Asian Transport Observatory

Road Safety:
Building Safer and More Resilient Transport Systems

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Webinar 4: Road Safety: Building Safer and More Resilient Transport Systems
3 October 2025

ADB ASIAN DEVELOPMENT BANK

AIIB ASIAN INFRASTRUCTURE INVESTMENT BANK

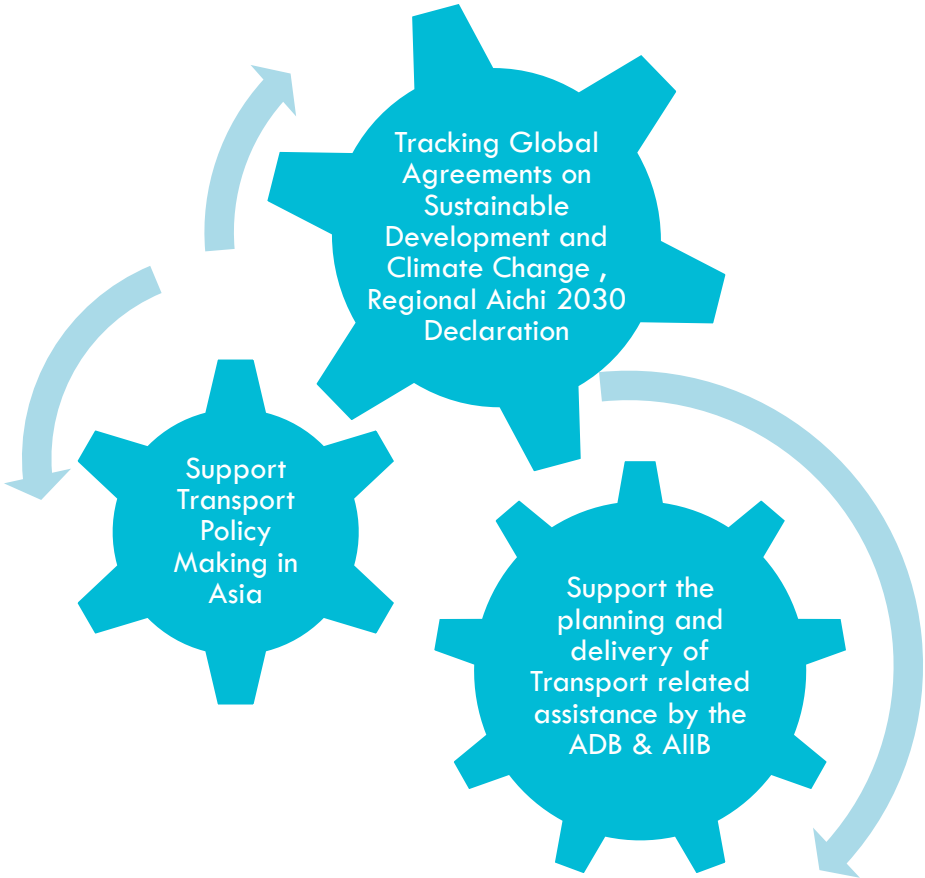
Asian Transport Observatory (ATO)

A Catalyst for Sustainable Transport in Asia

52 Economies (ADB Members + Russia and Iran)

460 Urban Centers (412 Asia-Pacific, 48 International)

51 Urban Centers with a detailed review



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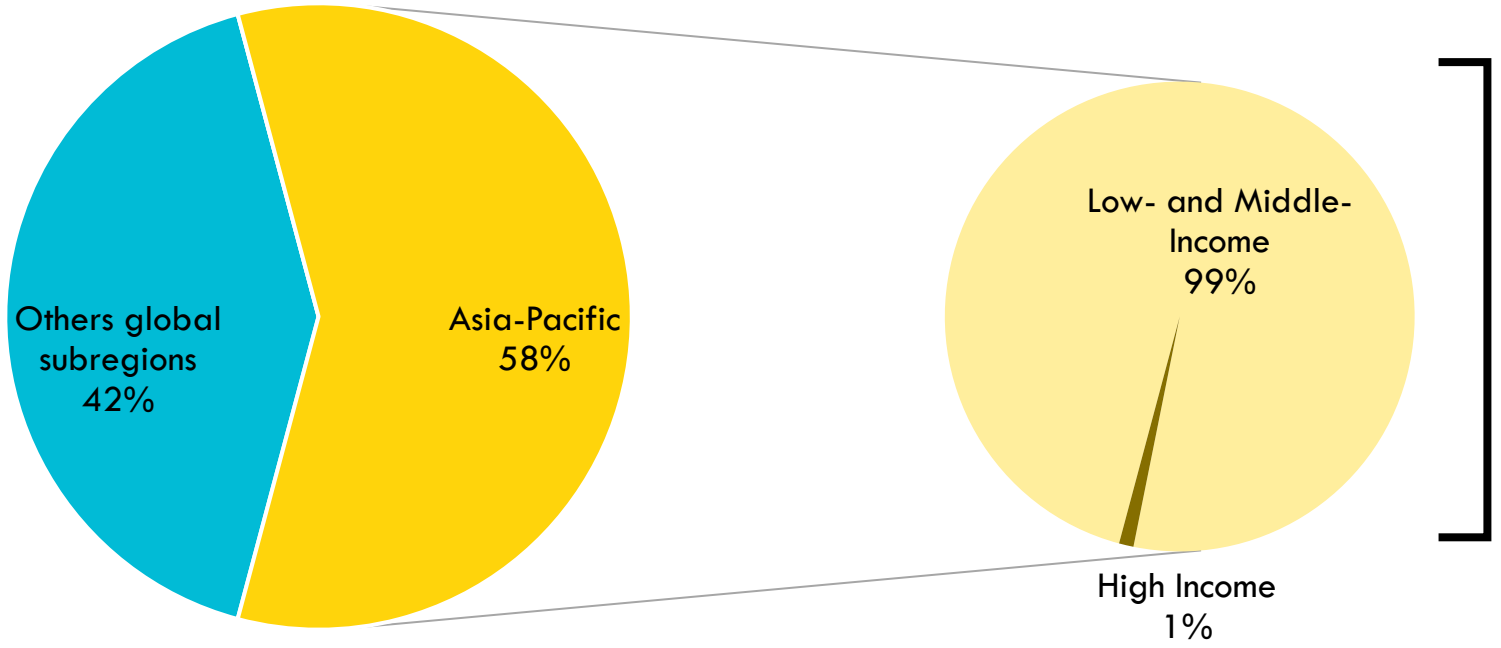
Every 17 minutes, someone dies in a Road crash

in Indonesia,

One every minute in Asia-Pacific

Asia-Pacific in the Global Picture

5% decrease since 2010



11% decrease since 2010

Country-wide variation exists.

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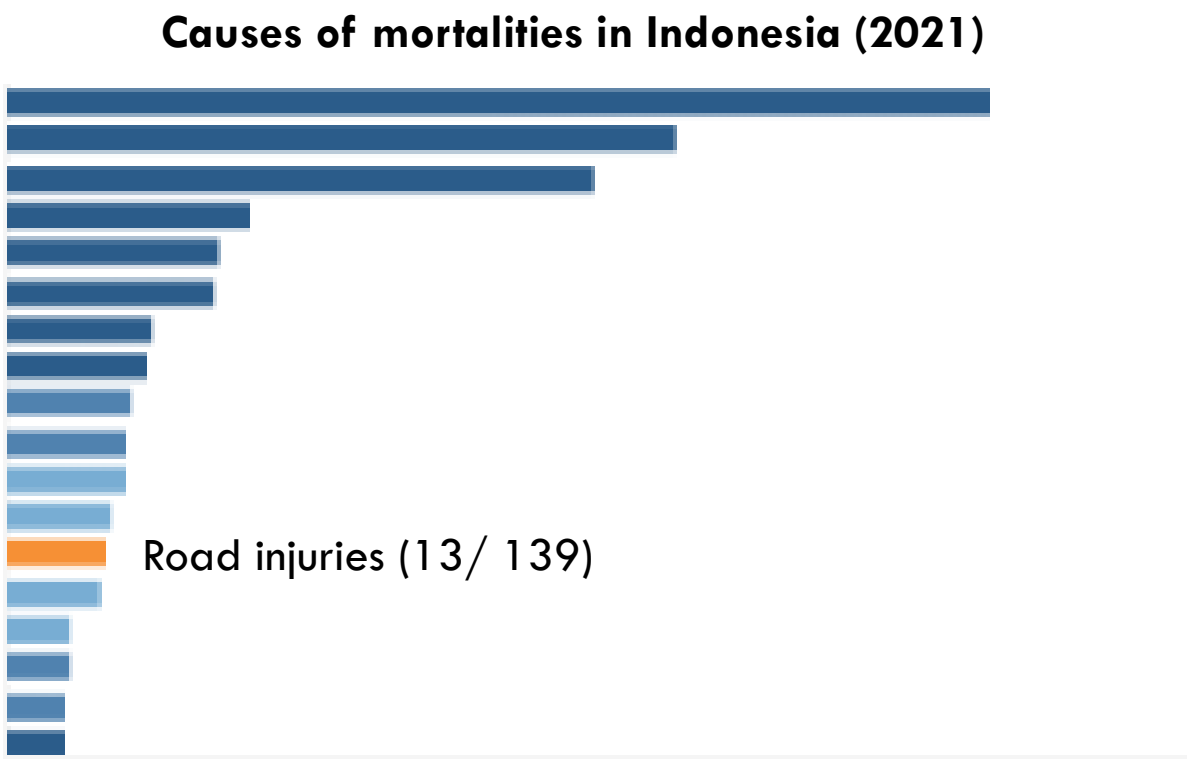
Source: WHO

Indonesia's Road Safety Challenge



- 31,000 road crash fatalities
- 2% of all deaths in country (2021)
- Road crash fatalities have slowed after 2016, but is still a major cause!

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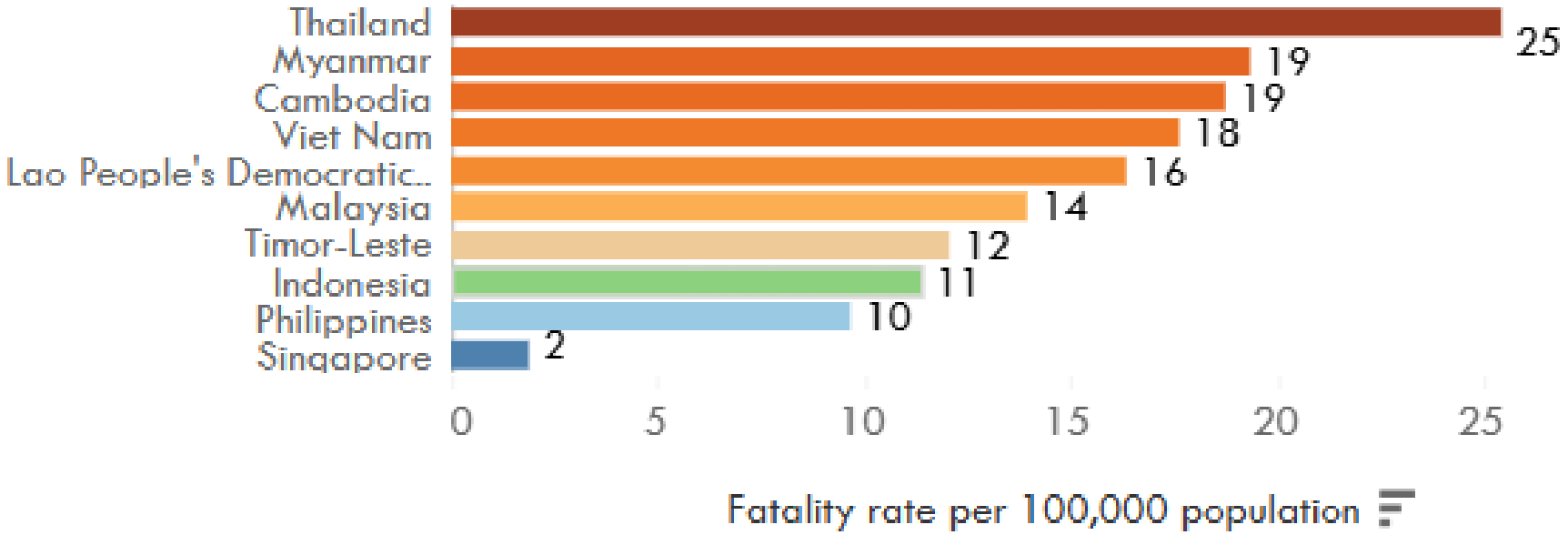
Source: IHME, 2024

How Indonesia Compares with Neighbors

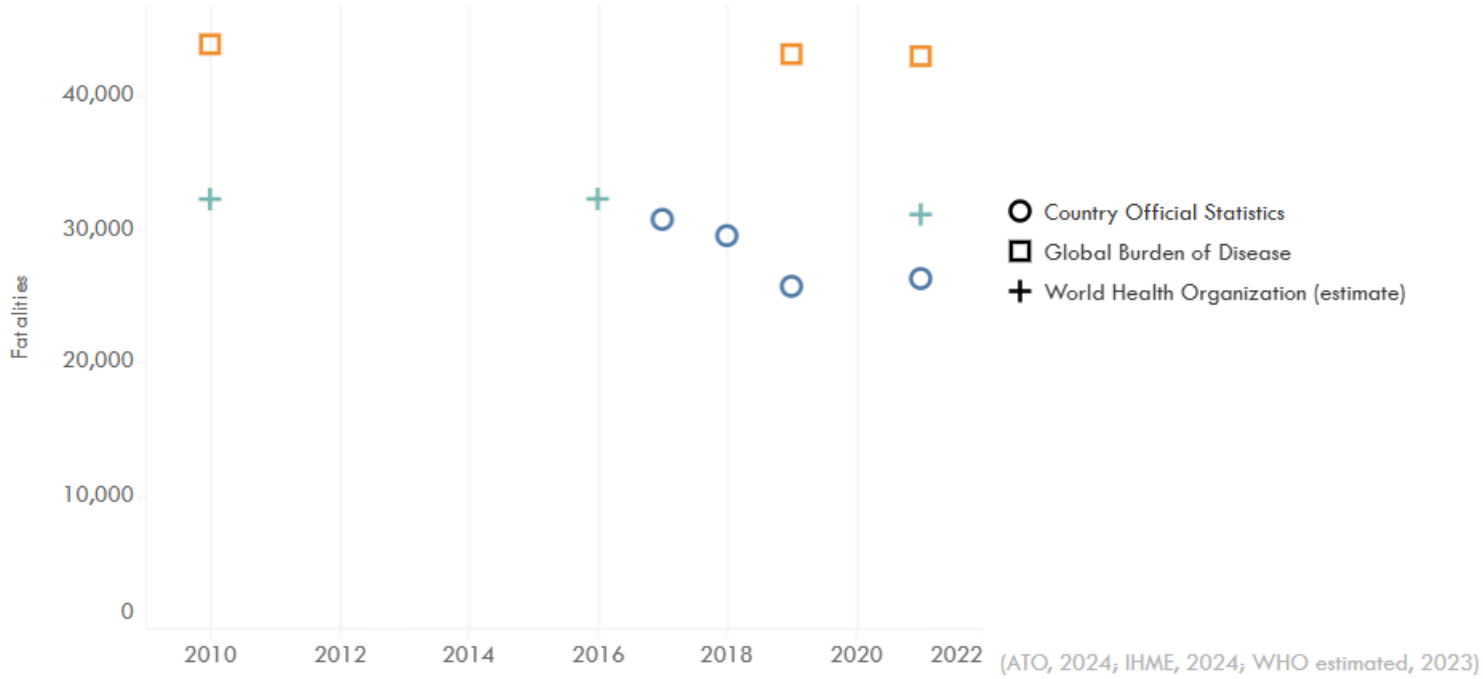
WHO estimated road crash fatality rate in Indonesia compared to other countries in South-East Asia (2021)



(WHO estimated, 2023)

Challenge 1: Data Gaps

Road crash fatalities, by source



(ATO, 2024; IHME, 2024; WHO estimated, 2023)

Road crash fatality rate, by source

WHO (estimate) for Year 2021
11.3 per 100,000 population

WHO (country-report) for Year 2021
9.1 per 100,000 population

Country official statistics for Year 2022
10.2 per 100,000 population

GBD estimate for Year 2021
***15.7* per 100,000 population**

Challenge 2: Helmet Use and Enforcement

Yogyakarta (2018):

89% wore helmets, but only 55% correctly

Bandung (2018):

76% drivers and 48% passengers wore helmets correctly

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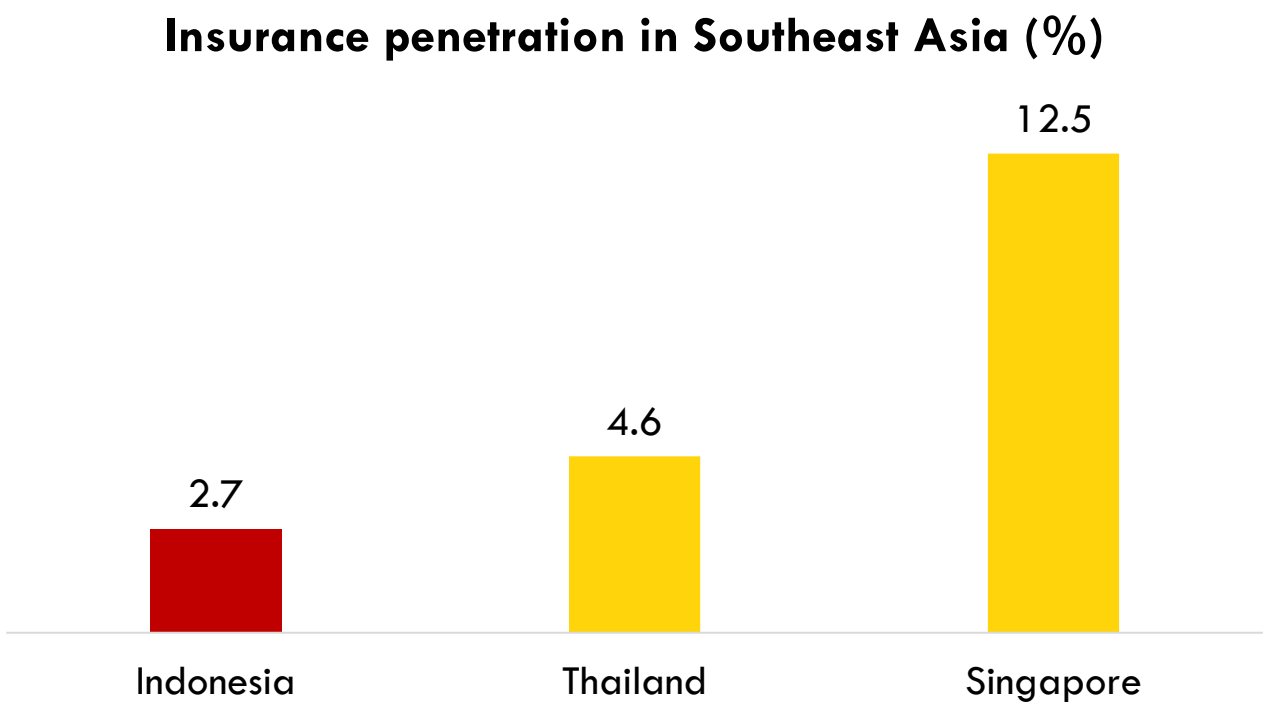
Source: IOP - https://iopscience.iop.org/article/10.1088/1755-1315/1294/1/012013/pdf#:~:text=speed%20limit%20are%20closely%20linked,around%2071%25%20(10).

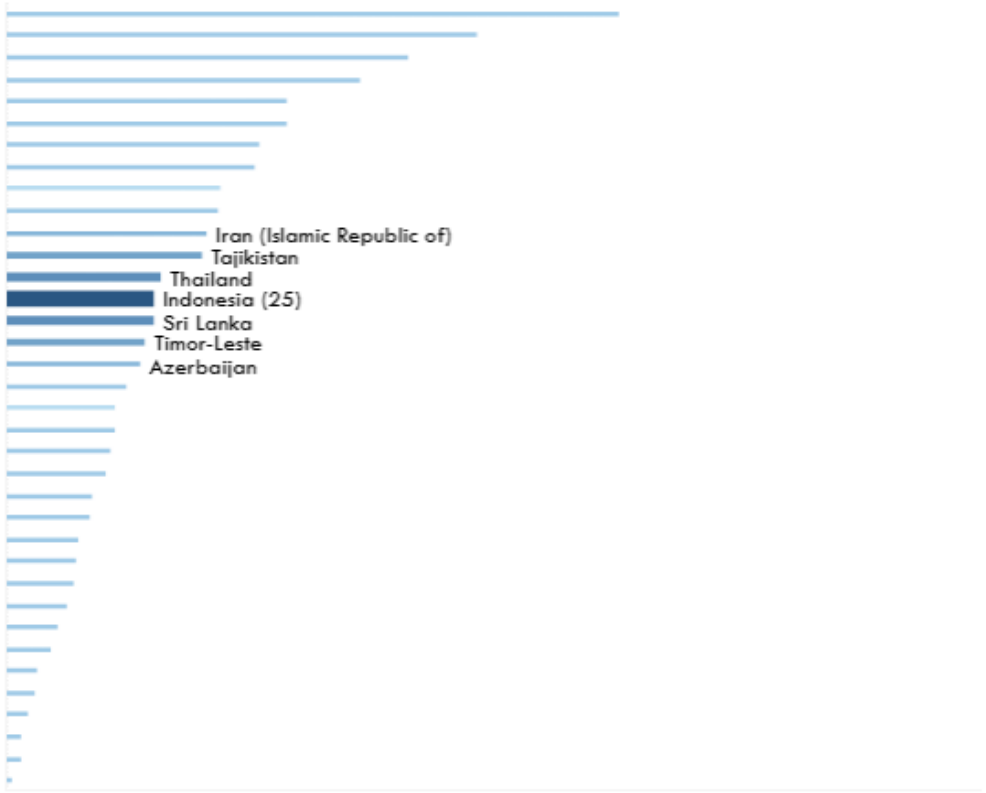
Challenge 3: Low Insurance Uptake



Source: https://jakartaglobe.id/business/mandatory-vehicle-insurance-to-face-challenges-ahead#goog_rewarded

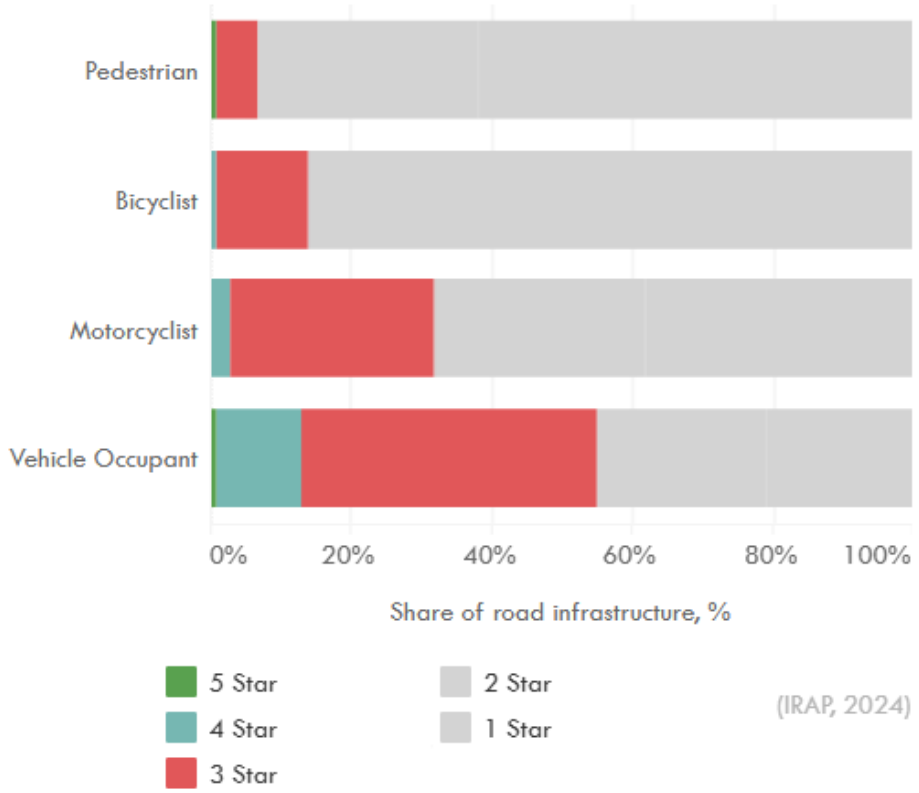
Challenge 4: Unsafe Infrastructure

Road crash fatalities per thousand kilometers (2021)



(WHO estimated, 2023; Nirandjan, et al., 2022)

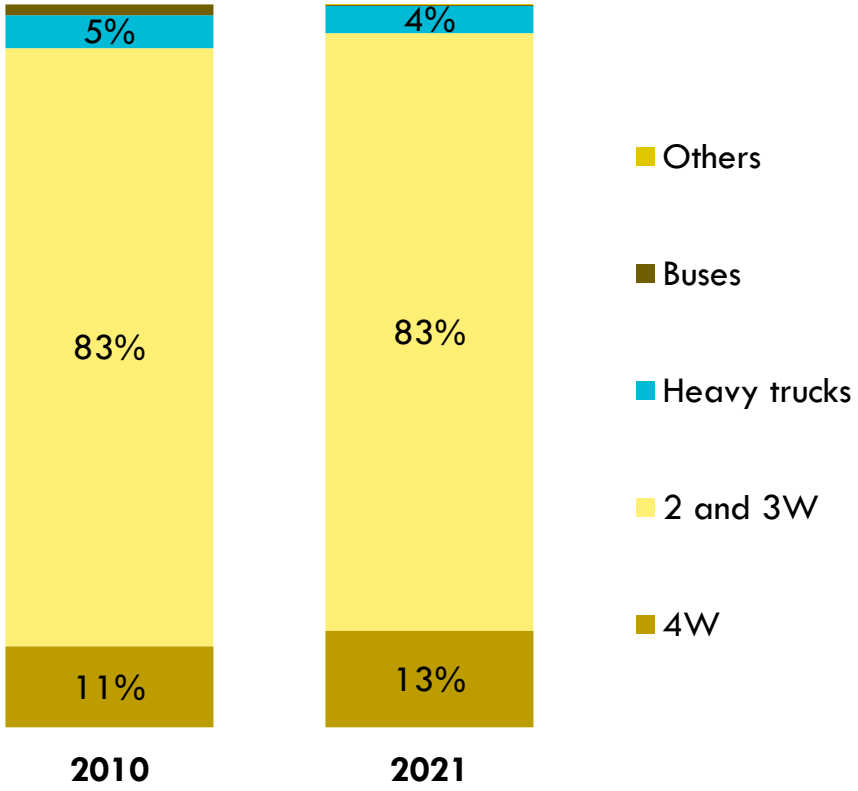
Share of road infrastructure with 3-star or better safety rating, by road user category (2024)



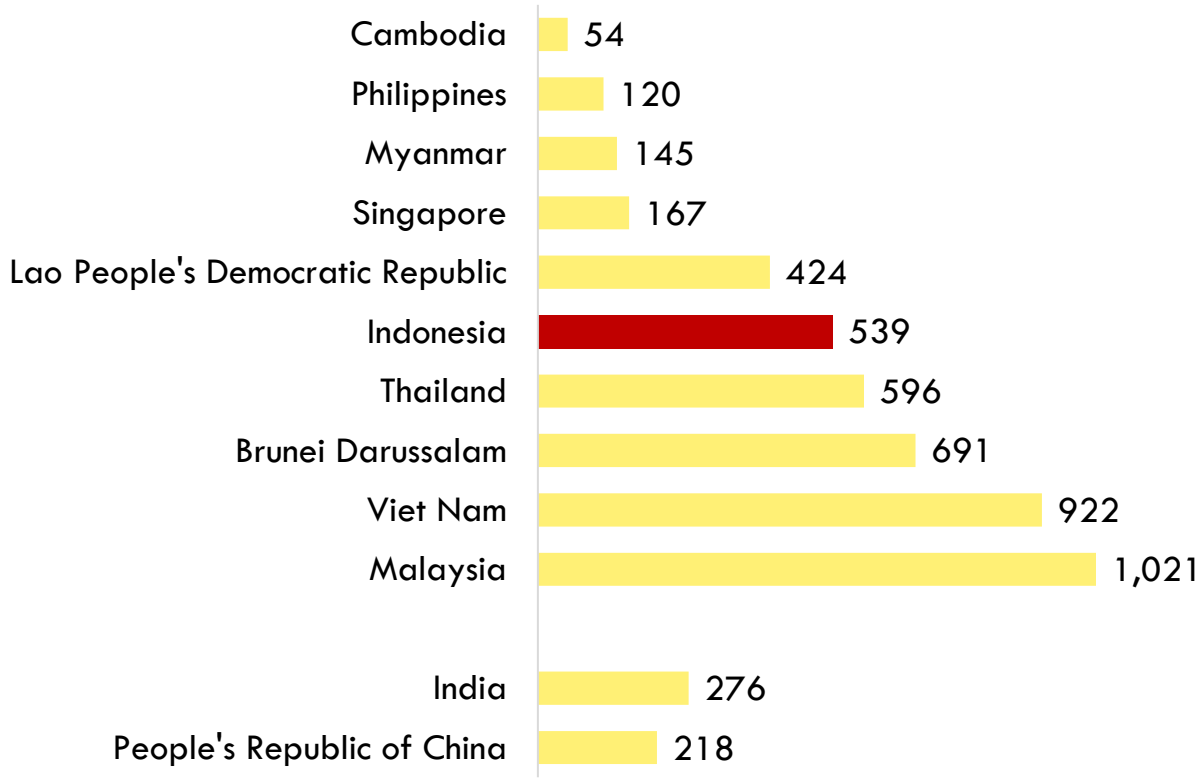
(IRAP, 2024)

Challenge 5: High Motorcycle Dependence

Vehicle fleet distribution



Number of vehicles per 1,000 population (2022)



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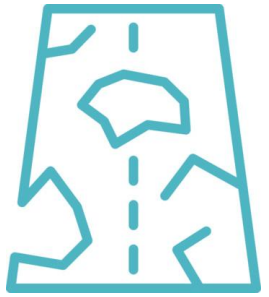
Source: WHO, Country stats

Quick Pause: What Would You Fix First?

Enforcement



Infrastructure

Behavior

Post crash response

If you had to choose just one to fix first in Indonesia, what would it be?

Challenge 6: Post-Crash Care

- **75%** of ambulance response times exceed **30 minutes.**
- **Median response time: 24 minutes** (IQR: 12–54 minutes)

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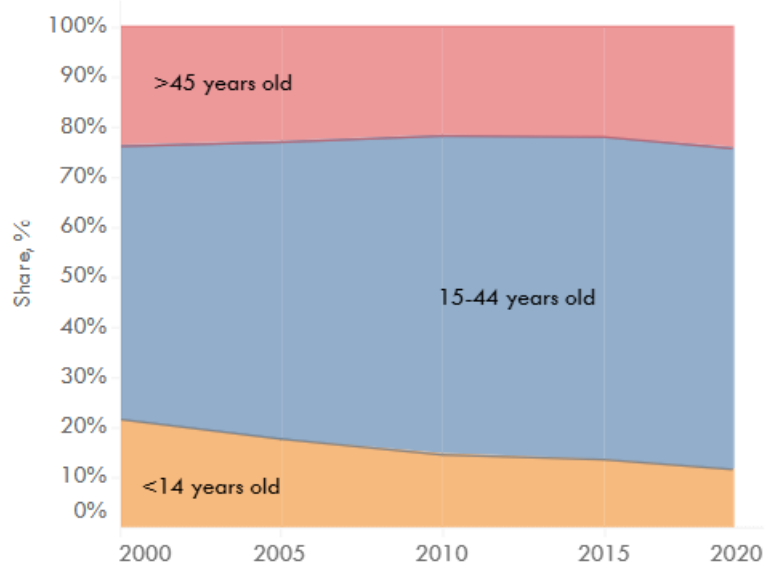
Source: https://pmc.ncbi.nlm.nih.gov/articles/PMC9103083/#:~:text=making%20a%20decision.-,Response%20time,all%20other%20modes%20of%20transport.

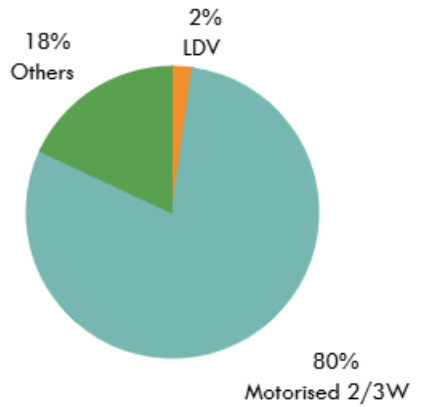
Who Bears the Human Toll?

Road crash fatalities, share by age group



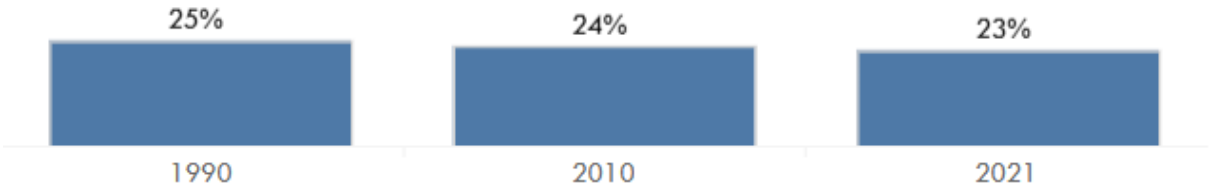
(IHME, 2021)

Road crash fatalities, share by road user



(Country report to WHO, 2023)

Share of female road crash fatalities

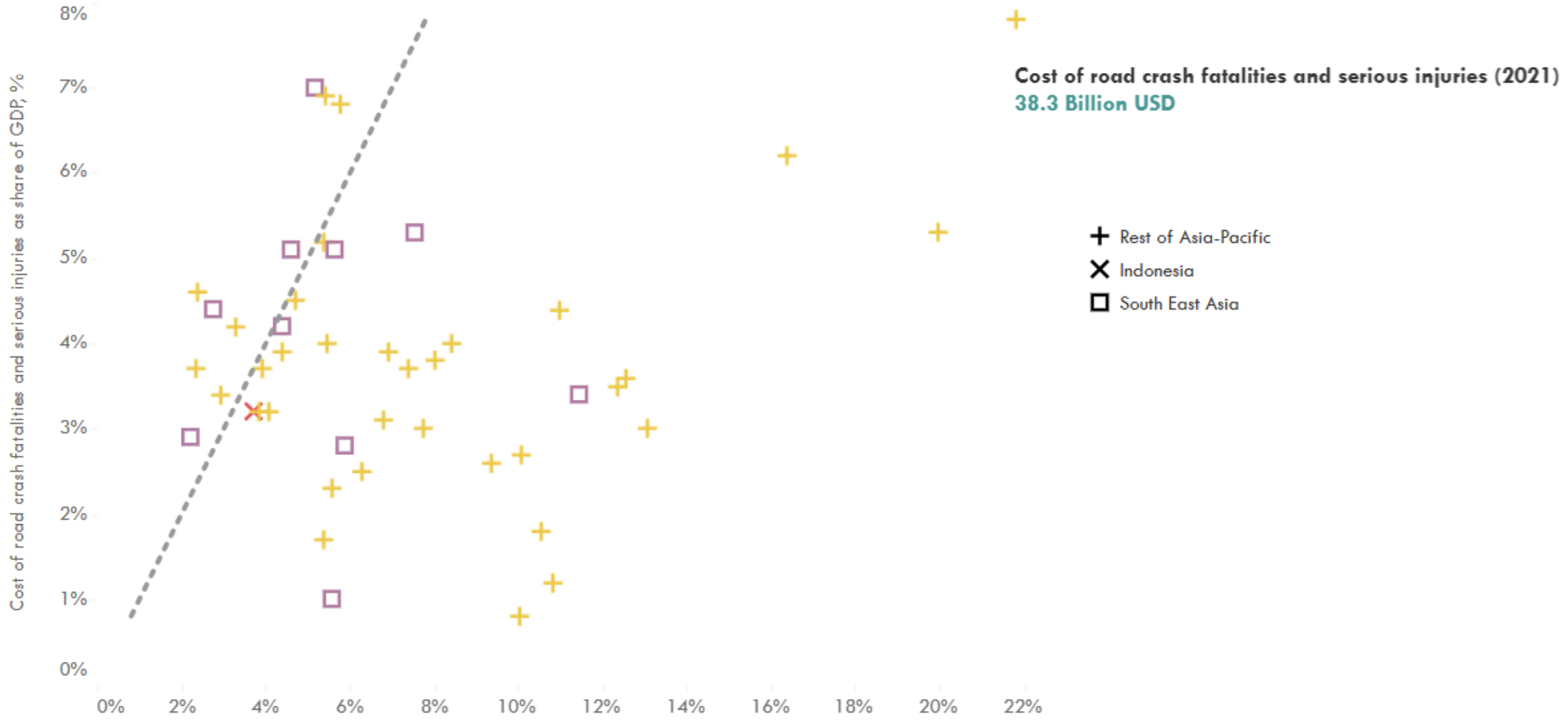


The country report to WHO indicates that women made up 21% of total road crashes deaths in 2021

(IHME, 2024)

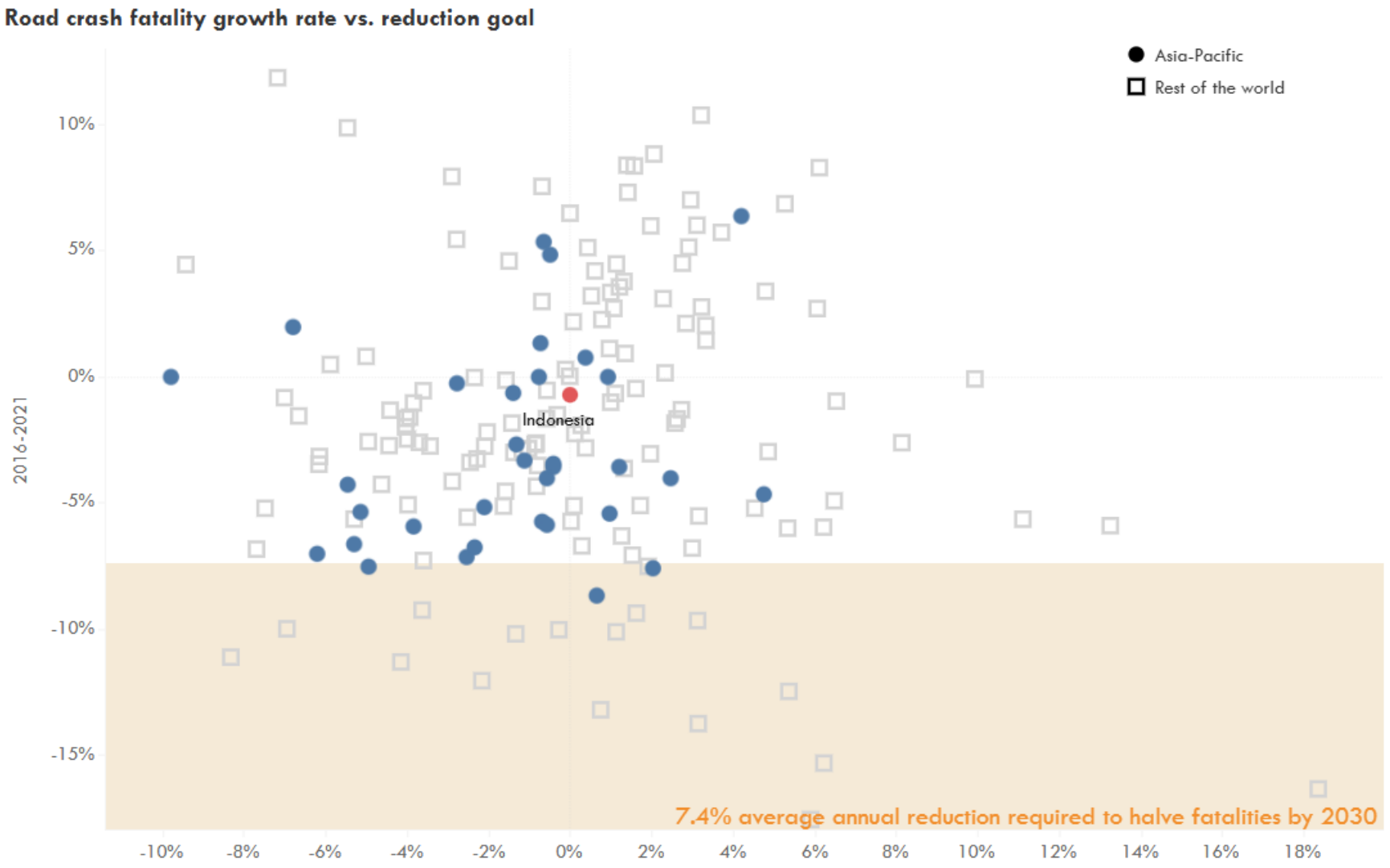
The Economic Costs of Road Crashes

Cost of road crash fatalities and serious injuries vs. country healthcare expenditure as share of GDP (2021)



(IRAP, 2024; World Bank, 2024)

Progress and Gaps in Reducing Fatalities



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Indonesia's Road Safety Policy Landscape

General infrastructure improvements:

Constructing grade-separated road and rail crossings in urban areas

[National Medium Term Development Plan 2020-2024]

Vehicle inspection and maintenance:

Periodic inspection is in effect

[Road Safety Opportunities and Challenges: Low- and Middle-Income Country Profiles]

Intelligent transport systems (ITS):

Application of traffic management technology in national main roads (Area Traffic Control System/ ATCS)

[Indonesia Third Biennial Update Report]

Design standards for sidewalks and bicycle paths:

- Physical protection should be provided to separate cycling lane from motorized traffic.
- Waiting space for pedestrians to wait before crossing. Make crossing distance as short as possible.
- Place traffic lights for cyclists and pedestrians. Provide signages that shows priority for cyclists and pedestrians

[National Vision of Non-Motorized Transport Infrastructure]

Technical standards for general transport infrastructure:

Bus stops placement: On 4-meter-wide (or more) sidewalks: Place on the curb edge, still providing a clear pedestrian zone with a minimum width of 2 meters.

[National Vision of Non-Motorized Transport Infrastructure]

Road safety training for professional drivers:

Design driving training courses to teach truck drivers to drive efficiently and safely in collaboration with training service providers and integrate this as a mandatory element into the truck driver certification training system.

[Mitigation Action Outline on Truck Fleet Modernization Scheme in Indonesia]

General education and behavior change:

Developing and educating human resources on transportation safety and SAR.

[National Medium Term Development Plan 2020-2024]

Public transit integration:

Development of modal transfer facilities - integrated with centers of economic activity, settlements and public facilities at transportation nodes

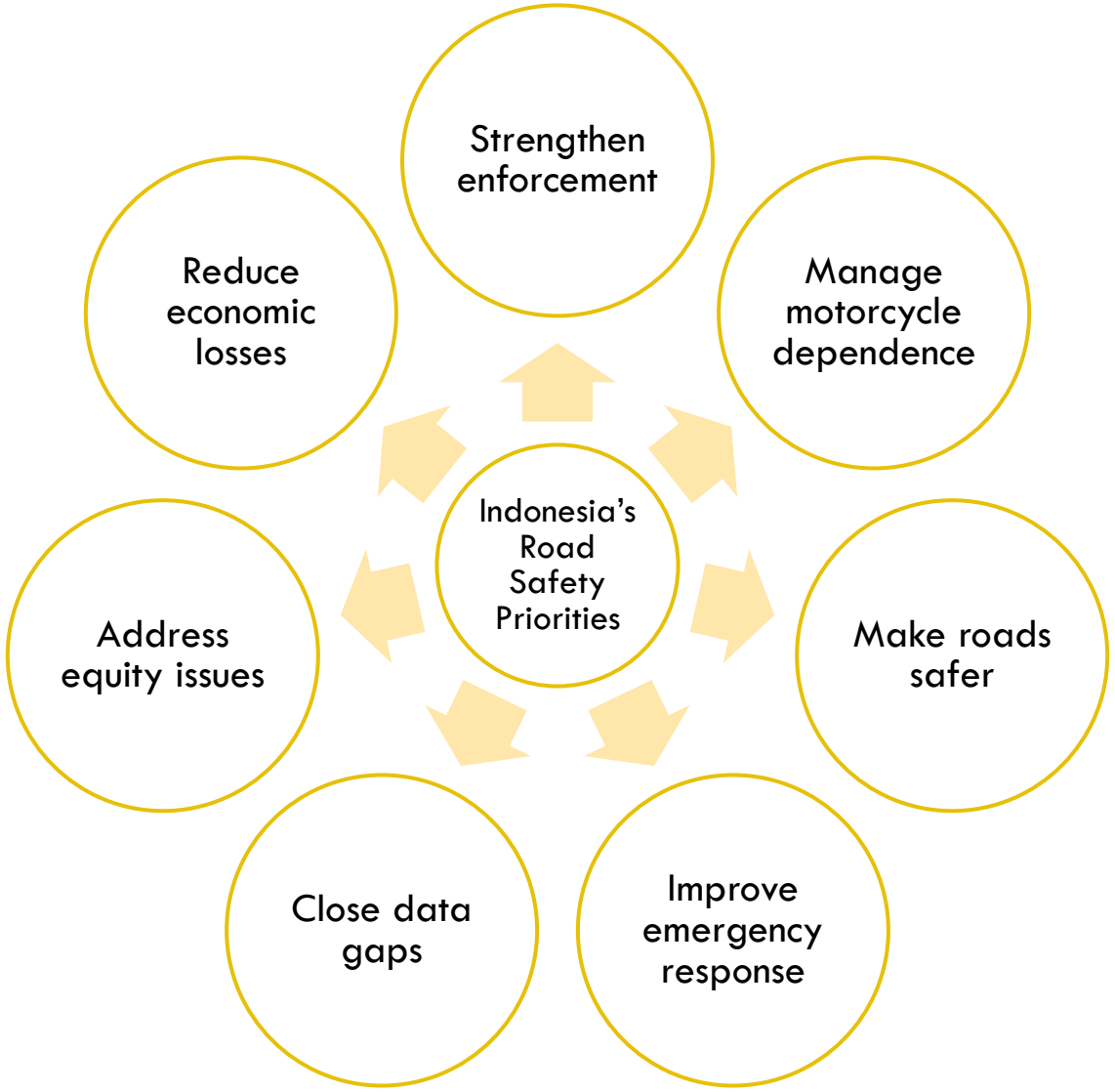
[Voluntary National Review 2021]

Accreditation of driver training agencies:

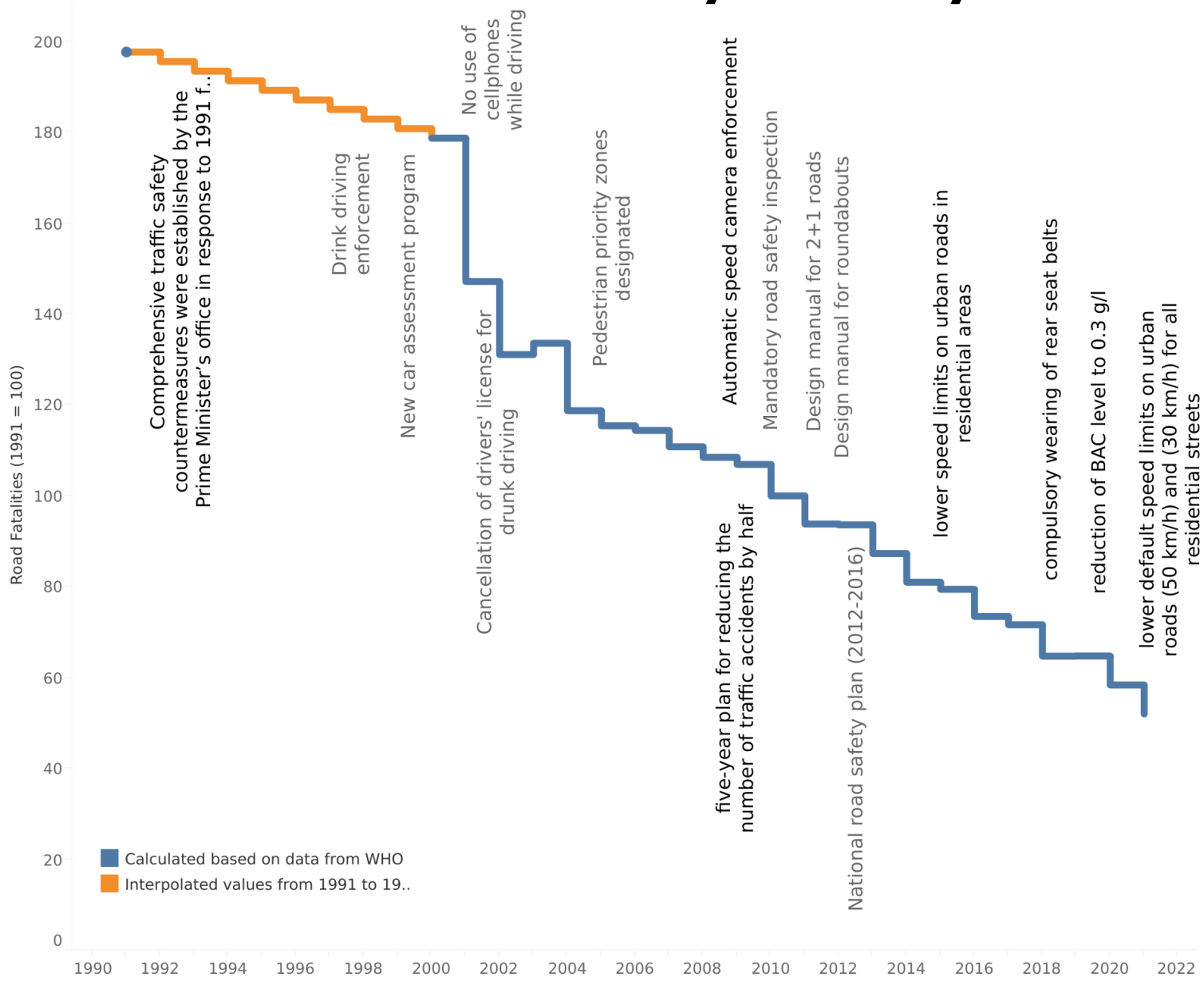
Require certified drivers to take driving class periodically and review drivers' qualification through periodical drive license renewal.

[Mitigation Action Outline on Truck Fleet Modernization Scheme in Indonesia]

Summary: Priority setting



Learning from Korea's Road Safety Journey



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Road Safety Profiles 2025

The ATO road safety profiles offer insights into the road safety in 37 Asia-Pacific countries by utilizing road safety related data from various sources and policy information extracted from a range of documents.

These road safety profiles were developed by the Asian Transport Observatory in collaboration with the Asia Pacific Road Safety Observatory (APRSO) and the International Road Federation (IRF). This September 2025 edition updates the February 2025 release—prepared for the Global Ministerial Conference on Road Safety in Marrakech—to inform discussions at the Asia-Pacific Regional Road Safety Conference in Manila.

Road Safety Profiles

- Afghanistan
- Armenia
- Australia
- Azerbaijan
- Bangladesh
- Bhutan
- Brunei Darussalam
- Cambodia
- People's Republic of China
- Cook Islands
- Fiji
- Georgia
- Indonesia
- Kazakhstan
- Kyrgyz Republic
- Lao People's Democratic Republic
- Malaysia
- Maldives
- Marshall Islands
- Mongolia
- Myanmar
- Nepal
- New Zealand
- Pakistan
- Papua New Guinea
- Philippines
- Samoa
- Singapore
- Solomon Islands
- Sri Lanka
- Tajikistan
- Thailand
- Timor-Leste

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