

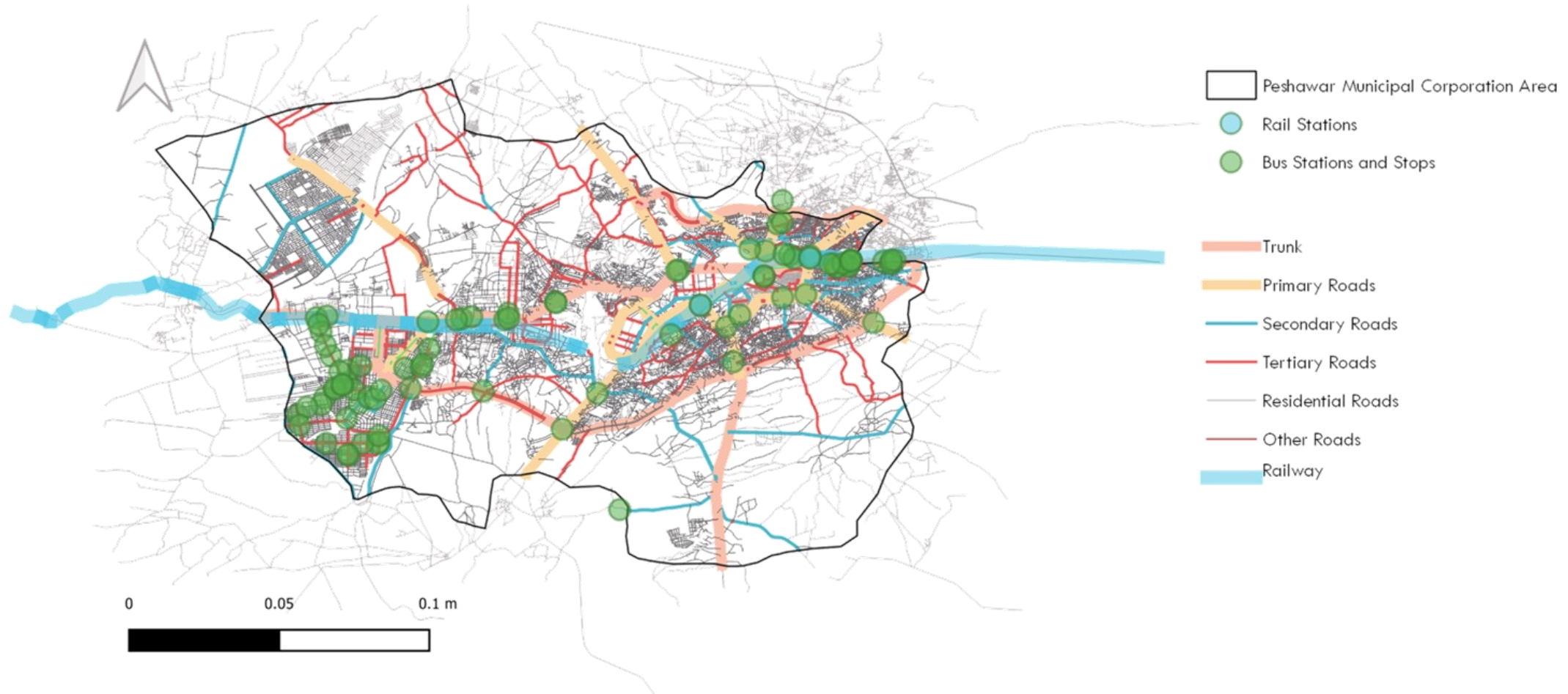
PESHAWAR CITY PROFILE

Insights from the Asian
Transport Outlook (ATO):
The Transport observatory
for the Asia – Pacific region

07 Feb. 2024

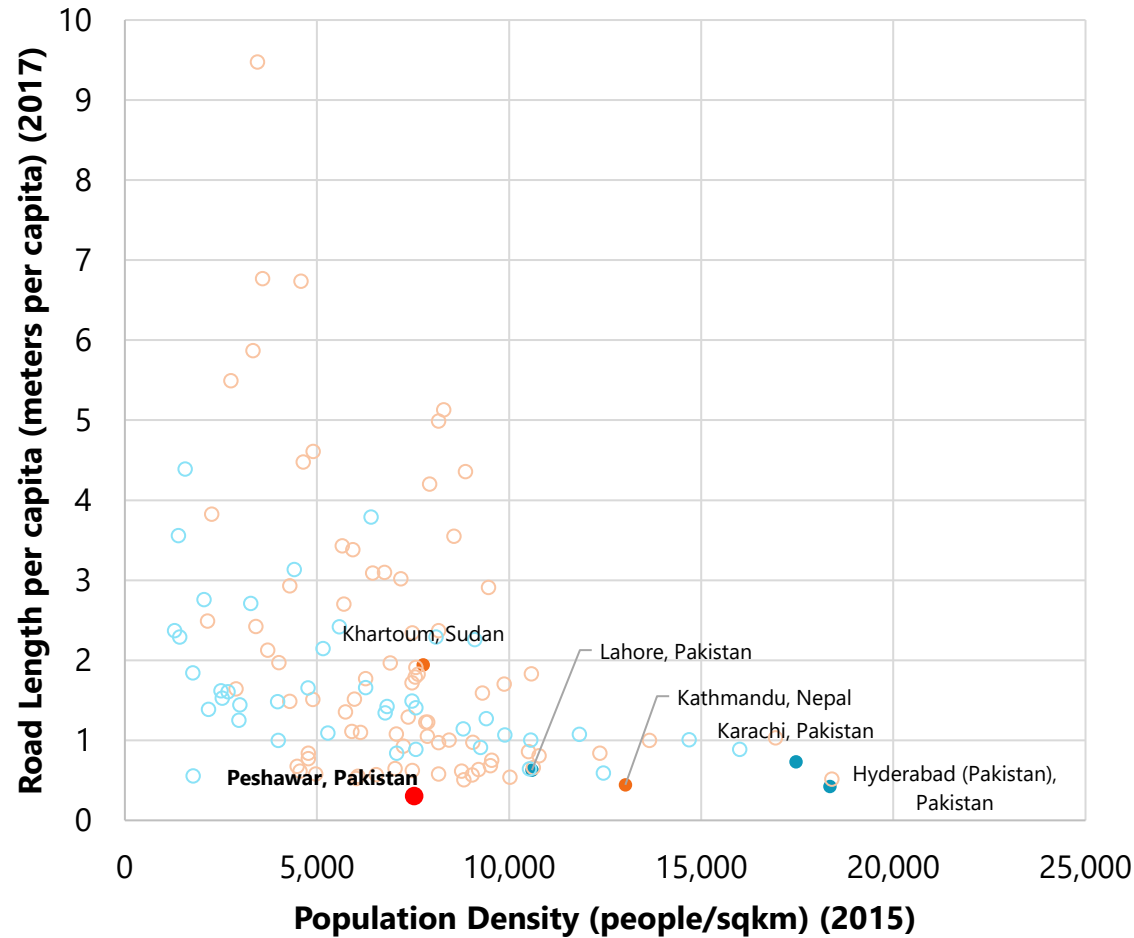


SECTION 1: PESHAWAR – STATE OF PLAY



ROAD INFRASTRUCTURE AVAILABILITY

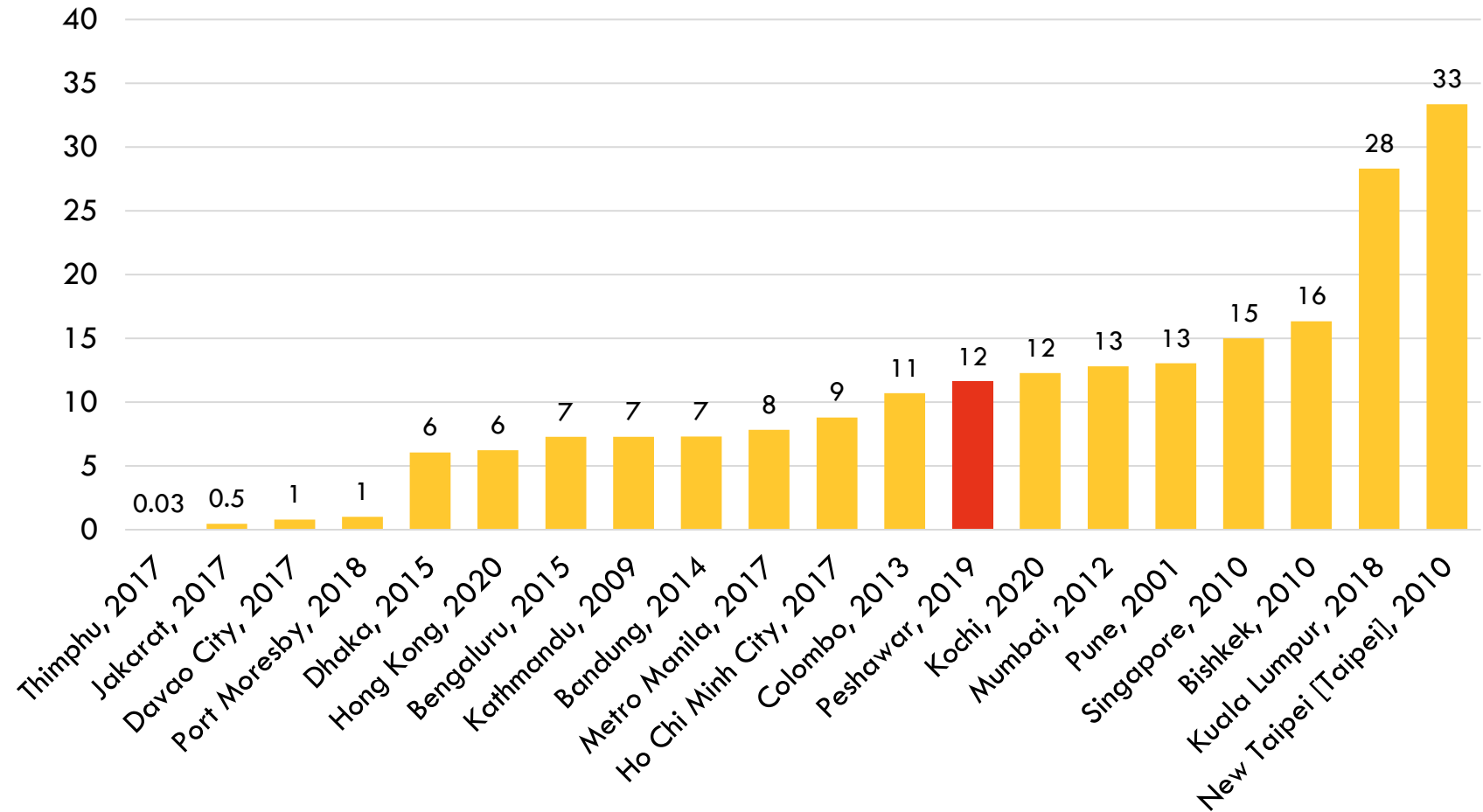
- At 7,500 population density level, Peshawar has a very low road infrastructure availability.
- Road traffic congestion issues are common.
- Peshawar ranks lower compared to its three other Pakistani UCs, which have higher per capita road infrastructure availability at higher density levels.



● UCs with similar GDP Levels ● Peer Pakistani UCs ● Other ATO UCs ● International UCs

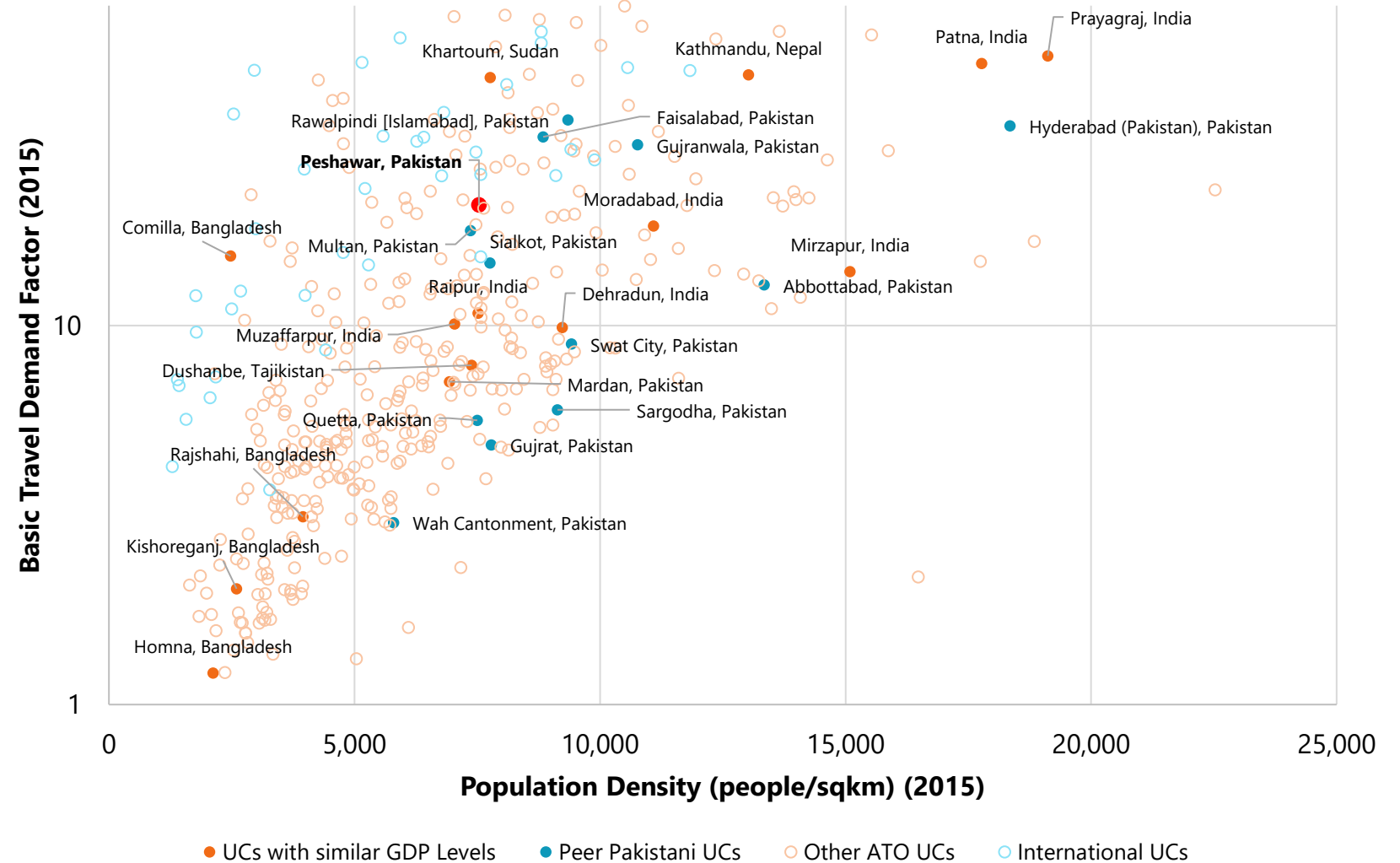
TRANSPORT LANDUSE PERCENTAGE

- Peshawar currently has 12% of the total landuse under 'transport' use, close to 11% for Colombo and 13% for Mumbai; while Singapore has 15% and Kuala Lumpur has 28%.
- Research indicates that the transport landuse share varies with the local conditions and there is not an ideal range, although the SDGs promote a balanced approach for transport modes as part of their broader agenda for sustainable development.



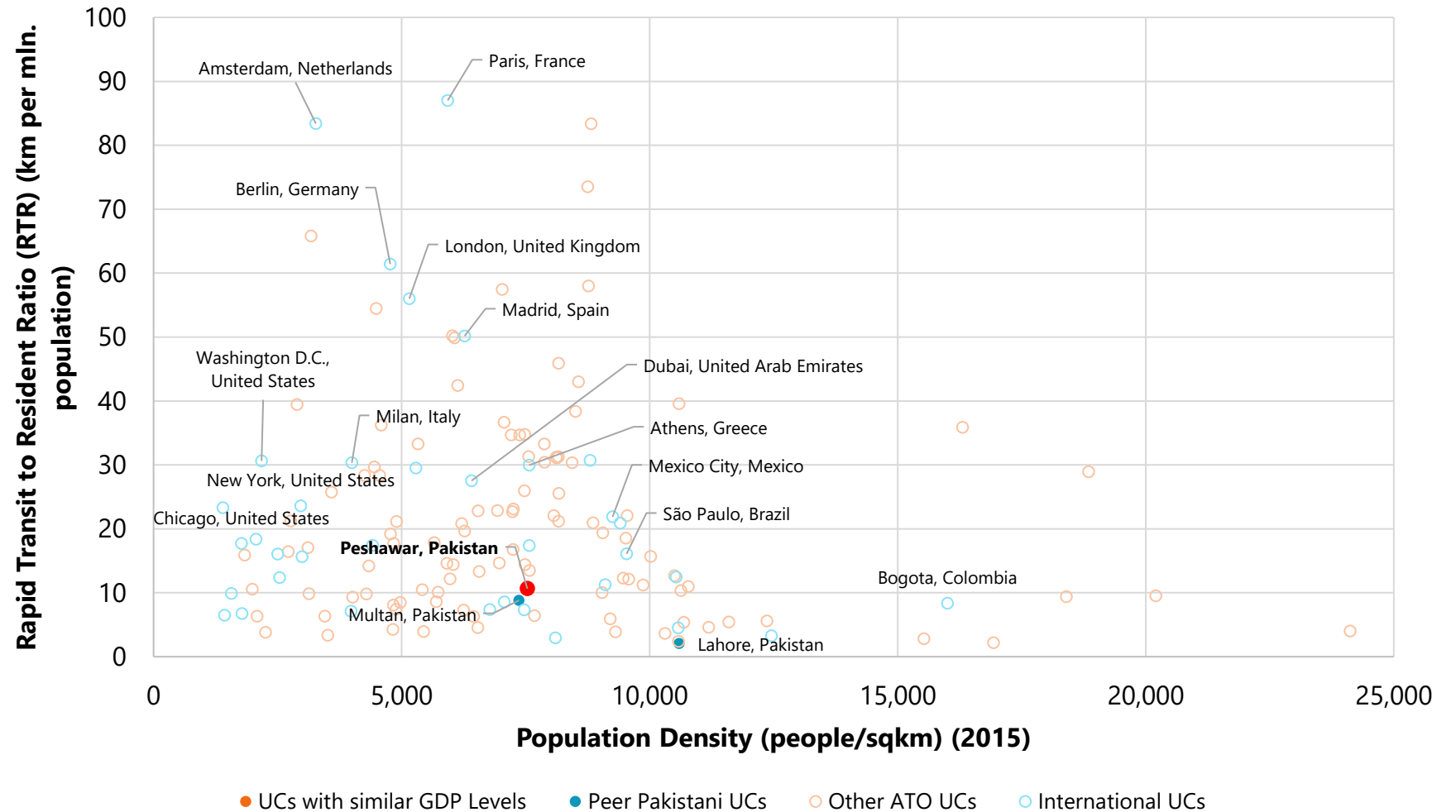
BASIC TRAVEL DEMAND FACTOR (BTDF)

- BTDF is the product of total population (in millions) times the population density (in thousands of persons per sq. km). BTDF is meant to be an indicator of major corridor flows.
- The provision of Infrastructure-based public transport systems is generally more influenced by the Basic Transport demand Factor (BTDF) compared to City average income levels.
- Analysis indicates that Peshawar has a higher potential transport demand compared to other major Pakistani UCs and a few Asia-Pacific UCs at similar GDP levels.



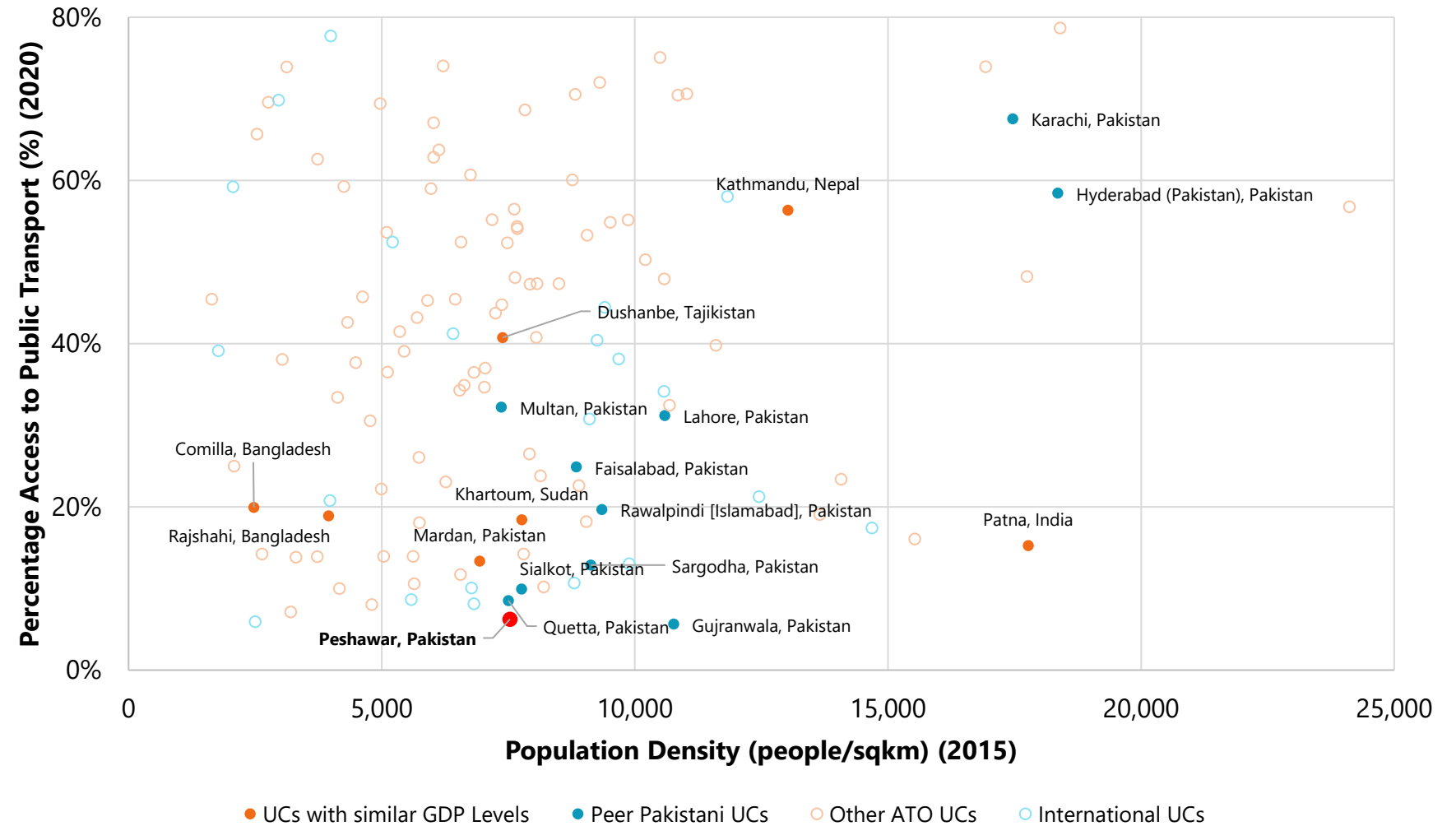
RAPID TRANSIT TO RESIDENT RATIO

- Peshawar has about 10.6 kms of rapid transit (MRT/ LRT/ BRT) infrastructure per million urban population which is higher than Multan and Lahore.
- At similar density levels, Jakarta has 23kms, Singapore has 33kms, Moscow has 34kms, and Chengdu has 57kms.



ACCESS TO PUBLIC TRANSPORT

- Peshawar has one of the lowest percentage of access to public transport within its peer Asia – Pacific UCs with similar GDP/ capita levels as well as other Pakistani UCs.
- There is a higher potential for Peshawar to leverage the advantage of population density.
- Although the rapid transit infrastructure availability is higher in Peshawar compared to Multan and Lahore (referring to the previous slide), its access is significantly lower.



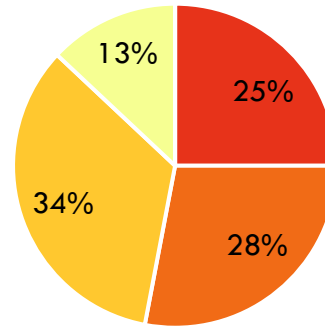
Sources: UN-Habitat, GHS (European Commission) | ATO Indicators: SEC-UDB-003, ACC-UDB-001

Notes: This indicator is computed as share of population living within a walking distance of 500m to a low capacity public transport system (eg bus, tram) and 1000m to a high capacity public transport system (eg trains, ferries, etc). Only public transport stops which are mapped are included in the analysis which may include both formal and informal stops.

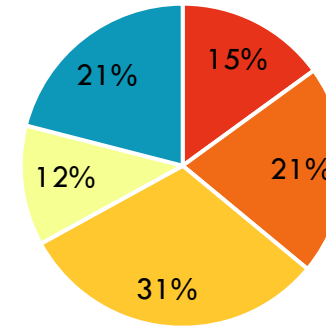
TRANSPORT MODESHARE

■ Minibus and wagon ■ Suzuki and datsudan ■ Private car and taxi ■ Rickshaw ■ BRT

2017



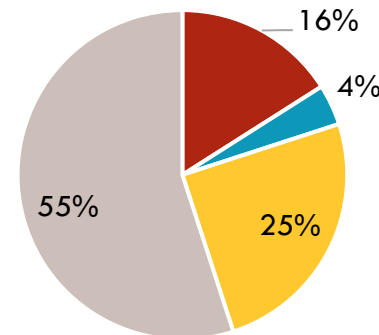
2021



- Based on the study by TransPeshawar, the transport modeshare in Peshawar shifted from private cars and taxis to public transport between 2017 and 2021.
- However, majority of the share has shifted from minibuses and wagons to BRTs. Private vehicle + Taxis usage has only dropped by 3%.
- A survey based study conducted by mobiliseyourcity indicates that 55% of the transport is by Walking, 20% by public transport modes and 25% by private modes.

2023

■ Formal public transport (excl. BRT) ■ BRT ■ Private cars and motorbikes ■ Walking



BRTS IMPLEMENTATION

70%
of the city area covered

10x
increase in female ridership

1,330,000
benefited from direct access to
public transport

- A few further insights on the implementation of the BRT system.

265,000
daily peak passengers, 80-95%
user satisfaction

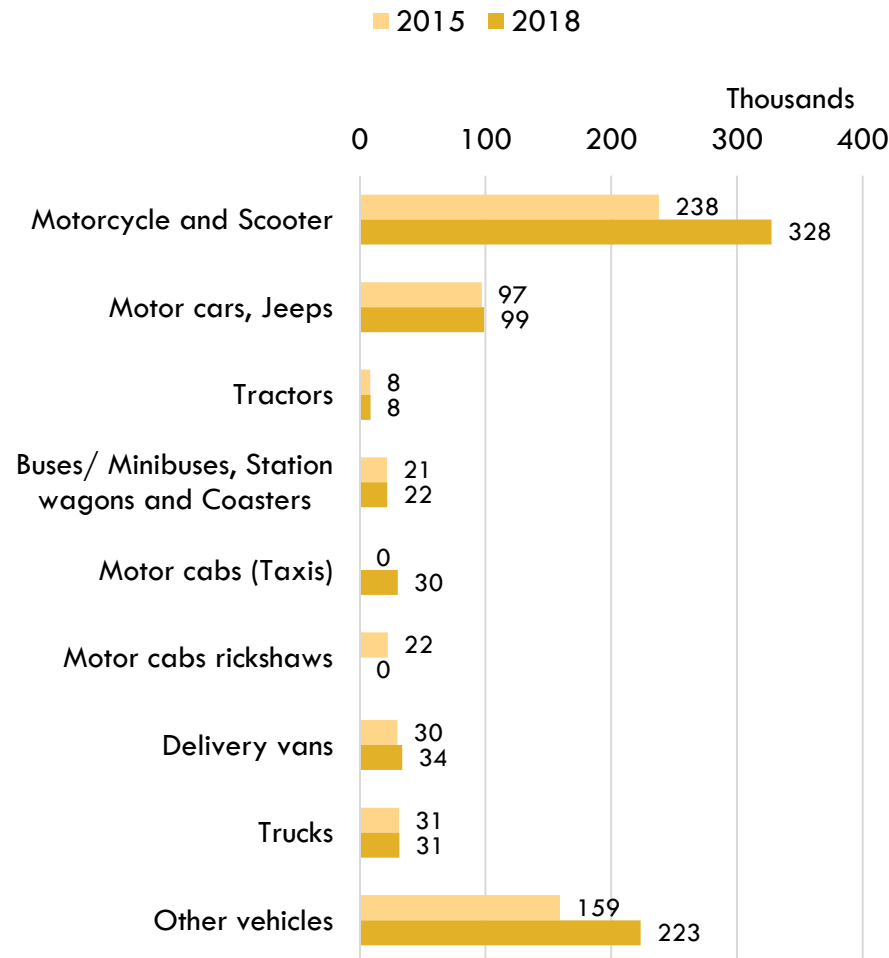
27km
bus corridors, 30 stations, 59km
of connecting routes, 220 diesel-
electric buses, 360 bikeshare
bicycles, 120km of footpaths,
ITDP Gold Standard

81%
of city educational institutes
now accessible by public
transport, 80% of hospitals beds,
75% of commercial hubs, 75% of
industrial areas

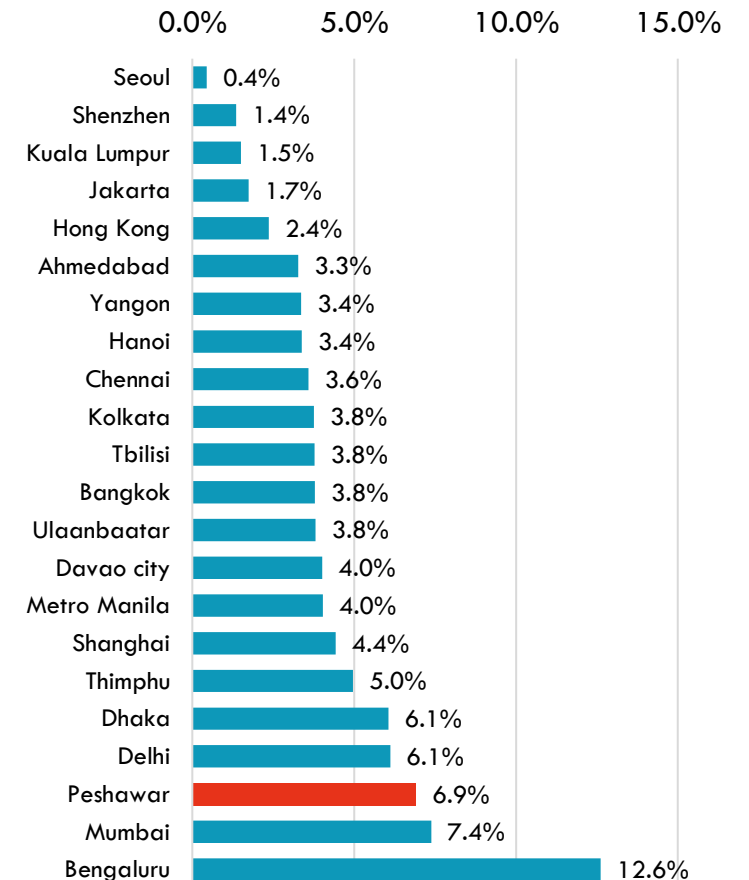
REGISTERED VEHICLES TREND FOR PESHAWAR DISTRICT

- Registered number of Motorcycle and Scooter in the Peshawar district have increased annually at the rate of 13% between 2015 and 2018.
- Total vehicles increased at 6.9% annually, compared to 6.1% in Delhi and 7.4% in Mumbai; whereas, in the same time period, Seoul had an annual increase of only 0.4% and Kuala Lumpur of 1.5%.

Registered vehicles by category

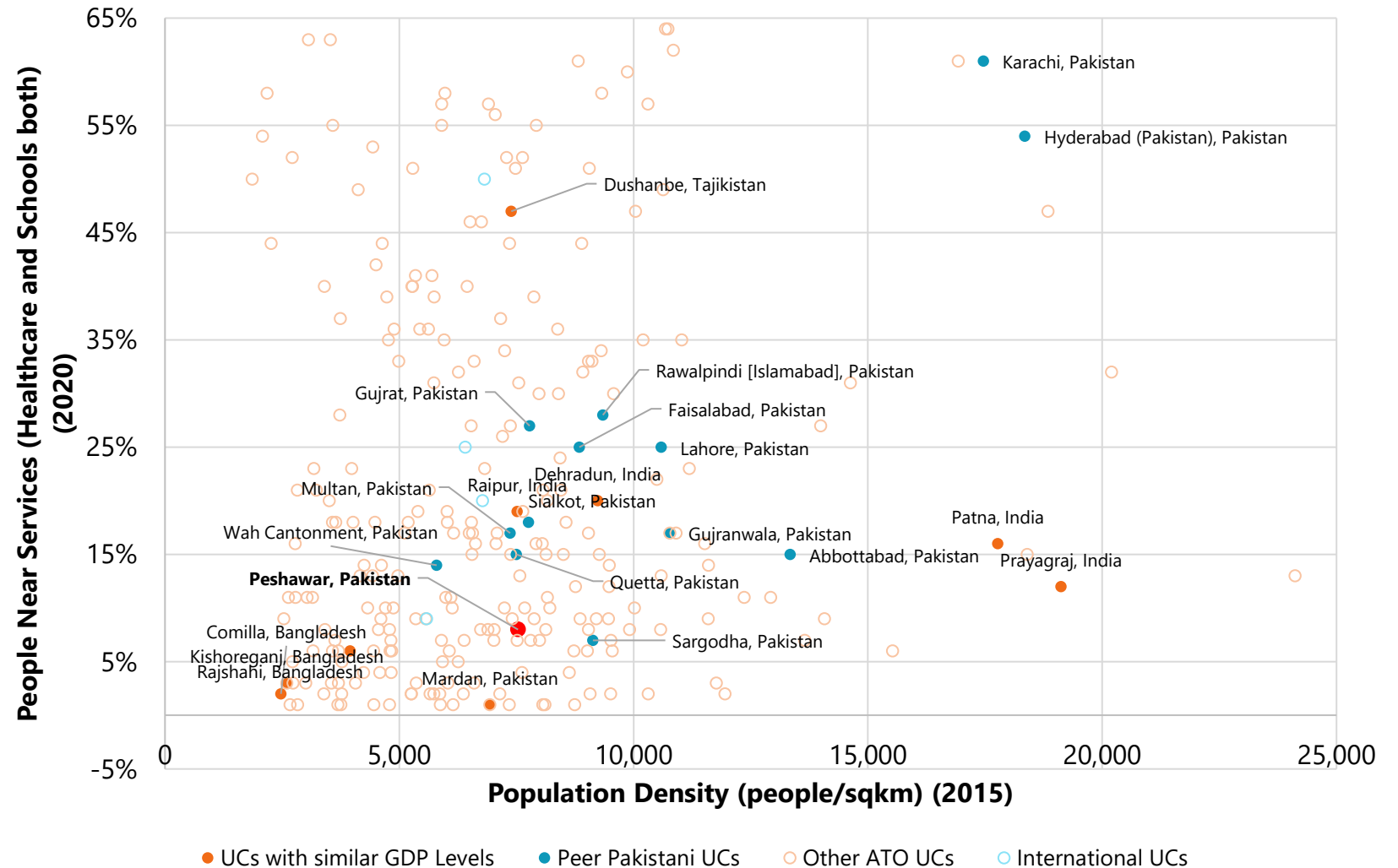


Annual growth of the Total Registered Vehicles between the period 2015 and 2018



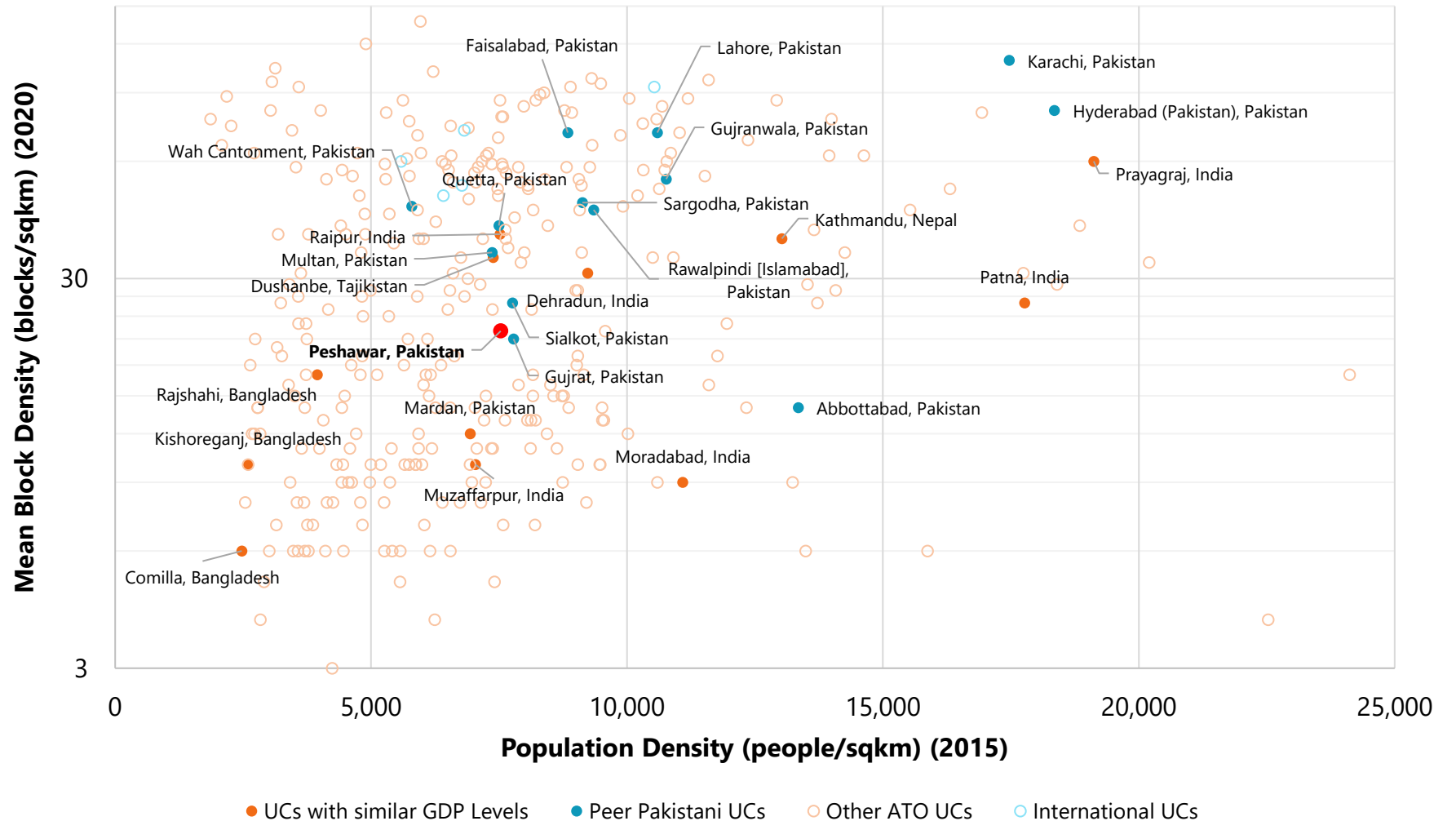
ACCESS TO HEALTHCARE AND EDUCATIONAL SERVICES

- Peshawar also ranks lower with respect to the access to healthcare and educational services.
- The indicator includes only walking as the mode of access. This highlights the walkability aspect of the city. Few more indicators related to the urban form and space in subsequent slides.



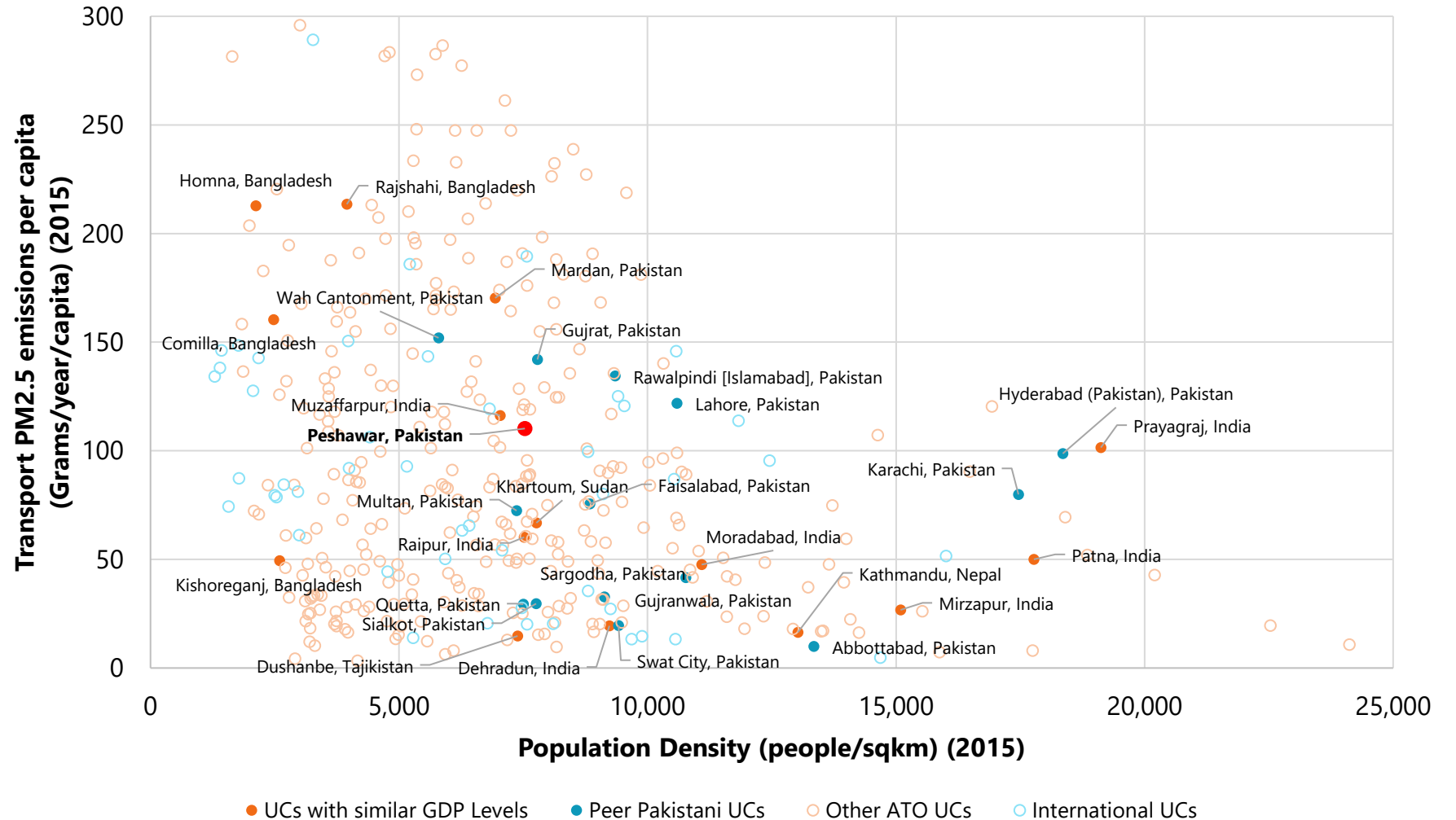
MEAN BLOCK DENSITY

- Higher the mean block density indicates higher walkability because of smaller mean block sizes and lower average traffic speeds.
- In those terms, Peshawar ranks lower compared to its peer Pakistani UCs.



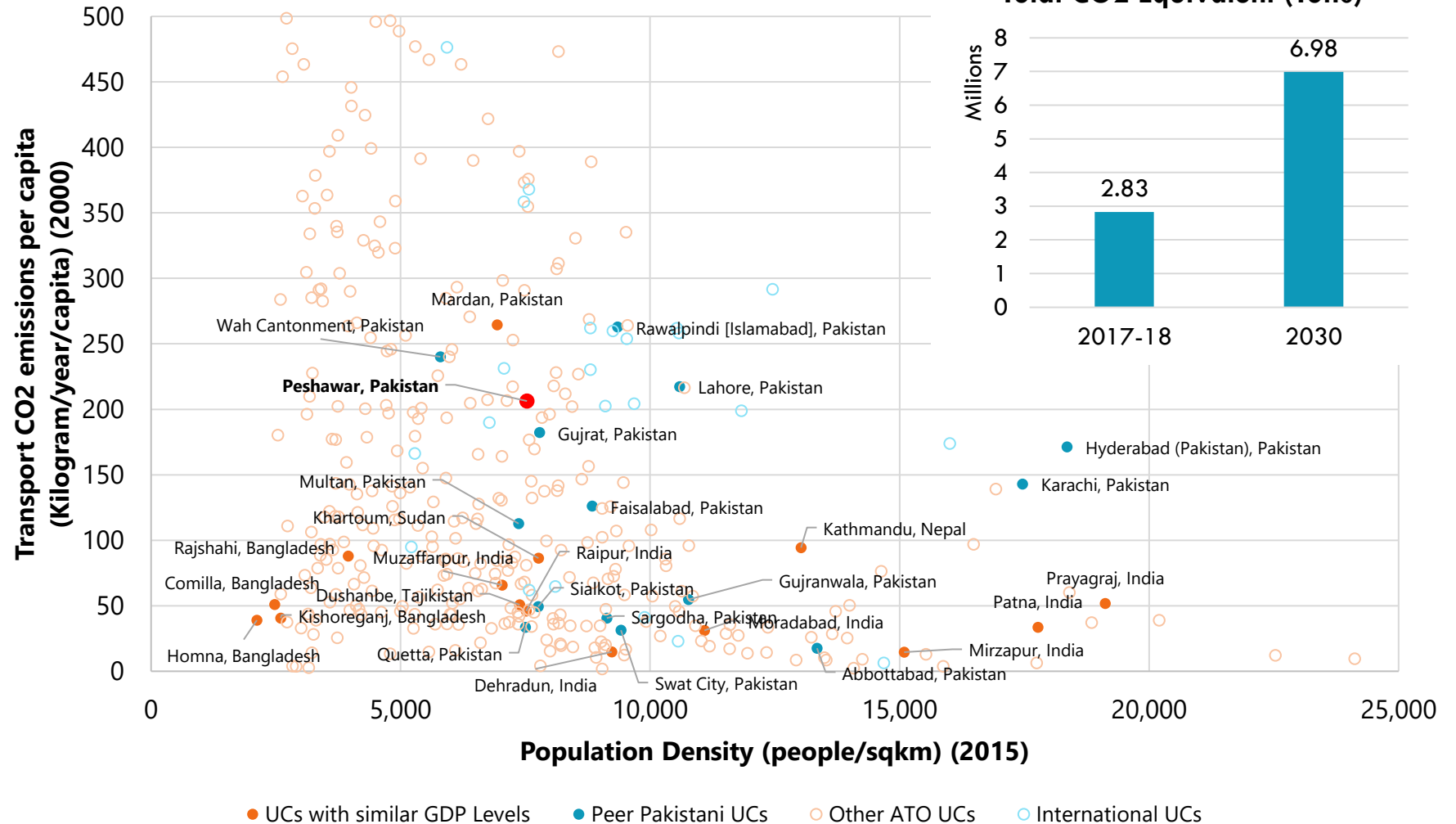
TRANSPORT PM2.5 EMISSIONS

- Peshawar ranks higher compared to many of its peer Pakistani UCs in terms of transport PM2.5 emissions per capita.



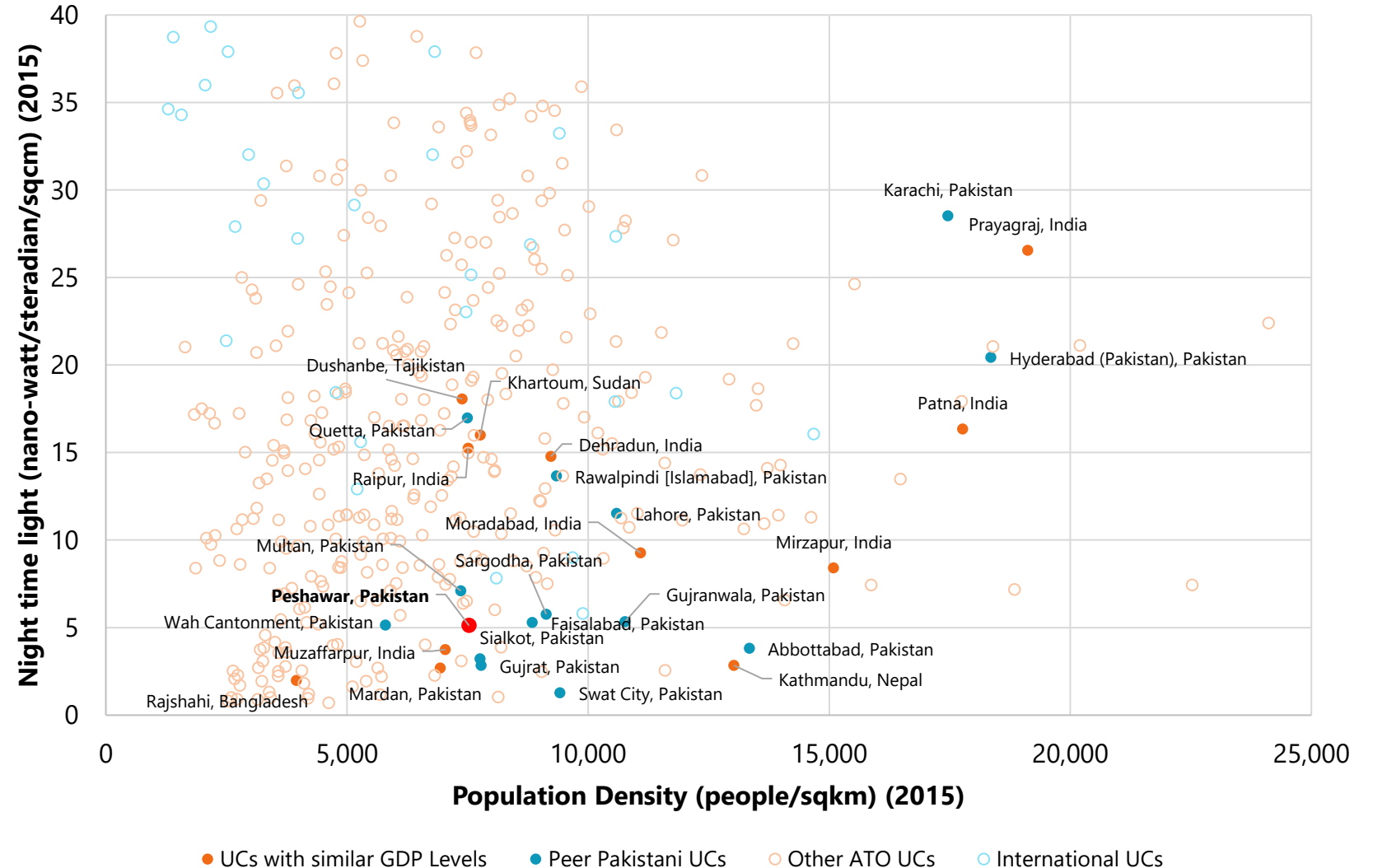
TRANSPORT CO2 EMISSIONS

- Peshawar ranks higher compared to many of its peer Pakistani UCs in terms of transport CO2 emissions per capita.
- Research (Khan. A. Climate Change Mitigation & Adaptation Presentation 24 Oct. 2022) indicates that by 2030, Transport GHG emissions are projected to account for about 59% of the total GHG emissions in Peshawar.
- The projected GHG emissions for 2030 are 6.98 million tCO2e for Peshawar.



NIGHT TIME LIGHT ANALYSIS

- Nighttime light analysis is a technique that involves studying satellite imagery of Earth at night to analyze the patterns and intensity of artificial lights.
- It reflects the urbanization trends, potentials of transport hubs, traffic and movement patterns etc.
- In comparison with the peer Pakistani UCs, Peshawar shows a moderate level of urbanization concentration. It can be a reflection of lower population densities compared to the peer cities.



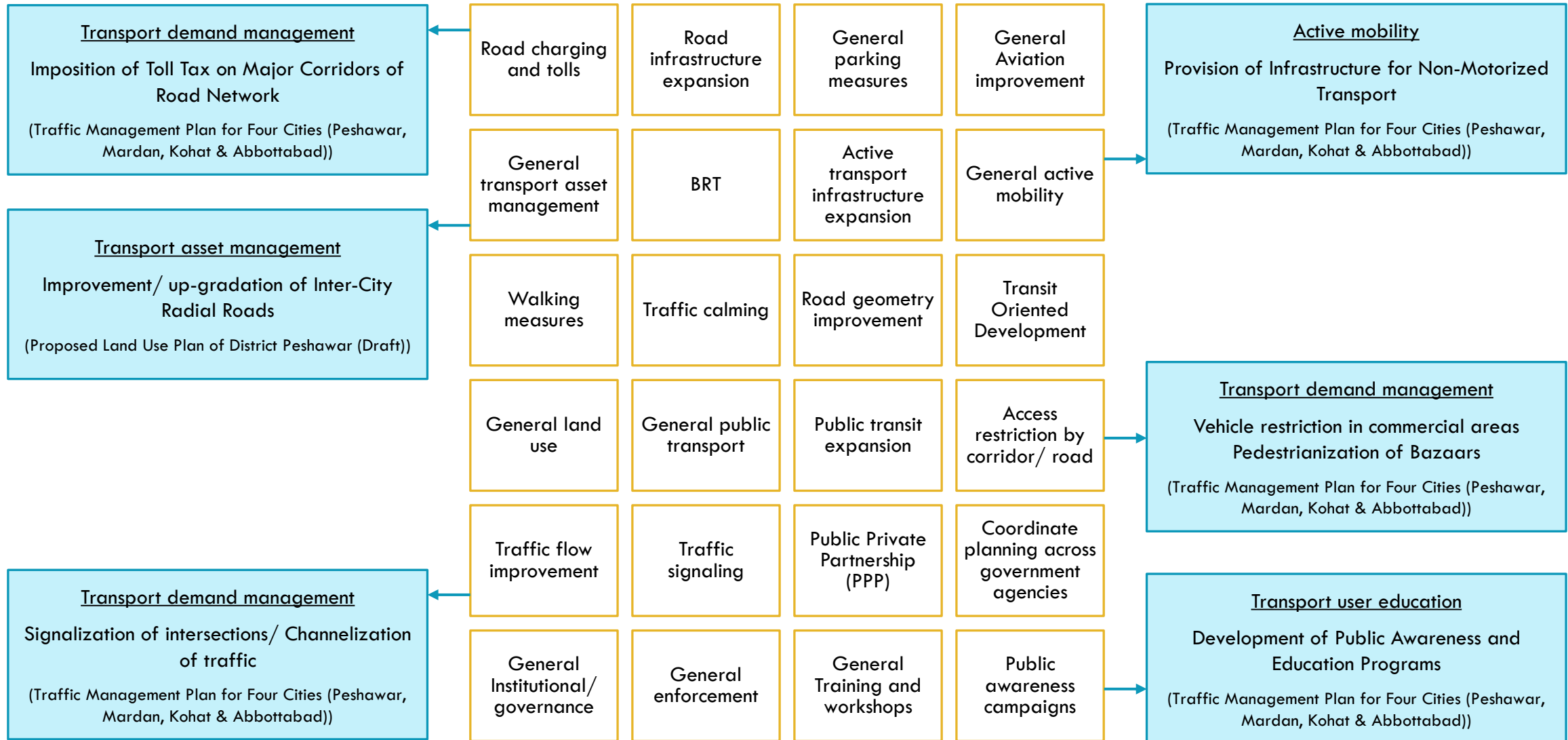
SECTION 2: PESHAWAR – POLICY OVERVIEW

LIST OF URBAN TRANSPORT POLICY DOCUMENTS

Document Name	Year Published	Document Type
Building By Laws	1989	Transport Laws/ Regulations
Peshawar development authority act	2017	Urban Development Policy
Proposed Land Use Plan of District Peshawar (Draft)	2019	Urban Development Policy
City Development Strategy - Peshawar	2010	Urban Development Policy
Traffic Management Plan for Four Cities (Peshawar, Mardan, Kohat & Abbottabad)	2018	Other Transport-related Urban Policy
Peshawar Sustainable Bus Rapid Transit Corridor Project	2017	Others

Measure Typologies	Counts
Active mobility	4
Aviation improvements	1
Data systems	0
Electrification	0
Freight and logistics improvement	0
General transport infrastructure improvement	1
General transport system improvements	0
In-use vehicle management	0
Information technology	0
Infrastructure standards	0
International conventions	0
Labels	0
Land use	2
LPG, CNG, LNG, and biofuels	0
Public transport improvement	4
Transport asset management	1
Shared mobility	0
Shipping improvements	0
Targets	0
Transport demand management	8
Transport finance	1
Transport human resource	0
Transport infrastructure construction and maintenance	3
Transport sector governance	3
Transport sector programming	0
Transport user administration	0
Transport user education	2
Transport users safeguard system	0
Vehicle improvement	0
Vehicle market entry	0

POLICY MEASURES RECORDED



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

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