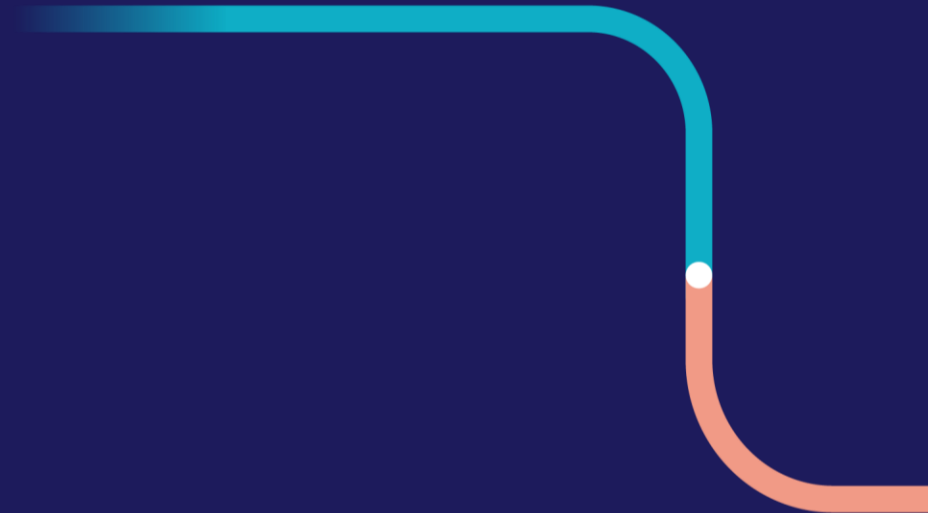


Sustainable Mobility

By GIZ/TUMI

Bonn, 14. September 2023





1.TUMI Introduction



2. Why TVET is important for Sustainable mobility?



3. Estimated Gap of trained manpower in sector



4. Conclusion



The leading global
implementation initiative
supporting city makers in developing
and emerging countries in the
transformation towards sustainable
urban mobility.



TUMI Partnerships

A 3-pronged Strategy for sustainable mobility



Multilaterale collaboration

Partnership approaches
scaling effects and leveraging
synergies



Further training & Innovation

Customized further training
formats and innovative
solutions throughout pilot
activities



Investment

Investigation for the building
and modernising for a
sustainable city mobility
infrastructure

The TUMI Pillars

A sustainable mobility approach for emerging and developing countries



Multilateral Collaboration

Partnership approaches, scaling effects and leveraging synergies with actors in sustainable mobility



Capacity Development

Customized training formats and innovative solutions through pilot activities



Investment

Innovative financing mechanisms sustainable mobility infrastructures

Global project TUMI Just Mobility



tumi E-Bus Mission

Support for cities in the deployment of electric buses

tumi DATA

Guide and comprehensive mobility data hub for urban mobility data

tumi E-MOBILITY

Guidance for battery-electric vehicles in local public transport

Why TVET is important for Sustainable Mobility?

Urban areas contribute more to partner countries' GDP

LAC

Latin America and the Caribbean is the most urbanized developing region in the world.



Over 8 out of 10 people
live in cities in the region

27% of GDP growth
is contributed by its 10 largest cities

3 million people
join the urban workforce annually

Asia & Pacific

Cities are the center of economic growth and innovation.



80% of economic growth
in developing Asia comes from
its urban areas

17 out of 33 megacities
with a population of 10 million
or more are located in the region

Africa

Rapid urbanization has become a pan-African phenomenon.



284%
Growth of the share of Africa's urban
population from 1990 to 2019

1.2 billion
Expected urban population by 2050

3 megacities with over **10 million**
inhabitants each are located in Africa

EBRD

Cities are drivers of growth



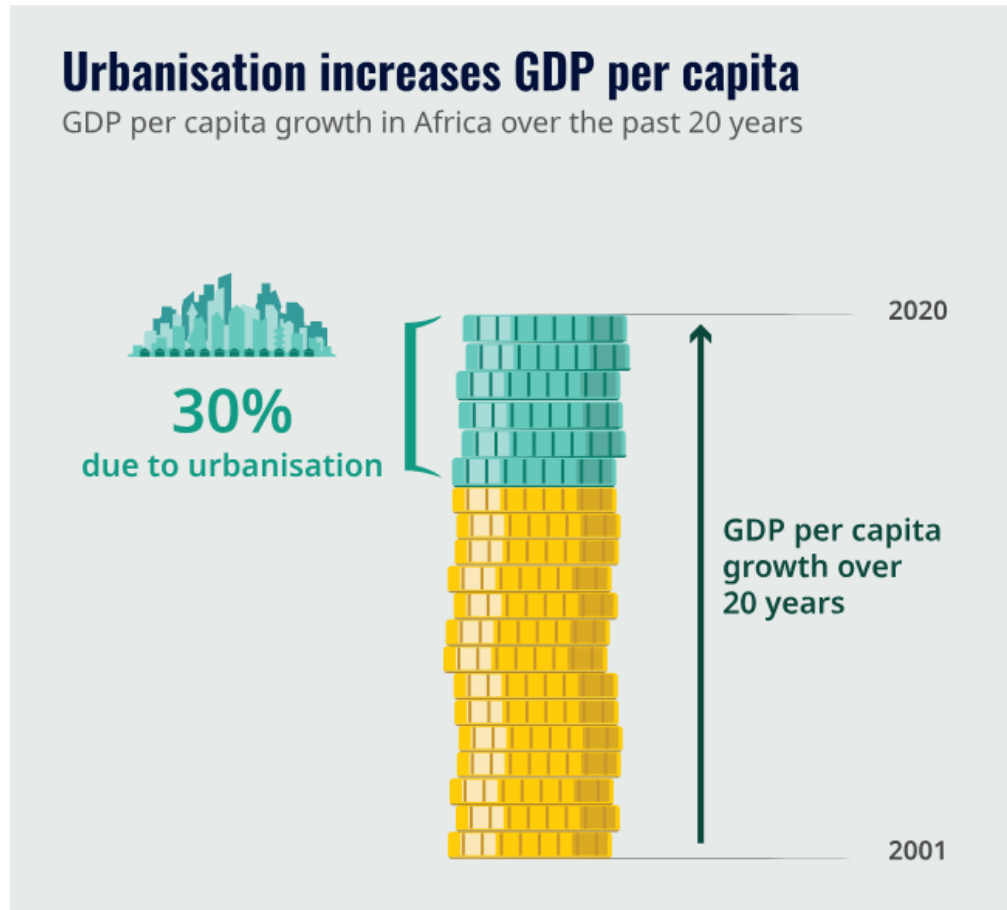
Over 70% of output and growth
come from cities in EBRD regions

Over 60% of the population
in EBRD regions live in cities

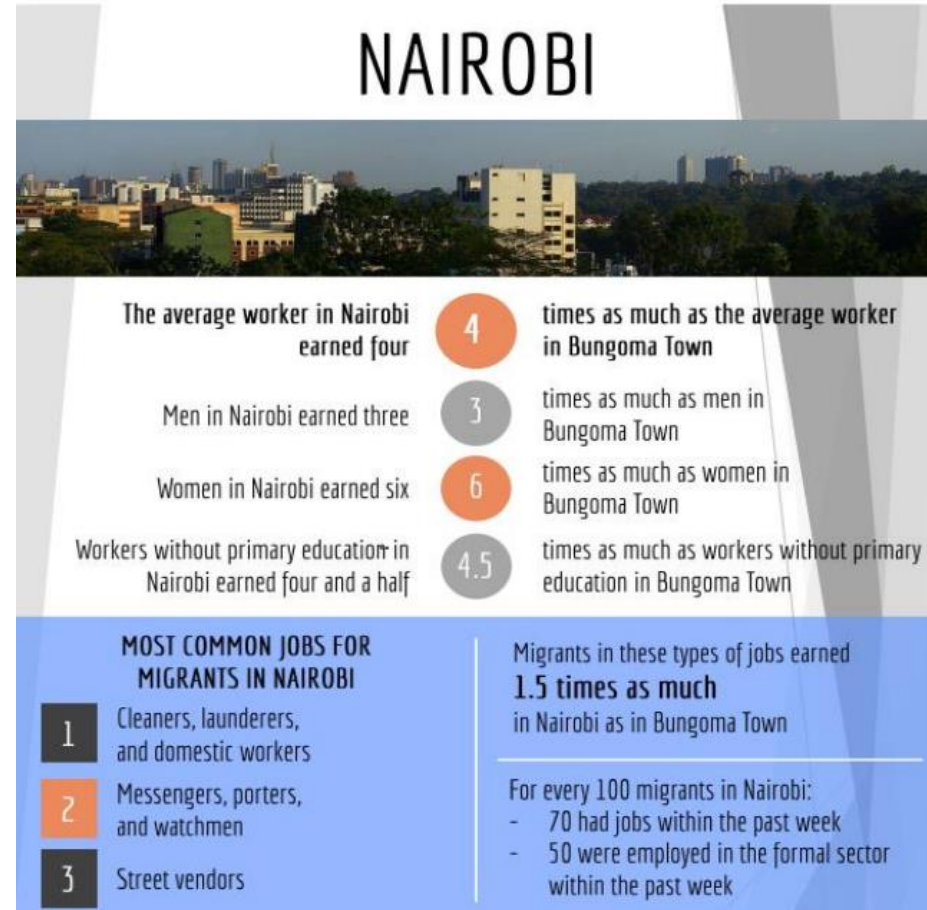
Large cities are growing more
in population and have higher GDP

Source: [Creating Livable Cities: Regional Perspectives \(Executive Summary\) \(adb.org\)](https://www.adb.org/publications/creating-livable-cities-regional-perspectives-executive-summary)

e.g. Nairobi, Kenya

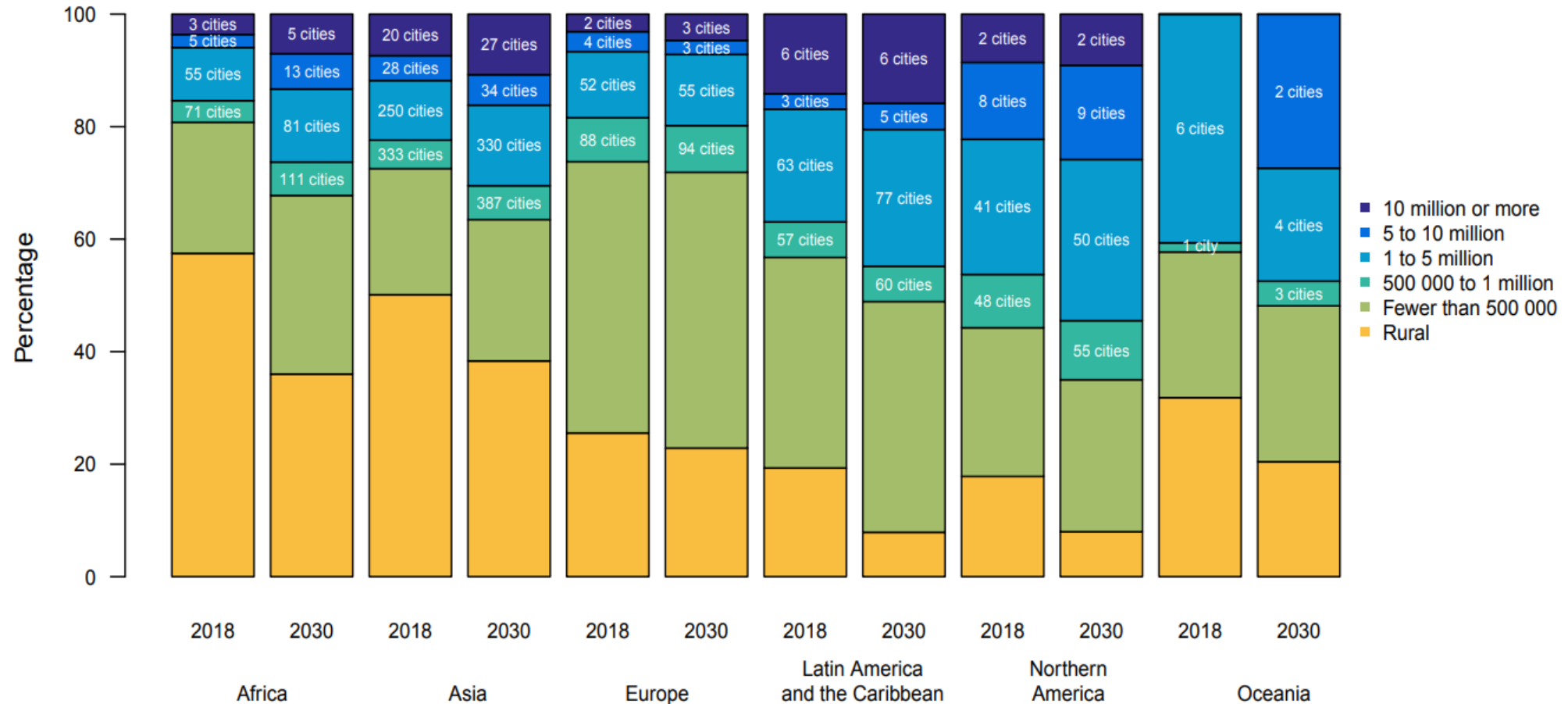


Source: OECD/SWAC (2022), *Africa's Urbanisation Dynamics 2022: The Economic Power of Africa's Cities*.



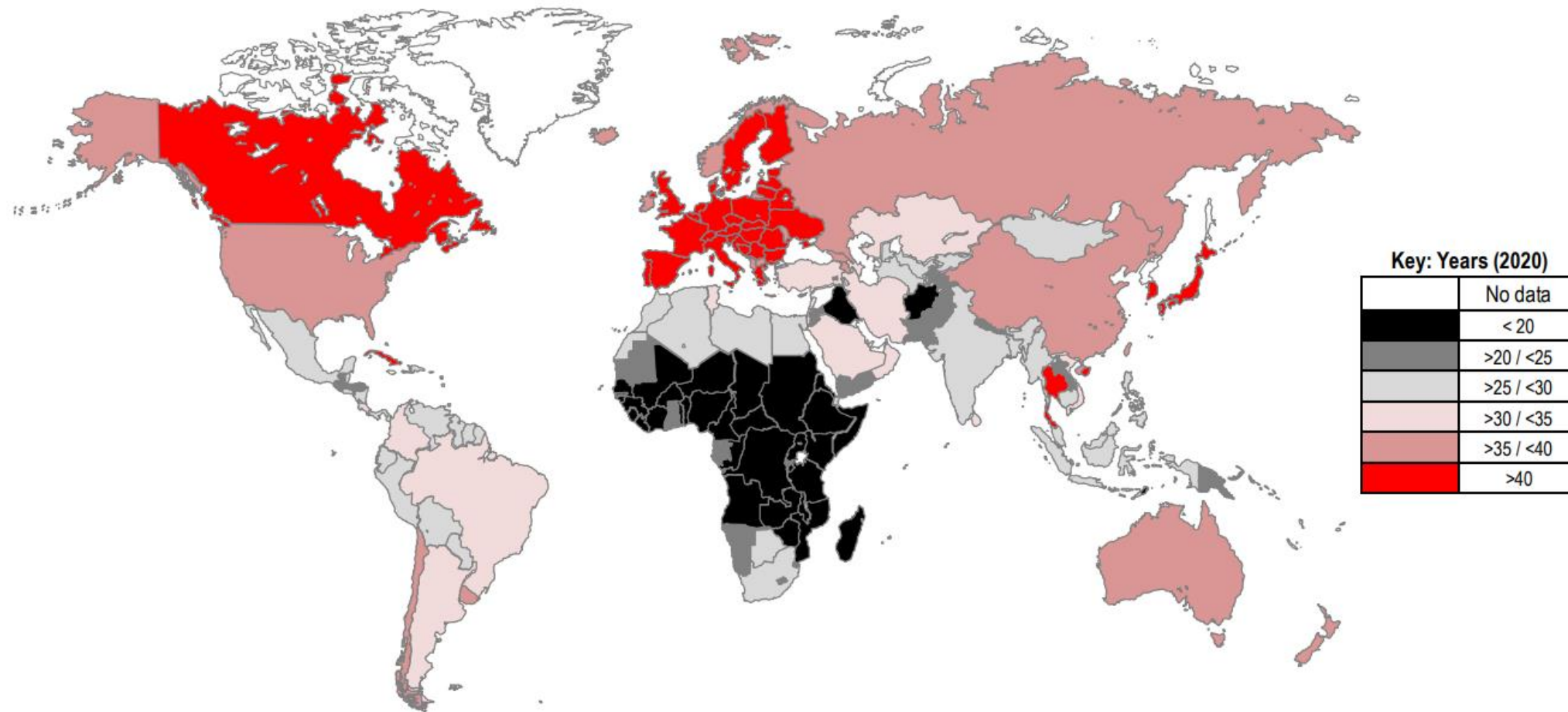
Source: Leah Platt Boustan, Economics Professor at Princeton University

Urbanization is global phenomena



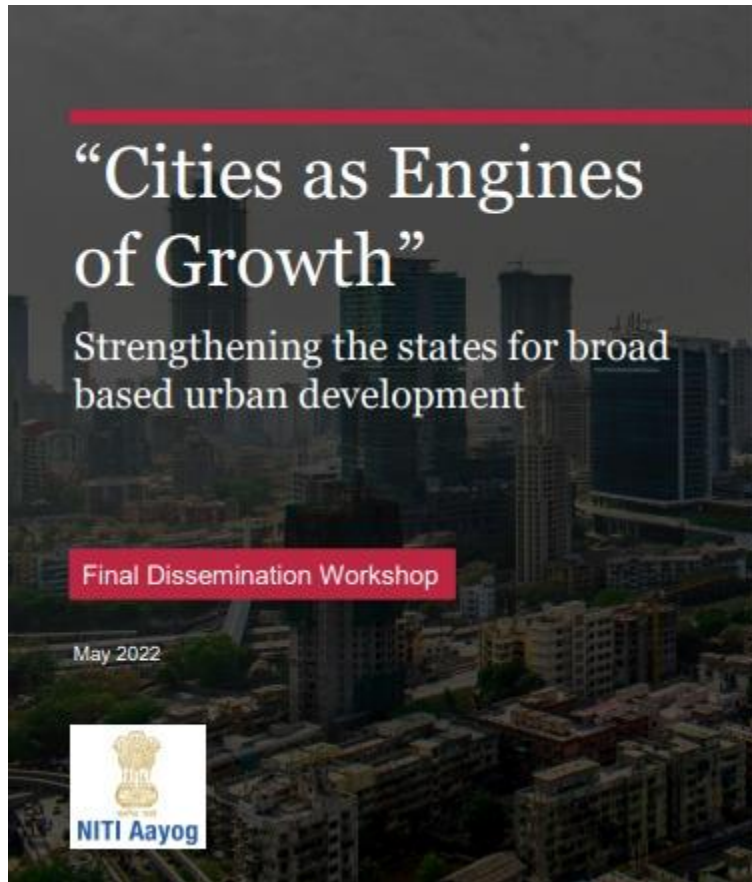
*The population of cities with fewer than 500,000 inhabitants is estimated by taking the difference between the total urban population and the population in cities with 500,000 inhabitants or more. The number of cities with fewer than 500,000 inhabitants is not estimated.

World's most youngest population is in Africa, South & South – East Asia



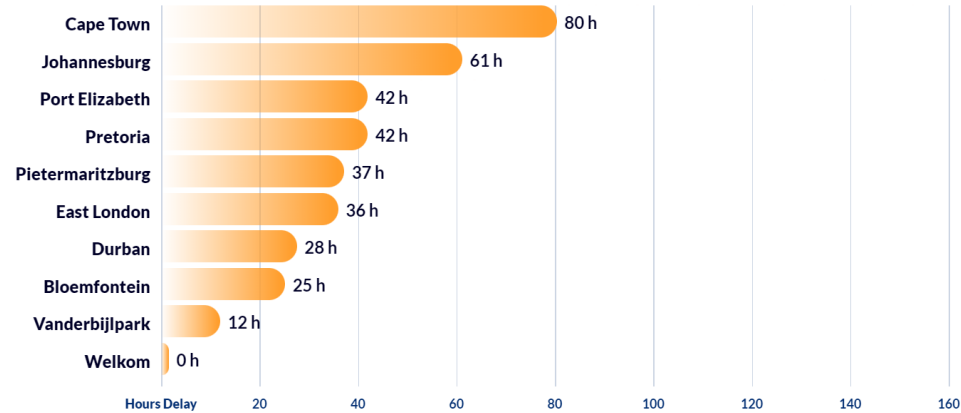
Source: HSBC, UN Population Division

Publications from partner countries

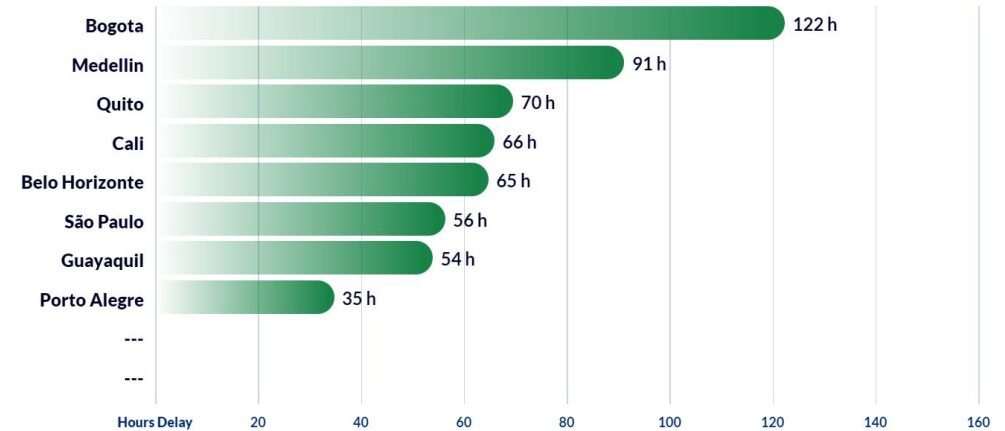


Region Wise 10 highest traffic delay times

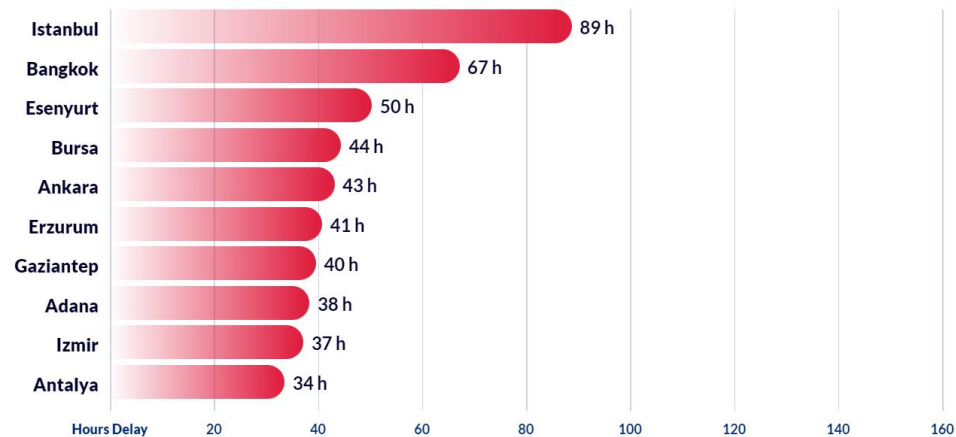
Africa



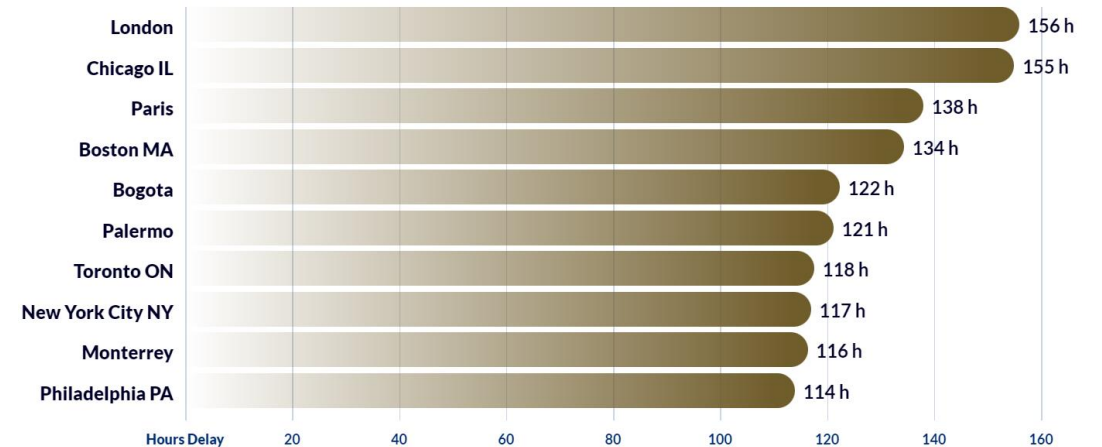
South America



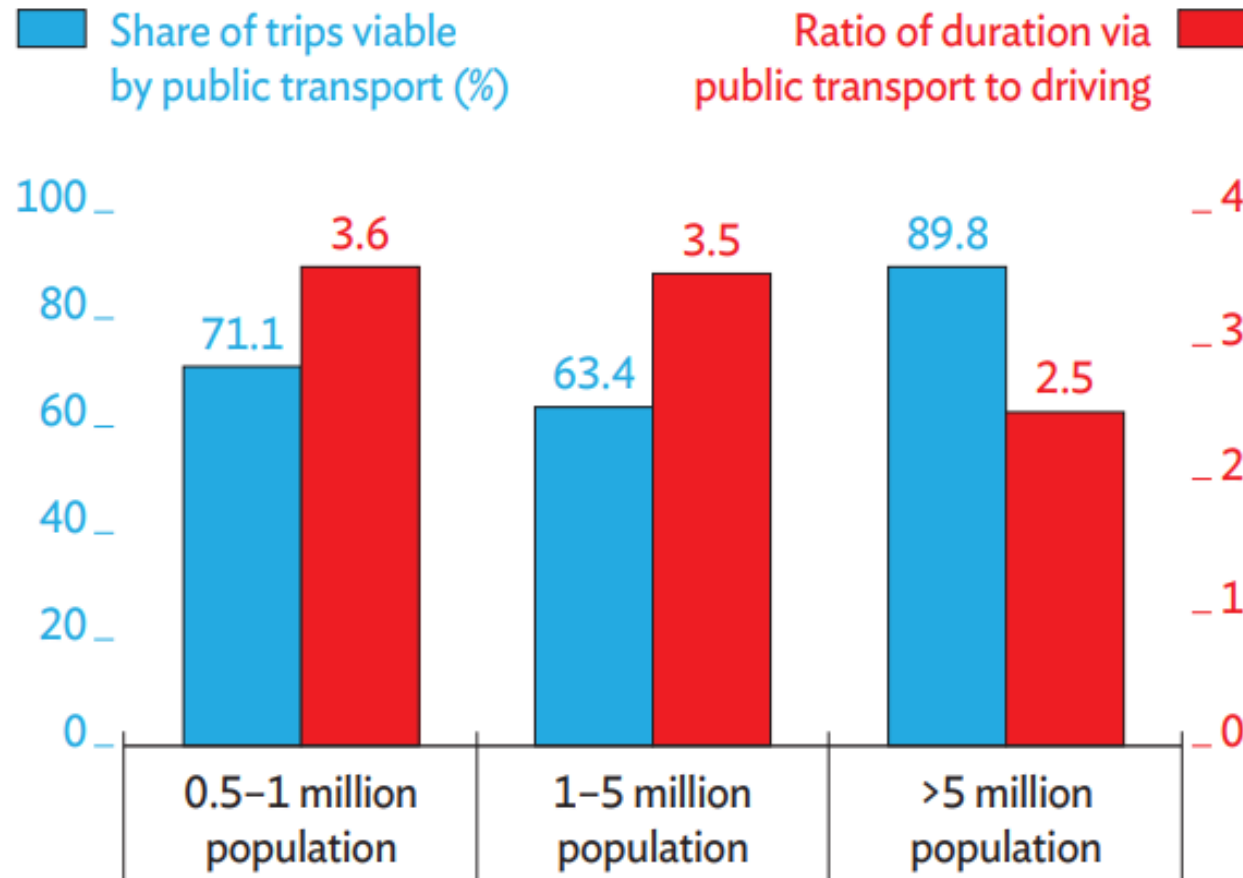
Asia



Global

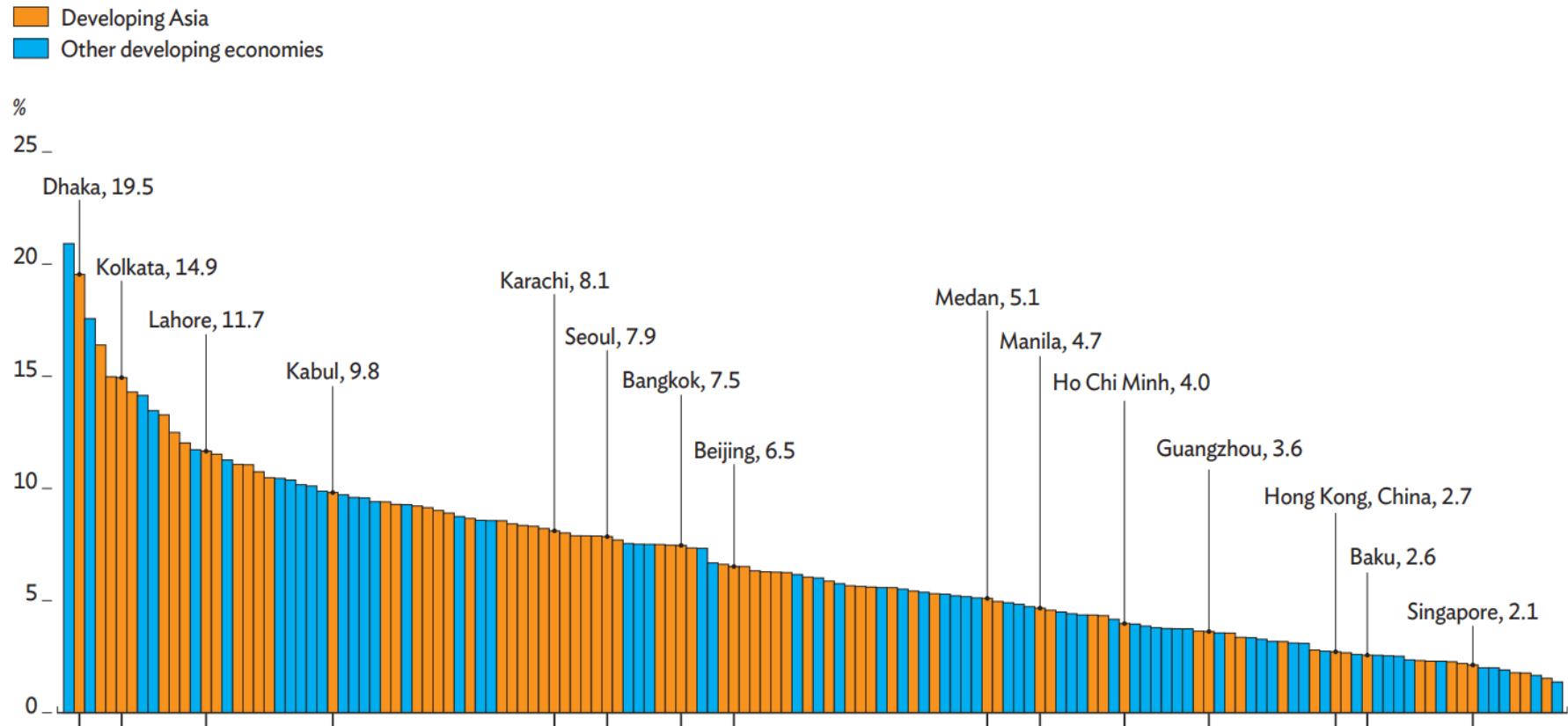


Viable public transport trips and their duration



Source: ADB's 2019 Report – [Fostering Growth and Inclusion in Asia's Cities](#).

Share of income spent on 40 commuting trips/month

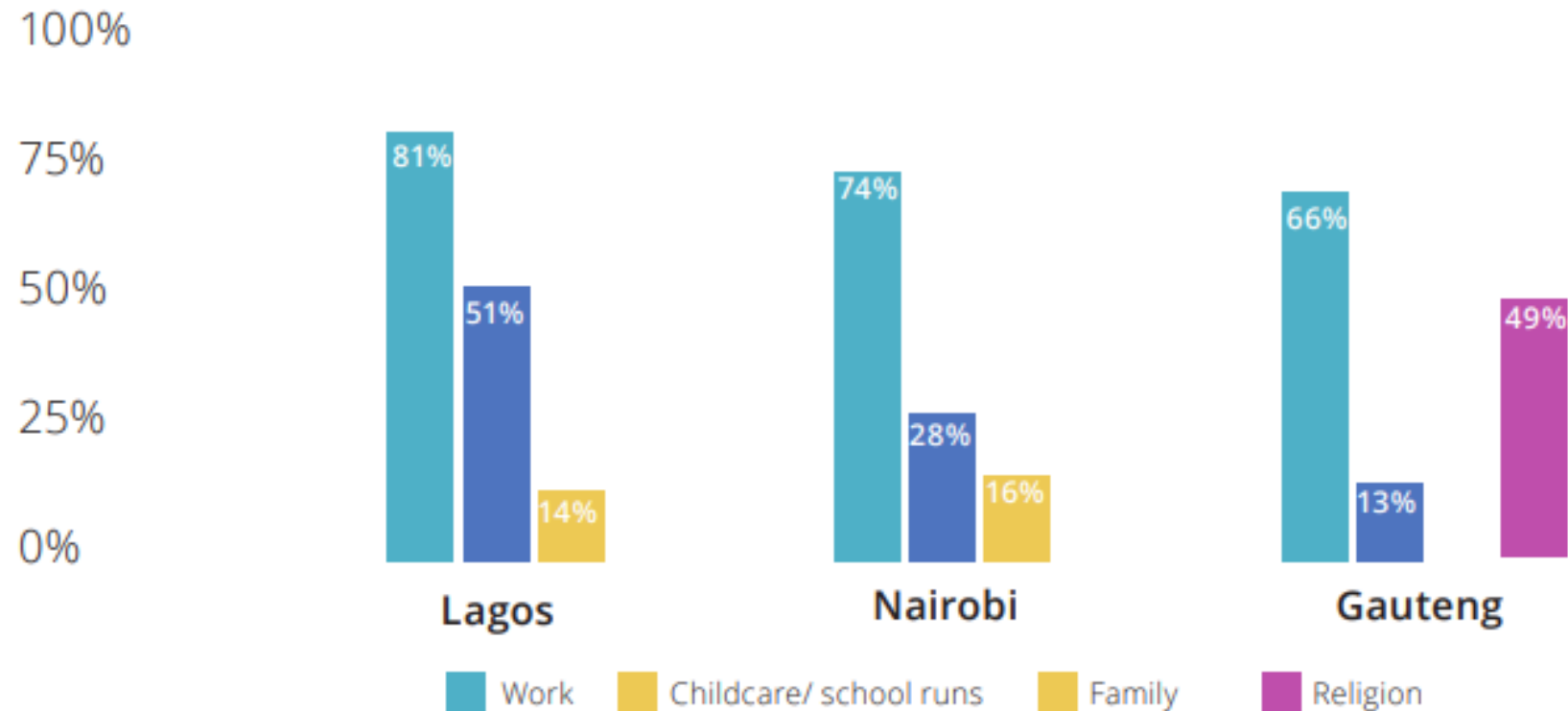


Note: Developing Asia is represented by 77 cities and developing economies in other regions by 65 cities.

Source: ADB estimates using data from the Land and Housing Survey in a Global Sample of 200 Cities of the New York University Urban Expansion Program 2016.

Source: ADB's 2019 Report – [*Fostering Growth and Inclusion in Asia's Cities*](#).

Public transport is not just used for work trips

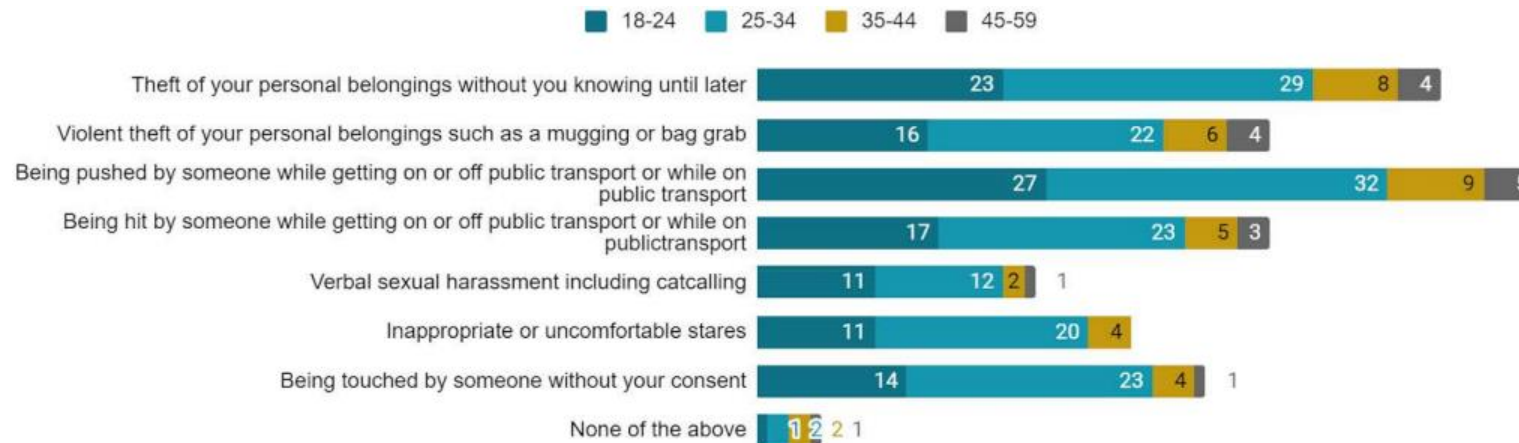


Note: includes only women survey respondents. Due to the small sample size, this graph does not claim to be representative of city-level trends.

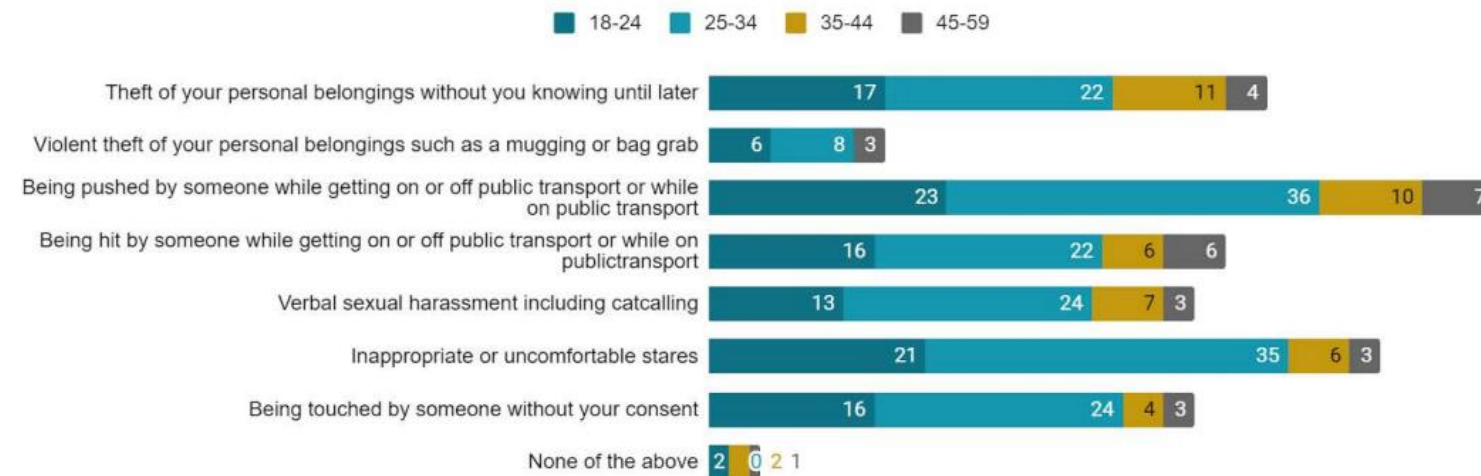
Source: TUMI – [Decoding Women's Transport Experiences](#).

Survey on Violence & Harassment

Lagos



Nairobi

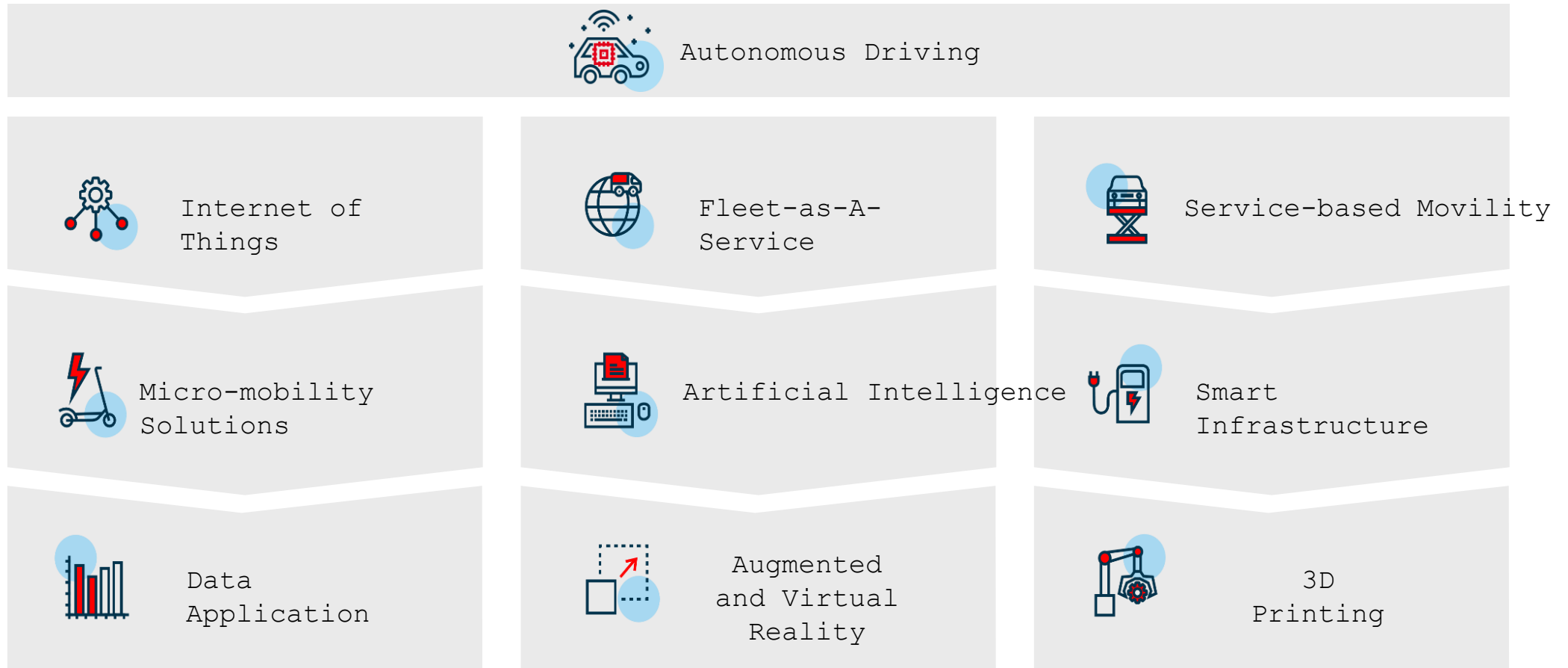


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3 Key Expectations from cities

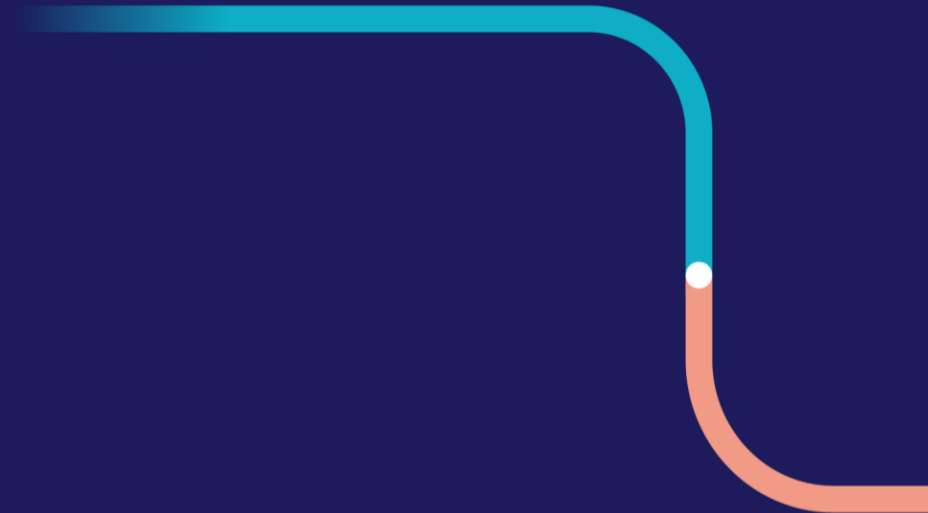
- i. Be the epicenter of the Economies
- ii. Provide Livable environment & opportunities to all
- iii. Be NetZero in next 4 decades

Global Mobility Trends and E-mobility development



Source: EV Magazine (2022)

Estimated Gap of trained manpower in sector



But, we do not have enough skilled manpower!



A 250K GAP?
BUILDING CAPACITY FOR THE
GLOBAL MOBILITY TRANSITION

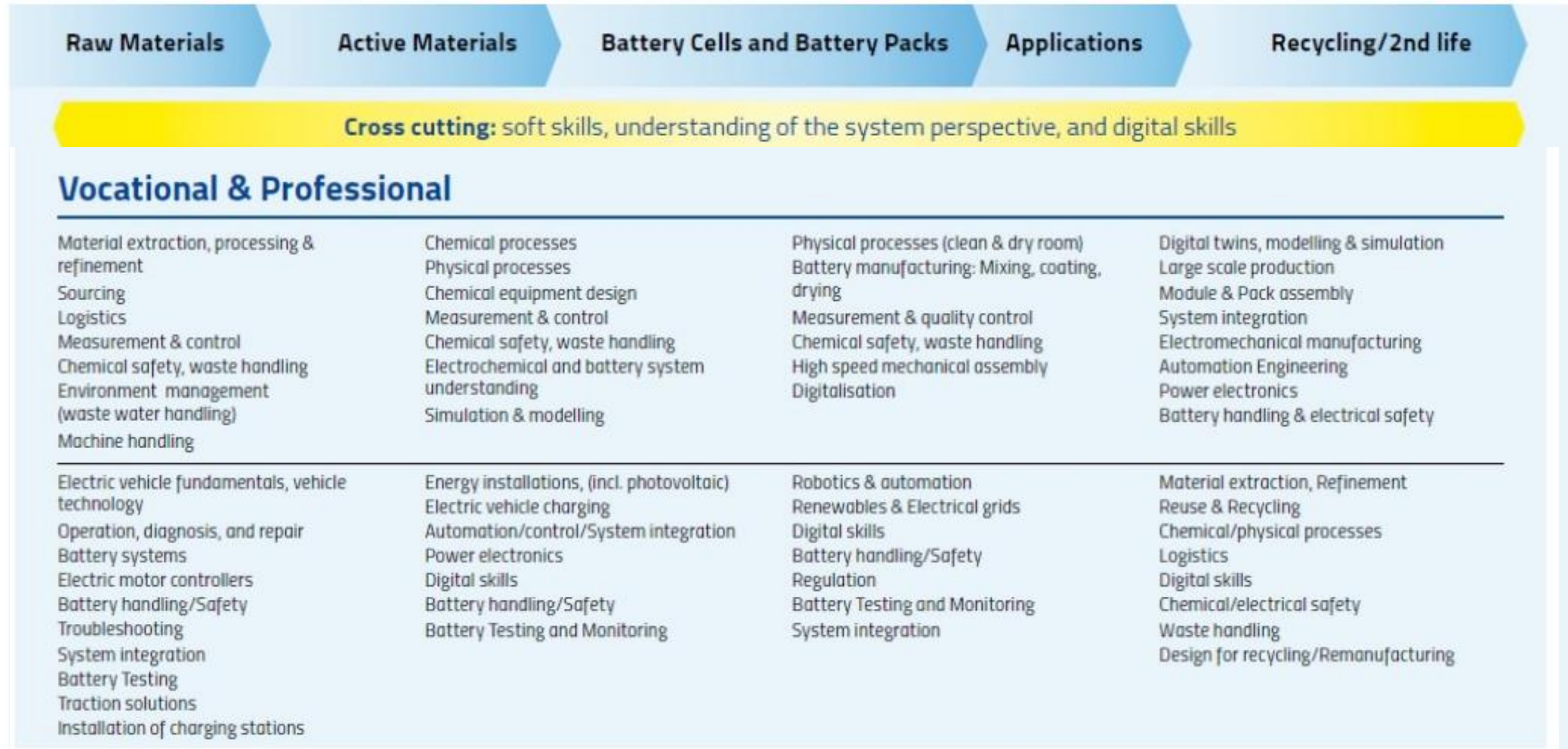
SCALING CAPACITY AND EDUCATION TO
ACHIEVE SUSTAINABLE MOBILITY FOR ALL

Typical stakeholder groups involved in transport projects (based on GUIDEMAPS)

Government / Authorities	Businesses / Operators	Communities / Local Neighbourhoods	Others
Local authorities	Transport operators / providers	National environmental NGOs	Research institutions
Neighbouring cities	Transport consultants	Motorist associations	Universities
Local transport authority	Car sharing companies	Trade unions	Training institutions
Traffic police	Bicycle rental operators	Media	Experts from other cities
Other local transport bodies	Other mobility providers	Local authority Forums	Foundations
Other local transport bodies	National business associations	Local community organisations	
Politicians	Major employers	Local interest groups	
Other decision-makers	Private financiers	Cycle/walking groups	

figure 2: Stakeholder groups (Eltis, 2015)

Identified skills within Battery & E-mob value chain



Source: European Battery Alliance.

Conclusion

It is clear we won't be able to achieve our goals until:

- the countries/cities identify the gaps in skilled staff, required skills and existing curriculas
- Initiatives and projects leave behind the traditional silos
- Development co-operation partners and private sector take a co-ordinated approach

Thank you for your Attention



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