

## SECTOR ASSESSMENT (SUMMARY): ROAD

### A. Sector Road Map

#### 1. Strategic Objective

1. The Government of Uzbekistan's long-term vision for road development is to foster economic growth by (i) extending access to regional and world markets, (ii) improving exports with expansion of marketing outlets for sale of national products, (iii) increasing transit transportation, and (iv) ensuring the sustainability of the road subsector. The objective of the proposed multitranche financing facility for the Second Central Asia Regional Economic Cooperation (CAREC) Corridor 2 Road Investment Program is to improve connectivity, road safety, and consequently boost domestic and international trade, together with policy and institutional measures to achieve long-term sustainability on investments. The strategic objective of the Accelerated Development Program (ADP), 2011–2015, for Infrastructure, Transport and Communications<sup>1</sup> is aligned with this vision

2. Uzbekistan, as a landlocked country, depends largely on an efficient transport system for imports and exports. In addition to physical investments, the ADP aims to create sound road asset management and efficient resource allocation. It will provide capacity building to (i) create an enabling environment for more objective decisions with respect to maintenance and investment regimes, and (ii) determine sources of financing that will be better aligned with road user charge principles and expand road construction and maintenance sources.

#### 2. Reform Progress

3. Road reforms have progressed significantly since 2003, with the result that the subsector is more functional and rational, with improvements in areas of competence and responsibilities. Reforms include (i) unbundling by separating road transport operations and road construction, and creation of the Republican Road Fund (RRF); (ii) restructuring Uzavtoyul, a sole road agency, and converting it to a state joint stock company<sup>2</sup> with clear performance and accountability targets; (iii) promoting competitive bidding for all road construction works; and (iv) establishing an independent quality control mechanism. A law on vehicular roads enacted in 2007 allows private sector financing for highway construction. The Asian Development Bank (ADB) has promoted private road contracting industries with access to road equipment provided by the state-owned road equipment pool company created under the loan for ADB's CAREC Regional Road Project.<sup>3</sup> The government has succeeded in ensuring a steady flow of maintenance funds. However, the road maintenance budget for primary roads needs to be increased to meet the requirements. The government has made a coordinated effort to improve road safety. The Road Safety Commission has been set up under the Cabinet of Ministers and a road safety plan is being implemented. However, it needs a national road strategy with time-bound actions for effective road safety plan implementation.

#### 3. Key Problems and Challenges

4. Separation of RRF from Uzavtoyul has led to avoidance of conflict of interest, and RRF is now a corporate entity with an appropriate organization structure. It has attained quasi-

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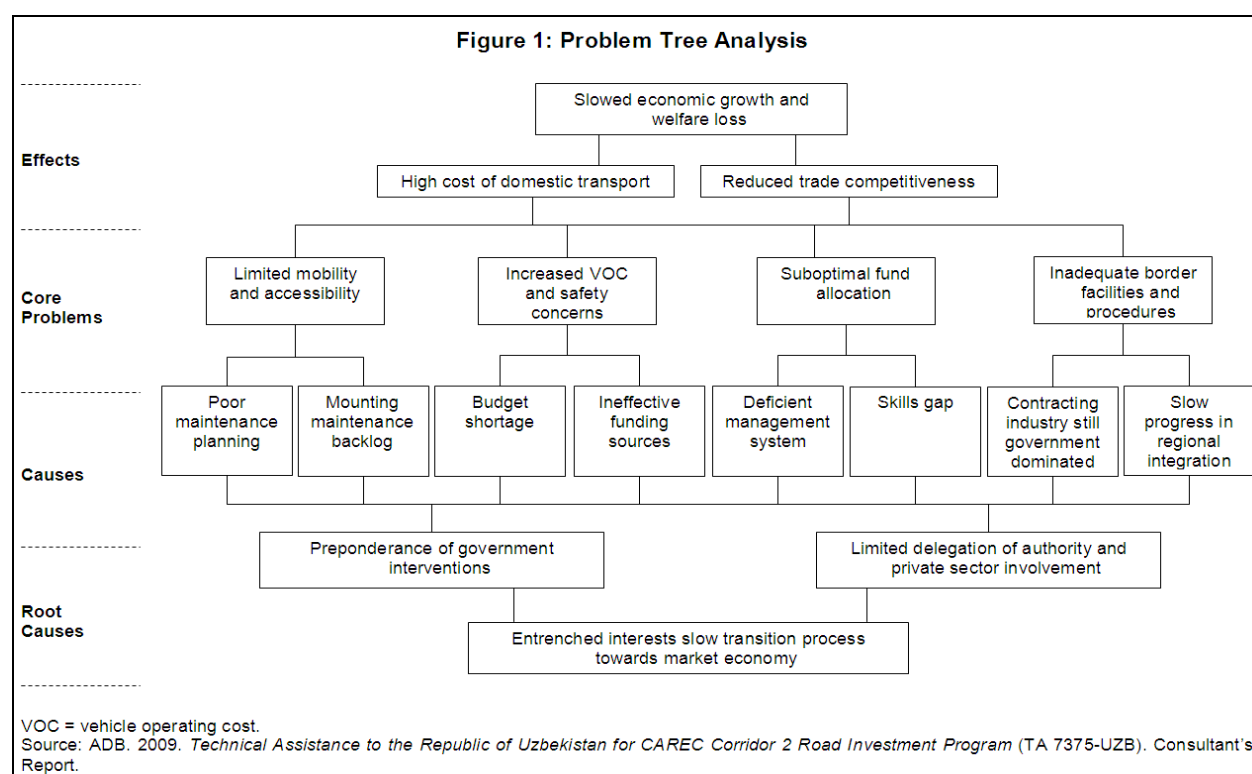
<sup>1</sup> Republic of Uzbekistan. 2010, *Resolution No. 1446 of the President "Accelerated Development Program (2011–2015) for Infrastructure, Transport and Communications"*. {City} (21 December).

<sup>2</sup> Decree of the President of the Republic of Uzbekistan UP-3292 dated 19 August 2003 on improvement of the management system for construction and operation of common use roads.

<sup>3</sup> ADB. 2007. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Republic of Uzbekistan for the CAREC Regional Road Project*. Manila. (Loan 2403-UZB, approved on 19 December, for \$75.3 million).

autonomous status, which may be the first stage toward the evolution of a full-fledged road asset management system. RRF, however, needs a sustainable source of income commensurate with the needs for road construction and maintenance.

5. Uzbekistan's spending of 1%<sup>4</sup> of its gross domestic product on roads is low by international standards.<sup>5</sup> RRF is responsible for financing about 25% of the entire network.<sup>6</sup> Despite income increasing by 23% annually in the last 5 years, the budget remains inadequate to meet the reconstruction and maintenance requirements of the network. This has resulted in about 60% of public roads having cracks on more than 10% of the surface area and 10 potholes per kilometer. Currently, RRF revenues are sufficient to maintain all roads to a good quality. However, if current RRF resources are used to develop the network, funding for routine maintenance could be insufficient. RRF needs to tap the potential of public-private partnerships, restructure the revenue system, and introduce road user charges. The flow of resource allocation to RRF should also reflect traffic and better pricing principles. A part of the tax on fuel is allocated to finance rural and urban roads.



6. Despite significant improvements in recent years, trade facilitation and the cross-border regime remain complex and time-consuming. Transit traffic is constrained by poorly maintained infrastructure and traffic safety concerns. The government has finalized cross-border agreements with all its neighbors but the facilities have not yet been developed. All future projects linking the borders are mandated to strengthen logistics by improving cross-border facilities and shortening the cross-border processing time.

<sup>4</sup> The figure of 1% is estimated based on average expenditure per kilometer for the network under RRF purview.

<sup>5</sup> The corresponding shares are Viet Nam 2.5% (2008), People's Republic of China 2.3% (2006), Thailand 1.8% (2006), and the Philippines (2008) below 1%.

<sup>6</sup> RRF, a quasi-independent agency under the auspices of the Ministry of Finance, is responsible for programming, planning, and budgeting of international and national roads. It also executes construction and reconstruction of international and national roads.

7. The road contracting industry is still in its infancy. Contracts for periodic maintenance of international and national roads are largely sourced to a captive market: Uzavtoyul and its subsidiaries. However, improvements are taking place and, recently, RRF awarded contracts based on competitive bidding to some private contractors for construction and repair works.

8. Road safety has become a growing concern with the rapid increase in the fleet of motorized vehicles. Road accidents are a leading cause of death. Traffic accidents averaged two fatalities for every 10 accidents. Uzbekistan records 1,430 fatalities per million vehicles, which is alarming by international standards.<sup>7</sup> Poor road conditions with inadequate infrastructure and weak speed control are major causes of the high fatal accident rate.

#### 4. Accelerated Development Program (2011–2015)

9. Table 1 provides the length of the road network by type of road and category. Common-use roads or primary roads are constructed and rehabilitated by RRF but maintained by Uzavtoyul enterprises. Responsibility for other roads is split between regional and city authorities, and state and other enterprises.

**Table 1: Summary Road Network**

Road Classification	Length (kilometer)	Proportion (%)
Common use	42,530	23.1
Rural and urban roads	141,194	76.9
<b>Total</b>	<b>183,724</b>	

Source: Republican Road Fund.

10. The ADP focuses on the development of strategic corridors (Table 2), including CAREC corridors, which are important for international trade and regional connectivity. A total of 1,625 kilometers of these corridors will be reconstructed and improved under the investment program. The total cost of the ADP is estimated at \$3 billion, of which \$1.6 billion will be invested for the reconstruction of the Uzbek National Highway: Beynau–Kungrad–Bukhara–Navoi–Samarkand–Tashkent–Andijan, which includes both the A380 and the A373.

**Table 2: Accelerated Development Program**

Road Sections	Length(kilometer)	Upgrading Costs(\$ million)
Beynau–Kungrad–Bukhara–Navoi–Samarkand–Tashkent–Andijan	1,008.00	1,484.00
Bukhara–Karshi–Guzar–Termez	190.00	382.00
Samarkand–Guzar	73.00	83.5.00
Mountain Pass Kamchik (A373)	100.00	263.6.00
Section of Tashkent bypass	22.00	37.4.00
Amudarya bridge (680 meters)		26.65
Section between A380 and new Amudarya bridge	16.00	25.6.00
Upgrading road sections with axle load limit of 10 tons–13 tons	896.00	636.90
<b>Total</b>	<b>1,625.00</b>	<b>2,940.00</b>

Source: President of Uzbekistan Resolution PP 1446 (21 December 2010).

#### B. Strategic Context

11. Uzbekistan, strategically located in Central Asia, is a key transport link in the growing trade within Asia and between Asia and Europe. Improving key roads in the country will enable traffic to flow smoothly; help boost domestic and international trade; and promote regional cooperation between Uzbekistan, Kazakhstan, the Russian Federation, and the rest of Europe. The CAREC Transport and Trade Facilitation Strategy and Action Plan provides for reliable and integrated transport operations and infrastructure within the CAREC region and beyond.<sup>8</sup>

<sup>7</sup> The indicator for other Asian countries is as follows: Indonesia 261, Malaysia 373, Philippines 215, Singapore 250, Thailand 488, and Viet Nam 558.

<sup>8</sup> ADB. 2008. *CAREC Transport and Trade Facilitation Strategy and Action Plan*. Manila.

12. The second investment program is an extension of the ongoing first investment program.<sup>9</sup> The second investment program will finance reconstruction of selected sections of CAREC Corridor 2 A380 and A373 highways. In Uzbekistan, CAREC Corridor 2 is part of the A380 and A373 highways and part of Asian and European highways. It connects Europe and East Asian countries through the Caspian Sea and links Azerbaijan, Kazakhstan, Turkmenistan, and Uzbekistan. Another ongoing highway investment in Kazakhstan (supported by ADB) will connect Beyneu (a town on Uzbekistan's border) with Uzbekistan's A380 and the port of Aktau in the Caspian Sea. All these highways, when completed, will provide Uzbekistan and other Central Asian countries with direct access to the Caspian Sea, and thereafter to South Asia and the Black Sea (via road corridors being built in Armenia, Azerbaijan, and Georgia). The second investment program links with CAREC Corridor 6, which reaches the ring road in Afghanistan and thereafter Pakistan's main ports.

13. The second investment program fits with ADB's Strategy 2020,<sup>10</sup> is included in the country operations business plan (2011–2013), and is aligned with the United Nations Decade of Action for Road Safety 2011–2020.<sup>11</sup> The investment program is in line with the proposed Uzbekistan Transport Sector Strategy (2006–2020)<sup>12</sup> and road map, as well as the CAREC Transport and Trade Facilitation Strategy and Action Plan (footnote 8)—aiming to complete six strategic corridors by 2018 (footnote 8). The investment program will continue ADB assistance under the ongoing loan (footnote 3) and support government efforts to improve the road subsector. The road map will apply to remaining projects financed by the first investment program.

### C. Policy Framework

14. The government's transport sector reform actions and plans are summarized in Table 3. The first and second investment programs support the selected key actions to ensure sustainability of the road subsector.

**Table 3: Policy Framework for Roads**

Reform	Action	Status	Planned
Good governance and accountability	Gradually streamline the main functions of road subsector management to delineate road ownership, road administration, and commercial contracting industry	<p>Management of roads shared by RRF and Uzavtoyul</p> <p>Responsibility for managing local primary roads falls under district or regional <i>hokimiyats</i> (governments)</p> <p>Uzavtoyul and 13 province-based core subsidiaries have government-like functions, such as road data collection and programming; RRF concentrates on road development</p> <p>Seven international and national road subsidiaries and 161 province-based ancillary subsidiaries mainly operate as business entities</p>	<p>Gradually restructure road subsector institutions.</p> <p>RRF to concentrate on institutional, financial, and policy matters. Uzavtoyul focuses on road network maintenance.</p> <p>Some Uzavtoyul enterprises are corporatized and converted from state unitary enterprises to limited liability corporations.</p> <p>Recommendations for road sector planning and management under ADB's CAREC Regional Road</p>

<sup>9</sup> ADB. 2010. *Report and Recommendation of the President to the Board of Directors: Proposed Multitranchise Financing Facility to the Republic of Uzbekistan for the Central Asia Regional Economic Cooperation Corridor 2 Road Investment Program*. Manila.

<sup>10</sup> ADB. 2008. *Strategy 2020: The Long-Term Strategic Framework of the Asian Development Bank, 2008–2020*. Manila.

<sup>11</sup> United Nations. 2011. *Decade of Action for Road Safety 2011–2020*.

<sup>12</sup> ADB. 2006. *Technical Assistance to the Republic of Uzbekistan for Transport Sector Strategy (2006–2020)*. Manila (TA 4659-UZB, consultant's final report).

Reform	Action	Status	Planned
		The department for transportation and construction industry under the Cabinet of Ministers is mandated to review the structure of road subsector institutions and recommend reforms for roads	Project are gradually implemented.
	Improve outsourcing and competition in road works and transport service provision	<p>Outsourcing for reconstruction and repair works is being executed by RRF through competition</p> <p>Presidential Decree on optimization of state procurement for roads was approved on 7 February 2011. The government, through its PPP task force and other state agencies, introduced the PPP legislative framework for roads</p> <p>RRF was exposed to ICB under the ADB loan for the CAREC Regional Road Project and CAREC Corridor 2 Road Investment Program</p> <p>Routine maintenance carried out by Uzavtoyul enterprises through performance-based contracts</p>	<p>RRF continues to adopt ICB for tranche 2 project and subsequent tranche for large contracts with postqualification.</p> <p>Public Road Equipment Pool Company continues to provide road construction equipment to contractors.</p> <p>Routine road maintenance contracts improved to ensure accountability and sustainability of financing.</p>
		Road equipment procured under the CAREC Regional Road Project will help strengthen the private sector and road construction enterprises	
	Adopt quality control procedure for road work	Independent quality control mechanism for all civil work contracts established at RRF	External quality control mechanism for all civil work contracts remains in place.
	Enhance accountability with respect to road subsector programming	<p>Uzavtoyul holds and maintains a comprehensive computerized balance sheet for public road network asset management</p> <p>Computerized road asset management system introduced</p> <p>Development of road database</p>	<p>Institutionalized computer technologies will enable better decisions to be made on investment and maintenance.</p> <p>Conduct systematic condition survey and life-cycle cost assessments and develop road database.</p>
Sustainable road subsector	Develop a stable, secure, and sustainable source of financing for the road network	<p>President Resolution #1103 "On Measure for development and reconstruction of Uzbek National Highway in 2010–2014" approved in April 2009</p> <p>RRF acts as a depository of road user revenues and financial manager</p>	Adopt rational maintenance and management strategies that seek to minimize costs over the life cycle of a road.
	Introduce better financing system for road funding to improve economic efficiency and equity between different categories of road users	Revenue collection is carried out on behalf of RRF by the Tax Committee (taxes), the Custom Committee (transit fees), and the Ministry of Internal Affairs (vehicle registration fees regardless the road user)	<p>Select sources of financing suitable for generating income consistent with traffic development.</p> <p>Facilitate development of the private sector in road construction, operation, and maintenance framework.</p>
Road safety	Reduce accident and fatality rates by expanding the	<p>Law on Road Traffic Safety enacted in 1999</p> <p>Road safety plan developed and Road Safety</p>	Approve a comprehensive national road infrastructure safety strategy.

Reform	Action	Status	Planned
	use of intelligent transport system for traffic surveillance	Commission set up under the cabinet of ministers  Accident data is collected and analyzed but is not publicly disclosed.  Intelligent transport system piloted in selected areas, especially urban areas  Selected emergency stations established for traffic accident along the national highways coordinated by the Ministry of Public Health, the Ministry of Internal Affairs, and the Ministry of Emergency Situations	Develop road safety action plan for all roads.  Implement road safety capacity development program for RRF, Uzavtoyul, and traffic police; and public education programs.  Publish accident data in official statistical newsletters.
Seamless transport logistics	Develop a seamless, intermodal network to ensure high-quality, efficient logistics chains and unimpeded flows of goods and people	Law on transit of cargo through Uzbekistan is under approval by the Parliament  A new logistic terminal “Angren” established to ensure smooth transportation of goods through Kamchik pass to and from Fergana valley  Preparatory works toward joining the agreement on transportation of hazardous cargoes convention are ongoing	Improve cross-border facilities.  Implement transborder transit agreements.  Introduce a single transport document to facilitate multimodal transport.  Rationalize transit fees.

ADB = Asian Development Bank, CAREC = Central Asia Regional Economic Cooperation, IDB = international competitive bidding, PPP = Public Private Partnership, RRF = Republican Road Fund.

<sup>a</sup>ADB. 2007. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Republic of Uzbekistan for the CAREC Regional Road Project*. Manila. (Loan 2403-UZB, approved on 19 December, for \$75.3 million).

Sources: Customs Committee, Ministry of Interior, Republican Road Fund, Uzavtoyul, Uzbek Agency for River and Road Transport.

## D. Corridor Development and Financing Plan

15. The first and second investment programs are part of the overall A380, A373, and A373/4R112 highway reconstruction program. Of the \$1.6 billion investment need, ADB provided \$10 million for civil works under the ADB loan for the CAREC Regional Road Project (footnote 3) and will provide \$600 million under the already approved first investment program (footnote 9) and \$500 million under the proposed second investment program. The government is financing the balance. The government has approved the ADP 2011–2015 (footnote 1) to be implemented by RRF.

**Table 4: Summary Financing Plan of the Second Investment Program (\$ million)**

Source	Tranche 1	Tranche 2	Tranche 3	Total
Asian Development Bank <sup>a</sup>	130	180	190	500
Government	30	40	30	100
<b>Total</b>	<b>160</b>	<b>220</b>	<b>220</b>	<b>600</b>

<sup>a</sup> Source of Asian Development Bank financing: tranches 1 and 3—ordinary capital resources, and tranche 2: Asian Development Fund resources.

Source: Asian Development Bank estimates.