Report and Recommendation of the President to the Board of Directors

Project Number: 42414
July 2010

Proposed Multitranche Financing Facility
Georgia: Sustainable Urban Transport Investment Program

Asian Development Bank
CURRENCY EQUIVALENTS  
(as of 30 April 2010)

Currency Unit – lari (GEL)  
GEL1.00 = $0.563602  
$1.00 = GEL1.7743

ABBREVIATIONS

ADB – Asian Development Bank  
ADF – Asian Development Fund  
EBRD – European Bank for Reconstruction and Development  
EIRR – economic internal rate of return  
FAM – facility administration manual  
FIRR – financial internal rate of return  
MDF – Municipal Development Fund of Georgia  
MFF – multitranche financing facility  
MOF – Ministry of Finance  
MRDI – Ministry of Regional Development and Infrastructure  
OCR – ordinary capital resources  
PFR – periodic financing request

NOTES

(i) The fiscal year (FY) of the government and its agencies ends on 31 December.  
(ii) In this report, "$" refers to US dollars.

Vice-President  
X. Zhao, Operations 1

Director General  
J. Miranda, Central and West Asia Department (CWRD)

Director  
M. Westfall, Urban Services Division, CWRD

Team leader  
A. Dauphin, Urban Development Specialist (Transport), CWRD

Team members  
L. Blanchetti-Revelli, Senior Social Development Specialist, CWRD  
I. Chkonia, Project Implementation Officer, Georgia Resident Mission (GRM), CWRD  
M. Davila, Urban Economist, CWRD  
G. Kiziria, Senior Country Coordination Officer, GRM, CWRD  
B. Konysbayev, Senior Counsel, Office of the General Counsel  
M. Kunzer, Senior Environment Specialist, CWRD  
V. Padmanbhan, Urban Development Specialist, CWRD  
S. Roth, Gender Specialist, CWRD  
N. Wallace, Senior Financial Management Specialist, Regional and Sustainable Development Department (RSDD)  
M.A. Vargas, Administrative Assistant, CWRD

Peer reviewers  
S. Saxena, Climate Change Specialist, RSDD  
F. Yue, Principal Urban Development Specialist, East Asia Department

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.
CONTENTS

I. THE PROPOSAL 1
II. THE INVESTMENT PROGRAM 1
   A. Rationale 1
   B. Impact and Outcome 3
   C. Outputs 3
   D. Investment and Financing Plans 3
   E. Implementation Arrangements 5

III. DUE DILIGENCE 7
   A. Technical 7
   B. Economic and Financial 7
   C. Governance 8
   D. Poverty and Social 8
   E. Safeguards 8
   F. Risks and Mitigating Measures 9

IV. ASSURANCES 9
V. RECOMMENDATION 10

APPENDIXES
1. Design and Monitoring Framework 11
2. List of Linked Documents 14
I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed multitranche financing facility (MFF) to Georgia for the Sustainable Urban Transport Investment Program.

2. The program targets investments in urban transport and related urban transport services across main cities in Georgia. This will improve connectivity, reduce traffic congestion and promote sustainable, safe, reliable and efficient transport.¹

II. THE INVESTMENT PROGRAM

A. Rationale

3. Georgia has a population of only 4.62 million but is one of the most urbanized countries in the Caucasus. Urban areas are the pillars of economic growth and account for 53% of the total population, nearly 2.5 million people. Urban areas can be divided into three groups: (i) the conurbation of Tbilisi and the adjacent city of Rustavi; (ii) the main secondary cities of Batumi, Gori, Kutaisi, and Poti; and (iii) cities with high tourism potential such as Anaklia, Borjomi, Gudauri, and Mestia. Although they differ in size, they all have common transport problems: rising traffic congestion, pollution, poor and inappropriate road infrastructure and highly inefficient urban transport systems. Tbilisi, the capital and largest city, is home to 30% of the national population and generates 50% of Georgia's gross domestic product. It is also the main employment center. A problem tree analysis linked to the design monitoring framework (DMF) is shown in Appendix 1.

4. **Urban environment and mobility patterns.** Urban sprawl takes place in all urban areas and low-density developments are mushrooming along main road networks, creating car-dependent communities. Tbilisi is the most affected. Located in a valley with mountains on two sides, its infrastructure and traffic flows converge in a single corridor. This fuels high urban mobility, severe traffic congestion, poor air quality, and excessive noise, a pattern repeated across other cities.

5. **Safety.** Recent high economic growth has led to a sharp increase in car ownership.² This trend is likely to continue, aggravating the congestion problem. Greater car ownership and poor quality transport infrastructure have led to rise in the number of accidents. Death and injury rates are higher than in comparable cities in Europe and Asia. For the whole of Georgia, there were 737 deaths and 7,349 injuries from traffic accidents in 2007 (53% of which occurred in Tbilisi), a 62% increase since 2002. About 80% of pollution derives from motorized transport, much of which comprises secondhand cars.

6. **Traffic management and parking.** Despite improvements to major arteries in the capital, the traffic signal system is outdated and inadequate. Illegal parking on pavements and busy streets is frequent. Tbilisi and other cities lack controlled parking places and sound parking policies. There are limited arrangements for cyclists and pedestrians, often the first victims of traffic accidents.

7. **Public transport.** Public urban transport in all cities relies heavily on microbuses and buses. Microbuses constitute 47% of public transport in Tbilisi and nearly 80% in other major cities. These often duplicate existing bus lines and provide a poor service and minimal comfort.

---

² About half of the total personal vehicles in Georgia are registered in Tbilisi (about 275,000 in 2008).
A rationalization of bus and microbus networks is necessary, especially in Batumi, Kutaisi, Rustavi, and Tbilisi. A new tendering process and criteria to award permits and concessions is needed. In particular, it is essential to focus on quality of service and on the strict respect for identified routes and stops. In Tbilisi, the public transport network has deteriorated. Further, trams and trolleybus services have been discontinued. The urban transport network in the capital comprises a two-line metro system, 125 bus routes, and 188 microbus routes operated by public and private companies. The two T-shaped metro lines were designed as the backbone of the city transport system and carry 260,000 passengers daily. Improvements to the rolling stock have been made since 2007. In 1985, its green line was extended and in 2000 a new station at Vazha-Pshavela was opened. However, an extension to the university district was never completed. This is creating traffic bottlenecks in the area. Although a modern ticketing system has been introduced, management, marketing and commercial operations are weak. In July 2009, a significant milestone was reached in network integration through the merger of the metro and bus companies. The reorganization is ongoing and efficiency and productivity gains are expected in the short term.

8. **Sector policy, strategy and roadmap.** The central government wants the cities to be the engine of economic growth and job creation. The government emphasizes city cluster development and the delivery of quality infrastructure and urban services. These are considered essential to increase quality of life, attract investment and increase productivity and competitiveness. The strategic vision is shared by all municipalities. In this regard, the Government has been working out an urban renewal strategy and supporting business plan. The work is complete, although some refinements to both will be needed overtime. Urban transport and various related services lie at the core of this strategy and business plan. A policy framework is in place for this purpose. It outlines key guiding principles and criteria for investment and follow-up operations, including competition, private sector involvement, efficiency, fairness, transparency, environmental sustainability, value for money with regard to capital investment, maintenance and sound service provision.

9. The long term investment program underpinning the urban strategy amounts to $1.1 billion. This is an estimate for the period 2010-2020. A medium term slice of this program (for 2010-2016) is estimated at $700 million. This is over and above the $400 million already spent between 2005 and 2010. With regard to urban transport, the target is to improve its reach, quality and continuity. It also pursues greater efficiency and tighter environmental safeguards. One policy directive is to favor nonmotorized transport use to reduce pollution, noise, and traffic accidents, and improve living conditions. The strategic objectives for urban renewal and transport are fully consistent with the strategy agreed by Georgia and ADB for the purposes of the ADB assistance program in the country and in line with ADB’s sustainable transport objectives. The roadmap comprises sequenced investments, including private, public and public/private initiatives. It also includes municipal reforms and capacity building (policy, planning and oversight). The government, the Municipal Development Fund of Georgia (MDF), and the Tbilisi and other municipalities have asked ADB to help them tackle the urban transport problem within the framework of the urban renewal strategy. The existence of a policy framework, strategy and roadmap also happens to be preconditions for the use by ADB of the multitranche financing facility (MFF) as a funding modality.

---

5 Set up in 1997 for a World Bank project, MDF channels donor funding for municipal projects (from EBRD, European Union, KfW, Millennium Corporation Challenge, and ADB) and has implemented more than 930 projects.
10. **Donor coordination.** The urban sector has been attracting finance and advice from other donors, including the World Bank and the European Bank for Reconstruction and Development (EBRD). The former financed transport investments in Tbilisi in 2002 and 2008 – focusing mainly on road safety, traffic management, and parking. EBRD extended finance for a bus company fleet renewal in Tbilisi in 2005 and in Batumi in 2008. EBRD also worked on a redistribution of microbus licenses to rationalize routes, upgrade and reduce fleets, and improve information management systems. ADB has been requested to complement these interventions through investments in public transport, habitat and urban environment, coastal waterfront renewal, road network expansion, traffic management and institutional reforms. EBRD is particularly interested in establishing a strategic alliance with ADB in the Caucasus and other parts of Central Asia to expand operations in the urban sector. Other donors (bilateral and multilateral) will also be encouraged to work with ADB for the same purpose. The investment requirements exceed the financing available from any individual institution. ADB will consider joint and parallel co-financing partnerships throughout the implementation of the MFF. In particular, it will promote public-private initiative in the sector.

B. **Impact and Outcome**

11. **Impact.** The investment program and MFF will improve the urban environment, the local economy, and living conditions within urban areas. This will expand economic growth, job opportunities and environmental sustainability (See DMF in Appendix 1).

12. **Outcome.** The investment program and MFF will improve the efficiency, reliability, and affordability of urban transport infrastructure and services (See DMF in Appendix 1).

C. **Outputs**

(i) Extension, rehabilitation, and improvement of urban transport infrastructure in Anaklia, Batumi, Kutaisi, Poti, Rustavi, and Tbilisi (See DMF in Appendix 1).

(ii) Increased institutional effectiveness, including the reorganization and reforms at the Tbilisi municipality, other municipalities and urban transport service providers (See DMF in Appendix 1).

(iii) Establishment of program management team with a capability and funds to handle project preparation, technical design, contract bidding, evaluation and award, contract supervision, progress monitoring and reporting (See DMF in Appendix 1).

D. **Investment and Financing Plans**

13. **Investment program.** The overall investment program is $1.1 billion (2010-2020). The medium term slice falls just under $700 million (2010-2016). An MFF is the preferred funding modality on account of its flexibility, sequencing of investments and the existence of a sound policy framework, strategy, and roadmap. The size of the MFF is $300 million. This will be structured into three tranches. The first tranche amounts to $85 million. Four subprojects have been assessed and are ready for implementation (See linked document 14). Tranche 2 will amount to $100 million. It has high profile investments some of which are already under preparation (See linked document 14). Tranche 3 is estimated at $115 million and the investments have been already pre-identified. The finance under Tranche 2 and 3 may vary, depending on project readiness and final design features.
Table 1: Investment Program Plan
($ million)

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Program (2010-2020) Base Cost&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>1. Component A: Urban transport infrastructure</td>
<td>1040.18</td>
</tr>
<tr>
<td>2. Component B: Institutional capacity</td>
<td>32.50</td>
</tr>
<tr>
<td>3. Component C: Program management</td>
<td>32.76</td>
</tr>
<tr>
<td>Total</td>
<td>1105.44</td>
</tr>
<tr>
<td>Investment Program (2010-2016) Base Cost&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>1. Component A: Urban transport infrastructure</td>
<td>606.18</td>
</tr>
<tr>
<td>2. Component B: Institutional capacity</td>
<td>29.00</td>
</tr>
<tr>
<td>3. Component C: Program management</td>
<td>21.84</td>
</tr>
<tr>
<td>Total</td>
<td>657.02</td>
</tr>
<tr>
<td>A. Tranche 1 Base Cost&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>1. Component A: Urban transport infrastructure</td>
<td>79.10</td>
</tr>
<tr>
<td>2. Component B: Institutional capacity</td>
<td>4.69</td>
</tr>
<tr>
<td>3. Component C: Program management</td>
<td>6.76</td>
</tr>
<tr>
<td>Subtotal (A)</td>
<td>90.55</td>
</tr>
<tr>
<td>B. Contingencies</td>
<td>7.66</td>
</tr>
<tr>
<td>C. Financing Charges</td>
<td>1.79</td>
</tr>
<tr>
<td>Total (A+B+C)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Note: Figures may not add up because of rounding.
<sup>a</sup> In mid-2009 prices.
<sup>b</sup> Includes taxes and duties of $15.00 million to be financed from government resources.
Source: Asian Development Bank estimates.

14. **Financing plan.** The overall program will be funded mainly by the government and the municipalities. External finance is only being raised at this stage to support a slice of the medium term investment plan. The government has requested an MFF in an amount up to $300 million to help finance a part of the investment program. The MFF will consist of several tranches, subject to the government’s submission of related periodic financing requests, execution of the related loan and project agreements for each tranche, and fulfillment of terms and conditions set forth in the framework financing agreement. The first tranche of the MFF will be financed from ADB’s Special Funds resources (Asian Development Fund ADF), will have a 32-year term, including a grace period of 8 years, an annual interest rate of 1.0% per annum during the grace period and 1.5% per annum thereafter, and such other terms and conditions set forth in the loan and project agreements for tranche 1.

15. The government has specifically requested flexibility in the use of ADF resources for subsequent tranches. It is understood that the provision of any such additional ADF financing will be accompanied by a corresponding reduction in the available OCR financing, so that in any event the total financing provided by ADB will not exceed the MFF amount of $300 million equivalent. Any additional ADF allocation will be subject to (i) the general availability of ADF resources from time to time, (ii) Georgia’s access to such resources pursuant to ADB’s then applicable Graduation Policy<sup>6</sup> and the requirements of the ADF donors, and (iii) the availability of such resources to Georgia pursuant to ADB’s then applicable policy on performance-based

---

allocation of ADF resources. The OCR loans will have a term of up to 25 years, including a grace period of up to 5 years, with interest to be determined in accordance with ADB’s London interbank offered rate (LIBOR)-based lending facility and such other terms and conditions set forth in the loan and project agreements for each tranche. Government financing in Tranche 1 will cover local expenditures, including taxes and duties, which amount to $15.00 million (15.00%) of the total cost. A facility administration manual (FAM) shows the financial arrangements and indicative flow of funds.

### Table 2: Financing Plan

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount ($ million)</th>
<th>Share of Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Investment Program (2010-2020)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian Development Bank</td>
<td>300.00</td>
<td>27.14</td>
</tr>
<tr>
<td>Cofinancers a</td>
<td>300.00</td>
<td>27.14</td>
</tr>
<tr>
<td>Government b</td>
<td>505.44</td>
<td>45.72</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1105.44</strong></td>
<td><strong>100.00</strong></td>
</tr>
<tr>
<td><strong>Investment Program (2010-2016)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian Development Bank</td>
<td>200.00</td>
<td>30.44</td>
</tr>
<tr>
<td>Cofinancers a</td>
<td>100.00</td>
<td>15.22</td>
</tr>
<tr>
<td>Government b</td>
<td>357.02</td>
<td>54.34</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>657.02</strong></td>
<td><strong>100.00</strong></td>
</tr>
<tr>
<td><strong>Tranche 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian Development Bank</td>
<td>85.00</td>
<td>85.00</td>
</tr>
<tr>
<td>Government b</td>
<td>15.00</td>
<td>15.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.00</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

*a* Under discussion  
*b* Includes taxes and duties  
Source: Asian Development Bank estimates.

### E. Implementation Arrangements

16. The executing agency will be MDF. It has the technical capacity and track record in implementing donor-financed projects. It will (i) procure and manage loan proceeds, (ii) supervise and monitor the implementation of investments under the MFF, (ii) provide counterpart assistance, and (iii) ensure oversight over environmental and social safeguard compliance. In subsequent tranches, Tbilisi municipality could become the implementing agency for its subprojects. The MDF Supervisory Board, chaired by the Prime Minister, will monitor progress on the MFF. This Board comprises representatives of all relevant government entities. It will also include representatives from regional/municipal authorities, as appropriate. The implementation arrangements are described in the FAM (See linked document 3).

### Table 3: Tentative Implementation Arrangements

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Tentative Arrangements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation period</td>
<td>September 2010–September 2018</td>
</tr>
<tr>
<td>Estimated project completion date</td>
<td>30 September 2018</td>
</tr>
<tr>
<td>Project management</td>
<td></td>
</tr>
<tr>
<td>(i) Oversight body</td>
<td>Steering committee/MDF supervisory board</td>
</tr>
<tr>
<td></td>
<td>MRDI, MOF, relevant ministries, region and municipalities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Tentative Arrangements</th>
</tr>
</thead>
<tbody>
<tr>
<td>(ii) Executing agency</td>
<td>MDF</td>
</tr>
<tr>
<td>(iii) Key implementing agencies</td>
<td>MDF</td>
</tr>
<tr>
<td>Municipalities</td>
<td></td>
</tr>
<tr>
<td>(iv) Project implementation unit</td>
<td>MDF</td>
</tr>
<tr>
<td>Procurement(^a)</td>
<td>ICB 20</td>
</tr>
<tr>
<td></td>
<td>NCB 30</td>
</tr>
<tr>
<td></td>
<td>Shopping 50</td>
</tr>
<tr>
<td>Consulting services(^b)</td>
<td>QCBS, QBS, CQS 495</td>
</tr>
<tr>
<td></td>
<td>LCS, FBS, SSS, ICS 450</td>
</tr>
<tr>
<td>Retroactive financing and/or advance contracting</td>
<td>Retroactive financing</td>
</tr>
<tr>
<td></td>
<td>Advance contracting</td>
</tr>
<tr>
<td>Disbursement</td>
<td>The loan proceeds will</td>
</tr>
</tbody>
</table>
|                                                      | be disbursed in accordance with ADB’s Loan Disbursement Handbook (2010, as amended from time to time) and detailed arrangements agreed upon between the government and ADB.


\(^a\) Tentative amounts referring to the procurement plan proposed in the FAM. To be updated for each PFR.

\(^b\) This mainly refers to a tentative budget for multiple individual consultant contracts over the 8-year period to support the MFF implementation and assist MDF and municipalities.

Source: Asian Development Bank estimates.

17. A procurement plan will be prepared for each tranche. All tender documents for tranche 1 subprojects will be finalized by the end of 2010 (in accordance with ADB’s Procurement Guidelines). As far as possible, the contracting approach will be to use turnkey contracts combining engineering, procurement, and construction (EPCs) modalities. They will have a fixed delivery period, a fixed budget and premiums and penalties against performance and quality. The quality aspects will be checked by independent supervision consultants. The government has requested a waiver from the procurement eligibility requirement to allow it to procure some metro equipment from nonmember countries. This will ensure full component compatibility with the existing system, and thus passenger safety. Such procurement will still be carried out through competitive bidding following ADB rules.

18. The MFF as a whole, and the first tranche in particular, includes finance (Component C) to support project management, project preparation (subsequent tranche due diligence), design work, project monitoring, reporting and institution capacity building (including support to improve planning, policy formulation and training). Advisory services will be secured for this purpose - from firms and individuals – selected in accordance with ADB’s Guidelines on the Use of...

\(^8\) The existing metro network has been built following Soviet metro standards. Technical due diligence has shown that some critical components of the signaling and energy system will need to be procured from nonmember countries. The metro company has traditionally imported such items from nonmember countries. This has been estimated at less than 10% of the total financing assigned to this particular subproject. Details are shown in the FAM and will be updated before each PFR. ADB members could supply alternative technology but as the extension represent only 1.5 km out of 28.5 km, the technological jump for the entire network will be too costly. All other components will be procured from ADB members countries.
Consultants. To speed up project implementation, advance contracting and retroactive financing of eligible expenditures will also be allowed.9

19. Tranche 1 subprojects are as follows:
   (i) the completion of a 1.5 kilometer (km) Tbilisi metro extension on Vazha Pshavela Av.) to the university district serving 150,000 inhabitants;
   (ii) the redevelopment of Gorgasali embankment in Tbilisi, including pedestrianized access to the river from the old city to enhance tourism appeal;
   (iii) the upgrading of 20 km of the Mestia urban area road network to allow year-round accessibility to this United Nations Educational, Scientific and Cultural Organization (UNESCO) heritage site and stimulate tourism; and
   (iv) the urban renewal of main avenues in Kutaisi through the introduction of a 26-km cycle network to provide transport alternatives.

III. DUE DILIGENCE

A. Technical

20. Technical due diligence was performed for the investment program and included an assessment of the strategy and policy framework, roadmap, investment program, and specific investment proposals under the first tranche (physical and non-physical). The due diligence work confirmed these activities to be in order, sound and of a high quality standard (see linked document 14). Besides internal ADB staff assessments, independent external consultants were also engaged to help with this work. Due diligence for some tranche 2 subprojects is already under way.10

B. Economic and Financial

21. The economic internal rate of return (EIRR) and financial internal rate of return (FIRR) for tranche 1 investments were calculated (see Linked document 7).11 The major economic benefit is savings in travel time. Savings in vehicle operating costs per kilometer and a reduction in traffic accidents are also part of this return.12 The analysis showed all subprojects to be economically viable, with EIRRs ranging from 12.6% to 14.4%, and an estimated economic net present value from $1.05 million to $3.90 million at a 12% discount rate. Sensitivity analysis confirmed this economic viability. For most scenarios, EIRR values were above 12%. However, for some subprojects, significant increases in capital costs (20%) or significant decreases in traffic (20%) result in EIRRs of less than 12%. An economic and financial analysis will be conducted for all future subprojects financed under the MFF. A financial cost–benefit analysis of the metro extension (included in tranche 1) shows an FIRR of 5.3%. This exceeds the weighted average cost of capital (0.85%). Sensitivity and risk analysis revealed this subproject to be sensitive to high revenue and cost variations.

---

9 The government was informed that expenses under advance contracting can be financed retroactively only if the procedures (including advertising) comply with ADB’s Procurement Guidelines and Guidelines on the Use of Consultants. The government acknowledges that ADB’s concurrence with the procedures, documentation, or proposals for award does not commit ADB to finance such expenses, or the related project.
10 Mtkvari bridge in Tbilisi, Anaklia footbridge, Batumi and Anaklia urban waterfront protection measures and Tbilisi–Rustavi urban road link (Linked document 14).
12 Economic and Financial Analyses (Linked document 7).
C. Governance

22. A financial management assessment was conducted. The capabilities and systems at MDF are considered sound. A procurement capacity assessment demonstrates high capacity to manage procurement using international and national competitive bidding according to ADB’s Procurement Guidelines. ADB’s Anticorruption Policy was explained to and discussed with the government, MDF, and tranche 1 participating municipalities. The specific policy requirements and supplementary measures on the governance front are described in the FAM (See linked document 3).

D. Poverty and Social

23. Tranche 1 will directly benefit 1.53 million urban residents (35% of the national population and 66% of the urban population), and will improve living conditions and the economic and urban environment of participating municipalities. The potential beneficiaries are local residents without cars, students, commuters, and road and public transport users. Businesses will benefit from greater people mobility and connectivity. The poor and socially excluded will benefit from (i) better access to the city and other activity centers, (ii) affordable transport alternatives, (iii) better living conditions and less pollution, (iv) employment opportunities from road construction and maintenance; and (v) development of business activities after project completion. The investment program will contribute to poverty reduction by stimulating economic development. In particular, it will increase the mobility of 1.4 million people living in Tbilisi. It will generate 1,000–1,500 jobs during implementation and promote tourism in the participating municipalities. Employment targets for local unskilled workers, women, and vulnerable groups and core labor standards have been included in the Summary Poverty Reduction and Social Strategy and Gender Action Plan and will be monitored (See linked document 9).

24. Health. Health hazards from car pollution and traffic accidents will be reduced. Reductions in congestion, noise, and exhaust fumes, and an increase in green and pedestrian areas will benefit health and quality of life. Shorter travel times and better transport services will improve lives—especially women, the elderly, and children—as they will have better access to social services such as schools, universities, hospitals, and clinics. Awareness training on HIV/AIDS and sexually transmitted infections is to be included in all civil works bidding documents and will be monitored during the implementation.

25. Gender. The MFF is categorized as effective gender mainstreaming. It will improve access to transport for women. Gender-specific actions are listed in the Gender Action Plan. Recommended measures include gender targets for recruitment, capacity building activities, consultation participation. More statistics will be disaggregated by sex. Women will have greater representation at the decision-making level in the sector agencies (see linked document 10).

E. Safeguards

26. Environment. An environmental assessment and review framework was approved by the government on 16 April 2010 (See linked document 11). Four initial environmental examinations have been carried out. The environment classification for tranche 1 is B as its subprojects will not have significant irreversible or permanent negative environmental impacts during or after construction. MDF will require the contractor to refine and implement the environmental management plan (EMP) prepared in the initial environmental examination,

included in the environmental assessment and review framework. EMP will be an integral part of construction contracts.

27. **Land acquisition and resettlement.** A land acquisition and resettlement framework was approved by the government on 6 February 2010 (See linked document 12). It specifies compensation eligibility and entitlements; land acquisition and resettlement-related conditions for subproject implementation; and mechanisms for the preparation of land acquisition and resettlement plans for subprojects entailing land acquisition and resettlement. The resettlement classification for tranche 1 is C as no land acquisition and involuntarily resettlement is envisaged for the subprojects.

28. **Indigenous peoples.** The investment program area does not include communities that may be defined as indigenous peoples under ADB’s Safeguards Policy Statement (2009). The indigenous peoples’ impact classification for the MFF and all tranche subprojects is C.

F. **Risks and Mitigating Measures**

29. The MFF has limited technical risks. The metro extension and the Gorgasali tunnel construction will not require sophisticated construction methods. Works on both projects can be easily controlled and monitored. Civil works and goods packages will be procured through international competitive bidding and appropriate performance guarantees will be required from the contractors. MDF has large experience with ADB procurement rules. In addition, it will be supported by an experienced project management team.

<table>
<thead>
<tr>
<th>Risks</th>
<th>Mitigating Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gorgasali tunnel may encounter archeological remains during construction near the old city.</td>
<td>Chance finds procedures will ensure that any cultural or archeological evidences will be properly handled and preserved.</td>
</tr>
<tr>
<td>Unexpected hydrological disturbances may compromise the completion of the metro tunnel and underground station.</td>
<td>Hydrological risk assessment has been undertaken and proper monitoring is planned. Prevention and corrective measures will be taken to control the risks during work completion and operation.</td>
</tr>
<tr>
<td>Some metro equipment may be sourced in nonmember countries. Inappropriate equipment may jeopardize metro functioning and safety.</td>
<td>The government has requested a waiver to avoid jeopardizing the proper operation of the metro.</td>
</tr>
<tr>
<td>Projects funded by other donors may reduce the availability of contractors.</td>
<td>Large EPC contracts will be encouraged for civil works projects. Financial advisors will provide procurement assistance.</td>
</tr>
<tr>
<td>Possible cost overruns due to inflation and the fluctuations in construction costs.</td>
<td>The investment program plan includes price contingencies of 8% to cover these extra costs.</td>
</tr>
<tr>
<td>The selection of civil works projects may be inappropriate.</td>
<td>The urban transport sector road map lists priority projects and will guarantee the relevance of all projects.</td>
</tr>
<tr>
<td>Urban transport infrastructure improvement may increase maintenance cost and operation subsidies for public transport operators.</td>
<td>Institutional improvement and assistance for PPP included in the MFF provide additional revenues for the urban transport sector and reduce the subsidy burden for the municipality.</td>
</tr>
<tr>
<td>MDF capacity for implementing large and sophisticated works is limited.</td>
<td>Specific funding has been allocated to cover consulting services, support and additional staff with experience and suitable skills</td>
</tr>
</tbody>
</table>

EPC = engineering, procurement, and construction; MDF = Municipal Development Fund; PPP = public–private partnership.

IV. **ASSURANCES**

30. The government and MDF assure ADB that implementation work will conform to all applicable ADB policies, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement. These warranties and representations are described in the FAM and relevant loan documents. The government and
MDF have given ADB certain undertakings for the MFF. These are included in a framework financing agreement (See linked document 1). Specific covenants agreed by the government and MDF with respect to individual tranches under the MFF will be included in loan and project agreements for respective tranches.

V. RECOMMENDATION

31. I am satisfied that the proposed multitranche financing facility would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the provision of loans under the multitranche financing facility in an aggregate principal amount not exceeding $300,000,000 equivalent to Georgia for the Sustainable Urban Transport Investment Program comprising:

(i) loans from ADB’s Special Funds resources, with interest and other terms to be determined in accordance with ADB's then applicable policies relating to Special Funds resources, subject to conditions set forth in paragraph 14 of this report; and

(ii) loans from ADB's ordinary capital resources, with interest and other terms to be determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility,

and such other terms and conditions as are substantially in accordance with those set forth in the framework financing agreement presented to the Board.

32. I also recommend that the Board approve the proposal set forth in paragraph 17 of this report that the metro equipment procured from nonmember countries of ADB be eligible for financing under the Sustainable Urban Transport Investment Program. If the requisite affirmative vote of Directors representing not less than two thirds of the total voting power of ADB's members, pursuant to Article 14(ix) of the Articles of Agreement of ADB, is not obtained for this recommendation and the Board only approves the recommendation in paragraph 31, then only metro equipment procured from member countries of ADB will be eligible for financing under the Program.

Haruhiko Kuroda
President

25 June 2010
### DESIGN AND MONITORING FRAMEWORK

**MULTITRANCHE FINANCING FACILITY**

<table>
<thead>
<tr>
<th>Design Summary</th>
<th>Indicative Performance Targets and Indicators</th>
<th>Data Sources and Reporting Mechanisms</th>
<th>Assumptions and Risks</th>
</tr>
</thead>
</table>
| **Impact**     | Improved urban environment, expanded local economy, and better living conditions within urban areas | By 2018  
- Attractiveness and preservation of cultural heritage with 10% increase in tourist nights compared to baseline in 2008  
- Reduce urban road accidents and casualties by 5% compared to baseline in 2009  
- Citizens will benefit from project construction through job increase (between 1,000 and 1,500 jobs)  
- Private sector involved in construction and service management |  
- Report on multiple Indicators from municipal departments, municipal companies and NGO  
- Surveys by Tourism Department or other entities as appropriate  
- Statistical surveys (MRDI or other agencies as appropriate)  
- Surveys by Tbilisi Municipality or other entities as appropriate |  
**Assumptions**  
- The government pursues strategy of growth  
- Appropriate environmental framework in place  
- Political and economic stability  
- Implementation of the urban transport MFF as planned  
**Risk**  
- Vulnerability of the economy to exogenous shocks |
| **Outcome**    | Efficient, reliable, and affordable urban transport services provided in relevant cities | By 2018  
- Program will benefit at least 2.5 million people in urban areas compared to base line in 2009  
- Increase by 5% of urban population in Tbilisi with direct access to public transport compared to base line in 2008  
- Increase in public transport ridership by 5% compared to 2009 baseline  
- Maintain public transport modal split in Tbilisi at least at the same level as 2009 baseline  
- Increase by 5% number of women using municipal urban transport compared to baseline in 2008 |  
- NGO and international or national transport associations reports  
- Municipal statistics  
- Metro, bus companies, or other agencies statistics as appropriate  
- MRDI database |  
**Assumptions**  
- Implementation of the urban transport road map as planned  
- Prompt decision-making by the government and releasing counterpart funds, and supporting the capacity development needs of the relevant municipalities  
- MDF, Tbilisi, and other municipalities follow safeguards policy  
**Risk**  
- Weak coordination among government departments and relevant municipalities undermines sustainable operations. |
| **Outputs:**   |  
1. Urban transport infrastructure extended, rehabilitated and improved by MDF and relevant municipalities | By 2014  
- A 1.5 km long Tbilisi Metro extension to university completed  
- One urban redevelopment on Gorgasali implemented including one underpass  
- 20 km of Mestia road upgraded  
- 27 km bicycles lanes implemented in Kutaisi  
- All design and construction address specific needs of women and men riders (e.g., adults with children) |  
- Urban transport road map published by the relevant municipality enforced  
- Tbilisi Metro and bus company, annual reports  
- Participating city website and other municipal communication and media materials  
- Press release reports and press review  
- Municipal transport statistics  
- Municipality reports  
- Surveys conducted by the municipality |  
**Assumption**  
- Properly staffed and empowered institutions are able to effectively deliver, operate, and manage municipal services  
**Risks**  
- New municipal government shifting focus from urban transport investments  
- Capacity of domestic contractors is exhausted due to large number of ongoing externally funded projects |
### Design Summary

<table>
<thead>
<tr>
<th>Indicative Performance Targets and Indicators</th>
<th>Data Sources and Reporting Mechanisms</th>
<th>Assumptions and Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rustavi completed</td>
<td>-Rising energy costs increase operation cost and tariff increases not supported by consumers</td>
<td></td>
</tr>
<tr>
<td>-Footbridges constructed in relevant cities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-10 km of urban road and coastal waterfront improvement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Traffic management center in operation in Tbilisi</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>By 2018</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-10 km of urban road with urban renewal upgraded in urban areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Multimodal interchanges redesigned and upgraded</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Segregated bus and tram lines, and for riverside urban regeneration considered</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**2. Institutional and management capacity of MDF and relevant municipalities strengthened**

<table>
<thead>
<tr>
<th>By 2014</th>
<th>-Participating city website and municipal organization chart</th>
</tr>
</thead>
<tbody>
<tr>
<td>By 2016</td>
<td>-Gender-responsive urban transport road map endorsed by Tbilisi</td>
</tr>
<tr>
<td></td>
<td>-One sex-disaggregated household survey carried out in Tbilisi (50% of respondents women)</td>
</tr>
<tr>
<td></td>
<td>-One multimodal traffic model implemented</td>
</tr>
<tr>
<td></td>
<td>-A multimodal team set up in Tbilisi with women representatives</td>
</tr>
<tr>
<td></td>
<td>-One multimodal transport website with gender responsive design of public transportation</td>
</tr>
<tr>
<td></td>
<td>-A city twinning with focus on gender public transport design implemented</td>
</tr>
<tr>
<td>By 2016</td>
<td>-Urban transport master plan developed and endorsed, including PPP options</td>
</tr>
<tr>
<td></td>
<td>-One integrated ticketing system implemented</td>
</tr>
<tr>
<td></td>
<td>-A parking management outsourcing carried out</td>
</tr>
<tr>
<td></td>
<td>-Microbus organization set up rethought in the context of the urban transport master plan</td>
</tr>
<tr>
<td></td>
<td>-Planning processes streamlined and monitoring tools established</td>
</tr>
<tr>
<td><strong>By 2018</strong></td>
<td>-One public service contracts considered</td>
</tr>
<tr>
<td></td>
<td>-Traffic calming zones or pedestrianization considered</td>
</tr>
</tbody>
</table>

**Establishment of skilled and experienced units to oversee the management and the implementation of the program in MDF and the relevant municipalities**

<table>
<thead>
<tr>
<th>By 2011</th>
<th>-MDF annual report and communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>By 2011</td>
<td>-Feasibility studies and project due diligences timely prepared by MDF and participating municipalities</td>
</tr>
<tr>
<td></td>
<td>-Gender sensitive public awareness campaigns organized</td>
</tr>
</tbody>
</table>

**Assumptions**
- Participating city website and municipal organization chart
- Participating city website and municipal organization chart
- Participating city website and municipal organization chart
- Participating city website and municipal organization chart

**Risks**
- Participating city website and municipal organization chart
- Participating city website and municipal organization chart
- Participating city website and municipal organization chart
- Participating city website and municipal organization chart
### Design Summary

<table>
<thead>
<tr>
<th>Indicative Performance Targets and Indicators</th>
<th>Data Sources and Reporting Mechanisms</th>
<th>Assumptions and Risks</th>
</tr>
</thead>
</table>
| - Financial management, gender sensitization procurement, safeguards and training provided **By 2013,**  
- Professional staff hired by MDF with 15% recruitment of qualified women  
- Training on concession, lease and management contracts carried out  
- Studies and due diligences for subsequent projects prepared | | Risk  
- Political issues shift urban transport priority |

### Activities with Key Milestones

1. **Construction, Improvement and Rehabilitation of Urban Transport Infrastructure**
   - **Tranche 1:**
     1. Detailed design completed by month 12 from the effectiveness of the tranche 1 loan agreement (MDF, participating municipalities)  
     2. Urban infrastructures constructed, commissioned, and made operational in phases by month 60 (MDF, participating municipalities, contractors)  
     3. Equipment procured and delivered by month 36 (MDF, participating municipalities, manufacturers)  
   - **Tranche 2:**
     1. Detailed design completed by month 12 from the effectiveness of the tranche 2 loan agreement (MDF, participating municipalities)  
     2. Timely land acquisition and implementation of resettlement plans before contract awards (MDF, participating municipalities)  
     3. Urban infrastructures constructed, commissioned, and made operational in phases by month 60 (MDF, participating municipalities, contractors)  
     4. Machinery & equipment procured and delivered by month 36 (MDF, participating municipalities, manufacturers)  
   - **Tranche 3:**
     1. Detailed design completed by month 12 from the effectiveness of the tranche 3 loan agreement (MDF, participating municipalities)  
     2. Timely land acquisition and implementation of resettlement plans before contractors contract awards (MDF, participating municipalities)  
     3. Urban infrastructures constructed, commissioned, and made operational in phases by month 60 by contractors (MDF, participating municipalities, contractors)  
     4. Machinery and equipment procured and delivered by month 36 (MDF, participating municipalities, manufacturers)  

2. **Institutional Capacity Development Plan**
   - Households survey and strategic traffic model developed by month 12 (MDF, Tbilisi municipality)  
   - Multimodal team set-up at the municipal level by month 12 and multimodal concept initiated by month 18 (participating municipalities)  
   - Sex-disaggregated public transport survey and database developed by month 24 (participating municipalities, operators)  

3. **Program Management Facility**
   - Safeguards specialist(s) recruited by month 6 (MDF, participating municipalities)  
   - Gender Focal point in MDF identified and supported by ADB  
   - Training plan carried out as appropriate by month 48, with at least 15% of women participants (MDF, participating municipalities)  
   - Support provided to the program development, implementation and management for the whole duration of the program (MDF, participating municipalities).  

**Tranche 2: to be approved by end of 2010-beginning of 2011**  
**Tranche 3: to be approved by end of 2013**  

**ADB** = Asian Development Bank, **ADF** = Asian Development Fund, **km** = kilometer, **MDF** = Municipal Development Fund, **MFF** = multitrancher financing facility, **MRDI** = Ministry of Regional Development and Infrastructure, **NGO** = nongovernment organization, **OCR** = ordinary capital resources, **PMU** = program management unit, **PPP** = public–private partnership.  

Problem Tree Analysis

Core Problem

Inadequate urban transport services

Effects

Environmental degradation and unsustainable policy
Degraded city livability and poor public health
Decreased city attractiveness and limited private investment
Limited economic growth prospects and access to employment opportunities

Causes

Poor urban transport services coverage
Technical sustainability
Weak or inappropriate institutional capacity
Institutional sustainability
Insufficient funds for efficient delivery
Financial sustainability

Severe safety risks and quality of services problems
Decreasing availability of the rolling stocks and equipment
Ageing assets underperforming and unviable to operate and maintain
Urban sprawl and inefficiency for public transport
Inefficient urban transport services

Limited transport planning and coordination with urban development
Inadequate investigations resulting inappropriate design
No transfers’ facility or interchange hubs
No integrated tariff or ticketing policy
Limited integration or coordination between urban transport modes
Lack of legal and regulatory framework
Inability to enforce regulations and incentivize service delivery
Lacking knowledge on best practices
Limited training capacity
No PPP framework for urban transport

Proposed EBRD Loan for rolling stock renewal in Tbilisi and Batumi
Proposed World Bank technical assistance for Mtkvari bridge feasibility study
EBRD Loan for Tbilisi Railway bypass

EBRD = European Bank for Reconstruction and Development, PPP = Public-private partnership-
LIST OF LINKED DOCUMENTS
http://www.adb.org/Documents/RRPs/?id=42414-01-3

1. Agreements
   Framework Financing Agreement and First Periodic Financing Request
   Draft Loan Agreement
   Draft Project Agreement
2. Summary Sector Analysis
3. Facility Administration Manual
4. Project Classification Summary
5. Contribution to the Output Aggregates of ADB’s Results Framework
6. Development Coordination
7. Economic and Financial Analyses
8. Country Economic Indicators
9. Summary Poverty Reduction and Social Strategy
10. Gender Action Plan
11. Environmental Assessment and Measures
    Environmental Assessment and Review Framework
    Initial Environmental Examination – Tbilisi University Metro Extension
    Initial Environmental Examination – Rehabilitation and Reconstruction of Secondary
    Road Zugdidi-Jvari-Mestia-Lasdili Road
    Initial Environmental Examination – Tbilisi Urban Environment and Gorgasali Road
    Rehabilitation
    Environmental Review and Categorization – Kutaisi Alternative Urban Transport
    Development
12. Involuntary Resettlement Assessment and Measures
    Land Acquisition and Resettlement Framework
13. Risk Management Assessment and Risk Management Plan
14. Others
    Tentative List of Subprojects to be Implemented under the MFF