Rural Feeder Roads Improvement Program (RFRIP)

Contract (A&E IQC) No. EDH-I-00-08-00026-00

Task Order No: AID-696-TO-11-00001

Performance Monitoring and Evaluation Plan



Submitted to

USAID FROM THE AMERICAN PEOPLE | RWANDA

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Submitted by

PARSONS

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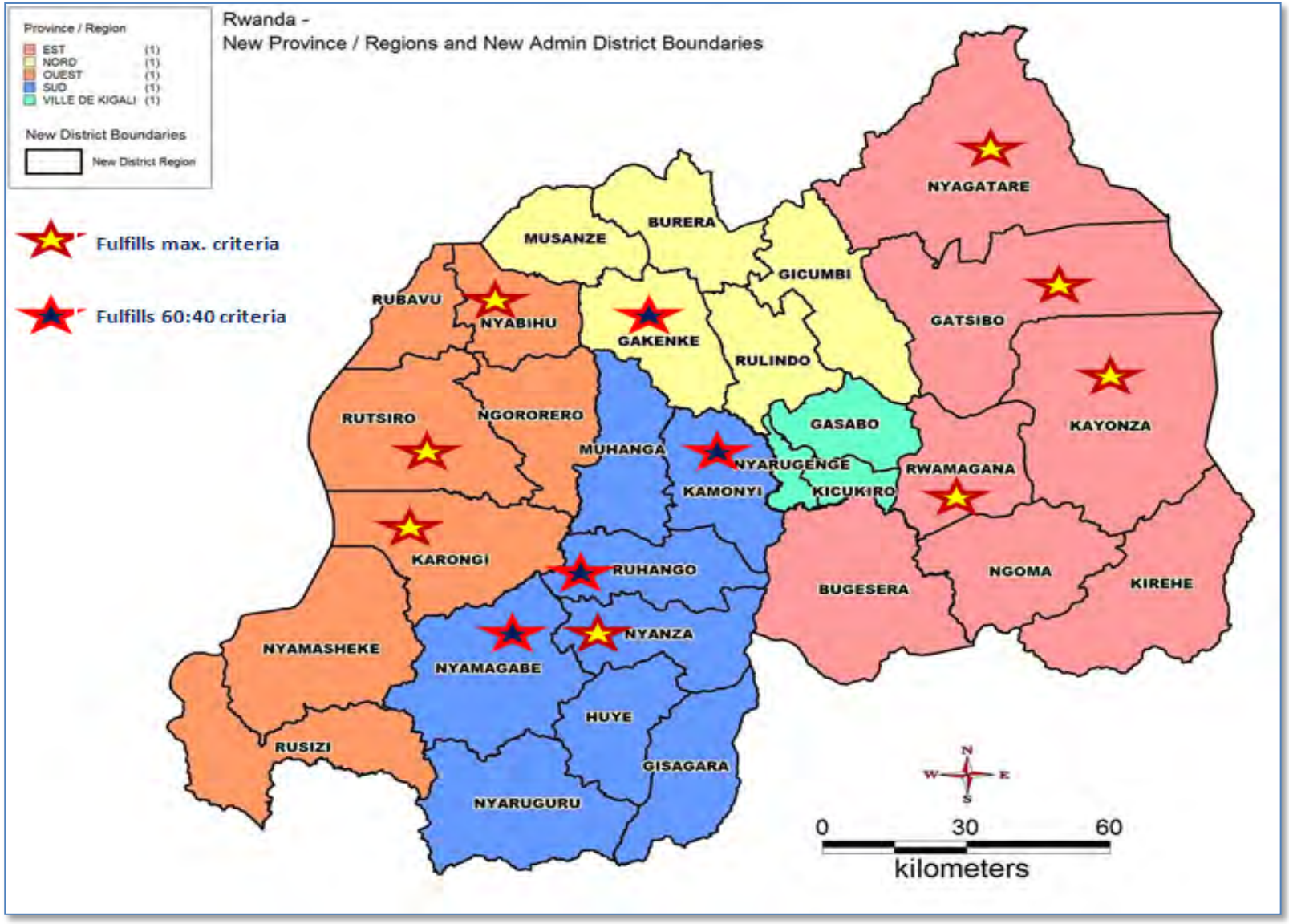

Acronyms

Acronym	Description
A&E	Architect-Engineer
ARDR	Association Rwandese pour le Development Rural
BEO	Bureau Environmental Officer
CASE	Competitive Agricultural Systems and Enterprises
CCC	Construction Consultancy Company
CDF	Common Development Fund
CEPLG	Economic Community of the Great Lakes Region
CGIS-NUR	Centre for Geographic Information Systems and Remote Sensing of the National University of Rwanda
CIP	Crop Intensification Program
CM	Construction Management
COP	Chief of Party
COTR	Contracting Officer's Technical Representative
CPM	Critical Path Method
CS	Construction Supervision
DBR	Design Basis Report
DCOP	Deputy Chief of Party
EA	Environmental Assessment
EG	Economic Growth
EIA	Environmental Impact Assessment
EMMP	Environmental Mitigation and Monitoring Plan
ENCAP	Environmental Capacity Program
ERRP	Emergency Road Repair Project
ETOA	Environmental Threats and Opportunities Analysis
EVMS	Earned Value Management System
FARA	Fixed Amount Reimbursement Agreement
FCPA	Foreign Corrupt Practices Act
FIDIC	Fédération Internationale des Ingénieurs-Conseils
FtF	Feed the Future
GDP	Gross Domestic Product
GE&SS	Green Engineering and Support Services
GIS	Geospatial Information Services
GoR	Government of Rwanda
GPS	Global Positioning System
HIMO	Haute Intensite de Main d'Oeuvre
HQ	Headquarters
IEE	Initial Environmental Examination
IESC	International Executive Services Corps
IFDC	International Fertilizer Development Center
IQC	Indefinite Quantity Contract
IRAP	Integrated Rural Accessibility Planning
IRG	International Resources Group
ISFM	Integrated Soil Fertility Management
LED	Light Emitting Diode
LOE	Level of Effort
LWH	Land Husbandry, Water Harvesting, and Hillside Irrigation Project
M&E	Monitoring & Evaluation
MDTF	Multi-Donor Trust Fund
MEO	Mission Environment Officer
MFI	Micro-finance Institutions
MINAGRI	Ministry of Agriculture and Animal Resources
MINALOC	Ministry of Local Government

Acronym	Description
MINICOM	Ministry of Trade and Industry
MININFRA	Ministry of Infrastructure
MIS	Management Information System
NETREP	National Emergency Transport Rehabilitation Project
NGO	Non-governmental Organization
NICRA	Negotiated Indirect Cost Rate
NTP	Notice to Proceed
O&M	Operations & Maintenance
ParsonsU	Parsons University
PDL-HIMO	Programme de Développement Local à Haute Intensité de Main d'Oeuvre
PE	Professional Engineer
PEA	Programmatic Environmental Assessment
PHHS	Post-Harvesting, Handling and Storage Program
PMP	Performance Monitoring Plan
PMR	Performance Monitoring Report
QA	Quality Assurance
QA/QC	Quality Assurance and Quality Control
QC	Quality Control
RADD	Rwanda Agro-Dealer Development
RAP	Rural Accessibility Planning
RED	Roads Economic Decisions Model
RF	Rural Feeder
RFR	Rural Feeder Road
RFRIP	Rural Feeder Roads Improvement Program
RFTOP	Request for Task Order Proposal
RICA	Roads Inventory and Condition Assessment
RTDA	Rwanda Transportation Development Agency
SOGIS	Société Générale d'Ingénierie et Services
SOW	Scope of Work
STTA	Short Term Technical Assistance
TIG	Travail d'Interet General
TOR	Terms of Reference
ToT	Training of Trainer
USAID	United States Agency for International Development
WBS	Work Breakdown Structure

Fig 1: Storm water run-off on a feeder road in Nyagatare District, Eastern Province

Performance Monitoring & Evaluation Plan

1. Background

US AID/Rwanda intends to implement a Rural Feeder Roads Improvement Program (RFRIP) to support the objectives of President Obama's Feed the Future initiative in Rwanda.

USAID/Rwanda's Feed the Future activities promote broad-based agriculture and sustainable economic growth. The road infrastructure program aims at enhancing market access and reducing transport costs for farm inputs and products with the goal of increasing the country's competitiveness in the domestic and regional trades for staples.

RFRIP will be implemented through a series of Fixed Amount Reimbursement Agreements (FARAs) between USAID and district beneficiaries, which will be assisted by Parsons. Parsons will be responsible for overall management of RFRIP, completion of a roads inventory and condition assessment (RICA), technical designs and capacity building of district governments. To further strengthen local capacity, Parsons will work with local engineering firms and consultants in a teaming or subcontracting arrangement to the greatest extent possible to complete the RICA and technical designs.

The program will be implemented over a five (5) year period with at least 80% of the total USAID investment channeled to districts using FARAs for construction/rehabilitation, supervision of work and maintenance of rural feeder roads rehabilitated. Besides access road improvements, depending on specific district needs, the program will contribute to connecting critical secondary roads, improving village streets and non-motorized rural transport. The exact location of the above-proposed improvements will be known through a rural feeder (RF) RICA and will be validated through the involvement of District/Sector authorities, engineers, agronomists and local communities. While the construction/rehabilitation of RF roads will require the recruitment of local construction firms, other types of access improvements will be implemented by the communities using labor-intensive approaches.

2. Performance Monitoring Plan

2.1 Purpose of the Performance Monitoring Plan

The purpose of a PMP is to establish the analytical framework to measure the impact of RFRIP with the goal of quantifying progress in meeting the stated objectives. It is critical to monitor RFRIP progress given USAID's anticipated investment in GOR's rural feeder roads sector over the 5 year Program. A well designed PMP will allow USAID to accurately gauge impact of the activities implemented by the program. The RFRIP Monitoring and Evaluation (M&E) system is tailored to address the specific reporting requirements of the RFRIP and meets the needs of USAID/Rwanda's Performance Monitoring Plan (PMP).

The COP has worked closely with USAID and the USAID/MEMS project to develop the overall project indicators in line with the Mission's PMP and refine the core milestones for the project. The M&E system will as much as

possible automate the tracking of the PMP and its related indicators, and greatly facilitate routine project reporting and ad hoc information requests. The PMP will use benchmarks for results reporting and those consistent with the Mission's overall PMP will be identified during project start-up. The details of the PMP were elaborated upon at project start-up during the final work-planning phase and are hereby submitted to USAID for approval.

Using the outcomes of the data and findings in the PMP, USAID may alter project implementation to maximize the program's impacts.

2.2 Main Elements of the Performance Monitoring Plan

All PMPs must contain two elements: good performance indicators, and good methods to collect the data on the indicators. First, the Plan must provide a well defined list of performance indicators that can be used to quantify the benefits directly attributable to a project's implementation. Performance indicators must be selected to provide effective measurements of a project's impacts throughout its life cycle. The performance indicators must be clearly defined and mapped to the objectives established during the project's development phase. USAID, through its ADS 203.3.4.2, establishes 7 criteria for characterizing a good performance indicator[1]:

- Direct
- Objective
- Adequate
- Quantitative where possible
- Disaggregated where appropriate
- Practical
- Reliable

A standard PMP usually includes two basic types of performance indicators:

- Standard Element Indicators
- Outcome Performance Indicators

Standard Element indicators provide a means for measuring how a project is attaining its immediate objectives for implementing the contract. For example, how many local contractors are used or how many local workers are hired during the construction phase. Also of interest would be the cost per linear kilometer of road constructed. Standard Element Indicators hence, measure the progress and effectiveness the project implementation. Information to support standard element (achievement) indicators is typically generated in conjunction with project reporting requirements.

Outcome Performance indicators, in contrast, provide measurements on how a project affects targeted populations. Accordingly, an Outcome Performance Indicator would measure how the constructed kilometers of road and training have affected the socioeconomic status of the targeted populations. Unlike, Standard

[1] USAID 2004. Functional Series 200- ADS Programming Policy 203, Assessing and Learning,

Element Indicators, data to support Outcome Performance Indicators must usually be collected through surveys, informant interviews and from applicable host country national or local government units.

The indicators for the RFRIP are described in detail in Annex I.

The second required element of the PMP delineates the roles and responsibilities for collecting data and specifies the frequency and timing for collecting and analyzing those data. Hence, the PMP serves as a critical tool for planning, managing, and documenting data collection.[2] To ensure consistency in implementation, the PMP must establish the frequency of data collection, the methods of data collection, and responsibility for implementing the plan, including reporting requirements.

2.3 RFRIP Performance Monitoring Plan

Team Parsons has developed a reporting format that simplifies reporting and provides a highly transparent vehicle for transmitting results to strategic audiences and project stakeholders, such as district government partners. Our staff will continue to work with USAID to refine the PMP/M&E system on an on-going basis. Where feasible and necessary, baseline surveys will be carried out in association with each district's set of RFRIP technical and capacity building activities to define a 'before' scenario against which we can later measure project progress, results and impacts.

Our reporting framework will provide layered information sets (in graphic and tabular format) to USAID and district level stakeholders to see information in a user friendly, visual format. The first layer will be presented via graphs and/or tables, composing a 'dashboard' of information that allows managers to rapidly gauge the program's progress against objectives. This dashboard will give a snapshot of indicator results and will be accompanied by concise text on progress, issues, challenges, and solutions. The RFRIP M&E system will be integrated with Parsons' standard project controls system that assures efficient project and financial management, and will be used to track the diverse work activities and document their physical and financial performance against a baseline schedule. We will train district government staff to participate in the data collection and management of the M&E system and the PMP reporting. This will facilitate each district's learning and application of our M&E tools and methods to their future projects and activities.

The RFRIP M&E system will incorporate best practices in information gathering and processing and a cost-effective, participatory approach to measure project results at the output, outcome, and impact levels. The collection and reporting of information at all three results levels will adhere to the monthly and quarterly reporting requirements (PMR) required by USAID/Rwanda for RFRIP and will be done so that they satisfy USAID standards related to data validity, integrity, precision, reliability, and timeliness (ADS 203.3.5 Data Quality). M&E design will be guided at all times by 'best practice' in M&E, subject to approved resource and field modifications or constraints.

The M&E system will be designed to provide credible evidence on RFRIP's effectiveness (achievement of performance targets), and impact (achievement of project strategic objectives). We will integrate gender and disaggregate the results by gender where possible. The project M&E team will consult closely with stakeholders and other recognized experts on gender in Rwanda for guidance on how to incorporate these perspectives into

[2] USAID 1996. *Performance Monitoring and Evaluation TIPS*, USAID Center for Development and Evaluation.

the M&E design and implementation. Finally, the RFRIP M&E system will consistently emphasize data collection and analysis that contribute to achievement of durability and replication of results at larger scales.

Team Parsons routinely uses performance monitoring as a tool in its adaptive management approach to project implementation in which the monthly and quarterly results are discussed and analyzed with counterparts to identify potential course corrections and changes in approach or sequencing. This will also be the case for RFRIP. We will include standard and innovative design features to enable all members of Team Parsons to monitor project results on an ongoing basis, incorporate results information into management planning and decision-making, and provide USAID Rwanda with timely and useful information on project results.

Team Parsons will apply a system that can aggregate and analyze a wide range of data from satellites, survey, and field level without requiring data intensive layer transformations. Team Parsons' experts in local and international agricultural development, natural resources management, and agro-climatology in addition to our strong local and international team of road engineers and planners, will work with the M&E specialist to develop a data collection/management methodology for the project so that GIS technology can be integrated into all M&E activities. The information generated will be easily accessed on a web-based platform and configured so that users can make specialized queries tailored to their needs. Once data are collected and entered in the system, they will be seamlessly integrated with existing data. Where Internet connections are not available, data can be synced on a computer that does have a connection and then transferred to the computer without a connection.

The M&E team is responsible for the day-to-day operation of the RFRIP M&E system. The M&E team will work closely with USAID/Rwanda and implementing partners to collect, analyze, disseminate, and manage performance data. Internally, the M&E team will facilitate a process of information collection, dissemination, learning, and action. The capacities of participating district governments will be assessed and the M&E will be integrated with their ongoing data management systems, including the RFRIP's GIS, to ensure sustainability. In addition to collecting data on project activities, we will train our staff and district staff on how to collect data that is geo-referenced and time stamped using data syncing GPS or cell phone survey technology, such as Datadyne or Voxiva. Such data will facilitate ease of analysis and will allow us to map and compare different types of road condition data, environmental data or data from any other source relevant to RFRIP. Specific data of this type will strengthen the managerial and M&E capacity of our team and implementing partners.

Below we present our comprehensive and extensive list of indicators referred to explicitly or implicitly in the RFRIP RFP, together with reporting frequency and targets categories.

This PMP and associated M&E system will be reviewed annually to ensure all the elements of success are being included and accurately tracked.

3 SCOPE OF WORK

The Contractor will provide engineering services in support of the planning, design and implementation of a rural road rehabilitation and construction program in 10 to 12 districts of Rwanda. The anticipated total value of the program (engineering services and road works) is $40-50 million over a five-year implementation period. USAID anticipates that at least 80% of its investment will be channeled to districts using FARAs for

construction/rehabilitation supervision of work and maintenance of rural feeder roads rehabilitated, while the remaining 20% will finance this Statement of Work.

The program will be implemented in two phases of approximately equal value. The first phase of the program will be preceded by a detailed roads inventory and facilitated consultative process to identify priority road sections requiring construction or rehabilitation. Once priority roads are identified in selected districts, the Contractor will begin preparation of technical designs (drawings, specifications and other bid documents) for select priority roads. The Contractor will assist district governments in using the design packages to procure local contractors for construction and construction supervision. Throughout the construction phase, various layers of supervision will be needed. The district governments will hire local supervision contractors to oversee the day-to-day implementation of road projects to ensure that construction contractors adhere to the design specifications. These construction supervision contractors will work under the supervision of district engineers, who will provide general oversight of the various roads projects in their districts. The A&E Contractor will both strengthen the capacity of district governments to perform general oversight and support USAID in providing oversight of the FARAs to evaluate progress and completion of works. Once the first phase of construction is well underway, USAID anticipates launching a second phase of rural road rehabilitation and construction in selected districts beginning with design and continuing through support to district governments for procurement, construction and construction supervision.

The Contractor will approach the overall program implementation with an implementation plan that emphasizes capacity building opportunities and results throughout the design, procurement and construction of roads. At the end of the program, it is expected that district governments, Rwandan engineering consultants and local construction contractors and communities will have significantly stronger capacity to implement and maintain similar road works.

Tasks to be implemented by the Contractor are detailed below.

3.1 Task 1 - Roads Inventory, Prioritization and Planning

At the outset of the rural roads program, the Contractor will initiate a comprehensive inventory of the transportation network in each of the priority districts in close cooperation with District government engineers and public works staff. The inventory will include basic information on alignment, surfacing, road condition and other relevant information critical to prioritizing road segments for rehabilitation. The information will be organized in a Geographic Information System (GIS) to be maintained at the district government offices. The resulting inventory is not expected to be a detailed kilometer-by-kilometer survey of the road network, but rather a general planning tool developed from field observations and information available at the district offices. Wherever possible, Rwandan engineers and engineering firms should be engaged in the performance of the roads inventory.

Upon completion of the inventory, the Contractor will engage each district in a facilitated exercise to identify priority road segments for rehabilitation and/or construction. The prioritization of road segments will be performed to identify those improvements to the transportation network that will have the greatest impact on agricultural development, market access and the local economy. The Contractor and the district government

will work with local community leaders to develop the appropriate criteria to be used for quantitative prioritization of road segments.

The Contractor will work with the district government to apply prioritization criteria and identify priority road segments in each district with a total anticipated rehabilitation cost of approximately $40 million in all districts. The results of the prioritization will be presented to district community leaders by district government officials supported by the Contractor. This consultative meeting will serve to validate prioritization results.

While every attempt should be made to meet the established priorities of each district, USAID recommends that the first phase of road design and construction focus on relatively simple segments (avoiding bridges, complex interchanges, extensive water crossings, etc.) to allow the program team to focus on administrative and capacity building aspects of the program. It is anticipated that the second phase of design and construction may include segments of greater technical complexity.

It is expected that the prioritization process will lead to the identification of priority road segments in each district to be constructed in both phase 1 and phase 2 of design and construction.

3.2 Task 2 - Preparation of Technical Designs

Pending approval of the priority road segments in each district by the district government and USAID, the Contractor will prepare technical design packages for each segment. It is anticipated that the first phase of design will be limited to approximately $20 million of priority road work in all districts. Where possible, priority road segments with an anticipated high level of implementation complexity will be considered in the second phase of design and construction.

Technical design packages resulting from this task will consist of both drawings and written specifications. The selected design shall be consistent with Rwandan tertiary roadway construction standards and will incorporate locally available materials and construction practices to the maximum extent possible. The level of detail provided in the technical design packages shall be sufficient for fixed-price bidding and will aim to minimize change management during construction. To limit the supervisory and administrative burden on the program, the Contractor may consider limiting the number of segments/design packages under the construction budget determined for each district. Wherever possible, Rwandan engineers and engineering firms will be engaged in the technical design and design management. The Contractor team and district government will also work closely together to prepare a scope of work for construction supervision to be contracted by the district government under the Fixed Amount Reimbursable Agreement with USAID. In addition to the preparation of technical designs and construction supervision scope of work, the Contractor shall prepare a detailed cost estimate of each design package. The cost estimate shall be based on a shared understanding between the Contractor and district government of the inputs (e.g., labor, materials, etc.) necessary to undertake the road works. The Contractor shall then independently price the inputs to serve as USAID's cost basis for the Fixed Amount Reimbursable Agreement (FARA) between USAID and the district government. It is expected that the district government will price the inputs independently to develop its own cost estimate. The Contractor will be required to provide additional support to USAID in the preparation of the FARAs, specifically the organization

and partitioning of each agreement into discrete elements that can be evaluated and accepted for progress payment.

The Contractor is also requested to prepare all necessary environmental compliance documentation including an initial Programmatic Environmental Assessment (PEA) and Environmental Mitigation and Monitoring Plan (EMMP) covering all the road segments to be rehabilitated (Refer to Section 3 below.)

3.3 Task 3 - Procurement Support

Upon approval of the technical design packages, the Contractor shall work closely with each district government to support the procurement of local construction and supervision services as defined under the FARAs. Separate procurements will be performed for each service.

The Contractor will work to strengthen existing district government procurement systems with an aim of achieving the best value for the investment. In the implementation of this task, the Contractor would be asked to assist with: the preparation of additional bidding documents to accompany the technical design packages; the response to questions that arise during bidding; the development of the evaluation process and evaluation criteria; and, the overall organization of the sealed bid procurement processes within the district government

Under no circumstances will the Contractor directly participate in the evaluation of bids received. However, the provision of technical guidance and support to the bidding process are acceptable activities under this task.

3.4 Task 4 - Construction Supervision

The immediate supervision of construction works under the rural roads program will be performed by local engineering and/or construction management consultants procured under the terms of the Fixed Amount Reimbursable Agreements between USAID and the district governments. Under this Task Order, the Contractor will be responsible for providing overall guidance and supervision of construction activities under the program and quality control

The Contractor will develop a construction guidance and supervision program that includes periodic monitoring of construction progress in the field and review of on-site supervision under contract to the district government. In addition, the Contractor will plan and implement a quality control program that helps assure that works are completed per design specifications and provides USAID with the necessary information to process progress payments according to each FARA. The guidance and supervision program will include field inspection, materials validation and testing (as appropriate), quantity measurement (as necessary) and review of supervision records and inspection reports prepared by the district government's construction supervision consultant.

The Contractor's guidance and supervision program is not intended to be redundant to the construction supervision contracted by the district government. Rather the primary purpose of the Contractor guidance and supervision program under this task order is to support the district government in their management of construction activities. Consistent with the overall approach to this Task Order, the Contractor is requested to identify and capitalize on opportunities to build capacity of district government staff and local engineering/construction management consultants. A secondary purpose of this activity is to support USAID's

monitoring and acceptance of works completed under the FARAs.

3.5 Task 5 - District Government Technical and Financial Capacity Building

In parallel to the engineering services activities (design, procurement support and construction s guidance and supervision), the Contractor will design and implement a targeted technical and financial capacity building program to strengthen the capability, effectiveness and efficiency of district government counterparts in preparing, planning, implementing and maintaining similar rural infrastructure programs.

The Contractor will perform a capacity needs assessment at the outset of this task examining the district government as a whole, but specifically targeting relevant engineering, project management and procurement offices and staff within the government. The needs assessment will envision and articulate the expected roles of the district government in the planning, design, implementation and maintenance of public infrastructure and identify gaps in the current institutional capability that serve as primary obstacles for the district government in achieving adequate service provision. The needs assessment will look at gaps and obstacles in at least four (4) key areas: staffing, skills and capabilities, equipment and financial. While it is expected that the majority of capacity building activities will be common across all of the districts where the rural roads program is being implemented, the capacity needs assessment should be sensitive to unique approaches and conditions of specific district governments and how they may affect capacity building activities. Related specifically to the assessment of financial and procurement capacity of each district government, the Contractor will work closely with the USAID/Rwanda Financial Management Office to ensure the assessment supports evaluation requirements needed prior to entering into a FARA.

On the basis of the needs assessment, the Contractor shall develop a capacity building plan to be carried out in parallel to the program engineering and construction activities. This plan shall maximize experiential learning and on-the-job training as much as possible, but shall also consider formal classroom training for skill building, software and hardware support, management training and team building activities.

In addition to the essential engineering and procurement capacity building, the Contractor shall examine the need for building capacity to perform community outreach related to the planning, design and implementation of community infrastructure, as well as environmental compliance. These critical aspects of rural infrastructure construction will be a focal point of the capacity building program and the Contractor shall recommend and implement steps to help ensure these district government functions are established and solidified within the government organization.

The capacity building program shall be designed to meet performance indicators established early in the program. Both output and outcome indicators will be used to help evaluate the impact of capacity building activities on the functionality of each district government. Implementation of the program in two phases of construction will allow for a comparative analysis of district government capacity and capability through monitoring the performance of district governments in each phase of the project.

Activities to be carried out under this task will be performed in addition to informal capacity building performed incidentally by the contractor through the regular course of program implementation.

ANNEX

Indicator Sheets

ANNEXES

ELEMENT:	**Program Area 4.5 Agriculture** **FTF – IR 4: Increased employment opportunities in targeted value chains**
INDICATOR TITLE: 4.5-2 Number of jobs attributed to FTF implementation	
DEFINITION: Jobs are all types of employment opportunities **created** during the reporting year in agriculture-related enterprises (including paid on-farm/fishery employment). Jobs lasting less than one month are not counted in order to emphasize those jobs that provide more stability through length. Jobs should be converted to full-time equivalents. Thus a job that lasts 4 months should be counted as 1/3 FTE. Number of hours worked per day or per week is not established as work hours may vary greatly. —Attributed to FTF implementation includes farming and non-farm jobs where FTF investments were intentional in assisting in any way to expand (or contract) jobs and where a program objective of the FTF investment was job creation.	
RATIONALE: This is a direct measure of improved livelihoods, as it measures creation of employment and related income. However, FTF is concerned about creation of sustainable employment, not temporary employment (of short duration such as a period of less than one month).	
UNIT: FTEs	*DISAGGREGATE BY:* Sex of job-holder (*if one FTE is split by a male and a female, then it would be 0.5 FTE for females and 0.5 FTE for males)*
TYPE: Outcome	*DIRECTION OF CHANGE:* Higher is better
DATA SOURCE: Parsons records	
MEASUREMENT NOTES: □ LEVEL of COLLECTION: Project-level; within the scope of the USG project □ WHO COLLECTS DATA FOR THIS INDICATOR: Parsons □ HOW SHOULD IT BE COLLECTED: Observation, project records, etc. □ FREQUENCY of COLLECTION: Annually reported	

BASELINE, TARGETS & ACTUALS

Fiscal Year	Target Value	Actual Value	Notes
Baseline Year (2011)		0	
2012	10		Local design engineers & technicians
2013	1000		Road rehabilitation starts
2014	1500		
2015			
2016			

ELEMENT: **FTF – IR 2: Expanding Markets & Trade / Sub IR 2.3: Improved market efficiency**
EG 4.3 - TRANSPORT SERVICES
IR 7.2 – Improved Access to Local, Regional and International Markets
Sub IR 7.2.1 - Rural Infrastructure Improved

INDICATOR TITLE: **KILOMETERS OF TRANSPORTATION INFRASTRUCTURE CONSTRUCTED OR REPAIRED THROUGH USG ASSISTANCE**

DEFINITION:
The number of kilometers feeder roads constructed or repaired through USG assistance

RATIONALE:
Measures the basic transportation infrastructure that has been assisted by USG programs.

UNIT:	*DISAGGREGATE BY:*
Kilometers	None
TYPE: OUTPUT/OUTCOME	*DIRECTION OF CHANGE:*
Output	Higher=better

DATA SOURCE:
Parsons, missions

MEASUREMENT NOTES:

☐ LEVEL of COLLECTION: Project level; within the scope of the USG project
☐ WHO COLLECTS DATA FOR THIS INDICATOR: Parsons
☐ HOW SHOULD IT BE COLLECTED: Observation, project records, etc.
☐ FREQUENCY of COLLECTION: Annually reported

BASELINE, TARGETS & ACTUALS

Fiscal Year	Target Value	Actual Value	Notes
Baseline Year (2011)		0	RICA field work & design only
2012	0		RICA field work & design only
2013	100		
2014	300		
2015			
2016			

ELEMENT: **FTF – IR 1: Improve agricultural productivity / Sub IR 1.2: Enhanced Technology Development, Dissemination, Management and Innovation**
EG 4.3 - TRANSPORT SERVICES
IR 7.2 – Improved Access to Local, Regional and International Markets
Sub IR 7.2.1 - Rural Infrastructure Improved

INDICATOR TITLE: **NUMBER OF PEOPLE BENEFITING FROM USG SPONSORED TRANSPORTATION INFRASTRUCTURE PROJECTS**

DEFINITION:

Estimation of the number of people who will benefit from using the transportation infrastructure constructed. For example, as the result of a new road, 1000 people can travel to local markets to purchase goods and 1000 other people can now easily access to the neighboring village's services. Therefore, 2000 people are benefiting from the USG sponsored transportation infrastructure.

RATIONALE:

Measures the effectiveness of the basic transportation infrastructure sponsored by the USG

UNIT:	*DISAGGREGATE BY:*
Number of people (in thousands)	None
TYPE: OUTPUT/OUTCOME	*DIRECTION OF CHANGE:*
Outcome	Higher = better

DATA SOURCE:

Parsons, mission, host country government

MEASUREMENT NOTES:

☐ LEVEL of COLLECTION: Project level; within the scope of the USG project
☐ WHO COLLECTS DATA FOR THIS INDICATOR: Parsons
☐ HOW SHOULD IT BE COLLECTED: Observation, project records, etc.
☐ FREQUENCY of COLLECTION: Annually reported

BASELINE, TARGETS & ACTUALS

Fiscal Year	Target Value	Actual Value	Notes
Baseline Year (2011)		0	Data for all sectors
2012	0		
2013	1,000		
2014	1,500		
2015			
2016			

ELEMENT: **FTF – IR 1 Improved Agricultural Productivity / Sub IR 1.1 Enhanced human and institutional capacity development for increased sustainable agriculture sector productivity**
EG 4.3 - TRANSPORT SERVICES
IR 7.2 – Improved Access to Local, Regional and International Markets
Sub IR 7.2.1 - Rural Infrastructure Improved

INDICATOR TITLE: **NUMBER OF PRIVATE INSTITUTIONS BENEFITING FROM USG SPONSORED TRANSPORTATION INFRASTRUCTURE PROJECTS**

DEFINITION:

Estimation of the number of private institutions that will benefit from using the transportation infrastructure constructed. For example, 1000 business now can transport their local goods to market, therefore, 1000 private institutions are benefiting from the USG sponsored transportation infrastructure.

RATIONALE:

Measure the effectiveness of the basic transportation infrastructure sponsored by the USG

UNIT:	*DISAGGREGATE BY:*
Number of institutions	Task No.
TYPE: OUTPUT/OUTCOME	*DIRECTION OF CHANGE:*
Outcome	Higher = better

DATA SOURCE:

Parsons, missions, host country government

MEASUREMENT NOTES:

☐ LEVEL of COLLECTION: Project level; within the scope of the USG project
☐ WHO COLLECTS DATA FOR THIS INDICATOR: Parsons
☐ HOW SHOULD IT BE COLLECTED: Observation, project records, etc.
☐ FREQUENCY of COLLECTION: Annually reported

BASELINE, TARGETS & ACTUALS

Fiscal Year	Target Value	Actual Value	Notes
Baseline Year (2011)		0	
2012	0		
2013	100		
2014	200		
2015			
2016			

ELEMENT: **EG 4.3 - TRANSPORT SERVICES**
IR 7.2 – Improved Access to Local, Regional and International Markets
Sub IR 7.2.1 - Rural Infrastructure Improved

INDICATOR TITLE: **HAS THE GOVERNMENT ADOPTED IMPROVED TRANSPORTATION RELATED POLICES OR PLANS THIS YEAR AS A RESULT OF USG ASSISTANCE**

DEFINITION:
As a result of USG assistance—such as drafting policies, providing analytical reports to the government, assisting in policy implementation, transportation analysis, advocacy, and etc—has the host government adopted improved transportation related policies or plans

RATIONALE:
Measure the host country's commitment to basic transportation infrastructure.

UNIT:	*DISAGGREGATE BY:*
Yes/ No	None
TYPE: OUTPUT/OUTCOME	*DIRECTION OF CHANGE:*
Outcome	Higher = better

DATA SOURCE:
Parsons, missions, host country government

MEASUREMENT NOTES:

☐ LEVEL of COLLECTION: Project level; those affected by USG project scope
☐ WHO COLLECTS DATA FOR THIS INDICATOR Parsons
☐ HOW SHOULD IT BE COLLECTED: Project records
☐ FREQUENCY of COLLECTION: annually reported

BASELINE, TARGETS & ACTUALS

Fiscal Year	Target Value	Actual Value	Notes
Baseline Year (2011)		0	
2012	3		Interim RFR design standards, PEA & Construction Supervision Guidance Document
2013	2		RICA protocol, Road prioritization guidance document
2014	0		
2015			
2016			

ELEMENT: **EG 4.3 - TRANSPORT SERVICES**
IR 7.2 – Improved Access to Local, Regional and International Markets
Sub IR 7.2.1 - Rural Infrastructure Improved

INDICATOR TITLE: **NUMBER OF PEOPLE RECEIVING USG SUPPORTED TRAINING IN TRANSPORTATION TECHNICAL & MANAGEMENT FIELDS**

DEFINITION:
Number of people that are provide with USG supported training (formal coursework, on-the-job, seminars) on technical areas in the transportation sector

RATIONALE:
Indicator of capacity building to ensure future ability to competently provide transport services

UNIT:	*DISAGGREGATE BY:*
Number of people	Sex, Task No.
TYPE: OUTPUT/OUTCOME	*DIRECTION OF CHANGE:*
Output	Higher = better

DATA SOURCE:
Parsons

MEASUREMENT NOTES:

☐ LEVEL of COLLECTION: Project level; within the scope of the USG project
☐ WHO COLLECTS DATA FOR THIS INDICATOR? Parsons
☐ HOW SHOULD IT BE COLLECTED: Observation, project records, etc.
☐ FREQUENCY of COLLECTION: Annually reported

BASELINE, TARGETS & ACTUALS

Fiscal Year	Target Value	Actual Value	Notes
Baseline Year (2011)		0	Training sessions in RICA, GIS, Bidding/contracting, road maintenance
2012	50		
2013	120		
2014	100		
2015			
2016			

ELEMENT: **EG 4.3 - TRANSPORT SERVICES**

IR 7.2 – Improved Access to Local, Regional and International Markets

Sub IR 7.2.1 - Rural Infrastructure Improved

INDICATOR TITLE: **KM OF ROADS MAINTAINED PROPERLY AT THE RATE OF $ PER KM, AS A RESULT OF THE USG ASSISTANCE.**

DEFINITION:

It is important to track the total amount of money provided to properly maintain road infrastructure. More significant, however, is the number of kilometers that are properly maintained. A base rate to assure proper maintenance can be determined during the design phase or later and this will serve as the baseline figure.

RATIONALE:

The amount of money used to properly maintain transport infrastructure is a fair measure of the ability of the host government to guarantee maximum benefit from the transport investment.

UNIT:	*DISAGGREGATE BY:*
KM	None
TYPE: OUTPUT/OUTCOME	*DIRECTION OF CHANGE:*
Output	Higher=Better

DATA SOURCE:

Implementing Mechanism

MEASUREMENT NOTES:

☐ LEVEL of COLLECTION: Project level; within the scope of the USG project
☐ WHO COLLECTS DATA FOR THIS INDICATOR? Parsons
☐ HOW SHOULD IT BE COLLECTED: Observation, project records, etc.
☐ FREQUENCY of COLLECTION: Annually reported

BASELINE, TARGETS & ACTUALS

Fiscal Year	Target Value	Actual Value	Notes
Baseline Year (2011)		0	
2012	0		
2013	100		Road maintenance begins after construction
2014	300		
2015			
2016			

ELEMENT: **EG 4.3 - TRANSPORT SERVICES**
IR 7.2 – Improved Access to Local, Regional and International Markets
Sub IR 7.2.1 - Rural Infrastructure Improved

INDICATOR TITLE: **NUMBER OF LOCAL CONTRACTORS CAPABLE TO DELIVER $0.5 M ROAD CONSTRUCTION OR MAINTENANCE SERVICES PER ANNUM, AS A RESULT OF USG SUPPORT.**

DEFINITION:
The number of local firms that can manage construction and/or maintenance of the constructed transport infrastructure. $0.5 million is an amount that suggests more than minimal engineering skill and business acumen.

RATIONALE:
The number of local contracting firms capable of delivering $0.5 million in construction or maintenance services is a measure of the strength of the local contracting sector. It also suggests that there will be domestic capability to operate and maintain the road network.

UNIT:	*DISAGGREGATE BY:*
Number of firms	None
TYPE: OUTPUT/OUTCOME	*DIRECTION OF CHANGE:*
Output	Higher=Better

DATA SOURCE:
Local Contracting Association

MEASUREMENT NOTES:

☐ LEVEL of COLLECTION: Project level; within the scope of the USG project
☐ WHO COLLECTS DATA FOR THIS INDICATOR: Parsons
☐ HOW SHOULD IT BE COLLECTED: Observation, project records, etc.
☐ FREQUENCY of COLLECTION: Annually reported

BASELINE, TARGETS & ACTUALS

Fiscal Year	Target Value	Actual Value	Notes
Baseline Year (2011)		0	
2012	0		
2013	4		
2014	8		
2015			
2016			

Custom (Project Specific) Indicators

Task 1 – Roads Inventory & Conditions Assessment (RICA), Prioritization, and Planning

Sub Task or Objective	Performance Indicators and Unit of Measure	Data Source	Reporting Frequency
1.1 - Conduct RICA	(#) Kilometers of U.S. funded roads mapped/ inventoried	Field progress reports	Monthly
	(%) Proportion of district roads inventoried	Field progress reports; District records	Monthly
1.2 - Stakeholder Meetings to Establish District and Community Prioritization Criteria	(#) of community outreach activities & meetings undertaken with participating districts/sectors	Attendance rosters, Meeting minutes, Field progress reports	Monthly

Task 2 – Preparation of Technical Designs

Sub Task or Objective	Performance Indicators and Unit of Measure	Data Source	Reporting Frequency
2.1 - Collaborative Creation of Design Standards	Design standards documents created	Supporting documents, progress reports	Monthly
2.3 - Programmatic Environmental Assessment, PEA & Environmental Mitigation and Monitoring Plan, EMMP	PEA & EMMP finalized	PEA, EMMP, Supporting documents, progress reports	Once

Task 3 – Procurement Support

Sub Task or Objective	Performance Indicators and Unit of Measure	Data Source	Reporting Frequency
3.1 - District Training & General Support on Procurement Processes for Design, Construction, CS, and O&M	(#) training sessions/workshops conducted	Attendance rosters	Monthly
3.2 - Support the Tender Package Preparation, Bidding Process, and Selection Under FARA – Including support to RPPA	Contractor pre-bid sessions/meetings	Tender evaluation reports Attendance rosters	Monthly

Task 4 – Construction Supervision

Sub Task or Objective	Performance Indicators and Unit of Measure	Data Source	Reporting Frequency
4.1 - Construction Guidance and Supervision Program – with On-going Monitoring and Evaluation	(#) of community outreach activities undertaken by participating districts/sectors related to various stages of rural road infrastructure development	Attendance rosters, Field progress reports	Monthly

Sub Task or Objective	Performance Indicators and Unit of Measure	Data Source	Reporting Frequency
4.2 - Training on Supervising CS Contracts under FARA (for Districts)	(#) of workshops and training sessions organized for districts	Attendance rosters, Progress reports	Monthly
4.3 - Training on Program Management/CS and Quality Control and Safety	(#) of workshops and training sessions conducted	Attendance rosters, Progress reports	Monthly

Task 5 – District Government Technical and Financial Capacity Building

Sub Task or Objective	Performance Indicators and Unit of Measure	Data Source	Reporting Frequency
5.1 - District Level Gap Analysis and Capacity Needs Assessment	No. of contracts successfully awarded and/or supervised by districts	Progress reports	Monthly
	Establishment of functional feeder roads inventory / Asset management system	Progress reports	Quarterly
	Districts ability to increasingly conduct design, bidding and supervision of feeder road projects independently	Progress reports, district reports	Quarterly
	Conformance to technical specification (quality) of rehabilitated feeder roads	Progress reports, QA/QC reports	Quarterly
5.2 - Gender Assessment and Integration Plan	Gender assessment and Integration plan prepared	Progress report	Monthly
5.3 - Training & Capacity Building Program Designed, Transferred to Regional Training Partners and Districts, and RPPA	(#) of GIS implemented in participating districts and being actively used for road planning and maintenance	Progress reports, District reports,	Monthly
	(#) of community outreach activities undertaken by participating districts/sectors related to various stages of rural road infrastructure development	Progress reports, District reports,	Monthly
5.4 - Launch ***ROADS WORK!*** Program: A Community Engaged, District-led Maintenance Program	(#) of community outreach activities undertaken by participating districts/sectors related to various stages of rural road infrastructure development	Progress reports, District reports,	Monthly
5.5 - Monitoring & Evaluation – Lessons Learned, Feedback to Districts for Future Programs	(#) Increase in capacity of trained local contractors to competitively win other contracts	Progress reports, Chamber of Commerce/other Professional body's reports, Surveys	Annual