

Transport
for Cairo



مواصلات
للقاهرة

Capacity Building in Sustainable Urban Mobility for Low Income Countries

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Urban Mobility Lab | Transport for Cairo

September 2025



Hello!

We are TfC.

Transport for Cairo (TfC) is a strategic advisory practice in the domain of sustainable urban mobility.

TfC Data Lab

We specialize in data collection, modelling, simulation and visualization.

TfC Urban Mobility Lab (UML)

We provide consulting and project management services and produce actionable research, policy papers and training programs.

TfC Tech

We develop digital tools, RouteLab, to facilitate data collection and management in data-poor environments.

TfC Passenger Information

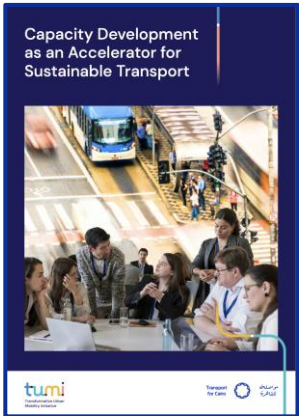
We develop Passenger Information Systems (PIS) including designs transit maps and wayfinding material for a quality passenger experience.

Contributions



[Link](#)

2024



[Link](#)

2025



[Link](#)

2025

Client



Approach and results

Understand capacity building and capacity needs assessments and activities and formats.

Identify capacity gaps, and their impacts on transport decarbonization goals.

Focus on ongoing efforts, consolidate findings and recommendations from both previous projects.

Research partners

Capacity development providers

Transport institutions

International transport community

Framework:

Capacity Definitions and Concepts

Capacity: The ability of people, organisations and society as a whole to manage their affairs successfully.

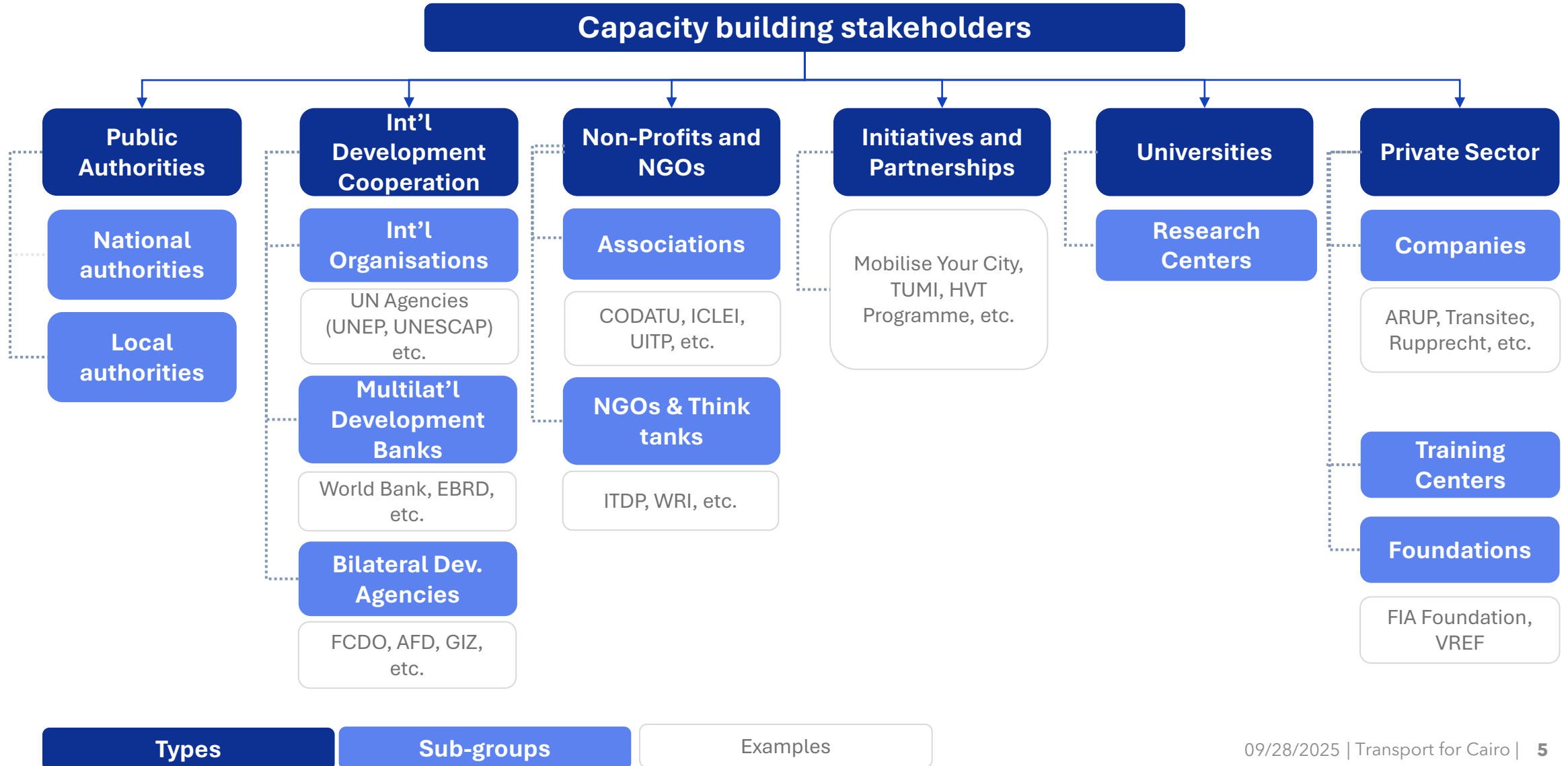
Capacity assessment: The identification of capacity assets and needs at national and local levels, equivalent to measuring baselines and the progress of (capacity) development indicators.

Capacity development: The process whereby people, organizations and society as a whole unleash, strengthen, create, adapt, and maintain capacity over time, in order to achieve development results.

Capacity development support: Efforts by external individuals or organisations to reinforce, facilitate, and catalyse capacity development.

Inherently, capacity development involves and supports making changes to an existing situation.

Capacity development support:



Capacity types in Sustainable Transport:

Technical vs Functional capacities

| Technical capacities | Functional capacities |
|---|--|
| <ul style="list-style-type: none">• Planning, regulating and supervising PT• Funding and financing models• Designing transport networks• Setting up charging schedules• Fare structures and pricing | <ul style="list-style-type: none">• Project management• Human resources management• Communications & marketing• Procurement• Knowledge sharing |

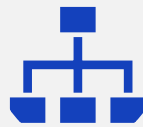
Capacity levels



Capacities related to developing human resources

- Number of staff
- Staff education
- Existing educational programmes
- Sustainability in educational programmes

Individual level



Capacities related to performance of the institute

- Governance capacities
- Planning capacities
- Technical capacities

Institutional level



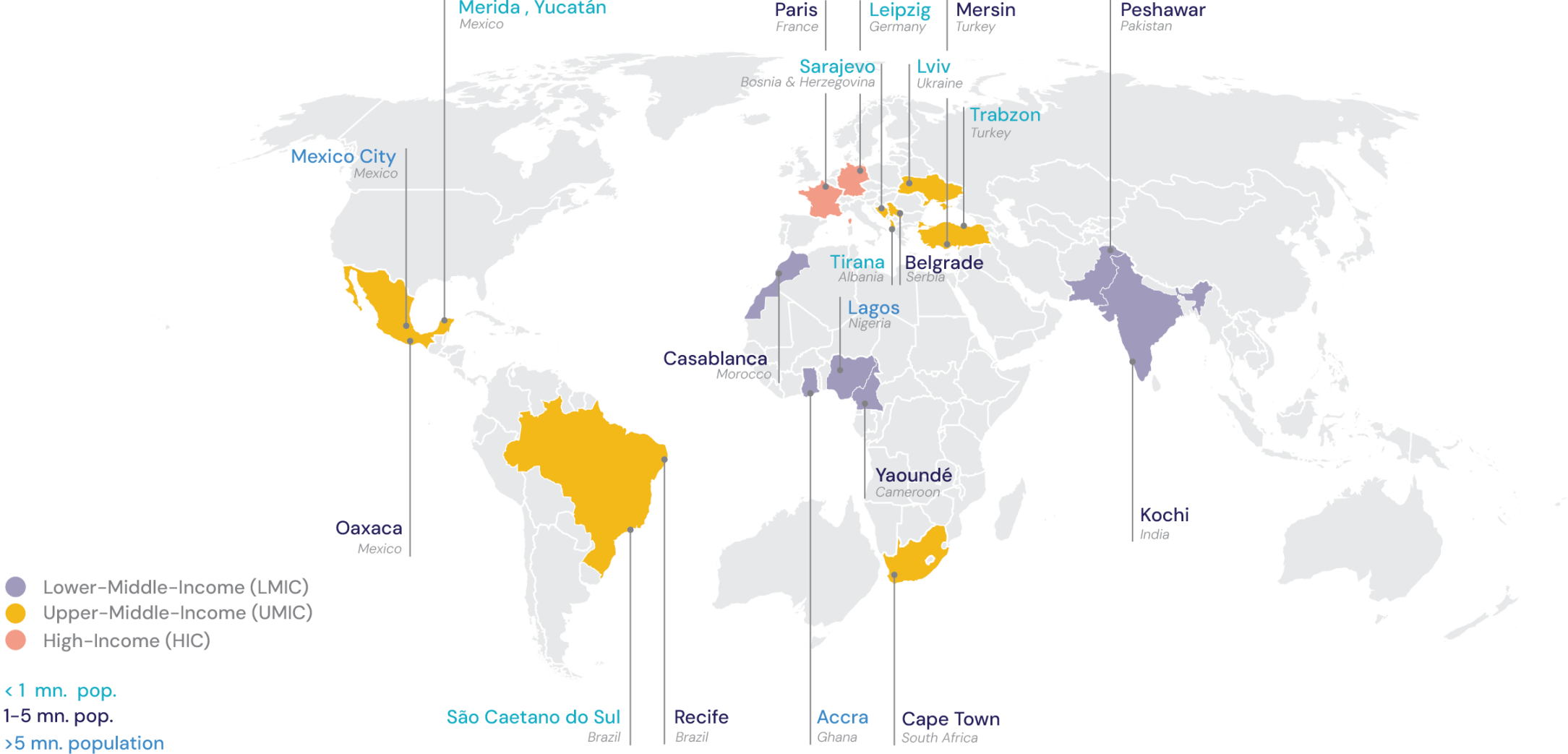
Legal, political and socioeconomic frameworks

- Cooperation & partnerships
- Enabling frameworks that shape the performance of sustainable transport

Societal level

Interrelated and mutually reinforcing levels of capacity building

TUMI Global Facts Study: Participating cities



Approach:

Defining capacity gaps in sustainable transport

- **Questionnaire** filled by the cities (providing both qualitative and numerical input).
- **Self-assessment** in the questionnaires asking them to rate current and desired capacities (importance).
- **Capacity gap** = Difference between the importance (desired status) and the current capacity.

| Capacities | Rating (1-5) |
|--|------------------|
| Number of staff: number of staff employed to address the city's sustainability/climate targets in the transport sector | Choose a rating. |
| Staff education: having staff members with an educational background related to transport | Choose a rating. |
| Education gap: presence of educational programs focusing on transport and mobility | Choose a rating. |
| Sustainable education gap: presence of existing educational programmes focusing on mobility and transport sustainability | Choose a rating. |
| Transport governance: the capacity to plan, design and implement transport services and projects | Choose a rating. |
| Transport planning: the presence of well-established mobility plans or strategies is for the achievement of transport decarbonization. | Choose a rating. |
| Technical capacity: technical capacity to plan and implementing high quality, well-designed transport infrastructure without major delays | Choose a rating. |
| Cooperation and partnerships capacity: cooperating with other organizations to establish and develop networks for knowledge sharing and co-creation | Choose a rating. |
| Enabling frameworks capacity: presence of legal, political, and socio-economic frameworks supporting your performance for sustainable transport | Choose a rating. |

17. On a scale of 1-5, **how important** do you think the following are for the achievement of climate and sustainability targets in the transport sector?
[5 being the highest and 1 the lowest]

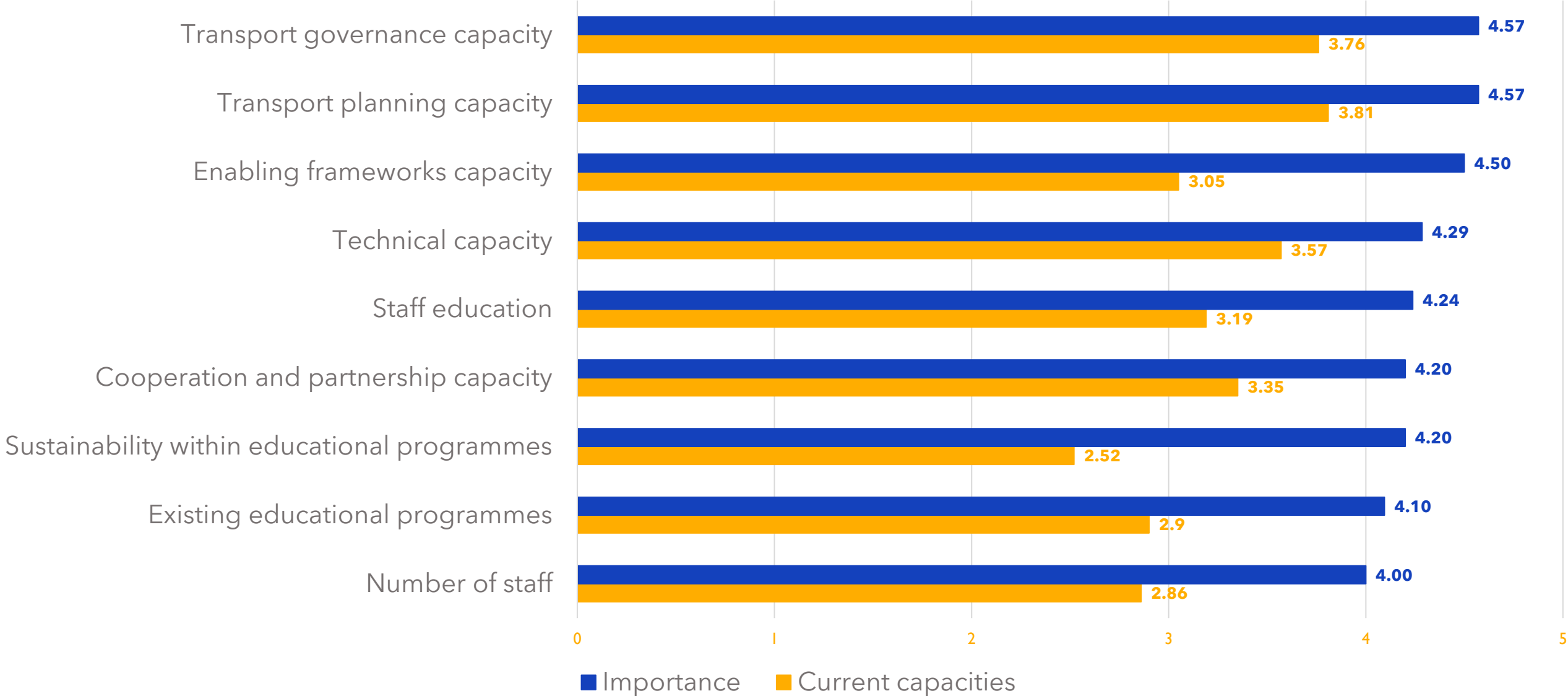
18. On a scale of 1-5, how would you assess your organisation's **current situation** with regards to the capacities below?
(5 being the highest and 1 the lowest)

Initial findings:

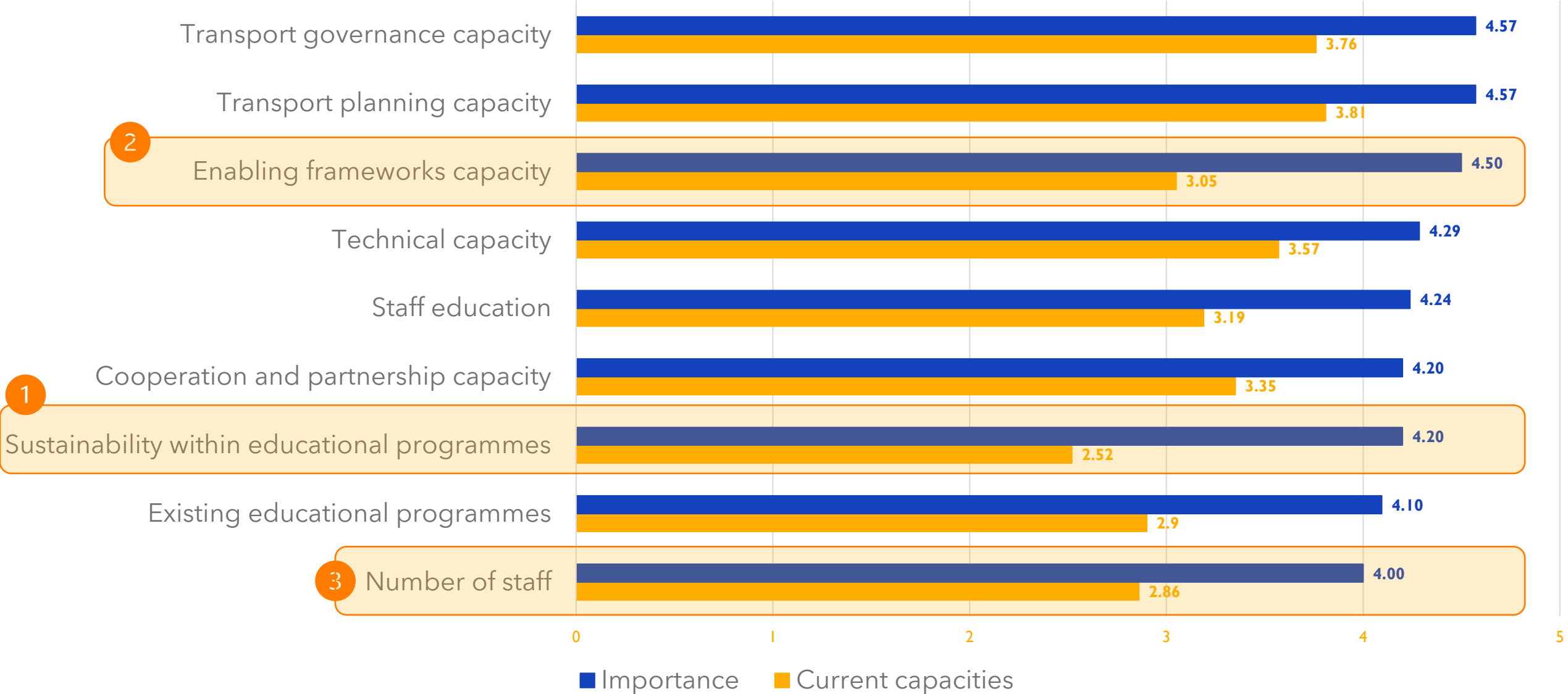
Importance and current capacities

- **Transport planning and governance** are rated as the two **most important capacities** for transport institutions to achieve transport decarbonisation.
- **Sustainability within educational programmes, existing educational programmes and the number of staff** are assessed as transport institutions' **weakest capacities** across all respondents

Average ratings of importance and current existing capacities to decarbonise transport

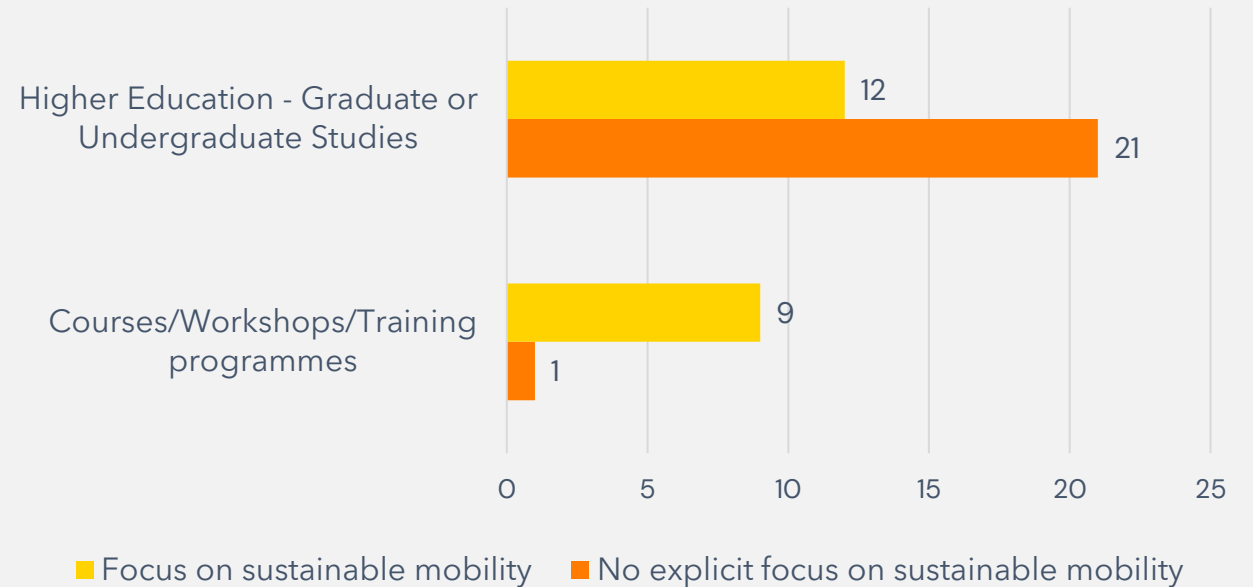


Average ratings of importance and current existing capacities to decarbonise transport



Sustainability within educational programmes

The focus on sustainable mobility in academic and non-academic programmes



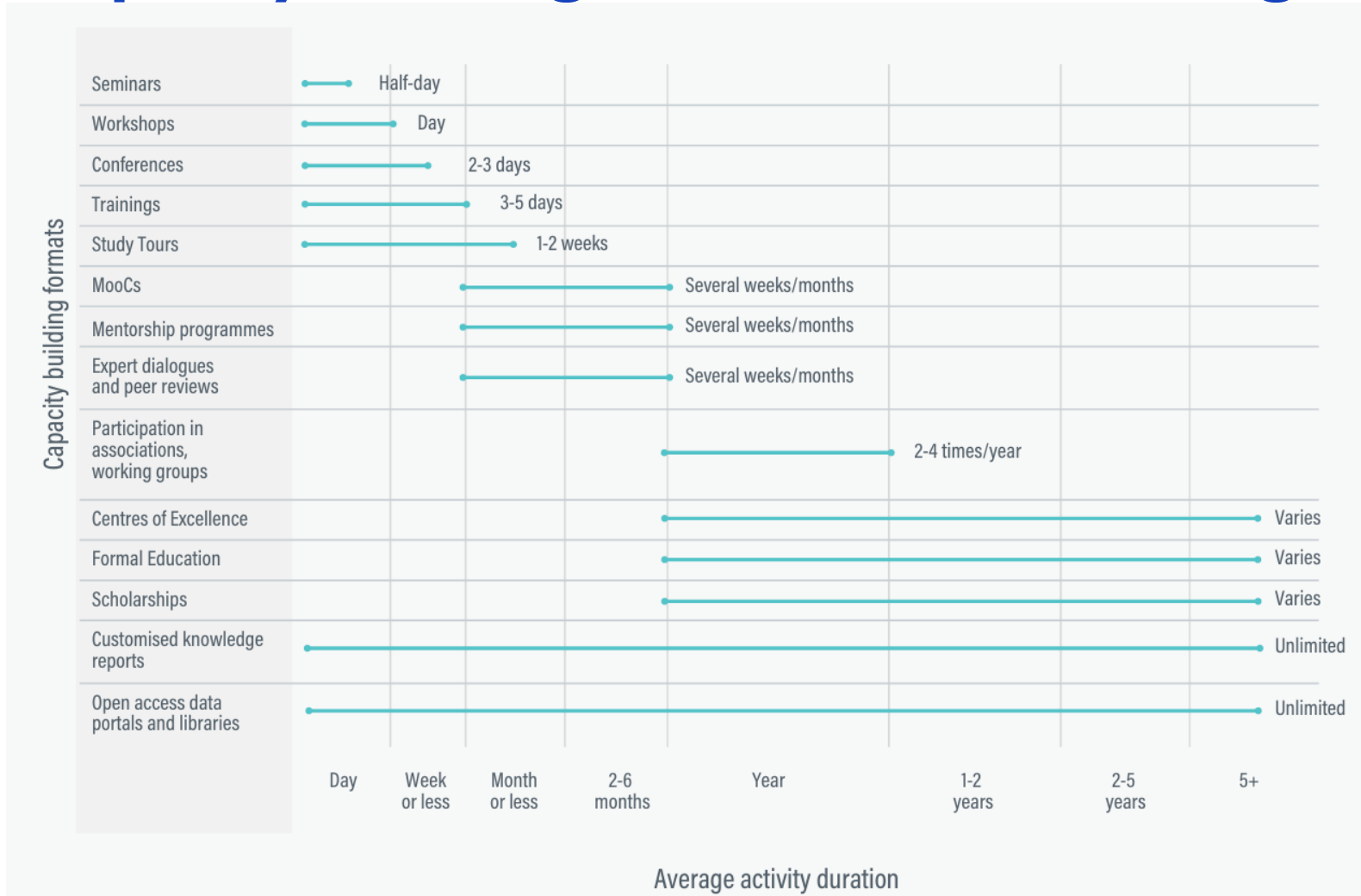
Most higher education programmes provided in the responses **don't offer explicit focuses on sustainable mobility practices**. While short courses, trainings or workshops provided by non-academic institutions offer specialised materials which focus on sustainable mobility practices.

Addressing gaps:

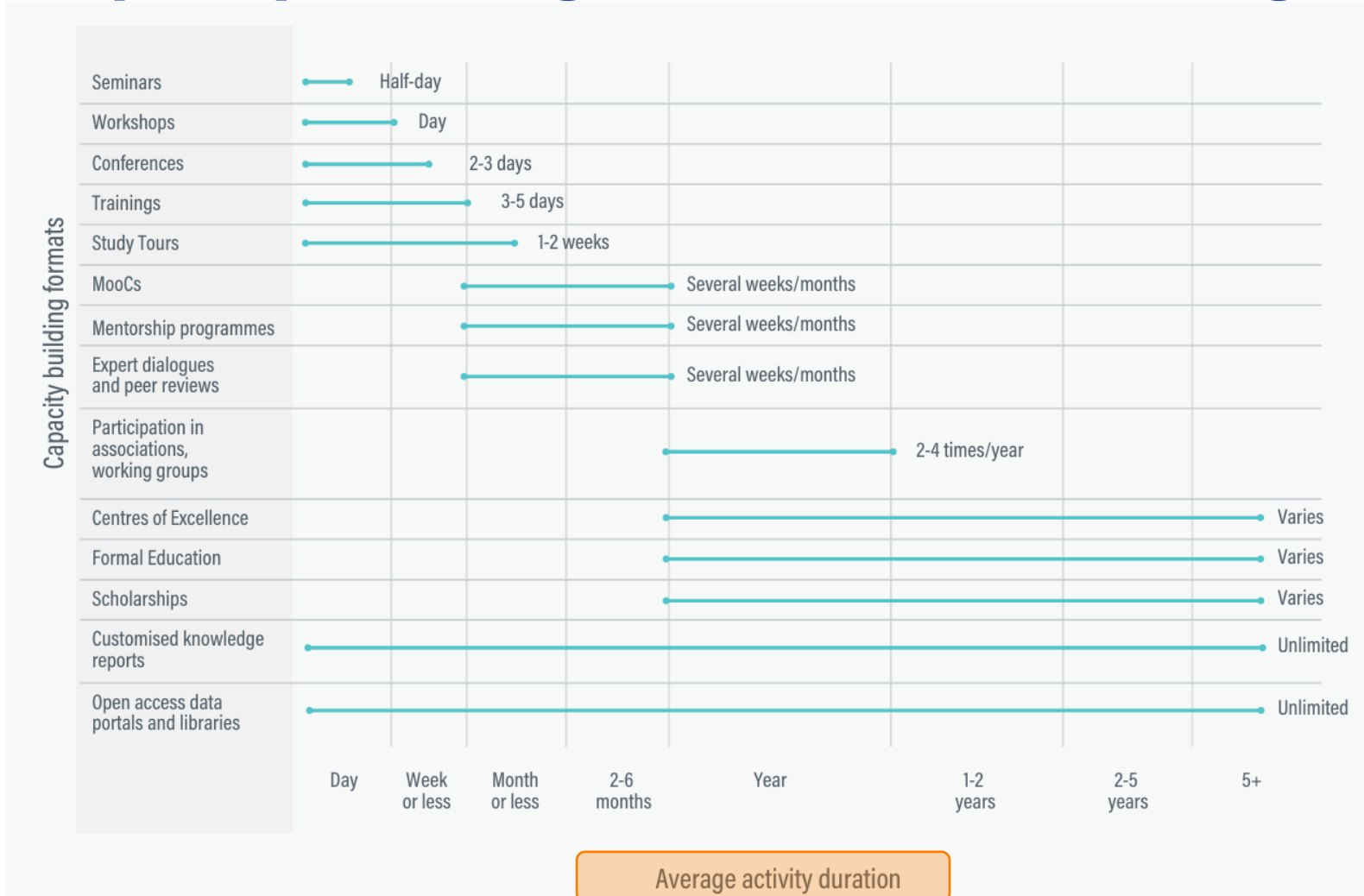
The majority of transport institutions invest in training programmes to overcome capacity gaps

| Method | Transport institutions | No./21 |
|--|---|--------|
| Trainings <i>incl. targeted, external or in-house trainings</i> | Belgrade, Cape Town, Casablanca, Kochi, Lagos, Leipzig, Merida, Peshawar, Recife, Sarajevo, São Caetano do Sul, Tirana, Trabzon | 13 |
| Mentorship and peer learning <i>incl. staff rotation, on-the-job learning</i> | Belgrade, Lagos, Lviv, Oaxaca, Sarjevo, Trabzon, Yucatán, Kochi | 8 |
| Workshops | Kochi, Lagos, Sarajevo, Trabzon | 4 |
| Courses | Merida, São Caetano do Sul, Sarajevo, Recife | 4 |
| Formal education | Lviv, Merida, Trabzon, Yucatán | 4 |
| Seminars and conferences | Sarajevo, Trabzon, Yaoundé | 3 |
| Study tours | Kochi, Trabzon, Sarajevo | 3 |
| Scholarships | Trabzon, Yucatán | 2 |
| Access to data portals and libraries <i>(online and offline)</i> | Lviv, Trabzon | 2 |
| Partnerships with universities | Trabzon | 1 |

Addressing gaps: Capacity building is more than training



Addressing gaps: Capacity building is more than training



| | | |
|--|--|-----------------|
| | Thematic focus (E-Mobility, NMT etc.) | Content |
| | Context (Tailored vs general) | |
| | Self-study components | |
| | Accreditation | Target audience |
| | Profile of partners (Seniority, department) | |
| | Accessibility (Pricing, eligibility) | |
| | Language | Logistics |
| | Setting (Online vs in-person) | |
| | Pace (Asynchronous vs Synchronous) | |
| | Duration | |
| | Frequency (Recurring vs one-off) | |

Addressing gaps: Sustainability in educational programmes



University degrees and curricula development

- *Master in Transport and Sustainable Urban Mobility in Rabat, Morocco* (CODATU, University of Senghor, Institut National d'Aménagement et d'Urbanism)

Executive education and diploma programmes

- *Leading Transport Transitions Programme for city leaders transforming urban mobility* (TUMI, C40 Cities, LSE Cities, BMZ)

Specialised courses and training programmes

- *TUMI training and e-learning courses* (TUMI, UCL, FutureLearn Platform)
- *Smart Freight Centre Academy's*

Addressing gaps: Continuing Professional Development (CPD)

Transport stakeholder with no policies for CPD

- Staff often **forced to self-fund and self-manage** to pursue external education programmes.
- Staff engage in **short-term hybrid programmes** on weekend and/or allow asynchronous flexible participation.
- **Unpaid leaves of absence** (particularly) for synchronous in-person engagements.

employees fully carry the direct and indirect costs associated with pursuing educational programmes.

Transport stakeholders with policies for CPD

- **Partnerships** with local and national academic institutions and research centres.
- **Supporting employees** in attending courses in their field of work.
- **Allocated budgets** and person days for staff professional development.
- **Paid training leave, or training allowance**

In this case, costs and risks associated with developing capacities of employees is either fully borne by the employer or shared between employer and employee.

Ending remarks

Where can more action be done?

- **Assessing needs:** transport institutions tend to be reactive to capacity gaps, and not proactive.
- **Institutionalizing capacity development:** Transport stakeholders do not always have dedicated resources and/or policies in place to support individual employees to continue their professional development.
- **Focusing on hiring the right profiles:** The highest gaps are noted in the departments focusing on: Procurement (Legal), regulation (Policy), marketing and customer management (Communication).
- **Coordinating efforts** across donors and the international transport community.
 - Multistakeholder capacity development **collaborations**;
 - Creating a globally supported **scholarship fund** dedicated to studies in sustainable transport;
 - Investing in stronger **academic collaboration** between universities (North - South)
 - Prioritizing structural changes in higher education curricula;

Thank you for listening!

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