



STATE AND TRENDS

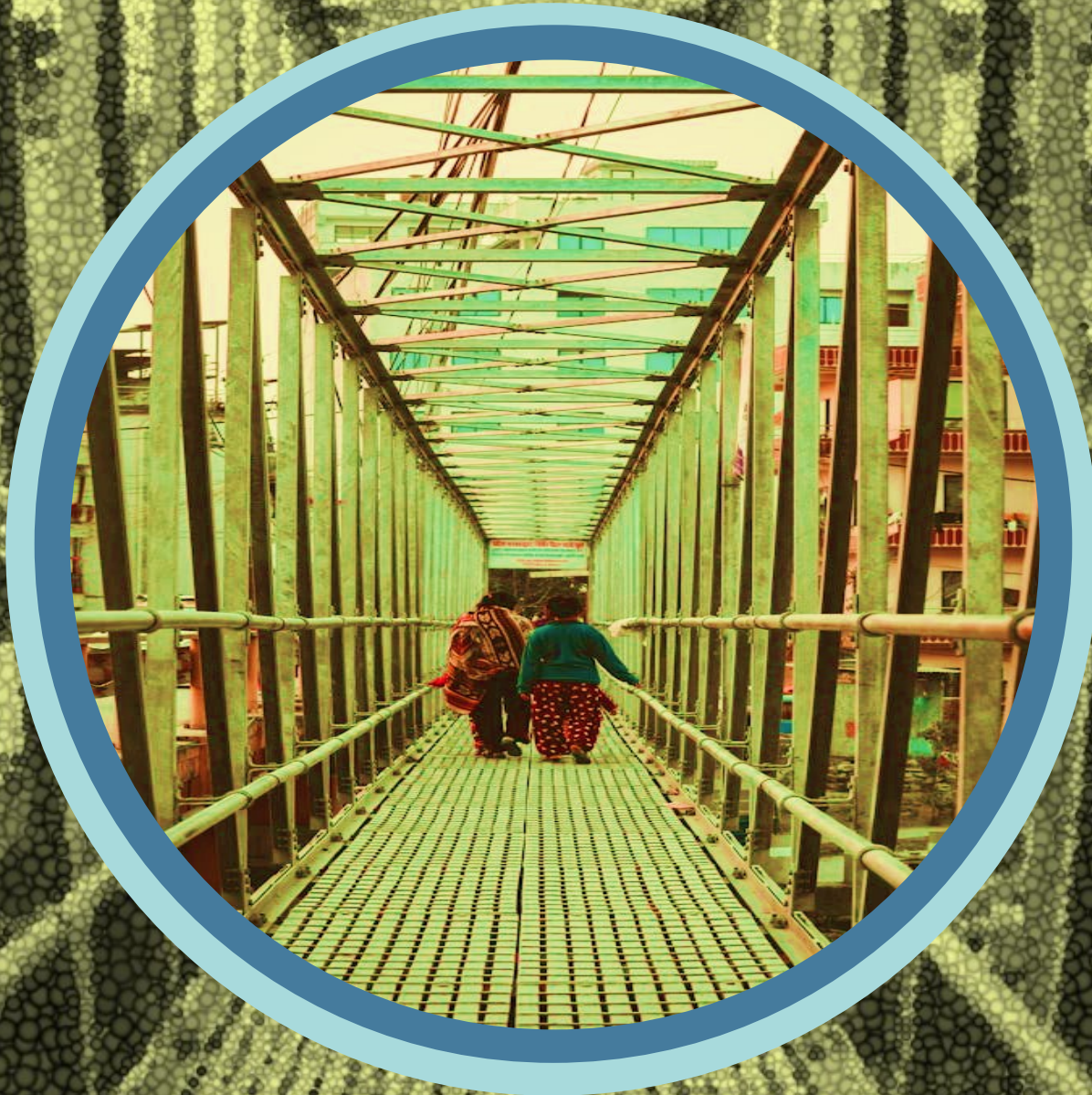
Transport and Sustainability in Asia and the Pacific

Alvin Mejia

Co-Team Lead
Asian Transport Observatory

Shaping the Future of Smart and Sustainable Mobility - Turning Global Strategies into Local Action as We Embark on the 1st UN Decade of Sustainable Transport

October 22, 2025



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)

47 Urban Centers with a detailed review * To be increased to 50

- Caters to various stakeholder groups
- Flexible approach towards indicator inclusion
- Multi-scalar data
- Wide range of indicator sources
- Includes policies and measures
- Includes relevant sectors outside transport



ATO National Database

Explore over 450 transport indicators from 51 economies divided across nine categories



ATO National Transport Policy Documents Database

Explore close to 1100 transport policy documents in Asia and the Pacific



ATO Urban Database

Explore more than 260 urban level transport indicators across nine categories



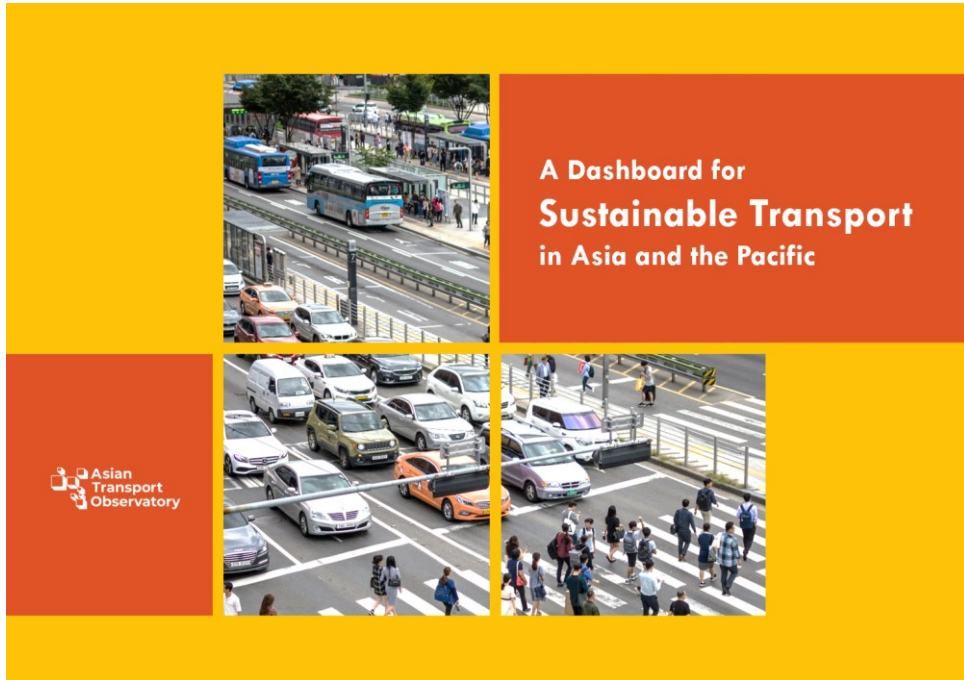
ATO Cost Database

Explore more than 1,300 transport-related projects and benchmark their costs within subregions or income groups in Asia and the Pacific



ATO Analytical Outputs

Read about analysis made using ATO transport data and policy information



**A Dashboard for
Sustainable Transport
in Asia and the Pacific**

Asian
Transport
Observatory

This report tracks measurable progress in sustainable transport across the region, benchmarking it against global trends. It provides a critical foundation for advancing the 2030 SDG Agenda and the upcoming UN Decade of Sustainable Transport (2026-2035)



Towards Effective Monitoring for the
UN Decade of Sustainable Transport

Holger Dalkmann*, James Leather, Sudhir Gota,
Alvin Meija

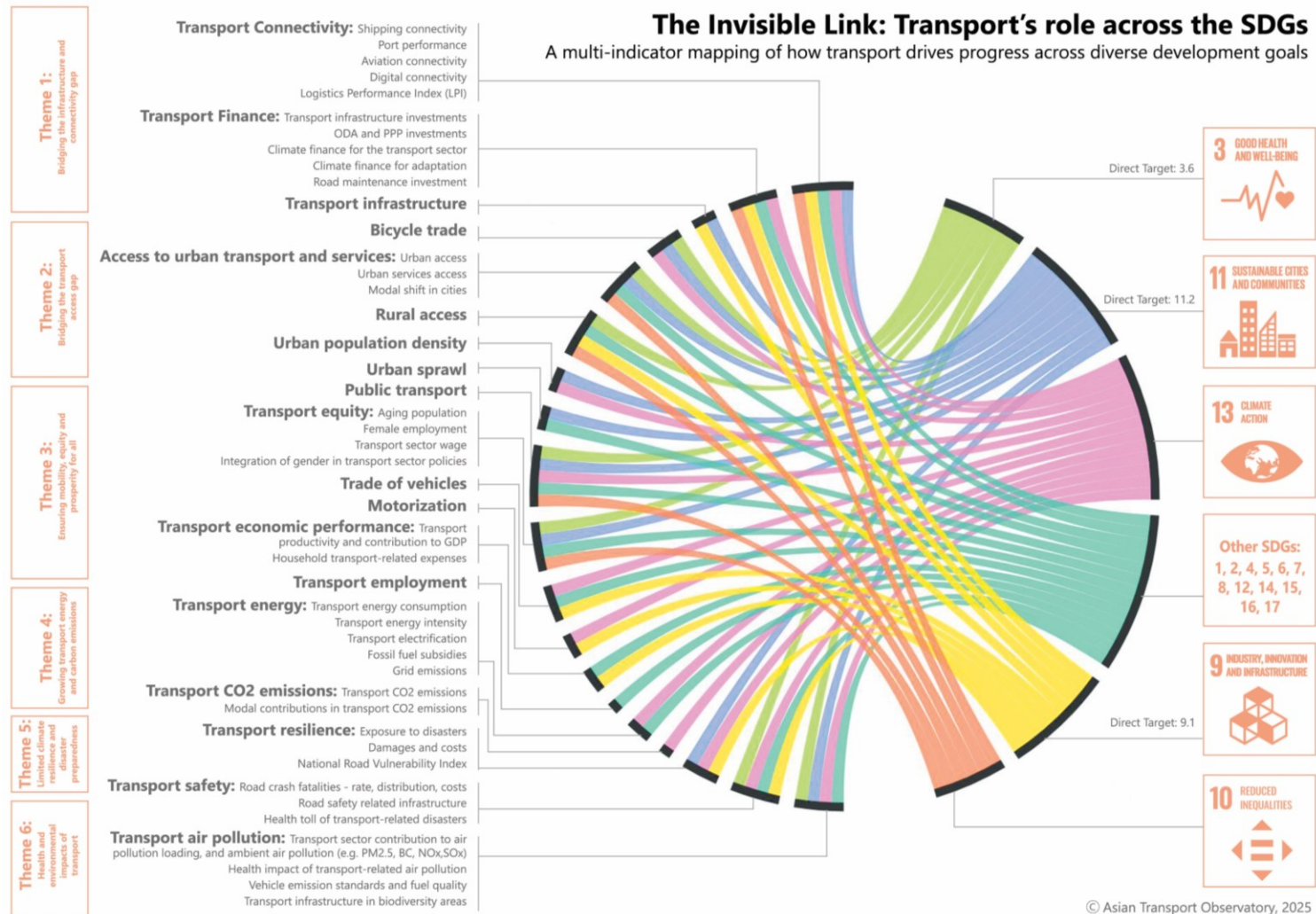
**Draft for Distribution to the participants of UN
workshop on Sustainable Transport
23 - 24 June 2025 in Geneva**

*Corresponding Author: Holger Dalkmann, Sustain 2030/ADB Consultant -
hdalkmann@sustain2030.net

The paper outlines key considerations for designing a future monitoring framework for the UN Decade of Sustainable Transport, drawing from past UN Decades, regional initiatives and ongoing data initiatives



Transport as a Red Thread



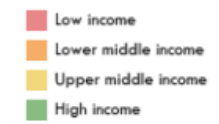
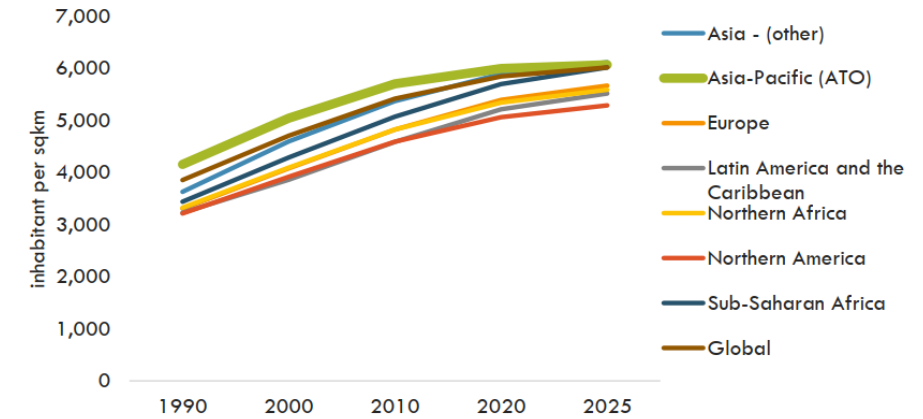
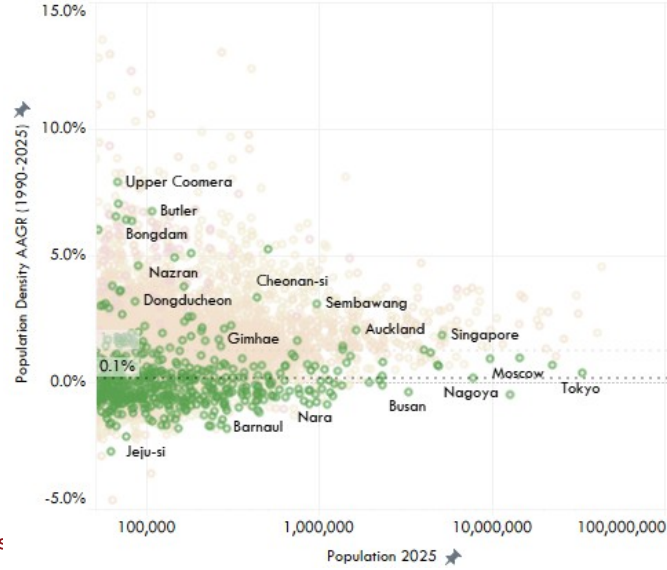
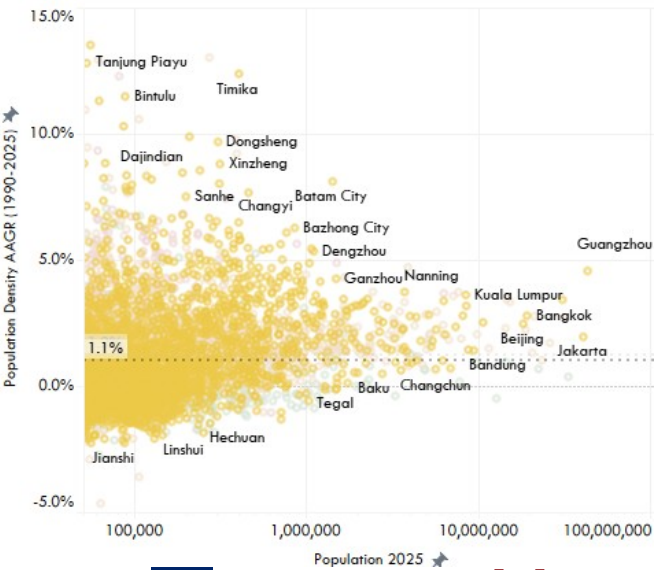
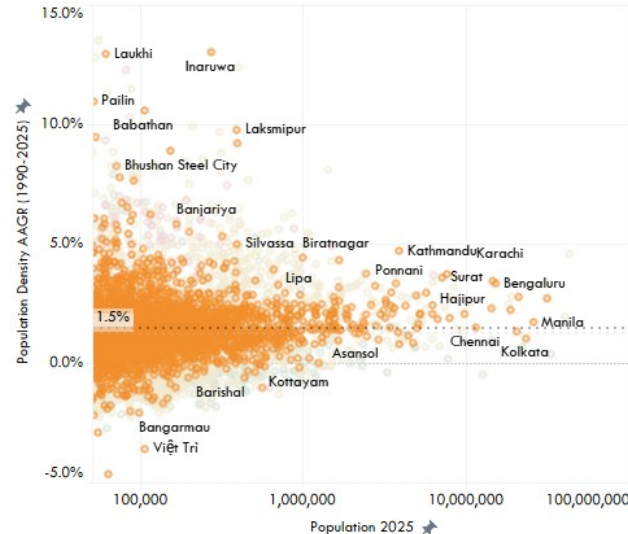
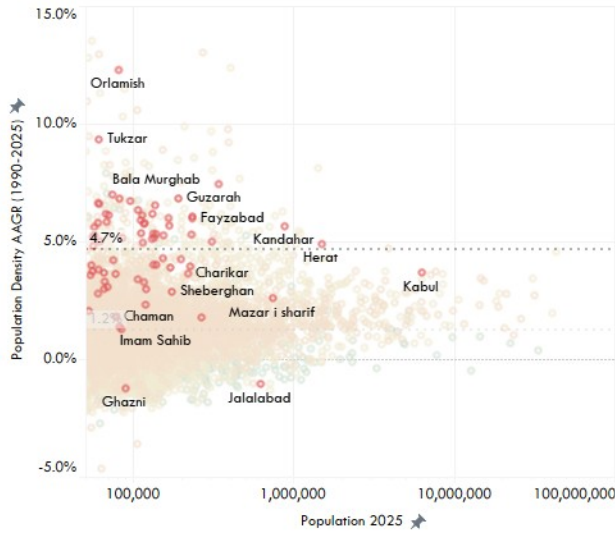
United Nations Decade of Sustainable Transport 2026 – 2035

Draft implementation plan thematic areas:

- Ensure access to sustainable transport for all
- Advance low-carbon, resilient and environmentally sound transport systems
- Enhance efficiency and promote sustainable connectivity and logistics
- Shape people-centred urban mobility and liveable cities
- Make transport safe and secure
- Leverage Science, Technology and Innovation for sustainable transport

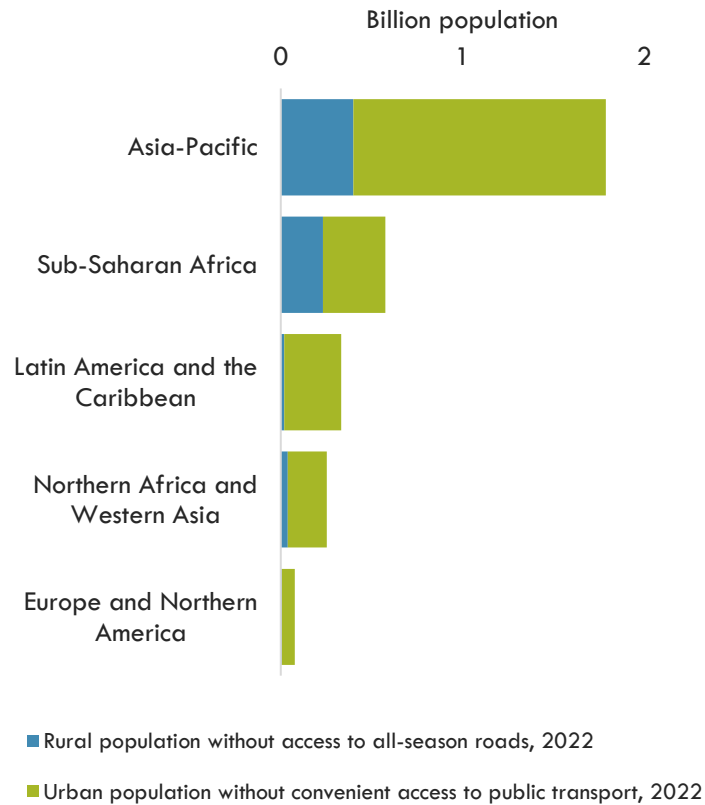
**1. Ensure access to sustainable
transport for all**

Urbanization



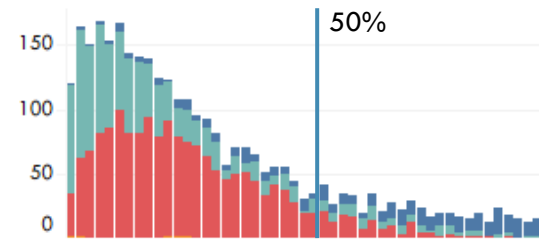
Access to Transport

Population Without Proper Access – Rural Roads and Urban Public Transport

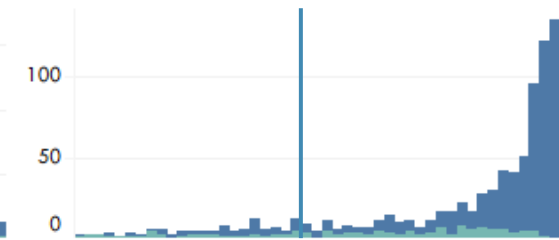


Distribution of Cities - % of Population with Convenient Access to Public Transport
(% Population with Convenient Access to Urban Public Transport)

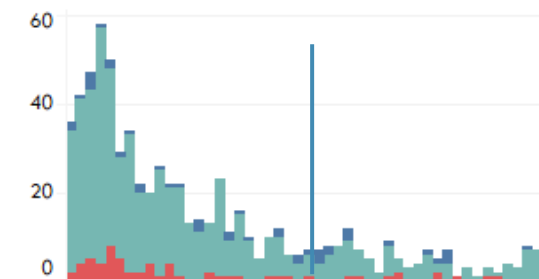
Asia-Pacific



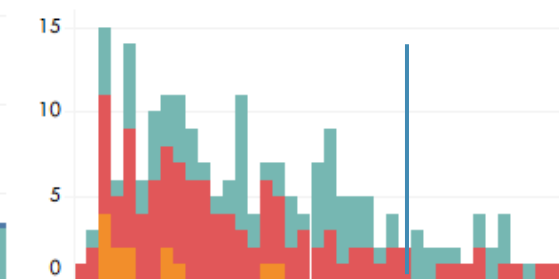
Europe



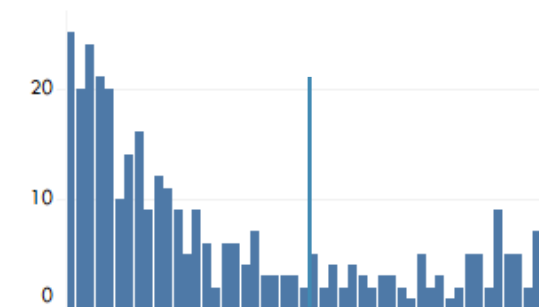
Latin America and the Caribbean



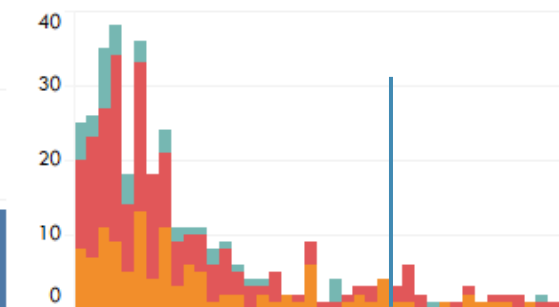
Northern Africa



North America



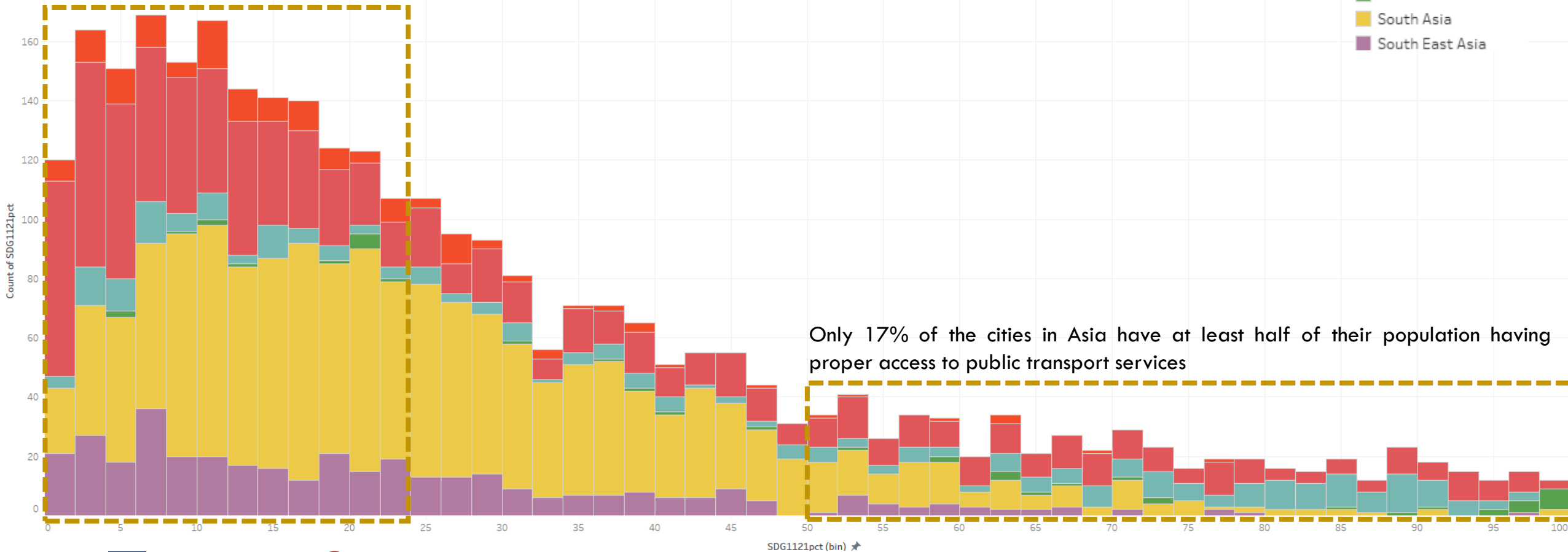
Sub-Saharan Africa



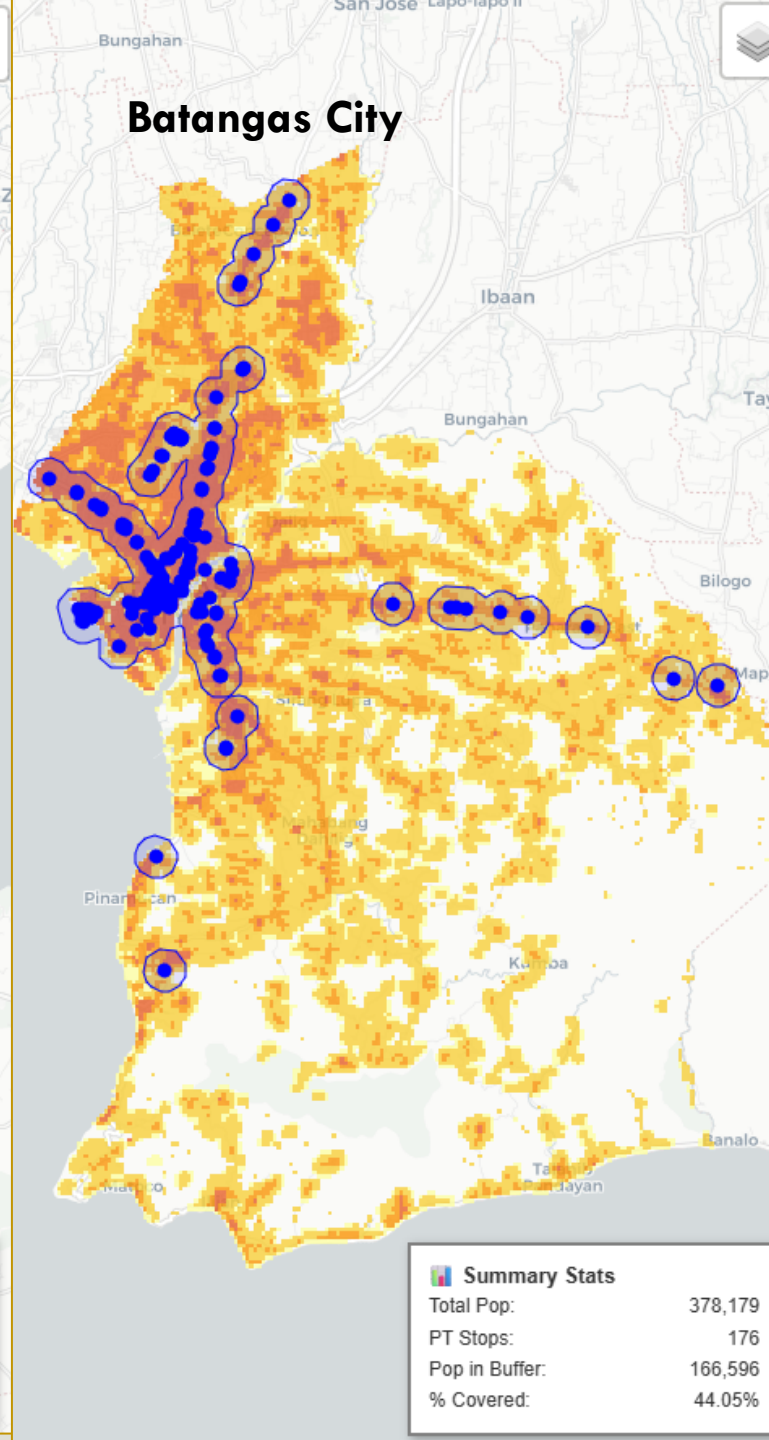
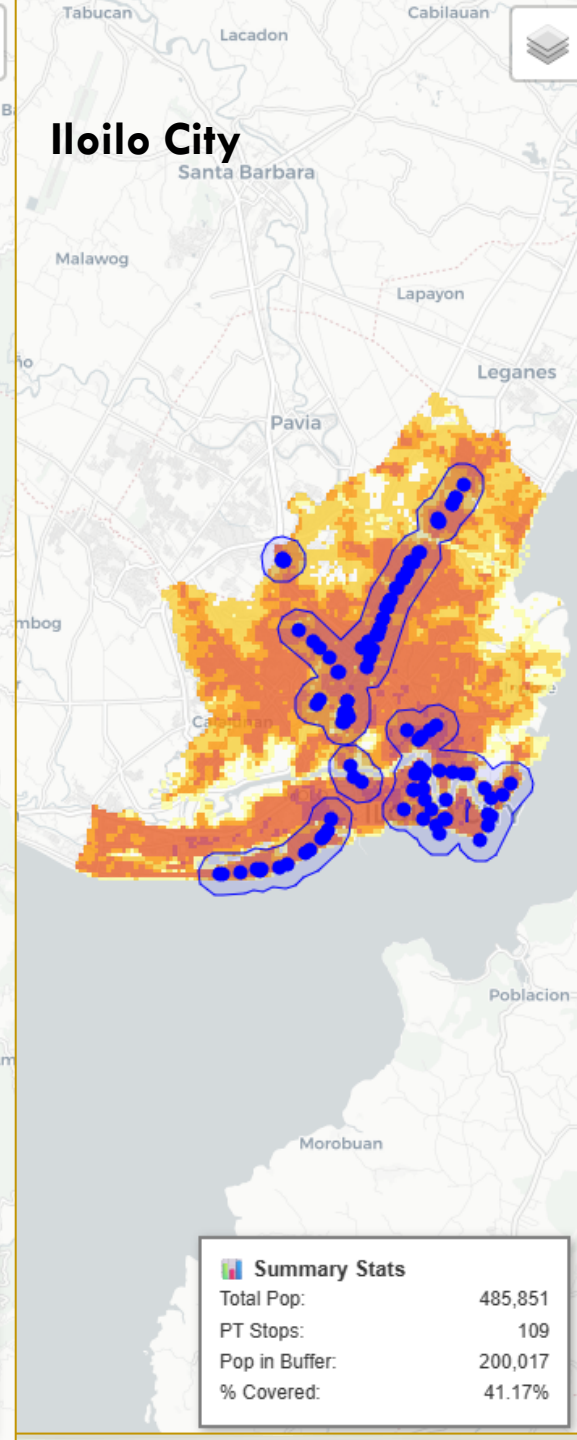
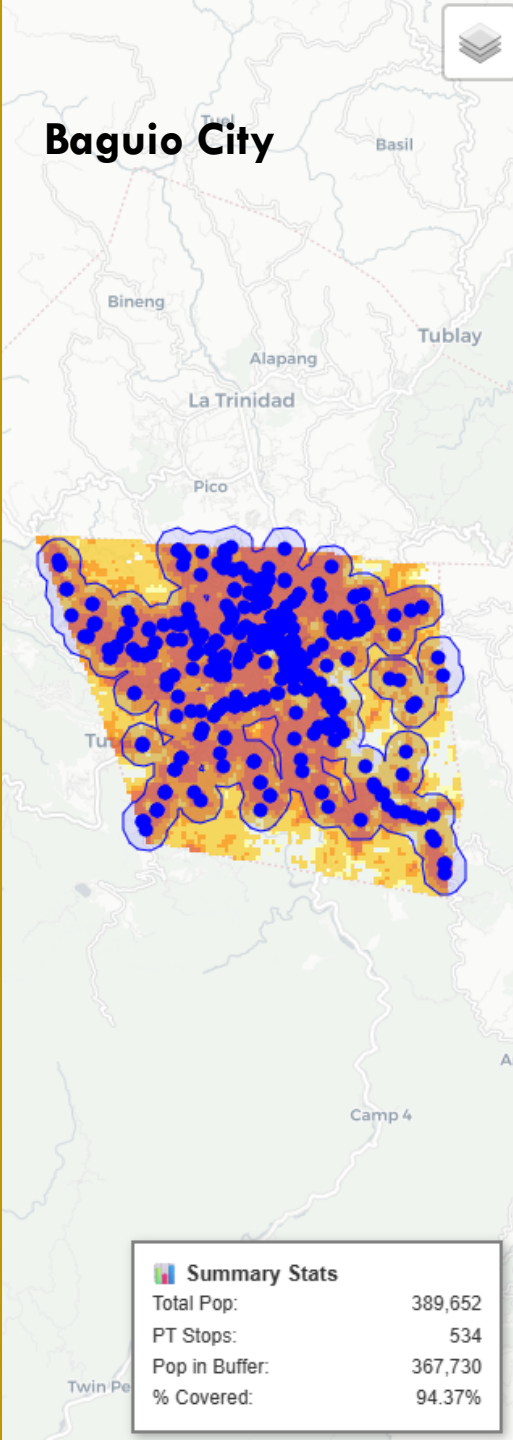
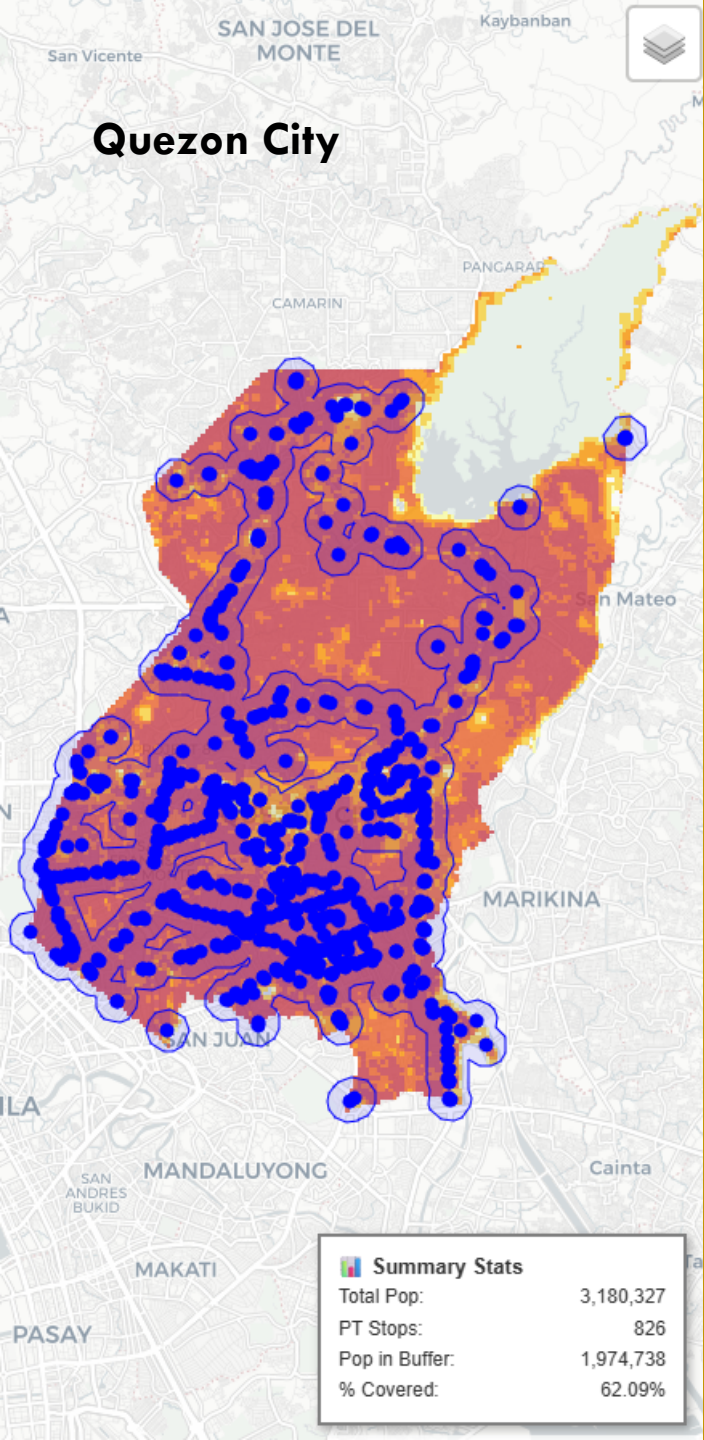
Public Transport Access in Asian Cities

This area represents >50% of all the Asian cities in the sample. It means that more than half of the cities have at least 3/4 of their populations not have proper access to public transport.

- Central and West Asia
- East Asia
- Others
- Pacific
- South Asia
- South East Asia

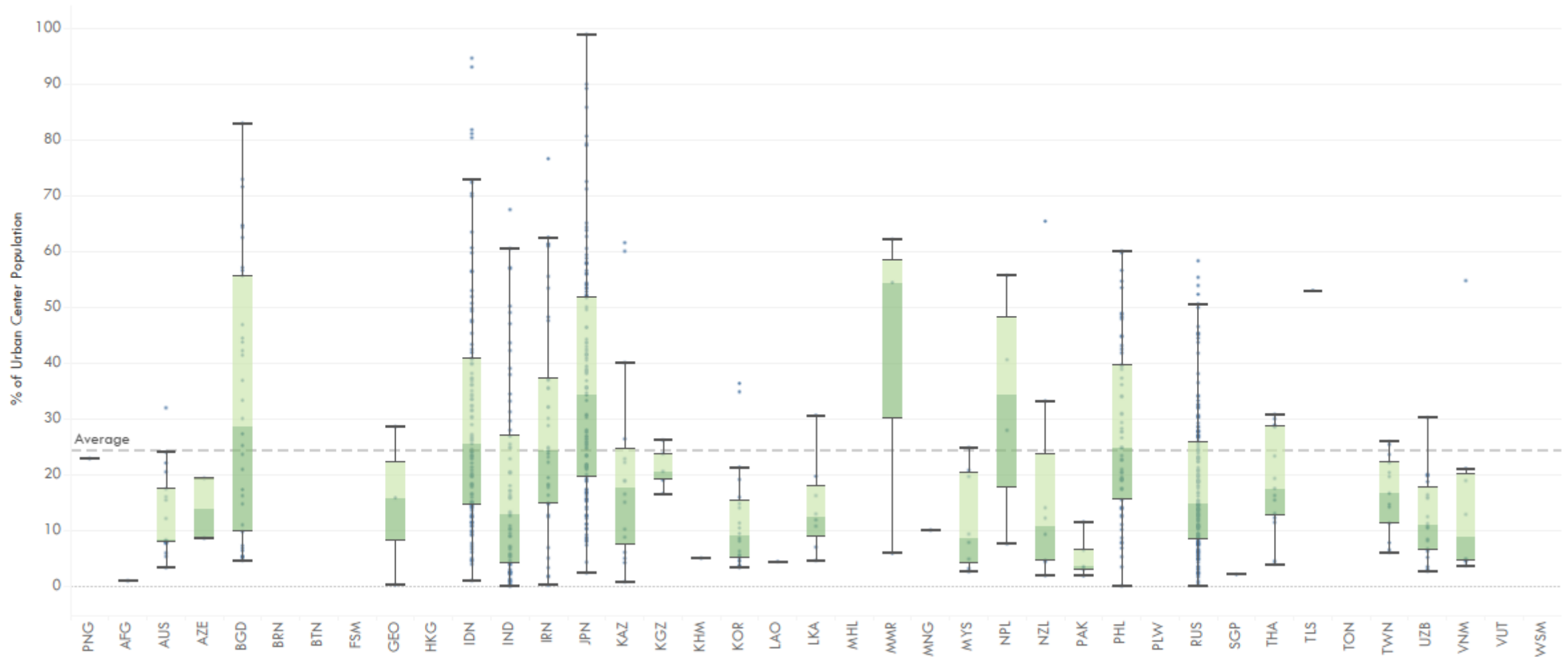


Only 17% of the cities in Asia have at least half of their population having proper access to public transport services



Access to Medical Facilities - Pharmacy

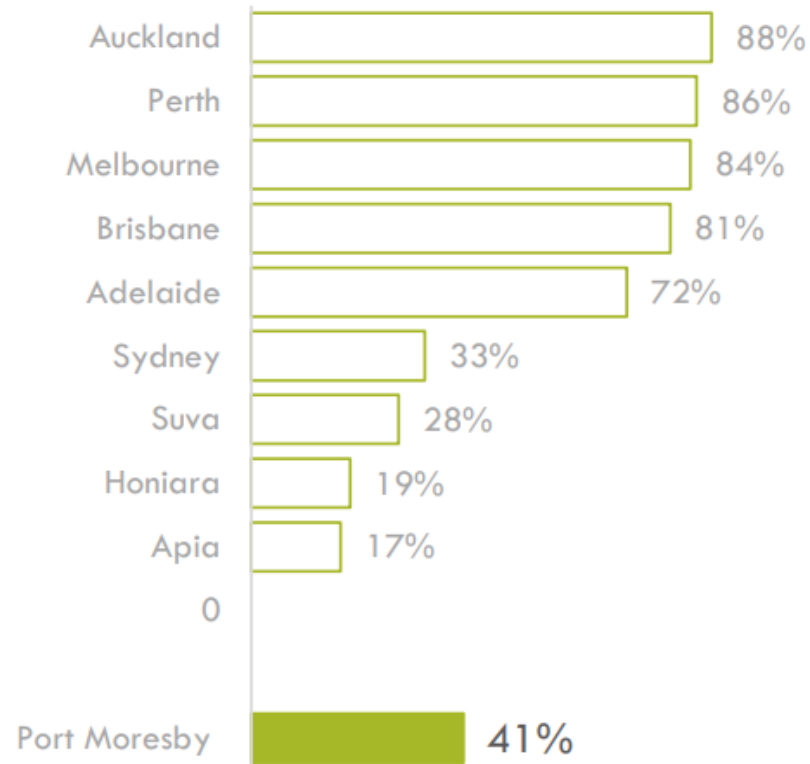
% of Urban Population Living w/in 1 km of a Pharmacy



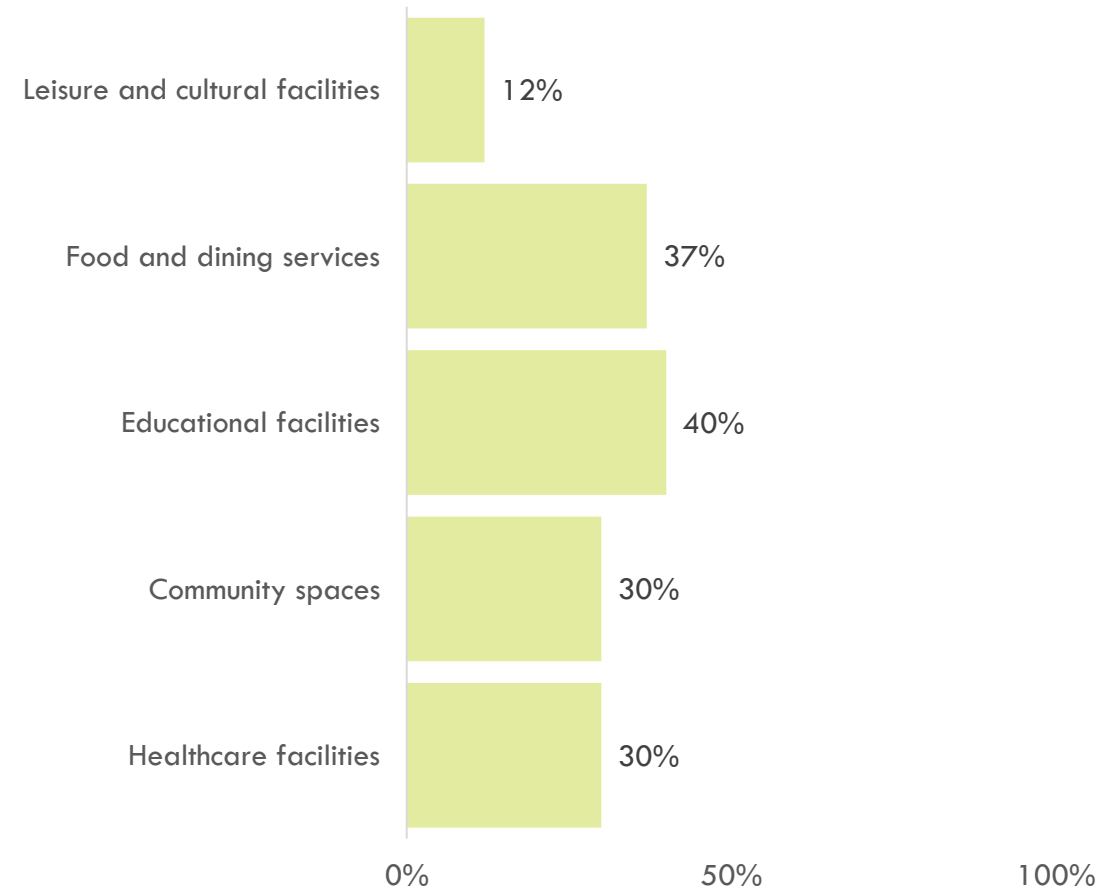
Access to Facilities

People near open public space

(Share of population) vs. highest 10 cities in Pacific (2020) (UN Habitat)

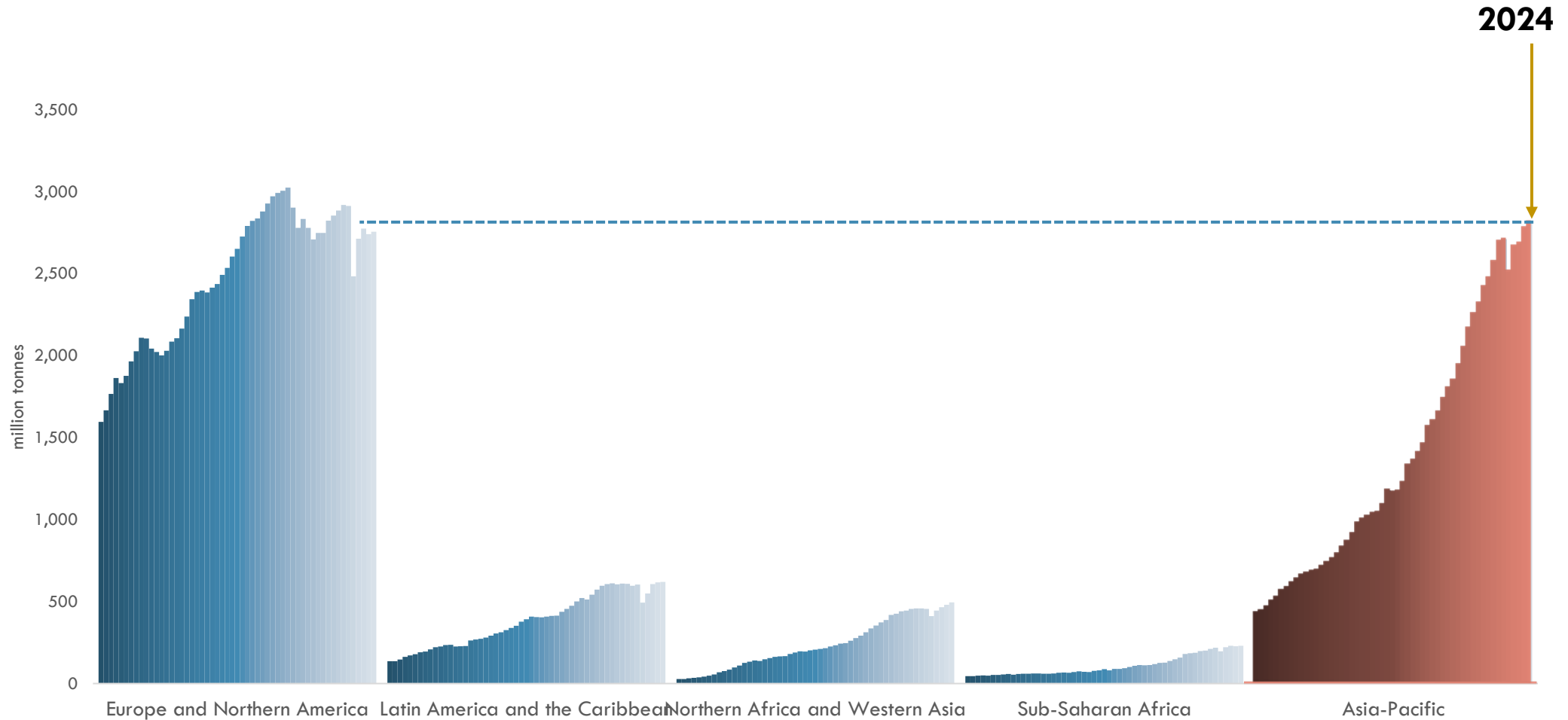


Share of population with access within a 15 min walk – Port Moresby

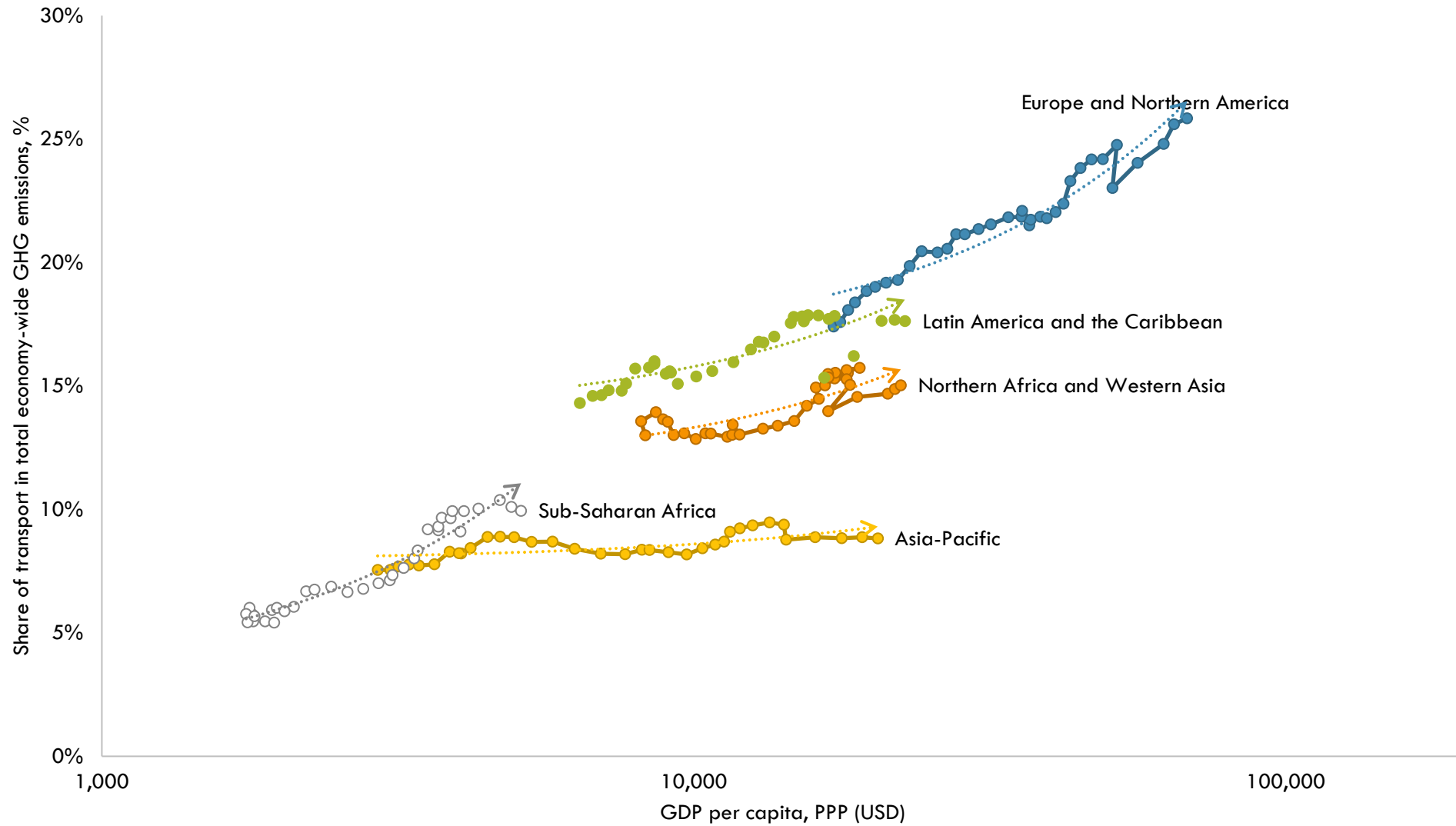


**2. Advance low-carbon,
resilient and environmentally
sound transport systems**

Domestic Transport Emissions

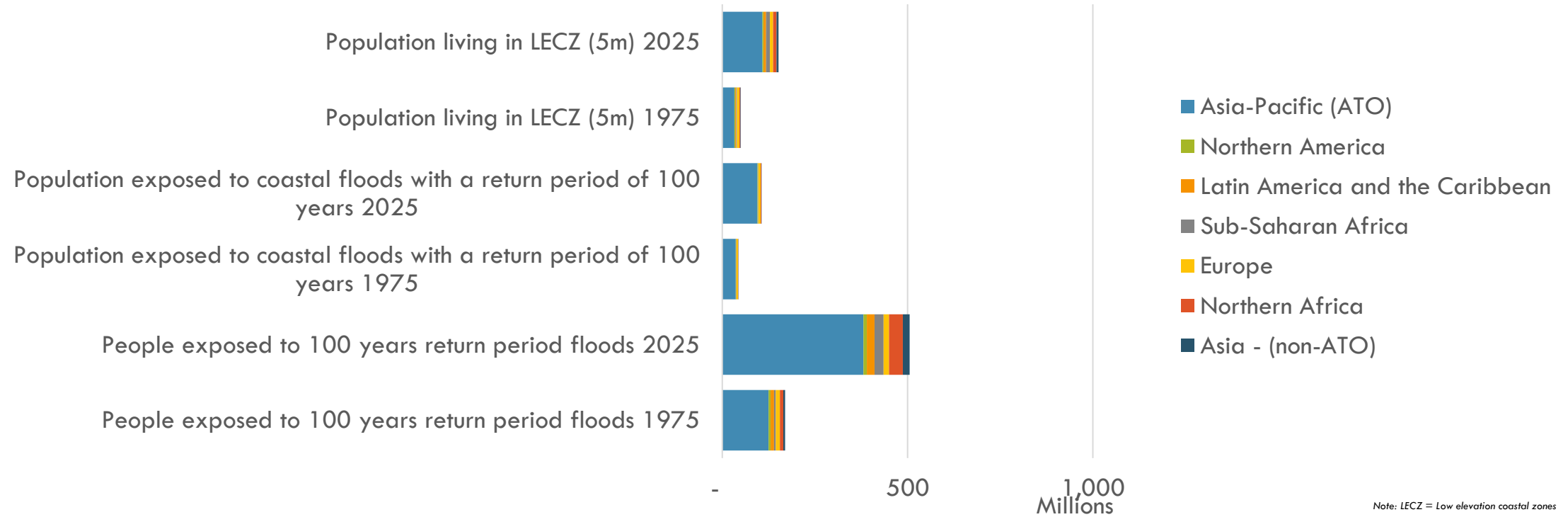


Source: ATO visualization based on data from Crippa et al. (2023)



Share of Domestic Transport in Total GHG Emissions and GDP per Capita

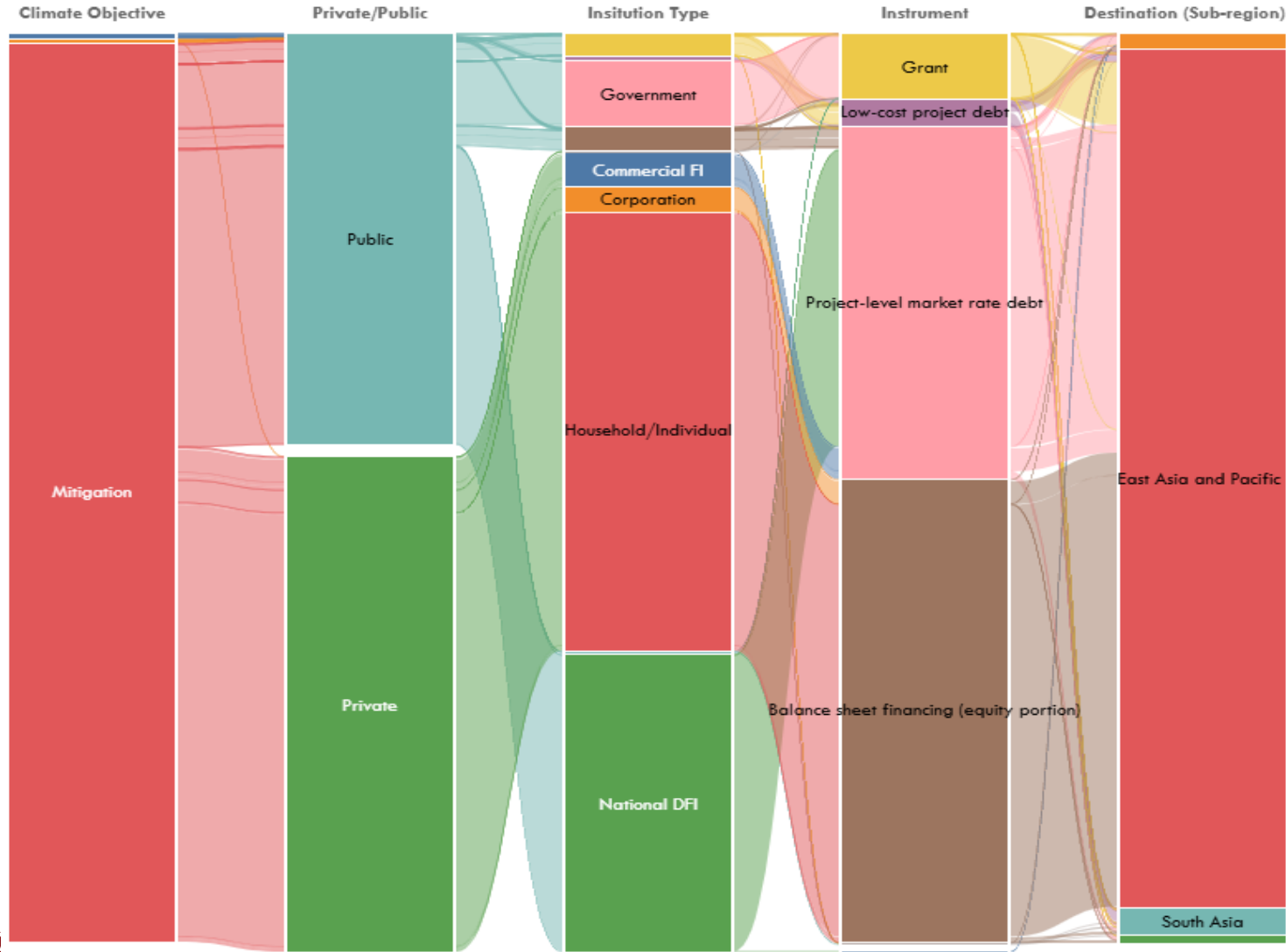
Urban Population Exposure to Hazards



Source: Own analysis and visualisation based on data from Melchiorri et al. (2024)

Climate finance in the transport sector of Asia-Pacific

(million USD for year 2022)



EMISSION STANDARDS

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Bangladesh (metros)	Euro 3			Euro 4											
Bangladesh (nationwide)	Euro 2			Euro 3											
Brunei Darussalam	Euro 4														
Cambodia	Euro 1			Euro 3		Euro 4						Euro 5			
China (metros)	China 5				China 6										
China (nationwide)	China 5		China 5		China 6										
India (metros)	Bharat 4				Bharat 6										
India (nationwide)	Bharat 3	Bharat 4			Bharat 6										
Indonesia	Euro 2		Euro 4				Euro 4								
Iran	Euro 4														
Lao PDR	Euro 4														
Malaysia (gasoline)	Euro 2			Euro 4						Euro 5					
Malaysia (diesel)	Euro 2		Euro 4						Euro 5						
Myanmar (diesel)	AFAPGIT Protocol 4							Euro 4							
Myanmar (gasoline)					Euro 4										
Nepal	Euro 3	Euro 4													
Philippines (gasoline)	Euro 4														
Philippines (diesel)	Euro 2		Euro 4												
Singapore (gasoline)	Euro 4		Euro 6												
Singapore (diesel)	Euro 5		Euro 6												
Sri Lanka	Euro 2		Euro 4												
South Korea	Standards 1-4														
Thailand	Euro 4								Euro 5						
Viet Nam	Euro 2	Euro 4				Euro 5					Euro 6				

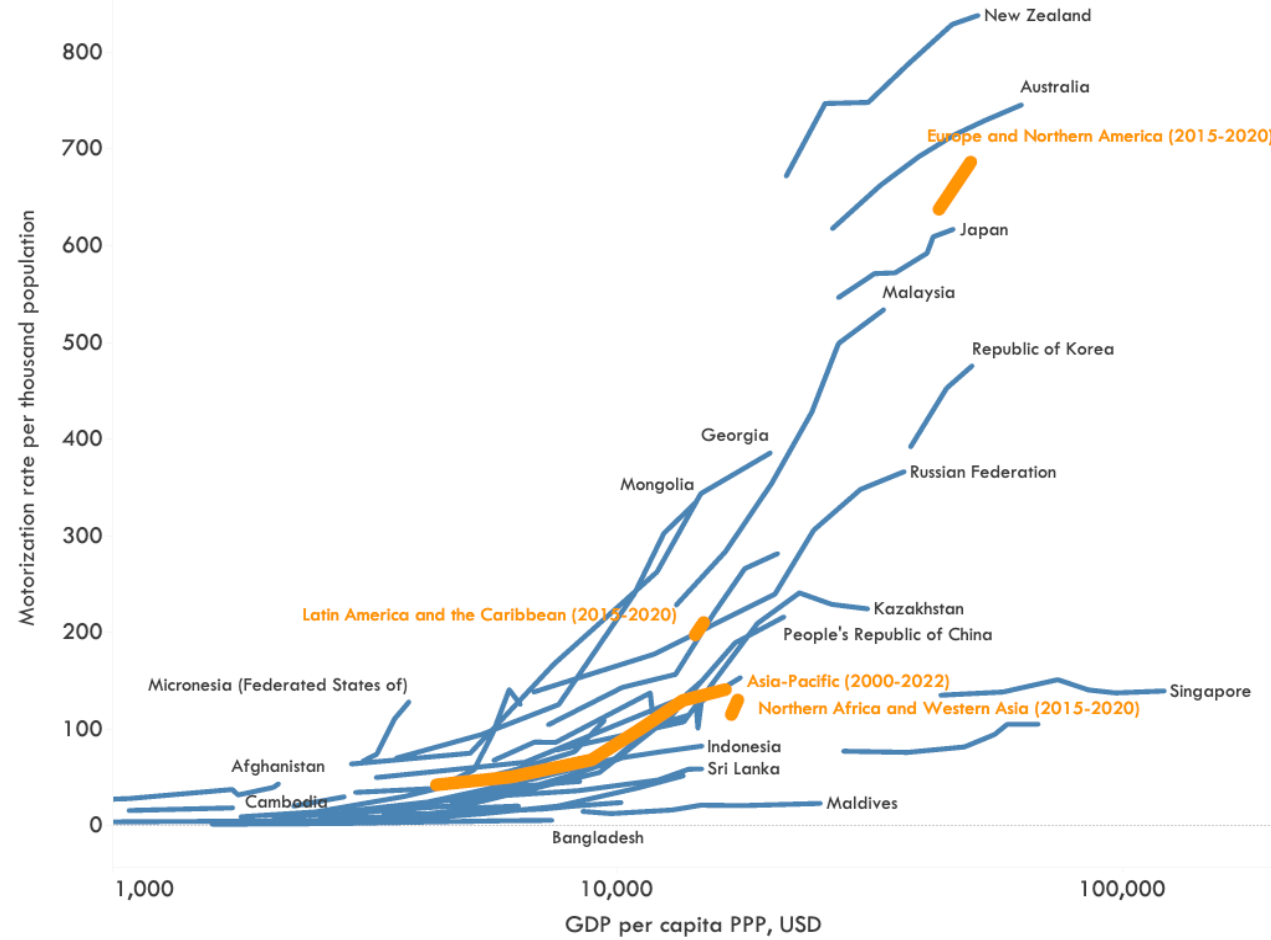
FUEL SULFUR CONTENT

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Bangladesh	350							50							
Brunei Darussalam	50														
Cambodia	1500			350 ^a		50			10						
China (metros)	10														
China (nationwide)	50	10 ^d													
India (metros)	50				10										
India (nationwide)	350	50			10										
Indonesia	3500	2500				500		50							
Iran	1000														
Lao PDR	500			50 ^k											
Nepal	350	50		10 ^j											
Malaysia	50					10 ^d									
Pakistan	500 ^a					10									
Philippines	50 ^d														
Singapore	10														
Sri Lanka	1000		50												
South Korea	10														
Thailand	50							10							
Viet Nam	50					10 ^d									

**3. Enhance efficiency and
promote sustainable
connectivity and logistics**

Motorization

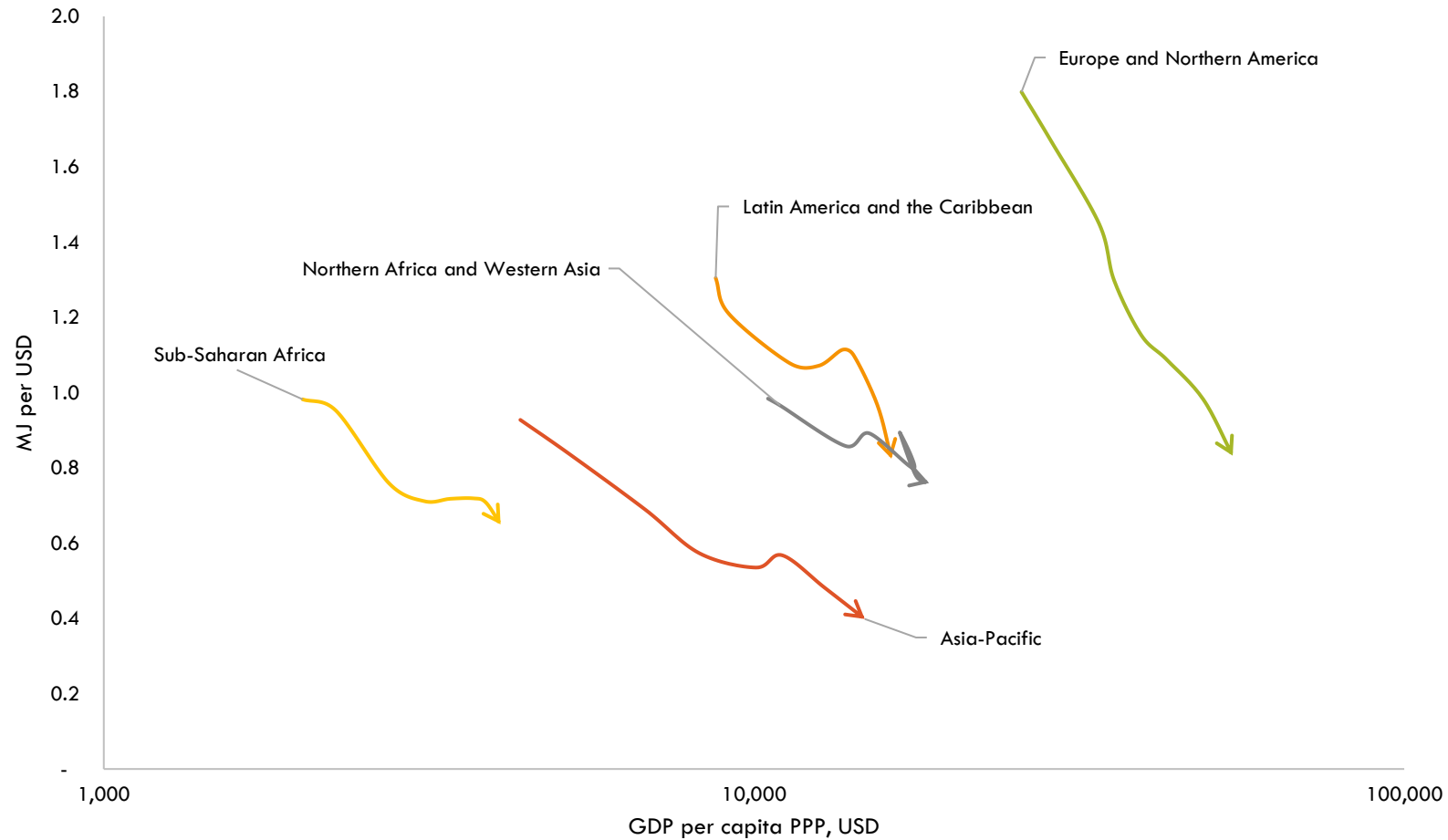
Motorization rate per thousand population, 2000-2022



Source: ATO analysis and visualization based on official country statistics

Energy Consumption Intensity

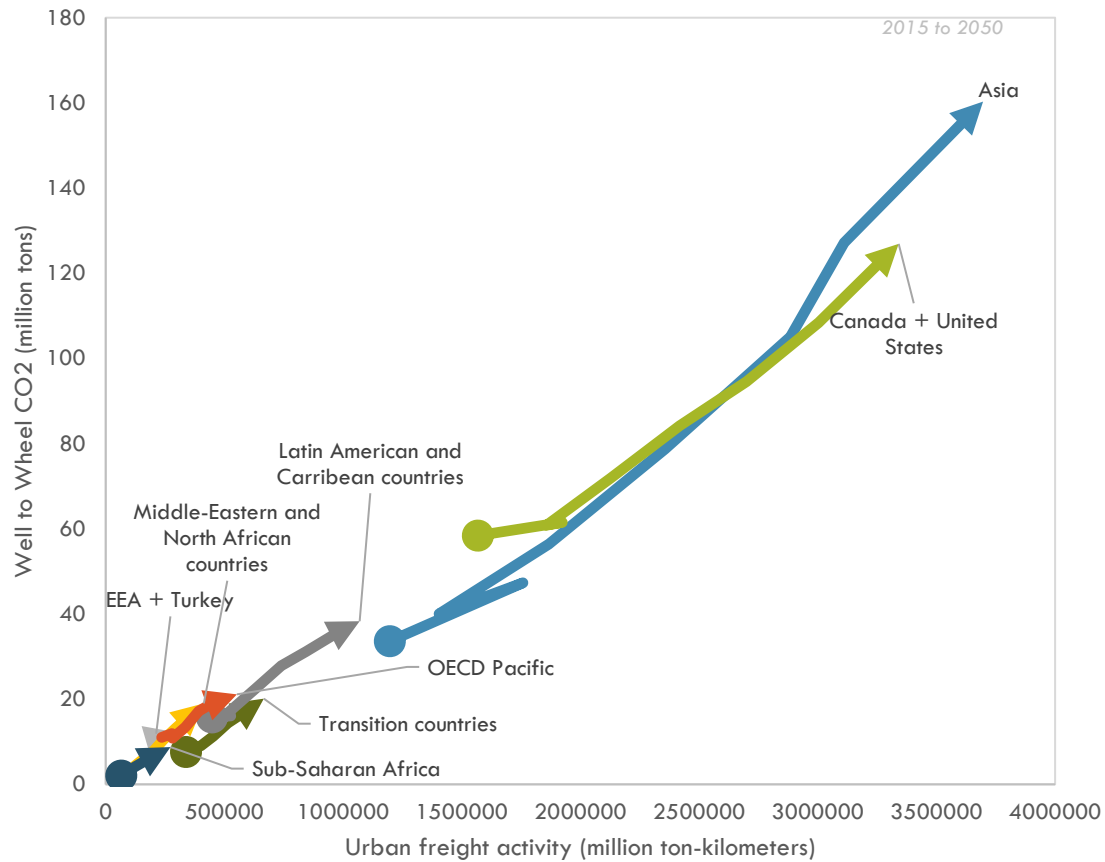
Transport energy consumption intensity with GDP, 2000-2021



Source: ATO visualization based on data from United Nations Statistics Division (2024) and World Bank (2023)

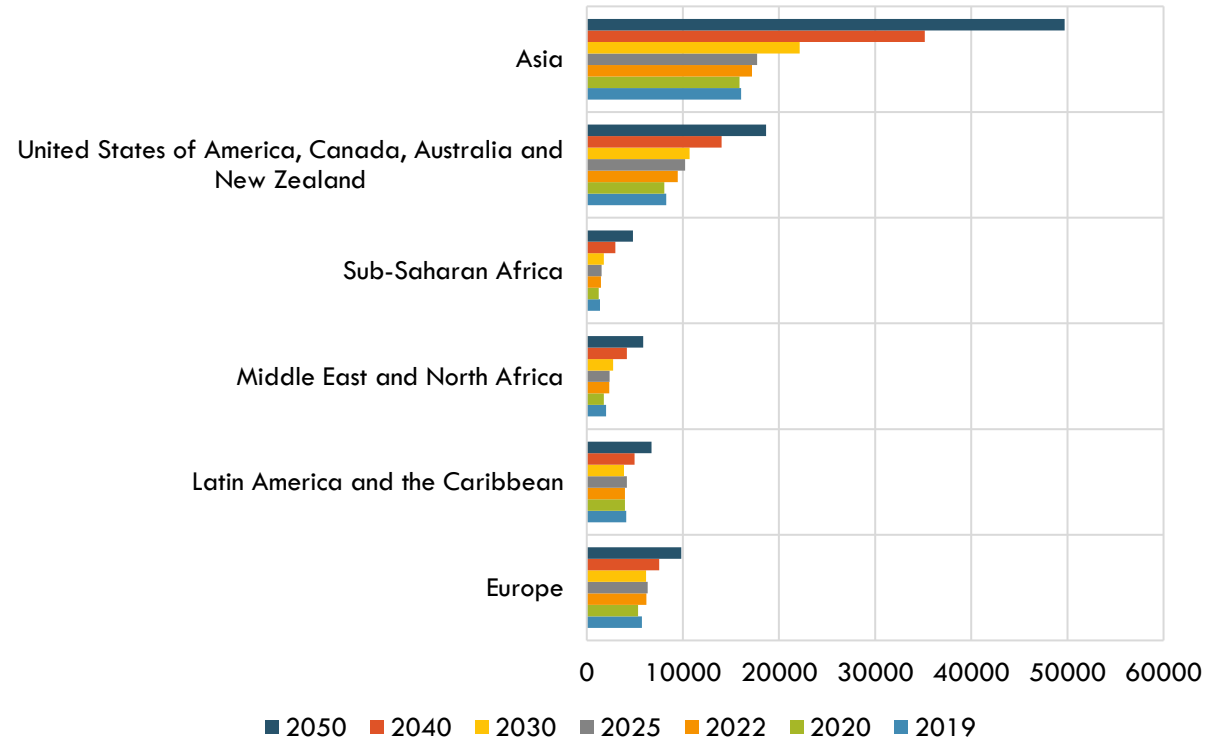
3. Improving Connectivity and Freight

Urban Freight



Source: 2015- 2050. Data taken from ITF (2021)

Domestic Freight

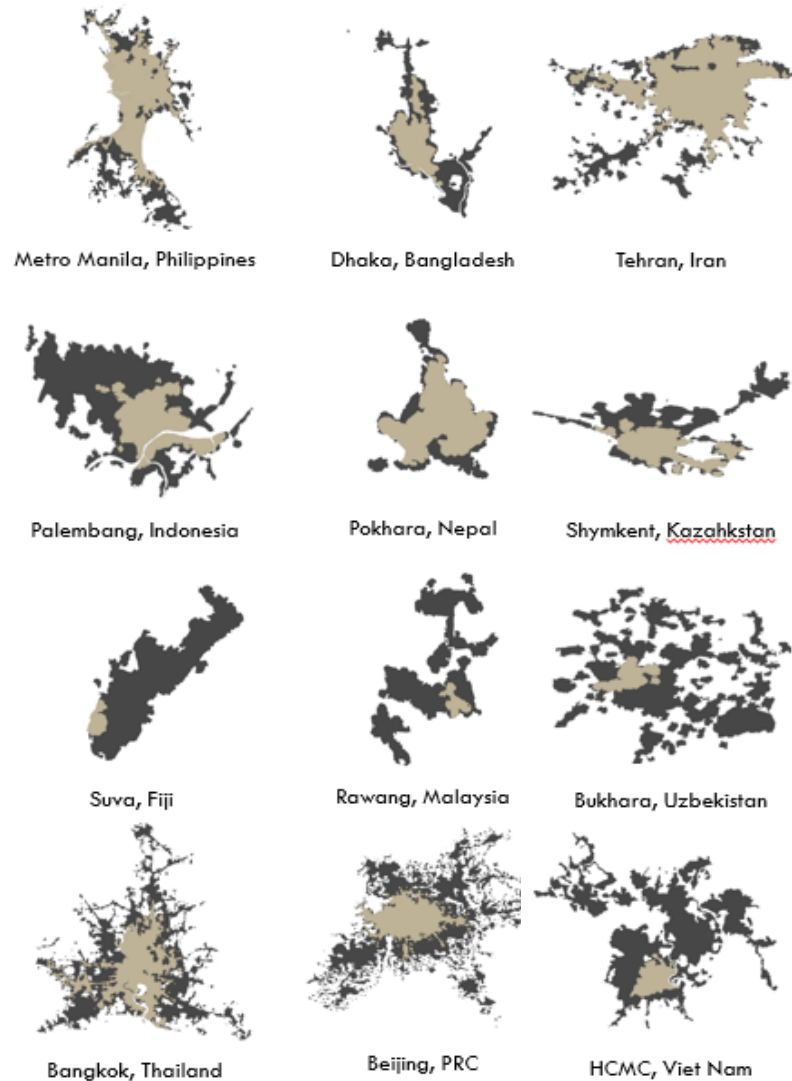


Source: 2015- 2050. Data taken from ITF (2021)

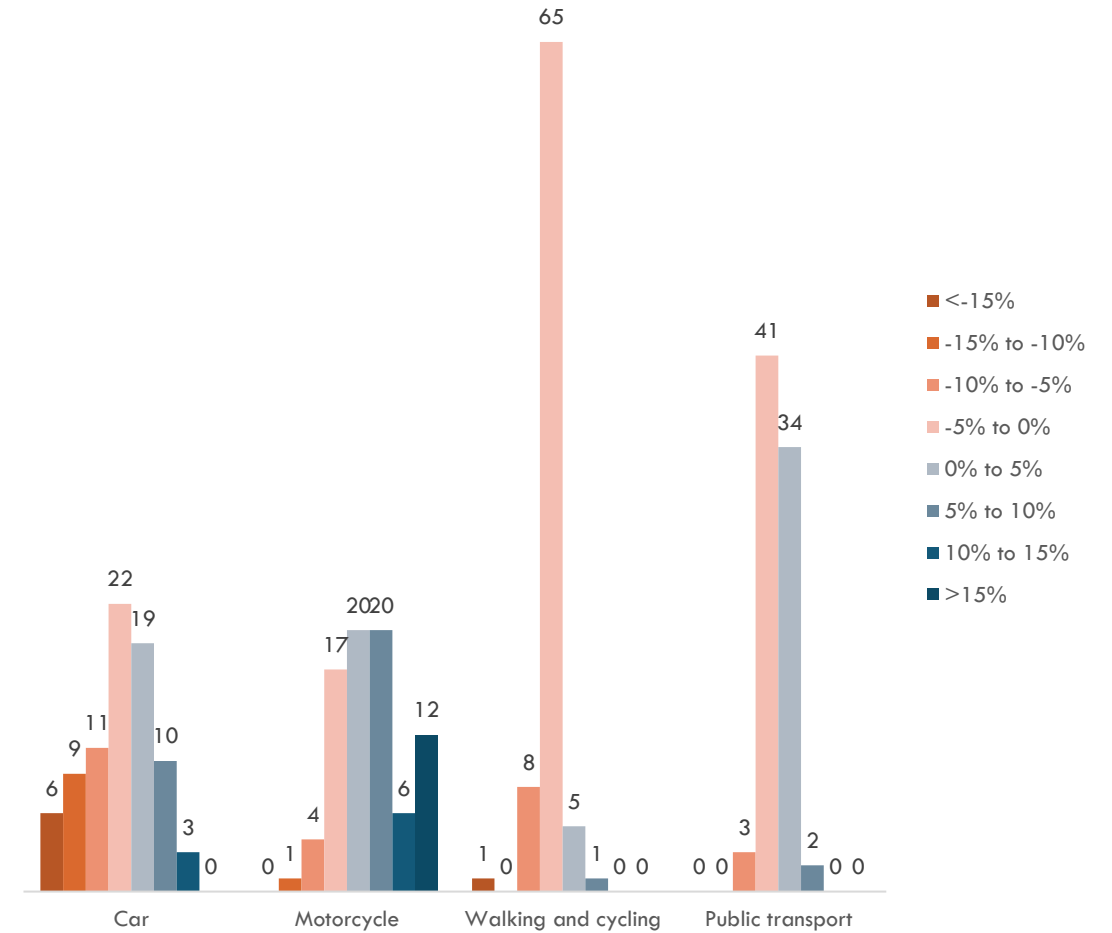
Source: ITF Outlook 2023

4. Shape people-centred urban mobility and liveable cities

5. People-Centered Urban Mobility and Livable Cities

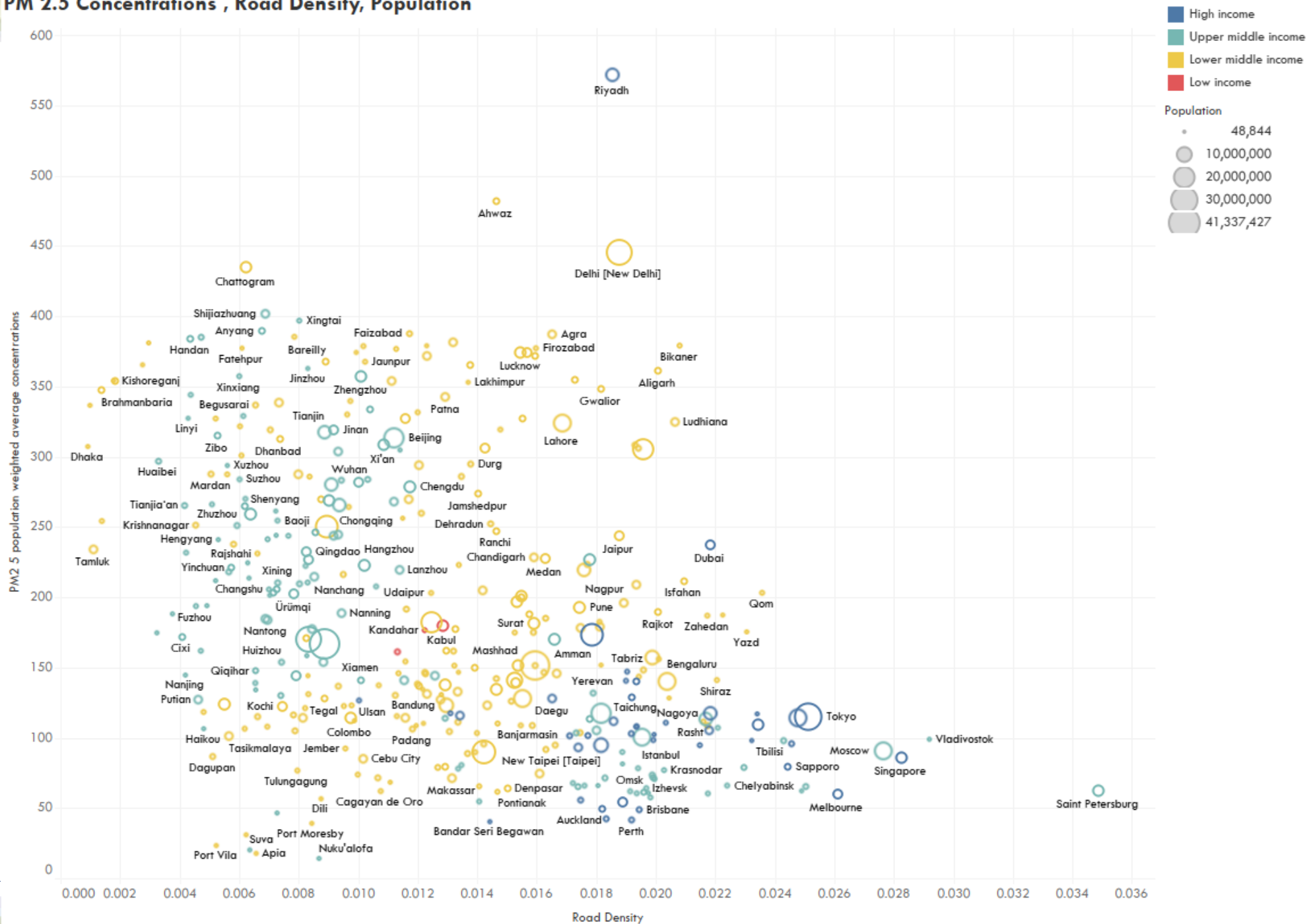


Modal shift in 80 cities between 2018 to 2023



Source: ATO analysis and visualization using data from Google (2025)

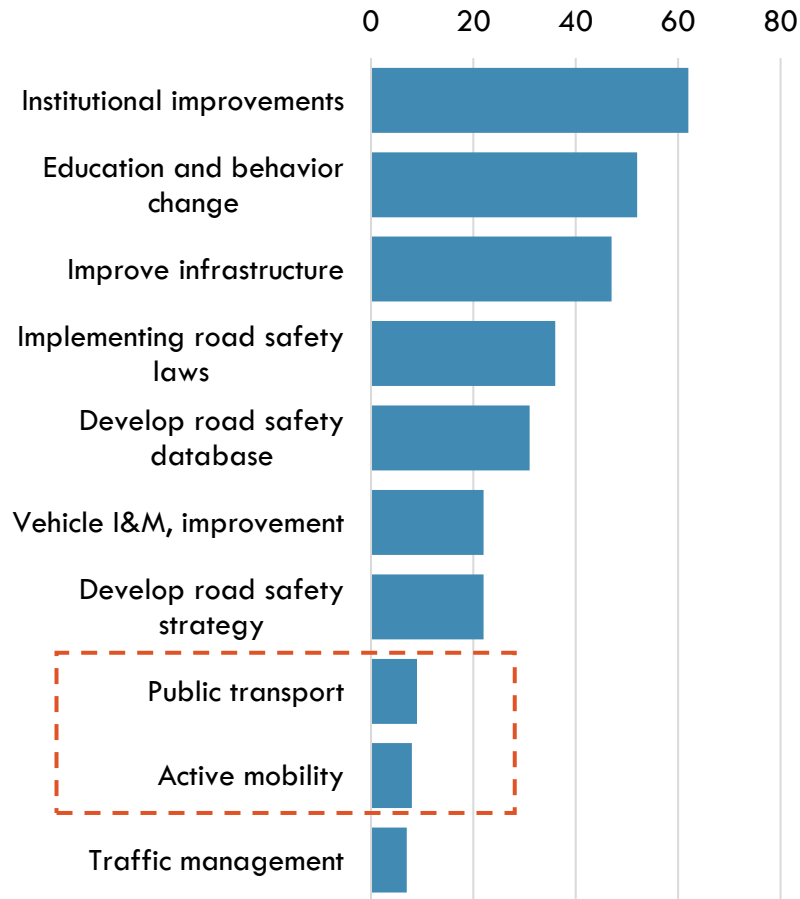
PM 2.5 Concentrations , Road Density, Population



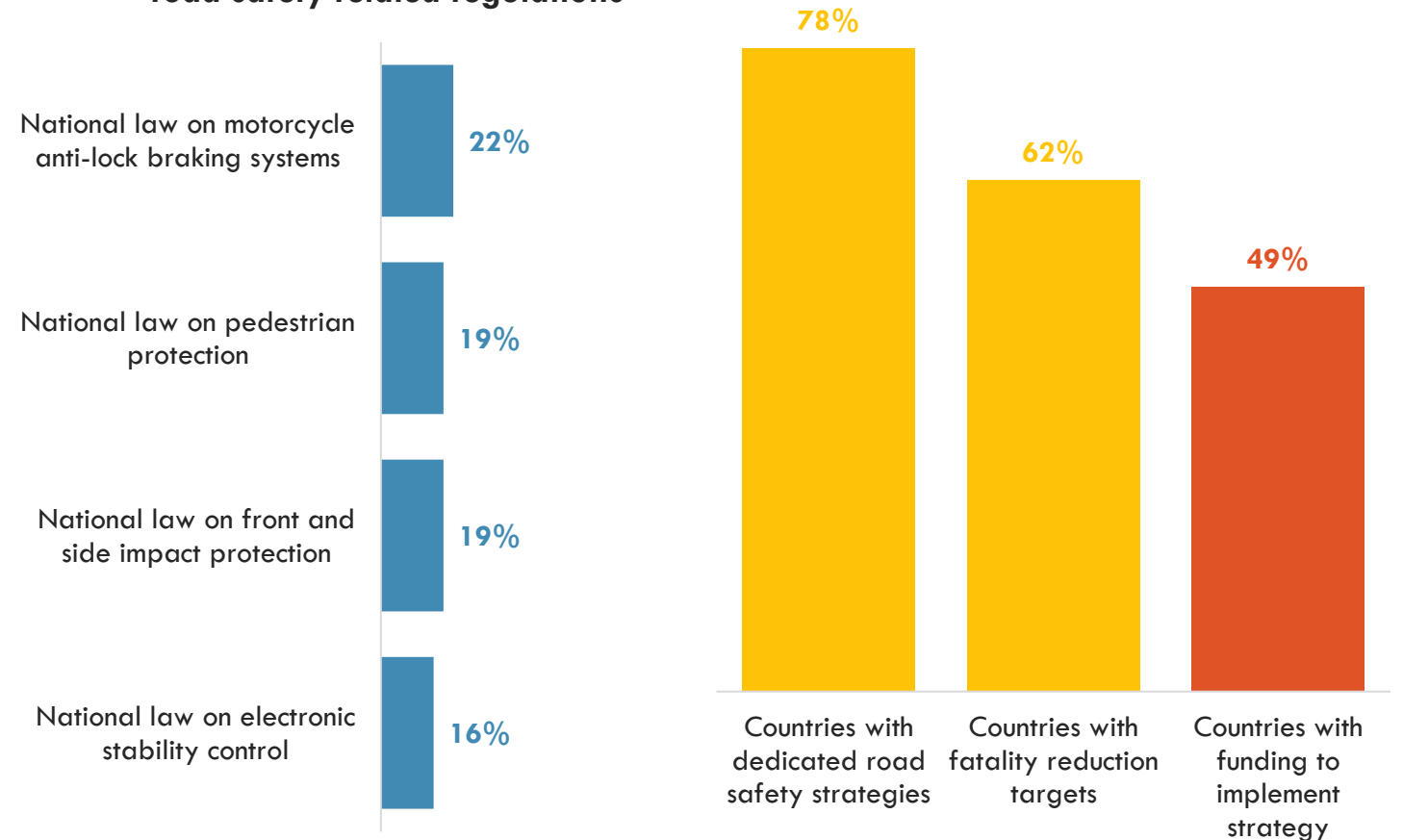
5. Make Transport Safe and Secure

Road Safety Policy Landscape

Top 10 measures within road safety strategies

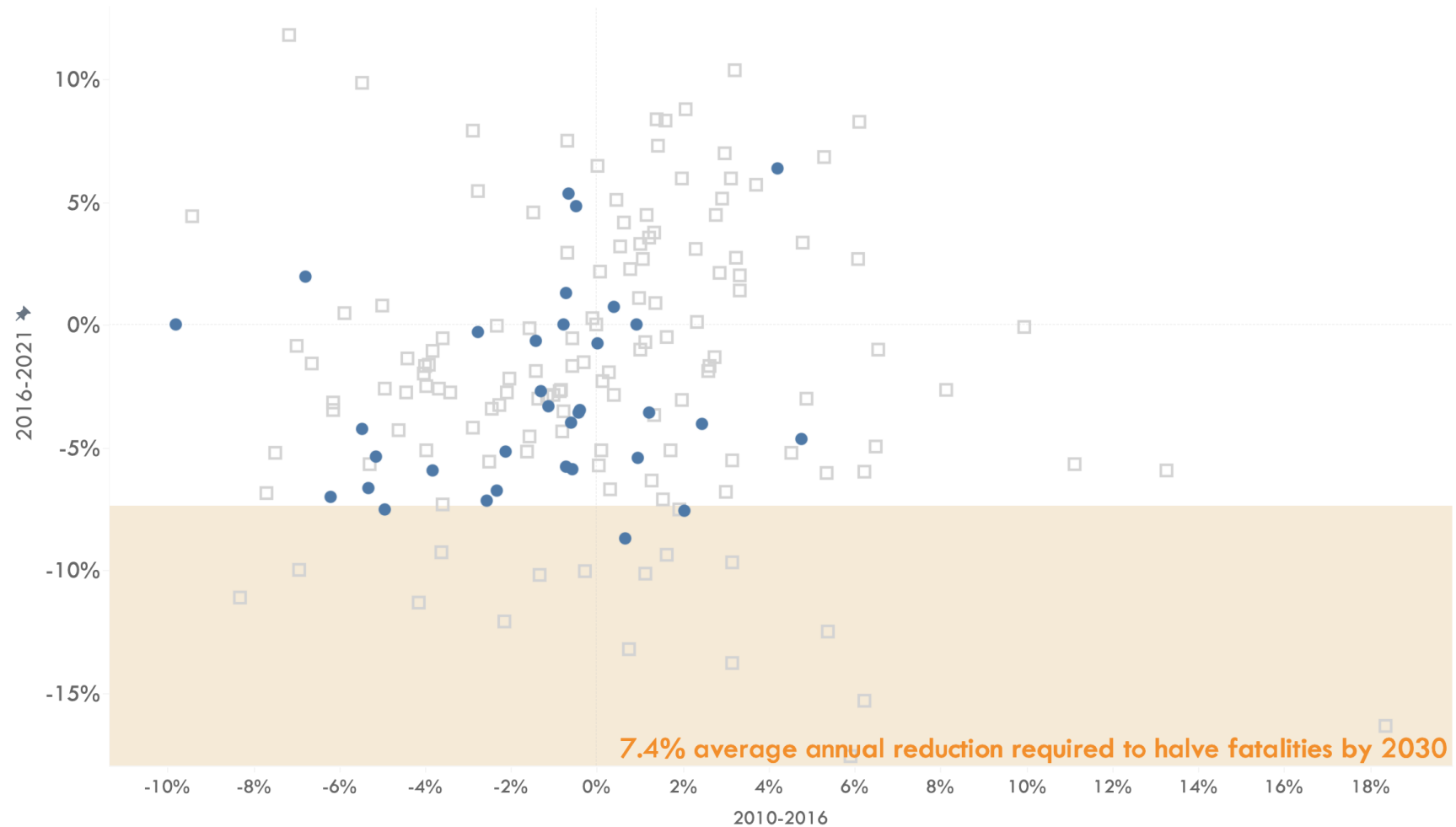


Share of Asian countries implementing road safety related regulations



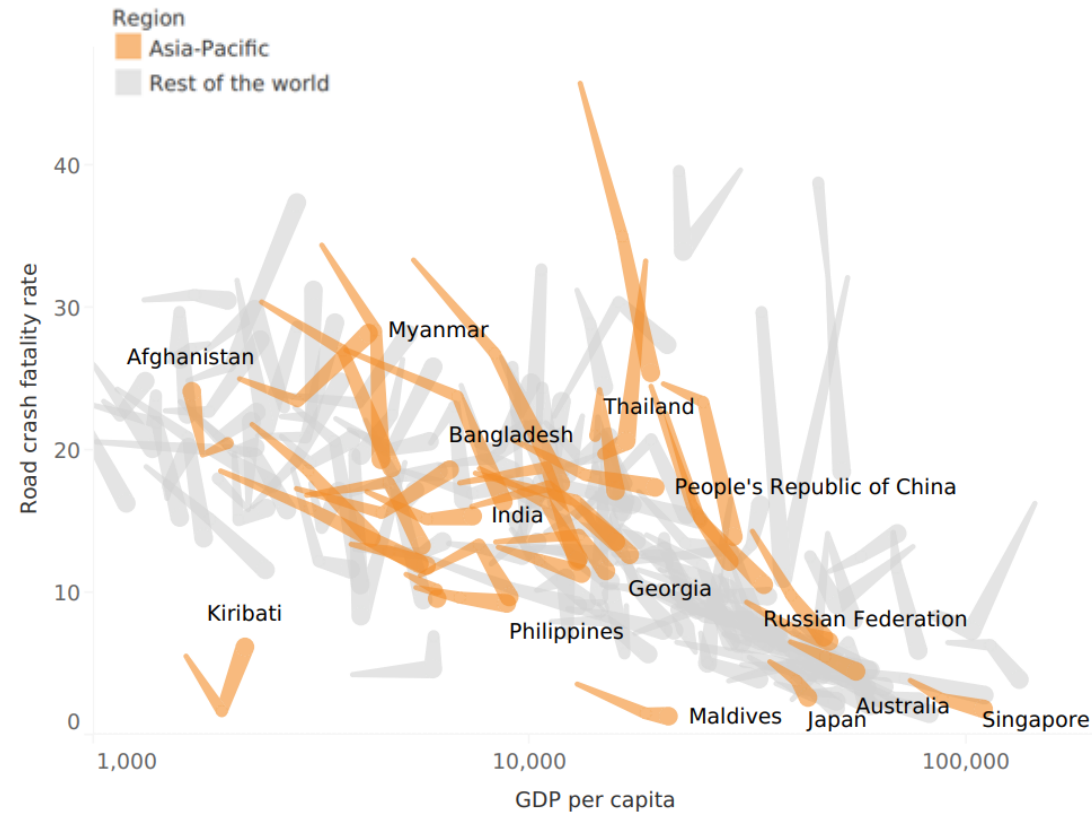
Falling short from the target

Road crash fatality growth rate vs. reduction goal

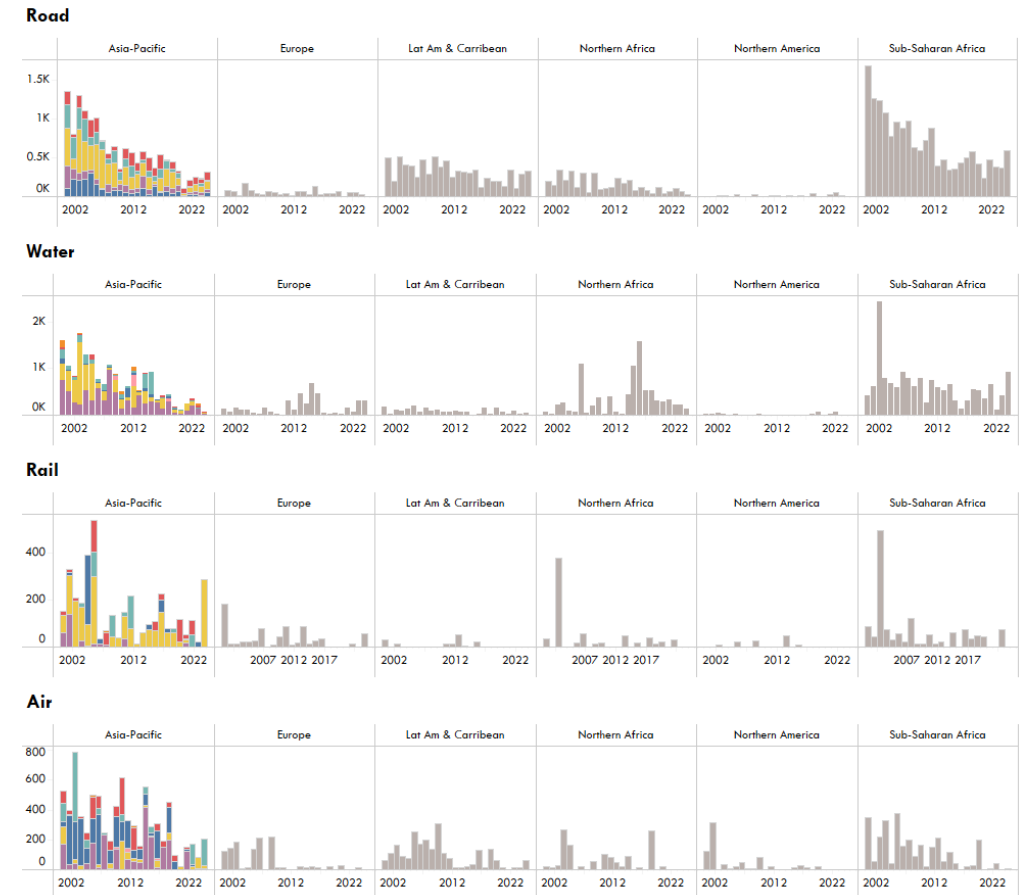


6. Making Transport Safe and Secure

Road crash fatality rate, 2010-2021



Number of deaths due to transport-related disaster events



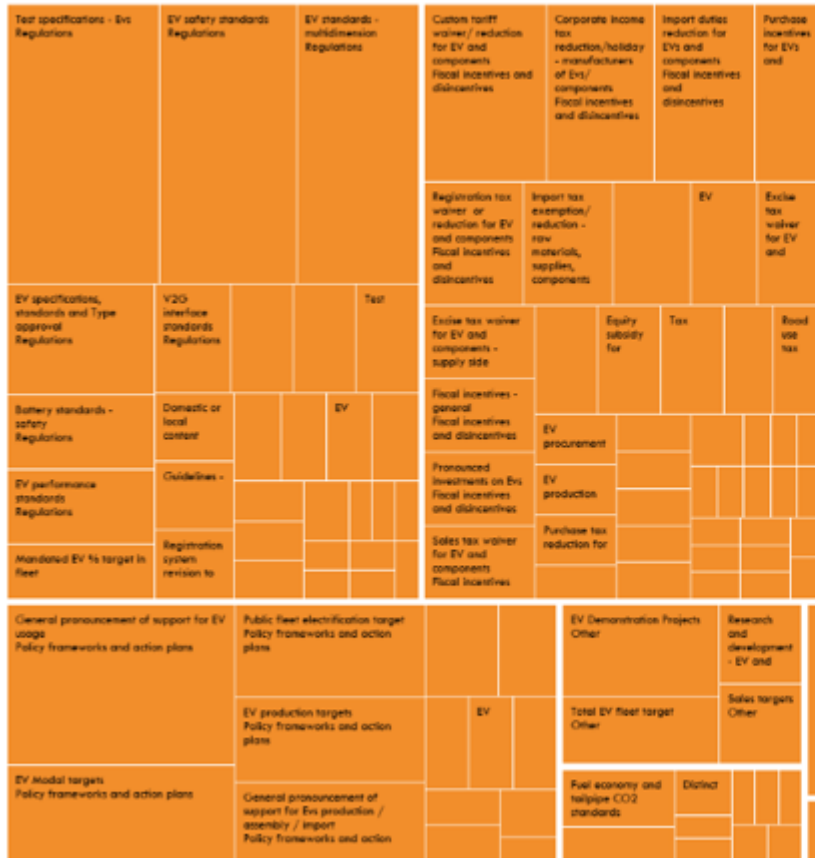
Own visualization based on data from Centre for Research on the Epidemiology of Disasters (2025).

Source: Own analysis and visualization based on data from WHO (2023)

6. Leveraging on Science, Technology and Innovation

E-mobility Policy Measures

EVs and EV components

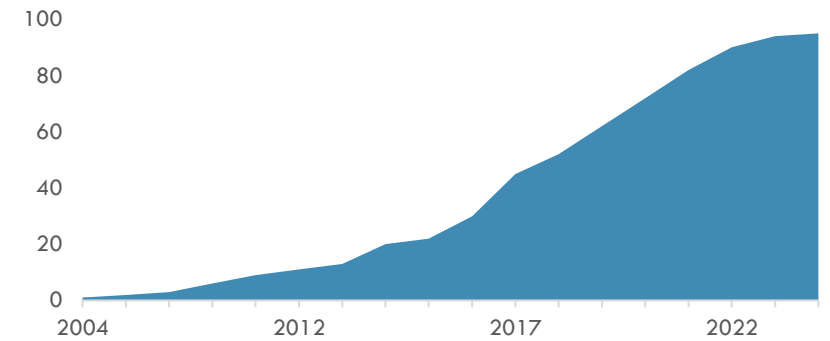


General

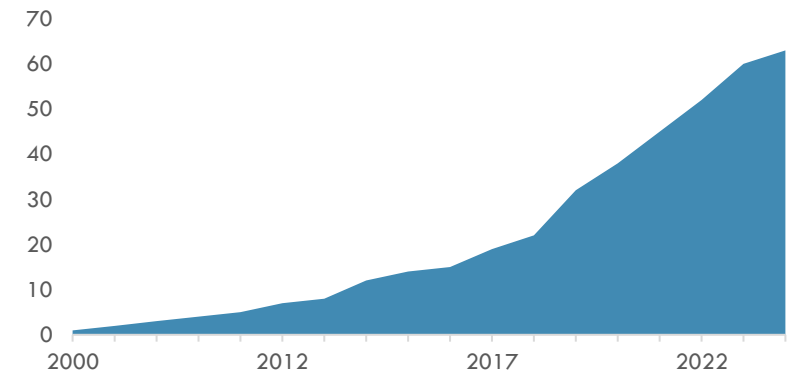
Infrastructure

Charging Equipment & components

Cumulative Measures "Tech and Knowledge Transfer"



Cumulative Measures "Digitalization"



asiantransportobservatory.org

“ATO translates data into insights, policies, and investments”

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