

Peshawar, Pakistan

Partner city

Status of the project: Completed Sustainable Urban Mobility Plan



Basic Information

Urban area: 1,217 km²

Population: 4,269,079 | Growth rate: +3.29%

Region capital city of the Khyber Pakhtunkhwa province

GDP per capita: USD 1,406 (National level)

Modal Share

Public transport (excl. BRT): 6%

BRT: 4%

Private cars and motorbikes: 25%

Walking: 55%

Rickshaws: 6%

Other: 4%

National GHG emissions per capita: 1.99 (tCO₂eq)

Exposure to climate change: HIGH

Context

Peshawar is the capital city of Khyber Pakhtunkhwa province, located 160 km west of Pakistan's capital city Islamabad. It is home to 1,970,042 inhabitants, spread over an area of 157 km², with the metropolitan area housing 4,269,079 inhabitants across 1,217 km². The city is governed by the Peshawar Municipal Corporation.

Recently, Peshawar has introduced a Bus Rapid Transit (BRT) system named "Zu Peshawar". This system, conceived and built with support from the Asian Development Bank (ADB) and the French Development Agency (AFD), commenced operations in August 2020. Operated by TransPeshawar, the BRT system comprises a main corridor stretching over 28 km from Chamkani in the east to Hayatabad and Karkhano Market in the west. Additionally, it features a 68 km long network of 8 feeder routes, connecting the main corridor to other parts of the city. The introduction of the first BRT line has already begun to alter this modal share, as it is attracting users to this public transport service. A video highlighting the BRT has been created and is available [here](#).

Peshawar faces challenges stemming from an inadequate public service offering, leading residents to rely heavily on private cars, resulting in traffic congestion, road safety concerns, and poor air quality. The city lacks a sufficient road network, infrastructure for non-motorised transport, and effective traffic management. Moreover, the city has also recognised a need for improved control of land use and urban development.

To address these challenges and prepare a comprehensive plan addressing not only transport issues but also improving the quality of life, the Khyber Pakhtunkhwa Urban Mobility Authority (KPUMA) has opted to develop a Sustainable Urban Mobility Plan (SUMP). This plan will encompass not only mobility-related issues but also considerations regarding local economic development and health concerns. Furthermore, the SUMP will facilitate the development of a Transport Management Plan and the establishment of a Road Safety Authority. It will also include initiatives to improve Non-Motorised Transport options and equip the city with better monitoring capabilities for traffic and GHG emissions. Lastly, the SUMP will build KPUMA's capacity for sustainable mobility planning.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: AFD

Funding amount: EUR 1,200,000 (budget includes SUMPs for 3 cities in the Khyber Pakhtunkhwa province)

Implemented by: French Development Agency (AFD) and Asian Development Bank (ADB) through MobiliseYourCity Asia

Local counterpart: Transport Department, Government of Khyber Pakhtunkhwa province and the Khyber Pakhtunkhwa Urban Mobility Authority

Supported activities:

- SUMP elaboration for the city of Peshawar
- Conceptual design for identified priority projects (i.e., BRT transit corridor and line extensions, non-motorised transport urban design equipment)

Status of the SUMP process

Project start: 2021 Q3

Project completion: 2024 Q1 - Administrative approval received; political approval is in progress.

Completed outputs:

- Inception Phase
- Diagnosis report
- Vision and scenarios
- Action plan
- Final SUMP and Concept Design for priority projects

SUMP key measures and cost estimates

The following table highlights the most significant measures identified in the SUMP.

Measure	Cost Estimate
Kabul Canal	EUR 3.3 million
GT Road Upgrade	EUR 1.3 million

The following table summarises the total capital expenses (CAPEX) estimates for different types of measures in the SUMP.

Urban transport investment measures	CAPEX Estimate (€M)
Road network	EUR 221.8 million
Urban transit	EUR 916.9 million
Non-Motorized Transport (NMT)	EUR 30.5 million
Urban logistics	EUR 12 million
Transit Oriented Development (TOD)	EUR 10.5 million
TOTAL	EUR 1,191.6 million

Projected impacts

Indicator	BAU 2022	Scenario 1 (2040) Compact City	Scenario 2 (2040) Scattered City	Scenario 3 (2040) Southern Extension
Total annual GHG emissions (Mt CO ₂ eq)	1,214,600 tCO ₂ eq	927,640 tCO ₂ eq	1,214,600 tCO ₂ eq	960,830 tCO ₂ eq
Annual transport related GHG emissions per capita (kg CO ₂ eq)	0.22686 tCO ₂ eq/capita	0.152 tCO ₂ eq/capita	0.199 tCO ₂ eq/capita	0.158 tCO ₂ eq/capita
Trips Daily Average Total generated trips	6,368,800	15,212,600	15,229,800	15,226,200
Modal share Related to the carbon footprint	Motorcycle: 24%	Motorcycle: 31%	Motorcycle: 32%	Motorcycle: 30%
	Car: 49%	Car: 50%	Car: 48%	Car: 49%
	Paratransit: 26%	Paratransit: 9%	Paratransit: 14%	Paratransit: 10%
	BRT: 2%	BRT: 9%	BRT: 7%	BRT: 11%

Perspectives for implementation

The SUMP's administrative approval has been secured, and the process for obtaining political approval is currently underway.

Following the completion of the three SUMPs in the Khyber Pakhtunkhwa province, public transport is recognised as a priority and additional feasibility studies are expected to be conducted at the scale of the province. It is expected that the city will draw further inspiration from the SUMP's strategic directions, including the implementation of green corridors.

The Peshawar BRT system's Phase 2 has been validated and is progressing with financial planning to further improve urban mobility and accessibility for residents.

Insights from practice: lessons learned from the SUMP process

The institutional framework of the transport sector in the Khyber Pakhtunkhwa province presents significant challenges linked with siloed operations and overlapping responsibilities. These issues highlight the need for clearer mandates, capacity building, and enhanced coordination mechanisms to streamline the SUMP process.

Highlights in the past year

Zu Peshawar: The First Gold Standard BRT in Pakistan is changing the way people travel

The authorities responsible for urban mobility in Peshawar have an ambitious vision to transition towards more sustainable urban transportation. With the preparation of the SUMP, supported by MobiliseYourCity partners, significant investments are foreseen, including the development of Zu Peshawar BRT, the first Gold-Standard BRT in the Indian subcontinent.

Peshawar's ambition and efforts in sustainable mobility have gained international recognition. In 2022, the city was nominated and received an honourable mention from the International Transport Development Policy (ITDP) Sustainable Transport Award. This recognition highlights Peshawar's commitment to prioritising the needs of its citizens and ensuring that their transportation needs are met in a sustainable and inclusive manner. More recently, Zu Peshawar received the "Best Smart Ticketing" prize from Transport Ticketing Global and was a finalist for the "Prize for Cities" awarded by the World Resource Institute. As the city progresses with its SUMP and planned investments, it is poised to become a leader in sustainable urban transportation in the region and beyond.

Peshawar advances with active mobility projects

During the SUMP elaboration process, several conceptual designs for key and priority projects have been developed. Among them is the concept design for the regeneration of the Kabul canal, which aims to transform the space into a non-motorised transport-friendly area. Another conceptual design focuses on upgrading the existing Saddar BRT Station area to create public spaces conducive to non-motorised transport and seamless intermodal connections.

Find out more on this [case study, co-developed by ITDP, TUMI and TransPeshawar](#).

Updated in December 2024