



Periodic Financing Request Report

Project Number: 42417-033
MFF Number: 0056
September 2015

Armenia: Sustainable Urban Development Investment Program – Tranche 2

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 25 September 2015)

Currency Unit – dram (AMD)

AMD1.00 = \$0.0021

\$1.00 = AMD475.00

ABBREVIATIONS

ADB	–	Asian Development Bank
DESC	–	detailed engineering and supervision consultant
EIRR	–	economic internal rate of return
IEE	–	initial environmental examination
LARP	–	land acquisition and resettlement plan
LIBOR	–	London interbank offered rate
MFF	–	multitranche financing facility
PMIC	–	program management and institutional consultant

NOTES

In this report, "\$" refers to US dollars.

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TRANCHE AT A GLANCE

1. Basic Data		Project Number: 42417-033	
Project Name	Sustainable Urban Development Investment Program - Tranche 2	Department /Division	CWRD/CWUW
Country Borrower	Armenia, Republic of Ministry of Finance	Executing Agency	Ministry of Economy
2. Sector	Subsector(s)	ADB Financing (\$ million)	
✓ Transport	Urban roads and traffic management		112.97
		Total	112.97
3. Strategic Agenda	Subcomponents	Climate Change Information	
Inclusive economic growth (IEG)	Pillar 1: Economic opportunities, including jobs, created and expanded	Climate Change impact on the Project	Medium
Environmentally sustainable growth (ESG)	Urban environmental improvement		
4. Drivers of Change	Components	Gender Equity and Mainstreaming	
Governance and capacity development (GCD)	Institutional development	Some gender elements (SGE)	✓
Partnerships (PAR)	Implementation Private Sector		
5. Poverty Targeting		Location Impact	
Project directly targets poverty	No	Urban Nation-wide	High Low
6. Risk Categorization: Complex			
7. Safeguard Categorization Environment: B Involuntary Resettlement: A Indigenous Peoples: C			
8. Financing			
Modality and Sources		Amount (\$ million)	
ADB		112.97	
Sovereign MFF-Tranche (Loan): Ordinary capital resources		112.97	
Cofinancing		0.00	
None		0.00	
Counterpart		37.34	
Government		37.34	
Total		150.31	
9. Effective Development Cooperation			
Use of country procurement systems		No	
Use of country public financial management systems		No	

TRANCHE AT A GLANCE

Date of Receipt by ADB of PFR: 16 April 2015

Tranche Number: 2

10. Country Operations Business Plan

CPS

<http://www.adb.org/documents/armenia-country-partnership-strategy-2014-2018>

COBP

<http://www.adb.org/documents/armenia-country-operations-business-plan-2015-2017>

11. Tranche Summary

The national government and YM have invested more than \$280 million from 2005 to 2014 in upgrading infrastructure. But these investments, except for Tranche 1 of the Investment Program and some other piecemeal actions, are only addressing immediate problems. Tranche 1 and the proposed Tranche 2 will give a long-term approach to the traffic and urban infrastructure by diverting traffic from the city center through the creation of a new, reliable, and efficient bypass of the city of Yerevan. This is part of the strategic framework for urban renewal that YM has undertaken. The project is backed by a roadmap, policy framework, and long-term investment plan until 2025 split into short, medium, and long-term actions.

Impact and Outcome: The impact will be improved road traffic safety and enhanced local economy in Yerevan. The outcome will be efficient, reliable, and affordable urban infrastructure and services provided in Yerevan by 2020.

Outputs: (i) Urban transport infrastructure extended, rehabilitated, and improved in Yerevan, (ii) Appropriate institutional capacity strengthened in Yerevan, and (iii) Skilled and efficient program implementation system established.

Implementation Arrangements: Ministry of Economy will be the executing agency.

Project Readiness: Detailed engineering designs of the Argavand-Shirak road link contract package including drawings, technical specifications, a cost estimation, a bill of quantities, and draft bid documents are completed, and the initial environmental examination (IEE) was disclosed on 5 June 2015. As part of the advance procurement, the invitation for bids was posted on 10 June 2015 and bid submission was on 7 August 2015. The PIU is currently preparing the bid evaluation report for submission to ADB by the end of October 2015. The Babajanyan-Ashtarak highway and Davitashen-Ashtarak highway detailed designs are ongoing and should be finalized by end of November 2015.

12. Significant Developments in the MFF and Previous Tranches

Tranche 1 (Loan 2752) is a loan of \$48.64 million equivalent from the ADB's Special Fund resources, which was signed on 19 May 2011 and declared effective on 19 July 2011. Contract awards and disbursements have reached \$28.44 million (68.52%) and \$18.30 million (41.1%). The physical progress is 55% against the elapsed time of 84% and the project is rated on track.

Physical progress. First construction tender for road rehabilitation in Yerevan which is the widening of Arshakunyats street (\$3.40 million) was awarded in December 2013 and was physically and satisfactorily completed in December 2014. The second construction tender for road rehabilitation in Yerevan which is the widening of Artashat highway and construction of new Shirak road and roundabout (\$21.82 million) was awarded in December 2014 and construction will be completed as originally scheduled.

Nonphysical progress. Consulting services for DED, construction supervision, and preparation of projects to be financed under the Investment Program were performed under Tranche 1 and services are being performed satisfactorily. Project management consultants were also engaged to assist in procurement support, safeguards preparation and monitoring, and other institutional development and strengthening plan for the project.

FFA undertakings and loan covenants for Tranche 1 that were due at the time of processing of the 2nd MFF tranche have been complied with.

13. Milestones

Estimated Approval
5 October 2015

Estimated Effectiveness
31 January 2016

Estimated Completion^a
30 March 2020

14. Linked Documents

	Required Document	Disclosure Date
(i) Environment	IEE - Initial Environment Examination	
Weblink:	http://www.adb.org/projects/documents/sustainable-urban-development-investment-program-t2-yerevan-western-ring-road-iee http://www.adb.org/projects/documents/sudip-t2-yerevan-western-ring-road-link-davitashen-ashtarak-highway-iee http://www.adb.org/projects/documents/sustainable-urban-development-investment-t2-yerevan-western-ring-road-link-3-argavand-junction-iee	17 April 2015 11 June 2015 5 June 2015
(ii) Involuntary resettlement	RP - Resettlement Plan	
Weblink:	http://www.adb.org/projects/documents/sustainable-urban-development-investment-t2-argavand-shirak-rp http://www.adb.org/projects/documents/sustainable-urban-development-investment-program-t2-yerevan-western-ring-road-rp	16 June 2015 20 April 2015
(iii) Indigenous peoples		
Weblink:		

^a For Tranches, this refers to the financial closing date.

I. BACKGROUND

1. The Asian Development Bank (ADB) and the Republic of Armenia signed a framework financing agreement for the multitranche financing facility (MFF) for the Sustainable Urban Development Investment Program on 24 March 2011. On 19 April 2011, ADB's Board of Directors approved the MFF for financing the program in an amount not exceeding \$400 million. The MFF closing date is 31 December 2020, and it is expected to have six tranches that will be processed until 2019. The program's executing agency is the Ministry of Economy, and the implementing agency is Yerevan Municipality.

2. The turbulent conditions experienced by Armenia since independence has led to a range of problems in the urban transport subsector, including physical challenges because of the degraded state of the road network and sidewalks, and poor quality of public transport infrastructure and services, such as metro, bus, and trolleybus. Other non-physical challenges include limited institutional capacity to provide an integrated transport network, a deteriorating road safety record, and a lack of passenger information or integrated fares systems. Improved urban road and street connections throughout the country is a priority for the Government of Armenia, as these are essential to improving residents' quality of life, attracting investment, raising productivity and competitiveness, and reducing pollution.

3. The sector roadmap prepared within the MFF includes a list of actions that aim to deal with identified issues. These actions are integrated and inter-related through various projects to coherently develop the urban infrastructure and urban transport network in Yerevan and, through subsequent tranches, in other municipalities. The different infrastructures are developed in a holistic vision: the issue is to propose complementary projects for all transport modes, especially road and public transport networks.

4. Project 1 was approved on 9 May 2011, signed on 19 May 2011, and made effective on 19 July 2011 for a loan of \$48.64 million from ADB's Special Funds. The loan closing date is 30 June 2016. Project 1 mainly focuses on the construction of Yerevan's south western bypass. When fully implemented, this road will divert traffic from the city center and stimulate economic development in the city's outer areas.

5. Project 2 will improve the access to efficient, reliable, and sustainable urban infrastructures and services as a continuation of Project 1, and comprises three components: (i) implement the missing links of Yerevan Western Bypass; (ii) improve the project institutional capacity; and (iii) improve the project management facility, and finance consulting services. Tranche 2 will also finance preparation for Project 3. Through the Ministry of Finance, the government submitted the periodic financing request for Tranche 2 on 16 April 2015, requesting a \$112.97 million loan from ADB's ordinary capital resources.

II. ASSESSMENT OF MFF IMPLEMENTATION

6. **Sector policy, strategy, and road map.** The national government and Yerevan Municipality invested more than \$280 million from 2005 to 2014 to upgrade infrastructure. But these investments, except for the program's Tranche 1 and some piecemeal actions, are only addressing immediate problems.

7. Project 1 and the proposed Project 2 will take a long-term approach to the traffic and urban infrastructure, as indicated in the roadmap, by creating a reliable and efficient bypass of Yerevan city to divert traffic from the city center. This is part of Yerevan Municipality's strategic framework for urban renewal.

8. The MFF is backed by a roadmap, policy framework, and long-term investment plan until 2025 split into short-, medium-, and long-term actions some of which have been partially completed, for instance the construction of the Yerevan bypass. Other actions are currently in the design phase. Institutional development is under implementation.¹

A. Assessment of Investment Program Implementation

9. Project 1 (L2752) contract awards reached \$28.44 million (68.52%) and disbursements reached \$18.30 million (41.1%) as of 14 September 2015. The project's physical progress is at 55% against 84% of elapsed time, and the project is rated *on track*. The Argavand–Shirak Road Link, including the Hrazdan River bridge, was moved to Project 2 because after detailed design, the package's total costs substantially increased, resulting in a shortage of funds under Project 1. The transfer of this civil works package resulted in some savings under Project 1.² These savings will be used under Project 1's Component A for the extension of Artashat Highway up to the North–South Corridor, as this remaining section was not covered by the two ADB-funded North–South Corridor projects. The new bus ticketing system and bus stop rehabilitation are also included under Project 1.

- i. **Component A: Urban infrastructure.** Project 1 has two construction tenders for road rehabilitation in Yerevan. The first is the widening of Arshakunyats street (\$3.09 million), and was awarded in December 2013 and satisfactorily completed in December 2014. The second is the widening of Artashat highway and construction of a Shirak road and roundabout (\$15.62 million), and was awarded in December 2014. Construction is scheduled for completion in June 2016. The project engaged the independent monitoring agency consultant in May 2012 and the detailed engineering and supervision consultant (DESC) in September 2012, and services of both are ongoing. Equipment for the integrated bus ticketing system and bus stop rehabilitation will be procured in the first quarter of 2016.
- ii. **Component B: Institutional strengthening.** The contract of the program management and institutional consultant (PMIC) was signed on 27 December 2012, amounting to \$4.2 million. The contract expired on 11 February 2015. As a result of the contract's expiration, the final deliverables related to bus and microbus reform and tendering are pending, and Yerevan Municipality is recruiting new consultants to reach the outcome. The sex-disaggregated baseline survey and multimodal committee setup are completed, and the multimodal tariff and ticketing system are partially completed.
- iii. **Component C: Program management and capacity building.** The PMIC was responsible for the program management and capacity building component. The PMIC-led management and capacity building did not reach one of the required outcomes (training plan). The project engaged additional Yerevan Development Project Implementation Unit support staff to meet the desired output.

10. As part of the MFF, the government is requesting ADB for a second tranche to help it address the urban infrastructure problem within the urban renewal strategy framework. The policy reform framework has been implemented under Project 1, and all outputs to be delivered by 2016 are ongoing or completed, except for the bus improvement design.

¹ A table setting out the implementation status of the road map is attached Supplementary Appendix A.

² Minor change in individual project to remove Argavand Highway–Shirak Street (West) from Tranche 1's project scope and include under Tranche 2, approved on 11 March 2014.

B. Compliance

11. The program complied with framework financing agreement undertakings and loan covenants for Project 1 that were due at the time of processing of the MFF's second tranche.³

12. **Safeguards compliance.** Project 1 is classified as category B for environment and category A for involuntary resettlement. Prior to the award of the urban road infrastructure contracts in Yerevan under Project 1, ADB cleared the land acquisition and resettlement plan (LARP) to compensate the affected households. An independent monitoring agency, selected by the project implementation unit, prepared a compliance report. Under Project 1, ADB and the government developed and approved a LARP covering Arshakunyats street and Artashat Highway (LARP 1), as well as a LARP covering New Shirak area (LARP 3). LARP 1 was implemented from 2013 to 2014, and ADB approved and disclosed the compliance reports in June and November 2014. LARP 3 is about 90% implemented, with contracts and/or agreements signed and compensation paid to affected persons. There are three cases under the court, which will be finalized by the end of November 2015. According to the local legislation, the court should provide its decision within 2 months after application. The compliance report for LARP 3 was approved by ADB in August 2015. Under Project 1, ADB developed and approved LARP 2 covering Argavand–Shirak in January 2014. Because of shortage of funds under Project 1, the Argavand–Shirak Road Link was moved to Project 2. Due to minor changes in the design, LARP 2 was updated in April and May 2015 and was approved and disclosed by ADB in June 2015.

13. The site-specific environmental management plans are included in the civil works contracts. As required under the loan agreement, Yerevan Municipality submits periodic environmental monitoring reports that indicate satisfactory compliance with environmental safeguards. ADB's safeguards team considered the implementation of safeguards satisfactory, through the review of biannual reports and regular participation in project review missions.

14. **Gender compliance.** Yerevan Municipality assigned the implementation of the gender action plan to the monitoring and evaluation specialist. Project 1 is classified as "some gender elements," and Yerevan Municipality developed a gender action plan for the tranche.

III. PERIODIC FINANCING REQUEST

A. Impact and Outcome

15. The project's impact will be improved road traffic safety and enhanced local economy in Yerevan city. The outcome will be efficient, reliable, and affordable urban infrastructure and services provided in Yerevan city.

B. Outputs

16. The outputs include (i) urban transport infrastructure extended, rehabilitated, and improved in Yerevan; (ii) appropriate institutional capacity strengthened in Yerevan; and (iii) skilled and efficient program implementation system established. Tranche 2 will also finance Project 3 preparation.

³ Tables setting out the status of compliance with the Tranche 1 covenants and FFA undertakings are attached as Supplementary Appendixes B and C.

1. **Component A:** Urban transport infrastructure extended, rehabilitated, and improved in Yerevan.

17. Under this component, the project will construct the (i) Argavand–Shirak Road Link, (ii) Babajanyan–Ashtarak Highway, and (iii) Davitashen–Ashtarak Highway, including two interchanges.

2. **Component B:** Appropriate institutional capacity strengthened in Yerevan.

18. Under this component, the project will (i) train Yerevan Municipality transport department and transport authority staff on transport and traffic models (with at least 25% women recruited and trained), (ii) make the transport model fully operational, and (iii) train Yerevan Municipality transport department staff and transport authority staff on transport asset management.

3. **Component C:** Skilled and efficient program implementation system established.

19. Under this component, the project will (i) recruit and train additional project implementation unit staff (at least 25% women), and (ii) create baseline data and conduct surveys with sex disaggregated data by Yerevan Municipality and operators.

C. Investment and Financing Plans

20. Tranche 2 is estimated to cost \$150.31 million (Table 1). The Tranche 1 project design engineering and supervision consultants prepared cost estimates based on the project's layout. The estimates of Tranche 1's detailed designs were used as a basis for Tranche 2 estimations.

Table 1: Tranche Investment Plan
(\$ million)

Item	Amount ^a
A. Base Cost^b	
1. Component A: Urban transport infrastructure improvement	110.59
2. Component B: Institutional strengthening	4.99
3. Component C: Project management facility and consulting services	2.37
4. Preparation of Tranche 3	4.99
Subtotal (A)	122.94
B. Contingencies^c	23.37
C. Financing Charges During Implementation^d	4.00
Total (A+B+C)	150.31

^a Includes \$37.34 million to be financed in cash from the government for taxes and duties and from Yerevan Municipality for land acquisition.

^b In mid-2014 prices.

^c Physical contingencies computed at 10% for civil works and 20% for land acquisition and resettlement plan (LARP). Price contingencies computed at 5% on local currency costs and 5% on foreign exchange costs due to the recent volatility of the USD/AMD exchange rate.

^d Includes interest and commitment charges. Interest during construction for ADB loan has been computed at the 5-year London interbank offered rate (LIBOR) plus a spread of 0.50%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount (for LIBOR-based loans only).

Source: Asian Development Bank.

21. The government has requested a loan of \$112.97 million from ADB's ordinary capital resources to help finance the project. The loan will have a 22-year term, including a 15-year grace period, straight line repayment method, annual interest rate determined following ADB's London interbank offered rate (LIBOR)-based lending facility, commitment charge of 0.15% per

year, and such other terms and conditions set forth in the draft loan and project agreements. Based on this, the average loan maturity is 18.75 years, and the maturity premium payable to ADB is 0.20% per annum. The interest and other charges during construction, as applicable, will be capitalized in the loan. The financing plan is presented in Table 2.

22. The government has provided ADB with (i) the reasons for its decision to borrow under ADB's LIBOR-based lending facility based on these terms and conditions, and (ii) a confirmation that these were its own decisions and not made based on any communication with or advice from ADB.

Table 2: Financing Plan

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank (ADB)	112.97	75.16
Government	37.34	24.84
Total	150.31	100.00

Source: ADB estimates.

D. Implementation Arrangements

23. The Ministry of Economy will be the executing agency and Yerevan Municipality will be the implementing agency. The implementation arrangements are summarized in Table 3 and detailed in the project administration manual.⁴

Table 3: Implementation Arrangements

Aspects	Arrangements		
Implementation period	December 2015 – September 2019		
Estimated completion date	30 September 2019 (Loan closing date 30 March 2020)		
Management			
(i) Executing agency	Ministry of Economy		
(ii) Implementing agencies	Yerevan Municipality		
(iii) Implementation unit	Existing “Investing Projects Implementation Unit Building up of Yerevan” CNCO (12 current staff members plus 8 full-time staff consultants)		
Procurement	ICB	2 works contracts	\$92.57 million
	Shopping	1 goods contract	\$0.05 million
Consulting services	QCBS	3 contracts 288 PMs (international) 912 PMs (national)	\$11.50 million
	LCS, CQS	2 contracts 38 PMs (national)	\$0.28 million
	ICS	Multiple contracts, including PIU incremental administration 32 PMs (international) 3 PMs (national)	\$1.91 million
Advance contracting	Advance contracting is requested for procurement of civil works for Argavand–Shirak urban road link.		

⁴ The project administration manual is accessible from the list of linked documents in Appendix 5.

Aspects	Arrangements
Disbursement	The loan proceeds will be disbursed in accordance with ADB's <i>Loan Disbursement Handbook</i> (2015, as amended from time to time) and detailed arrangements agreed upon between the government and ADB.

ADB = Asian Development Bank, CNCO = community non-commercial organization, CQS = consultants' qualifications selection, ICB = international competitive bidding, ICS = individual consultant selection, LCS = least-cost selection, PIU = project implementation unit, PM = person-month, QCBS = quality- and cost-based selection. Source: ADB estimates.

24. The construction supervision consultant overseeing the implementation of Project 2 work contracts, as well as consultants for the Project 3 feasibility study and the development of the Yerevan transport model, will be recruited following ADB's Guidelines on the Use of Consultants (2013, as amended from time to time). These consultants will be recruited through firms using quality- and cost-based selection with a quality–cost ratio of 90:10. Shortlisted firms will be required to submit full technical proposals.

E. Project Readiness

25. Detailed engineering designs of the Argavand–Shirak road link contract package—including drawings, technical specifications, a cost estimation, a bill of quantities, and draft bid documents—are completed, and the initial environmental examination (IEE) was disclosed on 5 June 2015. As part of the advance procurement, the invitation for bids was posted on 10 June 2015 and bid submission was on 7 August 2015. The PIU is currently preparing the bid evaluation report for submission to ADB by the end of October 2015. The Babajanyan–Ashtarak highway and Davitashen–Ashtarak highway detailed designs are ongoing and should be finalized by end of November 2015.

F. Advance Contracting

26. On 25 May 2015, ADB approved the government's request for advance contracting for the procurement of civil works for the Argavand–Shirak urban road link. ADB has advised the government that advance contracting approval does not constitute a commitment by ADB to subsequently approve the project or finance the procurement costs.

IV. DUE DILIGENCE

A. Technical

27. Yerevan Municipality has finalized the detailed design and bidding package for the Argavand–Shirak road link, and ADB developed, approved, and disclosed the LARP for this section (LARP 2) under Project 1. Because of inadequate funds, the road link's construction works were moved to Project 2 but the LARP remained under Project 1 and is pending implementation.

28. The detailed engineering and supervision consultant (DESC) has finalized the detailed design of the Davitashen–Ashtarak section. Yerevan Municipality has issued an initial survey decree for beginning a detailed measurement survey and socio-economic survey for the LARP. The government decree was approved on 21 May 2015, and field work will follow. Implementation of the measurements and valuations are finalized. By the end of November 2015, DESC will submit the draft LARP for ADB and government's approval.

29. The DESC will provide the draft design of the Babajanyan–Ashtarak road link by the end of October 2015. After finalizing the Davitashen–Ashtarak LARP, the DESC will start the road

link-related field surveys. The DESC is also developing the revised IEE required to start the bidding processes, and should have it ready by the end of November 2015.

B. Economic and Financial

30. The major economic benefits accruing from Projects 1 and 2 will be savings in travel time and vehicle operating cost per kilometer, as well as fewer traffic accidents. The analysis showed the subprojects are economically viable. Three alternatives were evaluated. The economic internal rate of return (EIRR) for Alternative 1 is 13.40%, while for Alternative 2 it is 13.21%. The EIRR is 15.80% for the optimal and selected option (Alternative 3). A sensitivity analysis confirmed this viability, with an EIRR of 14.85% for a 10% increase in construction and maintenance costs, and an EIRR of 14.75% for a 10% increase for vehicle operating costs and value of time, indicating that the EIRRs, though lower than the base case EIRR, are above 12.00%. In Project 2, no revenue-generating components will be implemented, so no financial analysis has been done. Project area operation and maintenance costs will increase by 3% annually after compensation for inflation.

C. Governance

31. Yerevan Municipality is the implementing agency for Project 1 and has adequate capacity to manage Project 2 and continue implementation. A financial management assessment was conducted for Yerevan Municipality. The procurement assessment demonstrated adequate capacity and systems to procure goods and services through international and national competitive bidding following ADB's Procurement Guidelines (2015, as amended from time to time).

32. ADB explained and discussed its Anticorruption Policy (1998, as amended to date) with the government and Yerevan Municipality. The specific policy requirements and supplementary measures are described in the project administration manual.

D. Poverty, Social, and Gender Dimensions

33. The program will benefit more than 2.1 million people residing in Yerevan. The project's strategic vision is to promote a sustainable, integrated, socially affordable, and cost-efficient urban transport system. By 2030, with the investment program's social benefits, urban transport will improve access to businesses and communities, sustain economic and tourism development, and enable citizens to have more economic and social opportunities. Project 2 will improve living conditions and the economic and urban environment in the municipality, especially in districts traversed by the project's roads. The potential beneficiaries are the government, municipality, local residents, commuters, road and public transport users, public transport providers, and road construction companies. The poor and socially excluded, especially in poorer suburbs such as Malatia-Sebastia district, will benefit from the program through: (i) improved access to social, educational, health, commercial, and cultural centers; (ii) affordable transport alternatives to travel to the city; (iii) better living conditions and an improved environment; (iv) the possibility of work on maintenance of the road project; and (v) the possibility of developing business activities in the project area after the project end.

E. Safeguards

34. **Environment.** Project 2 is categorized as B for environment, as it will not have significant irreversible environmental impacts during or after construction. The government adopted an environmental assessment and review framework, based on ADB's Safeguard Policy Statement (2009), which is used for all projects' environmental safeguards. The draft

IEEs (separate for the Davitashen–Ashtarak highway road link and Babajanyan–Ashtarak highway road link) and final IEE for the Argavand–Shirak road link were prepared and disclosed on the ADB website.⁵ Most of the predicted impacts are common during construction, such as dust, noise, vibration, and other disturbance to residents' livelihood and traffic. Yerevan Municipality will require contractors to prepare and implement the site-specific environmental management plans for each subproject to implement the environmental impact mitigation requirements of the environmental impact assessment and IEEs, which will also form an integral part of construction contracts. The construction supervision consultants will endorse site-specific environmental management plans, and the supervision engineer and Yerevan Municipality will then review and approve them, as under Project 1. The construction supervision consultants will assist Yerevan Municipality in monitoring the project's compliance with environmental requirements. A preliminary project climate risk-screening checklist review was done, and the tool confirmed the overall risk is medium, implying no further, more detailed climate risk analyses are needed.

35. **Involuntary resettlement.** Project 2 is categorized as A for the involuntary resettlement safeguard. Three LARPs are being prepared for Project 2 for its three sections (i) Argavand–Shirak Road Link section (29 affected properties) comprising LARP 2, which was moved from Project 1 (para. 9); (ii) Davitashen–Ashtarak Road Link section (nearly 100 affected properties); and (iii) Babajanyan–Ashtarak Road Link section (nearly 1,000 affected properties).⁶ Affected assets total 1,129, and estimated affected households total 351, comprising 1,405 persons. Since construction works for LARP 2 were moved to Project 2, its design and LARP were slightly modified, resulting in 2 new households affected (26 total) and impacts on 5 properties revised due to the changed geometry of the road. The total area of land taken for Project 2 is 294,417 square meters (29.44 hectares). The implementing agency is developing the government decree for initial survey of properties for the Babajanyan–Ashtarak Road Link section, and has already initiated initial survey decree for the Davitashen–Ashtarak Road Link section, as a precondition for starting field work, measurements, and surveys.

36. **Indigenous peoples.** Project 2 is classified as C for the indigenous peoples' impact. The investment program area does not include communities that may be defined as indigenous peoples under ADB's Safeguard Policy Statement (2009).

F. Risks and Mitigating Measures

37. The major risks are associated with land acquisition and resettlement and include (i) discrepancies between the actual measurements and cadastral maps, and (ii) legal problems or missing documents related to the assets or affected persons. Major risks and mitigating measures are summarized in Table 4 and detailed in the risk assessment and risk management plan (Appendix 10). The integrated benefits and impacts are expected to outweigh the costs.

Table 4: Summary of Risks and Mitigating Measures

Risks	Mitigating Measures
Vulnerability of the economy to exogenous shocks.	Project includes physical and price contingencies to cover these extra costs
Political debate shifting urban transport and	Project is essential to reduce transport costs and

⁵ The IEE for Babajanyan–Ashtarak highway was disclosed on 17 April 2015, the IEE for Argavand–Shirak road link on 5 June 2015, and the IEE for Davitashen–Ashtarak highway road link on 11 June 2015.

⁶ The preliminary LARP for the three sections disclosed on 20 April 2015 and the LARP for the Argavand–Shirak Road Link was disclosed on 16 June 2015.

Risks	Mitigating Measures
infrastructure rehabilitation focus over other projects.	ensure north–south connectivity.
Interdepartmental coordination and support not forthcoming.	Central government ratifies the loan agreement.
Discrepancies in cadastral database application during LARP preparation and implementation can lead to complaints.	YM cooperates with State Committee of the Real Estate Cadaster to eliminate possible discrepancies in the cadastral maps and database. In addition, during the DMS and SES, the DESC collects all necessary legal documents that will be provided to YM to decrease the number of possible legal problems in documentations.
Operation and maintenance is not adequate.	YM will implement under Component B of the loan a transport model that will also reflect the needs of O&M in relation to the street hierarchy within the city of Yerevan and for the upcoming years.

DESC = detailed engineering and supervision consultant, DMS = detailed measurement survey, LARP = land acquisition and resettlement plan, O&M = operation and maintenance, SES = socio-economic survey, YM = Yerevan Municipality.

Source: Asian Development Bank.

G. Risk Categorization

38. Project 2 is categorized as complex, as it has been classified as A for involuntary resettlement.

V. ASSURANCES AND CONDITIONS

39. The government and Yerevan Municipality have assured ADB that project implementation shall conform to all applicable ADB policies, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement, as detailed in the project administration manual and loan documents.

40. The government and Yerevan Municipality have agreed with ADB on certain covenants for the project, which are set forth in the loan agreement and project agreement.

VI. RECOMMENDATION

41. On the basis of the approval by ADB's Board of Directors for the provision of loans under the multitranchise financing facility in an aggregate principal amount not exceeding \$400 million to the Republic of Armenia for the Sustainable Urban Development Investment Program, it is recommended that the President approve the proposed tranche as described in para. 21 and such other terms and conditions as are substantially in accordance with those set forth in the draft loan and project agreements for the proposed tranche.

DESIGN AND MONITORING FRAMEWORK FOR TRANCHE 2

Impact the Project is aligned with:			
Improved road traffic safety and enhanced local economy in Yerevan. ¹			
Project Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
Outcome Efficient, reliable, and affordable urban infrastructure and services provided in Yerevan	By 2020 a. Travel time from South to North Yerevan (calculated from north south road connection points, 45 min as 2009) decreased by 30% compared to existing alternative routes. b. Yerevan Municipality respective staff use the multimodal transport model in the decision making process (incorporate the model in all new traffic infrastructures, baseline is 0, no model developed as of now)	a. NGO, international and national organizations IA progress report b. Municipal Transport statistics	Political debate shifting urban transport and infrastructure rehabilitation focus over other projects
Outputs 1. Urban transport infrastructure extended, rehabilitated, and improved in Yerevan	By Q1 2019 1a. Argavand - Shirak Road Link 1.35 km including a new bridge over Hrazdan River of 250 m length 1b. Babajanyan – Ashtarak highway, 6.85 km 1c. Davitashen-Ashtarak highway; of 2.24 km including 2 interchanges	1a-c. IA project progress reports 1a-c. YM, SUDIP websites and other municipal communication and media materials	
2. Appropriate institutional capacity strengthened in Yerevan	By Q1 2018 2a. YM transport department and transport authority staff trained on transport and traffic models (minimum 4 staff recruited and trained, with at least 25% women) 2b. YM transport department staff and transport authority staff	2a-b. IA project progress reports 2a-b. YM, SUDIP websites	Interdepartmental coordination and support is not forthcoming

¹ Impact statement in the approved MFF 0056-ARM (24 March 2011).

Project Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
	trained on asset management (minimum 4 staff trained)		
3. Skilled and efficient program implementation system established	By 2020 3a. PIU additional staff is recruited and trained (at least 25% women, with a minimum of 1) 3b. Yearly contracts awards and disbursement targets are achieved by IA 3c. ADB procedures and policy for safeguards, public communications and procurements are timely implemented and complied with by YM staff	3a-c. IA project progress reports 3a-c. YM, SUDIP websites	Interdepartmental coordination and support is not forthcoming
Key Activities with Milestones 1. Urban transport infrastructure extended, rehabilitated and improved in Yerevan 1.1 Complete detailed design for Davtashen-Ashtarak highway and Babajanyan-Ashtarak urban road links by October 2015. 1.2 Implement LARPs before contracts awards by March 2016. 1.3 Complete bidding process for civil works by March 2017. 1.4 Complete construction of all civil works by January 2019. 1.5 Complete construction supervision of the road links by January 2019. 1.6 Feasibility study for T3 developed by April 2017. 1.7 Detailed design for T3 developed by October 2017. 2. Appropriate institutional capacity strengthened in Yerevan 2.1 Produce final TOR for Yerevan Transport and Traffic Model by October 2015. 2.2 Yerevan Transport and Traffic Model developed by August 2017. 2.3 Develop training modules and conduct training by December 2017. 3. Skilled and efficient program implementation system established 3.1 Recruitment of additional PIU Staff by December 2015. 3.2 Baseline data created and surveys undertaken by October 2016.			
Inputs ADB: \$112,970,000 Ordinary capital resources Government: \$37,340,000			
Assumptions for Partner Financing Not Applicable			

ADB = Asian Development Bank, IA = implementing agency, LARP = land acquisition and resettlement plan, NGO = nongovernment organization, PIU = project implementation unit, RA = Republic of Armenia, SUDIP = Sustainable Urban Development Investment Program, TOR = terms of reference, YM = Yerevan Municipality

LOAN NUMBER _____-ARM

LOAN AGREEMENT
(Ordinary Operations)

(Sustainable Urban Development Investment Program - Project 2)

between

REPUBLIC OF ARMENIA

and

ASIAN DEVELOPMENT BANK

DATED _____

**LOAN AGREEMENT
(Ordinary Operations)**

LOAN AGREEMENT dated _____ between the REPUBLIC OF ARMENIA ("Borrower") and ASIAN DEVELOPMENT BANK ("ADB").

WHEREAS

(A) by a framework financing agreement dated 24 March 2011 between the Borrower and ADB, ADB has agreed to provide a multitranche financing facility to the Borrower for purposes of financing projects under the Sustainable Urban Development Investment Program;

(B) by a periodic financing request dated 14 April 2015, the Borrower has applied to ADB for a loan for the purposes of the Project described in Schedule 1 to this Loan Agreement;

(C) the Project will be carried out and implemented by Yerevan and, for this purpose, the Borrower will make available to Yerevan the proceeds of the loan provided for herein upon terms and conditions satisfactory to ADB; and

(D) ADB has agreed to make a loan to the Borrower from ADB's ordinary capital resources upon the terms and conditions set forth herein and in the Project Agreement of even date herewith between ADB and Yerevan;

NOW THEREFORE the parties hereto agree as follows:

ARTICLE I

Loan Regulations; Definitions

Section 1.01. All the provisions of the Ordinary Operations Loan Regulations Applicable to LIBOR-Based Loans Made from ADB's Ordinary Capital Resources, dated 1 July 2001 ("Loan Regulations"), are hereby made applicable to this Loan Agreement with the same force and effect as if they were fully set forth herein, subject, however, to the following modifications:

(a) Section 2.01(50) is deleted and the following is substituted therefor:

"Project Agreement" means the Project Agreement of even date herewith between ADB and Yerevan.

(b) The term "Project Executing Agency" appearing in Sections 7.04(b), 9.01(d), 9.01(f), 9.01(k), 10.01(c) and 10.02(c) of the Loan Regulations shall be substituted by the term "Yerevan".

- (c) Section 3.03 is deleted and the following is substituted therefor:

Commitment Charge; Credit; Maturity Premium. (a)

The Borrower shall pay a commitment charge on the unwithdrawn amount of the Loan at the rate and on the terms specified in the Loan Agreement.

(b) ADB shall provide to the Borrower a credit at the rate specified in the Loan Agreement, which credit shall remain fixed for the term of the Loan. ADB shall apply the credit against the interest payable by the Borrower.

(c) The Borrower shall pay a maturity premium at the rate specified in the Loan Agreement, which maturity premium shall remain fixed for the term of the Loan. ADB shall add the maturity premium to the interest payable by the Borrower.

- (d) Section 3.06 is deleted and the following is substituted therefor:

Rebate. (a) Following any announcement by

ADB that the Fixed Spread applicable to new Loans shall be reduced, ADB shall provide a Rebate to any Borrower with an outstanding Loan on which a higher Fixed Spread is applicable. The amount of the Rebate shall be determined by multiplying (i) the difference between the Fixed Spread applicable to the outstanding Loan and the Fixed Spread that will be applied to new Loans (expressed as a percentage per annum), by (ii) the principal amount of the outstanding Loan on which the Borrower shall pay interest for all interest periods commencing on and after the effective date of the lower Fixed Spread that will be applied to new Loans.

(b) Following any announcement by ADB that its Funding Cost Margin calculations with respect to any Loan Currency (or Approved Currency) in any Semester resulted in ADB achieving savings, ADB shall provide a Rebate to the Borrower. The amount of the Rebate shall be determined by multiplying (i) the Funding Cost Margin (expressed as a percentage per annum) by (ii) the principal amount of the Loan on which the Borrower shall pay interest for the Interest Period commencing immediately after the Semester for which the Funding Cost Margin was calculated. ADB shall apply the amount of the Rebate against the interest payable by the Borrower for the Interest Period commencing immediately after the Semester for which the Funding Cost Margin was calculated.

- (e) Section 3.07 is deleted and the following is substituted therefor:

Surcharge. (a) Following any announcement by ADB that the Fixed Spread applicable to new Loans shall be increased, any Borrower with an outstanding Loan on which a lower Fixed Spread is applicable shall pay ADB a Surcharge. The amount of the Surcharge shall be determined by multiplying (i) the difference between the Fixed Spread that will be applied to new Loans and the Fixed Spread applicable to the outstanding Loan (expressed as a percentage per annum), by (ii) the principal amount of the outstanding Loan on which the Borrower shall pay interest for all interest periods commencing on and after the effective date of the higher Fixed Spread that will be applied to new Loans.

(b) Following any announcement by ADB that its Funding Cost Margin calculations with respect to any Loan Currency (or Approved Currency) in any Semester resulted in ADB incurring additional costs, the Borrower shall pay ADB a Surcharge. The amount of the Surcharge shall be determined by multiplying (i) the Funding Cost Margin (expressed as a percentage per annum) by (ii) the principal amount of the Loan on which the Borrower shall pay interest for the Interest Period commencing immediately after the Semester for which the Funding Cost Margin was calculated. ADB shall add the amount of the Surcharge to the interest payable by the Borrower for the Interest Period commencing immediately after the Semester for which the Funding Cost Margin was calculated.

Section 1.02. Wherever used in this Loan Agreement, the several terms defined in the Loan Regulations have the respective meanings therein set forth unless modified herein or the context otherwise requires. Additional terms used in this Loan Agreement have the following meanings:

(a) “Consulting Guidelines” means the Guidelines on the Use of Consultants by Asian Development Bank and its Borrowers (2013, as amended from time to time);

(b) “Consulting Services” means the services to be financed out of the proceeds of the Loan as described in paragraphs 3(d) to 3(j) of Schedule 1 to this Loan Agreement;

(c) “Environmental Assessment and Review Framework” or “EARF” means the environmental assessment and review framework for the Investment Program, including any update thereto, agreed between the Borrower and ADB and incorporated by reference in the FFA;

(d) “Environmental Management Plan” or “EMP” means the environmental management plan for a Subproject, including any update thereto, incorporated in the IEE of such Subproject;

(e) “Environmental Safeguards” means the principles and requirements set forth in Chapter V, Appendix 1, and Appendix 4 (as applicable) of the SPS;

(f) “Facility” means the multitranche financing facility provided by ADB to the Borrower for purposes of financing projects under the Investment Program;

(g) “FFA” means the framework financing agreement dated 24 March 2011 between ADB and the Borrower with respect to the Facility;

(h) “Goods” means equipment and materials to be financed out of the proceeds of the Loan, including related services such as transportation, insurance, installation, commissioning, training, and initial maintenance, but excluding Consulting Services;

(i) “Initial Environmental Examination” or “IEE” means the initial environmental examination for a Subproject, including any update thereto, prepared and submitted by the Borrower pursuant to the requirements set forth in the EARF and cleared by ADB;

(j) “Investment Program” means the Sustainable Urban Development Investment Program;

(k) “Involuntary Resettlement Safeguards” means the principles and requirements set forth in Chapter V, Appendix 2, and Appendix 4 (as applicable) of the SPS;

(l) “Loan Disbursement Handbook” means ADB’s Loan Disbursement Handbook (2015, as amended from time to time);

(m) “PAM” means the project administration manual for the Project dated 9 July 2015 and agreed between the Borrower and ADB, as updated from time to time in accordance with the respective administrative procedures of the Borrower and ADB;

(n) “PFR” means the periodic financing request submitted or to be submitted by the Borrower for the purposes of each loan under the Facility, and, for the purpose of this Loan Agreement, means the periodic financing request dated 14 April 2015;

(o) “Procurement Guidelines” means ADB’s Procurement Guidelines (2015, as amended from time to time);

(p) “Procurement Plan” means the procurement plan for the Project dated 9 July 2015 and agreed between the Borrower and ADB, as updated from time to time in accordance with the Procurement Guidelines, the Consulting Guidelines, and other arrangements agreed with ADB;

(q) “Project facilities” means the facilities to be constructed, operationalized or provided under the Project;

(r) “Required Road and Urban Transport Maintenance Budget Increase” means that amount which is equal to the sum total of the increases in the road and urban

transport maintenance budget for Yerevan every year during the period 2016 to 2019 if such budget had been increased every year by 3% per annum, after compensation for inflation;

(s) “Resettlement Framework” or “RF” means the resettlement framework for the Investment Program, including any update thereto, agreed between the Borrower and ADB and incorporated by reference in the FFA;

(t) “Resettlement Plan” or “RP” means the resettlement plan for a Subproject, including any update thereto, prepared and submitted by the Borrower pursuant to the requirements set forth in the RF and cleared by ADB;

(u) “Road Maintenance Plan” means the long-term operation and maintenance plan for the road network in Yerevan;

(v) “Safeguard Policy Statement” or “SPS” means ADB's Safeguard Policy Statement (2009);

(w) “Safeguards Monitoring Report” means each report prepared and submitted by the Borrower to ADB that describes progress with implementation of, and compliance with, the EMPs and the RPs, including any corrective and preventative actions;

(x) “Subproject” means any one of the subprojects under the Urban Transport Infrastructure Component in Schedule 1 to this Loan Agreement;

(y) “Subproject Roads” means the roads, road links, highways and interchanges to be constructed under the Subprojects;

(z) “Transport and Traffic Model” means a sustainable urban transport and traffic model for Yerevan as more particularly described in the PAM;

(aa) “Works” means construction or civil works to be financed out of the proceeds of the Loan, including services such as drilling or mapping, and project related services that are provided as part of a single responsibility or turnkey contract, but excluding Consulting Services;

(bb) “YDPIU” means the Project implementation unit established by Yerevan in accordance with the PAM; and

(cc) “Yerevan” means Yerevan Municipality, or any successor thereto acceptable to ADB, which is responsible for the implementation of the Project.

ARTICLE II

The Loan

Section 2.01. (a) ADB agrees to lend to the Borrower from ADB's ordinary capital resources an amount of one hundred twelve million nine hundred seventy thousand Dollars (\$112,970,000), as such amount may be converted from time to time

through a Currency Conversion in accordance with the provisions of Section 2.06 of this Loan Agreement.

(b) The Loan has a principal repayment period of 7 years, and a grace period as defined in subsection (c) hereinafter.

(c) The term "grace period" as used in subsection (b) hereinabove means the period prior to the first Principal Payment Date in accordance with the amortization schedule set forth in Schedule 2 to this Loan Agreement.

Section 2.02. The Borrower shall pay to ADB interest on the principal amount of the Loan withdrawn and outstanding from time to time at a rate for each Interest Period equal to the sum of:

- (a) LIBOR;
- (b) 0.60% as provided by Section 3.02 of the Loan Regulations less a credit of 0.10% as provided by Section 3.03 of the Loan Regulations; and
- (c) a maturity premium of 0.20% as provided by Section 3.03 of the Loan Regulations.

Section 2.03. The Borrower shall pay a commitment charge of 0.15% per annum. Such charge shall accrue on the full amount of the Loan (less amounts withdrawn from time to time), commencing 60 days after the date of this Loan Agreement.

Section 2.04. Interest and other charges on the Loan shall be payable semiannually on 15 May and 15 November in each year.

Section 2.05. The Borrower shall repay the principal amount of the Loan withdrawn from the Loan Account in accordance with the provisions of Schedule 2 to this Loan Agreement.

Section 2.06. (a) The Borrower may at any time request any of the following Conversions of the terms of the Loan in order to facilitate prudent debt management:

- (i) a change of the Loan Currency of all or any portion of the principal amount of the Loan, whether withdrawn and outstanding or unwithdrawn, to an Approved Currency;
- (ii) a change of the interest rate basis applicable to all or any portion of the principal amount of the Loan withdrawn and outstanding from a Floating Rate to a Fixed Rate, or vice versa; and
- (iii) the setting of limits on the Floating Rate applicable to all or any portion of the principal amount of the Loan withdrawn and outstanding by the establishment of an Interest Rate Cap or Interest Rate Collar on said Floating Rate.

(b) Any conversion requested pursuant to subsection (a) hereinabove that is accepted by ADB shall be considered a "Conversion", as defined in Section 2.01(6) of the Loan Regulations, and shall be effected in accordance with the provisions of Article V of the Loan Regulations and the Conversion Guidelines.

ARTICLE III

Use of Proceeds of the Loan

Section 3.01. The Borrower shall make the proceeds of the Loan available to Yerevan upon terms and conditions satisfactory to ADB and shall cause Yerevan to apply such proceeds to the financing of expenditures on the Project in accordance with the provisions of this Loan Agreement and the Project Agreement.

Section 3.02. The proceeds of the Loan shall be allocated and withdrawn in accordance with the provisions of Schedule 3 to this Loan Agreement, as such Schedule may be amended from time to time by agreement between the Borrower and ADB.

Section 3.03. Except as ADB may otherwise agree, the Borrower shall procure, or cause to be procured, the items of expenditure to be financed out of the proceeds of the Loan in accordance with the provisions of Schedule 4 to this Loan Agreement. ADB may refuse to finance a contract where any such item has not been procured under procedures substantially in accordance with those agreed between the Borrower and ADB or where the terms and conditions of the contract are not satisfactory to ADB.

Section 3.04. Except as ADB may otherwise agree, the Borrower shall cause all items of expenditure financed out of the proceeds of the Loan to be used exclusively in the carrying out of the Project.

Section 3.05. The Loan Closing Date for the purposes of Section 9.02 of the Loan Regulations shall be 30 March 2020 or such other date as may from time to time be agreed between the Borrower and ADB.

ARTICLE IV

Particular Covenants

Section 4.01. (a) The Borrower shall cause the Project to be carried out with due diligence and efficiency and in conformity with sound applicable technical, financial, business, and development practices.

(b) In the carrying out of the Project and operation of the Project facilities, the Borrower shall perform, or cause to be performed, all obligations set forth in Schedule 5 to this Loan Agreement.

Section 4.02. The Borrower shall make available, or cause to be made available, promptly as needed, and on terms and conditions acceptable to ADB, the funds, facilities, services and other resources, as required, in addition to the proceeds of the Loan, for the carrying out of the Project.

Section 4.03. The Borrower shall enable ADB's representatives to inspect the Project, the Goods and Works, and any relevant records and documents.

Section 4.04. ADB shall disclose the annual audited financial statements for the Project and the opinion of the auditors on the financial statements within 30 days of the date of their receipt by posting them on ADB's website.

Section 4.05. The Borrower shall take all actions which shall be necessary on its part to enable Yerevan to perform its obligations under the Project Agreement, and shall not take or permit any action which would interfere with the performance of such obligations.

ARTICLE V

Effectiveness

Section 5.01. A date 90 days after the date of this Loan Agreement is specified for the effectiveness of this Loan Agreement for the purposes of Section 10.04 of the Loan Regulations.

ARTICLE VI

Delegation of Authority

Section 6.01. The Borrower hereby designates Yerevan as its agent for the purposes of taking any action or entering into any agreement required or permitted under Sections 3.02, 3.03 and 3.05 of this Loan Agreement and under Sections 6.01, 6.02, 6.03 and 6.04 of the Loan Regulations.

Section 6.02. Any action taken or any agreement entered into by Yerevan pursuant to the authority conferred under Section 6.01 of this Loan Agreement shall be fully binding on the Borrower and shall have the same force and effect as if taken by the Borrower.

Section 6.03. The authority conferred on Yerevan under Section 6.01 of this Loan Agreement may be revoked or modified by agreement between the Borrower and ADB.

ARTICLE VII

Miscellaneous

Section 7.01. The Minister of Finance of the Borrower is designated as representative of the Borrower for the purposes of Section 12.02 of the Loan Regulations.

Section 7.02. The following addresses are specified for the purposes of Section 12.01 of the Loan Regulations:

For the Borrower

Ministry of Finance
1 Melik Adamyan Street
Yerevan, Armenia

Facsimile Number:

(374 11) 800132

For ADB

Asian Development Bank
6 ADB Avenue
Mandaluyong City
1550 Metro Manila
Philippines

Facsimile Numbers:

(632) 636-2444
(632) 636-2484.

IN WITNESS WHEREOF the parties hereto, acting through their representatives thereunto duly authorized, have caused this Loan Agreement to be signed in their respective names as of the day and year first above written and to be delivered at the principal office of ADB.

REPUBLIC OF ARMENIA

By _____
[Name and designation]

ASIAN DEVELOPMENT BANK

By _____
[Name and designation]

SCHEDULE 1

Description of the Project

1. The objective of the Investment Program is to improve urban transport infrastructure in the cities of the Borrower leading to more efficient, reliable, safer, and affordable urban transport services.

2. As a part of the Investment Program, the Project aims to provide efficient, reliable and affordable urban infrastructure and services in Yerevan.

3. The Project shall consist of:

Urban Transport Infrastructure Component

- (a) Construction of the Argavand Shirak Road Link;
- (b) Construction of the Babajanyan-Ashtarak Highway;
- (c) Construction of the Davitashen-Ashtarak Highway including two interchanges;

Institutional Capacity Component

- (d) Operationalization of the Transport and Traffic Model;
- (e) Training of Yerevan transport department staff and transport authority staff on the Transport and Traffic Model (with at least 25% of the staff trained being women);
- (f) Training of Yerevan transport department staff and transport authority staff on transport asset management;

Program Implementation Component

- (g) Supervision of the implementation of the Project;
- (h) Recruitment and training of additional YDPIU staff (with at least 25% of the staff recruited and trained being women);
- (i) Development of baseline data, with sex disaggregated data, for the implementation of the Project; and
- (j) Preparation of the project or subprojects to be financed by tranche 3 of the Investment Program,

all as more fully described in the PFR.

4. The Project is expected to be completed by 30 September 2019.

SCHEDULE 2

Amortization Schedule

(Sustainable Urban Development Investment Program - Project 2)

1. The following table sets forth the Principal Payment Dates of the Loan and the percentage of the total principal amount of the Loan payable on each Principal Payment Date (Installment Share). If the proceeds of the Loan shall have been fully withdrawn as of the first Principal Payment Date, the principal amount of the Loan repayable by the Borrower on each Principal Payment Date shall be determined by ADB by multiplying: (a) the total principal amount of the Loan withdrawn and outstanding as of the first Principal Payment Date; by (b) the Installment Share for each Principal Payment Date, such repayment amount to be adjusted, as necessary, to deduct any amounts referred to in paragraph 4 of this Schedule, to which a Currency Conversion applies.

<u>Payment Due</u>	<u>Installment Share</u> (Expressed as a %)
15 November 2030	7.142857
15 May 2031	7.142857
15 November 2031	7.142857
15 May 2032	7.142857
15 November 2032	7.142857
15 May 2033	7.142857
15 November 2033	7.142857
15 May 2034	7.142857
15 November 2034	7.142857
15 May 2035	7.142857
15 November 2035	7.142857
15 May 2036	7.142857
15 November 2036	7.142857
15 May 2037	7.142859
Total	100.000000%

2. If the proceeds of the Loan shall not have been fully withdrawn as of the first Principal Payment Date, the principal amount of the Loan repayable by the Borrower on each Principal Payment Date shall be determined as follows:

(a) To the extent that any proceeds of the Loan shall have been withdrawn as of the first Principal Payment Date, the Borrower shall repay the amount withdrawn and outstanding as of such date in accordance with paragraph 1 of this Schedule.

(b) Any withdrawal made after the first Principal Payment Date shall be repaid on each Principal Payment Date falling after the date of such withdrawal in amounts determined by ADB by multiplying the amount of each such withdrawal by a fraction, the numerator of which shall be the original Installment Share specified in the table in paragraph 1 of this Schedule for said Principal Payment Date (the Original Installment Share) and the denominator of which shall be the sum of all remaining Original Installment Shares for Principal Payment Dates falling on or after such date, such repayment amounts to be adjusted, as necessary, to deduct any amounts referred to in paragraph 4 of this Schedule, to which a Currency Conversion applies.

3. Withdrawals made within two calendar months prior to any Principal Payment Date shall, for the purposes solely of calculating the principal amounts payable on any Principal Payment Date, be treated as withdrawn and outstanding on the second Principal Payment Date following the date of withdrawal and shall be repayable on each Principal Payment Date commencing with the second Principal Payment Date following the date of withdrawal.

4. Notwithstanding the provisions of paragraphs 1 and 2 of this Schedule, upon a Currency Conversion of all or any portion of the withdrawn principal amount of the Loan to an Approved Currency, the amount so converted in said Approved Currency that shall be repayable on any Principal Payment Date occurring during the Conversion Period, shall be determined by ADB by multiplying such amount in its currency of denomination immediately prior to said Conversion by either: (i) the exchange rate that reflects the amounts of principal in said Approved Currency payable by ADB under the Currency Hedge Transaction relating to said Conversion; or (ii) if ADB so determines in accordance with the Conversion Guidelines, the exchange rate component of the Screen Rate.

5. If the principal amount of the Loan withdrawn and outstanding from time to time shall be denominated in more than one Loan Currency, the provisions of this Schedule shall apply separately to the amount denominated in each Loan Currency, so as to produce a separate amortization schedule for each such amount.

SCHEDULE 3

Allocation and Withdrawal of Loan Proceeds

General

1. The table attached to this Schedule sets forth the Categories of items of expenditure to be financed out of the proceeds of the Loan and the allocation of the Loan proceeds to each such Category ("Table"). (Reference to "Category" in this Schedule is to a Category of the Table).

Basis for Withdrawal from the Loan Account

2. Except as ADB may otherwise agree, the proceeds of the Loan shall be disbursed on the basis of the withdrawal percentage for each item of expenditure set forth in the Table.

Resettlement Expenses

3. The amount allocated to Category 4 is for financing resettlement expenses associated with the Project, and shall not finance any expenses for land acquisition with respect to the Project as well as any related taxes and duties imposed within the territory of the Borrower.

Interest and Commitment Charges

4. The amount allocated to Category 5 is for financing interest and commitment charges on the Loan during the implementation period of the Project. ADB shall be entitled to withdraw from the Loan Account and pay to itself, on behalf of the Borrower, the amounts required to meet payments, when due, of such interest and commitment charges.

Reallocation

5. Notwithstanding the allocation of Loan proceeds and the withdrawal percentages set forth in the Table,

(a) if the amount of the Loan allocated to any Category appears to be insufficient to finance all agreed expenditures in that Category, ADB may, by notice to the Borrower, (i) reallocate to such Category, to the extent required to meet the estimated shortfall, amounts of the Loan which have been allocated to another Category but, in the opinion of ADB, are not needed to meet other expenditures, and (ii) if such reallocation cannot fully meet the estimated shortfall, reduce the withdrawal percentage applicable to such expenditures in order that further withdrawals under such Category may continue until all expenditures thereunder shall have been made; and

(b) if the amount of the Loan allocated to any Category appears to exceed all agreed expenditures in that Category, ADB may, by notice to the Borrower, reallocate such excess amount to any other Category.

Disbursement Procedures

6. Except as ADB may otherwise agree, the Loan proceeds shall be disbursed in accordance with the Loan Disbursement Handbook.

TABLE

ALLOCATION AND WITHDRAWAL OF LOAN PROCEEDS (Sustainable Urban Development Investment Program - Project 2)			
Number	Item	Total Amount Allocated for ADB Financing (\$) Category	Basis for Withdrawal from the Loan Account
1	Civil Works	65,570,000	100% of total expenditure claimed*
2	Goods	40,000	100% of total expenditure claimed*
3	Consulting Services and Incremental Administration	12,620,000	100% of total expenditure claimed*
4	Resettlement	13,880,000	100% of total expenditure claimed**
5	Interest and Commitment Charges	4,000,000	100% of amounts due
6	Unallocated	16,860,000	
	Total	112,970,000	

* Exclusive of taxes and duties imposed within the territory of the Borrower.

** Exclusive of land acquisition costs, taxes and duties imposed within the territory of the Borrower.

SCHEDULE 4

Procurement of Goods, Works and Consulting Services

General

1. The procurement of Goods, Works and Consulting Services shall be subject to and governed by the Procurement Guidelines, and the Consulting Guidelines, respectively.
2. All terms used in this Schedule and not otherwise defined in this Loan Agreement have the meanings provided in the Procurement Guidelines and/or the Consulting Guidelines, as applicable.

Goods and Works

3. Except as ADB may otherwise agree, Goods and Works shall only be procured on the basis of the methods of procurement set forth below:
 - (a) International Competitive Bidding; and
 - (b) Shopping.
4. The methods of procurement are subject to, among other things, the detailed arrangements and threshold values set forth in the Procurement Plan. The Borrower may only modify the methods of procurement or threshold values with the prior agreement of ADB, and modifications must be set out in updates to the Procurement Plan.

Conditions for Award of the Contract

5. The Borrower shall not award any Works contract for a Subproject which involves environmental impacts until Yerevan has:
 - (a) incorporated the relevant provisions from the EMP of such Subproject into the Works contract; and
 - (b) only for the Argavand Shirak Subproject described in paragraph 3(a) of Schedule 1 to this Loan Agreement, obtained the final approval of the IEE of such Subproject from the Ministry of Nature Protection of the Borrower.
6. The Borrower shall not award any Works contract involving involuntary resettlement impacts for a Subproject until the Borrower has prepared and submitted to ADB the final RP for such Subproject based on the detailed design of such Subproject, and obtained ADB's clearance of such RP.

Consulting Services

7. Except as ADB may otherwise agree, and except as set forth in the paragraph below, the Borrower shall ensure that Yerevan applies quality- and cost-based selection for selecting and engaging Consulting Services.

8. The Borrower shall ensure that Yerevan applies the following methods for selecting and engaging the specified Consulting Services, in accordance with, among other things, the procedures set forth in the Procurement Plan:

- (a) Least-Cost Selection for advisory services for audits; and
- (b) Consultants' Qualifications Selection for independent monitoring agency services.

9. The Borrower shall ensure that Yerevan recruits the individual consultants for technical auditing services; short term consulting services; public awareness and capacity building services; and YDPIU incremental administration services in accordance with procedures acceptable to ADB for recruiting individual consultants.

Industrial or Intellectual Property Rights

10. (a) The Borrower shall ensure that all Goods and Works procured (including without limitation all computer hardware, software and systems, whether separately procured or incorporated within other goods and services procured) do not violate or infringe any industrial property or intellectual property right or claim of any third party.

(b) The Borrower shall ensure that all contracts for the procurement of Goods and Works contain appropriate representations, warranties and, if appropriate, indemnities from the contractor or supplier with respect to the matters referred to in subparagraph (a) of this paragraph.

11. The Borrower shall ensure that all ADB-financed contracts with consultants contain appropriate representations, warranties and, if appropriate, indemnities from the consultants to ensure that the Consulting Services provided do not violate or infringe any industrial property or intellectual property right or claim of any third party.

ADB's Review of Procurement Decisions

12. Contracts procured under international competitive bidding procedures and contracts for Consulting Services shall be subject to prior review by ADB, unless otherwise agreed between the Borrower and ADB and set forth in the Procurement Plan.

13. In the case of a contract for Goods or Works, which is subject to ADB's prior review, the Borrower shall seek ADB's prior approval of any modification or waiver of the terms and conditions of the contract, including:

- (a) granting an extension of the stipulated time for completion of a contract for a period of 1 month or more, or which is likely to require an extension of the Loan Closing Date, and
- (b) increases in aggregate of the original price by more than 5% (for the avoidance of doubt, such increase shall take into account any previous change under such contract).

14. In the case of a contract for Goods or Works, which is subject to ADB's post review, ADB shall review the required contract modification or waiver and respond to the Borrower as soon as practicable, but not later than 1 month after the receipt of the required document.

15. The Borrower shall provide to ADB copies of all time extensions, modifications or waivers to the contracts (including change orders) within 1 month following amendment of the contract.

SCHEDULE 5

Execution of Project; Financial Matters

Implementation Arrangements

1. The Borrower shall ensure and cause Yerevan to ensure that the Project is implemented in accordance with the detailed arrangements set forth in the PAM. Any subsequent change to the PAM shall become effective only after approval of such change by the Borrower and ADB. In the event of any discrepancy between the PAM and this Loan Agreement, the provisions of this Loan Agreement shall prevail.

Environment

2. The Borrower shall ensure and cause Yerevan to ensure that the preparation, design, construction, implementation, operation and decommissioning of each Subproject comply with (a) all applicable laws and regulations of the Borrower relating to environment, health, and safety; (b) the Environmental Safeguards; (c) the EARF; and (d) all measures and requirements set forth in the IEE and the EMP of such Subproject, and any corrective or preventative actions set forth in a Safeguards Monitoring Report.

Land Acquisition and Involuntary Resettlement

3. The Borrower shall ensure and cause Yerevan to ensure that all land and all rights-of-way required for each Subproject are made available to the Works contractor in accordance with the schedule agreed under the related Works contract and all land acquisition and resettlement activities are implemented in compliance with (a) all applicable laws and regulations of the Borrower relating to land acquisition and involuntary resettlement; (b) the Involuntary Resettlement Safeguards; (c) the RF; and (d) all measures and requirements set forth in the RP of such Subproject, and any corrective or preventative actions set forth in a Safeguards Monitoring Report.

4. Without limiting the application of the Involuntary Resettlement Safeguards, the RF or any RP, the Borrower shall ensure and cause Yerevan to ensure that no physical or economic displacement takes place in connection with any Subproject until:

- (a) compensation and other entitlements have been provided to affected people in accordance with the RP for such Subproject; and
- (b) a comprehensive income and livelihood restoration program has been established in accordance with the RP for such Subproject.

Indigenous Peoples

5. The Borrower shall ensure and cause Yerevan to ensure that each Subproject does not have any indigenous peoples impact within the meaning of ADB's Safeguard Policy Statement (2009). In the event that any Subproject does have any such impact, the Borrower shall take and cause Yerevan to take all steps required to ensure that such Subproject complies with the applicable laws and regulations of the Borrower and with ADB's Safeguard Policy Statement.

Human and Financial Resources to Implement Safeguards Requirements

6. The Borrower shall make available or cause Yerevan to make available necessary budgetary and human resources to fully implement the EMPs and the RPs.

Safeguards – Related Provisions in Bidding Documents and Works Contracts

7. The Borrower shall ensure and cause Yerevan to ensure that all bidding documents and contracts for Works contain provisions that require contractors to:

- (a) comply with the measures and requirements relevant to the contractor set forth in the IEE, the EMP and the RP of the relevant Subproject (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set out in a Safeguards Monitoring Report;
- (b) make available a budget for all such environmental and social measures;
- (c) provide the Borrower with a written notice of any unanticipated environmental or resettlement risks or impacts that arise during construction, implementation or operation of the said Subproject that were not considered in its IEE, EMP or RP;
- (d) adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and
- (e) fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.

Safeguards Monitoring and Reporting

8. The Borrower shall do or cause Yerevan to do the following:

- (a) submit semi-annual Safeguards Monitoring Reports to ADB and disclose relevant information from such reports to affected persons promptly upon submission;
- (b) if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of any Subproject that were not considered in its IEE, EMP or RP, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan;

- (c) no later than 3 months from the date of effectiveness of this Loan Agreement, engage qualified and experienced external experts or qualified non-governmental organizations under a selection process and terms of reference acceptable to ADB, to verify information produced through the Project monitoring process, and facilitate the carrying out of any verification activities by such external experts;
- (d) report any actual or potential breach of compliance with the measures and requirements set forth in any EMP or RP promptly after becoming aware of the breach.

Prohibited List of Investments

9. The Borrower shall ensure and cause Yerevan to ensure that no proceeds of the Loan are used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of the SPS.

Labor Standards, Health and Safety

10. The Borrower shall ensure and cause Yerevan to ensure that the core labor standards and the Borrower's applicable laws and regulations are complied with during Project implementation. The Borrower shall include specific provisions in the bidding documents and contracts financed by ADB under the Project requiring that the contractors, among other things: (a) comply with the Borrower's applicable labor law and regulations and incorporate applicable workplace occupational safety norms; (b) do not use child labor; (c) do not discriminate workers in respect of employment and occupation; (d) do not use forced labor; (e) allow freedom of association and effectively recognize the right to collective bargaining; and (f) disseminate, or engage appropriate service providers to disseminate, information on the risks of sexually transmitted diseases, including HIV/AIDS, to the employees of contractors engaged under the Project and to members of the local communities surrounding the Project area, particularly women.

11. The Borrower shall strictly monitor compliance with the requirements set forth in paragraph 10 above and provide ADB with regular reports.

Gender and Development

12. The Borrower shall ensure and cause Yerevan to ensure that the principles of gender equity aimed at increasing Project benefits and impacts on women in the Project area consistent with ADB's Policy on Gender and Development (1998) are followed during implementation of the Project, including (a) equal pay to men and women for work of equal value; (b) enabling working conditions for women workers; and (c) taking necessary actions to encourage women living in the Project area to participate in the design and implementation of Project activities. The Borrower shall ensure and cause Yerevan to ensure that the gender action plan set out in the PAM is implemented in a timely manner throughout the duration of the Project and that adequate resources are allocated for this purpose.

Counterpart Support

13. The Borrower shall ensure that all counterpart funding required for the successful implementation of the Project is promptly provided.

14. The Borrower shall cause Yerevan to adequately staff and equip the YDPIU in a manner acceptable to ADB.

Governance and Anticorruption

15. The Borrower and Yerevan shall (a) comply with ADB's Anticorruption Policy (1998, as amended to date) and acknowledge that ADB reserves the right to investigate directly, or through its agents, any alleged corrupt, fraudulent, collusive or coercive practice relating to the Project; and (b) cooperate with any such investigation and extend all necessary assistance for satisfactory completion of such investigation.

16. The Borrower and Yerevan shall ensure that the anticorruption provisions acceptable to ADB are included in all bidding documents and contracts, including provisions specifying the right of ADB to audit and examine the records and accounts of the executing and implementing agencies and all contractors, suppliers, consultants, and other service providers as they relate to the Project.

Operational Covenants

17. The Borrower shall ensure and cause Yerevan to ensure that (i) the Subprojects are implemented in accordance with design specifications and construction norms; and (ii) construction supervision, quality control and contract management are performed in accordance with international standards.

18. (a) The Borrower shall ensure and cause Yerevan to ensure that the Subproject Roads are maintained according to the standards prescribed by the applicable laws and regulations of the Borrower and Yerevan, and, to this end, that adequate data on the condition and use of the Subproject Roads are collected, maintained and managed; that inspections of the Subproject Roads are regularly carried out; and that preventive maintenance and repair of the Subproject Roads are undertaken as required.

(b) The Borrower shall ensure and cause Yerevan to ensure that sufficient funding and resources are made available for the maintenance of the Subproject Roads as required by this Loan Agreement. The Borrower shall ensure and cause Yerevan to ensure (i) that, every year during the period 2016 to 2019, the actual road and urban transport maintenance budget for Yerevan increases so that, by the end of 2019, the sum total of all such increases is not less than the Required Road and Urban Transport Maintenance Budget Increase; (ii) that, out of the road and urban transport maintenance budget, an adequate amount is allocated for the maintenance of the Subproject Roads in particular; and (iii) that the allocation is based on a reasonable estimate, acceptable to ADB, of the costs of maintaining the Subproject Roads in accordance with the requirements of this Loan Agreement.

(c) Promptly after the Transport and Traffic Model is operationalized, but in any case by the end of 2018, the Borrower shall prepare, approve and adopt, or cause Yerevan to prepare, approve and adopt, the initial Road Maintenance Plan which, at the outset, shall cover principally the main road network of Yerevan. The Road Maintenance Plan shall be based on and shall be an outcome of the Transport and Traffic Model, and shall include, among others, forecasts of the cost of maintaining the various roads which make up the road network in Yerevan, including the Subproject Roads, over the course of their useful life and the budget required to meet such cost. The Borrower shall further develop, or cause Yerevan to further develop, the Road Maintenance Plan from time to time based on the information generated by the Transport and Traffic Model. The Borrower shall cause Yerevan to promptly discuss and agree with ADB such modifications to the budget increase requirement set out in paragraph 18(b) of this Schedule as may be necessary or appropriate taking into account the Transport and Traffic Model and the Road Maintenance Plan.

(d) The parties acknowledge that the arrangements set out in this Loan Agreement for the annual increase of the road and urban transport maintenance budget for Yerevan, particularly the method for the calculation of such increase, are specific to the Project and do not indicate that any party will adopt the same arrangements for any other project, all of which other projects shall develop their own operation and maintenance arrangements considering their own particular circumstances.

19. The Borrower shall ensure and cause Yerevan to ensure that the relevant municipal authorities install during the implementation of the Project such safety signs and facilities as may be appropriate and sufficient in accordance with international traffic norms and as are approved by the relevant Yerevan traffic authorities.

20. The Borrower shall ensure and cause Yerevan to ensure that ADB's consent is obtained at least 6 months prior to the implementation of any of the following: (i) any change in ownership of any asset, facility or structure financed under the Project; (ii) any sale, transfer, or assignment of interest or control in any asset, facility or structure financed under the Project; or (iii) any lease or other contract or modification of the functions and authority of Yerevan over the operation and maintenance of any such asset, facility or structure financed under the Project. The Borrower shall ensure and cause Yerevan to ensure that any such changes will be carried out in a legal and transparent manner.

LOAN NUMBER _____-ARM

PROJECT AGREEMENT

(Sustainable Urban Development Investment Program - Project 2)

between

ASIAN DEVELOPMENT BANK

and

YEREVAN MUNICIPALITY

DATED _____

PROJECT AGREEMENT

PROJECT AGREEMENT dated _____ between ASIAN DEVELOPMENT BANK ("ADB") and YEREVAN MUNICIPALITY ("Yerevan").

WHEREAS

(A) by a Loan Agreement of even date herewith between the Republic of Armenia ("Borrower") and ADB, ADB has agreed to make to the Borrower a loan of one hundred twelve million nine hundred seventy thousand Dollars (\$112,970,000) on the terms and conditions set forth in the Loan Agreement, but only on the condition that the proceeds of the loan be made available to Yerevan and that Yerevan agrees to undertake certain obligations towards ADB set forth herein; and

(B) Yerevan, in consideration of ADB entering into the Loan Agreement with the Borrower, has agreed to undertake the obligations set forth herein;

NOW THEREFORE the parties hereto agree as follows:

ARTICLE I

Definitions

Section 1.01. Wherever used in this Project Agreement, unless the context otherwise requires, the several terms defined in the Loan Agreement and in the Loan Regulations (as so defined) have the respective meanings therein set forth.

ARTICLE II

Particular Covenants

Section 2.01. (a) Yerevan shall carry out the Project with due diligence and efficiency, and in conformity with sound applicable technical, financial, business, and development practices.

(b) In the carrying out of the Project and operation of the Project facilities, including Subproject facilities, Yerevan shall perform all obligations set forth in the Loan Agreement to the extent that they are applicable to Yerevan.

Section 2.02. Yerevan shall make available, promptly as needed, and on terms and conditions acceptable to ADB, the funds, facilities, services, land and other resources as required, in addition to the proceeds of the Loan, for the carrying out of the Project.

Section 2.03. (a) In the carrying out of the Project, Yerevan shall employ competent and qualified consultants and contractors, acceptable to ADB, to an extent and upon terms and conditions satisfactory to ADB.

(b) Except as ADB may otherwise agree, Yerevan shall procure all items of expenditures to be financed out of the proceeds of the Loan in accordance with the provisions of Schedule 4 to the Loan Agreement. ADB may refuse to finance a contract where any such item has not been procured under procedures substantially in accordance with those agreed between the Borrower and ADB or where the terms and conditions of the contract are not satisfactory to ADB.

Section 2.04. Yerevan shall carry out the Project in accordance with plans, design standards, specifications, work schedules and construction methods acceptable to ADB. Yerevan shall furnish, or cause to be furnished, to ADB, promptly after their preparation, such plans, design standards, specifications and work schedules, and any material modifications subsequently made therein, in such detail as ADB shall reasonably request.

Section 2.05. (a) Yerevan shall take out and maintain with responsible insurers, or make other arrangements satisfactory to ADB for, insurance of Project facilities, including Subproject facilities, to such extent and against such risks and in such amounts as shall be consistent with sound practice.

(b) Without limiting the generality of the foregoing, Yerevan undertakes to insure, or cause to be insured, the Goods to be imported for the Project against hazards incident to the acquisition, transportation and delivery thereof to the place of use or installation, and for such insurance any indemnity shall be payable in a currency freely usable to replace or repair such Goods.

Section 2.06. Yerevan shall maintain, or cause to be maintained, records and accounts adequate to identify the items of expenditure financed out of the proceeds of the Loan, to disclose the use thereof in the Project, to record the progress of the Project (including the cost thereof) and to reflect, in accordance with consistently maintained sound accounting principles, its operations and financial condition.

Section 2.07. (a) ADB and Yerevan shall cooperate fully to ensure that the purposes of the Loan will be accomplished.

(b) Yerevan shall promptly inform ADB of any condition which interferes with, or threatens to interfere with, the progress of the Project, the performance of its obligations under this Project Agreement, or the accomplishment of the purposes of the Loan.

(c) ADB and Yerevan shall from time to time, at the request of either party, exchange views through their representatives with regard to any matters relating to the Project, Yerevan and the Loan.

Section 2.08. (a) Yerevan shall furnish to ADB all such reports and information as ADB shall reasonably request concerning (i) the Loan and the expenditure of the proceeds thereof; (ii) the items of expenditure financed out of such

proceeds; (iii) the Project; (iv) the administration, operations and financial condition of Yerevan; and (v) any other matters relating to the purposes of the Loan.

(b) Without limiting the generality of the foregoing, Yerevan shall furnish to ADB periodic reports on the execution of the Project and on the operation and management of the Project facilities, including Subproject facilities. Such reports shall be submitted in such form and in such detail and within such a period as ADB shall reasonably request, and shall indicate, among other things, progress made and problems encountered during the period under review, steps taken or proposed to be taken to remedy these problems, and proposed program of activities and expected progress during the following period.

(c) Promptly after physical completion of the Project, but in any event not later than 3 months thereafter or such later date as ADB may agree for this purpose, Yerevan shall prepare and furnish to ADB a report, in such form and in such detail as ADB shall reasonably request, on the execution and initial operation of the Project, including its cost, the performance by Yerevan of its obligations under this Project Agreement and the accomplishment of the purposes of the Loan.

Section 2.09. (a) Yerevan shall (i) maintain separate accounts and records for the Project and each Subproject; (ii) prepare annual financial statements for the Project and each Subproject in accordance with accounting principles acceptable to ADB; (iii) have such financial statements for the Project and each Subproject audited annually by independent auditors whose qualifications, experience and terms of reference are acceptable to ADB, in accordance with international standards for auditing or the national equivalent acceptable to ADB; (iv) as part of each such audit, have the auditors prepare a report (which includes the auditors' opinion on the financial statements and the use of the Loan proceeds as well as on the use of the procedures for imprest fund(s) and statement of expenditures) and a management letter (which sets out the deficiencies in the internal control of the Project or Subproject, as the case may be, that were identified in the course of the audit, if any); and (v) furnish to ADB, no later than 6 months after the close of the fiscal year to which they relate, copies of such audited financial statements, audit report and management letter, all in the English language, and such other information concerning these documents and the audit thereof as ADB shall from time to time reasonably request.

(b) ADB shall disclose the annual audited financial statements for the Project or Subproject, as the case may be, and the opinion of the auditors on the financial statements within 30 days of the date of their receipt by posting them on ADB's website.

(c) Yerevan shall enable ADB, upon ADB's request, to discuss the financial statements for the Project and Subprojects, and the financial affairs of Yerevan where they relate to the Project and Subprojects, with the auditors appointed by Yerevan pursuant to subsection (a)(iii) hereinabove, and shall authorize and require any representative of such auditors to participate in any such discussions requested by ADB. This is provided that such discussions shall be conducted only in the presence of an authorized officer of Yerevan, unless Yerevan shall otherwise agree.

Section 2.10. Yerevan shall enable ADB's representatives to inspect the Project, Subprojects, Goods and Works and any relevant records and documents.

Section 2.11. (a) Yerevan shall, promptly as required, take all action within its powers to maintain its corporate existence, to carry on its operations, and to

acquire, maintain and renew all rights, properties, powers, privileges and franchises which are necessary in the carrying out of the Project or in the conduct of its operations.

(b) Yerevan shall at all times conduct its operations in accordance with sound applicable technical, financial, business, development and operational practices, and under the supervision of competent and experienced management and personnel.

(c) Yerevan shall at all times operate and maintain its plants, equipment and other property, and from time to time, promptly as needed, make all necessary repairs and renewals thereof, all in accordance with sound applicable technical, financial, business, development, operational and maintenance practices.

Section 2.12. Except as ADB may otherwise agree, Yerevan shall not sell, lease or otherwise dispose of any of its assets which shall be required for the efficient carrying on of its operations or the disposal of which may prejudice its ability to perform satisfactorily any of its obligations under this Project Agreement.

Section 2.13. Except as ADB may otherwise agree, Yerevan shall apply the proceeds of the Loan to the financing of expenditures on the Project in accordance with the provisions of the Loan Agreement and this Project Agreement, and shall ensure that all items of expenditures financed out of such proceeds are used exclusively in the carrying out of the Project.

Section 2.15. Yerevan shall promptly notify ADB of any proposal to amend, suspend or repeal any provision of its functions and authority, which, if implemented, could have an impact on the Project. Yerevan shall afford ADB an adequate opportunity to comment on such proposal prior to taking any affirmative action thereon.

Section 2.16. Yerevan shall ensure that, every year during the period 2016 to 2019, the actual road and urban transport maintenance budget for Yerevan increases so that, by the end of 2019, the sum total of all such increases is not less than the Required Road and Urban Transport Maintenance Budget Increase.

ARTICLE III

Effective Date; Termination

Section 3.01. This Project Agreement shall come into force and effect on the date on which the Loan Agreement comes into force and effect. ADB shall promptly notify Yerevan of such date.

Section 3.02. (a) This Project Agreement and all obligations of the parties hereunder shall terminate on the earlier of the following two dates:

- (i) the date on which the Loan Agreement shall terminate in accordance with its terms; or
- (ii) a date 10 years after the date of this Project Agreement.

(b) If the Loan Agreement terminates in accordance with its terms before the date specified in subsection (a)(ii) hereinabove, ADB shall promptly notify Yerevan of this event.

Section 3.03. All the provisions of this Project Agreement shall continue in full force and effect notwithstanding any cancellation or suspension under the Loan Agreement.

ARTICLE IV

Miscellaneous

Section 4.01. Any notice or request required or permitted to be given or made under this Project Agreement and any agreement between the parties contemplated by this Project Agreement shall be in writing. Such notice or request shall be deemed to have been duly given or made when it shall be delivered by hand, mail or facsimile to the party to which it is required or permitted to be given or made at its address hereinafter specified, or at such other address as such party shall have designated by notice to the party giving such notice or making such request. The addresses so specified are:

For ADB

Asian Development Bank
6 ADB Avenue
Mandaluyong City
1550 Metro Manila
Philippines

Facsimile Numbers:

(632) 636-2444
(632) 636-2484.

For Yerevan

1 Argishti Street
Yerevan, Armenia

Facsimile Number:

(374 60) 544306.

Section 4.02. (a) Any action required or permitted to be taken, and any documents required or permitted to be executed, under this Project Agreement or under Section 6.01 of the Loan Agreement by or on behalf of Yerevan may be taken or executed by the Mayor of Yerevan or by such other person or persons as he or she shall so designate in writing notified to ADB.

(b) Yerevan shall furnish to ADB sufficient evidence of the authority of each person who will act under subsection (a) hereinabove, together with the authenticated specimen signature of each such person.

Section 4.03. No delay in exercising, or omission to exercise, any right, power or remedy accruing to either party under this Project Agreement upon any default shall impair any such right, power or remedy or be construed to be a waiver thereof or an acquiescence in such default; nor shall the action of such party in respect of any default, or any acquiescence in any default, affect or impair any right, power or remedy of such party in respect of any other or subsequent default.

IN WITNESS WHEREOF the parties hereto, acting through their representatives thereunto duly authorized, have caused this Project Agreement to be signed in their respective names as of the day and year first above written, and to be delivered at the principal office of ADB.

ASIAN DEVELOPMENT BANK

By _____
[Name and Designation]

YEREVAN MUNICIPALITY

By _____
[Name and Designation]

LOAN NUMBER _____-ARM

PROJECT AGREEMENT

(Sustainable Urban Development Investment Program - Project 2)

between

ASIAN DEVELOPMENT BANK

and

YEREVAN MUNICIPALITY

DATED _____

PROJECT AGREEMENT

PROJECT AGREEMENT dated _____ between ASIAN DEVELOPMENT BANK ("ADB") and YEREVAN MUNICIPALITY ("Yerevan").

WHEREAS

(A) by a Loan Agreement of even date herewith between the Republic of Armenia ("Borrower") and ADB, ADB has agreed to make to the Borrower a loan of one hundred twelve million nine hundred seventy thousand Dollars (\$112,970,000) on the terms and conditions set forth in the Loan Agreement, but only on the condition that the proceeds of the loan be made available to Yerevan and that Yerevan agrees to undertake certain obligations towards ADB set forth herein; and

(B) Yerevan, in consideration of ADB entering into the Loan Agreement with the Borrower, has agreed to undertake the obligations set forth herein;

NOW THEREFORE the parties hereto agree as follows:

ARTICLE I

Definitions

Section 1.01. Wherever used in this Project Agreement, unless the context otherwise requires, the several terms defined in the Loan Agreement and in the Loan Regulations (as so defined) have the respective meanings therein set forth.

ARTICLE II

Particular Covenants

Section 2.01. (a) Yerevan shall carry out the Project with due diligence and efficiency, and in conformity with sound applicable technical, financial, business, and development practices.

(b) In the carrying out of the Project and operation of the Project facilities, including Subproject facilities, Yerevan shall perform all obligations set forth in the Loan Agreement to the extent that they are applicable to Yerevan.

Section 2.02. Yerevan shall make available, promptly as needed, and on terms and conditions acceptable to ADB, the funds, facilities, services, land and other resources as required, in addition to the proceeds of the Loan, for the carrying out of the Project.

Section 2.03. (a) In the carrying out of the Project, Yerevan shall employ competent and qualified consultants and contractors, acceptable to ADB, to an extent and upon terms and conditions satisfactory to ADB.

(b) Except as ADB may otherwise agree, Yerevan shall procure all items of expenditures to be financed out of the proceeds of the Loan in accordance with the provisions of Schedule 4 to the Loan Agreement. ADB may refuse to finance a contract where any such item has not been procured under procedures substantially in accordance with those agreed between the Borrower and ADB or where the terms and conditions of the contract are not satisfactory to ADB.

Section 2.04. Yerevan shall carry out the Project in accordance with plans, design standards, specifications, work schedules and construction methods acceptable to ADB. Yerevan shall furnish, or cause to be furnished, to ADB, promptly after their preparation, such plans, design standards, specifications and work schedules, and any material modifications subsequently made therein, in such detail as ADB shall reasonably request.

Section 2.05. (a) Yerevan shall take out and maintain with responsible insurers, or make other arrangements satisfactory to ADB for, insurance of Project facilities, including Subproject facilities, to such extent and against such risks and in such amounts as shall be consistent with sound practice.

(b) Without limiting the generality of the foregoing, Yerevan undertakes to insure, or cause to be insured, the Goods to be imported for the Project against hazards incident to the acquisition, transportation and delivery thereof to the place of use or installation, and for such insurance any indemnity shall be payable in a currency freely usable to replace or repair such Goods.

Section 2.06. Yerevan shall maintain, or cause to be maintained, records and accounts adequate to identify the items of expenditure financed out of the proceeds of the Loan, to disclose the use thereof in the Project, to record the progress of the Project (including the cost thereof) and to reflect, in accordance with consistently maintained sound accounting principles, its operations and financial condition.

Section 2.07. (a) ADB and Yerevan shall cooperate fully to ensure that the purposes of the Loan will be accomplished.

(b) Yerevan shall promptly inform ADB of any condition which interferes with, or threatens to interfere with, the progress of the Project, the performance of its obligations under this Project Agreement, or the accomplishment of the purposes of the Loan.

(c) ADB and Yerevan shall from time to time, at the request of either party, exchange views through their representatives with regard to any matters relating to the Project, Yerevan and the Loan.

Section 2.08. (a) Yerevan shall furnish to ADB all such reports and information as ADB shall reasonably request concerning (i) the Loan and the expenditure of the proceeds thereof; (ii) the items of expenditure financed out of such

proceeds; (iii) the Project; (iv) the administration, operations and financial condition of Yerevan; and (v) any other matters relating to the purposes of the Loan.

(b) Without limiting the generality of the foregoing, Yerevan shall furnish to ADB periodic reports on the execution of the Project and on the operation and management of the Project facilities, including Subproject facilities. Such reports shall be submitted in such form and in such detail and within such a period as ADB shall reasonably request, and shall indicate, among other things, progress made and problems encountered during the period under review, steps taken or proposed to be taken to remedy these problems, and proposed program of activities and expected progress during the following period.

(c) Promptly after physical completion of the Project, but in any event not later than 3 months thereafter or such later date as ADB may agree for this purpose, Yerevan shall prepare and furnish to ADB a report, in such form and in such detail as ADB shall reasonably request, on the execution and initial operation of the Project, including its cost, the performance by Yerevan of its obligations under this Project Agreement and the accomplishment of the purposes of the Loan.

Section 2.09. (a) Yerevan shall (i) maintain separate accounts and records for the Project and each Subproject; (ii) prepare annual financial statements for the Project and each Subproject in accordance with accounting principles acceptable to ADB; (iii) have such financial statements for the Project and each Subproject audited annually by independent auditors whose qualifications, experience and terms of reference are acceptable to ADB, in accordance with international standards for auditing or the national equivalent acceptable to ADB; (iv) as part of each such audit, have the auditors prepare a report (which includes the auditors' opinion on the financial statements and the use of the Loan proceeds as well as on the use of the procedures for imprest fund(s) and statement of expenditures) and a management letter (which sets out the deficiencies in the internal control of the Project or Subproject, as the case may be, that were identified in the course of the audit, if any); and (v) furnish to ADB, no later than 6 months after the close of the fiscal year to which they relate, copies of such audited financial statements, audit report and management letter, all in the English language, and such other information concerning these documents and the audit thereof as ADB shall from time to time reasonably request.

(b) ADB shall disclose the annual audited financial statements for the Project or Subproject, as the case may be, and the opinion of the auditors on the financial statements within 30 days of the date of their receipt by posting them on ADB's website.

(c) Yerevan shall enable ADB, upon ADB's request, to discuss the financial statements for the Project and Subprojects, and the financial affairs of Yerevan where they relate to the Project and Subprojects, with the auditors appointed by Yerevan pursuant to subsection (a)(iii) hereinabove, and shall authorize and require any representative of such auditors to participate in any such discussions requested by ADB. This is provided that such discussions shall be conducted only in the presence of an authorized officer of Yerevan, unless Yerevan shall otherwise agree.

Section 2.10. Yerevan shall enable ADB's representatives to inspect the Project, Subprojects, Goods and Works and any relevant records and documents.

Section 2.11. (a) Yerevan shall, promptly as required, take all action within its powers to maintain its corporate existence, to carry on its operations, and to

acquire, maintain and renew all rights, properties, powers, privileges and franchises which are necessary in the carrying out of the Project or in the conduct of its operations.

(b) Yerevan shall at all times conduct its operations in accordance with sound applicable technical, financial, business, development and operational practices, and under the supervision of competent and experienced management and personnel.

(c) Yerevan shall at all times operate and maintain its plants, equipment and other property, and from time to time, promptly as needed, make all necessary repairs and renewals thereof, all in accordance with sound applicable technical, financial, business, development, operational and maintenance practices.

Section 2.12. Except as ADB may otherwise agree, Yerevan shall not sell, lease or otherwise dispose of any of its assets which shall be required for the efficient carrying on of its operations or the disposal of which may prejudice its ability to perform satisfactorily any of its obligations under this Project Agreement.

Section 2.13. Except as ADB may otherwise agree, Yerevan shall apply the proceeds of the Loan to the financing of expenditures on the Project in accordance with the provisions of the Loan Agreement and this Project Agreement, and shall ensure that all items of expenditures financed out of such proceeds are used exclusively in the carrying out of the Project.

Section 2.15. Yerevan shall promptly notify ADB of any proposal to amend, suspend or repeal any provision of its functions and authority, which, if implemented, could have an impact on the Project. Yerevan shall afford ADB an adequate opportunity to comment on such proposal prior to taking any affirmative action thereon.

Section 2.16. Yerevan shall ensure that, every year during the period 2016 to 2019, the actual road and urban transport maintenance budget for Yerevan increases so that, by the end of 2019, the sum total of all such increases is not less than the Required Road and Urban Transport Maintenance Budget Increase.

ARTICLE III

Effective Date; Termination

Section 3.01. This Project Agreement shall come into force and effect on the date on which the Loan Agreement comes into force and effect. ADB shall promptly notify Yerevan of such date.

Section 3.02. (a) This Project Agreement and all obligations of the parties hereunder shall terminate on the earlier of the following two dates:

- (i) the date on which the Loan Agreement shall terminate in accordance with its terms; or
- (ii) a date 10 years after the date of this Project Agreement.

(b) If the Loan Agreement terminates in accordance with its terms before the date specified in subsection (a)(ii) hereinabove, ADB shall promptly notify Yerevan of this event.

Section 3.03. All the provisions of this Project Agreement shall continue in full force and effect notwithstanding any cancellation or suspension under the Loan Agreement.

ARTICLE IV

Miscellaneous

Section 4.01. Any notice or request required or permitted to be given or made under this Project Agreement and any agreement between the parties contemplated by this Project Agreement shall be in writing. Such notice or request shall be deemed to have been duly given or made when it shall be delivered by hand, mail or facsimile to the party to which it is required or permitted to be given or made at its address hereinafter specified, or at such other address as such party shall have designated by notice to the party giving such notice or making such request. The addresses so specified are:

For ADB

Asian Development Bank
6 ADB Avenue
Mandaluyong City
1550 Metro Manila
Philippines

Facsimile Numbers:

(632) 636-2444
(632) 636-2484.

For Yerevan

1 Argishti Street
Yerevan, Armenia

Facsimile Number:

(374 60) 544306.

Section 4.02. (a) Any action required or permitted to be taken, and any documents required or permitted to be executed, under this Project Agreement or under Section 6.01 of the Loan Agreement by or on behalf of Yerevan may be taken or executed by the Mayor of Yerevan or by such other person or persons as he or she shall so designate in writing notified to ADB.

(b) Yerevan shall furnish to ADB sufficient evidence of the authority of each person who will act under subsection (a) hereinabove, together with the authenticated specimen signature of each such person.

Section 4.03. No delay in exercising, or omission to exercise, any right, power or remedy accruing to either party under this Project Agreement upon any default shall impair any such right, power or remedy or be construed to be a waiver thereof or an acquiescence in such default; nor shall the action of such party in respect of any default, or any acquiescence in any default, affect or impair any right, power or remedy of such party in respect of any other or subsequent default.

IN WITNESS WHEREOF the parties hereto, acting through their representatives thereunto duly authorized, have caused this Project Agreement to be signed in their respective names as of the day and year first above written, and to be delivered at the principal office of ADB.

ASIAN DEVELOPMENT BANK

By _____
[Name and Designation]

YEREVAN MUNICIPALITY

By _____
[Name and Designation]



MINISTRY OF FINANCE OF THE REPUBLIC OF ARMENIA
M I N I S T E R

1 Melik-Adamyany str., Yerevan, 0010
E-mail: minister@minfin.am

Tel. (+374 60) 700 304, fax (+374 60) 700 358
Web site: www.minfin.am

14.04.2015 № 5-2/9214-15

To: Mr. Klaus Gerhaeusser
Director General
Central and West Asia Department
Asian Development Bank



**Subject: Sustainable Urban Development Investment Program in Republic of Armenia-
Periodic Financing Request # 2**

Dear Mr. Gerhaeusser,

I would like to take this opportunity to express my sincere gratitude to your esteemed institution for your continuous effort extended to the Republic of Armenia.

We would like to refer to the Framework Financing Agreement (FFA) for Sustainable Urban Development Investment Program dated 24 March, 2011 between the Asian Development Bank (ADB) and the Republic of Armenia.

Pursuant to the provisions of the FFA, the Republic of Armenia (the Borrower) requests ADB to process this Periodic Financing Request (PFR) for the second tranche of the Facility, as a loan from its ordinary capital resources. The proposed financing amounts, terms, conditions and financing plan are specified in Attachment A hereto. The description of the project for which financing is hereby requested is set out in Annexes 1 - 8 of Attachment A hereto.

Thus, hereby we would like to request the ADB to consider the possibility of processing the said PFR for the purposes of carrying out a part of the Sustainable Urban Development Investment Program in accordance with the provisions of the FFA, the loan and project agreements and supplementary documents to be agreed between ADB and the Borrower.

Thank you for your support and looking forward to your positive feedback.

Enclosed: 50 pages.

Sincerely yours,

Gagik Khachatryan

Attachment A

**Project
Description**

The projects proposed for financing under this requested PFR are:

Component A: Urban Transport Infrastructure Improvement

- 1.1 Construction of Argavand-Shirak urban road link;
- 1.2 Construction of Davtashen-Ashtarak highway and Babajanyan-Ashtarak highway road links;
- 1.3 Resettlement and Land acquisition.

Component B: Institutional Strengthening

Development of Yerevan Transport Model.

Component C: Project management facility and consulting services

Financial and technical audit, safeguards monitoring, construction supervision and project management by implementing agency.

The Design and Monitoring Framework for this tranche is in **Annex 1**.

Component D: Preparation of Tranche 3

Feasibility study for Tranche 3.

**Cost Estimates
and Financing
Plan**

The total cost of the components is estimated at \$150.31 million, inclusive of taxes, duties, and interest and other charges on the loan during construction. The detailed cost estimates and financing plan are in **Annex 2**.

(\$million)		ADB	GoA	Total
Component A	Urban Transport Infrastructure Improvement	95.64	30.93	126.57
Component B	Institutional Strengthening	3.50	1.75	5.25
Component C	Project Management Facility and Consulting Services	6.33	2.91	9.24
Component D	Preparation of Tranche 3	3.50	1.75	5.25
Base Cost		108.97	37.34	146.31
Contingencies		TBD	TBD	TBD
Financial charges		4.00	0.00	4.00
Total		112.97	37.34	150.31

Loan Amount and Terms

A loan of \$112.97million from the ordinary capital resources of the Asian Development Bank (ADB) provided under ADB's London interbank offered rate (LIBOR)-based lending facility, with a 22 year term including a grace period of 15 years, an interest rate determined in accordance with ADB's LIBOR-based lending facility, and such other terms and conditions as agreed in the FFA and further supplemented under the loan and project agreements;

Period of Loan/Guarantee Utilization

The components are expected to be completed by 30 June 2020. No disbursements from the loan account will be requested or made later than 31 December 2020.

Advance contracting

Advance contracting is requested for procurement of civil works for Argavand-Shirak urban road link.

Retroactive Financing

Retroactive financing is requested for implementation of Land Acquisition and Resettlement Plan for the Argavand-Shirak urban road link not exceeding the amount of \$1 million, incurred before loan effectiveness, but not earlier than 12 months before the signing of the legal agreement.

Implementation Arrangements	<p>The Executing Agency will be the Ministry of Economy (MoE) and the Implementing Agency will be the Yerevan Municipality (YM). The Government supervisory board chaired by the Prime Minister includes inter alia Ministry of Finance (MOF); Ministry of Territorial Administration, Ministry of Transport and Communication, State Committee of Real Estate Cadastre Ministry of Justice, Ministry of Economy (MOE), Central Bank of Armenia and North South Road Corridor Investment Program SNCO. Representative of other relevant ministries and of municipalities can be invited to attend as appropriate. The board will be providing overall guidance, reviewing Investment Program performance, and deciding on all major issues of the Investment Program management. The Implementing Agency will handle day-to-day implementation of the Sustainable Urban Development Investment Program and be responsible for (i) supervising and monitoring the progress of Project implementation; (ii) undertaking all procurement tasks; (iii) managing the loan disbursement; (iv) providing any counterpart assistance as required; and (v) providing immediate oversight for environmental and social safeguards. A separate facility administration manual has been prepared for the second tranche of the Project.</p>
Procurement and Consulting Services	<p>The procurement plan is attached as Annex 3. Draft terms of reference for the components 2, 3, and 4 are attached as Appendixes of Annex 3.</p>
Confirmation of Continuing Validity of the Adherence to Provisions of FFA, Previous Agreements, and the Design and Monitoring Framework	<p>The Borrower confirms that the understanding set out in the FFA and provisions of previous loan agreement have been adhered, and remain true to date.</p> <p>The Tranche 2 has been prepared in close consultation with the stakeholders and meets the selection criteria set forth in Schedule 4 of the FFA. All project components were prepared in compliance with laws and regulations of Armenia for technical viability, and environmental and social safeguards and ADB Safeguard Policy Statement (2009).</p>
Readiness of the Project for Implementation	<p>Detailed engineering designs of Argavand-Shirak road link, Babajanyan-Ashtarak highway and Davitashen-Ashtarak highway, including drawings, technical specifications, cost estimation and bills of quantities has been prepared. The project description report is attached as Annex 4.</p>
Safeguards	<p>Safeguards documents required for the Tranche 2 have been prepared in accordance with ADB's Safeguards Policy Statement (2009) and are attached as Annex 5 (EARF for Tranche 2, EIA for Argavand-Shirak road link and IEEs for Babajanyan-Ashtarak highway and Davitashen-Ashtarak highway) and Annex 6 (Preliminary LARP). Compliance Reports with Tranche 1 loan covenants are in Annex 8.</p>

**Gender and
Social
Dimensions**

The Summary Poverty Reduction and Social Strategy Report, including Gender Action Plan is in **Annex 7**.

**Covenant
Compliance**

Compliance Reports with Tranche 1 loan covenants are in **Annex 8**.

Project Administration Manual

Project Number: 42417-033

Loan Number: LXXXXX

September 2015

Armenia: Sustainable Urban Development Investment Program – Project 2

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Project Administration Manual Purpose and Process

The project administration manual (PAM) describes the essential administrative and management requirements to implement the project on time, within budget, and in accordance with Government and Asian Development Bank (ADB) policies and procedures. The PAM should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.

The Government of Armenia and Yerevan and other municipalities are wholly responsible for the implementation of ADB financed projects, as agreed jointly between the borrower and ADB, and in accordance with Government and ADB's policies and procedures. ADB staff is responsible to support implementation including compliance by the Government of Armenia, Yerevan and other municipalities of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.

At Loan Negotiations the borrower and ADB shall agree to the PAM and ensure consistency with the Loan Agreement. Such agreement shall be reflected in the minutes of the Loan Negotiations. In the event of any discrepancy or contradiction between the PAM and the Loan Agreement, the provisions of the Loan Agreement shall prevail.

After ADB Board approval of the periodic financing request report, changes in implementation arrangements are subject to agreement and approval pursuant to relevant Government and ADB administrative procedures (including the Project Administration Instructions) and upon such approval they will be subsequently incorporated in the PAM.

ABBREVIATIONS

ADB	–	Asian Development Bank
EARF	–	environmental assessment and review framework
EIA	–	environmental impact assessment
IA	–	implementing agency
IARS	–	imprest account reconciliation statement
ICB	–	international competitive bidding
IEE	–	initial environmental examination
LARP		land acquisition and resettlement plan
MFF	–	multitranchise financing facility
MOF	–	Ministry of Finance
NCB	–	national competitive bidding
NGOs	–	nongovernment organizations
PAM	–	Project Administration Manual
PFR	–	periodic financing request
PIU	–	project implementation unit
PPMS	–	project performance monitoring system
QCBS	–	quality- and cost based selection
RRP	–	report and recommendation of the President to the Board
SBD	–	standard bidding documents
SOE	–	statement of expenditure
SPS	–	Safeguard Policy Statement
YDPIU	–	Yerevan Development Project Implementation Unit
YM	–	Yerevan Municipality

I. PROJECT DESCRIPTION

1. Project 2 will improve the access to efficient, reliable, and sustainable urban infrastructures and services, and comprises four components: (i) the first component will implement the missing links of Yerevan Western Bypass; (ii) the second component will improve the project institutional capacity; (iii) the third component will improve the project management facility and will finance consulting services; and (iv) the fourth component will include the preparation of Project 3.

Impact and Outcome

2. The project's impact will be improved road traffic safety and enhanced local economy in Yerevan city. The outcome will be efficient, reliable, and affordable urban infrastructure and services provided in Yerevan city.

Outputs

3. The outputs include (i) urban transport infrastructure extended, rehabilitated, and improved in Yerevan; (ii) appropriate institutional capacity strengthened in Yerevan; and (iii) skilled and efficient program implementation system established. Tranche 2 will also finance Project 3 preparation.

1. **Component A:** Urban transport infrastructure extended, rehabilitated, and improved in Yerevan.

4. Under this component, the project will construct the (i) Argavand Shirak Road Link; (ii) Babajanyan-Ashtarak Highway; and (iii) Davitashen–Ashtarak Highway including two interchanges.

2. **Component B:** Appropriate institutional capacity strengthened in Yerevan.

5. Under this component, the project will (i) train Yerevan Municipality transport department and transport authority staff on transport and traffic models (with at least 25% women recruited and trained), (ii) make the transport model fully operational, and (iii) train Yerevan Municipality transport department staff and transport authority staff on transport asset management.

3. **Component C:** Skilled and efficient program Implementation system established

6. Under this component the project will (i) recruit and train additional project implementation unit staff (at least 25% women), and (ii) create baseline data and conduct surveys with sex disaggregated data by Yerevan Municipality and operators.

II. IMPLEMENTATION PLAN

A. Project Readiness Activities

Indicative Activities	2014									2015												Responsibility
	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Advance contracting actions																						YM, ADB
Retroactive financing actions																						
ADB Management approval																						ADB
Loan signing																						MOF, MOE
Government legal opinion provided																						MOF, MOJ
Government budget inclusion																						MOF
Loan effectiveness																						PMO, MOF

ADB = Asian Development Bank, MOE = Ministry of Economy, MOF = Ministry of Finance, MOJ = Ministry of Justice, PMO = Prime Minister's Office, YM = Yerevan Municipality.

B. Overall Project Implementation Plan

	2015				2016				2017				2018			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Component A Urban Transport Infrastructure Improvement																
Preparation of TOR for construction supervision																
Recruitment of construction supervision consultant of the road Links																
LARP preparation																
LARP implementation																
Civil Works																
Argavand-Shirak Road Link																
Babajanyan-Ashtarak and Davitashen-Ashtarak																
Component B Institutional Strengthening																
Produce final TOR for Yerevan Transport and Traffic Model																
Recruitment of consultant for development of Yerevan Transport and Traffic Model																
Develop training modules and conduct training by December 2017																
Component C Project Management Facility and Consulting Services																
Recruitment of advisory service for audit																
Recruitment of independent monitoring agency																
Recruitment of technical auditor																
Recruitment of short-term consultants																
Component D4 Preparation of the 3rd Tranche																
Produce final TOR for Tranche 3 Preparation																
Recruitment of consultant for feasibility study and detailed design																

LARP = land acquisition and resettlement plan, TOR = terms of reference.

III. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Implementation Organizations – Roles and Responsibilities

Project Implementation Organizations	Management Roles and Responsibilities
Government supervisory board with Yerevan and other relevant Municipalities Executing Agency	<ul style="list-style-type: none"> – oversee progress on the program investment – responsible for guiding development of urban transport in Yerevan and other cities (priorities, subsequent tranches) – meet at least once every 6 months until Program completion – responsible for Program oversight and administration – hold quarterly meetings with the implementing agencies – submit progress reports to the Supervisory Board for decision making – obtain ADB approvals for Project component finance – ensure compliance with Project covenants – prepare subsequent tranches and negotiate project and loan agreements
Implementing Agency	<ul style="list-style-type: none"> – responsible for project implementation and management – oversee Program accounting and auditing – oversee implementation of urban transport roadmaps – carry out Project Performance Monitoring System (PPMS) surveys – ensure city administrations comply with covenant – submit Project documents, including audit reports, to ADB and the executing agency on time – invite bids/evaluate/prepare bid evaluation reports for ADB's approval award contracts – secure technical and ecological expertise for all civil works prior to bidding – conduct, monitor and review bid process and coordinate with ADB on all approvals – prepare quarterly progress reports and submit to EA within 20 days of the end of each quarter – implement the urban transport institutional reorganization – coordinate with ADB on matters related to disbursements – ensure monitoring and quality control of construction works with necessary safety measures – set up multimodal coordination committee and follow up the action plan – ensure urban services management and improved planning and monitoring management practices – manage detailed surveys, investigations and engineering designs for all subcomponents – prepare necessary land acquisition and resettlement framework, land acquisition and resettlement plan, environmental impact assessment or initial environment examination and environmental management and monitoring plan – administer construction or rehabilitation contracts (with support from

Project Implementation Organizations	Management Roles and Responsibilities
	relevant municipalities) – ensure quality control – evaluate work done by contractors and certify payments
ADB	– ensure technical and financial support and oversight according to the framework financing, loan and project agreements

B. Key Persons Involved in Implementation

Executing Agency

Ministry of Economy

Officer's Name : Karen Chshmaritian

Position: Minister

Telephone: +374-10-597-110

Email address: kchshmaritian@mineconomy.am

Office Address: 5a Mher Mkrtchyan St, Yerevan 0010, Armenia

Implementing Agency

Yerevan Municipality

Officer's Name : Taron Margaryan

Position: Mayor

Telephone: +374-10-514-101

Email address: press@yerevan.am

Office Address: 1 Argishti Street, Yerevan 0015, Armenia

ADB

Urban Development and Water
Division

Staff Name: Anand Chiplunkar

Position: Director

Telephone: +63-2-632 6346

Email address: achiplunkar@adb.org

Mission Leader

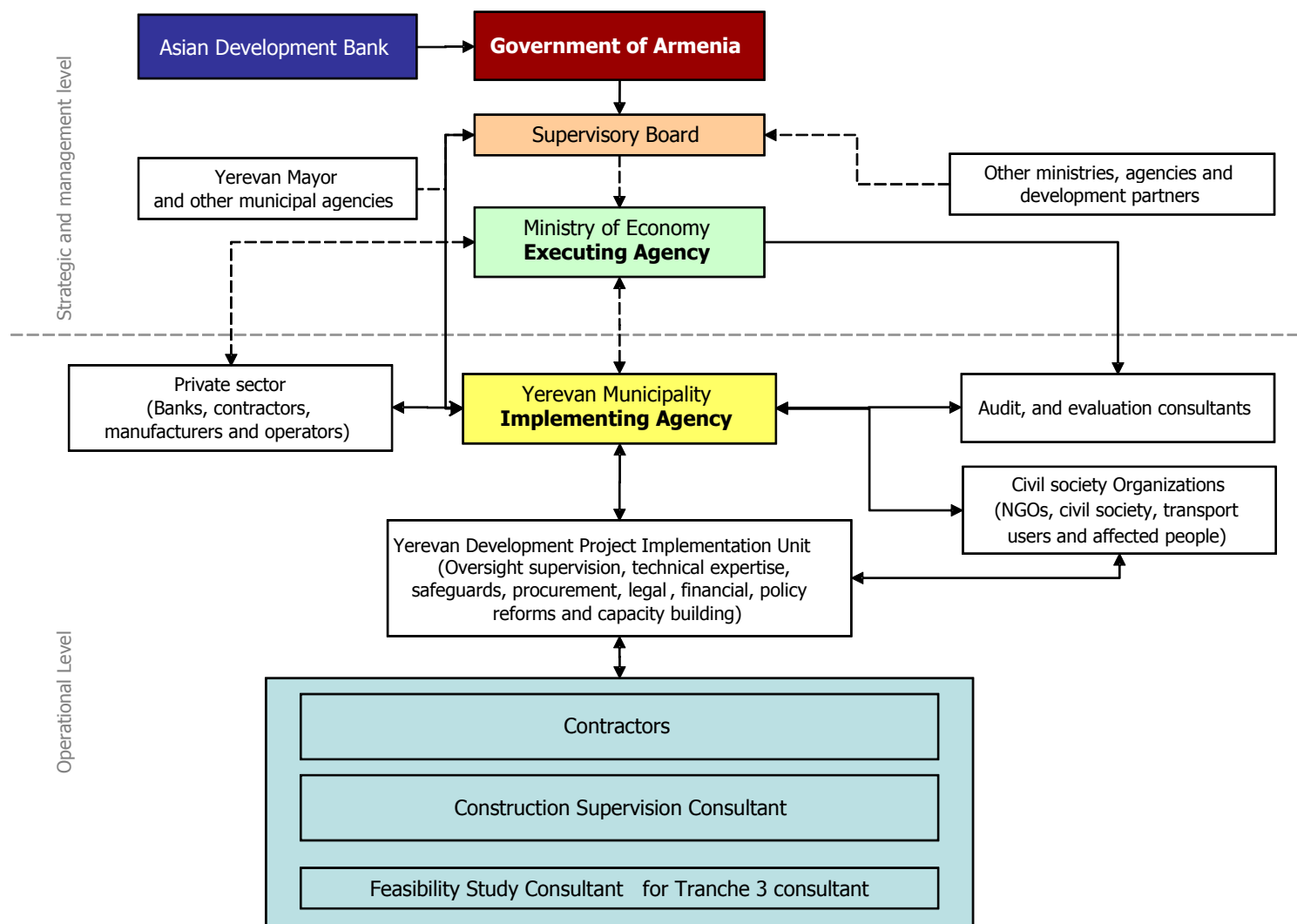
Staff Name: Cesar Llorens

Position: Urban Development Specialist

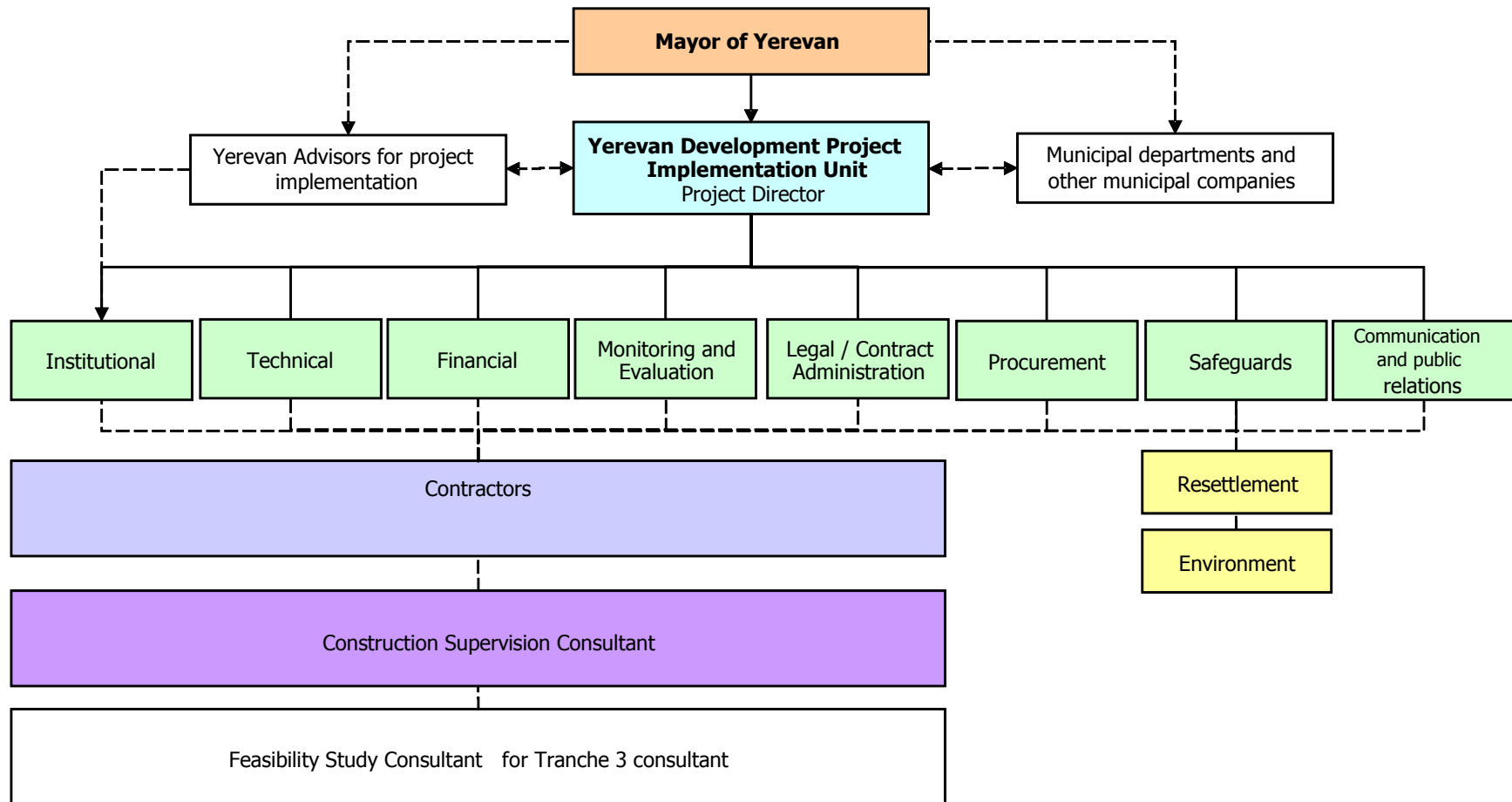
Telephone: +374 10 546373

Email address: cllorens@adb.org

Program Organization Structure (Tranche 2)



**SUSTAINABLE URBAN DEVELOPMENT MFF – PROJECT 2
PROJECT IMPLEMENTATION UNIT (PIU)**



IV. COSTS AND FINANCING

A. Detailed Cost Estimates by Expenditure Category

(\$ million)				
Item	Local Cost	Foreign Exchange	Total Cost	% of Total Base Cost
1 Civil Works				
1 Argavand-Shirak Street link	18.84	4.71	23.55	16.09%
2 Babajanyan-Ashtarak and Davtashen-Ashtarak Hyw.	44.12	11.02	55.14	37.69%
Subtotal (1)	62.95	15.73	78.68	53.78%
2 Goods				
1 Office and miscellaneous equipment for PIU	0.06	0.00	0.06	0.04%
Subtotal (2)	0.06	0.00	0.06	0.04%
3 Consulting Services and Incremental Administration				
1 Feasibility study for Tranche 3	4.99	0.00	4.99	3.41%
2 Development of Yerevan Transport Model	4.99	0.00	4.99	3.41%
3 Construction Supervision of the Road Links	6.41	0.00	6.41	4.38%
4 Advisory services for Audit	0.00	0.17	0.17	0.12%
5 Technical Auditor	0.29	0.00	0.29	0.19%
6 Short term Consultants	0.00	0.25	0.25	0.17%
7 Public awareness, capacity building	0.00	0.22	0.22	0.15%
8 Independent Monitoring Agency	0.00	0.10	0.10	0.07%
9 PIU incremental Administration, salaries and insurance	0.00	1.28	1.28	0.88%
Subtotal (3)	16.67	2.02	18.70	12.78%
4 Resettlement				
1 Resettlement	0.00	13.88	13.88	9.48%
2 Land acquisition	11.63	0.00	11.63	7.95%
Subtotal (4)	11.63	13.88	25.51	17.43%
5 Unallocated^a				
1 Physical Contingency	10.51	5.55	16.06	10.97%
2 Price Contingency	5.36	1.96	7.31	5.00%
Subtotal (5)	15.86	7.51	23.37	15.97%
Total Base Cost (1+2+3+4+5)	107.17	39.14	146.31	100.00%
6 Financing Charges During Implementation				
1 Interest and Commitment charges during Construction	0.00	4.00	4.00	2.73%
Subtotal (6)	0.00	4.00	4.00	2.73%
Total Project Cost (1+2+3+4+5+6)^b	101.81	40.98	150.31	102.73%

a. Physical contingencies computed at 10% for civil works and 20% for LARP. Price contingencies computed at 5% on local currency costs and 5% on foreign exchange costs due to the recent volatility of the USD/AMD exchange rate.

b. Including taxes and duties.

Source: Consultant estimates.

Allocation and Withdrawal of Loan Proceeds

ALLOCATION AND WITHDRAWAL OF LOAN PROCEEDS (Sustainable Urban Development Investment Program - Project 2)			
Number	Item	Total Amount Allocated for ADB Financing (\$) Category	Basis for Withdrawal from the Loan Account
1	Civil Works	65,570,000	100% of total expenditure claimed*
2	Goods	40,000	100% of total expenditure claimed*
3	Consulting Services and Incremental Administration	12,620,000	100% of total expenditure claimed*
4	Resettlement	13,880,000	100% of total expenditure claimed**
5	Unallocated	16,860,000	
6	Interest and Commitment Charges	4,000,000	100% of amounts due
	Total	112,970,000	

* Exclusive of taxes and duties imposed within the territory of the Borrower.

**Exclusive of land acquisition costs, taxes and duties imposed within the territory of the Borrower.

Detailed Cost Estimates by Financier

(\$ million)						
Item	ADB		Government		Total Cost	% of Total Base Cost
	Amount	% of Cost Category	Amount	% of Cost Category		
1 Civil Works						
1 Argavand-Shirak Street link	19.62	83.33%	3.93	16.67%	23.55	16.09%
2 Babajanyan-Ashtarak and Davtashen-Ashtarak Hyw.	45.95	83.33%	9.19	16.67%	55.14	37.69%
Subtotal (1)	65.57	83.33%	13.12	16.68%	78.68	53.78%
2 Goods						
1 Office and miscellaneous equipment for PIU	0.04	83.33%	0.02	16.67%	0.06	0.04%
Subtotal (2)	0.04	70.18%	0.02	29.82%	0.06	0.04%
3 Consulting Services and Incremental Administration						
1 Feasibility study for Tranche 3	3.33	66.67%	1.66	33.33%	4.99	3.41%
2 Development of Yerevan Transport Model	3.33	66.67%	1.66	33.33%	4.99	3.41%
3 Construction Supervision of the Road Links	4.28	66.67%	2.14	33.33%	6.42	4.38%
4 Advisory services for Audit	0.14	83.33%	0.03	16.67%	0.17	0.12%
5 Technical Auditor	0.19	66.67%	0.09	33.33%	0.29	0.19%
6 Short term Consultants	0.18	73.08%	0.07	26.92%	0.25	0.17%
7 Public awareness, capacity building	0.14	65.22%	0.08	34.78%	0.22	0.15%
8 Independent Monitoring Agency	0.08	81.82%	0.02	18.18%	0.10	0.07%
9 PIU incremental Administration, salaries and insurance	0.95	74.07%	0.33	25.93%	1.28	0.88%
Subtotal (3)	12.62	67.47%	6.08	32.52%	18.70	12.78%
4 Resettlement						
1 Resettlement cost	13.88	100.00%	0.00	0.00%	13.88	9.48%
2 Land acquisition	0.00	0.00%	11.63	100.00%	11.63	7.95%
Subtotal (4)	13.88	54.41%	11.63	45.59%	25.50	17.43%
5 Unallocated						
1 Physical Contingency	11.59	72.18%	4.46	27.79%	16.06	10.97%
2 Price Contingency	5.28	72.18%	2.03	27.79%	7.32	5.00%
Subtotal (5)	16.87	72.18%	6.50	27.79%	23.37	15.97%
Total Base Cost (1+2+3+4+5)	108.97	74.48%	37.34	25.52%	146.31	100.00%
6 Financing Charges During Implementation						
1 Interest and Commitment charges during Construction	4.00	100.00%	0.00	0.00%	4.00	2.73%
Subtotal (6)	4.00	100.00%	0.00	0.00%	4.00	2.73%
Total Project Cost (1+2+3+4+5+6)^b	112.97	75.16%	37.34	24.84%	150.31	102.73%

a. Physical contingencies computed at 10% for civil works and 20% for LARP. Price contingencies computed at 5% on foreign exchange costs and 5% on local currency costs: includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

b. Including taxes and duties.

Source: Consultant estimates.

Detailed Cost Estimates by Outputs/Components

(\$ million)									
Item	Total Cost	Component A		Component B		Component C		Component D	
		Amount	% of Cost Category	Amount	% of Cost Category	Amount	% of Cost Category	Amount	% of Cost Category
1 Civil Works									
1 Argavand-Shirak Street link	23.55	23.55	100.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%
2 Babajanyan-Ashtarak and Davtashen-Ashtarak Hyw.	55.14	55.14	100.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%
Subtotal (1)	78.68	78.68	100.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%
2 Goods									
1 Office and miscellaneous equipment for PIU	0.06	0.00	0.00%	0.00	0.00%	0.06	100.00%	0.00	0.00%
Subtotal (2)	0.06	0.00	0.00%	0.00	0.00%	0.06	100.00%	0.00	0.00%
3 Consulting Services and Incremental Admin									
1 Feasibility study for Tranche 3	4.99	0.00	0.00%	0.00	0.00%	0.00	0.00%	4.99	100.00%
2 Development of Yerevan Transport Model	4.99	0.00	0.00%	4.99	100.00%	0.00	0.00%	0.00	0.00%
3 Construction Supervision of the Road Links	6.41	6.41	100.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%
4 Advisory services for Audit	0.17	0.00	0.00%	0.00	0.00%	0.17	100.00%	0.00	0.00%
5 Technical Auditor	0.29	0.00	0.00%	0.00	0.00%	0.29	100.00%	0.00	0.00%
6 Short term Consultants	0.25	0.00	0.00%	0.00	0.00%	0.25	100.00%	0.00	0.00%
7 Public awareness, capacity building	0.22	0.00	0.00%	0.00	0.00%	0.22	100.00%	0.00	0.00%
8 Independent Monitoring Agency	0.10	0.00	0.00%	0.00	0.00%	0.10	100.00%	0.00	0.00%
9 PIU incremental Administration, salaries and insurance	1.28	0.00	0.00%	0.00	0.00%	1.28	100.00%	0.00	0.00%
Subtotal (3)	18.70	6.41	34.30%	4.99	26.68%	2.31	12.35%	4.99	26.68%
4 Resettlement									
1 Resettlement cost	13.88	13.88	100.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%
2 Land acquisition	11.63	11.63	100.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%
Subtotal (4)	25.50	25.50	100.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%
5 Unallocated^a									
1 Physical Contingency	16.06	15.61	97.24%	0.18	1.12%	0.09	0.53%	0.18	1.12%
2 Price Contingency	7.31	7.11	97.24%	0.08	1.12%	0.04	0.53%	0.08	1.12%
Subtotal (5)	23.37	22.72	97.24%	0.26	1.12%	0.12	0.53%	0.26	1.12%
Total Base Cost (1+2+3+4+5)	146.30	133.32	91.13%	5.25	3.59%	2.49	1.70%	5.25	3.59%
6 Financing Charges During Implementation									
1 Interest and Commitment charges during Construction	4.00	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%
Subtotal (6)	4.00	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%
Total Project Cost (1+2+3+4+5+6)^b	150.30	133.32	88.70%	5.25	3.49%	2.49	1.66%	5.25	3.49%

a. Physical contingencies computed at 10% for civil works and 20% for LARP. Price contingencies computed at 5% on foreign exchange costs and 5% on local currency costs: includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

b. Including taxes and duties.

Source: Consultant estimates.

Detailed Cost Estimates by Year

(\$ million)							
Item	2015	2016	2017	2018	2019	2020	Total
1 Civil Works							
1 Argavand-Shirak Street link	0.97	3.74	6.26	10.28	2.30	0.00	23.55
2 Babajanyan-Ashtarak and Davtashen-Ashtarak Hyw.		11.39	13.41	24.64	5.70	0.00	55.14
Subtotal (1)	0.97	15.13	19.68	34.92	7.99	0.00	78.68
2 Goods							
1 Office and miscellaneous equipment for PIU	0.00	0.06	0.00	0.00	0.00	0.00	0.06
Subtotal (2)	0.00	0.06	0.00	0.00	0.00	0.00	0.06
3 Consulting Services and Incremental Administration							
1 Feasibility study for Tranche 3	0.00	0.00	0.00	0.00	2.33	2.66	4.99
2 Development of Yerevan Transport Model	0.00	0.00	4.99	0.00	0.00	0.00	4.99
3 Construction Supervision of the Road Links	0.81	2.99	2.61	0.00	0.00	0.00	6.41
4 Advisory services for Audit	0.00	0.06	0.03	0.03	0.03	0.03	0.17
5 Technical Auditor	0.00	0.00	0.00	0.06	0.11	0.11	0.29
6 Short term Consultants	0.05	0.05	0.05	0.05	0.06	0.00	0.25
7 Public awareness, capacity building	0.00	0.06	0.08	0.09	0.00	0.00	0.22
8 Independent Monitoring Agency	0.00	0.05	0.06	0.00	0.00	0.00	0.10
9 PIU incremental Administration, salaries and insurance	0.22	0.22	0.22	0.22	0.22	0.19	1.28
Subtotal (3)	1.07	3.42	8.03	0.44	2.75	2.99	18.70
4 Resettlement							
1 Resettlement cost	0.00	13.88	0.00	0.00	0.00	0.00	13.88
2 Land acquisition	0.15	11.48	0.00	0.00	0.00	0.00	11.63
Subtotal (4)	0.15	25.35	0.00	0.00	0.00	0.00	25.51
			0.00				
5 Unallocated^a							
1 Physical Contingency	0.19	7.77	2.68	4.25	1.07	0.11	16.06
2 Price Contingency	0.09	3.54	1.22	1.94	0.49	0.05	7.31
Subtotal (5)	0.28	11.30	3.90	6.19	1.55	0.16	23.37
Total Base Cost (1+2+3+4+5)	2.47	55.26	31.60	41.54	12.29	3.15	146.31
6 Financing Charges During Implementation							
1 Interest and Commitment charges during Construction	0.00	0.20	0.60	0.90	1.10	1.20	4.00
Subtotal (6)	0.00	0.20	0.60	0.90	1.10	1.20	4.00
Total Project Cost (1+2+3+4+5+6)^b	2.47	55.46	32.20	42.44	13.39	4.35	150.31

a. Physical contingencies computed at 10% for civil works and 20% for LARP. Price contingencies computed at 5% on foreign exchange costs and 5% on local currency costs: includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

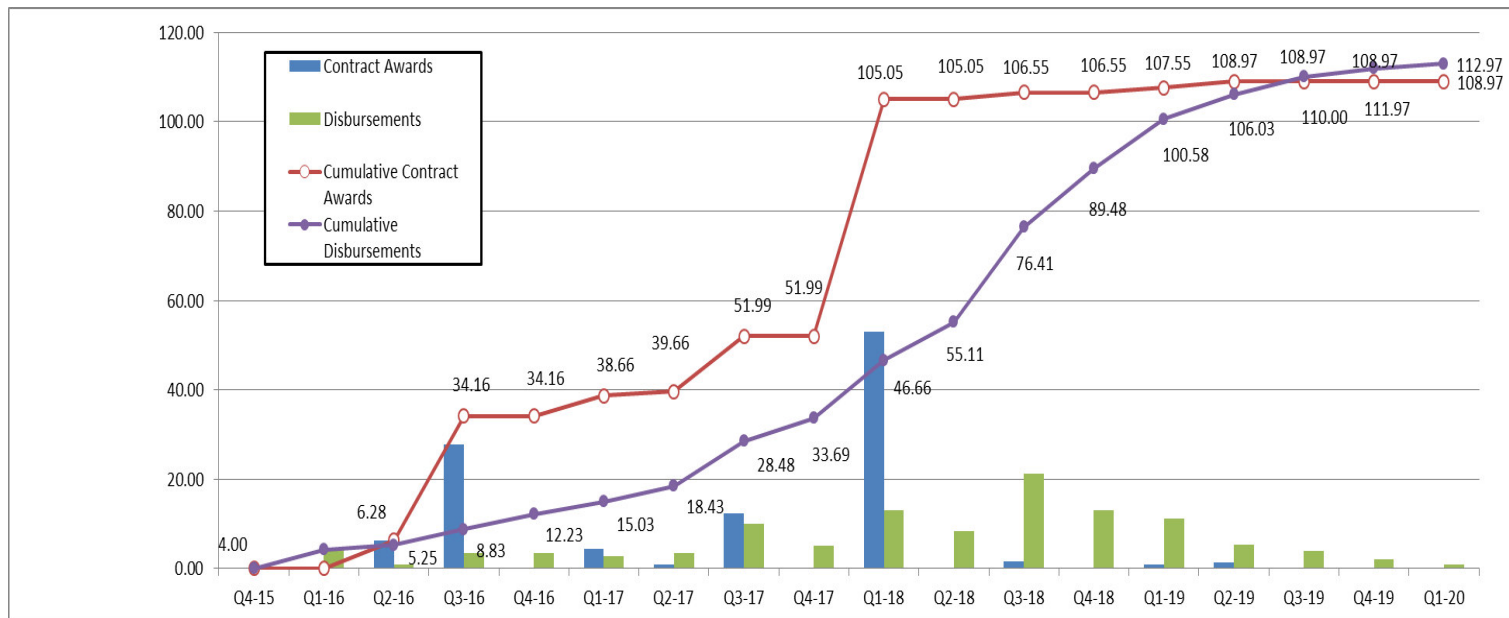
b. Including taxes and duties.

Source: Consultant estimates.

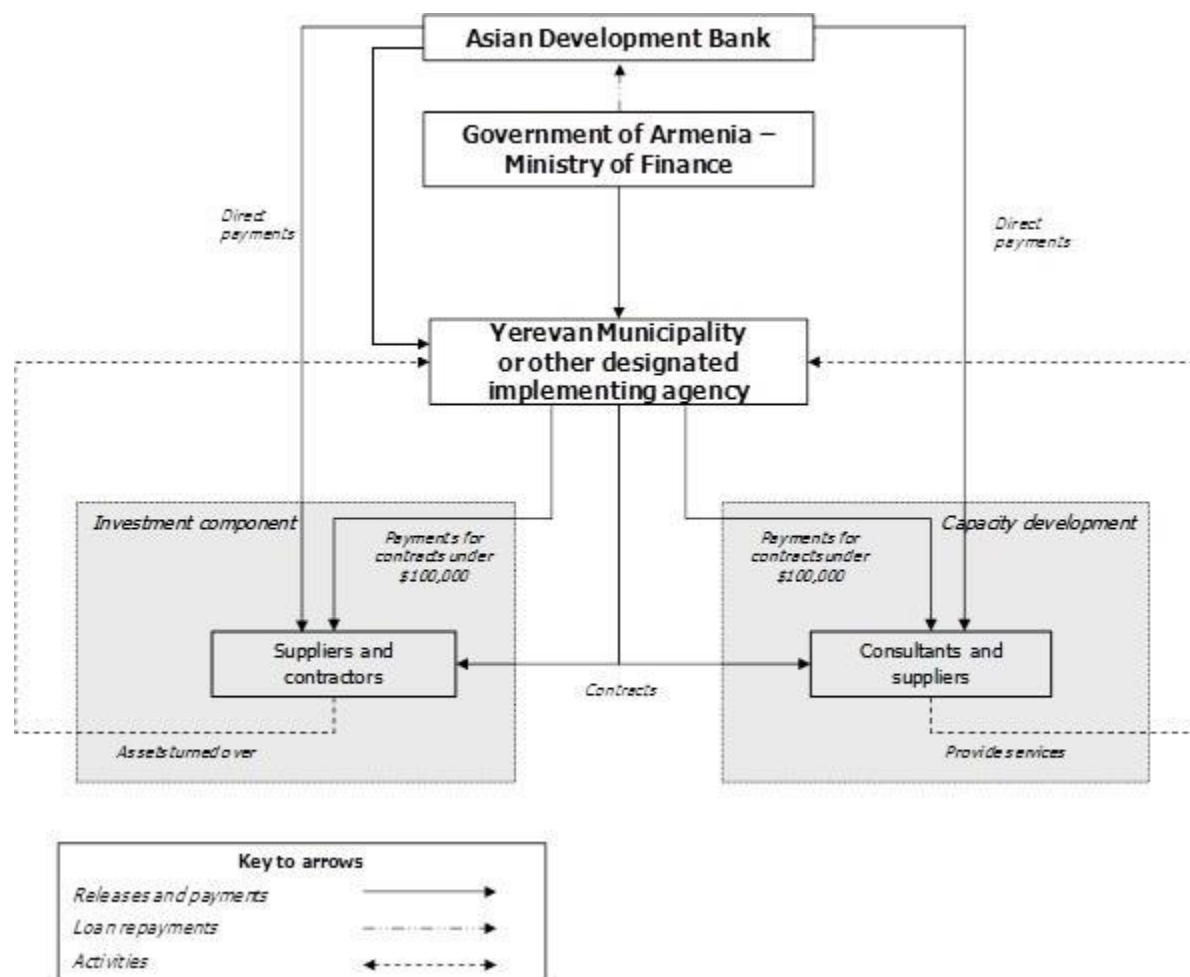
Contract and Disbursement S-curve

1. Indicative Semi-Annual Contract Awards and Disbursement Projections and S Curve

Year	Contract Awards (in \$ million)					Disbursements (in \$ million)				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
2015	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2016	0.00	6.28	27.88	0.00	34.16	4.23	1.02	3.58	3.40	12.23
2017	4.50	1.00	12.33	0.00	17.83	2.80	3.40	10.05	5.21	21.46
2018	53.06	0.00	1.50	0.00	54.56	12.97	8.45	21.30	13.07	55.79
2019	1.00	1.42	0.00	0.00	2.42	11.10	5.45	3.97	1.97	22.49
2020	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
	Total Contract Awards				108.97	Total Disbursements				112.97



Fund Flow Diagram



ADB:

- verifies invoices
- processes payments
- releases payments to YM or designated IA via imprest account replenishment or directly to contractors, suppliers, or consultants

Yerevan Municipality or designated IA:

- verifies invoices
- prepares withdrawal applications (WAs)
- submits WAs to ADB

Ministry of Finance:

- opens imprest account at the State Treasury in behalf of YM

Contractors, Consultants, Suppliers:

- submit invoices to Yerevan Municipality or designated IA

V. FINANCIAL MANAGEMENT

A. Financial Management Assessment

7. A financial management assessment of the YDPIU was conducted. Table 1 summarizes the result. The finance function of the YDPIU is carried out within the Finance Department staffed with an accountant and a financial specialist. The financial specialist reports to the accountant who in turn reports to the director.

8. The Finance Department is relatively well run with a qualified accountant and financial specialist. The department has adequate experience in accounting for projects implemented by the YM including ADB and World Bank financed projects.

9. The department produces quarterly and monthly financial reports. The reports are produced on time and used by the management. The YDPIU accounts are audited by the external, independent audit.

10. Accounting system is computerized using an off the shelf 1C software package from Russia. It can automatically produce financial reports for the YDPIU and for the YDPIU projects. However, bespoke report formats will need to be developed by “Infoweb” LLC for ADB projects. The system is adequately secure and reliable. Access to the system 1C is opened for Accountant (Level 1) and Financial Specialist (Level 2) and Assistant-Translator (Level 3).

11. The Finance Department uses cash based accounting system for RA Government reporting and accrual accounting for tax reports according to Armenian accounting standards. There are limited financial safeguards in place and there are no specific operations manuals. The Finance Department holds no cash and almost all transactions are done electronically. Budgets are prepared annually for the YDPIU and for the projects. Financial information and physical progress are not linked, but are occasionally checked against each other manually by the procurement specialist.

12. Overall, the YDPIU is an established entity, separate from the YM and it is adequate for the implementation of projects for the YM. However, existing staff will have to be trained, new staff hired and new rules, procedures and systems introduced to enable it to function efficiently and better manage ADB projects.

Table 1: Risk Assessment

Particulars of Risk	Rating	Mitigation
1. Inherent risks National and IA environment	Low	Risk at IA level is low - Project being controlled and managed via an established YDPIU which has been set up as separate entity to implement ADB project.
2. Funds flow/disbursement arrangements	Low	YDPIU has experience with previous ADB project (Sustainable Urban Development Project-Tranche 1).

Particulars of Risk	Rating	Mitigation
3. Staffing	Low	YDPIU is generally appropriately staffed for its current needs – but will require additional staff for implementation of Tranche 2 project. As the contract of the Project management and institutional consultant has been completed there will be a need for additional staff for smooth project implementation under the Tranche 2.
4. Accounting Policies and Procedures	Low	YDPIU uses cash based accounting system for RA Government reporting and accrual accounting for Tax reports according to Armenian accounting standards.
5. Internal Audit	Low	Not geared to provide continuous routine “internal audit check” – therefore cannot be relied on. YDPIU staff trained to take over the function of the internal audit.
6. External Audit	Low	External audit of project accounts will be completed by independent auditing consulting company hired by YDPIU, in according with ADB procurement guidelines.
7. Project Reporting and Monitoring	Low	YDPIU has quarterly reporting procedures in place reporting to ADB, RA Government and MOE.
8. Information Systems	Low	As above

ADB = Asian Development Bank, IA = Implementing Agency, MOE = Ministry of Economy, RA = Republic of Armenia, YDPIU = Yerevan Development Project Implementation Unit.

B. Disbursement

13. The loan proceeds shall be disbursed in accordance with ADB’s *Loan Disbursement Handbook* (2015, as amended to date)¹, and detailed arrangements agreed upon between the Government and ADB. Online training for project staff on disbursement policies and procedures is available at: http://wpqr4.adb.org/disbursement_elearning. Project staff are encouraged to avail of this training to help ensure efficient disbursement and fiduciary control.

14. Before the submission of the first withdrawal application, MOF should submit to ADB sufficient evidence of the authority of the two persons who will sign the withdrawal applications on behalf of the borrower, together with the authenticated specimen signatures of each authorized person. The minimum value per withdrawal application is \$100,000, equivalent. Individual payments below this amount should be paid (i) from the imprest, or (ii) by the EA/IA and subsequently claimed to ADB through reimbursement unless otherwise accepted by ADB.. Withdrawal applications and other loan disbursement information are available at ADB Controller’s Department’s website, <http://lfis.adb.org>.

¹ Available at: <http://www.adb.org/documents/loan-disbursement-handbook>

15. **Imprest Fund Procedure.** Imprest fund procedure. A separate imprest account should be established at State Treasury (MOF) as a sub-account of the Single treasury account of the MOF at the Central Bank of Armenia and maintained by the Yerevan Municipality for the ADB Loan.

16. The total outstanding advance to the imprest account should not exceed the estimate of ADB's share of expenditures to be paid through the imprest account for the forthcoming 6 months. The Yerevan Municipality may request for initial and additional advances to the imprest account based on an Estimate of Expenditure Sheet, setting out the estimated expenditures to be financed through the account for the forthcoming six (6) months. Supporting documents should be submitted to ADB or retained by the Yerevan Municipality in accordance with ADB's Loan Disbursement Handbook (2015, as amended from time to time) when liquidating or replenishing the imprest account.

17. **Statement-of-expenditure (SOE) procedure** The SOE procedure may be used for reimbursement of eligible expenditures or liquidation of advances to the imprest account. Supporting documents and records for the expenditures claimed under the SOE should be maintained and made readily available for review by ADB's disbursement and review missions, upon ADB's request for submission of supporting documents on a sampling basis, and for independent audit.

C. Accounting

18. The YM or the designated implementing agency will maintain separate accounts and records by loan and in accordance with sound accounting principles.

D. Auditing

19. The YM or the designated implementing agency will cause the detailed consolidated Project accounts to be audited in accordance with International Standards on Auditing and/or in accordance with the Government's audit regulations by an auditor acceptable to ADB. The audited accounts will be submitted in the English language to ADB within 6 months of the end of the fiscal year (31 December).

20. Annual audit report will include an audit management letter and audit opinions which cover (i) whether the project financial statements present a true and fair view or are presented fairly, in all material respects, in accordance with the applicable financial reporting framework; (ii) whether loan and grant proceeds were used only for the purposes of the project or not; (iii) the level of compliance for each financial covenant contained in the legal agreements for the project; and (iv) the use of the statement of expenditure procedure certifying to the eligibility of those expenditures claimed under SOE procedures in accordance with ADB's *Loan Disbursement Handbook* and the project documents.

21. Compliance with financial reporting and auditing requirements will be monitored by review missions and during normal program supervision, and followed up regularly with all concerned, including the external auditor.

22. The Government and YM have been made aware of ADB's approach and procedure for satisfactory and acceptable quality of the audited project financial statements.² ADB reserves

² ADB's approach and procedure on delayed submission of audited project financial statements:

- When audited project financial statements are not received by the due date, ADB will write to the executing agency advising that (i) the audit documents are overdue; and (ii) if they are not received within the next six

the right to require a change in the auditor (in a manner consistent with the constitution of the borrower), or for additional support to be provided to the auditor, if the audits required are not conducted in a manner satisfactory to ADB, or if the audits are substantially delayed. ADB reserves the right to verify the project's financial accounts to confirm that the share of ADB's financing is used in accordance with ADB's policies and procedures.

23. Public disclosure of the project financial statements, including the audit report on the project financial statements, will be guided by ADB's Public Communications Policy (2011).³ After review, ADB will disclose the project financial statements for the project and the opinion of the auditors on the financial statements within 30 days of the date of their receipt by posting them on ADB's website. The Audit Management Letter will not be disclosed.

months, requests for new contract awards and disbursement such as new replenishment of imprest accounts, processing of new reimbursement, and issuance of new commitment letters will not be processed.

- When audited project financial statements have not been received within 6 months after the due date, ADB will withhold processing of requests for new contract awards and disbursement such as new replenishment of imprest accounts, processing of new reimbursement, and issuance of new commitment letters. ADB will (i) inform the executing agency of ADB's actions; and (ii) advise that the loan may be suspended if the audit documents are not received within the next six months.
- When audited project financial statements have not been received within 12 months after the due date, ADB may suspend the loan.

³ Available from <http://www.adb.org/documents/pcp-2011?ref=site/disclosure/publications>

VI. PROCUREMENT AND CONSULTING SERVICES

A. Advance Contracting

24. All advance contracting and retroactive financing will be undertaken in conformity with ADB's Procurement Guidelines (2015, as amended from time to time)⁴ and ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).⁵ The issuance of invitations to bid under advance contracting and retroactive financing will be subject to ADB approval. The borrower, executing and implementing agencies have been advised that approval of advance contracting and retroactive financing does not commit ADB to finance the Project.

25. **Advance contracting.** The Government has requested ADB's approval of advance contracting for the procurement of civil works for Argavand-Shirak urban road link.

B. Procurement of Goods, Works and Consulting Services

26. All procurement of goods and works will be undertaken in accordance with ADB's Procurement Guidelines.

27. The Investment Program will follow ADB's Procurement and Project 2 loan includes: (i) one international competitive bid (ICB) for procurement of civil works for Argavand Shirak Street link amounting to \$27.70 million; (ii) one ICB for Babajanyan-Ashtarak Highway and Davitashen-Ashtarak Highway amounting to \$64.87 million. Consulting firms will be engaged using the quality- and cost-based selection (QCBS) method with a standard quality:cost ratio of 90:10. Individual consultants will also be engaged to provide technical and administrative support to the implementation of the project. All consultants will be recruited in accordance with the ADB Guidelines on the Use of Consultants.

28. Bidders eligibility will be determined in accordance with ADB's Procurement Guidelines. Accordingly, no bidder or potential bidder shall be declared ineligible for ADB financed contracts for any reason other than those set out in ADB's Procurement Guidelines. For goods and services funded by loans from ADB's Special Fund resources, payments are limited to goods produced in, and services supplied by, developed member countries that have contributed to such resources and all developing member countries.

29. Before the start of any procurement ADB and the Government will review the public procurement laws of the government to ensure consistency with ADB's Procurement Guidelines.

30. The procedures to be followed for national competitive bidding shall be those set forth in the Law of Armenia, with the clarifications and modifications described in Section E below as required for compliance with the ADB's Procurement Guidelines.

31. An 18-month procurement plan indicating threshold and review procedures, goods, works, and consulting service contract packages and national competitive bidding guidelines is listed in the Procurement Plan.

32. All consultants will be recruited according to ADB's Guidelines on the Use of

⁴ Available at: <http://www.adb.org/Documents/Guidelines/Procurement/Guidelines-Procurement.pdf>

⁵ Available at: <http://www.adb.org/Documents/Guidelines/Consulting/Guidelines-Consultants.pdf>

Consultants.⁶ The terms of reference for all consulting services are detailed in para. 49.

C. Procurement Plan (Tranche 2)

Basic Data

Project Name: Sustainable Urban Development Investment Program – Project 2	
Project Number: 42417-033	Approval Number:
Country: ARMENIA	Executing Agency: Ministry of Economy
Project Procurement Classification: {A or B}	Implementing Agency: Yerevan Municipality
Procurement Risk: {High, Substantial, Moderate, or Low}	
Project Financing Amount: \$ 150.31 ADB Financing: 112.97 Cofinancing (ADB Administered): Non-ADB Financing: 37.34 (Government)	Project Closing Date: 30 March 2020
Date of First Procurement Plan	Date of this Procurement Plan:

A. Methods, Thresholds, Review and 18-Month Procurement Plan

Procurement and Consulting Methods and Thresholds

33. Except as the Asian Development Bank (ADB) may otherwise agree, the following process thresholds shall apply to procurement of goods and works.

Procurement of Goods and Works		
Method	Threshold	Comments
International Competitive Bidding (ICB) for Works	\$5,000,000 ¹	
International Competitive Bidding for Goods	\$2,000,000 ¹	
National Competitive Bidding (NCB) for Works ²	Beneath that stated for ICB, Works	
National Competitive Bidding for Goods ²	Beneath that stated for ICB, Goods	
Shopping for Works	Below \$100,000	
Shopping for Goods	Below \$100,000	

¹ Refer to PAI 3.03 Appendix 2 for International Competitive Bidding

² Refer to Para. 3 of PAI 3.05 for National Competitive Bidding

Consulting Services	
Method	Comments
Quality and Cost Based Selection (QCBS)	
Quality Based Selection	
Consultants' Qualifications Selection ³	
Least-Cost Selection ⁴	
Fixed Budget Selection	
Individual Consultants Selection	

³ Refer to Para. 29 of PAI 2.02 for Consultants' Qualification Selection

⁴ Refer to Para. 26 of PAI 2.02 for Least-Cost Selection

Goods and Works Contracts Estimated to Cost \$1 Million or More

⁶ Checklists for actions required to contract consultants by method available in e-Handbook on Project Implementation at: <http://www.adb.org/documents/handbooks/project-implementation/>

34. The following table lists goods and works contracts for which the procurement activity is either ongoing or expected to commence within the next 18 months.

Package Number	General Description	Estimated Value	Procurement Method	Review [Prior / Post/Post (Sample)]	Bidding Procedure	Advertisement Date (quarter/year)	Comments
Tbd 1	Argavand - Shirak Street Link	\$27.70	ICB	Prior	1S1E	II-2015	Advance Contracting Large Works Prequalification of bidders and domestic preference – not applicable
Tbd 2	Babajanyan – Ashtarak and Davitashen – Ashtarak Highway	\$64.87	ICB	Prior	1S1E	IV-2015	Large Works Prequalification of bidders and domestic preference – not applicable

1. Consulting Services Contracts Estimated to Cost \$100,000 or More

35. The following table lists consulting services contracts for which the recruitment activity is either ongoing or expected to commence within the next 18 months.

Package Number	General Description	Estimated Value	Recruitment Method	Review (Prior / Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
Tbd 3	Feasibility study for Tranche 3	\$5.25	QCBS	Prior	II-2016	Full	International QCBS 90:10
Tbd 4	Development of Yerevan Transport and Traffic Model	\$5.25	QCBS	Prior	IV-2015	Full	International QCBS 90:10
Tbd 5	Construction Supervision of Road Links	\$6.75	QCBS	Prior	II-2015	Full	International QCBS 90:10
Tbd 6	Advisory Services for Audit	\$0.18	LCS	Prior	IV-2015	Bio-data	National
Tbd 7	Technical Auditor	\$0.30	ICS	Prior	IV-2015	N/A	International
Tbd 8	Short term Consultants	\$0.26	ICS	Prior	III-2016	N/A	International and National Multiple contracts – number of contracts to be determined later. These are technical support

Package Number	General Description	Estimated Value	Recruitment Method	Review (Prior / Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
							individual consultants for YDPIU
Tbd 9	Public awareness, capacity building	\$0.23	ICS	Prior	II-2015	N/A	International and National
Tbd 10	Independent Monitoring Agency	\$0.11	CQS	Prior	III-2015	Bio-data	National
Tbd 11	PIU incremental administration consultants	\$1.35	ICS	Prior	II-2015	N/A	National Multiple contracts – number of contracts to be determined later. These are additional YDPIU staff to assist in the implementation of Tranche 2

2. Goods and Works Contracts Estimated to Cost Less than \$1 Million and Consulting Services Contracts Less than \$100,000 (Smaller Value Contracts)

36. The following table groups smaller-value goods, works and consulting services contracts for which the activity is either ongoing or expected to commence within the next 18 months.

Goods and Works								
Package Number	General Description	Estimated Value	Number of Contracts	Procurement Method	Review [Prior / Post/Post (Sample)]	Bidding Procedure	Advertisement Date (quarter/year)	Comments
Tbd 12	PIU Office and miscellaneous equipment	\$0.05	Multiple	Shopping	Prior	1S1E	III-2015	Goods

Consulting Services								
Package Number	General Description	Estimated Value	Number of Contracts	Recruitment Method	Review (Prior / Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments

B. Indicative List of Packages Required Under the Project

37. The following table provides an indicative list of goods, works and consulting services contracts over the life of the project, other than those mentioned in previous sections (i.e., those expected beyond the current period).

Goods and Works							
Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Review [Prior / Post/Post (Sample)]	Bidding Procedure	Comments

Consulting Services							
Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Review (Prior / Post)	Type of Proposal ⁸	Comments ⁹

C. List of Awarded and On-going, and Completed Contracts

38. The following tables list the awarded and on-going contracts, and completed contracts.

1. Awarded and On-going Contracts

Goods and Works							
Package Number	General Description	Estimated Value	Awarded Contract Value	Procurement Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Comments

Consulting Services							
Package Number	General Description	Estimated Value	Awarded Contract Value	Recruitment Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Comments

2. Completed Contracts

Goods and Works								
Package Number	General Description	Estimated Value	Contract Value	Procurement Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Date of Completion	Comments

Consulting Services								
Package Number	General Description	Estimated Value	Contract Value	Procurement Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Date of Completion	Comments

D. Non-ADB Financing

39. The following table lists goods, works and consulting services contracts over the life of the project, financed by Non-ADB sources.

Goods and Works				
General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Comments

Consulting Services				
General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Comments

National Competitive Bidding

A. Regulation and Reference Documents

40. The procedures to be followed for national competitive bidding shall be those set forth in the Law of Republic of Armenia on Procurement effective as of January 1, 2011 with the clarifications and modifications described in the following paragraphs required for compliance with the provisions of the ADB *Procurement Guidelines*.

B. Procurement Procedures

1. Eligibility

41. The eligibility of bidders shall be as defined under section I of the Procurement Guidelines published by ADB in March 2013, as amended from time to time; accordingly, no bidder or potential bidder should be declared ineligible for reasons other than those stated in section I of the Procurement Guidelines as amended from time to time.

2. Bidding Procedures

42. The purchase of goods, works and services by barter is not acceptable as a method of procurement.

43. The open procedure is the acceptable procurement procedure for national competitive bidding. The use of competitive dialogue, simplified procedure, restricted procedure and negotiation procedure may only be used with prior approval of ADB.

3. Participation by Government-Owned Enterprises

44. Government-owned enterprises in Armenia shall be eligible to participate as bidders only if they can establish that they are legally and financially autonomous, operate under commercial law and are not a dependent agency of the contracting authority/executing agency/implementing agency. Furthermore, they will be subject to the same bid and performance security requirements as other bidders.

4. Prequalification

45. Normally, postqualification shall be used, unless prequalification is explicitly provided for in the financing agreement/procurement plan.

C. Bidding Documents

5. Bid Evaluation

46. Factors, evaluation methodology, and evaluation criteria must be explicitly stated in bidding documents and applied consistently, and the contract award must be to the bidder that submitted the lowest evaluated, substantially responsive bid.

6. Securities

47. When required, bid security shall be in the form of a bank guarantee from a reputable bank.

48. Performance security shall be provided within a reasonable period not exceeding twenty-eight (28) days after notification of award.

7. Rejection of All Bids and Rebidding

49. Bids shall not be rejected and new bids solicited without ADB's prior concurrence.

8. ADB Policy Clauses

50. A provision shall be included in all NCB works and goods contracts financed by ADB requiring suppliers and contractors to permit ADB to inspect their accounts and records and other documents relating to the bid submission and the performance of the contract, and to have them audited by auditors appointed by ADB.

51. A provision shall be included in all bidding documents for NCB works and goods contracts financed by ADB stating that the Borrower shall reject a proposal for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the contract in question.

52. A provision shall be included in all bidding documents for NCB works and goods contracts financed by ADB stating that ADB will declare a firm or individual ineligible, either indefinitely or for a stated period, to be awarded a contract financed by ADB, if it at any time determines that the firm or individual has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices or any integrity violation in competing for, or in executing, ADB-financed contract.

D. Consultant's Terms of Reference

53. The terms of reference for the audit, construction supervisor, independent monitoring and the Yerevan transport and traffic model consultants are detailed in Annex 1 of the PAM.

VII. SAFEGUARDS

A. Environment

54. Project 2 is categorized B as it will not have significant irreversible environmental impacts during or after construction. The government adopted an environmental assessment and review framework based on ADB *Safeguard Policy Statement* (SPS) 2009, upon which all environmental safeguards are prepared for all projects. The draft initial environmental examinations (IEE)s (separate for Davitashen-Ashtarak highway road link and Babajanyan-Ashtarak highway road link) and final environmental impact assessment (EIA) for Argavand-Shirak road link were prepared and disclosed on ADB website. Most of the predicted impacts are common during construction such as dust, noise, vibration and other disturbance to residents' livelihood and traffic. YM will require contractors to prepare, and implement the site specific environmental management plans for each subproject in order to implement the environmental impact mitigation requirements of the EIA and IEEs, which will also form an integral part of construction contracts.⁷

55. The site specific environmental management plans will be endorsed by the construction supervision consultants, and subsequently reviewed and approved by supervision engineer and YM. The construction supervision consultants will assist YM in monitoring the project's compliance with environmental requirements.

56. The project performance monitoring system (PPMS) will be established, including a web-based PPMS, based on the design and monitoring framework (DMF) of Tranche 2 (LXXXX-ARM) of the MFF (refer to project and loan documents) according to ADB's project performance management system principles). The PPMS will monitor (i) performance targets set in the DMF through implementation; (ii) compliance with social and environmental safeguards as recommended in the environmental management plan (EMP).

57. Pursuant to ADB's Safeguard Policy Statement (SPS) (2009),⁸ ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth at Appendix 5 of the SPS.

Administrative Framework and Tasks Related to Environmental Safeguards.

Yerevan Development Project Implementation Unit

58. Within the IA, the Yerevan Development Project Implementation Unit (YDPIU) is responsible for day-to-day management of this project. It is headed by a full-time Project Director. Environmental Unit is established with the responsibilities to review the consultant's deliverables (including the EIAs, EMPs, archaeological surveys, etc.) to ensure quality and facilitate conclusion on nature protection expertise from the RA Ministry of Nature Protection (agreement on route with the RA Ministry of Culture, etc.) and obtain ADB approvals; general management of the EMP to ensure compliance to Armenian legislation and ADB Safeguard

⁷ IEE for Babajanyan-Ashtarak Highway disclosed on 17 April 2015.

<http://www.adb.org/projects/documents/sustainable-urban-development-investment-program-t2-yerevan-western-ring-road-iee>

IEE for Argavand Shirak road link disclosed on 5 June 2015.

<http://www.adb.org/projects/documents/sustainable-urban-development-investment-t2-yerevan-western-ring-road-road-link-3-argavand-unction-iee>

IEE for Davitashen-Ashtarak highway road link disclosed on 11 June 2015.

<http://www.adb.org/projects/documents/sudip-t2-yerevan-western-ring-road-road-link-davitashen-ashtarak-highway-iee>

⁸ Available at: <http://www.adb.org/Documents/Policies/Safeguards/Safeguard-Policy-Statement-June2009.pdf>

Policy Statement; include EIAs and the EMPs in bidding documents and civil works contract; regularly inspect construction activities; review the monthly environmental safeguards, including monitoring reports submitted by the Engineer; and other documents as needed; keep the recording of monitoring data.

Detailed Engineering and Construction Supervision Consultant

59. Detailed Engineering and Construction Supervision Consultant (DESC) through the environmental unit will update or prepare the final IEE/EIA reports, along with the relevant EMP, and other documents as required; apply for and get a positive conclusion on nature protection expertise from the RA Ministry of Nature Protection and approvals from the RA Ministry of Culture, as prescribed by the Armenian legislation. DESC will provide guidance to the contractor in developing SEMP's and endorse them for YDPIU approval. DESC will be responsible for including a section on environmental performance in the project quarterly progress reports, and to assist YDPIU in preparing semi-annual Environmental monitoring reports.

60. During construction DESC environmental specialist with a strong background of health and safety have the following tasks to supervise and monitor Contractor's construction works; liaise with program management Consultants, NGO's, civil society, and other stakeholders concerned with the project; review the Contractor's weekly; monthly monitoring reports to check on the data of the environmental monitoring information, review and approve the corrective action plans .

Contractor

61. Awarded contractors shall hire the services of an environmental specialist, health and safety specialist, or environment specialist (with background health & safety) as defined in the tender document.

62. The Contractors' key responsibilities are (but not limited) to update the EMP before commencement of works and prepare site specific EMP's (SEMP's) based on the EIA and the EMP report; implement the EMP as a special part of the contract, particular conditions; and as a technical specifications; obtain permits and approvals from relevant agencies and provide copies to Engineer.

63. The baseline data for air quality, noise and dust is collected and analyzed in the scope of the EIA. According to the EIA, the Contractor shall establish baseline conditions at locations as determined by the Engineer. The instrumented baseline environmental data collection shall be carried out over a period of not less than 21 days prior to the commencement of construction works and the thresholds for monitoring shall be agreed. Routine monitoring to check compliance of construction works with the set thresholds shall be implemented.

64. Contractor implements the everyday routine monitoring through the responsible engineer staff onsite and weekly monitoring through the environmental unit staff. The frequency of environmental monitoring of noise, dust, vibration and water quality shall be determined by the monitoring plan in the EMP.

Asian Development Bank

65. ADB may carry out periodic missions to check the Project compliance with SPS 2009, review and approve EIAs and EMP's on no-objection basis; review of bi-annual reports and provide necessary advice to the YDPIU; disclose EIAs and bi-annual reports to the public on the ADB website.

Monitoring

66. Monitoring is a part of the Project's environmental management plan which includes the baseline monitoring data collection and routine environmental monitoring.

67. The baseline data for air quality, noise and dust is collected and analyzed in the scope of the EIA. According to the EIA, Contractor shall accept and validate the established baseline conditions at locations as determined by the Engineer or Contractor may carry out own instrumented baseline environmental data collection 21 days prior to the commencement of construction works. The thresholds for monitoring shall be agreed.

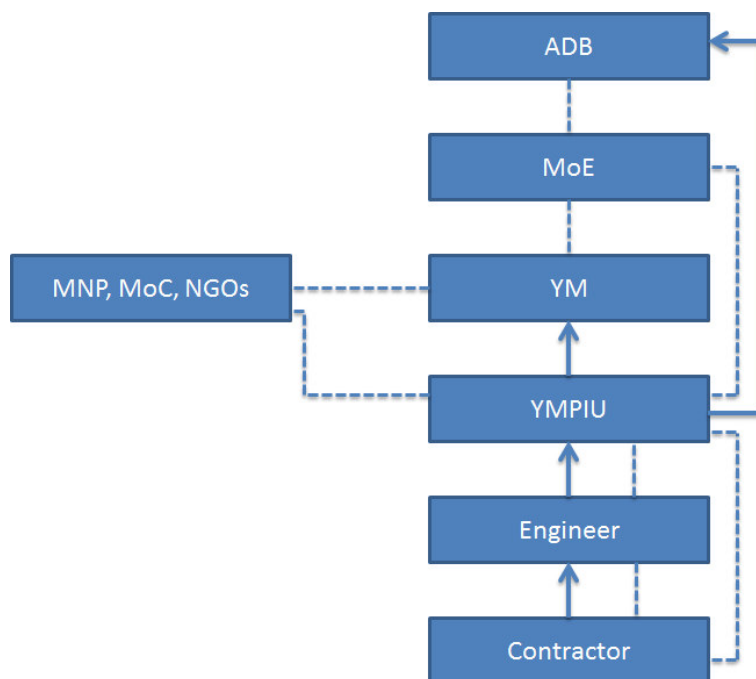
68. Routine monitoring to check compliance of construction works with the set thresholds, as well as to other mitigation measures set in EMP shall be implemented by Contractor. Routine monitoring contains the planned activities that will guide the Contractor to check and/or compare the effectiveness of the mitigation measures for prevention and control of the negative impacts of the project.

69. Cost of mitigation measures and monitoring will be included in Contractors' bid.

70. Engineer implements the baseline data monitoring and supervision of Contractor's construction works through site visits. Costs of baseline monitoring and supervision are included in supervising engineer budget. YDPIU will monitor the Engineer and Contractor through the inspection site visits.

Reporting

71. The environmental safeguards compliance of the project and monitoring results shall be regularly reported on all project implementation levels: Contractor, Engineer, YDPIU, YM and ADB. The parties involved in reporting and the sequence procedures are presented in the chart below.



72. Contractor submits to the Engineer weekly and monthly environmental monitoring reports, using the site inspection checklist.

73. The following environmental reports shall be submitted by the Contractor:

- Initial Environmental Baseline Report. - Required environmental baseline data as specified in the EMP and Technical Specifications,
- Weekly Environmental Reports. – The results and findings from the environmental monitoring activities will be documented in specially developed by Contractor and approved by Engineer monitoring check lists. The weekly monitoring report shall include the environmental performance indicator and assessment of the effectiveness of the mitigation measures,
- Monthly Progress Report- summary environmental report shall be submitted as part of the Contractor's Monthly Progress Report. Monthly reports shall be analytical and provide explanations for anomalies, non-compliance and problems encountered,
- Report on accidents/incidents.

74. The Reports shall comprehensively include all relevant aspects in implementing the mitigation measures and monitoring requirements of the EMP. The outline of the reports will be agreed with YDPIU.

75. Engineer submits to YDPIU weekly monitoring reports and report on environmental safeguards as a part of the monthly progress report. The progress reports should include a section on compliance with safeguard requirements and proposed corrective actions.

76. YDPIU will submit bi-annual environmental safeguards' report to ADB. The bi-annual reports shall be disclosed on the YDPIU and ADB websites.

B. Land Acquisition and Resettlement

77. Project 2 is categorized as A for the involuntary resettlement safeguard. Three LARPs are being prepared for Tranche 3 for its three sections: (i) Argavand-Shirak Road Link section (29 affected properties) comprising 'LARP 2' that was moved from Tranche 1, as explained in para. 8; (ii) Davitashen-Ashtarak Road Link section (nearly 100 affected properties); and (iii) Babajanyan-Ashtarak Road Link section (nearly 1,000 affected properties). The total number of affected assets is approximately 1,129, and the estimated total number of affected households is 351 comprising 1,405 persons. Since LARP2 was moved to Tranche 2, the design of the LARP2 section has been slightly modified, as a result of which 2 new households (total 26 households) will be affected and the impacts on 5 properties has been revised due to the changed geometry of the road. The total quantum of land take for Tranche 2 is 294,417 m² (29.44 ha). The IA is currently developing the respective government decree for initial survey of properties for the Babajanyan-Ashtarak Road Link section, and has already initiated initial survey decree for the Davitashen-Ashtarak Road Link section, which is a precondition for commencement of field work, measurements and surveys.

78. A preliminary LARP for Tranche 2 was disclosed in the ADB website on 20 April 2015⁹, an updated LARP was submitted in May 2015. LARF and LARP should be followed for guidance on the implementation of the LARPs, including carrying out consultations, disclosure, and the grievance redress mechanism.

⁹ <http://www.adb.org/projects/documents/sustainable-urban-development-investment-program-t2-yerevan-western-ring-road-rp>

C. Indigenous People

79. The investment program area does not include communities that may be defined as indigenous peoples under ADB's SPS (2009) and the indigenous peoples' impact classification for the tranche is "C.

VIII. GENDER AND SOCIAL DIMENSIONS

Gender Action Plan

80. Tranche 2 is categorized as Some Gender Elements (SGE) and a gender action plan has been developed by the Yerevan Municipality.

	Objective	Activity and Description	Target	Responsibility	Timing (TBC)
Component A : Urban infrastructure extended, rehabilitated and improved in Yerevan					
1.1	Final Design corresponding to EWCD and safety design standards	Integrate safety and EWCD friendly features into final design	EWCD and safety design features integrated into final design.	Engineer	Q2/2015
1.2	Establishment and implementation of a centralized resettlement/social management system in YDPIU for dealing with resettlement and other related topics such as gender aspects	Mobilize relevant staff for centralized resettlement /social management system in YM or YDPIU	Centralized resettlement/social management system will provide gender disaggregated Data on all Relevant resettlement issues	YDPIU	Q3, Q4/2015
1.3	Collection of sex-disaggregated data for preparation and implementation of gender-inclusive land acquisition and resettlement plan	Collect sex-disaggregated data through surveys Prepare land acquisition and resettlement plan to be gender-inclusive Conduct gender-inclusive public consultations and campaigns on LARP Identify vulnerable families headed by women	Baseline data created and surveys undertaken with sex segregated data by YM and Operators – separate consultations if necessary At least 30% of women participants in public consultations and on preparation of LARP Rehabilitation allowance for woman headed AHs	YDPIU, Engineer	Q4/2015 - Q1/2016
Component B: Appropriate institutional capacity strengthened in Yerevan					
2.1	Introduction of gender perspectives in infrastructure planning and construction	Construct ramps before and after pedestrian crosses to enable access to women with prams Design and install new lighting systems on the roads to enhance	Specific ramps before and after pedestrian crosses constructed in the project areas Illumination sufficient for good visibility of	YDPIU, Engineer	Construction lifetime

	Objective	Activity and Description	Target	Responsibility	Timing (TBC)
		safety	pedestrians and other vulnerable road users.		
2.2	Conduction of trainings for appropriate institutional capacity strengthened in Yerevan	Design gender inclusive training modules and programs on transport and traffic modelling.	YM transport department staff and transport authority staff trained on transport and traffic model (with at least 25% women recruited and trained	YM	Q4/2015 – Q4/2016
Component C: Skilled and efficient program implementation system established					
3.1	Identification of Gender Focal Points in MOE, YM, YTA and YDPIU, create a gender network and build capacity of relevant staff in YDPIU, YM and MOE	GFP are identified and establish network of agencies and NGOs established and regular meetings held to discuss joint GAD activities.	Gender Focal Points identified GAD Network established and functional Network with NGOs established	MOE, ADB, YDPIU, UNDP GFP, NGO	Q4/2016
3.2	Conduction of series of Gender Awareness trainings for the relevant staff in YDPIU, YM Conduction of training programs based on training needs assessment for relevant staff of YM, YDPIU, MOE, Yerevan Trans and public transport operators	Design gender-inclusive training modules and program (e.g. capacity building in gender mainstreaming in urban development/transport)	At least 35% of women participant gender-responsive training program developed number of trainings conducted YDPIU additional staff is recruited and trained (at least 25% women)	ADB	Q4/2015 - Q1-Q2 /2016
3.3	Gender-balanced composition and equal pay in YDPIU, increasing percentage of female in decision making positions in PIU	Women and men at YDPIU are paid equally	Equal access to employment opportunities with equal pay for the equal work performed in the same position is ensured	YM, MOE, ADB, YDPIU,	Project lifetime
3.4	Collection of sex-disaggregated data for reference baseline.	Collect sex-disaggregated data through surveys Conduct gender-	Baseline data created and surveys undertaken with sex segregated	YDPIU, Engineer	Q4/2015 - Q1/2016

	Objective	Activity and Description	Target	Responsibility	Timing (TBC)
		inclusive public consultations and campaigns, and identify vulnerable families headed by women	data by YM and Operators – separate consultations if necessary At least 30% of women participants in public consultations. Rehabilitation allowance for woman headed Ahs		
3.5	Development of monitoring tool and regular reporting system	Develop and maintain GAP indicators and targets monitoring system	Monitoring system in place	YM, YDPIU, ADB	Project lifetime

AHs = affected households, EWCD = elderly-women-children disabled, GAD = gender and development, GAP = gender action plan, GFP = gender focal points, LARP = land acquisition and resettlement plan, MOE = Ministry of Economy, NGO = nongovernment organization, YDPIU = Yerevan development project implementation unit, YM = Yerevan Municipality.

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING AND COMMUNICATION

A. Project Design and Monitoring Framework

Impacts the Project is aligned with:			
The project is aligned improved road traffic safety and enhanced local economy in Yerevan ¹⁰			
Project Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
Outcome Efficient, reliable, and affordable urban infrastructure and services provided in Yerevan	a. Travel time from South to North Yerevan (calculated from north south road connection points, 45 min as 2009) decreased by 30% compared to existing alternative routes. b. Yerevan Municipality respective staff use the multimodal transport model in the decision making process (incorporate the model in all new traffic infrastructures, baseline is 0, no model developed as of now)	a. NGO, international and national organizations IA progress report b. Municipal Transport statistics	Political debate shifting urban transport and infrastructure rehabilitation focus over other projects
Outputs 1. Urban transport infrastructure extended, rehabilitated, and improved in Yerevan	By Q1 2019 1a. Argavand - Shirak Road Link 1.35 km including a new bridge over Hrazdan River of 250 m length 1b. Babajanyan – Ashtarak highway, 6.85 km 1c. Davitashen-Ashtarak highway; of 2.24 km including 2 interchanges	1a-c. IA project progress reports YM, SUDIP websites and other municipal communication and media materials	
2. Appropriate institutional capacity strengthened in Yerevan	By Q1 2018 2a. YM transport department and transport authority staff trained on transport and traffic models (minimum 4 staff recruited and trained, with at least 25% women) 2b. YM transport department staff and	2a-b. IA project progress reports YM, SUDIP websites	Interdepartmental coordination and support is not forthcoming

¹⁰ Impact statement in the approved MFF 0056-ARM (24 March 2011).

Project Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
	transport authority staff trained on asset management (minimum 4 staff trained)		
3. Skilled and efficient program implementation system established	By 2020 3a. PIU additional staff is recruited and trained (at least 25% women, with a minimum of 1)) 3b. Yearly contracts awards and disbursement targets are achieved by IA 3c. ADB procedures and policy for safeguards, public communications and procurements are timely implemented and complied with by YM staff	3a-c. IA project progress reports YM, SUDIP websites	Interdepartmental coordination and support is not forthcoming
Key Activities with Milestones 1. Urban transport infrastructure extended, rehabilitated and improved in Yerevan 1.1 Complete detailed design for Davtashen-Ashtarak highway and Babajanyan-Ashtarak urban road links by October 2015. 1.2 Implement LARPs before contracts awards by March 2016. 1.3 Complete bidding process for civil works by March 2017. 1.4 Complete construction of all civil works by January 2019. 1.5 Complete construction supervision of the road links by January 2019. 1.6 Feasibility study for T3 developed by April 2017. 1.7 Detailed design for T3 developed by October 2017. 2. Appropriate institutional capacity strengthened in Yerevan 2.1 Produce final TOR for Yerevan Transport and Traffic Model by October 2015. 2.2 Yerevan Transport and Traffic Model developed by August 2017. 2.3 Develop training modules and conduct training by December 2017. 3. Skilled and efficient program implementation system established 3.1 Recruitment of additional PIU Staff by December 2015. 3.2 Baseline data created and surveys undertaken by October 2016.			
Inputs ADB: \$112,970,000 Government: \$37,340,000			
Assumptions for Partner Financing Not Applicable			

ADB = Asian Development Bank, IA = implementing agency, LARP = land acquisition and resettlement plan, NGO = nongovernment organization, PIU = project implementation unit, RA = Republic of Armenia, SUDIP = Sustainable Urban Development Investment Program, TOR = terms of reference, YM = Yerevan Municipality

B. Monitoring

1. Project Performance Monitoring

81. Refer to ADB's project performance monitoring system¹¹

2. Compliance Monitoring

82. Compliance monitoring system will be the same one as the one used during tranche one of this same MFF.

3. Safeguards monitoring

83. **Involuntary resettlement.** Semiannual monitoring report prepared and consultations carried out.

84. **Environment.** Semiannual monitoring report prepared and consultations carried out.

4. Gender and Social Dimensions monitoring¹²

85. **Gender.** A gender specialist will be appointed in the IA and will monitor the implementation of the gender action plan. In addition, an ADB gender specialist has been recruited for the region and will also follow the progress of the gender action plan implementation.

86. **Labor.** Civil works contracts will stipulate priorities to (i) employ local people, (ii) ensure equal opportunities for women and men for work, (iii) pay wages promptly, and (iv) not employ child or forced labor.

87. **Other Risks and/or vulnerabilities.** The Project will complement ongoing awareness programs through an information, education, and communication campaign covering HIV/AIDS and sexually transmitted infections for construction workers.

C. Evaluation

88. Within 6 months of physical completion of the Project, IA will submit a project completion report to ADB.

D. Reporting

89. IA will provide ADB with

- (i) quarterly progress reports in a format consistent with ADB's project performance reporting system
- (ii) semiannual safeguards monitoring report.
- (iii) consolidated annual reports including
 - progress achieved by output as measured through the indicator's performance targets
 - key implementation issues and solutions
 - updated procurement plan and
 - updated implementation plan for next 12 months
- (iv) a project completion report within 6 months of physical completion of the Project

¹¹ ADB's project performance reporting system is available at:
<http://www.adb.org/Documents/Slideshows/PPMS/default.asp?p=evaltool>

¹² Staff Guide to Consultation and Participation: <http://www.adb.org/participation/toolkit-staff-guide.asp> and CSO Sourcebook: A Staff Guide to Cooperation with Civil Society Organizations: <http://www.adb.org/Documents/Books/CSO-Staff-Guide/default.asp>

90. To ensure projects continue to be both viable and sustainable, project accounts together with the associated auditor's report, should be adequately reviewed.

E. Stakeholder Communication Strategy

91. ADB's *Public Communications Policy* (PCP) 2011 promotes proactive external relations and improved access to information about ADB operations for better development effectiveness. The policy promotes greater transparency and accountability by enabling ADB's stakeholders—especially people affected by development activities—to better participate in the decisions that affect them, like those taken during the implementation of the Tranche 1 SUDIP's LARPs.

92. Public communications are tailored to the needs of specific audiences. Engagement with affected people and other interested stakeholders are maintained throughout the project cycle, with essential communications and information-sharing aspects

93. Staff from operations departments will play a key role in assisting project sponsors and clients in communicating with project-affected stakeholders and in ensuring disclosure requirements are met. They will promote awareness among people from the public, private, and civil society sectors regarding the policy and the public's right to access ADB information. The ADB NGO and Civil Society Center will support relationships with civil society.

Communications Strategy Matrix for Project 2

Communications Context: <i>Public support and sustainability of the rehabilitated/expanded URR in the project areas depend on increased public awareness on the benefit of these investments to their wellbeing and modification in their hygiene and sanitation practices. Moreover, quality of construction works and SUDIP service also need transparency and an effective mechanism for receiving and addressing public feedback.</i>									
Project Objective: <i>Safe, reliable, and sustainable URR that contribute to improved living standards and environment in the project areas</i>									
Strategic Elements						Work Plan Elements			Evaluation
Communication Objective	Key Risks	Audience	Current/ Desired Behavior	Messages/ Info Needs	Channel Activity	Time	Responsibility	Resource Needs	Expected Outcomes
1. Public is informed of the benefits of (a) improved URR, and (b) safeguards, hygiene in the project areas.	Lack of interest to connect to the improved URR Unwillingness to change the behavior related to safeguards measures.	Households in the project areas.	Move from unwillingness to willingness to connect Improved behavior related to safeguards measures.	Safeguards measures to be implemented during construction as well as how improved roads can save time and money	SUDIP materials (posters/ pamphlets) distributed in administrative district centers, offices, market places and Newspaper ads and articles Training and seminars	2015-continuous	Project staff , contractors staff community leaders involved in material distribution and are trained to conduct public awareness programs		Improved urban environment, local economic conditions and greater private sector within urban areas
2. Stakeholders informed of likely environmental impacts during construction and mitigation measures planned and actually conducted	Complaints from local communities may cause delay	Communities	Maintain support for the project	Information on project environmental impacts and mitigation measures	Visits by safeguards team under SUDIP, contractor team and construction supervision consultants Posting of updated IEEs/EMPs and EMRs on the ADB website.		SUDIP (through its social and environmental specialists and construction supervision consultant, and contractors.		No complaint received from local community on management of environmental impacts from the projects

Communications Context: <i>Public support and sustainability of the rehabilitated/expanded URR in the project areas depend on increased public awareness on the benefit of these investments to their wellbeing and modification in their hygiene and sanitation practices. Moreover, quality of construction works and SUDIP service also need transparency and an effective mechanism for receiving and addressing public feedback.</i>									
Project Objective: <i>Safe, reliable, and sustainable URR that contribute to improved living standards and environment in the project areas</i>									
Strategic Elements						Work Plan Elements			Evaluation
3.Stakeholders/ general public informed of mechanism for providing feedback on the project thereby improving quality of project outputs	Unidentified feedback or unresolved concerns may affect quality of construction and operations of the facilities	Communities	Improved public feedback and support for the construction activities and improved quality of SUDIP services.	Information on project Grievance Redress Mechanism under IEE and EIA.	Visits and consultations by environmental and social and construction supervision consultants' specialists.	SUDIP staff	Public feedback/ complaints are received and addressed leading to improved quality of construction and improved operations of the SUDIP.	3.Stakeholders/ general public informed of mechanism for providing feedback on the project thereby improving quality of project outputs	Unidentified feedback or unresolved concerns may affect quality of construction and operations of the facilities.
4.Bidders and the public are informed of contract awards	Complaints from bidders or interested parties may delay works.	Bidders/ general public	Improved trust on the selection of contracts for civil works and consulting services.	Info on results of bid evaluation is widely available on the website and advertised in newspaper	Publication in a local newspaper/website ADB contracts awarded.	According to the bidding procedures in compliance with ADB's guidelines.	Procurement specialist under SUDIP		Improved transparency and public trust.

5. General public is informed of project expenditures	Low public trust on the expenditures may affect willingness to support project during implementation.	General public	Improved public trust	Audited financial report	Financial and Audit reports are submitted to Ministry of Economy, Government, YM and ADB.	Within 15 days upon receipt	Government		Improved transparency and public trust in expenditures related to the project.
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ADB = Asian Development Bank, EMP = environmental management plan, EMR = environmental monitoring report, IEE = initial environmental examination, SUDIP = Sustainable Urban Development Improvement Program, URR = urban road rehabilitation, YM = Yerevan Municipality.

X. ANTICORRUPTION POLICY, TRANSPARENCY AND ACCOUNTABILITY

94. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the Project.¹³ All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all Project contractors, suppliers, consultants and other service providers. Individuals/entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the Project.¹⁴

95. To support these efforts, relevant provisions are included in the framework financing agreement, loan and project agreements, loan regulations, and the bidding documents for the Investment Program. The Government will disclose to the public, and update annually the current status of the Investment Program and how the proceeds of the facility are used. For each contract financed under the Investment Program, YM will disclose on their respective websites information on, among others, the: (a) list of participating bidders; (b) name of the winning bidder; (c) basic details on bidding procedures and procurement methods adopted; (d) amount of contract awarded; (e) list of goods/services, including consulting services procured; and (f) intended and actual utilization of the facility proceeds.

96. It is YM's responsibility to conduct due diligence for authenticating information presented in civil works and consulting contracts during bid evaluation. In addition, "No conflict of Interest" declarations will be signed by bid evaluation committees.

¹³ Available at: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>

¹⁴ ADB's Office of Anticorruption and Integrity website is available at: <http://www.adb.org/integrity/unit.asp>

XI. ACCOUNTABILITY MECHANISM

97. People who are, or may in the future be, adversely affected by the project may submit complaints to ADB's Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-assisted projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures. Before submitting a complaint to the Accountability Mechanism, affected people should make a good faith effort to solve their problems by working with the concerned ADB operations department. Only after doing that, and if they are still dissatisfied, should they approach the Accountability Mechanism.¹⁵

¹⁵ For further information see: <http://www.adb.org/Accountability-Mechanism/default.asp>.

XII. RECORD OF PAM CHANGES

ANNEX 1

Sustainable Urban Development Investment Program Project 2 Consultants' Terms of Reference

I. ADVISORY SERVICES

1. ADB requires that the audit will be carried out in accordance with the agreed auditing standards as specified in the Loan Agreement, including professional or general standards, standards of fieldwork, and reporting standards. The audit program will consider the risk of material misstatements resulting from fraud or error. It should include procedures that are designed to provide reasonable assurance that material misstatements (if any) are detected.

A. Major objectives

2. The objectives of the APA audit are to enable the auditor to express an opinion on the financial position of ADB Loan P42147-033 for the fiscal years affecting its implementation and on the funds received and expenditures made within audit year(s). Separate opinions on the eligibility of claims made in statements of expenditure (SOE) and on the Imprest Account Statement are also required.

B. Scope of work

3. The major tasks are:

- (i) Review the compliance on each of the financial covenants in the Loan Agreements.
- (ii) The auditor's examination should include an evaluation of the systems and operating procedures for accounting, custody of assets, control of environment and internal financial control, financial reporting, and related systems. PIU and YM will provide to the auditor all information necessary to support the auditor's opinion and to construct the final audit report.
- (iii) The auditor should get acquainted with the project, the functions of the EA and IA; the contents of the RRP and legal agreements; and the ADB's guidelines, i.e. Financial Management and Analysis of Project, Loan Disbursement Handbook, Procurement Handbook and other guidelines available at ADB and act in accordance with the requirements described in guidelines.

II. CONSTRUCTION SUPERVISION

4. ADB requires that the civil works will be executed under the FIDIC Conditions of Contract for Construction, for Building and Engineering Works designed by the Employer to be procured under the ADB's international competitive bidding procedures. The construction period for the Contract will be tentative 18 months plus 12 month of defects liability period for each construction contract.

5. The purpose of construction supervision firm is to ensure construction quality and contractors performance. Under this TOR, the consultant shall conduct technical supervision over construction of the road links. In case of serious deficiencies or mistakes in the design or drawings made by the design firm, the consultant shall attempt to clarify the design and drawing from the original design firm (Egis International). The consultant shall work with YDPIU engineers and/or consultants to develop a practical solution to the design/drawings need.

6. All possible design/technical specifications changes should be done by the reasonable time and without additional payment to the consultant.

A. Major objectives

7. Services during construction shall include technical and administrative support as required on behalf of the YM. The Consultant shall:

- (i) To supervise and monitor construction of the project;
- (ii) To manage construction contract changes, variations, contractor claims and scope revisions (including preparation of all required documentation/design changes etc.);
- (iii) To manage and monitor the project performance, benefits and ensure compliance with all social and environmental requirements;
- (iv) To ensure that high quality construction is achieved;
- (v) To ensure that designs are carried out following international engineering standards;
- (vi) To ensure that all work associated with the project are carried out in full compliance with the designs and specifications;
- (vii) To prepare of all design changes and relevant documentation in case of need of design changes during the implementation of construction activities;
- (viii) To ensure that social, resettlement and environmental requirements, road safety and monitoring are carried out in accordance with the recommendations of studies, plans, and analysis of the project, and in compliance with ADB safeguards policy and applicable laws of Armenia;
- (ix) To issue the taking over certificate and commission the works after project completion;
- (x) To transfer know-how and methods to increase YM efficiency and productivity;
- (xi) To provide advices and a combination of on-the job and classroom training to improve YM and other agencies involved 's management capacity; and
- (xii) To liaise with government and municipal authorities, program management consultants, NGO's, civil society, and other stakeholders concerned with the project implementation to carry out proper consultation.

B. Scope of work

8. The major tasks are:

- (i) To ensure continuous presence at all construction sites, observe the progress and quality of the contractor's work, in order to ensure that the design concept of the completed project as a whole as indicated in the contract documents has been implemented and preserved by all the contractors. This includes any testing and measurement required to ensure that the works are constructed in accordance with the technical specifications;
- (ii) To prepare and issue variation orders, as required, and seek YDPIU approval of variation orders;
- (iii) To require such special inspections or tests of contractors' work as deemed reasonably necessary, as well as receive and review all certificates of inspections, tests, and approvals;
- (iv) To check and review interim payment certificates based on "the consultant" observations and on review of applications for payment and accompanying supporting documentation. "the Consultant" is responsible for issuing to PIU high

- quality documents;
- (v) To prepare a quality assurance plan for each contract and make arrangements to check the quality of materials brought to site; ensure that the quality of construction on each contract is consistent with the specifications and maintain test records;
- (vi) To review the contractors' quality management system, including testing laboratories, procedures for testing, etc.;
- (vii) Shall conduct independently all required quality control tests on the materials used (concrete, sealant, steel etc.);
- (viii) To make measurements and keep measurement records;
- (ix) To maintain records, correspondence, project photographs, and diaries documenting the progress of the project;
- (x) To certify the quantities of completed work and interim certificates for progress payments for each contract;
- (xi) To check the contractors' accounts, invoices, claims, and other statements concerning arithmetic error and compliance with their contract;
- (xii) To be responsible for all administration work related to the project supervision requirements including proper conduct, attendance and performance of duties of the staff, and ensuring that all the contractors properly record all equipment, materials, labor, etc. which have been supplied under the contract;
- (xiii) At the completion of each contract, prepare a consolidated project completion report for each Contract separately including all the technical and financial details of the project and a section containing specific recommendations for routine maintenance for areas requiring special care and attention.

9. After finalization of each separate construction contract all documentation prepared/obtained during implementation of that contract should be returned to YDPIU.

10. The YM will engage the consultant on lump-sum based contract. The consultant's team will have 103 person-months of international and 477 person-months of national expertise and administrative staff. The consultant may propose alternative arrangements, which, subject to assessment and approval by YM and ADB, will provide services of an equivalent or better quality. The consulting services are expected to be started by Q4 2016.

III. INDEPENDENT MONITORING AGENCY (IMA)

11. ADB policy and LARF require the IMA to carry out the external monitoring in parallel with the implementation of LARPs. The main goal of external monitoring is to assess relevance, efficiency, effectiveness and impact of the LARP processes and to suggest any corrective measures, if necessary. The IMA will monitor and verify LARP preparation and implementation to determine whether resettlement goals are achieved, livelihood and living standards are restored (and to what extent) and provide recommendation for improvement.

12. The IMA will provide an independent review of resettlement implementation to determine whether intended goals are being achieved, and if not, what corrective actions are needed.

A. Major objectives

- (i) To verify that resettlement has been implemented in accordance with the approved LARF and LARPs;
- (ii) To monitor and evaluate the schedules and the achievement of targets related to land acquisition and resettlement activities;

- (iii) To ensure that APs/AHs have been able to at least restore their livelihoods and living standards;
- (iv) To review the Project impacts on vulnerable groups and assess the effectiveness of the mitigation measures adopted;
- (v) To monitor the effectiveness and efficiency of implementing and executing agencies;
- (vi) Implementation process, including organization of public consultations etc. to assess resettlement relevance, efficiency, effectiveness and impact drawing both on policies and practices and to suggest any corrective measures, if necessary.

B. Scope of work

13. The major tasks are:
 - (i) To develop specific monitoring indicators in compliance with the LARP monitoring and evaluation framework;
 - (ii) To monitor the progress of the land acquisition and resettlement activities against the targeted performance indicators;
 - (iii) To verify claims through random checking at the field level to assess whether resettlement objectives have been generally met;
 - (iv) To identify the strengths and weaknesses of the resettlement objectives and approaches, and implementation strategies;
 - (v) To review and verify the progress in LARP implementation of Tranche 2 on a sample basis and prepare quarterly reports (if required) for the implementing and executing agencies and ADB;
 - (vi) To evaluate and assess the adequacy of compensation given to the APs and the livelihood opportunities and incomes as well as the quality of life of APs/Affected Households (AHs) of project-induced changes;
 - (vii) To evaluate and assess the adequacy and effectiveness of the consultative process with APs/AHs, particularly those vulnerable, including the adequacy and effectiveness of grievance procedures and legal redress available to the affected parties, and dissemination of information about these.
14. The estimated requirement for consultancy services is 11 person-months tentatively from June 2016 until the end of May 2018. During implementation of this assignment the consultant shall use its office, vehicles and equipment.

IV. YEREVAN TRANSPORT MODEL

15. The traditional transport organisation has difficulties in following this trend and traffic congestions become frequent. In particular, the public transport offer is undersized. It contributes to a constant growing of the number of individual vehicles and as consequence is detrimental to the environment with an increase in air and noise pollution.
16. The desired objective for Yerevan is the development of a strategic plan designed to satisfy the mobility needs of people and businesses in the city and its surroundings to ensure a better quality of life both now and in the future. It builds on existing planning practises addressing all transport modes such as private cars, taxi, trucks and public transport (buses, mini-buses, trolley-buses).

A. Major objectives

17. The model aims to create sustainable urban transport systems by addressing, at a minimum, the following objectives:

- (i) Improving safety and security for all modes of transport and reducing the number of accidents;
- (ii) Reducing air and noise pollution, greenhouse gas (“GHG”) emissions and energy consumption;
- (iii) Contributing to enhancing the attractiveness and quality of the urban environment and urban design;
- (iv) Developing a truly integrated intermodal transport network for the city;
- (v) Creation of optimal conditions for public transport to be preferred by people as transport means; and
- (vi) Allow for the coordinated development of infrastructure improvements.

B. Scope of work

18. The major tasks are:

- (i) A sustainable urban transport and traffic model of Yerevan, including a long term Action Plan;
- (ii) A multi-modal 4-stage transport macro model, designed to international standards, covering all modes of transport, accompanying each sustainable urban transport model;
- (iii) Training activities for local authorities, as well as for the transport operators on the implementation of products and tools delivered with the transport model; and
- (iv) Projects modelling the most congested urban zones as a minimum.

19. At the end of the project the model and programme licence shall be transferred to YM for their use or for additional subconsultant services in order to identify future needs and improvements defined in the action plan.

20. The persons-month assigned to this task and the duration are yet to be defined.

UPDATED CONTRIBUTION TO THE ADB RESULTS FRAMEWORK

No.	Level 2 Results Framework Indicators (Outputs and Outcomes)	Targets	Methods / Comments
1	Roads built or upgraded - District roads (kilometers)	10.1 km	From designs for three road sections in Tranche 2 subprojects and detailed design consultants' estimates for Tranche 1

ECONOMIC AND FINANCIAL ASSESSMENTS FOR PROJECT 2

A. Macroeconomic and Sector Context

1. Armenia's transport and urban transport sectors play an important role in the national economy, which is constrained by geography and international politics. The country's transport infrastructure, however, is not adequate. Improving the country's deficient transport network is critical for lowering the transportation and trade costs, and thus for increasing income-earning opportunities and for realizing the full benefits of Armenia's otherwise liberal trade regime. Excluding pipelines, rail and road carried most of the freight in 2013. Yerevan, the capital city, accounted for about two-thirds of the domestic freight by roads.

2. Country growth has brought widespread vehicle ownership, which has grown more than 40% since 2004.¹ This has resulted in large increases in traffic flows in the capital city, Yerevan, where daily traffic flows have recently increased to 13-48,000.² The number of accidents in Yerevan has risen in parallel with increasing traffic, from 260 fatalities in 2004 to more than 400 in 2008, a national wide traffic enforcement enhancement jointly with other transport infrastructure investments has reduced the fatalities to 61 in 2013, and this trend is likely to continue with the implementation of new infrastructures.

3. This project is the logical continuation and closure of the Yerevan by-pass initiated under Tranche 1 of the Sustainable Urban Development Investment Program (SUDIP). Despite improvements in major arteries, Yerevan's traffic signaling system is both outdated and inadequate. Environmental protection is also another priority. Located in the Ararat valley, Yerevan has little natural ventilation, and congestion results in concentration of hazardous substances.

4. SUDIP Tranche 2 derives from a request from the Yerevan Municipality to ADB to define a strategic plan to improve urban transport in Yerevan aligned with the urban master plan of Yerevan City.

Table 1: Yerevan By-Pass Sections

Section	Street or Highway Section	Length
Tranche 1		
S1	Arshakunyats	1,280 m
S2	New Shirak	2,860 m
S3	Artashat	
S4	North South Corridor IC	340 m
Tranche 2		
S5	Argavand-Shirak (initially under Tranche1)	1,350 m
S6	Babajanyan-Tichina	2,220 m
S7	Tichina-Old Silikyan	2,060 m
S8	Old Silikyan - Ashtarak Highway	2,570 m
S9	Davitashen - Ashtarak Highway	2,240 m

¹ ADB.2008. *Technical Assistance Consultant's Report: Armenia Transport Sector Development Strategy*. Manila.

² EGIS. 2015. *Traffic Economy Analysis*. Unpublished.

B. Without Project Scenario

5. The without project scenario is based on the continuation of the situation as is, with no further improvement to the road network in Yerevan. With urban transport responsible for generating 90% of emissions in 2009, and with carbon dioxide emissions expected to increase by 160% by 2020 the without project scenario involves continued increases in the health and environmental risks to which Yerevan's population is exposed. The limited number of bridges in Yerevan over the Hrazdan River has the effect of creating cross-city bottlenecks and massive congestion during peak hours.

6. An existing city bypass remains uncompleted, meaning that through traffic is unable to divert and is forced to route through the congested urban area. The partial bypass constructed under Tranche 1 by-pass will only work with full implementation of tranche 2. Illegal and double parking and poorly enforced traffic laws further constrain mobility.

C. With Project Scenario.

7. The with project scenario involves the completion of the urban bypass of Yerevan by completing the north-western missing road links of the western urban ring; SUDIP T1 (sections S1 to S4) improved south-western road links. The two tranches combined will help divert through traffic away from the city center.

8. The implemented road links within the Project will be: (i) Davitashen-Ashtarak Highway on one side; Babajanyan-Ashtarak highway (which includes Babajanyan-Tichina, Tichina-Old Silikyan and Old Silikyan-Ashtarak highway sections) and; (ii) Argavand-Shirak road link on the other side.

D. Options Analysis

9. During feasibility study stage a number of different technical options were studied. This preferred project alternative was selected on basis of a least cost analysis, with the preferred variant representing the least cost method of achieving all the project objectives.

E. Traffic Studies

10. Estimates of traffic demand (normal, diverted and generated traffic) used in the economic analysis were produced by EGIS Consultants. The traffic work undertaken includes traffic data collection (e.g. automatic and manual traffic counts, origin-destination surveys) and analysis. A total of 12 manual or automatic counts were undertaken in May 2014. The consultant provided demand forecasts on the new roads based on a manual assignment method.

11. Traffic forecast is based on the gross domestic product (GDP) forecast for a period of 20 years. The GDP growth figures for the period 2015-2020 were taken from the IMF outlook with consultant's estimates from 2020 onwards. An Income Elasticity of demand of about 1.2, was calculated based on recent data tables. The central forecast is for GDP growth of 4.8% in 2015-20, 4.5% in 2020-30 and 4% in 2030-35, translating respectively into traffic growth forecasts of 5.8%, 5.4% and 4.8% for the 3 periods.

Table 2: Traffic Assignment Scheme (Annual Average Daily Traffic)

Road Segment	Without Project		With Project				
	Node A	Node B	2014	2017	2019	2030	2044
Existing Road Segment							
Road Segment Jnct 1 to 3	1	3	22,128	26,206	30,597	51,282	111,274
Road segment Jnct 3 to 5	3	5	22,348	26,466	30,902	51,792	112,380
Road segment Jnct 5 to 6	5	6	12,636	14,965	17,472	29,284	63,542
Road segment Jnct 6 to 7	6	7	23,128	27,390	31,980	53,600	116,303
Road segment Jnct 7 to 8	7	8	31,943	37,830	44,169	74,029	160,630
Road segment Jnct 9 to 10	9	10	19,217	22,758	26,572	44,536	96,636
Road segment Jnct 10 to 11	10	11	26,619	31,525	36,807	61,690	133,858
Road segment Jnct 11 to 15	11	15	24,595	29,128	34,009	57,000	123,680
Road segment Jnct 13 to 14	13	14	41,382	49,008	57,221	95,904	208,096
Road segment Jnct 5 to 16	5	16	18,212	21,568	25,183	42,207	91,582
New Road Network							
Road segment Jnct 16 to 12	16	12	9,712	11,502	13,429	22,508	48,838
Road segment Jnct 12 to 13	12	13	9,712	11,502	13,429	22,508	48,838
Road segment Jnct 14 to 15	14	15	9,998	11,841	13,825	23,171	50,276
Road segment Jnct 3 to 17	3	17	13,532	8,328	9,863	16,688	33,715
Road segment Jnct 17 to 18	17	18	18,816	14,586	17,274	29,227	59,049
Road segment Jnct 18 to 4	18	4	25,920	22,999	27,237	46,086	93,108
Road segment Jnct 3 to 4	3	4	0	7,698	9,116	15,425	31,164

Source: Yerevan Municipality

F. Identification of Project Alternatives and Options Analysis

12. The master plan of the city of Yerevan, has put in place the needed urban reforms that will allow the implementation of the western urban ring road, thus implying that the path of the new infrastructure will be under municipal land mainly, or private land both limited to residential or community use, limiting therefore the opportunity cost of land.

13. Without-project scenario: if the city-traffic evolves as expected, the situation throughout the city center will become progressively more difficult in the medium to long term. Increased traffic will bring about negative impacts in the form of pollution, increase in travel times, increase of accidents with fatalities, thus lowering quality of life for the inhabitants of Yerevan.

14. Three with-project variants have been studied, each of which would result in substantial improvement for traffic flows in the city center and each of which would generally expect to attract around 40% of the traffic of the existing traffic onto the new by-pass.

15. The fact that the most of the sections (S5 to S7 and S9) of the variants are common, due to a lack of other potential urban corridors for the path of the by-pass, limiting the differences between the scenarios to the sections S8.1, S8.2 and S8.3.

16. Therefore three alternatives have been considered and evaluated by modelling studies.

- Alternative 1: Sections S5 to S7 plus S9, and the alternative S8.1
- Alternative 2: Sections S5 to S7 plus S9, and the alternative S8.2
- Alternative 3: Sections S5 to S7 plus S9, and the alternative S8.3

G. Comparison of Costs and Benefits

17. Cost-benefit-analysis compares the incremental economic costs and benefits of each potential solution with a without project scenario (as outlined above).

18. The economic costs of the Project comprises: (i) capital investment, including civil works, physical contingency and consulting services for construction and supervision, land acquisition and resettlement; and (ii) maintenance expenditure during the analysis period. Costs related to taxes, duties and financing charges during implementation have been excluded. Financial costs were converted into economic costs by applying appropriate conversion factors as per ADB guidelines. A Standard Conversion Factor of 0.93 was used, reflecting a weighted average of all conversion factors used to convert from financial to economic prices.

19. **Maintenance Costs.** Maintenance costs will include routine maintenance, pothole patching, resealing and overlay.

20. During the construction period no benefits occur. During the operation period the incremental change in maintenance costs are weighed against the benefits in terms of Value of Time (VOT) and Vehicle Operation Costs (VOC). Owing to lack of data, no benefits were calculated for reduction in collision costs or changes to local health or pollution costs.

21. The cost-benefit flows over the 30-year appraisal period are discounted at the standard rate of 12% applicable to appraisal of all ADB projects.

22. The calculation of economic benefits was carried out using World Bank's HDM-4 software version 2.05. VOC and VOT parameter values, e.g. fuel price, tyre costs, were taken from previous studies carried out in Yerevan city. The number of passengers for car, minibus and bus is calculated based on the origin destination survey carried out within Tranche 1 of SUDIP. After the calculation of the average vehicle occupancy for each station, it is calculated the average for all the stations. The values in table represent in economic values and they have been transformed from financial to economic prices by application of an appropriate conversion factor. The saving in time travel from 45 minutes as indicated in the 2009 baseline to 15 minutes in 2017, and the improved road quality will imply and improvement in the roughness index. See Table 3.

Table 3: Summary of Typical Vehicle-Based Data (2014 Prices)

Item	Car	Pick Up	Minibus	Large Bus	Trucks		
					2-Axle	3-Axle	>3-Axle
Economic New Vehicle Cost (\$'000)	15	16	20	41.5	25	41.5	66
Fuel Cost(\$/ liter)	1	1	1	0.9	0.9	0.9	0.9
Oil Cost(\$/ liter)	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Tyre Cost(\$/Tyre)	62	100	100	290	166	208	290
Maintenance labour(\$ per hour)	3.5	3.5	3.5	3.8	3.8	3.8	3.8
Crew wages(\$ per hour)	0	206	2	2.7	2.9	2.8	3.1
No. of passenger	1.9	0	6.5	16.4	0	0	0
Passenger work time(\$ per hour)	2.76		1.84	1.84			
Non-work time(\$ per hour)	1.38		0.92	0.92			
Work related time (%)	35		35	35			
Annual utilization(km'000)	23	30	47	70	40	86	86
Vehicle life years	10	8	8	12	12	14	14

Source: Yerevan Municipality

H. Calculation of Economic Indicators

23. **Alternative 1 and 2:** The modelling of the alternatives shows that the economic internal rate of return (EIRR) of the options 1 and 2 is respectively 13.40% and 13.21%,³ above the limit of 12%, but not the optimal, as the high resettlement cost are not compensated by other benefits.

24. **Alternative 3:** The section 8.3 is designed as an enhancement of the existing Old Silikyan and Old Silikyan-Ashtarak highway, using as much municipal land as possible in common with the old road infrastructure, and therefore reducing the land acquisition and construction costs significantly compared to the next best option. The EIRR for this option goes up to 15.80%, clearly defining without any doubt this alternative as the optimal, with a clearly reduced cost per km close to \$13 million for section 8.3. This alternative is considered as the preferred alternative.

25. **Economic indicators.** Therefore the economic viability of the intervention financed under the Investment Program is acceptable with an EIRR of 15.8% and an ENPV of \$44.8 million. See Table 3.

I. Sensitivity and Risk Analysis

26. A series of sensitivity tests were carried out for the by-pass project, involving the variations of the maintenance cost, construction costs, VOT, VOC by +/- 10%. See Table 4.

27. The sensitivity test results indicate that the economic viability is generally robust across the scenarios examined. In both cases the project achieves an EIRR that is above 12% with positive net present value in all the cases

28. The switching value for Alternative 3 is \$57,96 million, that is an increase of around 50% in relation to the actual costs.

J. Conclusion

29. The major economic benefits accruing from projects will be savings in travel time and vehicle operating cost per kilometer, and fewer traffic accidents. The analysis showed that the subprojects are economically viable. Three alternatives were evaluated. The EIRR for Alternative 1 is 13.40% while for Alternative 2 it is 13.21%. The EIRR goes up to 15.8% for the optimal and selected option (Alternative 3). A sensitivity analysis confirmed this viability with an EIRR of 14.85% for an increase of 10% in construction and maintenance costs and an EIRR of 14.75% for an increase of 10% for vehicle operating costs and value of time, indicating that the EIRRs, though lower than the base case EIRR, are above 12%. In Tranche 2, no revenue generating projects will be implemented, so no financial analysis has been undertaken.

³ Details are available on request but not reflected in this document as it has been limited to 7 pages according to the economic analysis template.

Table 4: Existing plus Alternative 3: (Values in \$ million, 2014 Prices)

Year	UNDISCOUNTED				
	Investment cost	OM	VOC	VOT	Net
2015	47.8	0.0	0.0	0.0	-47.8
2016	47.8	0.0	0.0	0.0	-47.8
2017	0.0	0.0	4.4	3.3	7.7
2018	0.0	0.0	4.8	3.5	8.3
2019	0.0	0.0	5.3	3.8	9.1
2020	0.0	0.0	6.0	4.1	10.0
2021	0.0	0.0	6.5	4.5	11.1
2022	0.0	0.0	7.7	5.5	13.3
2023	0.0	-0.2	9.2	6.7	16.1
2024	0.0	0.0	10.5	8.3	18.9
2025	0.0	0.0	11.2	9.0	20.2
2026	0.0	2.4	12.9	10.1	20.5
2027	0.0	0.0	14.0	11.3	25.3
2028	0.0	0.0	15.3	12.2	27.5
2029	0.0	0.0	17.1	13.2	30.3
2030	0.0	0.0	17.0	13.1	30.1
2031	0.0	0.0	17.2	13.5	30.7
2032	0.0	0.0	16.5	13.0	29.5
2033	0.0	-0.8	20.0	16.1	36.9
2034	0.0	0.0	20.7	18.9	39.6
2035	0.0	0.0	22.2	20.3	42.4
2036	0.0	2.2	24.8	23.8	46.5
2037	0.0	0.0	24.2	23.0	47.2
2038	0.0	0.0	23.0	23.0	46.1
2039	0.0	0.0	22.8	24.3	47.1
2040	0.0	0.0	23.8	25.5	49.3
2041	0.0	0.0	26.7	26.7	53.3
2042	0.0	0.0	25.6	27.7	53.3
2043	0.0	0.0	23.9	23.9	47.8
2044	0.0	-18.7	16.0	18.7	53.5
Total:	NPV	44.8		EIRR	15.8%

Source: Consultant's estimates.

Table 5: Sensitivity Test Results: Increase in Construction and Maintenance Costs, and Value of Time and Vehicle Operating Costs (Values in \$ million)

	Increase in Agency Costs- Undiscounted	Decrease in Road User Costs- Undiscounted	Total	Increase in Agency Costs- Undiscounted	Decrease in Road User Costs- Undiscounted	Total
2015	-52.51	0.00	-52.51	-47.74	0.00	-47.74
2016	-52.51	0.00	-52.51	-47.74	0.00	-47.74
2017	-0.01	7.71	7.70	-0.01	6.94	6.93
2018	-0.01	8.30	8.28	-0.01	7.47	7.46
2019	-0.01	9.09	9.08	-0.01	8.18	8.17
2020	-0.01	9.98	9.97	-0.01	8.98	8.97
2021	-0.01	11.22	11.21	-0.01	10.10	10.09
2022	0.00	13.11	13.11	0.00	11.80	11.80
2023	0.37	15.87	16.24	0.34	14.28	14.62
2024	-0.01	18.84	18.83	-0.01	16.96	16.95
2025	-0.02	20.37	20.35	-0.01	18.33	18.31
2026	-2.49	22.79	20.31	-2.26	20.52	18.25
2027	-0.01	25.22	25.21	-0.01	22.69	22.68
2028	-0.01	27.45	27.44	-0.01	24.70	24.70
2029	0.00	30.07	30.07	0.00	27.06	27.06
2030	-0.01	30.16	30.15	0.00	27.14	27.14
2031	-0.01	30.56	30.56	0.00	27.51	27.50
2032	-0.03	30.35	30.33	-0.02	27.32	27.29
2033	0.34	35.86	36.20	0.31	32.28	32.58
2034	-0.05	38.69	38.64	-0.04	34.82	34.78
2035	-0.05	41.43	41.38	-0.04	37.29	37.24
2036	-2.49	47.68	45.19	-2.26	42.91	40.65
2037	-0.01	47.10	47.08	-0.01	42.39	42.38
2038	0.00	45.78	45.78	0.00	41.20	41.20
2039	0.00	46.07	46.07	0.00	41.46	41.46
2040	-0.01	49.69	49.68	0.00	44.72	44.71
2041	-0.01	51.75	51.75	0.00	46.58	46.57
2042	-0.03	52.60	52.58	-0.02	47.34	47.32
2043	0.34	49.78	50.12	0.31	44.80	45.11
2044	20.96	37.38	58.34	19.05	33.64	52.69
	NPV-12%- IRR	\$31.78 14.85%		NPV-12%- IRR	\$27.79 14.75%	

Source: Consultant's estimates.

K. Financial Analysis

30. According to IMF Country Report No. 15/65 (Q1-2015), gross public debt stood at 43.4 % of GDP at the end of 2013, slightly lower than a year earlier. Public debt is expected to remain in the range of 44 to 46 % of GDP till 2016 and gradually decline thereafter to 43.6 % in 2019. (these numbers include the project investment cost).

31. The incremental cost of operating and maintaining the newly improved road network is estimated at \$692,000, which is 4.72% of the total maintenance budget of Yerevan municipality. Their maintenance budget has increased from \$11.06 million in 2012 to \$14.64 million in 2014 and while this is thought to be 40% lower than the amount of money needed to keep the road network operating at an acceptable level of service. Considering the increase in maintenance budget it is thought that by 2020 the budget would be sufficient to maintain the network at a good level of service, a loan covenant has been put in place in order to ensure adequate funds for operation and maintenance.

UPDATED SUMMARY POVERTY REDUCTION AND SOCIAL STRATEGY (SPRSS)

Country:	Armenia	Project Title:	Sustainable Urban Development Investment Program- Tranche 2
Lending/Financing Modality:	Multitranche Financing Facility	Department/ Division:	CWRD/CWUW

I. POVERTY AND SOCIAL ANALYSIS AND STRATEGY

Poverty targeting: General intervention

A. Links to the National Poverty Reduction and Inclusive Growth Strategy and Country Partnership Strategy

The country operations business plan (COBP), 2015-2017 for Armenia focuses on three sectors, one of them being urban transport. The COBP stated the ADB will work with the government by focusing on improving urban roads in Yerevan and in secondary towns., and to catalyze new economic opportunities in the secondary towns where poverty is highest through improved urban environments and business conditions. Therefore, the increased economic development and foreign direct investment as a result of an improved transport infrastructure is expected to indirectly contribute to social development and poverty reduction objectives.

A definition of a “poor” or “non-poor” person is based on combination of the basic biological, social and cultural needs. Earlier studies on poverty in Armenia focused almost exclusively on material (biological) needs, and as such, excluding other social needs, and socio-cultural factors. Non-material poverty is basically characterized by poor health, low educational level or illiteracy, social exclusion, vulnerability and inability to speak out one's own problems, the main way for overcoming it is to improve accessibility of education, health and other social services.

The Poverty Reduction Strategy Paper was approved by the RA Government in August 2003 for the period 2003-2015. Based on achievements of the first program, the Second Poverty Reduction Strategy Paper (PRSP-2) was approved in October 2008. The main three goals of the second paper for the period 2009-2021 are: (i) reduction of poverty and elimination of extreme poverty, (ii) ensuring human development, and (iii) reduction of territorial differences of poverty levels through the development and implementation of territorial development policy.

The PRSP-2 foresees that the poverty and extreme poverty levels will be reduced by 2021 in Yerevan to 3.2% and 0.4%, in other towns to 8.1% and 1.5% and in rural areas to 9.1% and 1.6% (in 2005 respective indicators were in Yerevan 23.9% and 3.6%, in other towns of the country 37.8% and 7.2% and in rural areas 28.3% and 3.2%).

As indicated in the country partnership strategy, 2014-2018, the national poverty rate dropped from 54% in 2004 to about 28% in 2008. The trend reversed in 2009, despite the government's response to the crisis: the poverty rate rose to 34% in 2009, and extreme poverty more than doubled. In 2013, 32% of the population was poor and 2.7% extremely poor.

The Sustainable Development Program (SDP) sees the development of transport systems as a necessary platform for economic and social development and therefore, one of the vital agents for poverty reduction. The improved main road network will enable regional development which would decrease regional differences. It would improve access to social services, mobility and increase general economic dynamics for the project adjacent communities.

Over the period of 10 years (2010-2020), the total cost of the Investment Program is estimated at \$1.45 billion. International financing institutions will share these investments.

Under the proposed project, upgrading of the Yerevan Western Bypass would divert the traffic from the City center, and provide efficient traffic flow, connection between markets, access to social services and employment opportunities. These outcomes are in accordance with the set SDP objectives.

Tranche 2 projects of the Investment Program are focused on three road missing links to complete the Yerevan Western Ring Road.

- (i) **Creating jobs and employment opportunities.** It is anticipated that between 300 to 500 full-time jobs during two years of the construction period will be created. It will be a priority to employ vulnerable unskilled and women from the project area on the non-construction jobs related to the project. The loan assurances will specifically address employment of vulnerable and women.
- (ii) **Improving living standards.** Better public transport services, travel-time saving, cost saving, improved landscapes and green areas, improved accessibility will positively affect public health.
- (iii) **Protect the environment.** Clear actions for environmental protection will be envisaged during construction.
- (iv) **Support gender inclusion.** Loan assurances will ensure the participation of women throughout the Project.

B. Results from the Poverty and Social Analysis during PPTA or Due Diligence

1. Key poverty and social issues. Key factors for impeding development in Armenia are the underdeveloped condition of infrastructures. Illiteracy, health and income are three major causes of poverty. Thus, increased access to transport, information, communication, education and health are precondition to addressing the existing poverty.

2. Beneficiaries. The contribution of the Tranche 2 investment program to the long-term poverty reduction goals will be more indirect. The most direct and immediate impact will be felt during the construction period. The construction works and supporting activities will create demand for labor, around 300 to 500 semi or unskilled workers. It is expected that a number of local women would get some income-earning positions in construction support activities. The proposed project will stimulate local and regional economic development, will have short and long-term positive impact. Project assurances will foresee employment of local labor (vulnerable groups and women).

3. Impact channels. A special attention, where technically possible, will be placed on benefit to poor, vulnerable, socially excluded or marginalized groups, through provision of better access to services such as safe bus-stops with appropriate lighting, safe pedestrian crossings or improved or added wheelchair access. A substantial effort to minimize involuntary resettlement will be applied. Three land acquisition and resettlement plan (LARPs) based on the social safeguard principles will be prepared and shared with the affected communities.

II. PARTICIPATION AND EMPOWERING THE POOR

1. Participatory approaches and project activities. Consultations will be carried out with all stakeholders during the planning, design and project implementation phases, and will include project affected persons, often excluded groups. Stakeholders, will be informed about the project, entitlements, obligations and compensation procedure for those affected by resettlement. Effective and meaningful communication and information sharing will be ensured.

2. Consultations during project preparation, as noted above, and disclosure of project planning documents.

3. Civil society organizations. Civil society organizations which will represent the interests of affected persons during implementation of the land acquisition and resettlement plan (LARP), are expected to participate in public awareness meetings on the Yerevan's by-pass, road and traffic safety and anti-harassment measures.

4. The following forms of civil society organization participation are envisaged during project implementation, rated as H ☒ Information gathering and sharing H ☒ Consultation ☐ Collaboration ☐ Partnership

5. Participation plan. ☒ Yes ☐ No.

During project implementation more detailed consultations will be held, covering safeguards (environment, resettlement), the project, safety, and complaints.

III. GENDER AND DEVELOPMENT

Gender mainstreaming category: Some Gender Elements

52% of the 3.1 million people living in Armenia are women. 27% of all households are female-headed households. Women are more likely than men to live or slip into poverty. Unemployment figures show that 66% of all unemployed are women, and those employed, they about 30% less than their male counterparts. Women are mostly employed as educators (83% of all educators) and in agriculture which represents 45 % of the work force almost half of these workers are women. Women are highly underrepresented in government.

Armenian laws and the Constitution grant women and men equal rights. Increasing number of female-headed households is a result of male migration and establishing of 'parallel families', therefore, women are particularly vulnerable and are very likely to fall into extreme poverty

There are no laws restricting the industries in which women may work, being entitled to 140 calendar days of maternity leave with 100% of wages paid. The law guarantees pregnant and nursing women workplace protections from dismissal, placement in an equivalent position when they return from maternity leave, and rights to a flexible schedule. Public provision of childcare for children under the age of primary education is granted and retirement age is 63 for men and women

Local transportation is problematic creating difficulties for women and girls to reach schools, health centers, etc. Improved urban services will facilitate women's easy access to services and will save their time.

A. Key issues. The project will assure equal gender opportunities in ensuring: (i) participation at community consultations throughout of the project phases (ii) that women voices are heard and project-related needs addressed (iii) that they are fully compensated for lost assets (iv) equal access to employment during construction works.

Recommended measures may include:

- (a) Physical design to include a gender perspective in infrastructure design planning and construction, will help ensure protection of female and employees against threats to their safety and security, and other forms of violence against women. Physical measures will address spaces for prams and wheelchairs in public transport, improved infrastructure of bus stops, ramps and side-walks for easy access for various groups communities, road links strategically organized to ensure easy access to schools, markets, hospitals, etc.
- (b) Addressing transportation needs of women considering that majority of transport users are women through Increasing and assuring women representation in all phases of the project;
- (c) Maintaining gender-segregated statistics and other data;
- (d) Ensuring meaningful consultations with women (if necessary separate consultations);
- (e) Considering information sessions on subjects related to project and relevant to women, like road safety;
- (f) All jobs created through the project are advertised publically and include "qualified women are encouraged to apply".

B. Key actions. Measures included in the design to promote gender equality and women's empowerment - access to and use of relevant services, resources, assets, or opportunities and participation in decision-making process:

Project assurances will enable equal access to employment and skills training. A set 30% target of women participating at project-related community consultations where women's project-related views, opinions, needs and suggestions will be heard and addressed. Economic opportunities as a result of economic growth due to new roads and improved accesses will indirectly provide new employment opportunities for women.

Involuntary resettlement of female headed households will be assessed and mitigated during the preparation of the final implementation-ready LARP. (<http://www.ifad.org/english/gender/cen/profiles/arm.htm>)

IV. ADDRESSING SOCIAL SAFEGUARD ISSUES

A. Involuntary Resettlement

Safeguard Category: ☒ A ☐ B ☐ C ☐ FI

1. Key impacts. The total number of affected assets is approximately 1,129, and the estimated total number of affected households is 351 comprising 1,405 persons. The total quantum of land take for Tranche 2 is 294,417 m² (29.44 ha).

2. Strategy to address the impacts. A LARF has been prepared and is relevant to all subsequent tranches; LARPs will be prepared after the finalization of the design.

3. Plan or other Actions.

- | | |
|---|--|
| <input checked="" type="checkbox"/> Resettlement plan | <input type="checkbox"/> Combined resettlement and indigenous peoples plan |
| <input checked="" type="checkbox"/> Resettlement framework | <input type="checkbox"/> Combined resettlement framework and indigenous peoples planning framework |
| <input type="checkbox"/> Environmental and social management system arrangement | <input type="checkbox"/> Social impact matrix |
| <input type="checkbox"/> No action | |

B. Indigenous Peoples

Safeguard Category: ☐ A ☐ B ☒ C ☐ FI

1. Key impacts. ADB's Safeguard Policy Statement (2009) is not likely to be triggered by the program.

Is broad community support triggered? ☐ Yes ☒ No

2. Strategy to address the impacts. No impacts are envisaged.

3. Plan or other actions.

- | | |
|---|--|
| <input type="checkbox"/> Indigenous peoples plan | <input type="checkbox"/> Combined resettlement plan and indigenous peoples plan |
| <input type="checkbox"/> Indigenous peoples planning framework | <input type="checkbox"/> Combined resettlement framework and indigenous peoples planning framework |
| <input type="checkbox"/> Environmental and social management system arrangement | <input type="checkbox"/> Indigenous peoples plan elements integrated in project with a summary |
| <input type="checkbox"/> Social impact matrix | |
| <input checked="" type="checkbox"/> No action | |

V. ADDRESSING OTHER SOCIAL RISKS

A. Risks in the Labor Market

1. Relevance of the project for the country's or region's or sector's labor market

☐ unemployment ☒ M underemployment ☐ retrenchment ☐ core labor standards

2. Labor market impact. It is estimated that the construction works will directly create between 300 to 500 semi or unskilled jobs, and indirect employment opportunities, on the short to long-term.

B. Affordability

During the design phase of the project, a substantial effort to minimize involuntary resettlement will be applied. The affected persons will be fully compensated at a replacement costs for affected assets, benefits to restoration of their livelihoods given and poor and vulnerable benefits envisaged.

C. Communicable Diseases and Other Social Risks

1. The impact of the following risks are rated as not applicable (NA):

NA ☐ Communicable diseases NA ☐ Human trafficking

NA ☐ Others (please specify) _____

2. Risks to people in project area: NA

VI. MONITORING AND EVALUATION

Social indicators for monitoring and evaluation will include but will not be limited to:

- Citizens enable to benefit from construction employment opportunities (300 to 500 full-time jobs)
- Ratio of affected households (%) has been able to at least restore their livelihood Respective staff members trained on traffic models (with At least 25% women recruited and trained)
- Baseline data created and surveys undertaken with sex segregated data by YM and operators
- Targets related LARP activities are achieved by at least 90% in accordance with the time schedule
- M&E Specialist is responsible for collecting and updating monitoring information in Project Performance Management System's web-based module.

SAFEGUARD REPORTS

Below are the links to the following reports:

1. Initial Environmental Examination for the Babajanyan–Ashtarak Highway Road Link
<http://www.adb.org/projects/documents/sustainable-urban-development-investment-program-t2-yerevan-western-ring-road-iee>
2. Initial Environmental Examination for the Argavand-Shirak Road Link
<http://www.adb.org/projects/documents/sustainable-urban-development-investment-t2-yerevan-western-ring-road-road-link-3-argavand-unction-iee>
3. Initial Environmental Examination for the Davitashen-Ashtarak Highway
<http://www.adb.org/projects/documents/sudip-t2-yerevan-western-ring-road-road-link-davitashen-ashtarak-highway-iee>
4. Land Acquisition and Resettlement Plan for the Argavand-Shirak Road Link
<http://www.adb.org/projects/documents/sustainable-urban-development-investment-t2-argavand-shirak-rp>
5. Preliminary Land Acquisition and Resettlement Plan for Tranche 2 Sections
<http://www.adb.org/projects/documents/sustainable-urban-development-investment-program-t2-yerevan-western-ring-road-rp>

UPDATED RISK ASSESSMENT AND RISK MANAGEMENT PLAN

Risk Description	Risk Assessment	Mitigation Measures or Risk Management Plan
Financial Sustainability The CF will be provided by Government on time during project implementation.	Low	Government to be provided with financing plan of the Project. Government to provide written commitment to include CF in the annual budget.
Procurement and Combating Corruption Political or other interference in the contractor's/consultant's selection.	Low	Loan covenant to include provision that all project procurement should follow ADB procedures.
Environmental Protection All the environmental actions are done according to ADB Safeguards Policy Statement (2009) and Armenian national standards.	Low	The possible risk was archeology in "Karmitr Blur" area but during Tranche 1 implementation, all mitigation measures such as the initial two stages of the archeological surveys were conducted and systematic investigations are being conducted.
Gender Mainstream Women will participate in SUDIP project design, planning, and implementation.	Low	The monitoring and evaluation specialist is appointed to implement and monitor the GAP, which is guided by a gender consultant appointed by ADB under RETA. ¹
Resettlement Discrepancies in cadastral database application during LARP preparation and implementation can lead to complaints.	High	YM is cooperating with State Committee of the Real Estate Cadaster to eliminate possible discrepancies in the cadastral maps and database. In addition, during the DMS and SES, DESC will collect all the necessary legal documents which will be provided to YM in order to decrease the number of possible legal problems in documentations.
Operation and Maintenance Operation and maintenance is not adequate. The O&M Plan will be provided by YM once the transport model is in place.	Medium	YM will implement under Component B of the loan a transport model that will also reflect the needs of O&M in relation to the street hierarchy within the city of Yerevan and for the upcoming years.
Physical and price contingencies Vulnerability of the economy to exogenous shocks.	Medium	Project includes physical and price contingencies to cover these extra costs
Transport connectivity Political debate shifting	Medium	Project is essential to reduce transport costs and ensure north-south connectivity.

¹ RETA 7563: Promoting Gender-Inclusive Growth in Central and West Asia Developing Member Countries.

Risk Description	Risk Assessment	Mitigation Measures or Risk Management Plan
urban transport and infrastructure rehabilitation focus over other projects.		
Loan ratification by the government Interdepartmental coordination and support not forthcoming.	Medium	Central government ratifies the loan agreement.
Overall	Low	
ADB = Asian Development Bank, CF = counterpart fund, DESC = detailed engineering and supervision consultant, DMS = detailed measurement survey, GAP = gender action plan, LARP = land acquisition and resettlement plan, O&M = operation and maintenance, RETA = regional technical assistance, SES = socio-economic survey, SUDIP = Sustainable Urban Development Investment Program, YM = Yerevan Municipality.		

Road Map Implementation Status

Action	Status (as of 10 June 2015)
Immediate action plan	
Road Network in Yerevan	Partially under implementation under Tranche 1, designs for all by-pass finalized.
Public Transport in Yerevan	Under design phase, some tasks will have to be rebid
Intermodality in Yerevan	No substantial progress until public transport has been finalized. intermodal stations proposed in all Secondary Cities
Secondary Cities Strategic Roadmap	City Development Plans developed
Medium -Term Actions	
Road network in all cities	Partially completion of the Yerevan bypass.
Public transport in all cities.	Under design/optimization phase only in Yerevan.
Parking organization and management	Under design phase only in Yerevan
Intermodality in all cities.	No substantial progress until public transport of Yerevan has been finalized.
Non-motorized transport	Bicycle lanes, set in place on the circular park in Yerevan, as a pilot.
Institutional.	Under implementation under Tranche 1 for Yerevan Municipality PIU.
Long-Term Development	
Road network in all cities	Partially completion of the Yerevan bypass, projects and under scrutiny for Secondary Cities
Public transport in all cities.	Under design/optimization phase only in Yerevan, potential projects identified under Secondary Cities
Parking organization and management	Under design phase only in Yerevan, assessing the need for it in Secondary Cities due to their limited size.
Intermodality in all cities.	No substantial progress until public transport model of Yerevan has been finalized, intermodal stations proposed in all Secondary Cities.
Non-motorized transport	Bicycle lanes, set in place on the circular park in Yerevan, as a test pilot.
Institutional.	Under implementation under Tranche 1 for Yerevan Municipality PIU, and knowledge will be transferred to future PIUs in Secondary Cities

Source: Asian Development Bank and Yerevan Municipality.

ARM: Sustainable Urban Development Investment Program
Status of Compliance with Undertakings in the Framework Financing Agreement

No.	Undertaking	Status
1.	Urban sector policy and sector management. (i) ADB is kept informed of Armenia's policies and programs related to the urban sector and economic development that will materially affect the economic viability of each project, subproject, or component financed under the Facility. (ii) Best efforts are used to sustain and strengthen urban sector particularly with the creation of Urban Transport Authority in Yerevan, and other relevant sector-oriented agencies in other urban areas. (iii) Developing the human resources, technical, managerial and administrative capacity in the urban subsector to achieve greater efficiency in planning, developing and operating the infrastructure financed under the Investment Program is of high priority.	(i) Complied with (ii) Partially complied with: PMIC has not completed and met all the contract requirements. Yerevan Municipality intends to start the process of new bidding on institutional strengthening component to hire new consultants. The initial ToR for the Institutional Strengthening will be sent to ADB for approval in Q2 2015 (iii) Complied with: For the proper implementation of the project PIU was restructured and a specific project unit is set up within PIU. The recruitment of the new staff has been carried out by YM with the assistance of the ADB resident mission.
2.	Counterpart funding and resources. (i) Financial, technical and human resources shown in the Investment Program and Tranche 1 financing plans, and the implementation arrangements will be provided on a timely basis; (ii) Adequate funds to sustainably maintain the project throughout its service life will be allocated as well as capital investment subsidies, when fully cost recovery is not feasible; and (iii) Financial, human and technical resources to implement the urban subsector plan will be made available.	Complied with: PIU has experience in the management of ADB funds disbursements. Current practice for counterpart financing is for the government's share. The government annually approves the counterpart financing schedule in accordance with allocated funds. PIU submits payment request for approval by YM. The counterpart funding provided by the government by the end of Q1 2015 is \$0.23 million.
3.	Construction quality. (i) Subprojects under the Investment Program are compliant with the international standards and relevant international agreements to which Armenia is a contracting party; (ii) Sound contract management and quality control procedures are performed in accordance with internationally acceptable standards; and (iii) Completed works comply with the design drawings, construction specifications and other documents stipulated in the bidding documents.	Complied with: Contractor submitted quality management (QMP) plan to Engineer and based on approved QPM all the construction works are implemented accordingly.

No.	Undertaking	Status
4.	Land acquisition and resettlement. (i) In the event that any land acquisition or resettlement becomes necessary, appropriate land acquisition and resettlement plans (LARPs) will be prepared in accordance with the national laws and regulations, the resettlement framework and the ADB's Safeguard Policy Statement (2009) in consultation with the affected people; (ii) All LARPs are disclosed to the public and submitted to ADB for approval; (iii) All land and right-of-way required for the project implementation are made available in a timely manner, (iv) Land acquisition and resettlement are carried out promptly and efficiently following the LARPs agreed with ADB and monitored, evaluated, and reported to ADB as required in the LARPs; and (v) Any civil works will be commenced only after the required land has been acquired and affected households have been compensated at full replacement cost.	Complied with: All LARPs were prepared based on approved designs. 1 LARP Arshakuniats Street Section and Artashat Highway Section is fully implemented and the construction works are finalized. LARP 3 Arshakuniats Street Section is under implementation and along with compliance will be completed in mid-June 2015.
5.	Environment. (i) Projects under the investment program are designed, carried out, maintained, and monitored in compliance with (a) all applicable environmental laws and regulations of Armenia; (b) ADB's Safeguard Policy Statement (2009); (c) environmental assessments (IEEs/EIAs) prepared for each individual project; and (d) EMPs, including the mitigation measures and monitoring requirements arising from the implementation of the IEEs/EIAs. (ii) Civil works contractors' specifications include requirements to comply with the environmental mitigation measures contained in the IEEs/EIAs and EMPs. (iii) Civil works contractors are supervised to ensure compliance with the requirements of the IEEs/EIAs and EMPs.	Complied with: It is envisaged in the contract that the detailed engineering supervisor of construction consultant (DESC) with Program implementation unit (PIU) monitors and reports the performance of the Project and ensure compliance with all environmental requirements. The approved EIAs for tender 1 and tender 2 were included in the respective bidding documents. During Q1 2015 the works on the construction site were performed according to EMP and were subject to periodical monitoring by environmental staff of the constructor, DESC and PIU.
6.	Local consultation and gender. (i) Gender Action Plan agreed under the MFF is implemented; (ii) all local consultations to address safety, social, and cultural issues during implementation of the investment program are carried out as recommended in the summary poverty reduction and social strategy; (iii) men and women are given equal employment opportunities directly, or indirectly, arising from the Investment Program and without any differentiation of wages for equal work; and (iv) mechanisms for maximizing local employment benefits will be included in the bidding documents.	Complied with: The community and gender action plan was prepared in May 2011, by the technical assistance consultant recruited by ADB. PIU with assistance of PMIC updated the community and gender action plan for Tranche 1 which was approved on 24 February 2014 by ADB and implemented it over the Project 1 period.
7.	Health risks and prevention. all civil works contracts will include a requirement to conduct an information and education campaign on sexually transmitted diseases and HIV/AIDS for construction workers as part of the health and safety program at campsites during the construction period.	Complied with: The occupational health & safety requirements are included in bidding documents and measures are being envisaged in EMPs for Tender 1 and 2. During Q1 2015 the works on the construction site were performed according to the Health and Safety Standards of EMP and were subject to periodical

No.	Undertaking	Status
		<p>monitoring by environmental staff of the constructor, DESC and PIU. All workers involved in construction received short trainings before commencement of the works. The contractor carried out environmental and health and safety training for all staff on 14 March 2015. The training also covered topics of sexually transmitted diseases and HIV/AIDS. Labor standards are subject to the assessment by State Labor Inspectorate of the Ministry of Labor and Social Affair.</p>
8.	<p>Anticorruption; transparency and good governance. EA will follow ADB's Anticorruption Policy (1998, as amended to date) and acknowledge that ADB, consistent with its commitment to good governance, accountability and transparency, reserves the right to undertake directly, or through its agents, investigation of any alleged corrupt, fraudulent, collusive or coercive practices related to the project and cooperate with such investigation and extend all necessary assistance including access to all relevant books and records, and engaging independent experts who may be needed for satisfactory completion of such investigations. All contracts financed by ADB under the investment program include provisions specifying the right of ADB to audit and examine the records and accounts of the implementing agency and all contractors, suppliers, consultants, and other service providers as they relate to the MFF. Additional measures to improve governance, accountability, and transparency under the MFF, include (i) independent external auditing of contracts, project accounts, and financial statements; (ii) publications on all procurement-related matters by the Executing or Implementing Agency as applicable, and (iii) timely disclosure of information on selection of consultants and contractors through local newspapers.</p>	<p>Complied with: PIU has experience in the management of ADB funds disbursements. Current practice for counterpart financing is for the government's share. The government annually approves the counterpart financing schedule in accordance with allocated funds. PIU submits payment request for approval by YM.</p> <p>PIU detailed consolidated project accounts are audited in accordance with International Standards on Auditing and/or in accordance with the Government's audit regulations by an auditor acceptable to ADB. The audited accounts are submitted to ADB within 6 months of the end of the fiscal year (31 December). Annual audit report includes a separate audit opinion on the use of imprest accounts and statement-of-expenditure procedure. ADB's policy on delayed submission, and the requirements for satisfactory and acceptable quality of the audited accounts shall apply.</p> <p>The contract for advisory services for audit with Grant Thornton CJSC was signed on 24 July 2013 and the audit report along with the management letter was provided to the PIU on 24 June 2014. According to audit report the statement of Project sources and uses of funds and appended notes thereto present fairly the cash balance of the Project as of 31 December 2013 and the funds</p>

4 Supplementary Appendix B

No.	Undertaking	Status
		<p>received and expenses paid for the year then ended in accordance with the financial covenants of the Loan number 2752-ARM (SF), the Asian Development Bank guidelines and the cash basis of accounting, as described in the note 2 to accompanying special purpose financial statements.</p> <p>The imprest account statement and the government co-financing account statement present fairly the balance of the imprest account and the government co-financing account, respectively, as of 31 December 2013 and the cash movements of these accounts for the year then ended, in accordance with Asian Development Bank guidelines.</p>

Sustainable Urban Development Investment Program (Loan 2752-ARM)
Status of Compliance with Loan Covenants
as of March 2015

Covenants	Reference in Loan/Project Agreement	Status of Compliance
The Borrower shall designate Yerevan as the Project Implementing Agency with responsibility for overall Project implementation and for liaison with ADB and other government agencies. The Borrower and Yerevan shall ensure that the Project is implemented in accordance with the detailed arrangements set forth in the FAM. Any subsequent change to the FAM shall become effective only after approval of such change by the Borrower and ADB. In the event of any discrepancy between the FAM and this Loan Agreement and/or the Project Agreement, the provisions of this Loan Agreement and/or THE Project Agreement shall prevail.	Loan Agreement (LA), Schedule 5, Paragraph 1	Being complied with: YM was appointed as the project implementation agency and is responsible for overall project implementation in accordance with ADB Policies and Procedures and for liaison with ADB and other government agencies. PIU has been restructured and is strengthened with additional staff. A specific unit was set up within PIU.
The Borrower shall ensure that the preparation, design, construction, implementation, operation and decommissioning of each Subproject comply with (a) all applicable laws and regulations of the Borrower relating to environment, health, and safety; (b) the Environmental Safeguards; (c) the EARF; and (d) all measures and requirements set forth in the respective IEE and EMP, and any corrective or preventative actions set forth in a Safeguards Monitoring Report.	LA, Schedule 5, Paragraph 2	Being complied with: it is envisaged in the contract that the DESC with PIU will monitor and report the performance of the Project and ensure compliance with all environmental requirements. The approved EIA for tender 2 is included in the respective bidding documents. During Q4 2014 the works on the construction site were performed according to EMP and were subject to periodical monitoring by environmental staff of the contractors, DESC and PIU.
The Borrower shall ensure that all land and all rights-of-way required for each Subproject are made available to the Works contractor in accordance with the schedule agreed under the related Works contract and all land acquisition and resettlement activities are implemented in compliance with (a) all applicable laws and regulations of the Borrower relating to land acquisition and involuntary resettlement; (b) the Involuntary Resettlement Safeguards; (c) the RF; and (d) all measures and requirements set forth in the respective RP, and any corrective or preventative actions set forth in a Safeguards Monitoring Report.	LA, Schedule 5, Paragraph 3	Being complied with: The LARF and the addendum were revised and approved by ADB in March 2012 and by the government in November 2012. LARP 1 was approved by ADB on 30 August 2013 and by RA government on 14 November 2013. LARP 2 was approved by ADB in 9 January 2014. LARP 3 was approved by ADB on 12 May 2014 and by RA government on 11 September

Covenants	Reference in Loan/Project Agreement	Status of Compliance
		<p>2014. A detailed grievance redress mechanism was established through the LARPs to receive and facilitate the resolution of affected persons' concerns and grievances. Implementation of LARP1 Arshakunyats section started on 31 December 2013, and was completed in May 2014, complying with land acquisition and involuntary resettlement arrangements made. The implementation of LARP1 Artashat section started in July 2014 and was finalized in Q4 2014. The implementation of LARP 3 started in Q4 2014.</p>
<p>Without limiting the application of the Involuntary Resettlement Safeguards, the RF or the RP, the Borrower shall ensure that no physical or economic displacement takes place in connection with the Subprojects until: (a) compensation and other entitlements have been provided to affected people in accordance with the RP; and (b) a comprehensive income and livelihood restoration program has been established in accordance with the RP.</p>	LA, Schedule 5, Paragraph 4	<p>(a) Being complied with: All AHs from Arshakunyats section signed the agreements/contracts and were compensated before physical or economic displacement was made. (b) Being complied with: Under livelihood restoration program vulnerable groups are provided with the allowance equivalent to 6 months of minimum salary.</p>
<p>Human and Financial Resources to Implement Safeguards Requirements The Borrower shall make available necessary budgetary and human resources to fully implement the EMP, the RP and the indigenous peoples plan.</p>	LA, Schedule 5, Paragraph 5	<p>Being complied with: For the proper implementation of the resettlement and environmental arrangements a resettlement specialist and an environmental specialist have been involved in the new project unit. DESC also has environment and resettlement specialists in their staff composition. Contractor's staff also included environmental and social specialists. Program management and institutional consultant's (PMIC) international</p>

Covenants	Reference in Loan/Project Agreement	Status of Compliance
		resettlement specialist joined the team on 2 September 2014. Budgetary resources are made available in accordance with the financing plan described in the periodic financing request. The project is not expected to affect indigenous people.
<p>Health and Labor Standards=</p> <p>The Borrower shall cause Yerevan to ensure that contractors engaged under the Project/Subproject (i) comply with all applicable labor laws; (ii) use their best efforts to employ women and local people, including disadvantaged people, living in the vicinity of the Project; (iii) provide equal pay to men and women for work of equal type; (iv) provide and adequately equip first-aid, health and sanitation, and personal hygiene facilities for male and female workers at the Project/Subproject site; (v) maximize female training and employment; (vi) conduct an information and education campaign on sexually transmitted diseases and HIV/AIDS for construction workers as part of the health and safety program at campsites and adjacent communities during Project/Subproject implementation; and (vii) abstain from child labor. Relevant contracts financed under the Project must include specific clauses on these undertakings.</p>	LA, Schedule 5, Paragraph 6	<p>Being complied with: The occupational health & safety requirements are included in bidding documents and measures are being envisaged in EMPs for Tender 2.</p> <p>During October 2014, 31 workers were employed by the contractor - 4 female workers and 27 male workers (20 workers were from regions). In November 2014, the contractor employed 32 workers- 4 of them female and 28 male (24 workers were from regions). In December 2014, the contractor hired 27 workers- 23 male and 4 female (17 were from regions). No child was involved in construction activities. During Q4 2014, the works on the construction site were performed according to the Health and Safety Standards of EMP and were subject to periodical monitoring by environmental staff of the contractor, DESC and PIU. All workers involved in construction received short trainings before commencement of the works. The contractor carried out environmental and health and safety training for all staff on 25 June 2014. The training also covered topics of sexually transmitted diseases and HIV/AIDS. Labor standards are subject to the</p>

Covenants	Reference in Loan/Project Agreement	Status of Compliance
		assessment by State Labor Inspectorate of the Ministry of Labor and Social Affair.
<p>Gender and Development</p> <p>The Borrower shall cause Yerevan to ensure that within 6 months of the Effective Date, the community and gender action plan is agreed with ADB, that it is implemented in a timely manner over the Project period, and that adequate resources are allocated for this purpose</p>	<p>LA, Schedule 5, Paragraph 7</p> <p>Deadline 31 Jan 2012</p>	<p>Being complied with: The community and gender action plan was prepared in May 2011, by the technical assistance consultant recruited by ADB. PIU with assistance of PMIC updated the community and gender action plan for Tranche 1 which was approved on 24 February 2014 by ADB and is currently being implemented under Tranche 1.</p>
<p>Safeguards Related Provisions in Bidding Documents and Works Contracts</p> <p>The Borrower shall ensure that all bidding documents and contracts for Works contain provisions that require contractors to:</p> <p>(a) comply with the measures and requirements relevant to the contractor set forth in the IEE, the EMP, and the RP (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set out in a Safeguards Monitoring Report;</p> <p>(b) make available a budget for all such environmental and social measures;</p> <p>(c) provide the Borrower with a written notice of any unanticipated environmental, resettlement or indigenous peoples risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the IEE, the EMP, and the RP;</p> <p>(d) adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and</p> <p>(e) fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.</p>	<p>LA, Schedule 5, Paragraph 8</p>	<p>(a) Being complied with. All provisions are included in the bidding documents and contracts for the civil works of both tenders 1 and 2.</p> <p>(b) Being complied with. Budget is available for environmental and social measures.</p> <p>(c) Being complied with. The procedure of notification to the Borrower on any unanticipated environmental risks or impacts, as well as procedures of addressing and reporting on mitigation such impacts is being included in the EMPs.</p> <p>(d) Being complied with in the section where works commenced. To be complied with in other sections.</p> <p>(e) The corresponding measures are envisaged in the site rehabilitation plan as a part of the EMP</p>
<p>Safeguards Monitoring and Reporting</p> <p>The Borrower shall do the following:</p>	<p>LA, Schedule 5, Paragraph 9</p>	<p>(a) Being complied with: PIU submits environmental reports to ADB on semi-annual basis. All previous social</p>

Covenants	Reference in Loan/Project Agreement	Status of Compliance
<p>(a)submit semi-annual Safeguards Monitoring Reports to ADB and disclose relevant information from such reports to affected persons promptly upon submission;</p> <p>(b)if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in the IEE, the EMP, and the RP, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan;</p> <p>(c)no later than 6 months, engage qualified and experienced external experts or qualified non-governmental organization under a selection process and terms of reference acceptable to ADB, to verify information produced through the Project monitoring process, and facilitate the carrying out of any verification activities by such external experts; and</p> <p>(d)report any actual or potential breach of compliance with the measures and requirements set forth in the EMP or the RP promptly after becoming aware of the breach.</p>		<p>safeguard reports were submitted to ADB on semi-annual basis. The semiannual social safeguard report for the first half of 2014 was submitted to ADB in Q3 2014 and after receiving ADB comments the report was delayed by PIU. It was agreed with ADB to submit the social safeguard report for the whole of 2014 in January 2015. Starting from 2015, the reports will again be submitted on semiannual basis.</p> <p>(b)The procedure of notifying ADB on any unanticipated environmental risks or impacts, as well as procedures of addressing and reporting on mitigation of such impacts is included in the EMP based on ADB Environmental Assessment Guidelines. The contractor was periodically notified about the defected issues raised during the construction of Arshakunyats Avenue (Tender 1). The defects were immediately improved and non-compliance notices (formal documents) were not issued during the reporting period.</p> <p>(c) Independent monitoring agency (IMA) was recruited in the second quarter (Q2) of 2012 under a selection process and terms of reference was acceptable to ADB. The IMA monitors and verifies LARP preparation and implementation to determine whether resettlement goals have been achieved, livelihood and living standards have been restored and recommendations were provided. The IMA scope of work</p>

Covenants	Reference in Loan/Project Agreement	Status of Compliance
		also includes site conditions; compensation, disbursement and grievance redress procedures. (d) Any breach of compliance by the contractor with EMP will be reported to the PIU management by DESC supervision team immediately along with subsequent follow-up reporting requirement. The whole description of the breach and measures on improvement undertaken will be included in the quarterly progress report and semi-annual environmental monitoring reports.
The Borrower shall ensure that no proceeds of the Loan are used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of the SPS.	LA, Schedule 5, Paragraph 10	Being complied with.
The Borrower shall ensure that the counterpart funding is promptly provided for purposes of successful Project implementation.	LA, Schedule 5, Paragraph 11	Being complied with. Counterpart funding being provided each year.
The Borrower shall cause Yerevan to be adequately staffed and equipped in a manner acceptable to ADB.	LA, Schedule 5, Paragraph 12	Complied with. YM is adequately staff and equipped.
The Borrower shall cause Yerevan to have the Project-related accounts annually audited in accordance with international standards by an independent auditor acceptable to ADB.	LA, Schedule 5, Paragraph 13	Being complied with: The contract for advisory services for audit with Grant Thornton CJSC was signed on 24 July 2013 and the audit report along with the management letter was provided to the PIU on 24 June 2014. According to audit report the statement of Project sources and uses of funds and appended notes thereto present fairly the cash balance of the Project as of 31 December 2013 and the funds received and expenses paid for the year then ended in accordance with the financial covenants of the Loan number 2752-

Covenants	Reference in Loan/Project Agreement	Status of Compliance
		<p>ARM (SF), the Asian Development Bank guidelines and the cash basis of accounting, as described in the note 2 to accompanying special purpose financial statements.</p> <p>The imprest account statement and the government co-financing account statement present fairly the balance of the imprest account and the government co-financing account, respectively, as of 31 December 2013 and the cash movements of these accounts for the year then ended, in accordance with Asian Development Bank guidelines.</p>
<p>The Borrower shall comply with ADB's <i>Anticorruption Policy</i> (1998, as amended to date) for the purposes of the Project. The Borrower, consistent with its commitment to good governance, accountability and transparency, agrees (a) that ADB reserves the right to investigate, directly or through its agents, any alleged corrupt, fraudulent, collusive or coercive practices relating to the Project and (b) to cooperate fully with any such investigation and to extend all necessary assistance. The Borrower shall ensure that all contracts financed by ADB under the Project include provisions specifying the right of ADB to audit and examine the records and accounts of Yerevan and all contractors, suppliers, consultants, and other service providers as they relate to the Project or Subproject.</p>	<p>LA, Schedule 5, Paragraph 14</p>	<p>Being complied with.</p>
<p>The Borrower shall cause Yerevan to ensure that (i) the Subprojects are implemented in accordance with design specifications and construction norms; and (ii) construction supervision, quality control and contract management are performed in accordance with international standards.</p>	<p>LA, Schedule 5, Paragraph 15</p>	<p>Being complied with: (i) DESC completed the detailed design works for the tender 2. (ii) DESC finalized the supervision of the tender 1 in December 2014. Construction supervision for tender 2 ongoing.</p>
<p>The Borrower shall contractually bind Yerevan to ensure that its actual road and urban transport maintenance budget increases at</p>	<p>LA, Schedule 5, Paragraph 16</p>	<p>Being complied with: Actual road and urban transport maintenance budget for</p>

Covenants	Reference in Loan/Project Agreement	Status of Compliance
least at 5% per annum during 2011-2015.		2011 was 4.249 billion AMD, for 2012 was 5.973 billion AMD, for 2013 was 6.299 billion AMD The budget for 2014 was 6,644 billion, and the projection for 2015 is 7,164 billion AMD which is 5.5% increase.
The Borrower shall ensure that the relevant municipalities or authorities install appropriate safety signs and facilities during implementation.	LA, Schedule 5, Paragraph 17	Being complied with: The necessary safety signs were installed according to traffic management plan and safeguard requirements. PIU periodically monitored sustainability of the safety tools on the site.
The Borrower and Yerevan shall ensure that ADBs consent is obtained at least 6 months prior to the implementation of any of the following: (i) any change in ownership of any asset, facility or structure financed under the Project; (ii) any sale, transfer, or assignment of interest or control in any asset, facility or structure financed under the Project; or (iii) any lease or other contract or modification of the functions and authority of Yerevan over operation and maintenance of any such asset, facility or structure financed under the Project. The Borrower shall ensure that any such changes will be carried out in a legal and transparent manner.	LA, Schedule 5, Paragraph 18	Shall comply when applicable.
Fielding of Consultants		Being complied with