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AFGHANISTAN

Final Report

Task Order # 14

Road Operation & Maintenance Capacity & Building Program

Final Performance Evaluation

June 12, 2012

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Disclaimer:

The views expressed in this report are those of the authors and do not necessarily reflect the views of USAID, the Government of Islamic Republic of Afghanistan, or any other organization or person associated with this project.

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ABBREVIATIONS AND ACRONYMS

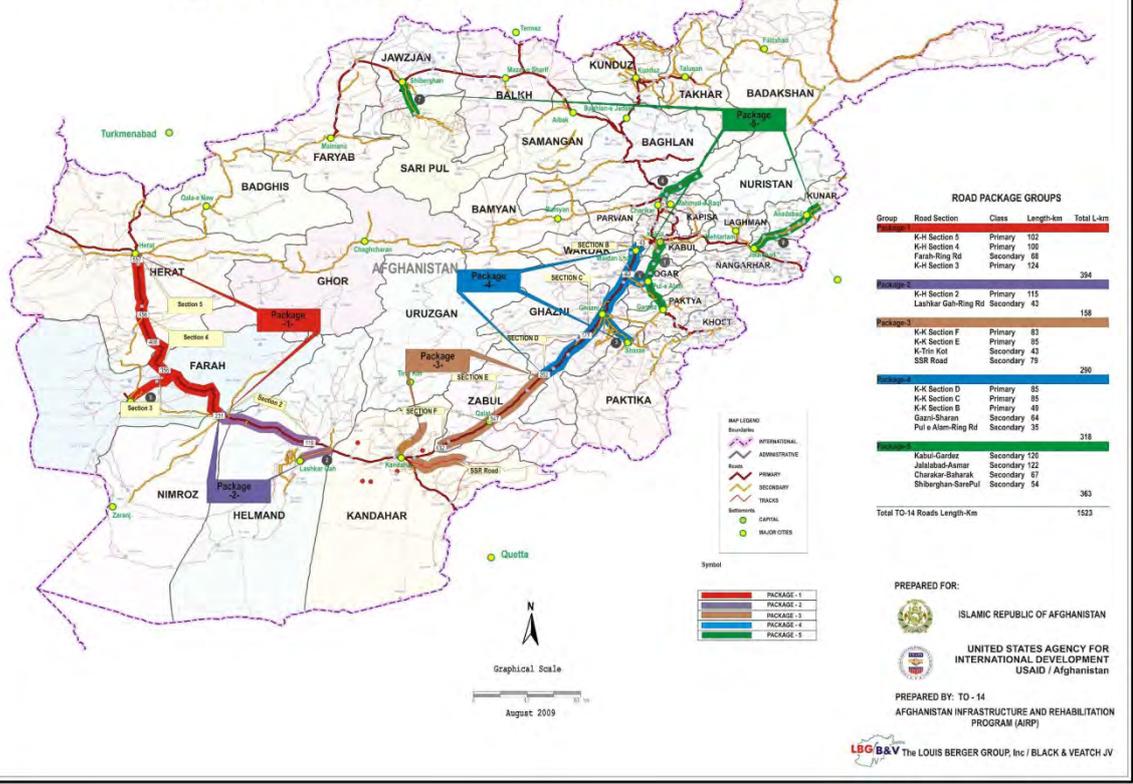
ADB	Asian Development Bank
EC	European Commission
GIRoA	The Government Of The Islamic Republic Of Afghanistan
ICA	Italian Cooperation Agency
IDB	Islamic Development Bank
IRD	International Relief & Development
IROP	Islamic Republic Of Pakistan
JICA	Japan International Cooperation Agency
KFW	KFW Entwicklungsbank German Development Bank
LBG/B&V	Louis Berger Group/Black & Veatch
MOPW	Ministry Of Public Works
NGO	Non-Governmental Organization
O&M	Operation And Maintenance
PBC	Performance Based Contract
PMMR	Performance Based Management & Maintenance Of Roads
RMU	Road Maintenance Unit
ROI	Republic Of India
RFTOP 20	Request for Task Order Project 20
RRCC	Road And Roof Construction Company
SIDA	Swedish International Development Cooperation Agency
SOW	Scope Of Work
UNOPS	United Nations Office For Project Services
UOK	University Of Kabul
USAID	United States Agency For International Development
VOC	Vehicle Operation Costs
WB	World Bank

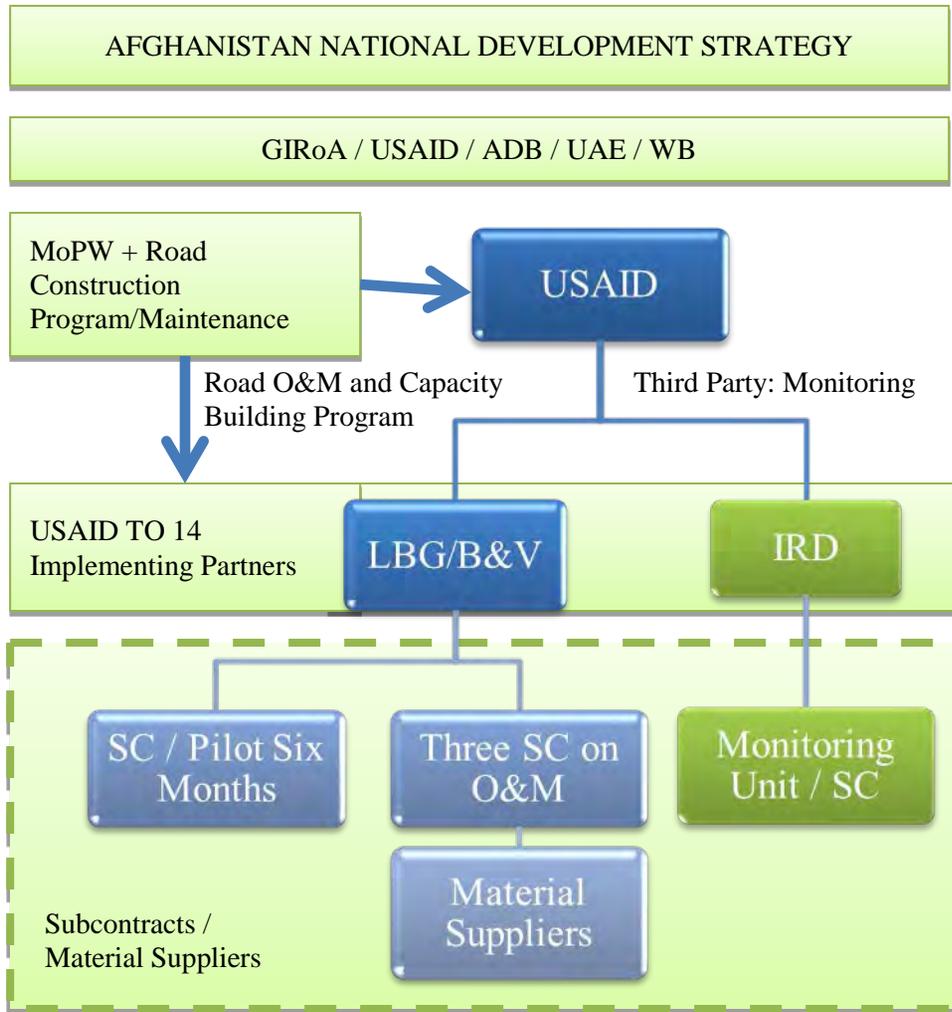
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AFGHANISTAN USAID FUNDED OPERATIONS AND MAINTENANCE (O&M) AND TRAINING AND CAPACITY BUILDING PROGRAM

O&M Road Network Managed by USAID funded Task Order 14





1. **Project Title:** Afghanistan Infrastructure Rehabilitation Program, Task Order#14 (AIRP/TO#14), Road O&M and Capacity Building Program
2. **Project Number:** 306-I-14-06-00517-00
3. **Project Dates:** 1 November 2007 through 31 December 2011
4. **Project Funding:** TEC \$59,286,512.35, Cumulative obligation \$52,846,023, with \$34,572,630.42 disbursed to 28 February, 2011 with the provided period of performance ending October 31, 2011.
5. **Implementing Organization:** The Louis Berger Group, Inc. / Black & Veatch Joint Venture (LBG/B&V-JV).
6. **Contracting Officer (CO):** Javier Castano
7. **Contracting Officer Representative (COR):** Sayed Israr Torak

I. EXECUTIVE SUMMARY

The Road Operations and Maintenance (O&M) and Capacity Building Program referred to Task Order #14 (TO14) was a component of the larger Afghanistan Infrastructure Rehabilitation Program (AIRP) that was funded through USAID Afghanistan's Office of Infrastructure, Engineering and Energy (OIEE). The program was implemented by the Louis Berger Group, Inc. and the Black & Veatch Joint Venture (LBG/B&V).

“The primary objective of the O&M Capacity building - Roads Project is to put in place within GIRoA a new organization using structure and new management procedures and develop a sustainable road maintenance program for Afghanistan. LBG/B&V will develop and implement performance based contracting practices to support the primary objective and at the same time utilizing Afghan subcontractors to the maximum extent possible.”

This final performance evaluation of TO14 provides an assessment of the project, focusing specifically on program design and planning, implementation and project management, and program results. It also provides recommendations for future O&M and capacity building projects.

The evaluation was initiated in January 2012, approximately four months after the conclusion of project activities and two months after the project's closure. The evaluation team's summaries of key findings are described below.

1. PROGRAM DESIGN AND PLANNING

Recognizing the need for a sustainable roads O&M program for Afghanistan, OIEE received the background information for TO14 from LBG/B&V, which was an implementing partner under the AIRP. The subsequent Task Order contained inconsistent and incompatible program objectives. The TO14 program was designed with two major components that consisted of the following:

1. The establishment of a Road Maintenance Unit (RMU) within the Ministry of Public Works (MoPW) to plan annual work programs, prepare and award performance based road maintenance contracts and manage the maintenance of designated USAID funded roads, and
2. A comprehensive Capacity Building Program (CBP), combined with the introduction of performance based contracting (PBC) to enhance the capabilities of RMU and MoPW staff, the Contractor's local staff and the private sector.

The evaluation team did not find any indication of significant contributions by the MoPW to the project. The TO14 program was reportedly designed, organized and implemented exclusively by LBG/B&V and their local Afghan staff with seconded MoPW staff.

2. IMPLEMENTATION AND PROJECT MANAGEMENT

a. Road Maintenance Unit

In 2008, the Contractor established the RMU within the MoPW, and the RMU closed at the conclusion of TO14 in December 2011. The RMU functioned as an independent organization within MoPW.

Similarly, training activities were started in 2008 with RMU and MoPW staff identified as the primary focus groups, followed by private sector sub-contractors that were subsequently engaged in road O&M projects.

While the Contractor did not perform a training needs assessment prior to introducing its CBP, the introduction of PBC was successfully introduced for routine O&M and emergency road repairs during the project's life-cycle.

3. OPERATIONS AND MAINTENANCE

A multi-year O&M Investment Plan was prepared by LBG/B&V and presented to the Ministry of Finance (MoF), the Ministry of Transportation (MoT), the Ministry of Rural Reconstruction and Development (MRRD) and MoPW.

Sub-contractors performed routine maintenance work at the required level of service standard specified in the O&M contracts developed by the Contractor.

Road O&M works undertaken in 2008-2011 were successful in maintaining strategic roads funded by USAID.

In February 2012, several O&M sub-contractors interviewed by the evaluation team reported that their payments were still being withheld by LBG/B&V due to the level of work claimed by LBG/BV to be unacceptable.

Data for *per kilometer costs* of routine maintenance were not available during the evaluation, therefore an analysis of said data and a statement of reasonableness was not possible by the evaluation team.

4. PROGRAM RESULTS

The primary objective of establishing a new organization within GIRoA was not achieved. While the Contractor did create and launch the RMU within the MoPW it was not institutionalized as envisioned. Similarly, the development of a sustainable road maintenance program for Afghanistan was not achieved using PBC procedures as the project closed in December 2011.

5. CONCLUSIONS

a. Project Design, Implementation and Management

The Task Order contained inconsistent and incompatible objectives. The primary objective of TO14 was establishing within GIRoA a new organization to manage a new sustainable road maintenance program for Afghanistan with the introduction of PBC procedures. The evaluation team believes that the MoPW was not significantly engaged as a partner in the planning and initial phases of implementing TO14. The team also believes that once the RMU was set-up, essentially as the Contractor's TO14 office, the program's emphasis shifted to O&M related activities on strategic roads employing the PBC methods and procedures introduced at the expense of institutionalizing the RMU as envisioned in the Task Order.

The evaluation team also feels that the absence of a work plan for the primary objective at the start of the project coupled with undefined relationships between the key stakeholders and the military obscured the primary objective. The lack of a work plan and undefined relationships also led to reported confusion between stakeholders and sub-contractors.

At the conclusion of the project the primary objective of establishing a new organizational structure for O&M within MoPW, and its related objectives had not been achieved. The secondary objective, TO14's O&M efforts appear to have maintained the designated roads in a usable condition during the period of performance and ceased once the project closed.

6. RMU & CAPACITY BUILDING

The RMU was established with its associated capacity building efforts focused on classroom and field-related training activities. In establishing the RMU, the Contractor did not address fundamental organizational development and change management issues associated with the creation of the RMU and processes such as the organization's mission or purpose, structure, organizational change and integration with the MoPW.

Absent from the capacity building component was a systematic assessment of the status and needs of the MoPW and sub-contractors or of individual personnel's capacities and position requirements within the RMU and MoPW. At the conclusion of the project the RMU was closed and program staff went to other positions. Those staff recruited from the MoPW reportedly returned to that Ministry.

The RMU's training manuals were distributed and remain with MoPW, along with items provided to MoPW's provincial offices for their use in conducting assessments of road conditions and vehicle usage. The project's capacity building efforts were severely limited by a lack of the three requirements:

1. Sufficient time to achieve the intended objectives.

2. A clear statement of training objectives to be achieved, and
3. A comprehensive assessment of the current capacity of the organizations engaged and personnel.

7. OPERATIONS AND MAINTENANCE

The project's O&M services successfully maintained the designated roads at a standard that was identified in the O&M subcontracts. The evaluation team believes that the standards employed lacked the necessary detail required to independently assess the work after a period of time, and with minimal inspection as possible.

Factors that did influence the O&M work included:

- Limited sub-contractor experience with such processes as cost estimation and PBC.
- A lack of clearly detailed quality and performance standards with which to work, and
- A security environment that included periodic attacks on work sites, and the killing and kidnapping of workers undoubtedly affected the performance and quality of the work performed, and the ability of performance monitors to conduct on-site assessments and inspections.

8. RECOMMENDATIONS

The overriding recommendation is that future O&M Capacity Building projects be joint Afghan Government and USAID efforts from problem identification and planning through project design, and implementation.

The second major recommendation is that future complex O&M capacity building projects include a needs assessment to clarify from the outset the goals and priorities envisioned for the program with clear and achievable objectives while ensuring that adequate time, personnel and funds are available.

II. INTRODUCTION

On July 2, 2007, USAID issued a Request for Task Order Project 20 (RFTOP 20) Operation and Maintenance Roads¹ to LBG/B&V. The Task Order was to provide follow-up support for road building and road rehabilitation activities conducted through the USAID funded Rehabilitation of Economic Facilities and Services (REFS) program and the USAID funded Afghanistan Infrastructure and Rehabilitation Program (AIRP) to support and encourage economic growth and provide support for military and security operations.

The importance and value of major road O&M support for Afghanistan was broadly recognized by the Government of Islamic Republic of Afghanistan (GIROA), USAID, ADB, World Bank and other donors.

Road maintenance also was supported in the Afghan National Development Strategy (ANDS). In addition, a 2007 USAID funded study prepared by LBG/BV² highlighted the need for road maintenance in view of USAID's extensive investment in roads. The Minister of Public Works stated that Afghanistan lacked the managerial, technical or financial capacity to meet the level of road maintenance services required to maintain Afghanistan's upgraded and continuously improving road network.

To help address Afghanistan's road O&M needs, USAID's Afghanistan Infrastructure and Rehabilitation Project's (AIRP), Task Order #14, the Road Operation and Maintenance and Capacity Building Program was implemented by LBG/BV from November 2, 2007 through December 30, 2011.

The O&M work included conducting routine road maintenance and emergency repair work through Afghan sub-contractors. Initially the O&M work were performed under a six month contract with Roof and Road Construction Company (RRCC). Following a two month extension, the RRCC ended in November 2008. Subsequently the O&M work was divided into five packages and contracts were awarded to three subcontractors. Two four month contracts were signed in 2011 for work in Parwan and Paktia provinces.³

Capacity building activities were to establish the Road Maintenance Unit (RMU), conduct training activities for RMU, MoPW central and provincial staff and for subcontractors.

2.1 PURPOSE OF THE EVALUATION

As the project closed, OIEE requested an *independent objective assessment of LBG/B&V's performance*, and contracted this final performance evaluation through USAID's Service Under Program and Project Office for Results Tracking Project.

¹ Letter to Larry D. Walker, Louis Berger/ Black and

² Afghanistan Infrastructure and Rehabilitation Program, Afghanistan Roads Operations and Maintenance Management Program, June 2007. LBG/B&V

³ TO14 Module 11

The purpose of this evaluation was to consider program management, performance and effectiveness, and provide suggestions that will assist USAID to better design future O&M and CBPs. This evaluation also considered the following:

- Identify project approaches and processes that were most and least effective;
- Provide recommendations to USAID for consideration for future work in road operation and maintenance and related capacity building programs;
- Assess outputs and outcomes to determine the extent to which the original objectives were achieved;
- Identify which programmatic components were successfully designed and implemented;
- Pinpoint missed opportunities or challenges not addressed by USAID and subcontractors in the design, implementation and management of the program;
- Make concrete recommendations that can assist the USAID/Afghanistan OIEE Roads Team to design a follow-on O&M program under the new roads IQC.

The scope of work (SOW) for this activity is provided in Annex A. Specific questions posed in the SOW are addressed in the Conclusions section, and are replied to in detail in Annex G.

2.2 METHODOLOGY

This evaluation was conducted in January and February 2012, in Kabul by a five person team composed of two expatriate road engineers, a capacity development specialist, and two Afghan program assistants. As required in the SOW, a workplan was drafted and approved by OIEE for this evaluation.

The evaluation was conducted through interviews with OIEE staff and personnel from LBG/B&V, International Relief and Development (IRD) staff, MoPW personnel in Kabul and MoPW provincial staff, and six Afghan O&M sub-contractors. Interviews also were conducted with representatives from the Asian Development Bank (ADB), World Bank (WB), and the United Nations Office for Project Services (UNOPS). Annex B provides a list of locations visited and individuals interviewed.

The evaluation included a review of available project documents and reports from LBG/B&V. Field visits were also made to MoPW offices in Parwan, Panjsher, Herat and Jalalabad.

The limitations encountered during the course of the evaluation included the following:

- Many of the expatriate personnel associated with the project were no longer in Afghanistan as the project had closed in December 2011 and staff had demobilized.
- Most Afghan staff formerly associated with the program could not be reached, and
- Project files were being processed by LBG/B&V and were not readily available.

2.3 PROJECT BACKGROUND AND DESCRIPTION

On July 2, 2007, USAID issued RFTOP 20 Operation and Maintenance Roads⁴ to LBG/B&V. The Task Order was to provide follow-up support for road building and road rehabilitation activities conducted through the USAID funded Rehabilitation of Economic Facilities and Services (REFS) program and the USAID funded Afghanistan Infrastructure and Rehabilitation Program (AIRP) to support and encourage economic growth and provide support for military and security operations.

The importance and value of major O&M support for Afghanistan was broadly recognized by GIRoA, USAID, ADB, World Bank and other donors.

Road maintenance also was supported in the Afghan National Development Strategy (ANDS). In addition, a 2007 USAID funded study prepared by LBG/B&V⁵ highlighted the need for road maintenance in view of USAID's extensive investment in roads. The Minister of Public Works stated that Afghanistan lacked the managerial, technical or financial capacity to meet the level of road maintenance services required to maintain Afghanistan's upgraded and continuously improving road network.

To help address Afghanistan's road O&M needs, USAID's AIRP, Task Order #14, the Road Operation and Maintenance and Capacity Building Program was implemented by LBG/BV from November 2, 2007 through December 31, 2011.

The O&M work included conducting routine road maintenance and emergency repair work through Afghan sub-contractors. Initially the O&M work were performed under a six month contract with Roof and Road Construction Company (RRCC). Following a two month extension, the RRCC ended in November 2008. Subsequently the O&M work was divided into five packages and contracts were awarded to three subcontractors. Two four month contracts were signed in 2011 for work in Parwan and Paktia provinces.⁶

Capacity building activities were to establish the Road Maintenance Unit (RMU), conduct training activities for RMU, MoPW central and provincial staff and for subcontractors.

⁴ Letter to Larry D. Walker, Louis Berger/ Black and

⁵ Afghanistan Infrastructure and Rehabilitation Program, Afghanistan Roads Operations and Maintenance Management Program, June 2007. LBG/B&V

⁶ TO14 Module 11

Specific project objectives were to establish a Road Maintenance Unit (RMU) to develop the capacity of the RMU, the Ministry of Public Works, and O&M subcontractors and to introduce Performance Based Contracting (PBC) and Performance Management and Maintenance of Roads (PMMR).

III. FINDINGS

The evaluation team's findings focus on the Project's Design, Implementation and Management, with a particular emphasis on the RMU and the Contractor's capacity building activities, the O&M program component, including the structure and processes for completing the work - contracting, monitoring and managing the routine maintenance and emergency and urgent repair work.

1. PROJECT DESIGN, IMPLEMENTATION AND MANAGEMENT

The RFTOP 20 issued by USAID/Afghanistan's OIEE to LBG/B&V in July 2007 was based on background research conducted by LBG/B&V and was used as the basis of a sole source justification for TO14.

The resulting Task Order for TO14 issued to LBG/B&V was incomplete and poorly drafted at the time it was issued and signed in November 2007. Negotiations between OIEE and LBG/B&V to achieve clarity in the Task Order continued from July through October 2007 amidst USAID comments about the difficulty of obtaining clarity in TO14.

The Contractor did not provide OIEE with a work plan for TO14 or perform a needs assessment before commencing its capacity building activities for the RMU, MoPW and project staff.

Communication between TO14's key stakeholders was inadequate, with reports not being shared in a timely manner, resulting in confusion amongst stakeholders.

The project's design and primary objective of creating a new organization within GIRoA did not include MoPW and other GIRoA officials in the design and planning process.

2. ROAD MAINTENANCE UNIT & CAPACITY BUILDING

An independent RMU was formally established in space provided by MoPW and renovated and furnished by LBG/B&V.⁷ The RMU was functionally LBG/BV's TO14 project office.

The project's personnel consisted of LBG/BV expatriate senior management, local engineers, technical and support staff. In addition, 14 MoPW staff members were recruited on a temporary basis in response to a list of positions LBG/B&V wished to fill

⁷ Afghanistan Infrastructure and Rehabilitation Program –IQC 306-I-00-06-00517-00; Task Order 14, O&M Capacity Building-Roads; Task Order 306-I-14-06-0517-00 (RFTOP-306-07-020)

with Ministry staff. The Contractor also retained MoPW provincial engineers for part time assistance. The Contractor's expatriate senior management was responsible for planning, organizing, managing and implementing the capacity building and O&M works.

While OIEE and LBG/B&V had agreed that a CBP would be developed within the first 60 days of the project's startup, LBG/B&V submitted a training strategy to OIEE in February 2008, four months after starting TO14. As previously mentioned, LBG/B&V did not perform a needs assessment for their CBP, including an assessment of the MoPW's personnel or organizational needs. The CBP targeted RMU Kabul based staff and selected MoPW staff with an English language training course.

The CBP's key accomplishments were as follows:

- A monthly one-day training program for MoPW provincial engineers.
- Ten - one half day training events sub-contractors for O&M works using performance based contracting (PBC) procedures.
- Two - one day pre-bidding conferences for potential subcontractors that provided information and guidance on Preparing Request for Proposal; General Information about the O&M Program, Information for Upcoming Road Maintenance Work Activities and General Information about PBC Contracting.
- Six manuals prepared by LBG that were provided to RMU and MoPW. The manuals addressed training and capacity building, administrative processes and technical areas.⁸
- MoPW provincial engineers were trained to conduct vehicle counts for road usage studies and visual inspections of road conditions to identify routine maintenance and emergency repair needs in their respective locations.
- Four engineers were sent abroad for training on Highway Development Management (HDM4).
- Mentoring of RMU, MoPW and sub-contractors, particularly in the field, and
- The introduction of PBC for routine road O&M works.

3. OPERATIONS AND MAINTENANCE

At the beginning of the project the O&M work identified a combination of 1,500 kilometers (km) of provincial and strategic roads as identified below. This was subsequently increased to 1,875 km of roads.

- 620 KM of Secondary Roads (Nationwide)
- 829 KM of the Ring Road across 17 provinces
- 178 KM of National Highway (Kandahar-Bekah and Keshim-Faizabad)
- 250 KM of Provincial Roads (Parwan and Paktya)⁹

⁸ Annex 4 contains a list of the manuals.

⁹ Work was not started in Parwan and Paktya until 2011

The three types of road O&M works performed under TO14 with PBC procedures included the following:

1. Routine maintenance of designated roads, with the intention of preserving these designated roads in a usable condition.
2. Urgent repairs, with the objective of performing priority repairs to return the designated roads to their *as built or previous condition* so that the road repaired could be subsequently maintained in compliance with established standards, and
3. Emergency repairs to designated roads, which included road damage or destruction that resulted from natural or man-made events, including acts of intentional damage or sabotage.

Prior to TO14's inception, the GIRoA and Afghan construction sub-contractors relied almost entirely on *Lump Sum* and *Unit Cost* based contracting procedures. The use of PBC procedures while acknowledged by MoPW was unfamiliar to the majority of Afghan sub-contractors. As a result of this situation, in October 2007 LBG/B&V hosted a pre-bid conference which was attended by 13 potential sub-contractors.

The first O&M subcontract was signed in March 2008, with a performance period for six months and extended for two months ending in October, 2008. The sub-contractor was responsible for providing O&M work for most of the designated 1,500 km of roads. This work was later divided into five separate work packages.

In June and July 2008, LBG/B&V conducted two additional pre-bid conferences, and participants were invited to submit qualification assessments. Qualified sub-contractors were then invited to submit proposals. Thirty six subcontractors submitted qualification statements and expressed an interest in submitting formal proposals for the O&M contracts. Three sub-contractors were subsequently selected and O&M contracts were signed in October and November 2008.¹⁰ In July 2011, two additional sub-contractors were selected for O&M works in Paktya and Parwan provinces.

While the TO14 project utilized a three part monitoring process throughout the project's life cycle, the evaluation team was not able to verify the existence or performance of TO14's quality control staff due the project's closure.

Difficulties encountered by sub-contractors and International Relief and Development (IRD) under contract with USAID in an independent monitoring and quality assurance role for TO14, reported to the evaluation team that inadequately defined performance standards and a lack of standardized material prices or accepted guidelines for materials were not generally available in Afghanistan resulting in confusion.

Reportedly, disagreements emerged between IRD and LBG/B&V staff regarding reports of work not being completed or being completed in an unacceptable manner or an

¹⁰ Annex 3 contains a list of the subcontractors and their work packages.

incorrect location reported for work performed. The TO14 COR arranged for LBG and IRD to deal directly with reports when there were disagreements on the quality and timeliness of work performed.

Due to the security situation in several areas, the on-site monitoring and the reports of work performed relied heavily on the use of photos, either aerial or ground photos. The quality of the photos and relative lack of any distinguishing natural landmarks made it difficult for all parties to clearly see what work had been performed, to what level of service and, for a period, where the work was performed. As a result of this situation, the use of GPS was employed for worksites and it was then possible to be relatively certain of the location of work being performed.

An illustrative multi-year Roads Investment Plan was prepared by LBG/B&V and presented to OIEE, MoPW and other agencies and reportedly received a positive response as the potential value of the plan was recognized for future road O&M activities.

IV. CONCLUSIONS

Based on the evaluation team's findings the following conclusions are provided below. A number of specific questions posed in the evaluation's SOW are also addressed below, and Annex G lists all the questions and the evaluation team's answers.

1. PROJECT DESIGN, IMPLEMENTATION AND MANAGEMENT

The conceptualization, design and implementation of TO14 primarily involved one Contractor; a process that the evaluation team believes is unusual. The LBG/B&V joint venture was engaged in USAID funded road construction in Afghanistan for about five years prior to TO14. In 2007, the same Contractor was engaged to prepare a status report on the roads and road maintenance in Afghanistan. In July 2007, USAID submitted its RFTOP 20 to LBG/ B&V with a submission due date of July 27, 2007. From July through October negotiations were undertaken as the terms and conditions of the Task Order were clarified and agreed between USAID and LBG/B&V. With the signing of TO14 in November 2007, LBG/B&V proceeded with implementing the project that continued through December 2011.

In addition to utilizing one source of information and task order design, the design and planning of TO 14 was accomplished with minimal Afghan involvement. For example, there is no indication or record of consultations or joint planning with MoPW for TO14. Further, all of the senior leadership and management positions for TO 14 were LBG/B&V expatriate employees. While there were Afghans on TO14 staff, the project's organizational chart indicates that they were not in key management roles.

The project design created a parallel structure to the MoPW. As early as 2006, concern was expressed in Afghanistan about the effect of projects becoming or fostering structures that are parallel to the government. Two concerns expressed about this process are: the structures can undermine the legitimacy of government agencies since they frequently have resources unavailable to the government. Thus the public and/or government officials learn to approach or rely on the projects or parallel structures for assistance rather than placing requests or needs in front of the government. The second concern is that by isolating a project from government officials a two-way learning opportunity is lost. Both the Afghans and project staff lose the opportunity to learn by doing or by observing.

2. COORDINATION AND COMMUNICATION IN THE FIELD

Throughout the evaluation, the evaluation team was informed that there was minimal consultation and communication between the project's stakeholders – the MoPW and the O&M private sub-contractors. While there may have been discussions at senior levels, it was not reflected in the formal records or passed on to others within the respective organizations. In the field, Afghan engineers reported that work might be planned within their province and normal living and work areas by the military or PRT or by LBG/B&V and they would not be informed. Similarly, repairs to a road might be undertaken by a PRT without informing the provincial MoPW staff.

The absence of a robust exchange of information among the parties on a regular basis appears to have contributed to a lack of commitment to the project. For example, MoPW staff in Kabul and provincial MoPW staff stated that contact with LBG/B&V was minimal. Several O&M sub-contractors cited the same.

The evaluation team noted that reports of emergency or key project activities were submitted to USAID and were typically not provided to MoPW. It was noted above that even in emergency situations MoPW reportedly was one of the last to know about it, further reflecting the inadequacy of communication and capacity building processes.

In documents the team reviewed it was noted that written or other reports would by-pass MoPW. Indicative of the communication malaise is that reports were not necessarily shared among the participants. The monthly reports of the contractor prepared for USAID could have been provided to ministry officials and other donors.

Throughout the project, security was a factor dealt with in a variety of ways. In some instances it was apparently necessary to keep expatriates away from the work sites to reduce the threat to the local population and avoid work disruptions. In other areas an Afghan sub-contractor contracted with local leaders for labor and or materials reducing security threats. Monitoring in response to security concerns was conducted at times by use of aircraft to reduce staff exposure.

3. ROAD MANAGEMENT UNIT

The RMU was formally established by LBG/B&V within the MoPW. The RMU was used by LBG/B&V as the TO14 project office, and was not institutionalized within the MoPW and was established as a sustainable entity.

While LBG/B&V had supported efforts to evolve the RMU into the proposed Road Authority and sought donor or independent funds for it, as TO14 concluded the Authority concept lost support and momentum. However some donors the Asian Development Bank for example continue to pursue the concept in a modified form.

Several factors beyond the control of LBG/B&V and OIEE appear to have affected the future of the RMU. Anticipated financial support for the RMU or more broadly a Road Authority did not materialize from within the GIRoA or other donors.

Within the GIRoA, opposition to the Road Authority concept reportedly remains. Ministries reportedly view this approach as likely to result in a reduction of their funds, level of responsibility and personnel.

The establishment and operation of the RMU in parallel to MoPW is not likely to have contributed to a more positive attitude toward either the Road Authority or RMU. Rather the RMU experience may have fostered envy and opposition since RMU staff, for example, received salaries substantially higher than MoPW. In addition MoPW office environments lacked the equipment and resources of the RMU, and there was no concerted effort to build bridges between MoPW and the RMU.

4. CAPACITY BUILDING

A large and complex capacity building program was embedded, but not clearly articulated in TO14. Major dimensions of capacity building in TO14 were organizational and institutional development, organizational change and integration processes, strengthening technical, management and administrative functions, and strengthening personnel capabilities of the RMU and MoPW in Kabul, and provincial staff and the subcontractors. A further priority element was introducing PBC Contracting and a Multi-Year Road Investment Plan.

A significant lack of preparation for and attention to capacity building was evident from the start of the project. There was no clear definition of the broad processes involved in capacity building. The lack of work plans or activities had been identified as the project started. Further, a needs assessment had not been planned for or conducted of the various organizations with which the project would work. This resulted in limited information about the current status and needs of the organizations, personnel capabilities and technical skills and required equipment. The information required to develop a meaningful and feasible capacity building program was thus missing.

The absence of a capacity building plan was recognized by USAID before the signing of TO14. USAID and LBG/B&V agreed that a plan for the primary project objective would be prepared within the first sixty days. Coupled with the lack of a plan was that capacity building deliverables, other than manuals, were not in the Task Order or available at the start of the project.

The capacity building efforts that emerged as TO14 started focused principally on training activities for the RMU and minimal training activities available for MoPW staff and subcontractors. This program of activities thus ignored significant organizational issues such as that illustrated by a director of a provincial MoPW office stating that before he could start work, even approved work, it was necessary to again obtain permission from his headquarters.

The lack of a qualified capacity building specialist among the senior project management from the beginning of the project undoubtedly contributed to a slow beginning for the capacity building efforts.

Overall, the project provided a limited amount of time in which to achieve, under difficult circumstances the even modest capacity building results. Given the time available and the magnitude of the needs, it is unrealistic to expect that the capacity building objectives could be attained.

The project's reports include numerous training activities conducted. However, it is difficult to determine the rationale or the results of the activities. The project did conduct some training tests and scores were reported. However, it is not clear what was being tested and whether there was any performance change as a result of the training.

At the conclusion of the project the RMU staff dispersed. Many of the staff recruited from MoPW apparently returned to the Ministry. None of the other former staff were available for interviews. MoPW provincial engineers continued in their positions and reported that the equipment provided was still in their office and was used. The sub-contractors interviewed did not express any benefit from the limited training they received. The capacity of private sector contractors to work under contracting in some form of public private partnership was not strengthened.

5. OPERATION AND MAINTENANCE

Considering the challenging and dangerous security environment the project was required to operate in at times coupled with the limited resources of local sub-contractors and the time constraints imposed to train-up and qualify local sub-contractors, the road maintenance works were a success in all three aspects of the road repairs undertaken.

The O&M works were initially divided into five work packages that were serviced for much of the project by three sub-contractors.

One objective of the project was to increase the pool of qualified sub-contractors for future O&M work with MoPW and other ministries. The project subsequently utilized six sub-contractors, while not a large number relative to the objective of increasing the number of experienced O&M subcontractors it did demonstrate considerable effort under the demanding conditions.

6. MONITORING

The monitoring of O&M activities was a particularly important aspect of TO14 for LBG/B&V and sub-contractors as works monitored were directly related to payments between parties. Work that was not performed or performed incorrectly could lead to a financial penalty being levied on the sub-contractor through the withholding of payment for the specific work. The sub-contractor had a specific period of time within which to correct the work. Further delays in correcting a deficiency could have lead to a permanent loss of payment for the particular work in question.

LBG/B&V's sub-contractors monitored the work being performed to ensure conformance with standards and performance in a timely manner. This was done on a monthly basis to supplement reports submitted by sub-contractors on a more frequent schedule.

As mentioned, due to security concerns LBG/B&V frequently relied on aerial monitoring using a helicopter and other aircraft and aerial cameras to record the progress of work. In addition, IRD working under contract with USAID as an independent monitor employed seven local contractors located in Kabul and around the country. These IRD monitors visited work sites for quality assurance.

The IRD reports were submitted to USAID who passed them to LBG/B&V with comments and notices concerning work that was reported as unacceptable. The reports were contested when LBG/B&V working from their own monitoring reports conflicted with sub-contractor reports. Two areas of disagreement emerged; the first was whether work had been performed. In some instances the discrepancy over reported performed work was due to an error in the use of incorrect GPS coordinates. The second area of difference was whether work had been performed or corrected in accordance with the required standards. Part of the difficulty in many of these cases apparently was related to different interpretations of the standards or determining whether particular work had been done.

The process of monitoring and reporting was difficult as a result of the extensive use of photographs. The reports the evaluation team reviewed were primarily photos with a small box of description or explanation. The quality of the photos made it difficult to decipher. For example, it was difficult to determine the size of a road patch from a photo when there was no referent point to assist in verifying the size or depth of the patch work.

During the evaluation several sub-contractors commented that significant payments were still withheld on the basis of claims that work had not been performed or performed

correctly. A concern of the subcontractors was who to contact and how to pursue these claims with the project now closed.

7. STANDARDS

Performance standards were not clearly defined or described in the sub-contracts. This made it difficult to prepare and submit estimates and to utilize PBCs and to assess the quality of work performed. For example, the level of service standard provided in the sub-contract for routine O&M lacked sufficient detail to determine whether or not work was acceptable.

An example of a standard from Section 2, Scope of Services, and Performance Standards¹¹ is provided in Table 1.

Table 1. Performance Standards for Asset Group A – Pavement Maintenance

Roadway Element	Description	Level of Service (LOS)	Time to Correct
Potholes	Potholes with diameter > 150 mm and depth > 25 mm	Roadway and paved shoulders free of potholes	48 hours
Cracking	Cracks with width > 6 mm and length > 100cm	Roadway and paved shoulders free of unsealed cracks	1 week

Missing from the standard was a reference to the length of time the repair or maintenance would last and the conditions thereunder. Thus even at the conclusion of the project it is unclear to what extent realistic O&M standards were met.

The Contractor applied US federal specifications FP-03 and FP-96 to emergency repairs. These specifications are incorrect, as they are specifically for highway construction and not highway maintenance. Technical standards for maintenance should reflect the precondition standards or better. For example, the repair work must be equal to or better than before the damage.¹²

Table 2 illustrates a wide variation in cost estimates prepared by the subcontractors, illustrating the difficulty with the cost estimating process.

¹¹ Annex 8 Scope of Services from Contract with Road and Roof Contract Company.

¹² Reference The American Association of State Highway and Transportation Officials (AASHTO), ASTM or other international standards.

Table 2. Average contracted cost per KM

	All Packages	Package 1& 2	Package 3& 4	Package 5
Contract length (month)	26	26	26	26
KM of road	1,491	552	494	398
Cost per month USD	781,716.97	147,318.00	190,782.57	86,000.00
Monthly USD/KM	524.29	267.88	386.2	216.08

Standards are also vital for estimating costs. To prepare an accurate estimate it is necessary to have a clear description of the standards and expectations for the work and a reliable record of the cost of materials and supplies. Without such information estimates can vary widely as the table above illustrates. In this instance, sub-contractors relied on their own recent cost data as a base for their calculations. This cost can vary depending on such variables as bargaining ability and the accuracy of the records maintained. In the illustration provided above the sub-contractors were all working on the basis of work packages that were the same, yet the cost estimates are significantly different. One subcontractor explained that his estimating process was taking his last purchases, adding ten percent and then adding an additional seventy five percent for labor, equipment and other items required to perform the work.

In addition, PBC also is reliant on clear and detailed standards. The purpose of PBC is to increase efficiency in executing road maintenance compared with traditional contracting methods. Contractors working with PBC seek to attain the required performance standard. When this standard is clear, work-selection, design and delivery are all their responsibility. Hence, the choice and application of technology and the pursuit of innovative materials, processes and management are up to the contractor. This allocates higher risk to the contractor compared to traditional contract arrangements, while opening opportunities to increase margins where improved efficiencies and effectiveness of design, process, technology or management are able to reduce the cost of achieving the specified performance standards.

8. O&M Costs

A question raised for the evaluation team was the cost of the O&M work. While the team reviewed some invoices and the original budget, the team was unable to obtain final figures that would enable us to provide a breakdown and provide an analysis.

9. Multi-Year O&M Investment Plan

A multi-year O&M Investment Plan was defined as an outcome to be achieved through the RMU. These plans are useful for improving road maintenance by projecting road degradation based on the collection and analysis of road use and condition data. Effective

use of a national multi-year O&M investment plan requires that reliable data is collected on road conditions and use over time.

The Contractor produced a multi-year plan that was presented the Ministry of Public Works, the Ministry of Finance, Ministry of Rural Rehabilitation and Development and Ministry of Transportation, all of which are involved with roads and road maintenance. The plan was based on the data collected by MoPW engineers during the project. Reportedly the value of the multi-year plan was recognized by the Ministries. The question now is whether the Ministries and the broader GIRoA is prepared and able to proceed with the next steps, and whether the financial resources are available?

Four afghan engineers were sent abroad for Highway Development and Management (HDM4) training, and were invaluable in developing the multi-year maintenance investment plan for specific roads.

The estimated figures presented in the plan are viewed as unusual since they are not clear with respect to the type of works covered and do not include winter operation maintenance, emergency works and security. Further the figures presented are very high compared with the sub-contracted cost in the past three years and the work completed. Winter operation and maintenance also should be included, since it is one of the main components of road operation and maintenance due to geographic location and climate conditions. Following is a caution from the World Bank about the development of a plan:

“Although HDM-4 includes a life-cycle analysis of the recurrent maintenance requirements of different project alternatives, the model is not generally used for planning and programming of recurrent maintenance road works, such as crack sealing, patching, or routine maintenance. The model is used for planning and programming of capital activities, such as reseal, overlay, reconstruction, widening, and new construction.”¹³

Some planning capability was developed through the project and can be a resource for the future. The four engineers who received HDM4 training may be lead trainers in developing competency in its use in Afghanistan. In addition, MoPW engineers in the provinces gained experience in collecting and reporting some of the data required for planning. The University of Kabul may also be a resource for and beneficiary of developing a multi-year investment planning capacity. Regrettably there was as the project ended, no institutional framework for a concerted planning effort and the MoPW engineers reported that they were not continuing to collect data since they had no way to use it.

¹³ <http://siteresources.worldbank.org/INTTRANSPORT/Resources/336291-1227561426235/5611053-1229359963828/tp-20.pdf>

V. RECOMMENDATIONS

The following recommendations are presented as requested for consideration by USAID with respect to future O&M projects. The set of recommendations is broadly consistent with current discussions in USAID regarding joint project design and implementation.

The overarching recommendation for future O&M Capacity Building projects is that they be USAID-Afghan Government. The Afghan Government or other partner is actively engaged in the definition of the situation, the design of the RFP and the review and selection of a project. Additionally the organization and management of the projects can benefit from a genuinely shared management and implementation process.

This recommendation is a direct response to the TO14 experience in which the project was established and functioned as a separate, parallel entity. There was little direct project interaction between the project stakeholders, MoPW, the Subcontractors, LBG/B&V and USAID. A concentrated effort to involve the public directly through citizen monitoring and labor and regularly contacting existing and emerging local entities can be gain support overall road and enable the project to support local O&M efforts.

The approach can help to reduce the divisive “we – they” situation that can undermine sensitive and complex projects. It can be a partnership and demonstrated in a very visible way that the two countries working together on as equal a basis as possible.

Strong commitment from both USAID and Afghan leadership will be needed for this to be successful. Obtaining this commitment will not be easy on either side. And to engage in honest joint decision making can be difficult. Laying the foundation for a joint project will require early and discussions among the governments or parties but can worth the effort if it ameliorates having projects done “for” the Afghans or the view that “they” are doing this “to” or “for” someone.

1. DESIGN AND IMPLEMENTATION PROCESS.

The approach will be a dramatic change from that of TO14 in which the project design process was dominated by USAID and LBG/BV with little involvement of MoPW. Too often projects have been designed without government or other stakeholders being engaged. Thus establishing and maintaining relations among the Afghan and USAID parties early in the conceptualization stage will be important.

On are regular basis a joint design team could meet to discuss, clarify and agree the focus and dimensions of a project or program of action.

2. INTEGRATING O&M CAPACITY BUILDING

O&M capacity building projects constitute an opportunity for well-coordinated or integrated activities to the benefit of the project. TO14 gave the impression that the two components were competing; that their goals were different and that equal weight or importance was not attached to both components. This can situation or impression can be addressed in a positive ways.

The evaluation team, all with significant varied experience in Afghanistan, were concerned from the outset that inadequate attention and resources were not provided to capacity building components. It appeared to the team that the project was in fact designed to be an intensive O&M project to keep roads open. Nothing learned during the evaluation led the team to change its view. However, the team did believe that greater transparency in the actual objectives would have been beneficial for all.

a. Capacity Building

It was evident in TO14 that a broad well designed capacity building program could benefit MoPW and other road related ministries as well as the private sector subcontractors. Missing was the identification and implementation of a capacity building program of activities that recognized and addressed the needs of all the parties, and the value of establishing effective working relations among the parties.

The identification and selection of subcontractors could be incorporated as part of an ongoing capacity building effort. Rather than a one day pre-bidding conference, several days could be devoted to a presentation and discussion of the work and the procedures that need to be followed. With a longer well-structured activity it would be possible to obtain information and suggestions from the sub- contractors. In addition, the participants could have an opportunity to become familiar with PBC Contracting, or another process and suggest how it can be modified to meet project or Afghan conditions. Additionally subcontractors might benefit from some additional guidance in how to prepare accurate qualification statements for their various potential client groups. Additionally throughout a project subcontractors could elect to participate in workshops or discussions that focus specifically on business aspects of their work and such as working effectively with government entities.

The engineers and other technical staff of MoPW/Kabul and in the provinces would work through a process of identifying and addressing organization and individual needs as they consider the organization change they are experiencing. Initially these events could be conducted on a regional basis, thus including staff from several MoPW offices. Periodic, possibly annually, conferences could be organized for all engineers and technical staff thus providing them with the opportunity to exchange information.

Government or private sector organizations could be assisted, if they wished, to conduct an organization and management self-assessment and develop a plan to strengthen the organizations. For new or particularly weak organizations some additional technical assistance might be offered.

To contribute further to the development of qualified sub-contractors a broad and intensive internship program could be explored with Kabul University, Polytechnic University, and/or other regional universities.

b. O&M

- The MoPW provincial engineers, largely excluded from TO14, and private sector contractors could, on a provincial or regional basis have a division of work, possibly providing support for some of the smaller secondary roads. Smaller work packages, at least in the early stages, could also help insure that contractors are familiar with local conditions.
- Increased use of local citizen voluntary involvement with O&M and other road projects. This involvement could be monitors, a process that is currently used in some areas. Provision should also be made to recognize and enhance the role of Community Development Councils, District Development Council and Provincial Councils and civil society organizations in road construction, maintenance and planning.¹⁴ In any of these efforts care should be taken to insure that non-governmental groups enhance and do not undermine formal government structures and processes.
- Developing and agreeing on performance standards that incorporate national road needs and the conditions of local areas should be a high priority. An approach to this would be forming working groups on a national and regional basis to review existing standards in Afghanistan, used by various donors and available through international organizations.

c. Work Package Size:

Above it was noted that smaller works packages can have positive effect on competitiveness, increase number of qualified subcontractors, lower price and increase quality, opportunities for employment, less administrative work on monitoring and supervision. Further, reducing the package size should not require any additional administrative work. Rather, the administrative work can become more efficient as it allows greater flexibility and better response by subcontractors.

¹⁴ Integrity Watch, an Afghan NGO is currently involved with monitoring road and other reconstruction projects and could be a good resource of information.

An additional anticipated benefit of smaller packages is that MoPW and the provincial departments could play a constructive and supportive role for the subcontractors. In the event one contractor fails to perform and needs to be replaced, there would be another, already selected subcontractor available to fill in. Thus, a project can have several opportunities and alternatives to negotiate and use existing qualified subcontractors without increasing the cost.

3. RISK AND CHALLENGES

The recommendations presented here are not without their challenges and risks.

Both USAID and Afghanistan will need to review and revise procedures and operational cultures. This is not an easy task in the current U.S. and Afghan political environment. The recommendations however could be implemented step by step as long as the principle of joint projects is accepted.

Potential implementing partners will need to continue and possibly intensify “capture” or information gathering processes. This is expensive and difficult but essential to lay a basis for working with local partners. This expanded capture activity will only be feasible and reasonable if USAID provides clearly defined objectives and, in an ideal way, offers flexibility to the implementing partners. In effect, USAID could utilize a “Performance Based Proposal” process rather than the current prescriptive approach that reduces the degrees of freedom of implementers. The implication of the approach is that “business as usual” will not suffice and this can be difficult to sell.

4. WORK PACKAGE SIZE

Smaller work packages, in the range of 100 km up to 150 km per package can be expected to have a positive impact on road O&M, administration, quality control and management. The smaller size should increase the efficiency and effectiveness of the subcontractors and reduce the risks of failure. Moreover compliance with performance requirements, quicker interventions for emergency work repairs would be possible. The packages and activities related to them would be more manageable and could improve coordination among stakeholders and community. Additionally, maintenance costs could be reduced and maintenance work could more easily be performed even in the winter maintenance. In order to be successful, this primary objective would have required strong senior leadership from the beginning.

Modifying the size of the work packages while keeping the work sufficient to be financially rewarding is the challenge. Smaller work packages could enable more companies to gain experience and exposure to PBC contracting and other practices as they are introduced. To ensure that past and current investments in Afghanistan’s natural resource management are sustained



ANNEX A: STATEMENT OF WORK

**STATEMENT OF WORK
FINAL EVALUATION OF OIEE'S AFGHANISTAN'S INFRASTRUCTURE
REHABILITATION PROGRAM**

**TASK ORDER#14, - ROAD OPERATION AND MAINTENANCE (O&M)
AND
CAPACITY BUILDING PROGRAM SECTION**

I. PROJECT DESCRIPTION

The United States Agency for International Development (USAID)/Afghanistan, Office of Infrastructure, Engineering and Energy (OIEE) intends to conduct a program evaluation of the Road Operation & Maintenance (O&M) and Capacity Building Program, which is the Task Order (TO) #14 component of the larger Afghanistan Infrastructure Rehabilitation Program (AIRP).

The evaluation will consider program management, performance, and effectiveness, and provide suggestions that will assist COTRs, AOTRs, and Activity Managers to better design future O&M and capacity building programs. An independent evaluation of this multi-year program will assist USAID to objectively assess the program's overall achievements and shortcomings, and assess the performance of both USAID and the Implementing Partner.

The administrative details of the Project to be assessed are as follows:

1. Project Title: Afghanistan Infrastructure Rehabilitation Program, Task Order#14 (AIRP/TO#14), Road O&M and Capacity Building Program.
2. Project Number: 306-I-14-06-00517-00
3. Project Dates: 1 November 2007 through 31 October 2011
4. Project Funding: TEC \$59,286,512.35, Cumulative obligation \$52,846,023, with \$34,572,630.42 disbursed to 28 February, 2011 with the provided period of performance ending October 31, 2011.
5. Implementing Organization: The Louis Berger Group, Inc. / Black & Veatch Joint Venture (LBG/B&V-JV).
6. Contracting Officer (CO): Roy Plucknett
7. Contracting Officer Technical Representative (COTR): Sayed Israr Torak

II. BACKGROUND

Roads are considered the key infrastructure to development in Afghanistan and are significant public assets. The 2006 Government of the Islamic Republic of Afghanistan's (GIRoA) Master Plan for Road Improvement identified the road network of Afghanistan as:

- 3,242 km of *regional highways* (Ring Road and highways connecting Afghanistan to neighbouring countries).
- 4,884 km of *national highways* (extending the regional highways to provincial capitals).
- 9,656 km of *provincial roads* (extending the National Highways from the provincial capitals to district headquarters and between important district headquarters), and
- 17,000 km of unclassified *rural roads* (either gravel or earth surfaced).

An early reconstruction program of USAID for the transport sector of Afghanistan was the Reconstruction of Economic Facilities and Services (REFS) Program in 2002 and between 2003, and in early 2007, USAID funded the construction and reconstruction of approximately 1,500 km of neglected Afghan national roads.

In 2006, USAID continued its road reconstruction program under the Afghanistan Infrastructure Rehabilitation Program (AIRP). The AIRP is a multifaceted program that continues the reconstruction of vital roads and road arteries. In November 2007, USAID awarded TO#14, the Roads Operation and Maintenance (O&M) and Capacity Building Program to Louis Berger Group / Black & Vetch (LBG/B&V). TO#14 focuses on the development and establishment of the capacity and institutional strengthening of the Ministry of Public Works (MoPW) to maintain its national and provincial road system, including the creation of a Road Management Unit (RMU) (to work in conjunction with the MoPW).

Traditionally, the MoPW has been responsible for road maintenance, using its own staff and equipment. However, as a result of the war and the exodus of the educated workforce during the last few decades, MoPW is unable to provide technical capacity and financial resources to meet the level of services required to maintain Afghanistan's continuously improving road network.

The Afghan National Development Strategy (ANDS) recommended that by the end of 2007, GIRoA set up capable road management and sustainable financing system to preserve the investment made in road infrastructure and maintain the upgraded road network. In late 2006, due to lack of resources, MoPW notified donors that MoPW lacked funding for the routine maintenance of the roads, and required interim funding while GIRoA set up the road management and financing system recommended in the ANDS.

USAID made a strategic decision to support MoPW's request in order to preserve more than \$1.5 billion in investments made on road rehabilitation since 2002. USAID awarded the road O&M and Capacity Building task order to LBG/B&V in November 2007, under the Afghanistan Infrastructure Rehabilitation Program (AIRP).

1. GEOGRAPHIC SCOPE

The following road links are maintained under TO#14:

- 620 kilometers of Secondary Roads (nationwide)
- 829 Km of the Ring Road across 17 provinces
- 178 kilometers of National Highway (Kandahar-Bekah and Keshim-Faizabad)
- 250 kilometers of provincial roads (Parwan and Paktya provinces)

General Note:

There are several activities being implemented under the TO#14. We recommend the evaluator should focus only on the activities that address the O&M objectives on the roads listed above, and goals that were set in the original SOW. The headlines of the focused activities are highlighted below.

2. PROGRAM ACTIVITIES

The following Road O&M and Capacity Building activities are included in TO#14:

a. Road Maintenance Unit (RMU)

The contractor established a Road Maintenance Unit in MoPW to manage the maintenance of these designated roads. In addition, the procedures developed by and for the Maintenance Unit, were designed to accommodate an expanded program that might eventually include all MoPW managed roads. The MoPW assigned qualified and full time counterparts that participated in the program with the long term objective of becoming the future managers of the Road Maintenance Unit. To the extent possible, the contractor required the use of local sub-contractors to maximize the amount of construction being performed by Afghans. This result was to be accomplished by the contractor through directed mentoring, training, and capacity building activities with the Afghan contracting community.

The Road Maintenance Unit was established to plan annual work programs, prepare and award performance based road maintenance contracts, monitor contractor performance, approve contractor payments, and train Afghan contractors and MoPW personnel. The contractor developed Output and Performance Based Road sub-contracts (OPRC) for road maintenance that were appropriate for Afghanistan and which gave due consideration to the technical and contracting capabilities of Afghan road contractors and took into account the prevailing security conditions.

Program activities to conduct timely and standardized quality assurance monitoring on 1,500 km of USAID funded roads O&M activities were intended to ensure that local subcontractors were building in accordance with international construction standards. These activities included:

- Creating a standardized O&M rating program and reporting system to maintain monitoring continuity and ensure subcontractor compliance with standards.
- Conducting an initial road feature inventory and conditions assessment surveys to design specific O&M program requirements.
- Coordinating all ground and aerial surveillance movements of RMU personnel and producing a monthly mission calendar to ensure regular planning and monitoring of road assets.
- Monitoring subcontractor performance on all repairs and routine and emergency maintenance.

10. CAPACITY BUILDING PROGRAM

This activity focused on enhancing the capacity of three targeted groups. The groups included participants from Ministry of Public Works, the Contractor's local staff, and the private sector. Capacity building efforts focused on the following activities:

- The RMU contractor staff (expat and local) collaborated with their MoPW counterparts to plan, develop, and execute management and engineer training for RMU staff, MoPW provincial staff, and local subcontractors who support O&M activities, and renovated RMU office space at the MoPW.
- Integrating MoPW participants into the RMU to expand capacity development in the government's transport sector.
- Creating manuals detailing RMU procedures to provide operational continuity for an eventual expanded and independent agency that may one day manage all MoPW road assets.

11. ROAD PLANNING

MoPW counterparts and the contractor's local staff learn to assess current Afghan road and structure conditions and traffic volume using modern engineering equipment and survey procedures to prepare a Multi-year Investment Plan for periodic and routine maintenance.

FOR REFERENCE ONLY

Transport Inter-Ministerial Commission (T-IMC): Objective is to advance the Transport Sector Strategy by coordinating among six transport-related ministries, donors, and members of parliament through regular meetings of technical staff and political leaders to prevent gaps and overlaps in their activities.

Provincial Roads O&M/RMU: This activity objective advanced the MoPW O&M expansion agenda by emplacing pilot RMUs at the provincial level in two provinces: Parwan and Paktya. These pilot programs monitored performance-based contracted O&M activities for selected provincial primary and secondary engineered road assets and undertook the following:

- Conducted initial road feature inventory and conditions assessment surveys to design O&M program for Paktya and Parwan roads.
- Monitored subcontractor performance in the field on all on all repairs and routine and emergency maintenance, and additional subcontractor survey and design for required improvement works for O&M roads to identify deficiencies, provide action points, and determine appropriate payments.

Bridges Reconstruction: This program activity objective created design plans and provided quality assurance monitoring for reconstruction of nine damaged bridges—partially destroyed by insurgents—along the Kabul – Kandahar Road that were funded by Commanders’ Emergency Response Program (CERP) and managed by USAID.

Salang Tunnel Emergency Repairs: The purpose of this activity is to implement temporary repairs to the Salang Tunnel in order to make it safer for the traveling public during the next 3 years. Extensive repairs are anticipated starting no later than 2014; this emergency repair work should be designed to last during the interim time period. Many serious problems exist with the current state of the tunnel. Regional Command-East committed to providing CERP funds for the emergency work.

Highway Authority: This activity created an Authority with two components: 1) a Road Fund (funded by road user chargers) to finance O&M projects; and 2) a Road Agency to oversee private sector contractors that the Authority hires to carry out maintenance and new construction.

ANDS recognized the limitation of current institutions to manage the transport network and called for the introduction of “best practice” institutions, which would allow for more private sector road maintenance. In particular, ANDS argued for the creation of a modern Road Fund and a commercialized Road Agency. The Road Fund’s primary function is to manage the funds that come from road user chargers and to ensure “value for the money” in the road maintenance carried out by the Road Agency. The Road Agency’s responsibility is to oversee private sector contractors and service providers to carry out both maintenance work and new construction.

12. PURPOSE

The program evaluation will help confirm or refute USAID’s assumptions regarding program management and performance. The evaluation will also provide USAID-

Afghanistan with an independent and unbiased assessment of the Road O&M and Capacity Building Program (AIRP TO #14).

The evaluation will provide the lessons learned for current and future COTRs, AOTRs, Activity Managers, and USAID leadership. The evaluators will conduct an objective assessment of program outputs and outcomes to ascertain the extent to which the original objectives were achieved. The evaluation will help identify which programmatic components were successfully designed and implemented, and those that were not. The evaluation will also pinpoint missed opportunities, or challenges not addressed by USAID and subcontractors in the design, implementation, and management of the program. It is expected that the evaluation will make concrete recommendations that can assist the USAID/Afghanistan OIEE-Roads Team to design a follow-on O&M program under the new roads IQC.

13. EVALUATION QUESTIONS

The evaluation team should focus on the three main stages of the Road O&M and Capacity Building Program as follows:

1. Program design and planning.
2. Implementation and project management, and
3. Program results.

The evaluation team will also address the following questions, which are intended to guide, but not limit the evaluation team's analytical effort to gauge the challenges, strengths, weaknesses, and lessons learned in those three stages:

14. PROGRAM DESIGN/PLANNING QUESTIONS

1. Were the original USAID/Afghanistan Road O&M and Capacity Building program description and program objectives adequate and achievable? If not, what specific components and/or objectives were unrealistic and why?
2. Did LBG/B&V design a proper O&M program and procurement package? If not, what changes and/or improvement are recommended?
3. Did LBG/BV prepare their engineering estimation plan for routine maintenance accordance to standard practice? If not, what changes are recommended to bring the cost estimates up to standards?
4. Did LBG/B&V develop responsive and flexible training and evaluation plans? If not, what changes and/or improvement are recommended?
5. Did LBG/B&V develop the sub-contractor bid evaluation criteria in accordance with standard industry practice for performance based contracts? If not, what proper bid evaluation process is required for the future?
6. Did the O&M sub-contracts provide for liquidated damages payable by the sub-contractors for failing to meet performance benchmarks for O&M contracts? Are

these liquidated damages consistent with the industry standards (general terms and conditions) of a performance based contracts? If not, what type of liquidated damages is recommended for future O&M contracts under the Performance Based Contract (PBC)?

7. Did LBG/B&V effectively assess sub-contractor capacity (i.e. number of Afghan and expatriate personnel, and organizational management structure) prior to program implementation and make adequate sub-contractor selections based on documented assessment methodology? If not, how can the assessment and methodology be improved for future programs?

15. IMPLEMENTATION/PROJECT MANAGEMENT QUESTIONS

1. In which areas (i.e. communication, documentation, decision making, etc.) could USAID and LBG/B&V have made better strategic decisions or corrections for improved performance?
2. Did the sub-contractors receive adequate training and management support from LBG/B&V? If not, what specific interventions could have improved sub-contractor performance and sub-contractor communication?
3. Monthly monitoring is an important component for the sub-contractor's monthly lump sum payment. How was the accuracy and quality of monitoring?
4. Did LBG/B&V develop a proper tracking system for the emergency repairs and job-orders? Did LBG/B&V monitor the road conditions properly or use a proper monitoring mechanism required for a performance management based contract? If not, provide lessons learned and recommendations.
5. Did LBG/B&V properly implement the payment procedure set forth in sub-contract for a performance based contract (liquidated damages in case of non-performance), and did the contractor establish a proper payment procedure for emergency works? Was the payment procedure set forth in the sub-contract for a performance based contract and the one for emergency works adequate? If not, what changes are recommended?
6. Were the response times for emergency repairs adequate? Please evaluate each O&M package individually. What caused most of the delays that occurred during the processing of the emergency repair of job-orders? Please provide recommendations to improve the response time for emergency repairs.
7. Were the O&M manuals useful documents for a Maintenance Unit to manage the O&M activity? If not, what changes are recommended?
8. Was the multiyear maintenance investment plan prepared accurately based on the worldwide practice?
9. Did the contractor communicate effectively with MoPW? If not, how can future contractors better communicate with the Ministry?
10. Did LBG/B&V provide a qualitative report and communication with the stakeholders (particularly the US Military (RC-E and RC-S)? Were the reports timely?

16. PROGRAM RESULTS

1. How effective was the Training and Capacity Building program (T&CB)? Were T&CB objectives and performance adequate for completion of O&M? If not, provide recommendations for future programming.
2. Did the O&M program meet the original deliverables laid out in the SOW? Did the RMU adequately complete all tasks listed in the SOW?
3. What was the ratio between the actual maintenance cost and the management cost? Was this ratio within the normal range of the management practices?
4. Were the designed O&M Levels of Service adequate to preserve the road network to a satisfactory level? If not, provide reasonable estimates for future programming.
5. Does the RMU now have the ability to solicit, manage, and oversee performance based contracts? If not, what are the weak areas that must be corrected in order to achieve those objectives?
6. What was the total cost per kilometer of maintained roads? How does this figure compare with other similarly developed countries?

17. EXISTING DATA

a. SOURCES of Information

The evaluation team will meet with USAID/Afghanistan OIEE staff; relevant staff from USAID/Afghanistan Office of Acquisition and Assistance (OAA); USAID/Afghanistan's third-party quality assurance contractor International Relief Development (IRD), the LBG/B&V Task Order #14 team responsible for managing the Road O&M and Capacity Building program; selected road O&M subcontractors; USAID/Afghanistan and/or military field personnel; and a cross-section of local beneficiaries, as the security situation permits. The evaluation team will be provided a broad range of background and program documents including, but not limited to:

- USAID/Afghanistan Activity Approval Document; Original Program Description; Contract; contract modifications; Sub-contract and LBG/B&V invoices and Project Correspondence.
- LBG/B&V Original Proposal of AIRP and TO#14; Monthly and Annual Reports; Monitoring and Evaluation Reports; Annual Implementation Plans; Road Rehabilitation Project Plans; Road Data Reporting; Copies of Subcontracts; Engineering Reports; and Miscellaneous Reports.
- Baseline Data gathered by USAID/Afghanistan and LBG/B&V.
- Third party monitoring reports submitted by IRD.

18. METHODOLOGY

The Evaluation team may use various methods to assess the different aspects of the program and to comprehensively answer the questions listed under Section 4. Though the evaluators have full leeway to design and use the most appropriate evaluation tools, the approach should be participatory in both design and implementation. Due to the constantly changing security situation in Afghanistan, close coordination with USAID/Afghanistan will be necessary to ensure that the evaluation team selects methods that are suitable for use in conflict areas. The following methods for the assessment are highly recommended:

1. Literature Review: The evaluation team should review all major program documents including, but not limited to, those specified in Section 5.
2. Field Visits: The evaluation team should visit subcontractor offices, and a selection of road rehabilitation sites and a selection of those roads maintained, in accordance with the level of effort specified in Section 11.
3. Checklists or Questionnaire: The evaluation team should develop checklists or questionnaires to ensure consistency in data collection. The evaluation team shall submit the checklists and questionnaire for USAID approval prior to use. See also Methodology Plan under Section 7.
4. Focus Group Discussions: The evaluation may include focus group discussions with USAID/Afghanistan OIEE staff, IRD/HRLS staff, LBG/B&V, subcontractors, and beneficiaries.
5. Individual Interviews: The evaluation team should interview representatives of USAID, the LBG/B&V senior staff, the Contracting Officer (CO) in the Office of Acquisition and Assistance, USAID and LBG/B&V program managers, subcontractors, GIROA/MoPW, beneficiaries, etc. and document the interviews using a checklist or questionnaire.

19. REQUIREMENTS AND DELIVERABLES

1. In-briefing: The Evaluation Team shall meet the USAID/Afghanistan OIEE team for introduction; presentation of the Team's understanding of the assignments, initial assumptions, evaluation questions, etc.; discuss and answer questions on initial work plan; and/or adjust SOW if necessary, etc.
2. Work Plan: The evaluation team will prepare an initial work plan and submit to USAID/Afghanistan prior to arrival in country. A more detailed work plan to include a timetable for meetings, site visits, focus groups, collecting and reviewing data, etc., shall be submitted to the USAID/Afghanistan evaluation COTR for approval no later than the seventh day of work.
3. Methodology Plan: A written methodology plan will be prepared and submitted to USAID/Afghanistan prior to arrival in country. Draft checklist or questionnaire should be submitted as an appendix to the methodology plan. The methodology

plan will be submitted to the evaluation COTR for approval no later than the seventh day of work.

4. Interim Briefings/Updates: The Evaluation Team shall provide regular interim briefings/updates --via email, phone, and meetings--to the USAID/Afghanistan OIEE team. To the extent possible, weekly meetings will be held at USAID.
5. Discussion of Preliminary Draft Evaluation Report: The evaluation team will submit a rough draft of the report to USAID/Afghanistan, who will provide preliminary comments prior to the debriefings. The team will submit the draft report five days prior to the USAID debriefing. USAID will have three days to return their comments, and the evaluation team will have two days to make any changes prior to the debriefing. This report should not include any procurement sensitive information.
6. Draft Evaluation Report: A draft report should be submitted to the USAID/Afghanistan prior to the team's departure from Afghanistan. The written report should clearly answer the questions detailed in Section 4, and remain objective and unbiased throughout. The evaluation team will have two days following the debriefings with USAID/Afghanistan to prepare the draft evaluation report. USAID/Afghanistan will provide comments on the draft report within two weeks of submission. This report should not include any procurement sensitive information.
7. Debriefing with USAID: The evaluation team will present the major findings of the evaluation to USAID/Afghanistan and other invited guests prior to the evaluation team's departure from Afghanistan. Any presentation method may be used as long as it clearly conveys the findings. The debriefing will include a discussion between the evaluation team and USAID staff to resolve any outstanding issues or questions prior to the team's departure. The evaluation team may consider USAID comments and revise the draft report accordingly, as appropriate; ensuring the final report remains objective.
8. Debriefing with LBG/B&V: The evaluation team will present the major findings of the evaluation to LBG/B&V using any presentation method as long as it clearly conveys the findings to the audience. The debriefing will include a discussion between the evaluation team and LBG/B&V staff to resolve any outstanding issues or questions prior to the team's departure. The evaluation team may consider LBG/B&V comments and revise the draft report accordingly, as appropriate; ensuring the final report remains objective.
9. Final Report: The evaluation team will submit a final report, not to exceed 60 pages (not including annexes), that incorporates the team responses to all comments received, no later than five days after USAID/Afghanistan provides written comments on the team's draft evaluation report. The format should include an executive summary, table of contents, methodology, findings, and recommendations. The final report will be submitted in English and electronically to the evaluation COTR. See also Section 10 Evaluation Report Format Requirements.

II. X. TEAM COMPOSITION

The evaluation team must consist of the following four key personnel, who are subject to approval by USAID:

- **Team Leader:** Must have over 10 years' experience in leading teams to complete evaluations of programs and projects, and experience in conflict or post-conflict countries is desired. The candidate must have strong analytical, communication and writing skills and is required to have an advanced degree.
- **Road Management Engineer:** Must have at least 10 years of experience working with donor funded road maintenance projects in developing countries, and this experience must include the implementation of maintenance works through performance management based contract that include planning, contracting-out, monitoring, payment, etc. The candidate must have a professional engineer's license (PE) from US or equivalent international professional engineer designation. The candidate must have good knowledge of the context and trends in the reforming and development of Afghanistan's transportation sector, or comparable conflict area and strong analytical, communication, and writing skills, and the ability to work independently and as a team player.
- **Road Planner and Asset Management Engineer:** Must have at least 10 years of experience working with donor funded infrastructure projects in developing countries and this experience must include road planning, Highway Design Model-4 (HDM-4), performance management based contract, road O&M monitoring, the ability to annualize and understand road data and to develop a multiyear investment plan for maintenance. The candidate must demonstrate good knowledge of the context and trends in the reforming and development of Afghanistan's transportation sector, or comparable conflict area, strong analytical, communication and writing skills, and the ability to work independently and as a team player.
- **Local Consultant/Facilitator:** The local consultant should have 5-10 years' experience as an engineer and/or working on local community development programs, and have strong English communication skills. The local consultant will also serve as the evaluation team's logistic point of contact in Afghanistan. Ability to work independently and as a team player.

Due to the potential for conflict of interest, the evaluation team may not consist of any individuals who are current or former employees of (Louis Berger Group/Black & Veatch Joint Venture).

III. SCHEDULING AND LOGISTICS

USAID/Afghanistan will provide overall direction to the evaluation team, identify key documents, assist in facilitating a work plan, and provide updates regarding the security

situation in Kabul and the program's geographic area of operations. The TO#14 assigned COTR will work closely with the evaluation team's local consultant to introduce them to LBG/B&V team and USAID field staff, and serve as the logistical point of contact within USAID/Afghanistan.

The evaluation team is responsible for coordinating with LBG/B&V to arrange meetings, site security during site visits, renting vehicles, and/or hiring drivers, and making hotel reservations. USAID partners may be able to assist with transportation, and security, to visit project sites. This will require close coordination with USAID/Afghanistan, but OIEE does not assume responsibility for ensuring the Evaluation Team's ability to travel.

The evaluation team should note that a six-day workweek is authorized for the duration of their stay in Afghanistan. Please note that the seventh day of the week will not count against the evaluation team's level of effort while in Afghanistan.

X. EVALUATION REPORT AND FORMAT REQUIREMENTS

The final evaluation report shall include the following:

1. Title Page
2. Table of Contents
3. List of any acronyms, tables, or charts (if needed)
4. Acknowledgements or Preface (optional)
5. Executive Summary
6. Introductory Chapter
 - a. A description of the projects evaluated, including goals and objectives.
 - b. Brief statement of why the project was evaluated, including a list of the main evaluation questions.
 - c. Brief statement on the methods used in the evaluation such as desk/document review, interviews, site visits, surveys, etc.
7. Findings – Describe the findings, focusing on each of the questions the evaluation was intended to answer. Organize the findings to answer the evaluation questions.
8. Conclusions – This section will include value statements that interpret the facts and evidence and describe what the facts and evidence mean.
9. Recommendations – This section will include actionable statements of what remains to be done, consistent with the evaluation's purpose, and based on the evaluation's findings and conclusions. This section will provide judgments on what changes need to be made for future USAID road O&M programming. Since this is a country-wide and all Mission activity, this section should also recommend ways to improve the performance of future USAID programming and project implementation; ways to solve problems this project has faced; identify adjustments/corrections that need to be made; and recommend actions and/or decisions to be taken by management.
10. Annex

- a. Statement of Work
- b. Places visited; people interviewed
- c. Methodology description
- d. Copies of all survey instruments and questionnaires
- e. Critical background documents
- f. List and/or Copies of any key documents reviewed

The final version of the evaluation report will be submitted to USAID/Afghanistan electronically. The format should be restricted to Microsoft products, 12-point type font in the body, with 1” page margins top/bottom and left/right. The report should not exceed 60 pages, excluding references and annexes.

XI. LEVEL OF EFFORT (LOE)

A team of four persons that includes an expatriate Team Leader, one expatriate Road Management Engineer, one expatriate Road Planner and one local as facilitator will work as a team in the following tasks as illustrated below in days LOE:

Task/Deliverable	Team Lead (1 persons)	Technical (2 persons)	Facilitator (1 person)	Duration (days)
1. Travel to/from country (for int'l consultants)	4	8	0	12
2. Preparation of Work Plan and Methodology Plan	3	4	0	7
3. Review background documents	6	12	0	18
4. Team planning meeting; meetings w/USAID	3	6	3	12
5. Information and data collection. Includes interviews with key informants and site visits.	10	20	10	40
6. Discussion, analysis, briefings, and draft evaluation report	6	10	5	21

7. USAID completes review of draft evaluation report (14 days)	n/a	n/a	n/a	-
8. Evaluation team reviews and revises final report (out of country)	4	6	0	10
9. Delivery of final report	n/a	n/a	n/a	-
<i>Total Duration</i>	<i>36</i>	<i>66</i>	<i>18</i>	<i>120</i>

XII. SUPERVISION

The Evaluation Team will report to David Ratliff and Sayed Torak, OIEE, USAID/Afghanistan. Designated USAID/Afghanistan staff will review all reports and attend briefings.

ANNEX B: PLACES VISITED AND PEOPLE INTERVIEWED

LOCATIONS VISITED BY THE EVALUATION

1. Parwan Province: Ministry of Public Works
2. Panjsher Province: Ministry of Public Works
3. Nangarhar Province: Ministry of Public Works
4. Herat Province: Ministry of Public Works

LIST OF INTERVIEWS AND MEETINGS

No.	Company /Organization Name	Family Name	First or Other Names	Phone	Email	Address	Province	Purpose	Visit Date
1	Kabul University	Gulistani	Aziz Ahmad		gulistani7469@gmail.com	Engineering Faculty, Kabul University	Kabul	Engineering curriculum and standards in Afg	24/01/12
2	Kabul Polytechnic University	Nejabi	M.Nazir		mnnejabi@gmail.com	Construction Faculty, Polytechnic University	Kabul	Engineering curriculum and standards in Afg	24/01/12
3	Tetra Tech ARD	Sedq	Mir.M.Ashan	93793400108	msedq@swcc-af.com	House#105, Afghana street. Shash Darak	Kabul		28/01/12
4	International Relief & development(IRD)	Wagner	Ben	93700296626	bwagner@ird-equals.org	Sherpur, Kabul	Kabul		29/01/12
5	International Relief & development(IRD)	Reinke	William Mark	93796110053	wreinke@ird-equals.org	Sher-pur, Kabul	Kabul		29/01/12
6	International Relief & development(IRD)	Odegard	Victor			Sher pur, Kabul	Kabul		29/01/12
7	International Relief & development(IRD)	Qalandary	Habibullah			Sher pur, Kabul	Kabul		29/01/12
8	The World Bank	Askerzoy	M.Ajamal	93706337856	maskerzoy@worldbank.org	House#19, Street#15 Wazir Akbar khan	Kabul		29/01/12
9	Ministry of Public Works		M.Aref	93799336658		1st Macrorian	Kabul	O&M Unit SoW, future plans and requests	30/01/12
10	Ministry of Public Works		Abdul Qahar			1st Macrorian	Kabul	O&M Unit SoW, future plans and requests	30/01/12
11	Ministry of Public Works	Hazim	Ahmad Humayon	93700210255	h.hazim@mopw.gov.af	1st Macrorian	Kabul	O&M Unit SoW, future plans and requests	30/01/12

12	Louis Berger Group-Black and Veatch,JV	Jalal	Ghulam Wali	93707275596	gwali@irp-af.com	House#06, Street#13, Lane 1 Wazir Akbar khan	Kabul		30/01/12
13	Louis Berger Group-Black and Veatch,JV	Haight	William H	93700025323	whaight@irp-af.com	House#06, Street#13, Lane 1 Wazir Akbar khan	Kabul		30/01/12
14	Road and Roof Construction Company	Abdullah	Ahmad Javed	93777223222	jabdullah@rrcc.af	House#105, Street#01, Kololapushta Road	Kabul		31/01/12
15	O&M Provincial Department	Najafi zada	Sayed M.Yunus			Charikar	Parwan	Meeting with O&M Unit at provincial level	01/02/12
16	O&M Provincial Department		Ghulam Jan		-	Charikar	Parwan	Meeting with O&M Unit at provincial level	01/02/12
17	O&M Provincial Department	Safi	Aman ullah			Charikar	Parwan	Meeting with O&M Unit at provincial level	01/02/12
18	Provincial Council	Mumtaz	Nasir Ahmad	93788383838		Charikar	Parwan	Meeting with provincial council	01/02/12
19	Provincial Council	Weqar	Saheed			Rukha	Panjsher	Meeting with provincial council	05/02/12
20	Provincial Council	Dazh Kohi	Waheed			Rukha	Panjsher	Meeting with provincial council	05/02/12
21	Provincial Council	Abasi				Rukha	Panjsher	Meeting with provincial council	05/02/12
22	Provincial Council	Khoja	Mir Rahman			Rukha	Panjsher	Meeting with provincial council	05/02/12
23	O&M Provincial Department	Ahmad	Noor			Anaba	Panjsher	Meeting with O&M Unit at provincial level	05/02/12
24	O&M Provincial Department		Abdul Basir			Anaba	Panjsher	Meeting with O&M Unit at provincial level	05/02/12

25	UNOPS	Makhmudov	Rustam	93797577929	rustamm@unops.org	1st Macrorian MoPW	Kabul		05/02/12
26	UNOPS	Raufi	Abdul Sattar			1st Macrorian MoPW	Kabul		05/02/12
27	Samim Wafa Construction Company	Wafa	Khudai Nazar	93700353535	nazar_wafa_swcc@yahoo.com	Shar-e-Now	Kabul	Evaluation of TO#14 (package 3&4)	05/02/12
28	Samim Wafa Construction Company		Abdul Hameed	93786570740	hameed10@gmail.com	Shar-e-Now	Kabul	Evaluation of TO#14 (package 3&4)	05/02/12
29	Samim Wafa Construction Company		Aziz Aqa	93775641142		Shar-e-Now	Kabul	Evaluation of TO#14 (package 3&4)	05/02/12
30	Afghan national standards agency(ANSA)	Matin	Shaikh Ahmad		shaikh_ahmad7677@yahoo.com	Pul-Charkhi	Kabul	Adoption of Engineering standards for Afghanistan	06/02/12
31	O&M Provincial Department		Eng Fazel Rabi	93700603522		Jalalabad	Nangarhar	Meeting with O&M Unit at provincial level	07/02/12
32	O&M Provincial Department		Eng Shahab uddin	93776430384		Jalalabad	Nangarhar	Meeting with O&M Unit at provincial level	08/02/12
33	BACURA Construction Company		Eng Imam Jan	93700601100	-	Jalalabad	Nangarhar	Evaluation of TO#14 (package 5)	07/02/12
34	Ibtakar Fiazi Construction Company	Mansouri	Eng Ah.Jawid	93703001049	jawidmanuri@yahoo.com	Herat	Herat	Evaluation of TO#14 (package 1&2)	07/02/12
35	Ibtakar Fiazi Construction Company	Amiry	Ab. Razeq	93797108287	razeq_amiry@yahoo.com	Herat	Herat	Evaluation of TO#14 (package 1&2)	07/02/12
36	USAID / Western region	Azimi	Habibullah	93794858509	aazimi@state.gov	Herat	Herat	Evaluation of TO-14/Coordination with USAID/Herat	07/02/12
37	USAID / Western region	Wheeler	Harry	0708694557X5033	hweeler@state.gov	Herat	Herat	Evaluation of TO-14/Coordination with USAID/Herat	07/02/12

38	Ibtakar Fiaz Construction Company		Eng Aminullah	93799433241		Herat	Herat	Evaluation of TO#14 (package 1&2)	08/02/12
39	O&M Herat Provincial Department	Tamuri	Habibullah	93799346695	-	Herat	Herat	Meeting with head of the O&M Unit at provincial level / RMU Unit	08/02/12
40	O&M Herat Provincial Department	Naib	Sayed		-	Herat	Herat	Meeting with head of the O&M Unit at provincial level / RMU Unit	08/02/12
41	BACURA Construction Company	Sekout	Sabah uddin		-	Taimany	Kabul	Evaluation of TO#14 (package 5)	11/02/12
42	BACURA Construction Company		Eng Imam Jan	93700601100	-	Taimany	Kabul	Evaluation of TO#14 (package 5)	11/02/12
43	Ministry of Public Works	Waheed	Eng Ahmad Shah	706103740		1st Macrorian	Kabul	Evaluation of TO#14 (package 5)	13/02/12
44	Asian Development Bank	Hill	David	6326326628		dhill@adb.org	Kabul	Meeting with Transport	15/02/12

ANNEX C: METHODOLOGY

This evaluation was conducted in January and February 2012, in Kabul by a five person team composed of two expatriate road engineers, a capacity development specialist, and two Afghan program assistants. As required in the SOW, a workplan was drafted and approved by OIEE for this evaluation.

The evaluation was conducted through interviews with OIEE staff and personnel from LBG/B&V, International Relief and Development (IRD) staff, MoPW personnel in Kabul and MoPW provincial staff, and six Afghan O&M sub-contractors. Interviews also were conducted with representatives from the Asian Development Bank (ADB), World Bank (WB), and the United Nations Office for Project Services (UNOPS). Annex B provides a list of locations visited and individuals interviewed.

The evaluation included a review of available project documents and reports from LBG/B&V. Field visits were also made to MoPW offices in Parwan, Panjsher, Herat and Jalalabad.

The limitations encountered during the course of the evaluation included the following:

- Many of the expatriate personnel associated with the project were no longer in Afghanistan as the project had closed in December 2011 and staff had demobilized.
- Most Afghan staff formerly associated with the program could not be reached, and
- Project files were being processed by LBG/B&V and were not readily available.

ANNEX D: SUBCONTRACTORS ROAD OPERATION & MAINTENANCE

Package #	1 & 2	Provinces	Herat and Farah	
Contractor Name	Ebtekar CC		Contact Person	Eng. Ahmad Javed
Contractors Location	Herat		Contact Details	+93703001049
Contract Duration	36 months		Contract Amount	\$5,303,439.36
Number of highway km	441		Disbursement	\$5,089,760.48
Number of road km	111		Provincial roads km	

First contract for Package 3 and 4

Package #	3&4	Provinces	Kandahar, Zabul Wardak, Logar, Ghazni	
Contractor Name	Samim Wafa CC		Contact Person	Nazar Wafa
Contractors Location	Kandahar		Contact Details	+93700322802
Contract Duration	36 months		Contract Amount	\$5,660,337.13
Number of highway km	387		Disbursement	\$3,679,677.30
Number of road km	221		Provincial roads km	

Second contract for Package 3

Package #	3	Provinces	Kandahar and Zabul	
Contractor Name	ECRC		Contact Person	
Contractors Location			Contact Details	
Contract Duration	4 months		Contract Amount	\$435,000.00
Number of highway km	168		Disbursement	\$317,400.00
Number of road km	122		Provincial roads km	

Second contract for Package 4

Package #	4	Provinces	Wardak, Logar and Ghazni	
Contractor Name	CRCC		Contact Person	
Contractors Location			Contact Details	
Contract Duration	4 months		Contract Amount	\$435,000.00
Number of highway km	219		Disbursement	
Number of road km	99		Provincial roads km	

ANNEX E: BIBLIOGRAPHY

USAID. Statement of Work, Evaluation of OIEE's Infrastructure Rehabilitation Program, Task Order 14, Road Operation and Maintenance and Capacity Building Program.

USAID. Afghanistan Infrastructure and Rehabilitation Program. Afghanistan Roads Operations & Maintenance Program, June 2007 (Preliminary Draft)

USAID Afghanistan Infrastructure and Rehabilitation Program. IQC 306-I-00-06-00517-00 Task Order 14 O&M Capacity Building [November 2, 2007], Modifications 1-2-5-7-8-10-11

The Louis Berger Group /Black and Veatch Special Project Corp. Joint Venture (LBG/B&V); Afghanistan Infrastructure and Rehabilitation Program (IRP):Request for Proposal (RFP) AIRP-RFP-08-TO14-02, July 1, 2008

--- Afghanistan Infrastructure and Rehabilitation Program (IRP); Monthly Progress Report on O&M Road Planning and Capacity Building Activities, 2008-2011

International Relief and Development. Scope of Work: 306-C-00-11-00512-00: Section C: Supplies or Services and Price/Costs. Page 21-24.

International Relief and Development. Scope of Statement of Work: Human Resources and Logistic Support. 306-M-00-06-00505-00

Fishstein, Paul and Andrew Wilder. Winning Hearts and Minds? Examining the Relationship between Aid and Security in Afghanistan. Fishstein International Center, January 2012

Lister, Sarah and Hamish Nixon, Provincial Governance Structures in Afghanistan: From Confrontation to Vision. AREU. Kabul, Afghanistan, May 2006

Subcontractor Contract Scope of Work
LBG/B&V TO 14 Operations and Maintenance Capacity Building-Roads .Monthly Reports

2008-2011 RMU Manuals

Summary of O&M Packages and Contractors

ANNEX F: LIST OF RMU MANUALS

1. RMU Administrative Procedures Manual: August 2009
2. RMU Performance Monitoring Manual: September 2009
3. RMU Feature Inventory and Conditions Assessment Manual October 2009
4. RMU Training and Capacity Building Manual: January 2010
5. RMU Highway Maintenance Planning Manual Part B: Economic Analysis and Multiyear Investment Plan Preparation: July 2010
6. RMU Contracts and Contracting Procedures Manual. December 2010 [Revised from April 2010]

ANNEX G: LIST OF QUESTIONS FROM THE SCOPE OF WORK

Program Design/Planning Questions

1. Were the original USAID/Afghanistan Road O&M and Capacity Building program description and program objectives adequate and achievable? If not, what specific components and/or objectives were unrealistic and why?

The program description was sufficiently adequate and reasonable, however the objectives of creating a new organization and structure within the GIRoA coupled with capacity building and developing a sustainable road maintenance program for Afghanistan did not materialize for the following reasons.

The RMU was not institutionalized within MoPW or GIRoA. Reportedly several other factors appear to have impacted the future of the RMU. Financial support for the RMU or more broadly a Road Authority was not forthcoming. The Contractor had supported efforts to obtain other donor funding for the RMU and the proposed Road Authority, however opposition within MoPW and/or GIRoA to this concept may have contributed to this lost opportunity.

The capacity building activities were coupled with strategic road repairs, laudably performed in a challenging security environment. Under the circumstances the two objectives were perhaps at odds with each other. Economic growth and the movement of goods and passenger traffic dictated that major roads be passable. Similarly, essential supplies for military operations had to be transported country-wide.

The O&M and emergency repairs may have assumed a greater urgency at the expense of the primary objective of establishing the RMU.

2. Did LBG/B&V design a proper O&M program and procurement package? If not, what changes and/or improvement are recommended?

The O&M program and procurement packages appear to have been adequate; however the Contractor and OIEE presumably were under considerable time constraints to achieve the intended goals and objectives of TO14. As mentioned, PBC was a relatively new concept to Afghan private sector construction contractors, and perhaps to MoPW staff. As mentioned, one Afghan sub-contractor was initially responsible for most of the O&M work, and subsequently other firms were included. However, as mentioned in Section 4.7, performance standards were not clearly defined which led to sub-contractors have difficulty preparing cost estimates.

The introduction and employment of PBC procedures and methods is a long-term intervention, and in many instances can be a project in itself. While the ADB continues to

promote the PBC concept, future O&M programs should be designed and planned as *partnerships* between the GIRoA and USAID with a long-term perspective.

3. Did LBG/B&V prepare their engineering estimation plan for routine maintenance accordance to standard practice? If not, what changes are recommended to bring the cost estimates up to standards?

The evaluation team did not have sufficient documentation to review in order to reply to this question.

4. Did LBG/B&V develop responsive and flexible training and evaluation plans? If not, what changes and/or improvement are recommended?

As mentioned in Section 4.4, a large and complex capacity building program was embedded, but not clearly articulated in TO14. Major dimensions of capacity building in TO14 were organizational and institutional development, organizational change and integration processes, strengthening technical, management and administrative functions, and strengthening personnel capabilities of the RMU and MoPW in Kabul, and provincial staff and the subcontractors.

A significant lack of preparation for and attention to capacity building was evident from the start of the project. There was no clear definition of the broad processes involved in capacity building. The lack of work plans or activities had been identified as the project started. Further, a needs assessment had not been planned for or conducted of the various organizations with which the project would work. This resulted in limited information about the current status and needs of the organizations, personnel capabilities and technical skills and required equipment. The information required to develop a meaningful and feasible capacity building program was thus missing.

5. Did LBG/B&V develop the sub-contractor bid evaluation criteria in accordance with standard industry practice for performance based contracts? If not, what proper bid evaluation process is required for the future?

The evaluation team did not have sufficient documentation to review in order to reply to this question. Our assumption is however that LBG/B&V did follow standard industry practices for PBC as they reportedly received an award for the introduction of PBC.

6. Did the O&M sub-contracts provide for liquidated damages payable by the sub-contractors for failing to meet performance benchmarks for O&M contracts? Are these liquidated damages consistent with the industry standards (general terms and conditions) of a performance based contracts? If not, what type of liquidated damages is recommended for future O&M contracts under the Performance Based Contract (PBC)?

Again, the evaluation team did not have sufficient documentation to review in order to reply to this question in sufficient detail. The team understood from interviews with IRD and sub-contractors that payments were withheld from sub-contractors for work performed.

7. Did LBG/B&V effectively assess sub-contractor capacity (i.e. number of Afghan and expatriate personnel, and organizational management structure) prior to program implementation and make adequate sub-contractor selections based on documented assessment methodology? If not, how can the assessment and methodology be improved for future programs?

The evaluation team believes that LBG/B&V initially relied on the local sub-contractors they were familiar with from previous roads-related projects, and as LBG/B&V introduced their CBP they assessed the capabilities of other Afghan firms which were subsequently sub-contracted.

Implementation/Project Management Questions

1. In which areas (i.e. communication, documentation, decision making, etc.) could USAID and LBG/B&V have made better strategic decisions or corrections for improved performance?

As previously mention in Section 4.1 and 4.2, the design and implementation of TO14 was undertaken with minimal Afghan involvement. The evaluation team found no indication or records of consultations or joint planning with MoPW. Similarly, reports were not shared between key stakeholders in a timely manner, and provincial MoPW officials were often times unaware of TO14 activities in their respective areas. It is the opinion of the evaluation team that TO14 lacked the partnership with MoPW to institutionalize the RMU within MoPW.

2. Did the sub-contractors receive adequate training and management support from LBG/B&V? If not, what specific interventions could have improved sub-contractor performance and sub-contractor communication?

As previously mentioned, sub-contractors interviewed by the evaluation team did not express any benefit from the limited training they received. Future CBC interventions need to have a dedicated capacity building specialist on staff and sufficient time for both MoPW staff and sub-contractors to absorb and apply the training received.

3. Monthly monitoring is an important component for the sub-contractor's monthly lump sum payment. How was the accuracy and quality of monitoring?

As discussed in Section 4.6 the process of monitoring and reporting was difficult as a result of the extensive use of photographs which were difficult to use to verify work performed.

Reportedly disputes arose between LBG/B&V, IRD monitors and sub-contractors, some of which remain unresolved with sub-contractors being owed payments.

4. Did LBG/B&V develop a proper tracking system for the emergency repairs and job-orders? Did LBG/B&V monitor the road conditions properly or use a proper monitoring mechanism required for a performance management based contract? If not, provide lessons learned and recommendations.

The evaluation team did not have sufficient documentation to review in order to reply to the first part of this question in sufficient detail. The monitoring procedures are described in Section 4.6. In addition, as mentioned in Section 4.7, the Contractor applied US Federal standards FP-03 and FP-96 to emergency repairs which the evaluation team believes is incorrect.

5. Did LBG/B&V properly implement the payment procedure set forth in sub-contract for a performance based contract (liquidated damages in case of non-performance), and did the contractor establish a proper payment procedure for emergency works? Was the payment procedure set forth in the sub-contract for a performance based contract and the one for emergency works adequate? If not, what changes are recommended?

Although the evaluation team did not have sufficient documentation to review in order to reply in sufficient detail to the questions, the team understood that payments were withheld by LBG/B&V.

6. Were the response times for emergency repairs adequate? Please evaluate each O&M package individually. What caused most of the delays that occurred during the processing of the emergency repair of job-orders? Please provide recommendations to improve the response time for emergency repairs.

Due to the absence of documentation, the evaluation team could not adequately answer this question. This limitation coupled with unsuccessful attempts to interview US military and PRT associated with emergency repair work prevents the team from providing suitable recommendations.

7. Were the O&M manuals useful documents for a Maintenance Unit to manage the O&M activity? If not, what changes are recommended?

The manuals were relevant and useful, however the evaluation team believes a greater emphasis and investment in time and resources could have been made on O&M training. As the project closed, the RMU itself was dissolved and staff returned to the MoPW or other positions.

8. Was the multiyear maintenance investment plan prepared accurately based on the worldwide practice?

As mentioned in Section 4.9, the estimated figures presented in the multi-year plan are viewed as unusual since the estimates are not with respect to the type of works covered and do not include winter operation maintenance, emergency works and security.

9. Did the contractor communicate effectively with MoPW? If not, how can future contractors better communicate with the Ministry?

The evaluation team feels that communication between the Contractor and MoPW was lacking as discussed in Section 4.2. A project such as TO14 requires a *true partnership* with the host organization, and the team feels this did not occur. Future interventions of this nature should have a memorandum of understanding between USAID and the host organization identifying the roles and responsibilities of each, including the implementing partner, and clearly defined goals and objectives and indicators to measure outputs.

10. Did LBG/B&V provide a qualitative report and communication with the stakeholders (particularly the US Military (RC-E and RC-S)? Were the reports timely?

Due to the absence of documentation, the evaluation team could not adequately answer this question. The team's attempts to communicate with US military personnel associated with TO14 were unsuccessful.

Program Results

1. How effective was the Training and Capacity Building program (T&CB)? Were T&CB objectives and performance adequate for completion of O&M? If not, provide recommendations for future programming.

As discussed in Section 4.4, a large and complex capacity building program was embedded, but not clearly articulated in TO14. Major dimensions of capacity building in TO14 were organizational and institutional development, organizational change and integration processes, strengthening technical, management and administrative functions, and strengthening personnel capabilities of the RMU and MoPW in Kabul, and provincial staff and the subcontractors. A further priority element was introducing PBC Contracting and a Multi-Year Road Investment Plan.

A significant lack of preparation for and attention to capacity building was evident from the start of the project. There was no clear definition of the broad processes involved in capacity building. The lack of work plans or activities had been identified as the project started. Further, a needs assessment had not been planned for or conducted of the various organizations with which the project would work. This resulted in limited information

about the current status and needs of the organizations, personnel capabilities and technical skills and required equipment. The information required to develop a meaningful and feasible capacity building program was thus missing.

The absence of a capacity building plan was recognized by USAID before the signing of TO14. USAID and LBG/B&V agreed that a plan for the primary project objective would be prepared within the first sixty days. Coupled with the lack of a plan was that capacity building deliverables, other than manuals, were in the Task Order or available at the start of the project.

The capacity building efforts that emerged as TO14 started focused principally on training activities for the RMU and minimal training activities available for MoPW staff and subcontractors. This program of activities thus ignored significant organizational issues such as that illustrated by a director of a provincial MoPW office stating that before he could start work, even approved work, it was necessary to again obtain permission from his headquarters.

The lack of a qualified capacity building specialist among the senior project management from the beginning of the project undoubtedly contributed to a slow beginning for the capacity building efforts.

Overall, the project provided a limited amount of time in which to achieve, under difficult circumstances the even modest capacity building results. Given the time available and the magnitude of the needs, it is unrealistic to expect that the capacity building objectives could be attained.

The project's reports include numerous training activities conducted. However, it is difficult to determine the rationale or the results of the activities. The project did conduct some training tests and scores were reported. However, it is not clear what was being tested and whether there was any performance change as a result of the training.

At the conclusion of the project the RMU staff dispersed. Many of the staff recruited from MoPW apparently returned to the Ministry. None of the other former staff were available for interviews. MoPW provincial engineers continued in their positions and reported that the equipment provided was still in their office and was used. The sub-contractors interviewed did not express any benefit from the limited training they received. The capacity of private sector contractors to work under contracting in some form of public private partnership was not strengthened.

2. Did the O&M program meet the original deliverables laid out in the SOW? Did the RMU adequately complete all tasks listed in the SOW?

The evaluation team lacked sufficient documentation to adequately address this question. However during the project's life cycle the O&M program was successful in road related

O&M. The RMU existed as LBG/B&V's TO14 project office and was closed at the end of the project.

3. What was the ratio between the actual maintenance cost and the management cost? Was this ratio within the normal range of the management practices?

Due to the absence of documentation, the evaluation term could not perform an analysis of costs.

4. Were the designed O&M Levels of Service adequate to preserve the road network to a satisfactory level? If not, provide reasonable estimates for future programming.

As discussed in Section 4.7, standards were not clearly defined or described in sub-contracts. The evaluation team's access to limited documentation prevents a reasonable estimate for future programming.

5. Does the RMU now have the ability to solicit, manage, and oversee performance based contracts? If not, what are the weak areas that must be corrected in order to achieve those objectives?

As mentioned in Section 4.3, the RMU closed with the TO14 project's closure. As such it no longer has any capabilities to manage PBC.

6. What was the total cost per kilometer of maintained roads? How does this figure compare with other similarly developed countries?

Due to the absence of documentation, the evaluation term could not perform an analysis of costs.