## SECTOR ASSESSMENT (SUMMARY): TRANSPORT1

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

- 1. The Kyrgyz Republic is a mountainous, landlocked country where commerce depends heavily on road transport. About 95% of passenger traffic and more than 50% of freight traffic is carried by road. The country's transport network comprises approximately 35,000 kilometers (km) of roads and 420 km of railway, as well as four international and seven domestic airports. Vehicle registrations increased by more than 60% during 2002–2010, from 285,084 to 459,747. Freight traffic increased by almost 58% over the same period, from 1,270 million ton-kilometers to 2,002 million ton-kilometers; and passenger traffic grew by 35%, from 4,900 million passenger-kilometers to 6,599 million passenger-kilometers.
- 2. Road infrastructure and services are mutually dependent. As shown in Table 1, they can be divided spatially into four categories that sometimes overlap—urban and suburban, rural, intercity, and international. The Ministry of Transport and Communications (MOTC) is responsible for transport and communications policy, regulation, planning, and development. It also takes charge of the maintenance of 4,163 km of international roads, 5,678 km of national roads, and 8,969 km of provincial roads. Local governments are responsible for developing and maintaining other secondary and rural roads and the urban road networks. The Kyrgyz Republic Customs Agency manages airport, road, and rail freight and terminal customs station inspections. Eight country land border checkpoints operate on a regular basis. Kyrgyz Railway is responsible for track maintenance and for managing train stations, depots, workshops, and freight handling yards. Other public and freight transport activities are managed and operated by other public and private entities.

Table 1: Ownership and Responsibility for Road Infrastructure and Services

Spatial Category	Infrastructure and Services	Responsibility/Ownership
Urban and suburban	Roads	Local government
(local)	Buses and terminals	Local government/private
	Taxi	Private
	Trucks, vans, and terminals	Private
Rural (local)	Roads	Local government
	Buses and terminals	Local government/private
	Taxi	Private
	Trucks, vans, and terminals	Private
Intercity (national)	Road	Central government
	Buses and terminals	Local government/private
	Taxi	Private
	Trucks, vans, and terminals	Private
	Railways	Central government
	Airlines and terminals	Private/central government
International	Road	Central government
	Buses and terminals	Local government/private
	Taxi	Private
	Trucks, vans, and terminals	Private
	Railways	Central government
	Airlines and terminals	Private/central government

Sources: Asian Development Bank and Ministry of Transport and Communications of the Kyrgyz Republic.

<sup>&</sup>lt;sup>1</sup> This summary is mainly based on ADB. 2012. *The Master Plan on Road and Transport Sector Development (2010-2025)*. Manila.

- Of the international and national roads, 33% are in poor condition and require rehabilitation or reconstruction. The 67% that are generally in good condition need only routine or periodic maintenance. The MOTC maintains the roads through nine regional road maintenance offices that undertake maintenance work on an ad hoc basis using force account. The government's average annual budget allocation to the MOTC for this work covers less than half of the estimated maintenance needed to keep the condition of the country's roads up to international standards. To address this situation, the Asian Development Bank (ADB) is working with MOTC to introduce the use of performance-based maintenance contracts. Several opportunities exist for generating more of the funding necessary to do this. Traditional sources such as vehicle licensing and registration fees need adjustment from time to time to commeasure with the actual value and usage of the vehicles. More financing can possibly be derived by imposing fees on foreign vehicles entering or transiting the Kyrgyz Republic and tolls on certain parts of the road network, among other steps. Road maintenance costs can be reduced by revising road design standards and the materials and equipment used. Procurement methods also need to be improved to encourage and ensure the development of national private contractors, increase competition, and lower costs.
- 4. Road safety in the Kyrgyz Republic is not given proper attention. The number of crashes rose from 4,248 in 2009 to 4,813 in 2011, when an estimated 1,022 traffic deaths occurred. The increase was due partly to bad road conditions and weak regulations and enforcement. The government's Road Safety Secretariat, which collects and analyzes crash data and coordinates prevention initiatives with government agencies, often lacks the funding and expertise needed to operate the existing road safety program and improve road safety management.
- 5. While the government has made moderate headway in implementing a reform agenda under a transport sector master plan developed and adopted in 2014 under ADB's Bishkek–Torugart Road Project,<sup>2</sup> progress has generally been slow. The agenda includes establishing an adequate budget for road maintenance and attracting private sector involvement in road maintenance operations. Weak government capacity has been evident in many government efforts, including those to provide counterpart funds promptly and to coordinate development partner assistance. The sector master plan examined the inherent problems of the international, national, and secondary road networks managed by the MOTC and reviewed the need for updated management practices, technology upgrades, design and safety standards, and multimodal interconnectivity. The master plan, which covers the road, rail, and aviation subsectors, is expected to guide short-, medium-, and long-term priority investments until 2025.

#### B. Government's Sector Strategy

- 6. The government's national development strategy for 2013–2017<sup>3</sup> envisages the rehabilitation of five road transport corridors to ensure connectivity in the Central Asian region, the Kyrgyz Republic's access to regional markets for goods and services, and development of transit capacity and transport independence: (i) Osh–Sarytash–Irkeshtan, (ii) Bishkek–Naryn–Torugart, (iii) Osh–Batken–Isfana, (iv) Taraz–Talas–Suusamyr, and (v) Issyk–Kul Circle. The government expects some assistance from the Government of the United States to improve air navigation equipment and is in preliminary discussions with the World Bank on the improvement of a railway running between the People's Republic of China, the Kyrgyz Republic, and Uzbekistan. The government is interested in introducing public–private partnerships for infrastructure projects to lessen the burden of financing, maintaining, and rehabilitating roads.
- 7. Improving the road network has been and continues to be a top government priority. All routine maintenance and about one-half of periodic and emergency work is done by the

<sup>3</sup> Kyrqyz Republic. 2013. *National strategy for sustainable development of Kyrgyz Republic for 2013-2017.* Bishkek.

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<sup>&</sup>lt;sup>2</sup> ADB. 2008. Report and Recommendation of the President to the Board of Directors: Proposed Asian Development Fund Grant to the Kyrgyz Republic for the CAREC Transport Corridor 1 (Bishkek–Torugart Road) Project. Manila.

provincial and subregional units of the MOTC's roads maintenance department (RMD). Maintenance of the Bishkek–Osh Road and the Bishkek–Naryn–Torugart Road is managed by two separate departments, also under the RMD. In total, 58 units are responsible for maintaining the state road network. Decisions are largely delegated to the RMD's provincial units. The RMD prepares the annual maintenance budget based on the regional requests, submits it to the Ministry of Finance, and allocates the annual amount appropriated to the provincial units. The maintenance appropriations increased to Som2.057 billion in 2013. This was more than four times the amount in 2005 but still inadequate (Tables 2 and 3). The lack of funding remains a major obstacle to making the country's roads network sustainable.

Table 2: Budgetary Allocation to the Road Sector, 2005–2013

(5011 000)								
Item	2005	2007	2009	2011	2012	2013		
Capital investments	209,350	319,430	361,500	176,938	181,490	197,737		
Road maintenance	221,674	1,058,758	1,293,500	1,344,374	1,684,695	1,846,792		
Administration	40,790	78,700	246,903	127,386	124,568	13,133		
Total	473,819	1,458,895	1,901,903	1,648,698	1,990,753	2,057,662		

<sup>&</sup>lt;sup>a</sup> Numbers may not sum precisely because of rounding. Source: Ministry of Transport and Communications of the Kyrgyz Republic.

Table 3: Financing for Road Sector, 2009–2013

(Som'000) 2013 Item 2009 2012 2011 A. Roads and Repair 1,293,500.00 1,331,519.00 1,681,398.80 2,043,227.60 Maintenance 1. Roads Department 1,124,100.00 1,165,319.00 1,452,298.80 1,741,127.60 General Directorate Bishkek 169,400.00 166,200.00 229,100.00 302,100.00 Osh B. Government's Cofinancing of 210,779.00 240,008,849.00 149,113,802.00 379,067,832.00 **Projects** Subtotal from Budget (A + B) 1,504,279.00 241,340,368.00 150,795,200.80 381,111,059.60 C. External Financing of 3,120,457.00 6,452,399 811.69 4,843,817,011.90 4,427,577,903.68 **Investment Projects** Total (A + B + C) 4,624,736.00 6,693,740,179.69 4,994,612,212.70 4,808,688,963.28

Source: Ministry of Transportation and Communication of the Kyrgyz Republic.

8. Although investment of about \$1.9 billion by the bilateral and multilateral development partners since 1994 has helped improve more than 56% of the roads of international importance, the condition of the overall road network has not improved significantly. This is due partly to the increase in traffic and inadequate maintenance. No data exists to accurately establish the network's current condition, but the fact that only about 50% of the necessary maintenance has been carried out during 1994–2013 due to inadequate funding makes it reasonable to assume that more external assistance will be needed for capital improvements during 2014–2020 to raise the entire network to acceptable condition. Funding is not the only problem, however. MOTC also lacks sufficient human resources to manage and regulate the road sector, both in terms of skilled and unskilled labor and at the executive level. In addition, private construction and consulting firms have yet to acquire international best practices. The state still plays a dominant role in the design, construction, and operation of the network.

#### C. ADB Sector Experience and Assistance Program

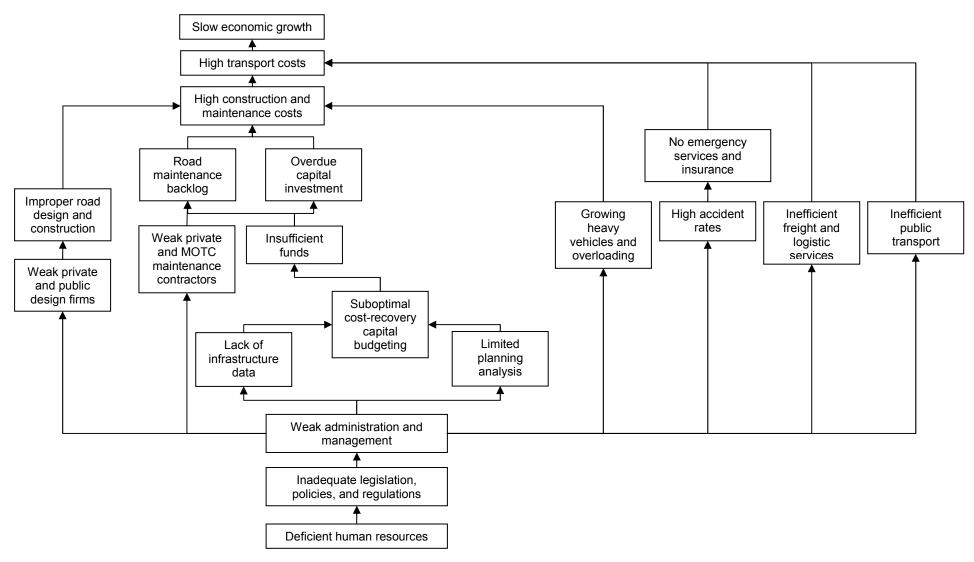
9. Since 1996, ADB has supported the transport sector in the Kyrgyz Republic through numerous loans, grants, and advisory technical assistance (TA) projects. A total of \$350.0 million in loans and grants went to road projects, while TA totaling \$3.3 million focused on capacity development and institutional support. ADB assistance has rehabilitated and improved an estimated 726 km of roads in key regional corridors—e.g., the Bishkek–Osh Road and the Bishkek–Naryn–Torugart Road—as well as 105 km of secondary roads.

- 10. ADB TA has helped the government improve various aspects of infrastructure management and has increased its understanding of international procurement methods, design standards, and contract administration issues. Nonetheless, the government needs to acquire more knowledge and practice in some areas before it can manage the infrastructure efficiently. Along with investment in the road infrastructure itself, investment is also needed to create a well-educated work force that can meet the skills mix required by the MOTC, service providers, contractors, and consultants in the sector and raise their efficiency. Work force development is a long-term undertaking and will require an overhaul of the post-secondary education system. As an interim measure, the MOTC has to rely on consultants while improving its partnerships with universities to increase knowledge transfer.
- 11. Based on the country's growing transport demands, the past experience of ADB–government cooperation in the sector, and the government's priorities, ADB will continue to assist the government in the following areas:
  - (i) Connectivity. ADB's assistance under the country partnership strategy for the Kyrgyz Republic for 2013–2017 will concentrate mainly on the road network. ADB will continue to promote regional connectivity by supporting the completion of Central Asia Regional Economic Cooperation (CAREC) transport corridors and helping CAREC countries facilitate the cross-border movement of goods and people along these corridors. It will also assist the government in improving connectivity between domestic market centers and regional corridors and in upgrading village feeder roads to further enhance the economic value of the CAREC regional corridors. Upgrading the rail system to serve the whole country would require significant resources and long-term planning and commitment from the government. In this regard, ADB will also work closely with the government and other development partners.
  - (ii) **Maintenance.** ADB will help the government develop its road asset management plan to ensure that sufficient funds are allocated for maintaining the existing network. ADB will take the lead in promoting performance-based maintenance contracts and pilot-test their use on road sections in the country. ADB will continue to coordinate with other development partners that have experience in road asset management in the Kyrgyz Republic, such as the European Bank for Reconstruction and Development, Japan International Cooperation Agency, and the World Bank, to develop and expand the computer-based road management system and support road sector reform to strengthen sustainability and resource allocation in road maintenance.
  - (iii) **Road safety.** Road safety is an essential component of strengthening the road network. ADB will continue its involvement in road safety by helping the government improve road safety management by, among other things, (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. The action plan will include road safety audits and capacity building, public awareness programs, and steps to address the needs of women and children—for example, by providing safe crossings and well-lit transport stops.
  - (iv) **Knowledge support.** Through TA projects and capacity building components within loan and grant projects, ADB will help the government meet the challenges in the sector through training, institutional strengthening, policy dialogue, issue-oriented research and studies, and the development of knowledge products.

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<sup>&</sup>lt;sup>4</sup> ADB. 2013. Country Partnership Strategy: Kyrgyz Republic, 2013–2017. Manila.

## **Problem Tree for Transport Sector**



MOTC = Ministry of Transport and Communications. Source: Asian Development Bank.

# Sector Results Framework (Transport, 2014-2017)

Country Sector Outcomes		Country Sector Outputs		ADB Sector Operations		
Outcomes with	Indicators with	Outputs with ADB	Indicators with	Planned and Ongoing	Main Outputs Expected	
ADB Contribution	Targets and Baselines	Contribution	Incremental Targets	ADB Interventions	from ADB Interventions	
Increased, more efficient, and safer movement of people and goods	Road traffic fatality rate decreased to 18.0 per 100,000 persons in 2017 (2011 baseline: 19.2 per 100,000 persons)  International freight traffic increased to 345 AADT in 2017 (2011 baseline: 320 AADT)	Transport infrastructure and systems expanded, improved, and maintained	Percentage of road network length in sustainable condition increased from 67% in 2011 to 85% in 2017  120 km Bishkek—Osh Road rehabilitated by 2020  60 km Bishkek—Torugart Road rehabilitated by 2017  Percentage of estimated road maintenance needs met by annual road maintenance budget increased from 32% in 2011 to 80% in 2017  75% of CAREC corridors improved in 2017, compared with 64% in 2007	Planned key activity areas International and selected feeder road rehabilitation (80%), road asset management system (10%), road safety (5%), and cross border facilitation (5%) Pipeline projects with estimated amounts Road Maintenance and Rehabilitation Project for \$50 million ADB financing; Additional Financing of CAREC Transport Corridor 1 (Bishkek—Torugart Road) Project 3 (\$18 million)  Ongoing projects with approved amounts CAREC Transport Corridor 1 (Bishkek—Torugart Road) Project 2 (\$50 million); CAREC Transport Corridor 1 (Bishkek—Torugart Road) Project 3 (\$55 million); CAREC Regional Improvement of Border Service Project (KGZ: \$8.4 million); CAREC Corridor 3 (Bishkek—Osh Road) Improvement Project, Phase 4 (\$100 million)	Planned key activity areas About 200 km of international and feeder roads rehabilitated Performance-based maintenance contract piloted Road safety action plan developed Cross border agreement and facilities rehabilitated  Ongoing projects 300 km of international (regional) roads rehabilitated  Transport sector master plan completed Civil works with the required facilities and equipment completed for border crossing point, and national single window developed at Karamyk border	

AADT = annual average daily traffic, CAREC = Central Asia Regional Economic Cooperation, EDB = Eurasian Development Bank, KGZ = Kyrgyz Republic, km = kilometer. Source: Asian Development Bank