

SECTOR ASSESSMENT (SUMMARY): TRANSPORT (ROAD TRANSPORT [NONURBAN])¹

1. Sector Performance, Problems, and Opportunities

1. **Development challenges.** Tajikistan is a landlocked mountainous country in Central Asia bordered by Afghanistan, the People's Republic of China (PRC), the Kyrgyz Republic, and Uzbekistan. Despite its strategic location, the country had a gross domestic product per capita of just \$819, with 32% of the national population living below the poverty line in 2017. Almost 70% of the population lives in rural areas, in territory that is largely mountainous. Tajikistan depends heavily on its road transport corridors to support investment, job creation, trade, and ultimately economic growth and poverty reduction. Ailing transport infrastructure and geographic isolation result in high transport costs and limited access to markets and services, posing significant barriers to the country's economic and social development.

2. **Transport sector overview.** The Ministry of Transport (MOT) is responsible for roads, railways, and airports; transport sector policy; and related regulation, planning, operations, and investment. The MOT is headed by a minister and three deputy ministers, and divided into seven departments that include 90 staff at MOT headquarters. The MOT's subordinate organizations include six state enterprises for transport management and 61 state enterprises for highway maintenance. The country's transport network comprises approximately 27,000 kilometers (km) of roads, 680 km of railway tracks, and four international airports. Demand for road transport is outpacing demand for other transport modes, with approximately 68% of cargo and 90% of passenger traffic carried by road. From 2010 to 2015, vehicle registration increased by 50%, from 289,000 to about 434,000 vehicles. Vehicle ownership is relatively low (50 vehicles per 1,000 people) compared with 58 vehicles per 1,000 people in the Kyrgyz Republic. Domestic freight transport uses roads in preference to airlines and railways because the 22 km average freight haul distance is relatively short. Freight carriage doubled during 2004–2014, from 3,573 million tons to 7,441 million tons. Road freight tariffs are entirely deregulated, and road haulage companies enter into agreements with customers at negotiated rates.

3. **Roads.** Tajikistan has a large road network inherited from the former Soviet Union. The road network under the MOT's jurisdiction (13,968 km) comprises 3,178 km of international roads (23%), 2,120 km of national roads (15%), and 8,670 km of local roads (62%). Paved roads account for 73% of the MOT's road network (by length), including 32% with asphalt concrete and 41% with aggregate and bitumen. The remaining roads are gravel (20%) and earthen roads (7%). Road density is 187 km per 1,000 square km, which is comparable to that of the Kyrgyz Republic (176 km per 1,000 square km). The backbone of Tajikistan's road network, comprising four Central Asia Regional Economic Cooperation (CAREC) corridors and three Asian Highways, has been largely improved with assistance from the Asian Development Bank (ADB) and other development partners.

4. **Railways.** The railway network is currently divided into three separate sections with limited connectivity between the north and south of Tajikistan. The southern section, which used to be connected to the Uzbek railway network, is currently a stand-alone section. Work is being undertaken to reconnect this network with the central railway near Dushanbe. Trains from Dushanbe to Khujand in the north must cross through Uzbekistan, adding travel cost and time. The railway carries some of Tajikistan's exports and imports, mostly bulk goods such as cotton and aluminum exports, and hydrocarbon imports. The railway currently offers very limited

¹ The summary is based on Asian Development Bank (ADB). 2011. *Developing Tajikistan's Transport Sector: Transport Sector Master Plan*. Manila; and project preparatory technical assistance reports.

passenger service from Dushanbe, with only two international trains departing and arriving per week.

5. **Civil aviation.** The aviation sector is dominated by two carriers: the partially state-owned Tajik Air, and Somon Air, a private airline. Although large investments have been made in airports and related infrastructure, most flights are to destinations in the former Soviet Union. The main destinations outside of the Commonwealth of Independent States are Delhi, Dubai, Frankfurt, and Istanbul. An International Civil Aviation Organization audit in 2015 identified significant shortcomings, particularly in aircraft airworthiness and air navigation services. This may discourage some carriers from entering the market or offering code-sharing flights, thus reducing competition and customer choice.

6. **Road sector challenges.** The growing portfolio of rehabilitated international and national roads in Tajikistan requires more attention and action on road safety and road asset management to cater for the increased traffic volumes and loads, and higher vehicle speeds. Improvements in road planning, design, and operation and maintenance (O&M) are slowly being introduced but remain constrained by inadequacies in sector funding, institutional capacity and arrangements, and the legislative framework.

7. **Road infrastructure and cross-border transport.** Four CAREC corridors (2, 3, 5, and 6) cross the territory of Tajikistan, which highlights the importance of road network connectivity and regional integration. The road network was largely constructed before the 1970s, and the rapid increase of traffic on some arterial roads is intensifying pressure on aging transport infrastructure. Tajikistan has limited links to neighboring countries, especially Afghanistan and the PRC. The World Bank's 2016 Logistics Performance Index placed Tajikistan near the bottom of the global ranking (153 out of 160), compared with an overall ranking of 146 for the Kyrgyz Republic. Tajikistan ranked 150th for efficiency of customs clearance processes, 130th for quality of transport infrastructure, and 159th in timeliness of shipments delivery.² Logistics costs are already very high, accounting for about 20% of exported value and 17% of imported value.³

8. **Road maintenance.** While aggregated data are not available, the overall condition of the road network is relatively poor, which is due in part to the inadequate initial construction, as well as inadequate subsequent maintenance of pavements and structures. In 2017, TJS60.2 million was allocated for routine and periodic road maintenance, which is inadequate to meet the road network's needs. The lack of a road asset management system further compounds the problem, because there is no way to optimize the allocation of funds based on road needs and functions. Defining a "core network" that includes the most heavily trafficked roads should enable better use of the MOT's scarce road maintenance resources. Since 2000, the government has constructed, rehabilitated, or carried out major repairs on an estimated 2,000 km of roads, and maintenance requirements for these roads will remain relatively limited for some years.

9. **Road safety.** The road safety record in Tajikistan is dismal despite its low level of vehicle ownership. Tajikistan reported 472 fatalities in 2013. The World Health Organization estimates that there were 1,543 fatalities in 2013, which corresponds to about 19 fatalities per 100,000 people, compared with 22 fatalities per 100,000 people in the Kyrgyz Republic. In 2014, the following were the main causes of fatalities: high speed of vehicles (54%), driving on the wrong

² World Bank. 2016. *International Logistics Performance Index Global Ranking*. Washington, DC.

³ World Bank. 2013. *Road Transport and Logistics Providers in Central Asia: Kazakhstan, Kyrgyz Republic and Tajikistan*. Washington, DC.

side of the road (21%), illegal maneuvering (5%), driving under the influence of alcohol (2%), and other (18%).⁴ With ADB and CAREC assistance, the MOT is currently developing a road safety strategy and action plan that will provide relevant stakeholders with a reference framework to implement future road safety programs.

10. **Road sector funding.** To increase road sector funding, the allocation of resources needs to be improved and its revenue base expanded. The budgetary process for road funding is centralized at the Ministry of Finance, which allocates funds to the MOT for both road maintenance and construction; however, allocations for road funding are not discussed yearly at the ministerial level when the national budget is prepared. The MOT has experimented by outsourcing some road O&M to the private sector; recent examples include the 358 km Dushanbe–Chanak toll road (2010),⁵ and two performance-based maintenance contracts for selected sections (149 km) of the Dushanbe–Kyrgyz border road (2013).⁶ The results of these pilot operations have yet to be thoroughly evaluated to draw lessons for potential replication and expansion in other sections of the road network.

11. **Road sector legislative framework.** The road sector legal and regulatory framework is incomplete and not effectively enforced to create an enabling environment for a safe, efficient, and reliable road transport system. Progress has been made, however, with the introduction of a pilot public–private partnership for road O&M, enhanced laws and regulations on vehicle overloading and seat-belt requirements, and ratification of most international road transport agreements.

12. **Road sector-related capacity.** There is a lack of adequate individual and institutional capacity to sustainably address road sector-related challenges. First, the government and MOT are unable to make evidence- and needs-based decisions because of the limited availability of data, tools, and monitoring systems. Second, the transport engineering curriculum needs to be updated to enable best practices—in terms of road safety and maintenance, climate change and disaster risk management, and gender considerations—to be incorporated in road design, construction, and operation. Third, the number of local design and construction companies with adequate technical and financial capacity remains limited.

13. **Road sector institutional arrangements.** Most of the sector’s problems involve issues that fall under the responsibility of various ministries such as the Ministry of Interior (road safety), Ministry of Economic Development and Trade (cross-border transport), and Ministry of Finance (road maintenance). There are no existing platforms or mechanisms to ensure that road policies and programs are adequately coordinated among stakeholders, including the government, private sector, and civil society. The CAREC Program offers some possibilities in this area while also enabling experience sharing among countries in the CAREC region.

⁴ World Health Organization. 2013. *Global Status Report on Road Safety 2013: Supporting a Decade of Action*. Geneva.

⁵ United Nations Economic Commission for Europe. 2013. *National PPP Readiness Assessment Report: Tajikistan*. Geneva.

⁶ ADB. 2013. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Republic of Tajikistan for the CAREC Regional Road Corridor Improvement Project (Phase 3)*. Manila.

2. Government's Sector Strategy

14. The development of the transport sector in Tajikistan is guided by the National Development Strategy⁷ and the Transport Sector Master Plan (footnote 1), and implemented through the State Program on Transport Sector Development.⁸ The Transport Sector Master Plan is the basis for the government's strategic planning in the transport sector and, as such, provides a framework for coordination among government bodies and development partners. The State Program on Transport Development includes a list of short-, medium-, and long-term investments that is regularly reviewed and updated, and aims to (i) minimize total transport costs, (ii) develop specific transport modes and enhance their efficiency, (iii) maximize the country's transit potential and develop tourism, and (iv) increase transport services competitiveness.

15. The government participates actively in the CAREC Program, which has developed a transport and trade facilitation strategy that includes three overarching goals: (i) establish competitive transport corridors across the CAREC region; (ii) facilitate efficient movement of people and goods across borders; and (iii) develop safe, people-friendly transport systems.⁹

3. ADB Sector Experience and Assistance Program

16. From 1998 to 2016, ADB financed 28 transport projects with loans, grants, and technical assistance totaling nearly \$461 million. Loans and grants were spent on road rehabilitation projects, while technical assistance projects focused on capacity development and institutional support. ADB assistance has rehabilitated and improved approximately 810 km of roads in strategic CAREC regional corridors and about 350 km of rural roads. During the same period, other development partners provided about \$1,276 million to finance 62 projects through loans, grants, and technical assistance.

17. A number of knowledge products were developed through ADB regional and advisory technical assistance, including the Road Sector Governance Assessment (2009) and the Transport Sector Master Plan (2011). This laid the groundwork for the development of the State Program on Transport Sector Development, 2010–2025.

18. The size of ADB's program in the transport sector, coupled with its leading role in CAREC's transport program, has positioned ADB to successfully support the government's sector strategies, policies, and plans. ADB investments in the transport sector have improved transport infrastructure; introduced pilot projects on performance-based maintenance; raised awareness regarding road safety; reduced cross-border barriers; and improved connectivity with Afghanistan, the PRC, the Kyrgyz Republic, and Uzbekistan.

19. The CAREC Corridors 2, 5, and 6 (Dushanbe–Kurgonteppa) Road Project will also develop guidelines on safe arterial road design and support the development of a tailored road asset management system with the aim of incrementally strengthening MOT capacity in these areas. This approach will support a policy dialogue that will run parallel with the progressive improvement of the project road and be closely coordinated with other development partners active in the transport sector. ADB will continue assisting the government in infrastructure financing, policy and capacity development, and institutional reforms.

⁷ Government of Tajikistan. 2017. *National Development Strategy of the Republic of Tajikistan for the Period up to 2030*. Dushanbe.

⁸ Government of Tajikistan. 2010. *State Program on Transport Sector Development for 2010–2025*. Dushanbe.

⁹ ADB. 2014. *CAREC Transport and Trade Facilitation Strategy, 2020*. Manila.

PROBLEM TREE FOR THE ROAD TRANSPORT SECTOR

