

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

A. Sector Road Map

1. Sector Performance, Problems, and Opportunities

1. **Railways as a backbone of Uzbekistan's economy.** Uzbekistan is a doubly landlocked country that relies heavily on rail transport for freight and passenger movement. Its railways carry about 60 million tons of freight and 15 million passengers annually. The public railway company O'zbekiston Temir Yo'llari (UTY) is responsible for the management and operation of the nationwide 4,731-kilometer (km) railway network.

2. Uzbekistan's railway network, with 10.5 km of rail per 1,000 square kilometers, is denser than that of the People's Republic of China (6.9), Turkmenistan (6.4), Kazakhstan (5.2), and Iran (3.7). Railways have a strong position in Uzbekistan's transport market. UTY operates transport services for freight and passengers and is in charge of infrastructure development and maintenance. It carries 30%–40% of the total freight traffic (expressed in ton-km), a significant market share compared with railways worldwide, and 3%–4% of total passenger transport (expressed in passenger-km).²

3. **Freight traffic trends.** UTY is predominantly a freight railway company. The volume of freight transported by rail is gradually increasing, from 63.7 million tons in 2013 to 70.1 million tons in 2019. About one-third (in terms of ton-km) of the freight traffic carried by the railways consists of international movements (import, export, and transit)—mostly grain, fuel, and other bulk and semi-bulk commodities. Despite this growth in traffic volume, UTY's freight traffic remains significantly behind the traffic volumes of the Uzbek sections of the Central Asian Railways before the disintegration of the Soviet railways.³ A decline in the fleet of freight wagons accompanied the decline in traffic. Thanks to a combination of solid economic growth forecasts for Uzbekistan, and efforts under the new administration to improve connectivity with neighboring countries, the prospects for freight traffic, including cross-border freight, are promising.

4. **Passenger traffic trends.** Passenger ridership increased by 2.4% annually from 14.6 million in 2000 to 22.9 million in 2019. About 80% of UTY's passengers are on local services, but two-thirds of the passenger-km are on intercity regional trains that connect Tashkent with all the major centers.⁴ The prospects for passenger traffic are promising, as more high-speed railway services connecting major cities are being introduced, coupled with the government's drive to use railways to boost Uzbekistan's tourism potential.

5. **Completing missing links for domestic connectivity.** Before the breakup of the Soviet Union, the rail network in Central Asia was driven by a Moscow-centered planned economy without regard for internal boundaries between the Soviet republics. Since the 1990s, national

¹ This summary is based on ADB. 2020. Railway Sector Assessment: Uzbekistan. Consultant's report. Manila (TA 9641-REG).

² Government of Uzbekistan, State Committee of the Republic of Uzbekistan on Statistics. 2020. Cargo Transportation and Cargo Turnover by Type of Transport; and Transportation of Passengers and Passenger Turnover by Mode of Transport (accessed 19 June 2020). The freight market share of railways averages 17% in the European Union and 25%–30% in North America. The passenger share of railways in the European Union with a higher population density is 7%.

³ Sredneazitskaya Zheleznaya Doroga (Central Asian Railways), the predecessor of UTY, was based in Tashkent and existed until 1991. It included the railway networks of Uzbekistan, Tajikistan, Turkmenistan, the southern Kyrgyz Republic, and southern Kazakhstan.

⁴ UTY annual reports (2000–2019).

boundaries between the newly independent states of the former Soviet Union have created new barriers to trade flows and market access. This has had many serious effects on Uzbekistan's railway operations and activities. Newly erected border crossings worsened internal connectivity because many rail and road routes had to cross into neighboring countries before crossing back into Uzbekistan. Similarly, neighboring countries depended on Uzbekistan's transport network to transport their goods and passengers (e.g., southern Uzbekistan provided transit for Tajikistan and northern Uzbekistan provided transit for the Kyrgyz Republic).

6. One of the most serious issues was connecting the Fergana Valley region to the rest of Uzbekistan and ensuring adequate capacity for traffic from this productive region. Until 2016, rail traffic to and from the Fergana Valley was disrupted by lengthy border-crossing procedures and high transit tariffs through Tajikistan. With the commissioning of the Kamchik tunnel in September 2016,⁵ Uzbekistan was finally able to complete a fully internally integrated railway network.

7. **Electrification.** In parallel with the completion of the missing links, UTY focused on improving the condition of its infrastructure and electrifying its main lines. The incremental electrification efforts started in 1971, but the greatest progress has been made since 2010, when Uzbekistan electrified about 800 km of its railway network. Currently, about 1,830 km—about 39% of the network—are electrified. Enabled by electrification, high-speed passenger trains (above 200 km per hour) operate between Tashkent, Samarkand, Bukhara, Karshi, and Termez. The new line to the Fergana Valley is electrified from Tashkent to Angren and Pap. The Fergana rail loop, linking Pap, Kokand, Andijan, and Namangan, is also being electrified. New higher-speed passenger services will begin operating on these new lines after the ongoing project is completed.

8. UTY's ability to benefit fully from the increasingly electrified network depends on the speed at which electric locomotives can be procured and commissioned. UTY's current fleet consists of 75% diesel locomotives and 25% electric locomotives—37 electric units were procured between 2009 and 2019. The overall fleet is old, with most units having served more than 30 years. Coupled with limitations in the absolute number of electric locomotives, caused by lack of financial resources, it is very difficult to keep expanding freight and passenger train services reliably.

9. **Operational improvements.** UTY is a strongly managed organization with a focus on infrastructure development and train service operations, but has scope for improvement in the commercial aspects of its business. Assisted by the Asian Development Bank (ADB) and other development partners, UTY is enhancing its operational efficiency to maximize the use of the improved infrastructure. UTY's operating staff barely changed from 2011 to 2015, and its labor productivity is 0.4 million traffic units per staff member.⁶ This compares with 0.8 million traffic units per staff member in Turkmenistan, and 1.7 million traffic units per staff member in Kazakhstan.

10. Financial improvements are possible if UTY can increase its premium passenger services and operational efficiency in freight operations. It has the potential to improve its service to all categories of clients and develop new logistics products, especially in general freight traffic. Once it strengthens its commercial orientation, UTY has a good chance to offer new logistics products at high profit margins, which will improve its profitability and prospects of long-term growth.

11. UTY has retained its technical and operating expertise. It has a workforce of about 70,000 in main operations and subsidiary divisions, and undertakes rail construction projects as

⁵ The 19.2 km long tunnel on the Angren–Pap railway section was completed in 2016.

⁶ Traffic units are a total of passenger-km and ton-km.

well as operation and maintenance.⁷ The company is profitable and it does not receive operating subsidies from the state. It can finance most investments necessary to preserve the current infrastructure and modernize its rolling stock. It also finances a significant portion of the modernization of the railway corridors. UTY has historically financed most of its investment from its own sources, but any further deterioration of its operating assets will begin to restrict its ability to fund their replacement, while limiting its ability to obtain loans on its own account. UTY should therefore make it a priority to improve its technical efficiency and operating ratio.

2. Government's Sector Strategy

12. The government, recognizing the strengths of railway transport, continues to support the development and expansion of railway operations.

13. It created UTY by presidential decree in November 1994. Initially, UTY was a policy maker, regulator, and operator of all railway services in Uzbekistan until institutional reforms separated the policy-making and regulatory functions from the commercial management of the company. Supported by ADB, the government began UTY's institutional reform in 1997, largely separating ancillary rail services from core operations.⁸ Some downsizing of staff and noncore assets improved the efficiency and sustainability of operations. In 2001, UTY was corporatized as an open joint stock company with a reformed management structure and a new board of external appointees, including representatives of some of UTY's main customer industries. However, it remains 100% owned by the state, like many railway organizations across the world.

14. A presidential resolution issued in May 2018 calls for a program to strengthen the governance and management of state-owned enterprises, including UTY. ADB will assist the government in supporting further meaningful reforms in the rail transport (nonurban) subsector, based on sound transport sector principles. The project directly supports these efforts through the implementation of UTY's long-term development strategy.

B. Major Development Partners: Strategic Foci and Key Activities

15. ADB, the Government of the People's Republic of China, the European Bank for Reconstruction and Development, the Japan International Cooperation Agency, German development cooperation through KfW, the Kuwait Fund, the Organization of the Petroleum Exporting Countries (OPEC), and the World Bank have provided external assistance to the rail transport (nonurban) subsector in Uzbekistan. Their main activities are summarized in the table.

⁷ With its own workforce and equipment, UTY completed the construction of several new railway investment projects (including the Navoi–Uchkuduk–Nukur–Sultanuizdag, Tashguzar–Baisun–Kumkurgan, Angren–Pap, and Bukhara–Miskin sections). UTY also built the 75 km Hairatan–Mazar-i-Sharif rail link in Afghanistan, funded by ADB.

⁸ ADB. 1998. *Technical Assistance to the Republic of Uzbekistan for Institutional Strengthening of the Uzbekistan Temir Yullari*. Manila (TA 3068-UZB); and ADB. 2000. *Technical Assistance to the Republic of Uzbekistan for Facilitating Development of Railway Sector in Uzbekistan*. Manila (TA 3529-UZB).

Major Development Partners

Development Partner	Project Name	Duration	Amount (\$ million)
ADB	Rehabilitation of Uzbekistan Railways Project	1999–2005	62.67
	Modernization of Uzbekistan Railways Project	2000–2006	70.00
	Technical Assistance for Institutional Strengthening of Uzbekistan Temir Yullari	2000–2001	0.85
	Technical Assistance for Furthering Railway Sector Reform in Uzbekistan	2002–2003	0.60
	Central Asia Regional Economic Cooperation Corridor 6 (Marakand–Karshi) Railway Electrification Project	2011–2018	100.00
	Central Asia Regional Economic Cooperation Corridor 2 (Pap–Namangan–Andijan) Railway Electrification Project	2017–2021	80.00
	Railway Efficiency Improvement Project	2019–2025	170.00
EBRD	Repowering Diesel Locomotives Park	2002–2005	40.00
	Modernization of Diesel Locomotives Park and Reconstruction of Foundry	2004–2011	65.99
Fund for Reconstruction and Development of Uzbekistan	Procurement of High-Speed Passenger "Talgo"-250 Trains (from Spain)	2010–2011	24.70
	Reconstruction, and development of engineering and founding factory	2011	33.80
Government of the PRC	Procurement of 15 Passengers' Locomotives	2009–2011	70.11
	Pap–Angren Railway Project	2014–2019	355.00
JICA	Railway Passenger Transportation Project	1997–2001	54.48
	Construction of new railway line: Tashguzar–Boysun–Kumkurgan Project	2005–2010	148.52
	Karshi–Tashquzar–Boysun–Kumkurgan–Termez Electrification Project	2011–2018	220.60
KfW	Tashkent–Angren Electrification Project	2007–2010	36.48
Kuwait Fund	Tashkent–Angren Electrification Project	2007–2010	20.89
OFID	Modernization of Uzbekistan Railways Project	2002–2006	5.00
World Bank	Pap–Angren Railway Project	2015–2019	195.00

ADB = Asian Development Bank, EBRD = European Bank for Reconstruction and Development, JICA = Japan International Cooperation Agency, OFID = OPEC Fund for International Development, PRC = People's Republic of China.

Sources: Asian Development Bank and O'zbekiston Temir Yo'llari.

16. ADB has a history of cooperation with other development partners in Uzbekistan's transport sector. In the first railway project, the European Bank for Reconstruction and Development financed the rolling stock while ADB financed the rehabilitation of rail tracks. The OPEC Fund for International Development cofinanced the second railway project. ADB's project completion reports and project performance evaluation report confirmed the success of both projects.⁹ The proposed additional financing will ensure the completion of the modernized railway network in the Fergana Valley, financed in part by ADB, KfW, the World Bank, and the Government of the People's Republic of China.

⁹ ADB. 2006. [Completion Report: Railway Rehabilitation Project in Uzbekistan](#). Manila (Loan 1631-UZB); ADB. 2008. [Completion Report: Railway Modernization Project in Uzbekistan](#). Manila (Loan 1773-UZB); Independent Evaluation Department. 2010. [Performance Evaluation Report: Railway Rehabilitation Project and Railway Modernization Project in Uzbekistan](#). Manila: ADB (Loans 1631-UZB and 1773-UZB).

C. Institutional Arrangements and Processes for Development Coordination

17. ADB has coordinated with other development partners on the development of railways in Uzbekistan at two levels: national and subregional. This embodies the need for railway investments to be planned on a subregional basis, augmented by projects executed nationally.

18. **National coordination.** The government leads a transport sector development partner coordination group, in which ADB has the lead role in the road and rail transport subsectors. The Ministry of Investments and Foreign Trade supervises the implementation of large and strategically important investment projects financed by international financial institutions and development partners. The Ministry of Finance and the Ministry of Investments and Foreign Trade are mandated to coordinate and monitor financial assistance from various development partners and the implementation of externally assisted projects.

19. **Subregional planning.** Uzbekistan, having once been the headquarters of the Central Asian Railways, has a strong subregional identity and actively participates in regional railway cooperation initiatives. UTY is a member of the Organization for Cooperation between Railways, the International Union of Railways, and the Commonwealth of Independent States Railway Transport Council.

20. ADB has assisted the government and UTY in improving these strategic subregional links, largely through the Central Asian Regional Economic Cooperation (CAREC) program. Established in 2001, CAREC brings together 11 partner countries;¹⁰ and promotes the implementation of regional projects in energy, transport, and trade. Out of the six CAREC multimodal corridors that link the region's key economic hubs with each other and connect the landlocked CAREC countries to other Eurasian and global markets, three transit Uzbekistan. In 2019, CAREC member countries endorsed the CAREC Transport Strategy 2030, which emphasizes investments in railway infrastructure, and institutional and operational reforms.¹¹ In 2016, the CAREC program facilitated the development of the CAREC railway strategy, 2017–2030.¹² This strategy augments CAREC Transport Strategy 2030 and identifies six designated rail corridors. It offers a long-term framework for the sound development of railways in the CAREC region. While the strategy recognizes the importance of building missing railway links and investing in modern railway technologies, significant attention is given to promoting cooperative operational arrangements between regional railways and commercial reforms in the railway segment.

D. ADB Experience and Assistance Program

21. The transport sector has been one of the main areas of ADB support for Uzbekistan. The program has expanded significantly since 2010, with investments totaling \$1.3 billion and the ongoing portfolio consisting of five projects totaling \$767 million.

¹⁰ Afghanistan, Azerbaijan, Georgia, Kazakhstan, the Kyrgyz Republic, Mongolia, Pakistan, the People's Republic of China, Tajikistan, Turkmenistan, and Uzbekistan.

¹¹ ADB. 2020. [CAREC Transport Strategy 2030](#). Manila.

¹² ADB. 2017. [Unlocking the Potential of Railways: A Railway Strategy for CAREC, 2017–2030](#). Manila.

22. ADB has provided five loans to Uzbekistan for the railway segment, two for the rehabilitation and modernization of the railway infrastructure,¹³ two for the electrification of the Marakand–Karshi and Pap–Namangan–Andijan railway lines,¹⁴ and one primarily to update the locomotive fleet.¹⁵ All these projects support the regionally planned approach (paras. 19–20) and have had UTY as the executing agency. ADB’s Independent Evaluation Department rated the two completed projects *successful* and the government’s and UTY’s performance *highly satisfactory*. Electrification of the Marakand–Karshi railway line has been fully completed to budget and schedule. Electrification of the Pap–Namangan–Andijan railway, as well as the project for the modernization of the locomotive fleet, remains *on track*. Future support for railways in Uzbekistan will be formulated in view of the remaining challenges (paras. 5–11) and in support of a regionally integrated approach.

23. ADB’s investment in the rail transport (nonurban) subsector has had several significant impacts. The first railway project, financed by ADB, spurred O’zbekiston Temir Yo’llari (UTY) to adopt new and improved railway technology such as welded rails, flexible fasteners, and switch expansion joints. This led to foreign direct investment in a new plant that supplies parts compatible with these new technologies to UTY. The first project was also notable for establishing ADB’s first project implementation unit (PIU) in Uzbekistan. The PIU became a source of knowledge and experience for PIUs of other ADB-financed projects, laying the foundation for ADB’s program in the country. The CAREC Corridor 6 (Marakand–Karshi) Railway Electrification Project supported UTY in efficiently procuring goods and equipment using a plant contract modality, to complete the electrification of a trunk line. Largely completed by mid-2016, the project created a blueprint for the accelerated electrification of Uzbekistan’s railway network, also paving the way for a high-speed passenger railway network connecting key cities such as Tashkent, Samarkand, Karshi, and Bukhara. The CAREC Corridor 2 (Pap–Namangan–Andijan) Railway Electrification Project, approved in 2017, will complete the electrification of lines in the populous Fergana Valley.

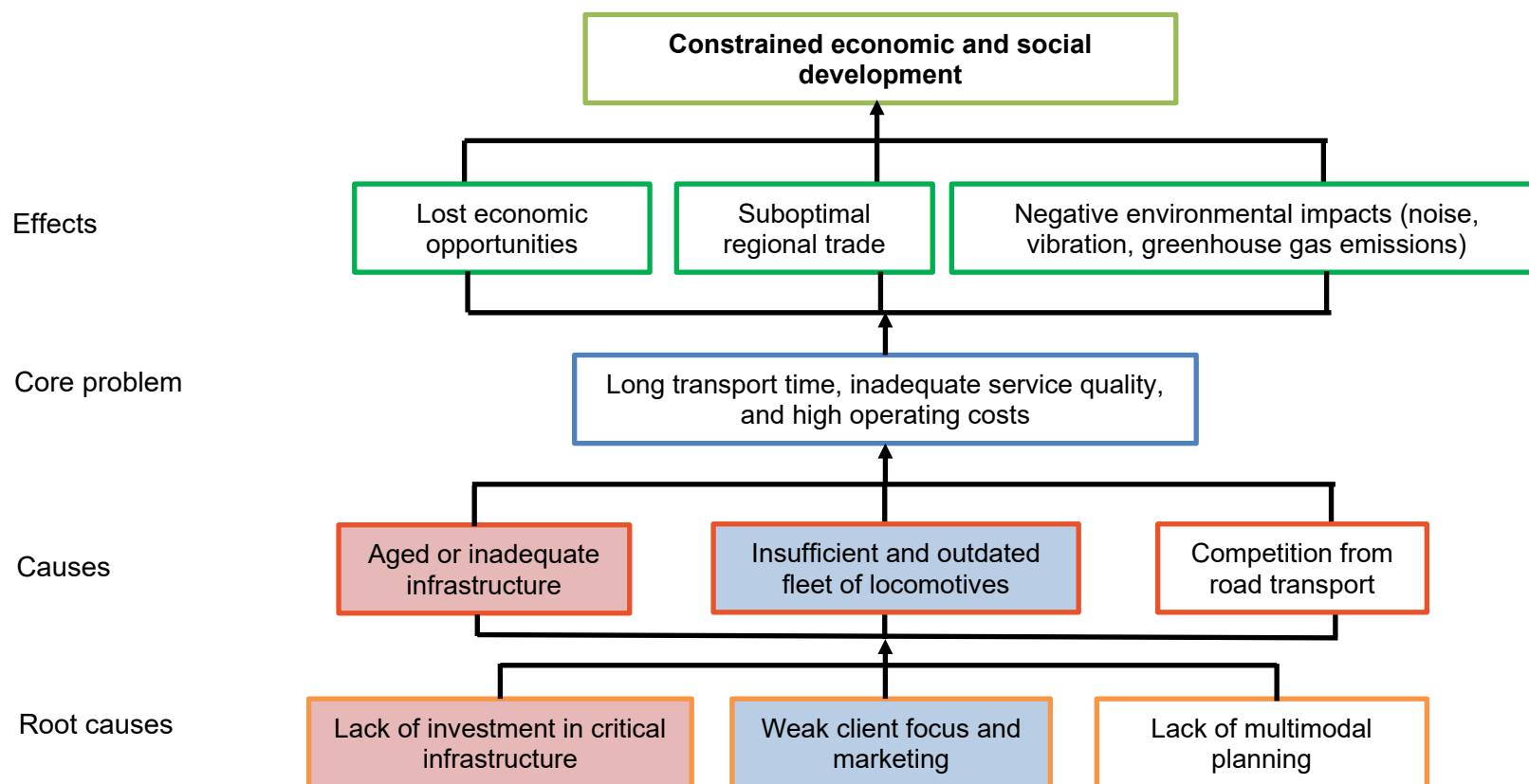
24. In addition, ADB and development partners actively contributed to the institutional strengthening of UTY and supported sound sector reforms. From 2000 to 2003, ADB provided two technical assistance projects to this effect. The Japan International Cooperation Agency supported UTY in the construction of a facility for the rehabilitation and maintenance of rolling stock. Assisted by such efforts, UTY’s ability to maintain its assets is strong. Since 2015, the World Bank has supported UTY in improving its marketing and accounting functions, which will support the evolution of UTY into a more commercially oriented and demand-responsive organization. In 2018, the World Bank also initiated support to the government on a comprehensive transport and logistics strategy, which will improve the planning process, identify and implement essential reforms, and develop innovative financing solutions. The work being undertaken under this project on the long-term development strategy for UTY will feed into the World Bank support, and vice versa.

¹³ ADB. 1998. [Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to the Republic of Uzbekistan for the Railway Rehabilitation Project](#). Manila; and ADB. 2000. [Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to the Republic of Uzbekistan for the Railway Modernization Project](#). Manila.

¹⁴ ADB. 2011. [Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Republic of Uzbekistan for the Central Asia Regional Economic Cooperation Corridor 6 \(Marakand–Karshi\) Railway Electrification Project](#). Manila; and ADB. 2017. [Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Republic of Uzbekistan for the Central Asia Regional Economic Cooperation Corridor 2 \(Pap–Namangan–Andijan\) Railway Electrification Project](#). Manila.

¹⁵ ADB. 2019. [Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Republic of Uzbekistan for the Railway Efficiency Improvement Project](#). Manila.

Problem Tree for Transport (Rail Transport [Nonurban])



- Supported by existing Asian Development Bank projects
- Supported by this project

Source: Asian Development Bank.