

## SECTOR ASSESSMENT (SUMMARY): TRANSPORT, AND INFORMATION AND COMMUNICATION TECHNOLOGY

### A. Sector Performance, Problems, and Opportunities

1. The Kyrgyz Republic is a mountainous, landlocked country bordering the People's Republic of China (PRC) in the east, Kazakhstan in the north, Tajikistan in the south, and Uzbekistan in the west. Regional commerce depends heavily on road transport, which dominates the Kyrgyz transport system. Approximately 95% of passenger traffic and more than 50% of freight traffic is carried by road. In addition to approximately 35,000 kilometers (km) of roads, there are 420 km of railway tracks, four international airports, and seven domestic airports. From 2002 to 2010, vehicle registrations increased by more than 60%, from 285,084 to 459,747. From 2002 to 2008, freight traffic increased by almost 58%, from 1,270 million ton-km to 2,002 million ton-km, and passenger traffic increased by almost 35%, from 4,900 million passenger-km to 6,599 million passenger-km, over the same period.

2. **Road Subsector.** The Ministry of Transport and Communications (MOTC) is the leading transport agency in the Kyrgyz Republic and is responsible for transport and communications policy, regulation, planning, and development. The MOTC is also responsible for maintenance of 4,163 km of international roads, 5,678 km of national roads, and 8,969 km of provincial roads. Local government agencies are responsible for developing and maintaining other secondary, rural, and urban road networks. The Kyrgyz Republic Customs Agency manages airport, road, and rail freight and terminal customs station inspections, with a total of eight country border checkpoints operating on a regular basis. Kyrgyz Railway is responsible for track maintenance and for train stations, depots, workshops, and freight handling yards. Other public and freight transport modes are managed and operated by various public and private entities.

3. **Inadequate road infrastructure and maintenance.** Of the international and national roads, 33% are in poor condition, requiring rehabilitation or reconstruction, while 67% are in sustainable condition, requiring only routine or periodic maintenance.<sup>1</sup> The 2011 budget allocation of Som1.1 billion for the MOTC's maintenance work covers less than one-third of the estimated Som3.5 billion needed to maintain the roads at an international standard. The MOTC maintains the roads through nine regional road maintenance offices, which undertake maintenance work on an ad hoc basis using force account. To address this situation, ADB is working with the MOTC to introduce performance-based maintenance contracts in the country.

4. **High road crash rate.** The road safety situation in the Kyrgyz Republic requires serious attention. The total number of road crashes increased from 4,248 in 2009 to 4,813 in 2011, with estimated road traffic deaths of up to 1,022. Part of the increase was due to bad road conditions and weak regulations and enforcement. The Road Safety Secretariat, which collects and analyzes road traffic crash data and coordinates prevention initiatives with government agencies, often lacks secure funding and expertise to operate the existing road safety program and improve road safety management.

5. **Railway Subsector.** Kyrgyz Railways is a state-owned company that owns and manages about 300 km of railway tracks—200 km in the north of the country and 100 km in the south. It receives no budget support; the profit-making freight services subsidize passenger services. For historical reasons the two parts of the system—north and south—are not

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<sup>1</sup> Government of Kyrgyz Republic. 2012. *"It's unwise to pay too much, but it's foolish to spend too little": Sustainable road sector development through asset management in the Kyrgyz Republic.* Bishkek.

connected with each other. The main freight cargo is coal, followed by fuel, fertilizers, and other bulk commodities. The northern system's capacity is fully utilized; the southern system utilization is 50%–60%. The wagon fleet and the locomotives are more than 35 years old and are below international standards. There are several locations that have speed restrictions and rehabilitation is needed. The legal requirement to return 50% of the profit to the state treasury constrains the ability of Kyrgyz Railways to rehabilitate its track and modernize the rolling stock and transshipment facilities, the costs of which are substantial.

6. **Aviation Subsector.** All the 11 airports in the country are owned and operated by Manas International Airport Joint Stock Company, in which the government has an 80% shareholding. Of these airports, four are international airports—Manas (Bishkek), Osh, Issyk-Kul, and Karakol. Manas and Osh operate year-round; Issyk-Kul is operational mainly during summer and Karakol is operational mainly during winter. Regular domestic flights are operated between Manas, Osh, Jalal-Abad, Batken, and Isfana. International passenger arrivals at Manas airport are projected to reach 1.5 million per year by 2025, and at Osh airport 1.4 million. The air traffic and passenger terminal capacity of both airports will need to be expanded to meet increasing traffic demand. Improvement and modernization of the international airports is considered imperative to attract international tourists.

7. **Weak institutional commitment and capacity.** The government has been slow in implementing a reform agenda in the transport sector, including setting up an adequate budget for road maintenance and attracting private sector involvement in road maintenance operations. Weak government capacity has been visible in many projects, including in promptly providing counterpart funds and coordinating donor assistance.

## B. Government's Sector Strategy

8. In the National Sustainable Development Strategy for 2013-2017 (NSDS), the government recognizes the importance of international transport corridors and is paying special attention to the country's transport independence through the construction of bypass roads to avoid unnecessary transit via neighboring states. The government also recognizes that the country's rail network does not meet the needs of regional traffic and that there is an urgent need to replace air navigation equipment. Therefore, to ensure regional connectivity, access to regional markets for goods and services, and development of transit capacity and transport independence, the government envisages rehabilitation of five corridors: (i) Osh–Sarytash–Irkeshtan, (ii) Bishkek–Naryn–Torugart, (iii) Osh–Batken–Isfana, (iv) Taraz–Talas–Suusamy, and (v) Issyk–Kul Circle/Ring. Some assistance from the Government of the United States to improve air navigation equipment is expected, and preliminary discussion with the World Bank on the improvement of the PRC–Kyrgyz Republic–Uzbekistan railway is ongoing. The government is interested in introducing public–private partnerships to infrastructure projects to lessen the burden of financing, maintaining, and rehabilitating roads.

9. A transport master plan, covering the road, rail, and aviation subsectors, was developed for the systematic and planned development of the transportation network.<sup>2</sup> The master plan became the guiding document for the short-, medium-, and long-term priority investment program until 2025. Although road maintenance is not specifically addressed in the, the master plan examined the inherent problems of the international, national, and secondary road networks

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<sup>2</sup> The transport master plan is supported by ADB. 2012. *CAREC Transport Corridor 1 (Bishkek-Torugart Road), Project 1*. Manila (Grant 0123-KGZ).

managed by the MOTC. It reviewed the need for updated management practices, technology upgrades, design and safety standards, and multimodal interconnectivity.

10. Although multilateral development partners have invested around \$1 billion since 1994, the overall condition of the road network has not improved significantly. This is partly due to the increase in vehicle-km traveled and inadequate maintenance.<sup>3</sup> The government has been heavily involved in expanding the road network but little attention has been paid to institutional reform, asset management and maintenance, road safety, and private sector participation. When roads have been rehabilitated, no specific plans have been put in place for maintenance and management them.

### C. ADB Sector Experience

11. Since 1996, ADB has supported the government with eight loans, three grants, and five advisory technical assistance projects. Loans and grants totaling \$350.00 million were spent on road projects, while technical assistance projects totaling \$3.29 million were focused on capacity development and institutional support. ADB assistance has rehabilitated and improved an estimated 726 km of roads in key regional corridors, e.g., the Bishkek–Osh road, and 105 km of secondary roads. When ADB rehabilitated 483 km of its 670 km (ADB financed \$140 million and the Japan Bank for International Cooperation (JICA) cofinanced \$62 million), 3,000 roadside households benefited from increased road-related trade activities, travel time was reduced from 20 hours to 9 hours, and the number of vehicles using the road increased from 800 per day before rehabilitation to 8,500 per day.<sup>4</sup>

12. ADB targets most of its assistance to the transport sector and is the lead donor agency in transport projects in the Kyrgyz Republic. Other development partners in the sector include the PRC, European Bank for Reconstruction and Development (EBRD), the World Bank, Islamic Development Bank, and JICA. Under the Central Asia Regional Economic Cooperation (CAREC) Transport and Trade Facilitation Strategy,<sup>5</sup> there are three overarching goals: (i) to establish competitive transport corridors across the CAREC region; (ii) to facilitate efficient movement of people and goods across borders; and (iii) to develop safe, people-friendly transport systems. Enabling cross-border and transit transport and easing border-crossing formalities at CAREC corridor border-crossing points are priorities which are highly relevant to the Kyrgyz Republic. ADB's road rehabilitation work has had positive social and economic impacts in the Kyrgyz Republic, increasing access to product and labor markets and to services. ADB-sponsored projects have also contributed to poverty reduction and economic growth in the region.<sup>6</sup>

13. On the other hand, technical assistance to the country has been piecemeal. This has resulted in weaknesses in areas such as institutional reform, road asset management, and road safety, where improvements require much more time than can be afforded under individual projects. ADB should offer a more comprehensive approach to reforming the transport sector, including strengthening capacity, setting up a robust maintenance regime, and implementing a road safety action plan.

<sup>3</sup> ADB. 2011. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Kyrgyz Republic: CAREC Corridor 1 (Bishkek–Torugart Road) Project 3*. Manila.

<sup>4</sup> Independent Evaluation Department. 2010. *Project Performance Evaluation Report: Road Rehabilitation Project, Second Road Rehabilitation Project, and Third Road Rehabilitation Project (Kyrgyz Republic) (Loans 1444-KGZ, 1630-KGZ, and 1853-KGZ)*. Manila: ADB.

<sup>5</sup> ADB. 2007. *CAREC Transport and Trade Facilitation Strategy*. Manila.

<sup>6</sup> ADB. 2011. *Completion Report – Kyrgyz Republic: Southern Transport Corridor Road Rehabilitation Project*. Manila.

#### D. ADB Future Assistance Program

14. Considering growing transport demand, ADB and government cooperation experience, and priorities, ADB will continue to assist the government in the following areas:

**Connectivity.** Though there is a need for the government to upgrade its railway and civil aviation systems, ADB's assistance under the country partnership strategy will concentrate on the road network. Roads are the most cost-effective and dependable mode of transport given the country's large geographic area, low population density, extreme climate, and mountainous topography. Upgrading the rail system to serve the whole country would require significant resources and long-term planning and commitment from the government.

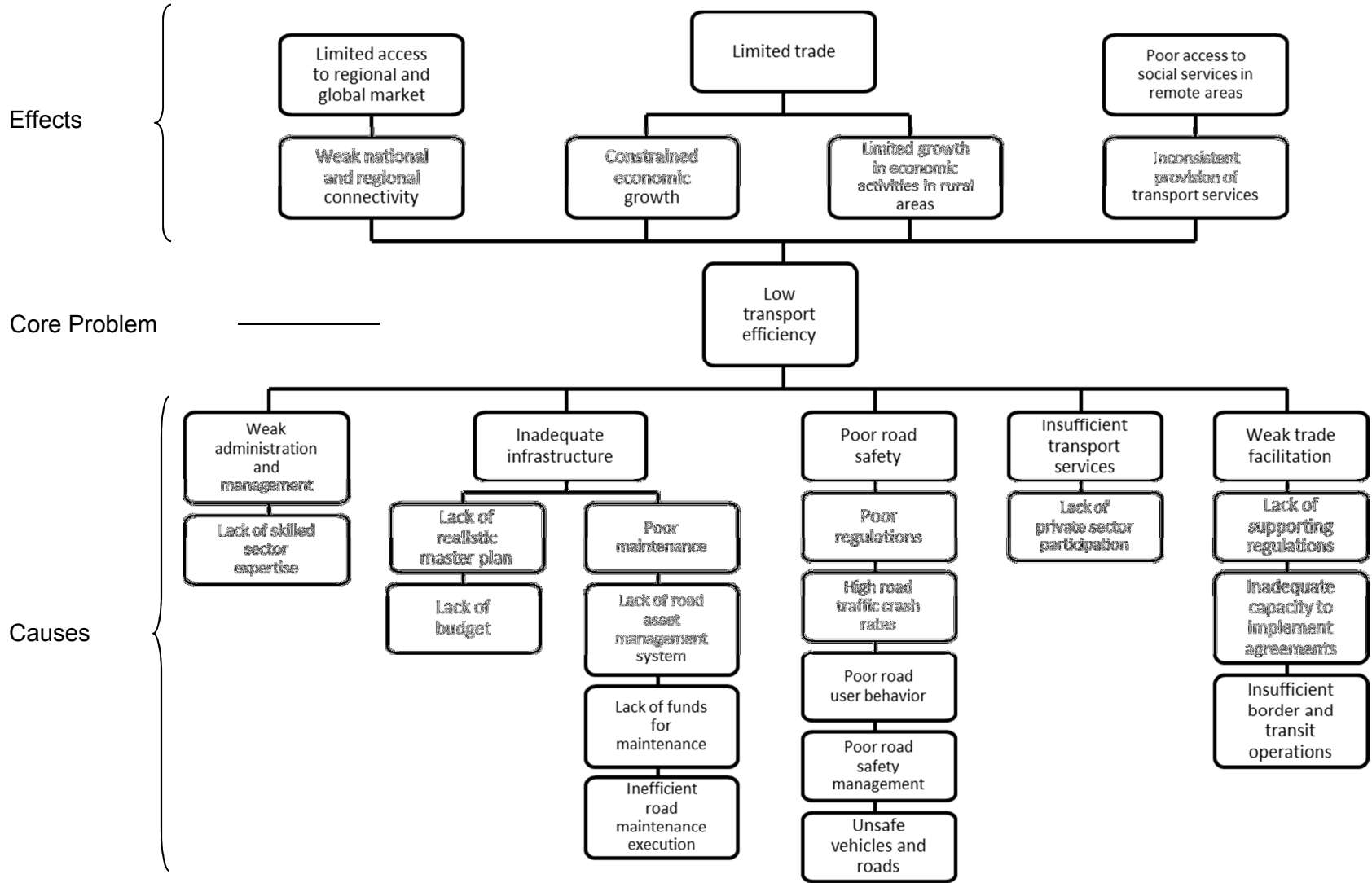
In line with the strategic objectives of expanded trade and improved competitiveness of the new 10-year strategic framework of CAREC, ADB will continue to promote regional connectivity by supporting the completion of CAREC transport corridors. Also, ADB will assist the government in improving connectivity between domestic market centers and regional corridors to further enhance the economic value of the regional corridors. ADB will also assist in upgrading village feeder roads, which is a priority concern for many rural women, to provide access to health facilities and income-earning opportunities. ADB will assist CAREC countries in facilitating the cross-border movement of goods and people along the CAREC corridors. The ADB-assisted CAREC trade facilitation program covers customs modernization, a joint customs control initiative, and other key measures for CAREC countries, including the Kyrgyz Republic. Similarly, the CAREC regional improvement of border services project covers border-crossing-point improvement and national single-window development for the Kyrgyz Republic and Tajikistan. ADB will support the integration of climate-proofing measures in the construction, operation, and maintenance of road projects.

**Maintenance.** To improve road maintenance, ADB will assist the government in developing its road asset management plan to ensure sufficient funds are allocated for maintaining the existing network. ADB will take the lead in performance-based maintenance contracts and run pilot sections in the country. ADB will continue coordination with other donor partners with experience in road asset management in the Kyrgyz Republic, such as the EBRD, JICA, and the World Bank, to develop and expand the computer-based road management system and support road sector reform in strengthening sustainability and resource allocation in road maintenance.

**Road safety.** Considering the high road traffic crash rate in the Kyrgyz Republic, and given CAREC goals, road safety is an essential component of strengthening the road network. ADB will continue its active involvement by assisting the government to improve road safety management, including (i) developing a national road infrastructure safety strategy and road safety checklist and guidelines; and (ii) developing a road safety action plan for all road sections which will include road safety audits and capacity building, public awareness programs, and addressing the needs of women and children, for example, for safe crossings and well-lit transport stops.

**Knowledge support.** Through technical assistance projects and by capacity building within projects, ADB will assist the government to address the specific needs of the sector through training, institutional strengthening, policy dialogue, and issue-oriented research and studies, and the development of knowledge products.

### Problem Tree for Transport



## Sector Results Framework

Country Sector Outcomes		Country Sector Outputs		ADB Sector Operations	
Sector Outcomes with ADB Contribution	Indicators with Targets and Baselines	Sector Outputs with ADB Contribution	Indicators with Incremental Targets	Planned and Ongoing ADB Interventions	Main Outputs Expected from ADB Interventions
Increased, more efficient and safer movement of people and goods	<p>Road traffic fatality rate decreased to 18 per 100,000 persons in 2017 (2011 baseline: 19.2 per 100,000 persons)</p> <p>International freight traffic will increase to 345 annual average daily traffic (AADT) in 2017 (2011 baseline: 320 AADT)</p>	Transport infrastructure and systems expanded, improved and maintained	<p>Percentage of road network kilometers in sustainable condition increased from 67% in 2011 to 85% in 2017</p> <p>120 km Bishkek–Osh Road rehabilitated by 2020</p> <p>60 km Bishkek–Torugart Road rehabilitated by 2017</p> <p>Percentage of estimated road maintenance needs met by annual road maintenance budget increases from 32% in 2011 to 80% in 2017</p> <p>75% of CAREC corridors improved in 2017, compared with 64% in 2007</p>	<p><b>Planned key activity areas</b></p> <p>International and selected feeder road rehabilitation (80%), road asset management system (10%), road safety (5%) and cross border facilitation (5%)</p> <p><b>Pipeline projects with estimated amounts</b></p> <p>CAREC Corridor 3 (Bishkek–Osh Road) Improvement Project, Phase 4 (\$160 million), including \$100 million ADB financing and \$60 million cofinancing with EDB</p> <p>Road Maintenance and Rehabilitation Project for \$30 million ADB financing</p> <p>R-PATA Mitigating Nonphysical Barriers to Cross-Border Transport in the CAREC region</p> <p><b>Ongoing projects</b></p> <p>Grant 0084 and Loan 2667-KGZ: CAREC Regional Road Corridor Improvement Project (\$45.6 million)</p> <p>Grant 0123-KGZ: CAREC Transport Corridor 1 (Bishkek–Torugart Road) Project 1 (\$20 million)</p> <p>Grant 0153 and Loan 2533-KGZ: CAREC Transport Corridor 1 Project 2 (\$50 million)</p> <p>Loan 2755-KGZ: CAREC Transport Corridor 1 Project 3 (\$54 million)</p> <p>Grant 0340 and Loan 2995-KGZ: CAREC Regional Improvement of Border Service Project (KGZ: \$8.4 million)</p>	<p><b>Planned key activity areas</b></p> <p>About 130 km of international and feeder roads rehabilitated</p> <p>Performance-based maintenance contract piloted</p> <p>Road safety action plan developed</p> <p>Cross border agreement and facilities rehabilitated</p> <p><b>Pipeline projects</b></p> <p>120 km of international and feeder roads rehabilitated</p> <p>1 cross border transport facilitation arrangement agreement</p> <p>60 km of CAREC corridor and key feeder roads rehabilitated</p> <p><b>Ongoing projects</b></p> <p>300 km of international (regional) roads rehabilitated</p> <p>Transport sector master plan completed</p> <p>Civil works with the required facilities and equipment completed for border crossing point, and national single window developed at Karamyk border</p>

AADT = annual average daily traffic, CAREC = Central Asia Regional Economic Cooperation; EDB = Eurasian Development Bank; KGZ = Kyrgyz Republic; km = kilometer; R-PATA = regional policy advisory technical assistance.

Source: Asian Development Bank.