

SECTOR ASSESSMENT (SUMMARY): TRANSPORT¹

A. Sector Performance, Problems, and Opportunities

1. **Georgia's transport system.** Since the mid-2000s, Georgia has radically transformed the infrastructure and service delivery of its transport system through the construction of roads, railways, port terminals, and airports. During 2005–2011, freight handling at ports grew by 10% a year and passenger traffic at airports grew 15% a year. Over the same period, cross-border truck movements increased by 15% a year, rising to nearly 300,000 in 2011. Both domestic and international passenger transport is almost entirely road-based. The 22,000-kilometer (km) road network—comprised of 860 km of international, 6,140 km of secondary, and 15,000 km of local roads—is the most significant component of the transport system. The 400 km East–West Highway (EWH) is the main road link, providing the fastest surface access from the east to the west. It plays a strategic role, and is part of three international road networks—the Central Asia Regional Economic Cooperation, European, and Asian networks—extending from Red Bridge at the Azerbaijan border to Sarpi at the Turkish border. Nearly 60% of international trade crossing Georgia moves on the EWH. During 2009–2011, average daily traffic in some parts of the EWH increased by more than 50% to about 11,000 vehicles.

2. **Institutional arrangements.** The Ministry of Economy and Sustainable Development (MOESD) is charged with coordinating and regulating all modes of transport, and formulating a national transport policy. The Ministry of Regional Development and Infrastructure (MRDI) is responsible for developing and maintaining the road network, except local roads, which fall under the jurisdiction of local authorities. Each ministry has implementing units. At the MOESD, the Transport Policy Department oversees road and maritime transport, railways, and civil aviation. The Land Transport Agency, the Maritime Transport Agency, and the Civil Aviation Agency are the technical regulators. At the MRDI, the Roads Department implements and manages the infrastructure. Georgian Railways is a state-owned enterprise under the Partnership Fund of Georgia. All seaports and two major airports (Tbilisi and Batumi) are either owned or operated by private companies. A state-owned enterprise, United Airports of Georgia, operates the international airport in Kutaisi and all smaller airports.

3. **International road connectivity.** The road improvement program supported by the Asian Development Bank (ADB), the European Investment Bank, the Japan International Cooperation Agency, and the World Bank has increased the proportion of international roads that are in good condition to 77% by 2013, including more than 40% of the EWH.² Georgia still needs to complete the EWH corridor from Turkey and the Black Sea ports to Azerbaijan to meet growing demand for transit traffic. While most of the EWH has been funded, a large potential funding gap, estimated at more than \$800 million, remains. In the longer term, reinforcing the country's North–South links may also strengthen its role as a transit corridor. Beyond large infrastructure construction on motorways, the sustainability of the national road network remains a challenge. This is primarily due to insufficient funding of routine and periodic maintenance, and a significant backlog of repairs. The estimated cost of upgrading priority international roads, repairing secondary roads, and financing road maintenance is about \$3 billion at 2011 prices. As new regional roads are developed, there is a need to operationalize a World Bank-financed road asset management system to help the government plan and prioritize road maintenance.

4. **Domestic road connectivity.** Some 38% of the secondary roads and 54% of the local roads, many linking to major agricultural hubs and tourist attractions, are in poor or very poor

¹ This summary draws on ADB. 2013. *Georgia: Transport Sector Assessment*. Manila, and Roads Department data.

² Another 15% of international roads are in fair condition by 2013 based on data from the Roads Department.

condition in 2013. Several access roads from the EWH to the seaports and railway terminals, which carry high volumes of heavy vehicles, sometimes including dangerous goods, are functionally obsolete and structurally inadequate. The risk of severe crashes or vehicle malfunction is high. Given the significant regional disparities in Georgia, improving the collector and feeder links of the road network is essential to prevent further isolation of rural communities, foster more domestic trade, and expand opportunities for more inclusive economic growth.

5. **Urban transport systems.** Mobility and connectivity within and between urban centers is hampered by dilapidated infrastructure, suboptimal urban transport planning and management, and gaps in policies and regulations. Concerns include (i) institutional and regulatory constraints to a systemic approach to urban mobility, (ii) lack of integrated planning between urban and other transport modes, (iii) system redundancies, (iv) inadequate traffic management, (v) limited information on mobility needs, and (vi) constrained funding and financing sources. To strengthen urban transport systems, Georgia needs to streamline policy and regulatory frameworks, rationalize and improve public transport, reinforce network structures, optimize technologies and services, and develop links with diversified supply elements (i.e., public and private service providers). Priorities for capacity development include (i) systems for traffic management, modern asset management, and integrated mobility; (ii) better investment planning, funding, and financing mechanisms; and (iii) road safety.

6. **Road safety.** Road safety in Georgia has deteriorated, increasing from about 12 deaths per 100,000 people in 2002 to 15.7 deaths per 100,000 in 2010. Road user behavior contributes to poor road safety. For example, in urban areas, pedestrians choose not to use existing pedestrian crossings and underpasses, highlighting a general lack of understanding and importance of personal safety. Nonenforcement of vehicle speed limits aggravates the situation, leading to an increase in the number and severity of crashes.

7. **Railways.** JSC Georgian Railways has a staff of 12,767 organized into three cost centers: (i) infrastructure, (ii) freight, and (iii) passenger services. It has about 2,344 km of track, most of which is electrified. Georgia has the capability to maintain and refurbish its rolling stock.

8. **Aviation.** Georgia's four airports are state-owned by United Airports of Georgia, which has outsourced the operations of the Batumi and Tbilisi airports. Georgia has bilateral air service agreements, and is part of the Common Aviation Area Agreement with the European Union. Georgia is a member of the European Organisation for the Safety of Air Navigation.

9. **Governance.** Georgia's transport sector has been managed on the basis of short-term objectives without an overall long-term sector policy or strategy. Institutions are fragmented between the MOESD, the MRDI, and several regulatory bodies and commissions. Regulators have insufficient authority to foster competition and ensure quality passenger and freight services. Transport charges have not been set to encourage optimal resource use. As a result, the division of freight between roads and rail is not optimal; rail should carry more freight than it currently does. There is need for (i) sound criteria and goals for investment, modal integration, safety, security, and environment protection; (ii) sustainable mechanisms for financing capital and operating expenditure of roads; (iii) uniform road construction and maintenance standards; and (iv) value engineering and life-cycle cost analysis.³ The role of the Expertise Commission under the Ministry of Justice, which reviews and approves the engineering designs for compliance with Georgian standards and specifications, also needs to be reviewed.

³ The national standards and specifications need further revision to adequately address climate change, the environment, and sustainability issues. Cost-insensitive design standards and specifications have also contributed to higher road construction costs (footnote 1).

10. **Capacity.** Both the private and public transport sectors have difficulty finding and retaining staff with sufficient technical and managerial skills. This is mainly due to the slow response of transport-related education programs to the needs of a modern market economy. Vocational training programs in transport are not readily available, although post-secondary education programs have increased.

B. Government's Sector Strategy

11. **Strategic directions.** The government aims to leverage Georgia's transit and trade potential to boost private sector competitiveness and inclusive economic growth.⁴ The Socio-economic Development Strategy of Georgia (Georgia 2020) emphasizes environmental sustainability and integrating Georgia within regional and international transport systems. The broad strategic directions are to improve the transport system to link all parts of the country, and to connect its ports and airports to neighboring countries and beyond. Key to this strategy is streamlining transport infrastructure and developing logistical centers, mobilizing public-private partnerships (PPPs) where feasible. Road network development is a top priority. Since 2008, the upgrading of international roads to European standards, in particular the EWH, has received the largest share of public funds in the sector. There is also increasing emphasis on north-south international roads, and secondary and local roads that connect regional centers and markets. Formulating a national transport policy and developing the technical and managerial capacities of the core ministries is also a strategic priority.

C. ADB Sector Experience and Assistance Program

12. **ADB's transport sector support.**⁵ ADB has supported the government's international road development program. ADB has provided a \$500 million multitranche financing facility (MFF) to improve subregional roads, and build the Road Department's capacity to manage road assets and improve safety. The first and third tranches of funding from the MFF amount to \$258 million for the construction of the Kobuleti Bypass, a 34 km, two-lane road passing Kobuleti, a Black Sea resort.⁶ A 12 km segment of this road opened in 2013, and the rest should be operational by 2016. The MFF has experienced implementation delays, and construction costs have been higher than anticipated at approval of the first two tranches.

13. **Development partner support.** The European Investment Bank, the European Union, the Japan International Cooperation Agency, the Millennium Challenge Corporation, and the World Bank have also assisted road network development, including the EWH. The Millennium Challenge Corporation and the World Bank have financed secondary road improvements. The World Bank has provided technical assistance (TA) for institutional strengthening in project management, traffic safety, manpower training, curriculum development, and road maintenance. ADB works closely with its development partners through meetings and information exchanges. The MOESD and the MRDI serve as liaisons, and periodically bring the development partners together to discuss financing requirements. The government has asked its main development partners to coordinate on financing the remaining segments of the EWH.

14. **ADB sector strategy.** ADB will continue to support the government in its efforts to develop an efficient and sustainable transport system, consistent with Georgia's vision of becoming a competitive international gateway. Toward this end, ADB will finance improvements

⁴ Government of Georgia. 2014. *Socio-economic Development Strategy of Georgia (Georgia 2020)*. Tbilisi.

⁵ ADB support for urban transport is elaborated in the Sector Assessment (Summary): Water and Other Urban Infrastructure and Services (accessible from the list of linked documents in Appendix 2).

⁶ Approximately 2 km of this 34 km road will be upgraded from a 2-lane road to a 4-lane road.

to international and national road links to enhance Georgia's competitiveness and improve internal connectivity. ADB will coordinate closely with other development partners to harmonize project development and delivery standards, and to maximize the impact of support for reform and capacity development. ADB-financed TA will complete support for improving the physical transport network by strengthening sector policy and institutional capacities.

15. **International roads.** ADB will continue to support remaining improvement works on the EWH. These works are technically challenging because of the environmentally and geologically sensitive terrain of the road alignment, and are likely to cost substantially more than the earlier works. Given this context, and the significance of the EWH to Georgia and the region, development partners are combining their efforts to mobilize adequate financing and technical support to complete critical segments. These efforts will help create the first high-speed road across the country. ADB will ensure maximum return on investment in international connectivity through sound design and construction, and by ensuring full compliance with ADB safeguards.

16. **Domestic roads.** To foster better internal connectivity and contribute to inclusive growth, ADB will assist in linking international roads to local regional centers through secondary road improvements. This will increase the opportunities for domestic and international trade, and maximize the impact on women's livelihoods and access to services. Priority will be accorded to areas where better connectivity is critical to unlock the growth potential of lagging areas.

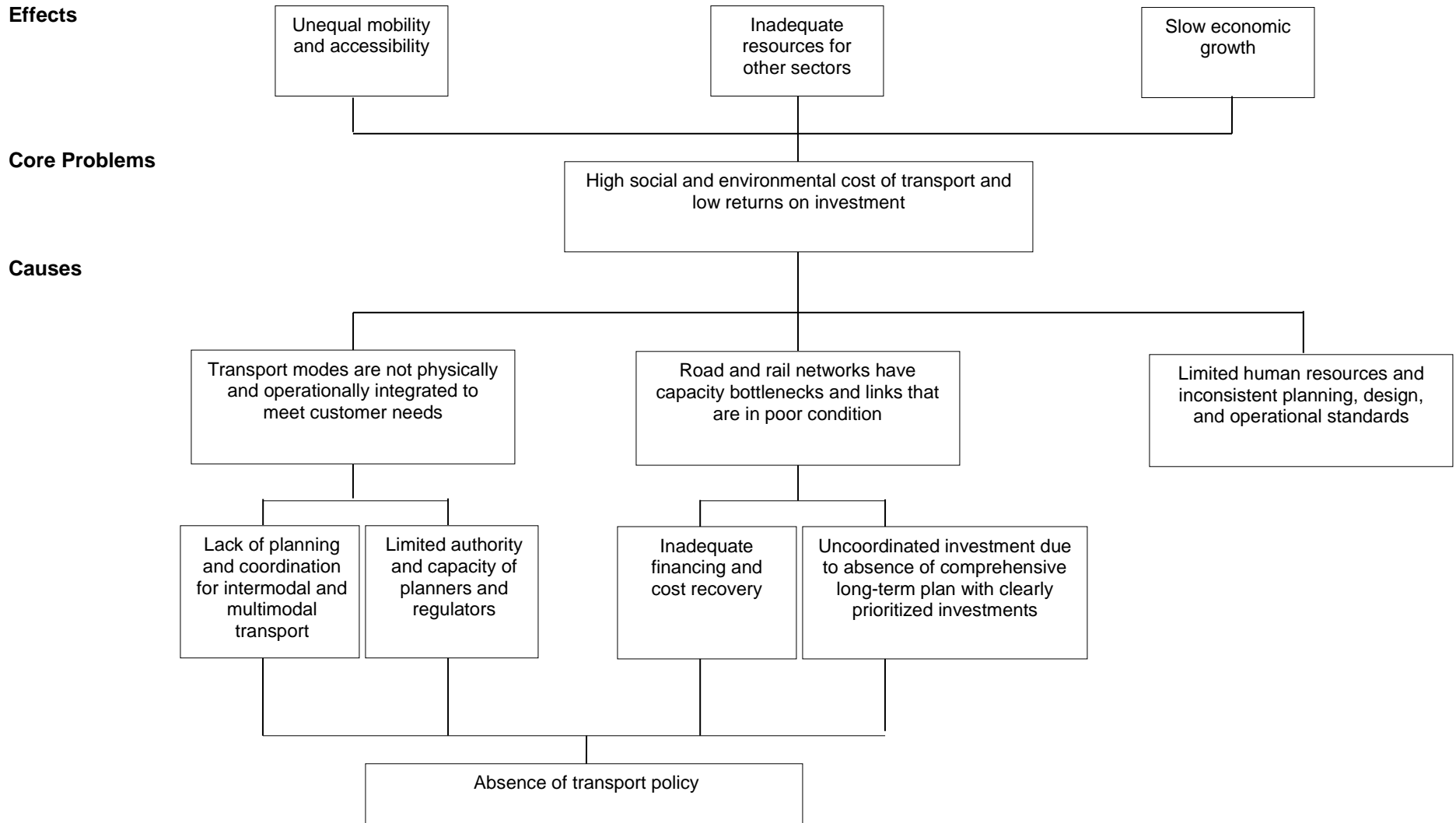
17. **Transport policy.** ADB will help formulate a national transport policy and develop transport planning capacity. The policy will foster economically, financially, and environmentally sustainable transport service delivery; boost transport safety and security; establish environmental and social safeguard requirements; and assist in setting public service obligations. It will also define sector investment targets and financing arrangements, both for capital and operating expenditures. The policy will promote modal integration through road connections and operational arrangements while the immediate investment in international roads and other transport assets continues. It will also outline the role and responsibility of each mode in serving different groups of transport service consumers, and set out the requirements for coordinated planning, prioritizing investment, modernizing technical standards and specifications, and developing the workforce.

18. **Capacity development assistance.** ADB will assist in modernizing technical standards and specifications for roads, and to address gaps in implementing modern standards. These initiatives will also help institutions understand and incorporate social and gender dimensions into transport design standards and operational policies. Such standards will reflect the special transport needs of women, children, senior citizens, and people with disabilities; and will promote the use of climate-friendly materials, equipment, and approaches. ADB will support more proactive disaster risk management and route realignment to address climate risks (e.g., landslides, flooding, drainage, and soil erosion). Finance sector TA projects will improve the enabling environment for private sector investment in transport and encourage PPPs.⁷

19. **Road safety and road asset management systems development.** ADB will provide technical assistance to improve road safety. This support will complement ongoing World Bank support. In parallel, international good practices in road asset management systems development will be introduced and coordinated with other stakeholders.

⁷ Potential areas for PPPs include railway development for increased container transport, leasing for replacement of older vehicles used in commercial transport, and establishment of sector-based training institutions and programs.

Problem Tree for Transport Sector in Georgia



Sector Results Framework (Transport, 2014–2018)

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Country Sector Outcomes		Country Sector Outputs		ADB Sector Operations	
Outcomes with ADB Contribution	Indicators with Targets and Baselines	Outputs with ADB Contribution	Indicators with Incremental Targets	Planned and Ongoing ADB Interventions	Main Outputs Expected from ADB Interventions
More people have access to efficient, reliable, safe, and sustainable transport system including in urban areas	<p>Number of fatalities per 10,000 registered cars decreases to 4.7 in 2018 (2013 baseline: 5.5)</p> <p>At least 2.5 million people in Anaklia, Batumi, Rustavi, and Tbilisi use improved transport services (including public transport and road expansion) by 2018 (2012 baseline: 0)</p> <p>Urban population in Tbilisi riding public transport increased to at least 59% by 2018 (2011 baseline: 54%)</p> <p>Annual average daily traffic at km 64 of the Senaki–Poti–Sarpi road section increased to 7,500 vehicles by 2018 (2013 baseline: 6,000)</p>	Transport infrastructure and systems expanded, improved and maintained	<p>About 268 km of East–West Highway will be built or upgraded by 2018 (2013 baseline: 85 km)</p> <p>Share of secondary roads in good condition (with IRI index of 5.0 or less) increases to at least 64% in 2018 (2013 baseline: 52%)</p> <p>Length of improved secondary roads that support intermodal and multimodal transport increases to 2,700 km in 2018 (2012 baseline: 1,990 km with IRI index of 5.0 or less)</p> <p>Independent road safety audits performed on 100% of all new or rehabilitated international roads between 2014 and 2018 (2013 baseline: 0)</p>	<p>Planned key activity areas</p> <p>Transport infrastructure improvements (53% of funds)</p> <p>Urban transport infrastructure improvements (42% of funds)</p> <p>Transport management, policies and reforms (5% of funds)</p> <p>Pipeline projects with estimated amounts</p> <p>Secondary Road Improvement Project (\$100 million)</p> <p>MFF SUTIP, Tranche 4 (\$57 million)</p> <p>PDA for Sustainable Cities Development Program (\$10 million)</p> <p>Roads and Market Connectivity (PPTA, \$1.0 million)</p> <p>Capacity Development for Roads Department (S-CDTA, \$200,000)</p> <p>Preparing Sustainable Cities Development Program (PPTA, \$500,000)</p> <p>Preparing Transport Sector Connectivity Project (PPTA, \$1.0 million)</p> <p>Ongoing projects with approved amounts</p> <p>MFF RCIP, Tranche 1 (\$118 million)</p> <p>MFF RCIP, Tranche 3 (\$140 million)</p> <p>MFF SUTIP, Tranche 1 (\$85 million)</p> <p>MFF SUTIP, Tranche 2 (\$65 million)</p> <p>MFF SUTIP, Tranche 3 (\$73 million)</p> <p>Secondary Road Improvement (PPTA, \$1.0 million)</p> <p>Support for Transportation Policy (PATA, \$750,000)</p>	<p>Pipeline projects</p> <p>50 km of upgraded secondary roads</p> <p>Coastal reinforcement works completed to protect local roads in Anaklia</p> <p>Transport sector policy completed</p> <p>Capacity built in planning agency and Road Department staff</p> <p>Ongoing projects</p> <p>34 km two-lane bypass constructed</p> <p>17 km of intercity road rehabilitated</p> <p>Metro station constructed</p> <p>Coastal reinforcement works constructed</p> <p>Capacity developed in Roads Department</p> <p>Project management systems improved</p> <p>Road safety measures improved</p>

ADB = Asian Development Bank, IRI = international roughness index, km = kilometer, MFF = multitranchise financing facility, PDA = project design advance, PPTA = project preparatory technical assistance, RCIP = Road Corridor Investment Program, S-CDTA = small-scale capacity development technical assistance, SUTIP = Sustainable Urban Transport Investment Program, TA = technical assistance.

Sources: ADB and Government of Georgia.