## SECTOR ASSESSMENT (SUMMARY): URBAN TRANSPORT

## Sector Road Map

## 1. Sector Performance, Problems, and Opportunities

1. Peshawar is the capital of the province of Khyber Pakhtunkhwa in Pakistan, and serves as the administrative center of the Federally Administered Tribal Areas. The city is in a valley between the Iranian plateau and the Indus River, and is 140 kilometers (km) west of Islamabad and 230 km east of Kabul, Afghanistan. The Peshawar district covers a total area of 1,257 square km. Due to its proximity to the Khyber Pass and its history as one of the oldest urban settlements on the subcontinent, Peshawar has played a notable role in the region's history. Its population, currently estimated at 1.8 million, is projected to reach 2.6 million by 2030.<sup>1</sup> The city's population growth has been intensified by Afghan refugee migration and internal displacement, with approximately 280,000 Afghan refugees and 100,000 internally displaced persons currently residing in Peshawar.<sup>2</sup> As these refugees have limited resources and opportunities, the city and provincial governments are facing considerable pressure to deliver infrastructure and public services in terms of housing, education, healthcare, and transport.

2. Poverty and security are the principal social concerns across the city. Poverty is widespread, most notably in the 18 informal settlements housing the majority of the internally displaced and international refugees. Overall, 44% of Khyber Pakhtunkhwa's inhabitants are classified as poor. A lack of gender equity also defines workforce and economic opportunities. While approximately 90% of men are employed, only an estimated 10% of women are.<sup>3</sup> Public security is also a principal determinant of how residents move around and interact in the city; for example, women's movements are highly restricted due to the risk of harassment, and all residents are affected by the ongoing threat of terrorism. Peshawar has been a focal point of violence and terrorist attacks, including acts by groups such as the Taliban. In December 2014, an attack on a local school resulted in the deaths of 132 children.

3. Peshawar is directly linked to Islamabad (and beyond) by a dual carriage highway that feeds into the main city arterial road known as the Grand Trunk Road (GTR). The city also has a rail link serving national destinations, including three daily passenger train services between Peshawar and Islamabad. Although inter-city rail is a popular way to travel in Pakistan, it has lost passengers to road transport, largely due to improved road infrastructure and the improved passenger bus services now plying intercity routes. Urban public transport in Peshawar is exclusively served by various road transport modes. Peshawar also has an international airport mainly serving the Middle East, as well as regular domestic flights to other cities in Pakistan.

4. Various forms of paratransit and public vehicles dominate the urban transport subsector in Peshawar, accounting for an estimated 60%–70% of trips.<sup>4</sup> The public transport fleet consists of large, medium-sized, and mini-buses; Suzuki utility vehicles; all-terrain vehicles; station wagons; and pickup trucks. However, this current fleet of disparate vehicle types is in a general state of decay. Although public transport vehicles are legally required not to exceed a maximum age of 10 years, much of the fleet dates to the 1980s and 1990s. Government agencies lack the resources to oversee effectively or enforce compliance regarding safety, emissions, and maintenance standards. Surveys conducted for this project's pre-feasibility study indicated that

<sup>&</sup>lt;sup>1</sup> United Nations. 2016. *The World's Cities in 2016*. New York.

<sup>&</sup>lt;sup>2</sup> Government of Khyber Pakhtunkhwa. 2017. http://urbanpolicyunit.gkp.pk/sectors/.

<sup>&</sup>lt;sup>3</sup> Cities Development Initiative for Asia. 2014. Urban Transport Pre-Feasibility Study: Peshawar, Pakistan. Manila.

<sup>&</sup>lt;sup>4</sup> Government of Khyber Pakhtunkhwa and ADB. 2016. *Peshawar Bus Rapid Transit Project: Preliminary Design Report.* desMobi: Jakarta.

84% of passengers consider these services unsafe and insecure.<sup>5</sup> Principal concerns expressed were the lack of seating for women and children, especially during peak periods, the slowness of services, and aggressive and crude behavior of drivers and conductors. Supporting infrastructure, such as shelters and stops, is often either nonexistent or decayed.

5. For the many urban poor and women, walking is often the only viable mode of transport. For women, existing forms of public transport are either not secure or socially unacceptable. Unfortunately, pedestrian facilities are of poor quality or non-extant. Footpaths are narrow, utilities and signage block the paths, drainage and lighting are inadequate, and surfaces are uneven and poorly maintained. High levels of noise and air pollutants also make walking in Peshawar difficult.

6. Despite the current high mode share of paratransit and public transport, the rapid growth of car and motorcycle use is already altering Peshawar's urban form and livability. The poor quality and insecurity of extant public transport services are leading people to acquire cars and motorcycles as soon as they have the economic means to do so. This increase in private motorization has led to severe congestion, especially along the city's principal arterial roads, such as the GTR. In many cases, average peak hour travel speeds are as low as 11 km per hour.<sup>6</sup> The rapid increase in the number of cars and motorcycles is also causing a deficit of vehicle parking facilities, resulting in illegal parking on streets and footpaths. Traffic authorities have limited resources to control and enforce traffic and parking regulations. There are virtually no functional signalized intersections, and junctions are either manually managed by traffic police or left to the control of the motorists themselves. The Government of Khyber Pakhtunkhwa has responded by providing new infrastructure to help address congestion, including new flyovers at the GTR, Charsadda Road, and Hayatabad; however, traffic speeds and congestion continue to worsen.

7. Despite the public transport quality challenges, poor pedestrian conditions, and rising levels of private motorization, the opportunity to transform urban transport conditions in Pakistan and achieve sustainability still exists. Public transport remains dominant, largely due to the captive nature of the city's many low-income inhabitants. If the quality of public transport and pedestrian facilities can be raised, then the motorization rate and resulting congestion, noise, safety hazards, and pollution can be reversed. The investment decisions made over the next decade will largely determine whether Peshawar becomes a city defined through its accommodation of cars and motorcycles or a city favoring pedestrians and public spaces.

# 2. The Government of Pakistan's Sector Strategy

8. The Peshawar Sustainable Bus Rapid Transit (BRT) Corridor Project is directly related to the Government of Pakistan's long-term development plan "Vision 2030," which specifically names modern transport systems as a principal objective, along with an increased emphasis on development investment in Khyber Pakhtunkhwa.<sup>7</sup> The project also supports and is consistent with the objectives of the government's Eleventh Five Year Plan (2013–2018), National Framework for Economic Growth (2011), and "Pakistan 2025: One Nation—One Vision," which state that the "modernization of transport infrastructure and greater connectivity" is a principal means of achieving its 2025 vision for a globally competitive and prosperous country providing a high quality of life for all of its citizens.<sup>8</sup>

<sup>&</sup>lt;sup>5</sup> Cities Development Initiative for Asia. 2014. Urban Transport Pre-Feasibility Study: Peshawar, Pakistan. Manila.

<sup>&</sup>lt;sup>6</sup> Government of Khyber Pakhtunkhwa and ADB. 2016. *Peshawar Bus Rapid Transit Project: Preliminary Design Report.* desMobi: Jakarta.

<sup>&</sup>lt;sup>7</sup> Government of Pakistan, Planning Commission. 2007. Pakistan in the 21st Century, Vision 2030. Islamabad.

<sup>&</sup>lt;sup>8</sup> Government of Pakistan. 2011. *Framework for Economic Growth*. Islamabad; Government of Pakistan, Ministry of Planning, Development and Reform. 2014. *Pakistan 2025: One Nation—One Vision*. Islamabad.

9. The project also underpins the priorities set forth by the Khyber Pakhtunkhwa Comprehensive Development Strategy, 2010–2017,<sup>9</sup> which recognizes that "demand for road transport has been expanding at a rate much greater than economic development as a whole" (p. xiii) and that "municipal facilities such as…bus shelters are inadequate" (p. 72). The project directly addresses many of the core objectives of the transport sector strategy, including (i) the development and rehabilitation of infrastructure; (ii) capacity building of individuals, the establishment of organizations or units in public service, and institutional development; (iii) capacity building of the private sector through private sector involvement; (iv) supporting initiatives to provide environment-friendly transport options; (v) improved transport operations, maintenance systems, and processes; and (vi) improved safety of vehicles, passengers, and other road users.

The national government has already demonstrated its intent to transform urban transport 10. through the recent implementation of BRT systems in Lahore (27.0 km in length), Islamabad-Rawalpindi (22.5 km), and Multan (18.2 km). Although these BRT corridors are more basic firstgeneration systems (the corridors only involve trunk services, with no feeder services or direct services to other parts of the cities), the speed of their planning and implementation indicates that the capacity exists nationally to deliver high-quality public transport services. These initial systems are incurring significant operational subsidies due to their limited capacity and subsequent demand on the corridors. The project will complement these early efforts by delivering the first national example of a modern third-generation BRT system. As the third-generation design has significant potential to reduce the need for operational subsidies, the Peshawar BRT system has an opportunity to influence the form of future urban transport efforts across the country. The Peshawar system will also be unique in that the investment includes improvements to pedestrian facilities, traffic management, and parking management options. Footpath conditions will be improved for up to 500 meters around each station, and a bicycle path will be constructed along the entire corridor to encourage the use of bicycles, both as a feeder option to the BRT corridor and as a principal means of travel. Intersection treatments will simultaneously improve traffic flow conditions for private vehicles, and better organized parking and the provision of strategically placed parking plazas will relieve parking pressures, as well as encouraging the use of a parkand-ride option for the BRT system.

11. Creating new institutional structures will be essential to ensure that the system is developed, operated, and maintained sustainably. The government has already demonstrated its intent and seriousness with regard to this issue. With ADB support, the TransPeshawar company was legally established and is being staffed and developed. TransPeshawar, as the management entity, will contract and oversee the service providers to the system, including (i) the vehicle operating companies; (ii) the station services, fare system, and control center company; and (iii) the revenue clearinghouse company. The Khyber Pakhtunkhwa Urban Mobility Authority (KPUMA) has also been established as a regulatory body to ensure the appropriate integration of all transport plans across the metropolitan area.

12. To date, the existing provincial and local institutions with a mandate for transport and urban development have been the project's principal supporters and developers. The Transport and Mass-Transit Department of Khyber Pakhtunkhwa has provided the vision and technical support enabling ADB and the preparatory consultant teams to develop the project's scope and contents. The Peshawar Development Authority also provided essential administrative and consultation support to ensure the project's successful launch and local acceptance.

<sup>&</sup>lt;sup>9</sup> Government of Khyber Pakhtunkhwa. 2009. *Khyber Pakhtunkhwa Comprehensive Development Strategy: 2010–2017.* Peshawar.

### 3. ADB Sector Experience and Assistance Program

13. The project represents ADB's first urban transport investment to Pakistan. ADB has supported previous transport investments in Khyber Pakhtunkhwa, such as the 2006 North–West Frontier Province Road Development Sector and Subregional Connectivity Project (Peshawar–Torkham Subproject), but these investments focused on provincial and rural road development. ADB is also currently developing a new roads initiative for the province, the Khyber Pakhtunkhwa Rural Roads Project, which has the potential to provide about \$100 million in investment in roads and road maintenance. While the need for provincial and rural road connectivity will continue, the migration of large populations to urban centers such as Peshawar is increasingly rendering urban transport investment a development need.

14. ADB is also currently supporting the development of a BRT corridor in Karachi. Like Peshawar, the Karachi Red Line BRT was initially supported by a \$9.7 million project design advance. At this stage, the Peshawar BRT system will likely be implemented before the Karachi system. Every effort will be made to ensure that the lessons learned from the Peshawar and Karachi projects are shared between project teams to optimize quality.

15. ADB's new emphasis on urban transport initiatives, such as the Peshawar project, stems directly from the approval of the ADB Sustainable Transport Initiative (STI) in 2010.<sup>10</sup> The STI envisaged transforming the organization's transport operations to align fully with the bank's Strategy 2020 and the ongoing demographic changes taking place across the Asia and Pacific region.<sup>11</sup> In particular, the STI operational plan targets increased investment in the urban transport subsector, with an emphasis on public transport systems and nonmotorized transport. Since 2010, ADB has achieved several milestones in successfully implementing urban transport systems. In the People's Republic of China, new BRT systems in Lanzhou and Yichang are now providing enhanced public transport services, as well as serving as platforms for urban regeneration. New urban transport initiatives are also underway in Dhaka, Bangladesh; Hanoi and Ho Chi Minh City, Viet Nam; Jaipur, India; Jinan, People's Republic of China; Ulaanbaatar, Mongolia; and Vientiane, Lao People's Democratic Republic.

16. The project is consistent with and complements ADB's country operational business plan, 2016–2018, and country partnership strategy (CPS), 2015–2019 for Pakistan.<sup>12</sup> The country operational business plan identifies the project and lists it for implementation. The CPS identifies transport as one of six priority investment sectors and specifies the problem areas to be addressed as "…a deficient road network, lack of passenger and freight train services and mass rapid transit in urban areas… This weakens connectivity, increases operational costs for businesses, dampens productivity, and reduces access to key public services—particularly affecting poorer segments of society as they have less recourse to alternatives." (p. 3). The CPS also highlights investments promoting "… urban public transport systems to provide wider access to markets, jobs, and public services" (p. 5), and mentions the importance of urban public transport systems in achieving other thematic objectives, including "safe and female-friendly transport systems" (p. 6) and "pollution abatement through mass transit systems" (p. 7).

<sup>&</sup>lt;sup>10</sup> ADB. 2010. Sustainable Transport Initiative Operational Plan. Manila.

<sup>&</sup>lt;sup>11</sup> ADB. 2008. Strategy 2020: Working for an Asia and Pacific Free of Poverty. Manila.

<sup>&</sup>lt;sup>12</sup> ADB. 2015. Country Operational Business Plan: Pakistan 2016–2018. Manila; ADB. 2015. Country Partnership Strategy: Pakistan 2015–2019. Manila.

#### **Problem Tree for Peshawar Urban Transport**



Source: Asian Development Bank.