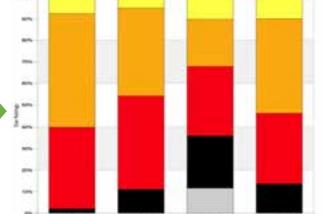
## Safer Designs Often Cost Just 5% More to Implement



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.



Existing road



Design version 1 – business as usual

Design version 2 – with audit and iRAP interventions





Source: ADB and iRAP

## We Can Find Solutions to Most Problems

#### **Problems**

#### **Infrastructure**

- Engineers hesitant to implement treatments not in design standards
- "Expensive"

#### <u>Other</u>

- Resistance to cross-departmental collaboration
  - Separate funding
  - Different KPIs
  - Lack of incentives
- Stakeholder and political support



#### **Solutions**

- International evidence base (ChinaRAP/iRAP)
- Local, capable technical team
- Pilot project evidence
- Measurable outcomes / economic analysis
- Ministry endorsed a guideline document for road safety treatment
- National program/agenda aligned
- Leadership
  - Champion within government
  - Bring the right people to the table
- Communication for collaboration
  - Relevance of content to other stakeholders/partners



Source: ADB

# Thank You

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