PROJECT PAPER

ON A

PROPOSED ADDITIONAL CREDIT
IN THE AMOUNT OF SDR 3.7 MILLION
(US$5.5 MILLION EQUIVALENT)

AND A

PROPOSED ADDITIONAL GRANT
IN THE AMOUNT OF SDR 3.0 MILLION
(US$4.5 MILLION EQUIVALENT)

TO THE

KYRGYZ REPUBLIC

FOR THE

NATIONAL ROAD REHABILITATION (OSH-BATKEN-ISFANA) PROJECT

September 16, 2010

Sustainable Development Department
Central Asia Country Unit
Europe and Central Asia Region
CURRENCY EQUIVALENTS

(Exchange Rate Effective August 31, 2010)

Currency Unit = Kyrgyz Som (KGS)
46 KGS = US$1
US$1.508910 = SDR 1

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

AADT Average Annual Daily Traffic
ACTED Agence d'Aide a la Cooperation Technique et au Developement
ADB Asian Development Bank
AF Additional Financing
BoQ Bill of Quantities
DCCA Public Fund Development and Cooperation in Central Asia
EBRD European Bank for Reconstruction and Development
EC European Commission
FM Financial Management
FY Fiscal Year
IDA International Development Association
IFI International Financial Institution
IsDB Islamic Development Bank
JEA Joint Economic Assessment
JICA Japanese International Cooperation Agency
KRCBI Kyrgyz Confidence Building Initiative
MoF Ministry of Finance
MoTC Ministry of Transport and Communications
MoU Memorandum of Understanding
NCB National Competitive Bidding
OCHA UN Office for the Coordination of Humanitarian Affairs
ORAF Operational Risk Assessment Framework
PDO Project Development Objective
PIU Project Implementation Unit
RRA Regional Road Agency

Vice President: Philippe H. Le Houerou, ECAVP
Country Director: Motoo Konishi, ECCU8
Country Manager: Alexander Kremer, ECCKG
Sector Manager: Henry G. R. Kerali, ECSSD
Task Team Leader: Elizabeth Wang/Cordula Rastogi, ECSSD
KYRGYZ REPUBLIC

NATIONAL ROAD REHABILITATION (OSH-BATKEN-ISFANA) PROJECT
ADDITIONAL FINANCING

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KYRGYZ REPUBLIC

NATIONAL ROAD REHABILITATION (OSH-BATKEN-ISFANA) PROJECT
ADDITIONAL FINANCING

Data Sheet

### Basic Information - Additional Financing (AF)

<table>
<thead>
<tr>
<th>Country Director: Motoo Konishi</th>
<th>Sectors: Roads &amp; Highways (100%)</th>
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<tr>
<td>Sector Director: Peter Thomson</td>
<td>Themes: Conflict prevention and post-conflict reconstruction (80%); Regional integration (20%)</td>
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<tr>
<td>Sector Manager: Henry Kerali</td>
<td>Environmental category: B</td>
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<tr>
<td>Team Leader: Elizabeth Wang/</td>
<td>Expected Closing Date: December 31, 2013</td>
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<tr>
<td>Cordula Rastogi</td>
<td></td>
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<tr>
<td>Project ID: P123291</td>
<td></td>
</tr>
<tr>
<td>Expected Effectiveness: October 15, 2010</td>
<td></td>
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<tr>
<td>Lending Instrument: Specific Investment Loan</td>
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<td>Additional Financing Type: Emergency</td>
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### Basic Information - Original Project

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<tr>
<th>Project ID: P107608</th>
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<tr>
<td>Project Name: National Road Rehabilitation (Osh-Batken-Isfana)</td>
<td>Expected Closing Date: June 30, 2013</td>
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<td>Lending Instrument: Specific Investment Loan</td>
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</table>

### AF Project Financing Data

| Loan | Credit | Grant | Guarantee | Other: |

Total Bank financing: IDA Credit SDR3.7 million (US$5.5 million equivalent) and IDA Grant SDR3.0 million (US$4.5 million equivalent)

Proposed terms: For the IDA Credit 40 years to maturity including 10 years grace period.

### AF Financing Plan (US$ m)

<table>
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<tr>
<th>Source</th>
<th>Total Amount (US$ million)</th>
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<tr>
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<tr>
<td>International Development Association</td>
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<tr>
<td>Total Project Costs (proposed AF)</td>
<td><strong>10.00</strong></td>
</tr>
</tbody>
</table>

### Client Information

**Recipient:**
Kyrgyz Republic

**Responsible Agency:**
Ministry of Transport and Communication
Project Implementation Unit, Room 612
6/F 42 Isanova Street,
Kyrgyz Republic, 720017
Tel: (996-312) 900-970, 900-893: Fax: (996-312) 314-378
bishkekoshroad@infotel.kg
Original Project Development Objectives are: (i) to contribute to the reduction of transport costs and travel time along the Osh-Batken-Isfana Road corridor, and (ii) to improve road safety planning.

Revised Project Development Objectives are to: (i) contribute to the reduction of transport costs and travel time along the Osh-Batken-Isfana Road corridor; (ii) improve road safety planning; and (iii) repair and rehabilitate road infrastructure in and around Osh and Jalal-Abad cities thereby creating temporary jobs.

Project description of the proposed AF:
The proposed Additional Financing (AF) will consist of the following activities:
Activity 1: Roads Repair and Rehabilitation (US$9.5 million equivalent), which will finance (i) provision of additional consultants’ services for the rehabilitation of segments of the Osh-Batken-Isfana road corridor financed under the original Project; (ii) provision of works and consultants’ services for the repair of urban roads within the city of Osh and the assessment of financing options for road maintenance activities by municipalities; and (iii) provision of works and consultants’ services for the rehabilitation of urban roads in and around the greater Osh and Jalal-Abad cities.
Activity 2: Road Safety Enhancement (US$0.2 million equivalent) which will finance the provision of road safety goods and equipment, such as traffic cones, mobile traffic signs, reflective jackets, thermal plastic paint, illuminated medium strip (so-called “cat’s eyes”).
Activity 3: Project Management and Implementation (US$0.3 million equivalent), which will finance provision of goods, consultants’ services, training, and Operating Costs, including an audit, to support Project coordination, implementation and management, and provision of consultants’ services for the development and implementation of a communication strategy for the Project activities.

Safeguard and Exception to Policies

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<th>Safeguard policies triggered:</th>
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<td>Environmental Assessment (OP/BP 4.01)</td>
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<td>Forests (OP/BP 4.36)</td>
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<td>Pest Management (OP 4.09)</td>
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<td>Physical Cultural Resources (OP/BP 4.11)</td>
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<td>Indigenous Peoples (OP/BP 4.10)</td>
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<td>Involuntary Resettlement (OP/BP 4.12)</td>
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<td>Safety of Dams (OP/BP 4.37)</td>
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<td>Projects on International Waters (OP/BP 7.50)</td>
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<td>Projects in Disputed Areas (OP/BP 7.60)</td>
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<tr>
<td>Does the project require any exceptions from Bank policies?</td>
<td>[X]Yes [ ] No</td>
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<tr>
<td>Have these been approved by Bank management?</td>
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</table>

AF Estimated Disbursements (Bank FY/US$ million)

<table>
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<tr>
<th>FY</th>
<th>2011</th>
<th>2012</th>
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<tr>
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<td>Cumulative</td>
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<table>
<thead>
<tr>
<th>Financing Agreement Reference</th>
<th>Description of Condition/Covenant</th>
<th>Date Due</th>
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</thead>
<tbody>
<tr>
<td>Schedule 2 Section I., A3</td>
<td>The Recipient, through the MoTC, shall during the implementation of the Project submit to the Association an Annual Work Program for the following calendar year, satisfactory to the Association, and shall agree with the Association on activities to be taken under the Project in the following calendar year and the related road maintenance budget.</td>
<td>December 15 of each calendar year (starting December 15, 2010)</td>
</tr>
<tr>
<td>Schedule 2 Section I., A4</td>
<td>The Recipient, through the MoTC, shall during the implementation of Part A of the Project: (i) take all necessary measures, including ensuring access to all relevant information related to the Project, to facilitate an independent technical audit; and (ii) act promptly upon the findings and recommendations of such audit under terms of reference acceptable to the Association.</td>
<td>June 1 of each calendar year (starting June 1, 2011)</td>
</tr>
<tr>
<td>Schedule 2 Section I., A5</td>
<td>For the purpose of carrying out the Project, the Recipient shall cause MoTC to update in form and substance satisfactory to the Association, the Project Operational Manual and furnish same to the Association.</td>
<td>December 31, 2010</td>
</tr>
<tr>
<td>Schedule 2 Section I., A6</td>
<td>By not later than October 31, 2010 and for the purpose of carrying out Part A.2 of the Project, the Recipient shall cause MoTC to enter into and maintain throughout the duration of the Project, implementation arrangements with the Municipality of Osh city, satisfactory to the Association, in accordance with the Project Operational Manual and the EIA.</td>
<td>October 31, 2010</td>
</tr>
<tr>
<td>Schedule 2 Section II., A2</td>
<td>The Recipient shall carry out jointly with the Association, a midterm review of the progress made in carrying out the Project (hereinafter referred to as the Midterm Review). The Midterm Review shall cover, inter alia: (a) progress made in meeting the Project’s objectives; and (b) overall Project performance against Project performance indicators.</td>
<td>June 30, 2011</td>
</tr>
<tr>
<td>Schedule 2 Section II., A3</td>
<td>The Recipient shall prepare and furnish to the Association, a separate report describing the status of implementation of each component of the Project and a summary report of Project implementation generally.</td>
<td>4 weeks prior to Mid-term Review</td>
</tr>
<tr>
<td>Schedule 2 Section II., B2</td>
<td>The Recipient shall prepare and furnish to the Association interim unaudited financial reports for the Project covering the quarter, in form and substance satisfactory to the Association.</td>
<td>45 days after the end of each calendar quarter</td>
</tr>
<tr>
<td>Schedule 2 Section IV., B1</td>
<td>No withdrawal shall be made for payments made prior to the date of this Agreement, except that withdrawals up to an aggregate amount not to exceed SDR 1,200,000 out of the Grant may be made for payments made prior to this date but on or after September 1, 2010, for Eligible Expenditures.</td>
<td>4 weeks prior to Mid-term Review</td>
</tr>
</tbody>
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I. Introduction

1. This Project Paper seeks the approval of the Executive Directors to provide an additional Credit in the amount of SDR3.7 million (US$ 5.5 million equivalent) and an additional Grant in the amount of SDR3.0 million (US$ 4.5 million equivalent) to the Kyrgyz Republic for the National Road Rehabilitation (Osh-Batken-Isfana) Project (P107608; Credit number 4658-KG, Grant number H520-KG). The proposed Additional Financing (AF) is an emergency operation processed under OP/BP 8.00, prepared in response to recent social unrest in the Kyrgyz Republic. It will support scaling up road rehabilitation activities of the original Project (“the Project”) and create temporary jobs in road construction. The proposed AF will finance costs associated with road repairs on a portion of the network within the city of Osh and roads servicing the greater Osh City, and to a lesser extent Jalal-Abad City. These activities will improve road infrastructure, reduce travel time, lower vehicle operating costs, and ease access to work, education, and social opportunities. A secondary benefit will be to create temporary employment in a region where substantial economic dislocation has recently occurred.

2. Project restructuring is needed to align the Project Development Objective (PDO) with activities proposed under AF. The Results Framework and associated monitoring indicators were revised to reflect increased Project scope. No changes are foreseen to institutional arrangements for Project implementation because the Project Implementation Unit (PIU) within the Ministry of Transport and Communications (MoTC), the implementing agency, has been highly effective in managing projects financed by the World Bank, the European Bank for Reconstruction and Development (EBRD), the Asian Development Bank (ADB), the European Commission (EC), and bilateral donors. The MoTC will be responsible for implementing all Project activities, including routine maintenance works for the road network under administrative responsibility of the Osh municipality. No co-financing will come from Government or other donors. The Project closing date will be extended by six months, from June 30, 2013 to December 31, 2013.¹

3. Project implementation has advanced significantly since Project effectiveness on February 26, 2010, but since Project implementation has been underway for less than one year, Regional Vice President (RVP) authorization was sought to proceed with AF preparation for the Project (as required under OP/BP13.20), and was granted on August 11, 2010.

II. Background and Rationale for Additional Financing

Country Context

4. The social unrest during April and June 2010 in the Kyrgyz Republic resulted in a group of opposition and civic leaders assuming power. A Joint Economic Assessment (JEA) reported that the recent events destroyed the livelihoods of many households in the cities of Osh and Jalal-

¹ The activities envisioned in the Additional Financing are not expected to take four years to implement. Given this is an emergency operation, a significant portion of the activities will be completed in the first 12 months of project implementation. However, the extended time is provided in case the project experiences implementation difficulties due to the fragile and some time contentious political environment in the southern part of the country.
Abad in the southwest. The Commission for Assessment of Damages estimated that about 4,000 people lost employment, primarily in services and trades; markets and economic activities have been significantly disrupted. Recommendations for the short-term include developing employment opportunities using cash-for-work and labor-intensive public works initiatives targeted to households affected by the events and other economically vulnerable groups.²

5. Civil unrest in the cities of Osh and Jalal-Abad has damaged the local economy, which is expected to contract substantially compared to the pre-crisis growth estimate, and lead to major income declines among local households. Also, foreign investment is anticipated to slow down considerably. It is expected that reconstruction and development needs will extend into 2011, when the economy may begin to recover. Government’s current fiscal balance is expected to expand significantly and require external financing estimated at US$335 million in 2010 and US$225 million in 2011. Additional nongovernmental support will be crucial to reconstruction, recovery, and rehabilitation efforts.

Sector Policy and Strategy

6. Roads in the Kyrgyz Republic carry 92 percent of passenger traffic and 59 percent of freight traffic. Road network coverage is relatively good but roads are deteriorating;³ therefore, current road sector policies focus on maintenance and rehabilitation. Over 60 percent of the road network requires either periodic maintenance or rehabilitation. Government, with donor assistance, has focused on rehabilitating road network links of regional and national importance that carry most of the road-based traffic. This original Project is financing rehabilitation on about 32 kilometers (kms) of the Osh-Batken-Isfana road, a key regional corridor that will enable traffic to bypass foreign territories (Uzbekistan and Tajikistan) and their enclaves within the Kyrgyz Republic, which is now a serious impediment to travel. The EBRD and EC are contributing about US$45 million through parallel financing of other road sections along the same corridor.

Municipal roads in Osh and Jalal-Abad Cities

7. The City of Osh Urban Roads Department manages the city road network, and is in charge of maintenance and construction of paved and unpaved streets and associated drainage structures, including bridges and side drains. The Department comprises eight staff, including five engineers. The urban roads network is about 520 km long—some 320 km are paved and some 200 km are earth or gravel. The network is in poor condition due to prolonged lack of maintenance funding, except for a few central main streets. In 2008, the Osh municipal roads budget, including capital repair and maintenance costs, was only KGS29 million (US$630,000); in 2009, it was only KGS18 million (US$173,900). This remains inadequate for a city with 260,000 people (2009 census). Therefore, basic road maintenance activities are needed, including repairs to potholes, area-wide patching works, repair of old and poorly performing patched areas, restoration and repairs to street storm water drains, re-graveling, edge repairs, repairs to concrete sidewalks, bridge railings, sealing of cracks, removal of crocodile cracking, and some limited replacement of base courses. A few road sections might be beyond repair and

² Joint Economic Assessment July 21, 2010, Chapter V.
³ The total road network in the country is about 34,000 km, including 18,810 kilometers under the jurisdiction of the MoTC and 15,910 kilometers of urban, rural, agricultural industrial and other roads.
might require reconstruction. To carry out this routine maintenance and repair works in the city of Osh⁴ should take no more than three years and could cost up to US$4.5 million.

8. In contrast, the city of Jalal-Abad was providing more resources for its Urban Roads Department and the road network under its management is in noticeably better condition. Therefore, the AF will focus on funding works related to repairing roads in the City of Osh. A short road section in the greater Jalal-Abad vicinity (administered by MoTC) is on the list of roads planned to be repaired under the proposed AF.

**Regional roads under the administrative responsibility of MoTC**

9. Some urban arteries and main roads within the city boundaries of Osh and Jalal-Abad are national roads—owned, managed, and maintained by the MoTC. The Regional Road Agency (RRA) of the respective oblast (region) maintains roads under MoTC administrative responsibility. RRAs have equipment to carry out rescaling of paved roads with bituminous surface treatment. Timely intervention by RRAs has extended the life of some of the national roads, but others are too old to be improved by rescaling only, and require strengthening by asphalt overlay. The RRA in Osh Oblast appears to be doing a reasonably good job with the limited funding available.

10. The RRA activities in Osh oblast have somewhat limited further development of the local construction industry in the region; nevertheless, small contractors in Osh Oblast can undertake asphalt overlay and other road works needed to rehabilitate MoTC-managed sections of the national road network. Past budget constraints have limited the size of civil works contracts, so the AF is designed to accommodate this capacity constraint by adjusting contract size to local contractors’ financial capacity, and providing adequate technical supervision.⁵

**Rationale for the proposed AF**

11. The proposed AF for SDR6.7 million (US$10 million equivalent) is based on Joint Economic Assessment findings published in July 2010, confirming widespread damage and economic dislocation. The country faces severe infrastructure deficiencies: energy insecurity, poor road connectivity, and lack of basic local-level infrastructure services. The current crisis highlights the need for improved infrastructure to pursue economic development, and to promote peace, security, and social cohesion. Although direct damage to transport infrastructure was limited in this relatively depressed region, the proposed AF would enhance economic development by improving transport links for trade, and providing temporary employment. The US$25 million equivalent Project was approved by the Board on November 3, 2009, became effective on February 26, 2010, and is being implemented satisfactorily. It aims to rehabilitate about 32 km of the Osh-Batken-Isfana road corridor and improve national road safety planning. The main civil works contract was awarded and construction will start soon.

12. On August 21, 2010, the Government of the Kyrgyz Republic requested the World Bank to provide additional financing to expand the Project implementation. Activities proposed under the AF would allow Government to quickly implement road maintenance and repairs that would

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⁴ Some roads might have deteriorated to such condition that repair might not be possible.

⁵ Some Bishkek headquartered construction companies have Osh offices and might be interested, depending on the size of the civil works contracts
generate employment within a short time horizon. The proposed AF would be a rapid and highly visible response from the international community to provide assistance after recent events. Assuming that about half of road works supported under the AF would be labor-intensive maintenance, the AF is anticipated to create an estimated 6,200 person-months of paid labor in this job market, depressed by recent events. Much of the employment generated would be for unskilled laborers, which would particularly benefit the poor and vulnerable, and about US$1.5 million in contracts could be implemented during the upcoming winter months, providing employment when it is most urgently needed.

**Risk Factors**

13. The proposed scope of AF road works is unlikely to pose significant risks; technical risk is minimal. However, Government, civil works contractors and workers, and the World Bank, could face reputational risks if the AF became linked to political controversy or renewed violence. Significant foreseeable sources of controversy or conflict include: (i) deployment of international security forces into Osh and Jalal-Abad city (proposed for September 2010); (ii) disturbances in advance of national elections planned for October 2010; (iii) announcement or implementation of urban redevelopment plans that prevent residents or shop owners from reconstructing destroyed structures, or that result in forced evictions; and (iv) failure to provide sufficient transitional housing or livelihood support before the onset of winter (see Annex 2).

**Availability of Government co-financing and donor support**

14. Given current Government fiscal circumstances, a co-financing requirement is not under consideration for the proposed AF. Following recent events, JEA findings, and the United Nations Flash Appeal, donors have pledged about US$1.1 billion over the next two and a half years. The three principal areas for proposed donor funding are: (i) budget support; (ii) social reconciliation, reconstruction, and recovery; and (iii) repair of essential infrastructure.

15. Several agencies have launched cash-for-work activities, but there is an urgent need for public works programs to generate employment for affected areas. The ADB has pledged US$40 million for budgetary support and US$80 million for Osh and Jalal-Abad water supply and sanitation activities, possibly including housing. However, the World Bank is the only international financial institution (IFI) with experience in municipal infrastructure projects in the Osh and Jalal-Abad region, and the only IFI that has been working with the municipality of Osh. The World Bank Urban Transport Project that closed in 2005 (US$22 million equivalent) supported urban roads improvement, including urban roads in three cities: Osh, Jalal-Abad, and Bishkek. The World Bank is pursuing improvements to living conditions in selected semi-informal settlements in the cities of Bishkek and Osh by increasing availability of basic infrastructure services to residents under the ongoing Bishkek and Osh Urban Infrastructure Project (US$12 million equivalent).

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7 Including transitional winterized shelters, construction of durable, permanent housing, restoration of markets, help for re-building producer to seller links; and social help to victims of violence and their families.
8 Including United Nations Development Program (UNDP), Mercy Corps, Save the Children, Kyrgyz Confidence Building Initiative (KRCBI), Public Fund Development and Cooperation in Central Asia (DCCA), UN Office for the Coordination of Humanitarian Affairs (OCHA), HelpAge, and World Food Program (WFP).
III. Proposed Changes

Restructuring and Revised Project Development Objective

16. To reflect scaled-up activities, restructuring will amend the PDO and the Results Framework of the ongoing Project. The revised Project objectives are to: (i) contribute to the reduction of transport costs and travel time along the Osh-Batken-Isfana road corridor, (ii) improve road safety planning, and (iii) repair and rehabilitate road infrastructure in and around Osh and Jalal-Abad cities thereby creating temporary jobs.

Project Activities

17. The proposed AF would finance road repairs within the city of Osh and rehabilitation of roads around the city of Osh and Jalal-Abad, thereby creating employment in a region with substantial and recent economic dislocation. The AF will have the following three activities:

Activity 1: Road Repairs and Rehabilitation (US$9.5 million equivalent)

18. The AF will finance two types of civil works in addition to increasing the scope of consultants’ services initially procured under the original Project to design and supervise civil works: (i) the repair of urban roads within the city of Osh; and (ii) rehabilitation of urban roads in and around greater Osh and Jalal-Abad cities.

19. Rehabilitation of a Section of the Osh-Batken-Isfana Road Corridor – additional consultants’ services related to road works (US$0.5 million equivalent). This activity will finance expanded scope of consultants’ services procured under the original Project to cover design, design review, preparing bidding documentation, providing technical support for bid evaluation, consultant services for construction supervision, and social assessment for activities envisioned under the AF.

20. Repair of urban roads within the city of Osh (US$4.5 million equivalent). This activity will finance routine repairs of urban roads that are under City of Osh administrative responsibility. Works would include pothole patching, crack sealing, edge repairs, sidewalk repairs and other minor rehabilitation. Works would also include rehabilitation of open canal urban storm water drains on a wide network of primary and secondary streets; some of these drains, located between the pavement and sidewalks, function as irrigation channels. Works would help preserve pavements or slow their deterioration until funds for periodic maintenance become available. Repair works would be carried out by small local contractors selected through competitive tenders under Term Maintenance Contracts. During the first phase, about three contracts are expected to be awarded by November 2010. This type of routine repair work could take place during winter months, would involve low-skill tasks, and provide temporary supplemental income for many local residents. A second batch of contracts would be awarded in early 2011 with adjustments made based on experience from the first batch.

21. Since the proposed AF is processed on an emergency basis, implementation will adopt a phased approach. The Mid-Term Review of the original Project (planned for no later than June 30, 2011) will also review the activities proposed under the AF, implementation status, and associated costs. If funds are available, resurfacing or rehabilitation of some Osh city roads could
be possible. In order to do this equitably, respecting local sensitivities, a social assessment would have to be completed to identify roads for more extensive repair works.

22. The activity will also finance technical assistance to assess financing options for municipal road maintenance activities and to benchmark of several practices by Kyrgyz cities to identify good practice guidance for future financing of municipal road maintenance.

23. **Rehabilitation of urban roads in and around the greater Osh and Jalal-Abad cities** (US$4.5 million equivalent). This activity will finance works provision to rehabilitate urban roads that are in and around the greater cities and their surrounding areas, including proposed road rehabilitation of a section in Jalal-Abad). These roads are under MoTC administrative responsibility. Government has a priority list of road sections with very poor riding quality and has requested urgent resurfacing with asphalt overlay; seven road sections in and around the city of Osh and one around Jalal-Abad. Kyrgyzdortransproject, the local Design Institute is preparing technical designs for some of these sections, financed from Kyrgyz Republic general budget. Designs are expected to be ready for tendering in early 2011. Priority road sections include a section of the Osh-Batken-Isfana road corridor that enters the city of Osh, and two adjoining sections of the Osh Ring Road that would reduce the traffic flow into the city.

**Activity 2: Road Safety Enhancement** (US$0.2 million equivalent).

24. **Activity 2** will finance the provision of road safety goods and equipment, such as traffic cones, mobile traffic signs, reflective jackets, thermal plastic paint, illuminated medium strip (so-called “cat’s eyes”). The activity will build on the Government Road Sector Development Strategy, the recently launched program of regular road safety audits, and help finalize the National Road Safety Program. These small-scale activities are considered an MoTC pilot project that aims to develop Ministry awareness of international good practices.

**Activity 3: Project Management and Implementation** (US$0.3 million equivalent).

25. **Activity 3** will finance provision of (i) goods, consultants’ services, training, and operating costs, including an audit, to support Project coordination, implementation and management and (ii) consultant’s services to develop and implement a communications strategy for Project activities.

**Table 1. Total Costs by components and activities (US$ million equivalent)**

<table>
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<th>Component/Activity</th>
<th>Original cost</th>
<th>Changes with AF</th>
<th>Revised cost</th>
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</thead>
<tbody>
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<td>9.5</td>
<td>36.79</td>
</tr>
<tr>
<td>Rehabilitation of a Section of the Osh-Batken-Isfana Road Corridor (including related consultancy services)</td>
<td>27.29</td>
<td>0.5</td>
<td>27.79</td>
</tr>
<tr>
<td>Repair of urban roads within the city of Osh</td>
<td>4.5</td>
<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Rehabilitation of urban roads in and around the greater Osh and Jalal-Abad city vicinities</td>
<td>4.5</td>
<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Component 2: Road Safety Enhancement</td>
<td>1.5</td>
<td>0.2</td>
<td>1.7</td>
</tr>
<tr>
<td>Component 3: Project Management and Implementation</td>
<td>1.93</td>
<td>0.3</td>
<td>2.23</td>
</tr>
</tbody>
</table>
26. The IDA financing will cover 100 percent of Project costs of the proposed AF. The original Project includes Government counterpart funding for US$5.76 million equivalent of total Project costs of US$30.72 million equivalent. The PIU within MoTC will remain the implementing entity and it is proposed that the Project closing date be extended by six months.

**Project outcome indicators**

27. The proposed changes will affect Project outcome indicators and expected outcomes. Annex 1 summarizes and explains the proposed changes, necessary to reflect activities proposed under the AF and ensure clarity.

**IV. Appraisal Summary**

**Economic Analysis**

28. Repair of urban roads generally yields substantial economic benefits arising from reduced travel time, lower vehicle operating costs, and easier access to work, education, and social opportunities in a densely populated area. Funding levels are limited for this type of investment but the benefits are widespread. Because essential data cannot be obtained within the Project preparation time frame, cost/benefit calculations cannot be prepared. However, Government will prepare economic analyses for investments envisioned under Additional Financing as soon as reasonably reliable data are available and the economic analysis with cost/benefit calculations will be included in the implementation completion report.

**Financial Management Arrangements**

29. Financial management (FM) functions under the proposed AF, including flow of funds, staffing, accounting, reporting, and auditing, will be handled by the existing PIU within the MoTC of the Kyrgyz Republic. Existing FM arrangements would remain, except for changes to reporting and external auditing, the accounting system, and financial management manual, which would incorporate additional activities with existing arrangements.

30. The Project implemented by the PIU within MoTC became effective on February 26, 2010 and no FM supervision has yet been conducted. The PIU implemented all FM actions agreed during the FM assessment, and acceptability of FM arrangements was confirmed during appraisal for the proposed AF. The PIU is in compliance with FM covenants; it submitted the first set of Interim Unaudited Financial Reports (IFRs) on August 15, 2010, which were found acceptable to the Bank. The first FM audit report is due on June 30, 2011. The FM arrangements are acceptable and overall FM risk for the Project is moderate.

31. The following changes are recommended to Project arrangements: (i) the Project FM Manual will be updated to include new activities and changes envisaged to the accounting

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9 For instance, curfew was lifted the day before field appraisal so traffic level is very depressed.

10 It should be noted that under a previous Urban Transport Project where similar activities were financed in Osh, the EIRR was found to be close to 200%
system, reporting formats, and scope of audit, to capture additional activities proposed under AF. The Project audit will be conducted by independent auditors using terms of reference acceptable to the Bank, and procured by the MoTC. Audit costs will be financed from Project proceeds; Project management-oriented IFRs will be used for monitoring and supervision of the proposed AF. (ii) Existing IFR formats will be slightly modified to include new activities under the proposed AF and the PIU will produce a full set of IFRs every quarter throughout the Project life, and will submit them to the Bank within 45 days after the end of each calendar quarter.

Procurement Arrangements

32. Procurement for the proposed AF will be carried out in accordance with the World Bank’s "Guidelines: Procurement under IBRD Loans and IDA Credits" published in May 2004 and revised in October 2006 and May 2010 (Procurement Guidelines); "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" published in May 2004 and revised in October 2006 and May 2010 (Consultants Guidelines); and also in accordance with provisions stipulated in the Financing Agreement. The World Bank “Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credit and Grants dated October 15, 2006”, will also apply.

33. The main procurement activities to be financed under the proposed AF include: civil works for routine and periodic road maintenance; supply of traffic safety goods and equipment; and consultant services for design and supervision of civil works and for project audits. In view of the Project’s emergency nature and the small value of contracts, National Competitive Bidding (NCB) and Shopping procedures will be followed for procurement of works and goods. For construction supervision services, an international firm (JV between Kocks Consult GmbH from Germany, and BCL from Bangladesh) was selected through a competitive process (Quality-and Cost-Based Selection, QCBS) to provide services, including Project construction supervision; a new competitive selection process would not add value. To expedite Project implementation it was agreed, based on client requests, that the construction supervision contract (not to exceed US$0.5 million) be awarded to the above firm on a single-source basis. Least Cost Selection (LCS) will be used to select an audit firm, in view of the small value.

34. The proposed AF will also finance operating costs related to project management; expenditures incurred will be based on a budget subject to prior Bank approval and in line with MoTC’s administrative procedures, which were reviewed under the original Project and are acceptable to the Bank. In line with the above arrangements, a procurement plan was prepared and agreed for the proposed AF; it is attached in Annex 6.

35. The existing PIU established under the MOTC will manage procurement (a joint PIU for projects financed by the Bank, ADB, IsDB, Chinese Exim Bank, and other donors). The original Project Financing Agreement became effective in February 2010; so far, procurement performance is satisfactory; international consultants were selected for design and construction supervision, and the main works contract was awarded. Nevertheless, the Bank team will continue to help build procurement capacity, monitor procurement progress, and provide advice and assistance. Procurement risk under the proposed AF is the same as the original Project, which is rated medium after mitigation.
36. Local contractor capacities vary; contractors based in Bishkek have stronger technical capacity and more road construction experience than those based in Osh. Osh-based contractors’ capacity is more limited but they might be more suitable for routine maintenance works, which requires substantial day labor. Also, larger Bishkek-based contractors are better positioned to provide bank guarantees—bid security, advance payment guarantees, and performance guarantees, than regionally based road contractors with more limited financial capacity. Project procurement will be carried out through Shopping and NCB procedures, and the above issue related to bank guarantees shall be addressed on a case-by-case basis in consultation with the Regional Procurement Management Office. For example, for routine road maintenance contracts, performance security requirements may need to be waived on an exceptional basis and replaced with retention of specified amounts from invoices.

Disbursements

37. The disbursement period is expected to be about three years; original Project disbursement procedures will also be used for the AF. Details on minimum size of applications and documentation to be submitted for disbursement are provided in the Disbursement Letter.

Table 2: Expenditure Categories

<table>
<thead>
<tr>
<th>Expenditure Category</th>
<th>Credit Amount in SDR</th>
<th>Grant Amount in SDR</th>
<th>Financing Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Works, goods, operating costs, training and consultancy services, including Project audits</td>
<td>3,700,000</td>
<td>3,000,000</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>3,700,000</td>
<td>3,000,000</td>
<td></td>
</tr>
</tbody>
</table>

38. Disbursements from the credit and grant account will be made only for Eligible Expenditures under the Project, according to the terms of the Financing Agreement. Retroactive financing out of the Grant proceeds will not exceed an aggregate amount of SDR1.2 million (US$1.8 million equivalent) for eligible expenditures incurred for payments made for Eligible Expenditures, prior to the date of the Financing Agreement but on or after September 1, 2010. These expenditures will be claimed for reimbursement once the Financing Agreement is declared effective. All expenditures incurred during the retroactive financing period will follow standard procurement and disbursement procedures, as approved for the additional financing.

Safeguard Policies

39. Under the proposed AF, the Project environmental category does not change nor are any new safeguard policies triggered. Activities proposed for the AF are likely to have minor environmental impacts, readily addressed through known technologies and managed by local agencies with adequate capacity. Proposed civil works include primarily resurfacing of existing roads without widening or change of alignment, and providing routine maintenance such as filling potholes, sealing cracks, clearing drainage, and so forth. These activities are unlikely to cause significant environmental change, but require measures to control normal adverse environmental impacts associated with works such as noise, dust, runoff, and waste disposal.
40. The Environmental Impact Assessment (EIA) prepared for the original Project included an Environmental Management Plan (EMP) that pertains to the entire Osh-Batken-Isfana Road corridor. The EMP is part of the works contracts and is implemented for the ongoing Project. The existing EIA and EMP fully cover all potential impacts of activities planned under the proposed AF; however, site-specific EMPs will be prepared and included in the bidding documents and works contracts. Due to the technical simplicity of the works, it has been agreed that simplified EMP formats for low-impact type roads works are sufficiently prudent.

41. OP 4.12 is not triggered. Selection criteria for road improvement works will eliminate new construction, road widening, or alignment changes under the Additional Financing. Screening will be undertaken to ensure that neither property nor access to resources will be lost due to the Project.

**Social Dimension of Project Design**

42. Implementation of activities proposed for the AF will generate social benefits commensurate with the scope and scale of investment. The proposed AF will provide temporary employment in a city suffering deep economic dislocation, such as Osh. The magnitude of labor generation depends on the proportion of routine repairs to asphalt resurfacing, because routine repairs are more labor intensive. Road improvements are also expected to generate transport-related social benefits, including reduced travel times and vehicle operating costs, improved access to markets and services, improved road safety, and redirection of longer-distance traffic from urban center areas. Funding traffic safety goods and equipment under Activity 2 of the proposed AF will improve safety for road users, pedestrians, and road workers.

43. Because this operation is a rapid response to the crisis in the southwest of the Kyrgyz Republic, roads are to be prioritized and selected for improvement without formal cost-benefit assessment. However, similar repairs and rehabilitation activities for urban roads typically produce substantial economic return. Formal needs assessment was not feasible within the limited time available for preparation, but the World Bank Project team performed a visual inspection of roads proposed for rehabilitation and reported that roads proposed would meet Bank criteria for economic returns under regular Project preparation. Proposed activities will be implemented in stages; the first stage (October 2010 to March 2011) will cover urgently needed road maintenance during winter months when more extensive rehabilitation such as resurfacing, is not feasible. The selection of road sections for improvement after the Mid-Term Review would include social equity considerations, based on results of a social assessment to be undertaken in the winter 2010.

44. The proposed AF will emphasize funding routine road maintenance because site review of existing road conditions suggests that relatively inexpensive investments in minor works will deliver benefits to more areas of the city, preventing further deterioration that is more costly to repair; also, routine maintenance is more labor-intensive than asphalt resurfacing. Encouraging labor-intensive road maintenance activities promotes greater use of local labor (especially

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11 Besides pavement and ride conditions, the Bank project team also observed the traffic level – which is much reduced as a result of the events – and has excluded low traffic segments from proposed road improvement lists.

12 Through a social assessment, the Project will strive to promote equitable selection of sections to be financed for repair/rehabilitation.
unskilled labor), helping alleviate substantial local economic dislocation, and facilitating rapid initiation of works that can continue throughout winter. Resurfacing activities will require more time to initiate because designs need to be finalized and because the weather will not permit works to begin until spring 2011 (see Annex 5 for indicative estimates of labor benefits).

45. There are significant social risks associated with proposed activities. Tensions associated with urban planning in Osh City could trigger renewed ethnic violence. It is essential that proposed activities and road sections selected for financing from Project proceeds are perceived beneficial for all residents of Osh city. Government has indicated that World Bank financing would not require land acquisition; however, municipal government policy has not yet been clarified on supporting or even allowing, reconstruction of houses or businesses destroyed during the conflict. Labor practices pose the risk that hiring, firing, or payments could be perceived as ethnically biased. To mitigate these risks, MoTC will undertake a social assessment to screen proposed road improvements before selecting specific investments for funding.

46. The AF will have mechanisms that ensure to the extent possible, equitable employment opportunities for all Osh residents: (i) tendering documents will emphasize that contractors must adhere to equitable employment practices; (ii) employers will be required to keep labor records; (iii) employers will be sensitized to social issues prior to the start of works, (iv) social awareness checklists and labor audits will be provided; and (vi) contracts will be supervised by an international firm. In addition, a communications strategy and Website will aim to ensure that information is disseminated; an inquiry Hotline will be established to ensure questions or complaints are addressed within a specified time frame.

47. The proposed AF will finance routine maintenance of the road network in Osh city based on a needs assessment with the following criteria: (i) the first set of routine maintenance contracts are for roads in obvious need of repair; and (ii) for subsequent repairs, a simple needs assessment would be done during the winter months to ensure that the funds of the proposed AF are used at the optimal level. Road segments selected for more substantive repairs than routine maintenance would take into account equity, local sensitivities, and other socio-economic considerations.

48. There are risks associated with promoting routine maintenance as a means to generate local short-term employment. Without a needs assessment, it is impossible to reliably estimate actual labor demand or supply. However, interviews with donor agencies and municipal officials suggest that labor supply would be more than adequate, in part because local Osh residents have great need of supplemental income. During the process of final road works selection it may be possible that only marginal labor gains materialize. Ensuring ethnically equitable access to employment opportunities through works to be managed by private, small-scale local contractors is an obvious point of concern that can be somewhat mitigated by contract provisions and international consultancy supervision. Also, measures must be taken to avoid abusive labor practices and ensure that casual laborers receive full and timely payment. Therefore, the Project

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13 In the interim, reconstruction is not being permitted in some center city areas. There also are indications that forcible evictions may be planned in areas slated for urban redevelopment

14 Routine area wide maintenance does not involve selectivity and can take place in parallel with social assessment.
Operational Manual and contract bidding specifications will include provisions for labor standards, a checklist for social safeguards, and forms for labor employment records.

49. Ethnic tensions can rise dramatically without accurate information. To mitigate the risk that the Bank or its financed activities could become a source of controversy, a comprehensive communications strategy is essential to keep local people informed about the Project, its purposes, and the basis for selection of all financed activities. The PIU will establish a local communications office to promote effective information dissemination to local residents, and to be a focal point for questions, requests for information or complaints.

Financial Terms and Conditions

50. Additional IDA financing will be made available in Special Drawing Rights (SDR) on a 45 percent (SDR3.0 million, US$4.5 million equivalent) grant and 55 percent (SDR3.7 million, US$5.5 million equivalent) credit basis with 40-year maturity including 10-year grace period.

51. The following conditions apply:

- No withdrawal shall be made for payments made prior to the date of this Agreement, except that withdrawals up to an aggregate amount not to exceed SDR 1,200,000 out of the Grant may be made for payments made prior to this date but on or after September 1, 2010, for Eligible Expenditures.

Implementation Covenant:

- The Recipient, through the MoTC, shall carry out the Project in accordance with the requirements, criteria, organizational arrangements and operational procedures set forth in the Project Operational Manual and the EIA, and shall not assign, amend, abrogate or waive any provisions of the Project Operational Manual or the EIA without prior approval of the Association.
- The Recipient shall maintain the PIU throughout Project duration with organization, staffing, and terms of reference satisfactory to the Association at all times. The Recipient shall cause the PIU to: (a) maintain arrangements satisfactory to the Association for the overall Project management, coordination, supervision, and implementation in accordance with the Project Operational Manual and the EIA; (b) operate the Project financial management system in a manner satisfactory to the Association; (c) gather data to maintain Project indicators; (d) coordinate the procurement and disbursement process; and (e) prepare and submit progress reports and financial monitoring reports.
- The Recipient shall, through the MoTC: (a) prepare, prior to the commencement of any works under the Project, Site-Specific Environmental Management Plan(s), satisfactory to the Association, in accordance with the EIA and an EMP; (b) disclose such Site-Specific EMP(s) and conduct proper consultations in accordance with the EIA; (c) carry out the Project in accordance with the Site-Specific EMP; and (d) not amend, suspend or abrogate any of the provisions of the Environmental Management Plan without the prior agreement of the Association.
- In carrying out the Project, the Recipient shall ensure that no land shall be acquired and no activity shall be undertaken involving resettlement and/or land acquisition.
Prior to commencement of works under Part A.3 of the Project, MoTC shall have completed and furnished to the Association, the Social Assessment which justifies the selection of a particular road segment for carrying out any works under Part A.3 of the Project. The Recipient shall ensure that the selection any road segment for carrying out any works under Part A.3 of the Project, shall be conducted in accordance with the procedures and selection methods and criteria set forth in the Social Assessment and satisfactory to the Association.

Project Reporting:
- The Recipient shall monitor and evaluate the Project progress and prepare Project Reports. Each Project Report shall cover the period of one calendar semester, and shall be furnished to the Association not later than forty five (45) days after the end of the period covered by such report.

Dated Covenants:
- The Recipient, through the MoTC, shall, not later than December 15 of each calendar year, during the implementation of the Project, starting December 15, 2010, submit to the Association an Annual Work Program for the following calendar year, satisfactory to the Association, and shall agree with the Association on activities to be taken under the Project in the following calendar year and the related road maintenance budget.
- The Recipient, through the MoTC, shall, not later than June 1 of each calendar year, during the implementation of Part A of the Project, starting June 1, 2011: (i) take all necessary measures, including ensuring access to all relevant information related to the Project, to facilitate an independent technical audit; and (ii) act promptly upon the findings and recommendations of such audit under terms of reference acceptable to the Association.
- For the purpose of carrying out the Project, the Recipient shall cause MoTC to update in form and substance satisfactory to the Association, the Project Operational Manual and furnish same to the Association by not later than December 31, 2010.
- Not later than June 30, 2011, the Recipient shall carry out jointly with the Association, a midterm review of the progress made in carrying out the Project (hereinafter referred to as the Midterm Review). The Midterm Review shall cover, inter alia: (a) progress made in meeting the Project’s objectives; and (b) overall Project performance against Project performance indicators.
- The Recipient shall prepare at least four (4) weeks prior to the Midterm Review, and furnish to the Association, a separate report describing the status of implementation of each component of the Project and a summary report of Project implementation generally.
- The Recipient shall prepare and furnish to the Association not later than forty five (45) days after the end of each calendar quarter, interim unaudited financial reports for the Project covering the quarter, in form and substance satisfactory to the Association.
- By not later than October 31, 2010 and for the purpose of carrying out Part A.2 of the Project, the Recipient shall cause MoTC to enter into and maintain throughout the duration of the Project, implementation arrangements with the Municipality of Osh city, satisfactory to the Association, in accordance with the Project Operational Manual and the EIA.
### Annex 1: Revised Results Framework and Monitoring Indicators

**KYRGYZ REPUBLIC: Additional Financing for National Road Rehabilitation (Osh-Batken-Isfana) Project**

### Results Framework

#### Revisions to the Results Framework

<table>
<thead>
<tr>
<th>PDO</th>
<th>Current (PAD)</th>
<th>Proposed</th>
<th>Comments/ Rationale for Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>To contribute to the reduction of transport costs and travel time along the Osh-Batken-Isfana Road corridor, and to improve road safety planning.</td>
<td>To contribute to the reduction of transport costs and travel time along the Osh-Batken-Isfana road corridor, improve road safety planning, and repair and rehabilitate road infrastructure in and around Osh and Jalal-Abad cities thereby creating temporary jobs.</td>
<td>The change in the PDO reflects the addition of new activities under the additional financing.</td>
<td></td>
</tr>
</tbody>
</table>

#### PDO indicators

<table>
<thead>
<tr>
<th>Current (PAD)</th>
<th>Proposed change*</th>
<th>Comments/ Rationale for Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction in transport costs for road users by car and large bus along the project road section (2009 US$ per veh-km)</td>
<td>Revised to: Reduction in transport costs for road users by car along the project road section of the Osh-Batken-Isfana Road corridor</td>
<td>Refined to clarify that this indicator only relates to the Osh-Batken-Isfana Road corridor, frequency reduced to baseline and target (dropped annual reporting)</td>
</tr>
<tr>
<td>Reduction in travel time for road users, by car along project road sector</td>
<td>Revised to: Reduction in travel time for road users by car along the project road section of the Osh-Batken-Isfana Road corridor and along the entire Osh-Batken-Isfana Road corridor</td>
<td>Combined and refined to clarify that this indicator only relates to the Osh-Batken-Isfana Road corridor, frequency reduced to baseline and target (dropped annual reporting)</td>
</tr>
<tr>
<td>Reduction in travel time for road users, by car in project area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase in traffic one year after project road sections improved or rehabilitated (AADT)</td>
<td>Revised to: Proportional increase in traffic one year after project road section of the Osh-Batken-Isfana Road corridor has been improved or rehabilitated</td>
<td>Refined to clarify that this indicator only relates to the Osh-Batken-Isfana Road corridor</td>
</tr>
<tr>
<td>Proportional increase in the number of rural people in the project area who live within 2 kilometers of an all-season road</td>
<td>Revised to: Proportional increase in the number of rural people along the Osh-Batken-Isfana Road corridor who live within 2 kilometers of an all-season road</td>
<td>Refined to clarify that this indicator only relates to the Osh-Batken-Isfana Road corridor, frequency reduced to baseline and target (dropped annual reporting)</td>
</tr>
<tr>
<td>Increased effectiveness of road safety planning</td>
<td>No change</td>
<td>No comment.</td>
</tr>
<tr>
<td>Number of person-months of employment created</td>
<td>New addition</td>
<td>To reflect the routine maintenance activities proposed under the AF</td>
</tr>
<tr>
<td><strong>Intermediate Results indicators</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Current (PAD)</strong></td>
<td><strong>Proposed change</strong>*</td>
<td></td>
</tr>
</tbody>
</table>
| Number of current kilometers of all roads rehabilitated under the project (kms) | 1. Number of kilometers of roads rehabilitated along the Osh-Batken-Isfana Road corridor  
2. Number of kilometers of urban roads repaired within the city of Osh  
3. Number of kilometers of roads repaired in and around the greater Osh and Jalal-Abad city vicinities | Changed to distinguish between different activities under the Project and proposed AF. |
| Percentage of total classified road network in the project area in good and fair condition (percent) | No change | No comment |
| National Road Safety Program developed and launched (number) | No change. | No comment |
| Pilot demonstration projects on road safety along the corridor developed (number) | No change | No comment |
| Technical audit is conducted (number) | No change | No comment |
REVISED PROJECT RESULTS FRAMEWORK

Project Development Objectives (PDO):
To (i) contribute to the reduction of transport costs and travel time along the Osh-Batken-Isfana road corridor, (ii) improve road safety planning, and (iii) repair and rehabilitate road infrastructure in and around Osh and Jalal-Abad cities thereby creating temporary jobs.

<table>
<thead>
<tr>
<th>PDO Level Results Indicators</th>
<th>Core</th>
<th>UOM</th>
<th>Baseline Original Project Start (2010)</th>
<th>Progress To Date (2010)</th>
<th>Frequency</th>
<th>Data Source/Methodology</th>
<th>Responsibility for Data Collection</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reduction in transport costs for road users by car along the project road section of the Osh-Batken-Isfana Road corridor</td>
<td></td>
<td>2009 US$ per veh-km</td>
<td>0.3</td>
<td>n/a</td>
<td>2010</td>
<td>Baseline, Target</td>
<td>MoTC, PIU</td>
<td></td>
</tr>
<tr>
<td>2. Reduction in travel time for road users by car along the project road section of the Osh-Batken-Isfana Road corridor and project area</td>
<td></td>
<td>minutes</td>
<td>50' 377'</td>
<td>n/a</td>
<td>2010</td>
<td>Baseline, Target</td>
<td>MoTC, PIU</td>
<td></td>
</tr>
<tr>
<td>3. Proportional increase in traffic one year after project road section of the Osh-Batken-Isfana Road corridor has been improved or rehabilitated</td>
<td></td>
<td>AADT</td>
<td>3,047</td>
<td>n/a</td>
<td>2010</td>
<td>Baseline, Target</td>
<td>MoTC, PIU</td>
<td></td>
</tr>
<tr>
<td>4. Proportional increase in the number of rural people along the Osh-Batken-Isfana Road corridor who live within 2 kilometers of an all-season road</td>
<td></td>
<td>%</td>
<td>TBD</td>
<td>TBD</td>
<td>2010</td>
<td>Baseline, Target</td>
<td>MoTC, PIU</td>
<td></td>
</tr>
<tr>
<td>5. Increased effectiveness of road safety planning</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>-</td>
<td>-</td>
<td>Baseline, Target</td>
<td>MoTC, PIU</td>
<td></td>
</tr>
<tr>
<td>6. Number of person-months of employment created</td>
<td>Person-months</td>
<td>0</td>
<td>n/a</td>
<td>-</td>
<td>-</td>
<td>Baseline, Target</td>
<td>MoTC, PIU</td>
<td></td>
</tr>
</tbody>
</table>

**Beneficiaries**

Employment will be created through routine maintenance contracts for Osh municipal roads.
<table>
<thead>
<tr>
<th>Project beneficiaries</th>
<th></th>
<th>Number</th>
<th>0</th>
<th>n/a</th>
<th>1 million</th>
<th>Baseline, Target</th>
<th>Census</th>
<th>MoTC, PIU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Of which female (beneficiaries)</td>
<td></td>
<td>Number</td>
<td>0</td>
<td>n/a</td>
<td>0.5 million</td>
<td>Baseline, Target</td>
<td>Census</td>
<td>MoTC, PIU</td>
</tr>
</tbody>
</table>

### Intermediate Results and Indicators

<table>
<thead>
<tr>
<th>Intermediate Results Indicators</th>
<th>Core</th>
<th>Unit of Measurement</th>
<th>Baseline Original Project Start (2010)</th>
<th>Progress To Date (2010)</th>
<th>Target Values</th>
<th>Frequency</th>
<th>Data Source/Methodology</th>
<th>Responsibility for Data Collection</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate Result 1: Roads rehabilitated/repaired under the Project</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Number of kilometers of roads rehabilitated along the Osh-Batken-Isfana Road corridor</td>
<td></td>
<td>Km</td>
<td>0</td>
<td>0</td>
<td>32</td>
<td>Annual</td>
<td>Project reports</td>
<td>MoTC, PIU</td>
<td></td>
</tr>
<tr>
<td>2. Number of kilometers of urban roads repaired within the city of Osh</td>
<td></td>
<td>Km</td>
<td>0</td>
<td>n/a</td>
<td>350</td>
<td>Annual</td>
<td>Project Report</td>
<td>MoTC, PIU</td>
<td></td>
</tr>
<tr>
<td>3. Number of kilometers of roads repaired in and around the greater Osh and Jalal-Abad city vicinities</td>
<td></td>
<td>km</td>
<td>0</td>
<td>n/a</td>
<td>15</td>
<td>Annual</td>
<td>Project Report</td>
<td>MoTC, PIU</td>
<td></td>
</tr>
<tr>
<td>Intermediate Result 2: Road network in good and fair condition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Percentage of total classified road network in the project area in good and fair condition</td>
<td></td>
<td>%</td>
<td>30</td>
<td>35</td>
<td>70</td>
<td>Annual</td>
<td>Project Report</td>
<td>MoTC, PIU</td>
<td></td>
</tr>
<tr>
<td>Intermediate Result 3: Road safety planning improved</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. National road safety program developed and launched</td>
<td></td>
<td>Yes/No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Baseline, Target</td>
<td>-</td>
<td>MoTC, PIU</td>
<td></td>
</tr>
<tr>
<td>6. Pilot demonstration projects on road safety along the Osh-Batken-Isfana Road corridor developed</td>
<td></td>
<td>Number</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>Annual</td>
<td>Project reports</td>
<td>MoTC, PIU</td>
</tr>
</tbody>
</table>
## Intermediate Results and Indicators

<table>
<thead>
<tr>
<th>Intermediate Results Indicators</th>
<th>Unit of Measurement</th>
<th>Baseline Original Project Start (2010)</th>
<th>Progress To Date (2010)</th>
<th>Target Values</th>
<th>Frequency</th>
<th>Data Source/Methodology</th>
<th>Responsibility for Data Collection</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediate Result 4: Technical Audit conducted</td>
<td>□ Number</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>Annual</td>
<td>Project reports</td>
<td>MoTC, PIU</td>
</tr>
</tbody>
</table>

Intermediate Result 4: Technical Audit conducted

7. Technical audit is conducted (number)
### Annex 2: Operational Risk Assessment Framework
KYRGYZ REPUBLIC: Additional Financing for National Road Rehabilitation (Osh-Batken-Isfana) Project

#### Project Development Objective(s)

The revised objectives of the Project are: (i) to contribute to the reduction of transport costs and travel time along the Osh-Batken-Isfana Road corridor, (ii) to improve road safety planning, and (iii) to repair and rehabilitate road infrastructure in and around Osh and Jalal-Abad cities thereby creating temporary jobs.

#### PDO Level Results Indicators:

1. Reduction in transport costs for road users by car along the project road section of the Osh-Batken-Isfana Road corridor
2. Reduction in travel time for road users by car along the project road section of the Osh-Batken-Isfana Road corridor and project area
3. Proportional increase in traffic one year after project road section of the Osh-Batken-Isfana Road corridor has been improved or rehabilitated
4. Proportional increase in the number of rural people along the Osh-Batken-Isfana Road corridor who live within 2 kilometers of an all-season road
5. Increased effectiveness of road safety planning
6. Number of person-months of employment created

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>Risk Rating</th>
<th>Risk Description</th>
<th>Proposed Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Stakeholder Risks</strong></td>
<td>High</td>
<td>The risk of potentially difficult implementation by MoTC of repair works for the roads under the jurisdiction of Osh municipality</td>
<td>All project activities will be implemented by the PIU within MoTC, which will be responsible for procurement and financial management for the entire project, including contract signing for routine maintenance works for the roads under the administrative responsibility of Osh municipality, The MOTC will agree with the municipality on the implementation arrangements (dated covenant – by October 31, 2010)</td>
</tr>
<tr>
<td><strong>Implementing Agency Risks</strong></td>
<td>Medium -I</td>
<td>MoTC with its PIU is the implementing agency, but some of the project activities will be implemented at the municipal level. Practice of the public procurement law is limited (i.e. the concerned government officials are not well aware of the competitive bidding procedures, as</td>
<td>The Project will rely on the established PIU within MoTC, given its experience with the Bank and similar donor-financed projects. A Procurement Specialist, Disbursement Specialist and Accounting Assistant will be hired shortly. The PIU will assign one or more staff to be based in Osh as the Osh road</td>
</tr>
</tbody>
</table>


well as Bank procedures); recent political developments may lead to the frequent turnover of tender committee members. Experience with the past and on-going projects in the country shows frequent procurement delays. Shortage of FM staff can result in inadequate capacity to maintain FM arrangements at satisfactory level.

Project Risks

<table>
<thead>
<tr>
<th>Risk Type</th>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>Medium-L</td>
<td>There is limited precedent in internationally financed projects to using local contractors to implement road works in the country. Lack of interest from the side of contractors to bid for works in the Kyrgyz Republic; more pronounced with the recent events. The technical risk is minor. Proper packaging of contracts will ensure that contract size is appropriate to local industry. Monitor growth of domestic private sector in the road construction industry. Targeted procurement methods, preparation of (join) prebid conference, etc.</td>
</tr>
<tr>
<td>Social and Environmental</td>
<td>High</td>
<td>There are significant social risks associated with proposed activities as the social wounds inflicted during the June conflict are far from healed. In particular there are risks that road improvements will be perceived as ethnically biased or as contributing to ethnic dispossession in center city areas. There also is a risk that hiring, firing, payment and other labor practices could be perceived to be ethnically biased. Environmental management capacities in the country are consistently low. Enforcement and oversight capacities by authorities are poor; Contractors are generally inexperienced and lack good environmental practice. It is envisioned that routine maintenance will cover much of the Osh network so as to eliminate the selection risk. A social assessment planned for winter 2010 will provide social equity considerations and will serve as the basis for planning of the second phase of the road works. A communications strategy will be undertaken to encourage multiethnic community support for project objectives. The social risk associated with roads managed by the MoTC is lower. Grievance mechanism will be developed, which in addition to social assessment and clear communications strategy will help to somewhat minimize the risks. Environmental management was diligently prepared under the original project, the mechanisms and</td>
</tr>
</tbody>
</table>
measures can be directly applied to the additional financing. Measures include detailed instructions to Contractors and construction management as well as institutional strengthening and capacity building.

- Program and Donor
  - Low
  - Low level of risk of poor donor cooperation
  - ADB which is the leading institution in the road sector has stated that they will not be involved in the municipal roads reconstruction efforts.

- Delivery Quality
  - High
  - There is a risk of slow disbursement and delays in the start of works due to procurement delays and low capacity of local contractors. Contract management capacity is low. Monitoring of works in the city might be difficult due to existing social tensions and wide area covered by routine maintenance
  - Implementation of routine and periodic maintenance activities which could be tendered quickly should reduce delivery risk. Advanced procurement planning and proper packaging will help minimize the risk of delays. An internationally reputable supervision consultant is being hired under the original project and will have contract expanded to also cover the AF. Sustainability of investments will be supported by the technical assistance on financing of road maintenance by municipalities.

<table>
<thead>
<tr>
<th>Overall Risk Rating at Preparation</th>
<th>Overall Risk Rating During Implementation</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium-L</td>
<td>High</td>
<td>There is a strong Government commitment to the rehabilitation of transport infrastructure and employment creation. While this is an emergency operation with a very compressed preparation schedule, this is an additional financing with established counterparts. Activities will be mainly repair and rehabilitation works with a relatively low technical risk. However, due to high social risks, the project risk during implementation is rated as High.</td>
</tr>
</tbody>
</table>
Annex 3: Detailed Description of Project Activities
KYRGYZ REPUBLIC: Additional Financing for National Road Rehabilitation (Osh-Batken-Isfana) Project

1. The proposed AF would finance road repairs within the city of Osh and rehabilitation of roads around the city of Osh and Jalal-Abad, thereby creating employment in a region with substantial and recent economic dislocation. The AF has the following three activities:

   *Activity 1: Road Repairs and Rehabilitation (US$9.5 million equivalent).*

2. In addition to increasing the scope of consultants’ services initially procured under the original Project to design and supervise civil works, the AF will finance two types of civil works: (i) the repair of urban roads within the city of Osh; and (ii) rehabilitation of urban roads in and around greater Osh and Jalal-Abad cities.

3. **Rehabilitation of a Section of the Osh-Batken-Isfana Road Corridor – additional consultant’s services related to road works** (US$0.5 million equivalent). This activity will finance expanded scope of consultants’ services procured under the original Project to cover design, design review, preparing bidding documentation, providing technical support for bid evaluation, consultant services for construction supervision, and social assessment for activities envisioned under the AF.

4. **Repair of urban roads within the city of Osh (US$4.5 million equivalent):** This activity will finance routine repairs of urban roads which are under the administrative responsibility of the city of Osh. The works would include pothole patching, crack sealing, edge repairs, sidewalk repair and other minor rehabilitation. These works would also include rehabilitation of open canal urban storm water drains on a wide network of primary and secondary streets. These drains are located between the pavement and sidewalks and function as irrigation channels in some areas. These works would help preserve and/or slow the deterioration of the pavements until funds for periodic maintenance are available. These repair works would be carried out by small local contractors selected through competitive tenders under Term Maintenance Contracts. In the first phase, about three contracts are expected to be awarded by November 2010. This type of routine repair work could take place in the winter months and will involve low skill tasks, which would provide temporary supplemental income for many residents. A second set of contracts would be awarded in early 2011 with adjustments made based on experiences from the first batch.

5. Since the proposed AF is processed on an emergency basis; there will be a phased approach to implementation. The Mid-Term Review of the Project (planned for no later than June 30, 2011) will be used to review the proposed activities, implementation status and associated costs. If funds are available, the resurfacing or rehabilitation of some Osh city roads might be possible. In order to do this equitably and with due consideration of the local sensitivities, a social assessment would have to be completed to identify roads for more extensive repair works.
6. In addition, the activity will finance technical assistance to assess the financing options for road maintenance activities by municipalities and the benchmarking of several different practices by different cities in the country in order to identify best practice and guidance for future financing of municipal road maintenance.

7. **Rehabilitation of Urban Roads in and around the greater Osh and Jalal-Abad city vicinities** (US$4.5 million equivalent). This activity will finance the provision of works for the rehabilitation of urban roads that are in and around the greater cities and their immediate vicinity (including proposed rehabilitation of a road section in the city of Jalal-Abad). These roads are under the administrative responsibility of MoTC. There is a priority list of road sections with very high roughness for which Government has requested urgent resurfacing with asphalt overlay; seven road sections in and around the city of Osh and one around Jalal-Abad. Kyrgyzdortransproject, the local Design Institute, is currently preparing technical designs of some of these sections (financed from the General Budget of the Kyrgyz Republic). These are expected to be ready for tendering in early 2011. Priority road sections include a road section of the Osh-Batken-Isfana Road corridor that enters the city of Osh and two adjoining sections of the Osh Ring Road that would reduce the traffic flow into the city. The final selection of the roads for rehabilitation will be confirmed based on the social assessment which is planned to be undertaken at the end of 2010.

Activity 2: **Road Safety Enhancement** (US$0.2 million equivalent).  
Activity 2 will finance the provision of road safety goods and equipment (such as traffic cones, mobile traffic signs, reflective jackets, thermal plastic paint, illuminated medium strip i.e. “cat’s eye”). It will build on the Government’s Road Sector Development Strategy and build on the recent launch of the program of regular road safety audits, and finalization of a National Road Safety Program. These small-scale activities are seen to be a pilot project for the MoTC with the aim to expose them to international best practice.

Activity 3: **Project Management and Implementation** (US$0.3 million equivalent).  
Activity 3 will finance consultants’ services to assist the Project Implementing Unit to develop and implement a communication strategy for the Project activities. It will also include provision of goods, consultants’ services and incremental operating costs to support project management.

10. The project implementation will be phased with an assessment of the first phase to be completed at the time of the mid-term review of the original project planned to take place by June 2011.

**Stage 1 Implementation 2010-2011**

**Activity 1: Repair of urban roads within the city of Osh:**  
Term maintenance, about three to four small contracts with a value of no more than US$500,000 each.

**Activity 1: Rehabilitation of Urban Roads in and around the greater Osh and Jalal-Abad city vicinities**:  
Periodic Maintenance of Urban Arteries  
Osh Entry from Isfana (Ashkhabadskaya S–Nokatski Circle)
Activity 1: Repair of urban roads within the city of Osh: Maintenance by Contract
Term maintenance, further contracts
Activity 1: Rehabilitation of Urban Roads in and around the greater Osh and Jalal-Abad city vicinities: Periodic Maintenance of Urban Arteries
Ring road section 2
Other priorities to be defined

Routine Maintenance by Contract

11. The lack of funds for urban roads managed by the city of Osh has resulted in large sections of the primary and secondary street networks left unattended, primarily main central streets have benefited from whatever limited resources existed for maintenance. There is a need to urgently carry out such maintenance on area-wide zones of the network, using several contracts. In contrast, the city of Jalal-Abad has provided adequate resources for its road department and the road network under its management is in noticeably better condition. The proposed AF therefore will focus on funding routine maintenance works for urban roads in Osh city.

12. The most practical arrangement in this case is to use measured normal short–term contracts for pre-defined network of streets and roads. Only when there is considerable experience with this approach could more performance based road maintenance contract types be explored. Tenders would be launched and evaluated to get successful bidders. The tenders would be based on pro-forma quantities and rates for zones included, and the contracts would be for a specific duration, for example six months initially with an option for extension if performance is satisfactory. The work to be executed would be identified and marked for execution by the contractor and approved by the supervision engineer on behalf of the employer. Contractors would be paid once a month based on measured actual quantities and tendered rates. Some work may have to be done more than once as per requirements on the ground. More than one set of contracts would be required to routinely protect the roads and render them easily passable without potholes and drainage deficiencies. For this, each contractor is expected to hire crews of laborers and the minimum of tools, material and equipment to undertake the works.

13. Activities that require only laborers and hand tools such as wheel barrows, shovels and brooms are: (i) cleaning of side drains and cross drains with covers; (ii) de-silting of culverts; (iii) fill and adjustments to low shoulders; (iv) reshaping of carriageway on unpaved roads; (v) vegetation clearing; (vi) high shoulder trimming; and (vii) cleaning and debris removal. In addition, there are activities that require material and equipment: (i) stone masonry work; (ii) pothole patching; (iii) spot graveling; (iv) crack cleaning and sealing with bitumen; (v) repairs to curb stones and concrete sidewalks; and (vi) road furniture replacement and maintenance. To what extent the services should include manual road marking renewal and other labor based activities would be discussed with the design and supervision consultant.
Annex 4: Implementation Arrangements
KYRGYZ REPUBLIC: Additional Financing for National Road Rehabilitation (Osh-Batken-Isfana) Project

Implementation arrangements:

1. The proposed AF will follow existing Project implementation arrangements. The MoTC, through the PIU will be responsible for all activities of the proposed AF. The PIU is experienced; and is implementing several donor-financed projects for ADB, IsDB, JICA, EBRD, and the World Bank with a total transport portfolio of about US$500 million.

2. The MoTC will have overall responsibility for implementing all activities under the proposed AF, including routine maintenance works for Osh City roads under municipal administrative responsibility; MoTC will agree with Osh city municipality on implementation arrangements. The PIU will assign one or more PIU staff to be based in Osh, to coordinate Project implementation in Osh. The coordinator will work with the Osh Road Department.

3. The PIU in charge of implementing the existing Project will act as procurement and financial management agent and be responsible for managing all activities. The MoTC will sign contracts with service providers such as contractors and suppliers. Due to the large number of small contracts, care would be taken to expedite bid evaluation and prompt payments to the contractors from the Designated Account. The PIU would be assisted in this through an international consultant firm, already identified.

4. The international firm would assist the MoTC and the PIU in the following duties (Preliminary Scope of Works): design if required, review of designs, bidding documentation, technical support to tender committee, contract supervision, and social assessment.

Activity 1: Repair of urban roads within the city of Osh: Maintenance by Contract

- Prepare term maintenance bidding documents, BoQ, technical specifications (including minimum equipment requirements for contractors) and contract forms for NCB in coordination with Osh and PIU;
- Provide technical assistance during bidding;
- Support Bid Evaluation Committees;
- Specify during implementation tasks and locations, in coordination with the MoTC and Municipality; provide technical support and quality control for small contractors implementing repair works;
- Control payment certificates for clearance by MoTC, payments by PIU.

Activity 1: Rehabilitation of Urban Roads in and around the greater Osh and Jalal-Abad city vicinities: Periodic Maintenance of urban arteries

5. The Design Institute has started design works. This institute is a well-regarded MoTC external directorate; it has already mobilized survey teams in the field. Simplified design and tender documents are expected by November 2010 with bidding to commence in early 2011 so works can commence in spring 2011. International firm support would include:

- Control of the design and tender documents
- Technical assistance during bidding
- Support to the Bid Evaluation Committees
- Regular construction supervision activities
Annex 5: Indicative Estimation of Labor Benefits Available through Routine Road Maintenance
KYRGYZ REPUBLIC: Additional Financing for National Road Rehabilitation (Osh-Batken-Ifsana) Project

1. Economic dislocation is among the most significant costs of the April 2010 political crisis and the subsequent June 2010 outbreak of ethnic violence in South Kyrgyzstan. According to estimates in the JEA prepared by the Bank and other donors, the crisis will result in economic contraction, manifested as diminished agricultural output, destruction of markets and disruption to retail distribution, slowdown and reduced working hours in other commercial operations, inability or unwillingness to travel to jobs or markets, and postponed or reduced investment. One direct effect is an estimated loss of 4,000 jobs, with additional indirect loss of income due to economic dislocation. Other threats to livelihoods remain for those displaced and other vulnerable groups within the population.

2. The proposed AF is under preparation as a rapid response measure intended to provide immediate support to the Government and population of the Kyrgyz Republic. While direct damage to roads or other transport infrastructure has been minimal, the project approach pursues warranted road improvements in a manner that would promote economic growth once political stability returns and that would generate as much local employment as is feasible. The JEA notes that cash-for-work programs and labor-intensive public works activities may provide needed temporary employment activities for those whose livelihoods have been affected. Other donor agencies (UNDP and ACTED) are operating cash-for-work programs on a small scale.

3. Labor generated through the proposed AF is not intended as a relief measure. No effort will be taken to inflate labor requirements beyond identifying more labor-intensive but economically justified tasks among many maintenance activities, or to substitute manual labor on tasks that could be most economically accomplished by use of machinery. Instead, the approach is to promote identifying and including routine maintenance works that are more labor intensive. Unlike relief operations directly administered by donor agencies unconcerned by profitability or efficiency considerations, the proposed activities will be undertaken by local contractors who will be free to utilize labor in light of profitability and efficiency constraints. Contractors will first ensure full utilization of their own employees before hiring casual labor, making it difficult to reliably estimate demand. However, local contractors have a limited workforce and typically, manual labor is hired daily, as needed. The available timeframe has made it impossible to assess proposed activities of all other donor agencies, which could influence labor supply and cost.

4. Given limited information on which to base relative economic returns from routine maintenance activities as opposed to more capital-intensive road resurfacing, there are not rigorous means to establish investment between the two modalities with precision. Moreover, both routine maintenance and resurfacing and rehabilitation works involve use of labor and use of machines. At this stage, it is difficult to calculate with precision the supplemental volume of labor required under local conditions per unit of investment in the proposed routine maintenance activities. Despite these limitations, it appears that investment in routine maintenance activities is warranted for the following reasons:
i) Routine maintenance is cheaper than resurfacing on a unit basis, many more kilometers of roads can be improved with limited available funding, potentially extending benefits to more areas of the city;

ii) Relatively little advance design and preparation is necessary, meaning that routine maintenance works can be initiated in a much shorter time frame, whereas design and preparation steps delay initiation of resurfacing for at least several months;

iii) Routine maintenance is feasible throughout winter months as long as there is no snow or ice accumulation, whereas asphalt resurfacing usually is impractical in winter because of low temperatures. This means that additional labor opportunity can be generated in winter months when income needs may be most acute;

iv) The labor required is largely unskilled, providing opportunity to those unemployed or underemployed, whereas resurfacing relies more on skilled equipment operators.

**Estimating Labor Benefit**

5. Given the above constraints, only an indicative estimation of supplementary labor utilization and benefits is possible. The base scenario - no project funding made available, implies no additional labor requirement. The proposed AF is expected to provide about US$9 million for road improvement works. The table below compares labor utilization and amount of kilometers of road improvement in different scenarios, including:

- 0 percent routine maintenance/100 percent resurfacing;
- 30 percent routine maintenance/70 percent resurfacing;
- 50 percent routine maintenance/50 percent resurfacing; and
- 100 percent routine maintenance/0 percent resurfacing.

6. Note the Project design currently calls for 50 percent routine maintenance (Osh roads) and 50 percent resurfacing (MoTC roads). During Project implementation, reallocation might become necessary.

Calculation estimates assume the following: Based on contractor interviews, the cost of unskilled labor is about KGS 640 (about US$14) per day. This includes direct worker payment, plus 10 percent required tax payment to government on behalf of workers and an additional 18 percent social protection fee. Assuming a minimal 20 percent premium for skilled labor, the cost per man day for skilled labor would be KGS 768 (about US$16.75). Actual labor costs will fluctuate depending on supply and demand considerations.

7. Based on rough engineering estimates, capital-intensive resurfacing costs will include about 10-15 percent for labor (the estimate assumes 80 percent skilled and 20 percent unskilled labor input), while routine road maintenance will include about 35-40 percent labor costs, assumed to be 80 percent unskilled. The table assumes 10 percent labor input for resurfacing (assumed to include indirect labor inputs in production and transportation of materials) and 35 percent for routine road maintenance.

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16 Reported unskilled labor rates range from KGS 380-500 per day. For estimation, KGS 500 is used for calculations in order to reduce the likelihood of overestimating potential labor benefits.
8. The rough average cost of routine road maintenance is estimated at about US$5,000 to US$10,000 per kilometer while the rough average cost of resurfacing (at a depth of 5 cm) is estimated at US$200,000 per kilometer.

<table>
<thead>
<tr>
<th>Kms of Road Improvement</th>
<th>0% routine maintenance</th>
<th>100% rehabilitation</th>
<th>30% routine maintenance</th>
<th>70% rehabilitation</th>
<th>50% routine maintenance</th>
<th>50% rehabilitation</th>
<th>100% routine maintenance</th>
<th>0% rehabilitation</th>
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</thead>
<tbody>
<tr>
<td>Total</td>
<td>45</td>
<td>571</td>
<td>922</td>
<td>1,800</td>
<td></td>
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<td></td>
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<tr>
<td>Labor Value (US$ 000)</td>
<td>(0)</td>
<td>900</td>
<td>945</td>
<td>630</td>
<td>1575</td>
<td>450</td>
<td>3150</td>
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<tr>
<td>Total</td>
<td>900</td>
<td>1,575</td>
<td>2,025</td>
<td>3,150</td>
<td></td>
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<td></td>
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<tr>
<td>Man days skilled</td>
<td>(0)</td>
<td>42,950</td>
<td>11,475</td>
<td>30,545</td>
<td>19,090</td>
<td>21,818</td>
<td>38,181</td>
<td>(0)</td>
</tr>
<tr>
<td>unskilled</td>
<td>(0)</td>
<td>12,850</td>
<td>54,000</td>
<td>9,000</td>
<td>90,000</td>
<td>6,428</td>
<td>180,000</td>
<td>(0)</td>
</tr>
<tr>
<td>Total</td>
<td>55,750</td>
<td>105,020</td>
<td>137,336</td>
<td>218,181</td>
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<td></td>
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<td>Man months skilled</td>
<td>(0)</td>
<td>1,950</td>
<td>521</td>
<td>1,388</td>
<td>867</td>
<td>1,735</td>
<td>(0)</td>
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</tr>
<tr>
<td>unskilled</td>
<td>(0)</td>
<td>584</td>
<td>2,418</td>
<td>455</td>
<td>4,090</td>
<td>292</td>
<td>8,181</td>
<td>(0)</td>
</tr>
<tr>
<td>Total</td>
<td>2,534</td>
<td>4,782</td>
<td>6,241</td>
<td>9,916</td>
<td></td>
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</tbody>
</table>

9. No formal economic analysis is to be conducted, either for routine maintenance or for resurfacing activities. Under present circumstances, in which traffic flow and economic activity is dramatically diminished, it would be difficult to generate reliable predictive data. Both forms of road improvement are warranted, and both are likely to yield positive returns, depending on individual cases selected for inclusion. It is likely that routine maintenance will yield a higher return on average, especially if the multiplier effect of labor spending and potential savings from avoidance of further road deterioration were measured.

10. Full investment in routine maintenance would allow coverage of all, or nearly all, of the entire Osh road network over the three-year implementation phase. This would be a significant benefit given that the 2010 municipal budget includes only KGS 8 million (about US$173,900) for the entire network.

11. The proposed AF will select roads for investment in stages, with an emphasis on routine maintenance in the first stage, so that works can begin in winter 2010. While no firm quota is intended, the overall target for routine maintenance is 50 percent of investment.
### Annex 6: Procurement Plan

**KYRGYZ REPUBLIC: Additional Financing for National Road Rehabilitation (Osh-Batken-Isfana) Project**

**PROCUREMENT PLAN - CONSULTING SERVICES (individuals)**

*(Date of PP: September 9, 2010)*

<table>
<thead>
<tr>
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<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AF/CS-IC-01</td>
<td>PIU Communication Officer</td>
<td>Plan/План</td>
<td>IC, post</td>
<td>17-Sep-10</td>
<td>20-Sep-10</td>
<td>25-Sep-10</td>
<td>30-Sep-10</td>
<td>NA</td>
<td>NA</td>
<td>5-Oct-10</td>
<td>NA</td>
<td>10-Oct-10</td>
<td>31-Dec-13</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>AF/CS-IC-02</td>
<td>PIU Regional Coordinator based in Osh</td>
<td>Plan/План</td>
<td>IC, post</td>
<td>17-Sep-10</td>
<td>20-Sep-10</td>
<td>25-Sep-10</td>
<td>30-Sep-10</td>
<td>NA</td>
<td>NA</td>
<td>5-Oct-10</td>
<td>NA</td>
<td>10-Oct-10</td>
<td>31-Dec-13</td>
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</tr>
<tr>
<td>3</td>
<td>AF/CS-IC-03</td>
<td>Office-manager/Translator</td>
<td>Plan/План</td>
<td>IC, post</td>
<td>5-Nov-10</td>
<td>10-Nov-10</td>
<td>20-Nov-10</td>
<td>30-Nov-10</td>
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<td>NA</td>
<td>5-Dec-10</td>
<td>NA</td>
<td>10-Dec-10</td>
<td>31-Dec-13</td>
<td></td>
</tr>
</tbody>
</table>

**Legend**

- **QCBS**: Quality and Cost-based Selection (in accordance with sections 2.1 - 2.28 of the Consultant’s Guidelines)
- **CQ**: Consultants Qualifications (in accordance with section 3.7-8 of the Consultant’s Guidelines)
- **SSS**: Single source Selection (in accordance with section 3.9-13 of the Consultant’s Guidelines)
- **IC**: Individual Consultant (in accordance with section V of the Consultant’s Guidelines)
- **Prior Review**: For firms: All contracts equal to USD 200,000 or more. First contract regardless of value and all SSS contracts.

For individual consultants: All contracts equal to USD50,000 equivalent or more. All SSS contracts.
## PROCUREMENT PLAN - CONSULTING SERVICES (Firms)

(Date of PP: September 9, 2010)

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<thead>
<tr>
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<tbody>
<tr>
<td>1</td>
<td>AF-CS-SSS-01</td>
<td>Consulting Services for construction supervision*</td>
<td>Plan</td>
<td>SSS</td>
<td>Prior</td>
<td>20-Sep-10</td>
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<td>Actual</td>
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<td>Actual</td>
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</table>

**Legend**

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<table>
<thead>
<tr>
<th>№</th>
<th>Contract Ref. №</th>
<th>Contract Description</th>
<th>Plan vs Actual</th>
<th>Procurement Method</th>
<th>WB Rvw (Prior/ Post)</th>
<th>Date of Draft BD to WB</th>
<th>Date of WB No-objection to BD</th>
<th>Date of Invitation to Bids</th>
<th>Date of Bid Opening</th>
<th>Bid Evaluation Report</th>
<th>WB No-objection to Contract Award</th>
<th>Date of Contract Signing</th>
<th>Date of Contract Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SH-G-01</td>
<td>Car for Coordinator</td>
<td>Plan/План</td>
<td>SH</td>
<td>prior</td>
<td>20-Oct-10</td>
<td>1-Nov-10</td>
<td>17-Nov-10</td>
<td>22-Nov-10</td>
<td>25-Nov-10</td>
<td>1-Dec-10</td>
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</tr>
<tr>
<td>2</td>
<td>SH-G-02</td>
<td>Furniture for Coordinator</td>
<td>Plan/План</td>
<td>SH</td>
<td>post</td>
<td>20-Oct-10</td>
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<td>17-Nov-10</td>
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<td>25-Nov-10</td>
<td>1-Dec-10</td>
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</tr>
<tr>
<td>3</td>
<td>SH-G-03</td>
<td>IT equipment for Coordinator (labtop, printer and etc.)</td>
<td>Plan/План</td>
<td>SH</td>
<td>post</td>
<td>20-Oct-10</td>
<td>N/A</td>
<td>17-Nov-10</td>
<td>N/A</td>
<td>25-Nov-10</td>
<td>1-Dec-10</td>
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<td>4</td>
<td>SH-G-04</td>
<td>Accounting Software update</td>
<td>Plan/План</td>
<td>DC</td>
<td>prior</td>
<td>N/A</td>
<td>N/A</td>
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<td>N/A</td>
<td>25-Sep-10</td>
<td>30-Sep-10</td>
<td>1-Dec-10</td>
<td></td>
</tr>
</tbody>
</table>

**GOODS/ТОВАРЫ**

1. **SH-G-01** Car for Coordinator
2. **SH-G-02** Furniture for Coordinator
3. **SH-G-03** IT equipment for Coordinator (labtop, printer and etc.)
4. **SH-G-04** Accounting Software update

**WORKS/РАБОТЫ**

6. **MainINCB-CW-01** Term Maintenance Contract 1
7. **MainINCB-CW-02** Term Maintenance Contract 2
8. **MainINCB-CW-03** Term Maintenance Contract 3
9. **AC-NCB-CW-04** Osh Entry Road from Isfana, (Ashkhabadskaya)
10. **AC-NCB-CW-05** Osh Bypass Road km 0-3, (Nokatski Circle –)
11. **AC-NCB-CW-06** Osh Bypass Road km 9-11(City Traffic Police to
<table>
<thead>
<tr>
<th><strong>International Competitive Bidding (in accordance with section 2 of the Guidelines)</strong></th>
</tr>
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<tbody>
<tr>
<td>For goods contracts valued more than $500,000</td>
</tr>
<tr>
<td>For works contracts valued more than $2 million</td>
</tr>
<tr>
<td><strong>National Competitive Bidding (in accordance with section 3.3 of the Guidelines)</strong></td>
</tr>
<tr>
<td>For works contracts valued at or less than $2 million</td>
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<tr>
<td><strong>Direct Contracting (in accordance with section 3.6 of the Guidelines)</strong></td>
</tr>
<tr>
<td><strong>Shopping (in accordance with section 3.5 of the Guidelines)</strong></td>
</tr>
<tr>
<td>For works contracts valued at or less than $500,000</td>
</tr>
<tr>
<td>For goods contracts valued at or less than $500,000</td>
</tr>
<tr>
<td>For Works contracts: All ICB contracts. First NCB contract regardless of value of contract. For Goods contracts: All ICB contracts. First shopping contract</td>
</tr>
<tr>
<td>Will not apply</td>
</tr>
<tr>
<td>Will not apply</td>
</tr>
</tbody>
</table>
Annex 7: Map
KYRGYZ REPUBLIC: Additional Financing for National Road Rehabilitation (Osh-Batken-Isfana) Project