

# **PROJECT AGREEMENT**

## **National Park Service Roads Working Group**

U.S. Department of the Interior  
National Park Service

U.S. Department of Transportation  
Federal Highway Administration  
Federal Lands Highway Division

October 11, 2007

## **PROJECT BACKGROUND**

The National Park Service (NPS) has undertaken a large initiative to incorporate asset management concepts and practices into their resource allocation decision mechanisms used to improve and maintain facilities within the National Park units. This includes roads and bridges, which represent a sizable portion of the overall asset base and deferred maintenance obligation. The Federal Highway Administration (FHWA) has a long history of providing assistance in managing NPS transportation infrastructure and is therefore in a unique position to assist the NPS in asset management activities for roads and bridges. The primary tool for accomplishing this integration is the Facility Management Software System (FMSS). They have committed to the Department of Interior (the Department) and the Office of Management and Budget (OMB) to be able to use FMSS to articulate their maintenance needs.

The Federal Highway Administration and the National Park Service have cooperatively created a working group to identify procedures and business practices for integrating FHWA information and data into NPS processes to more effectively manage roadway assets. The NPS Roads Working Group (RWG) is comprised of NPS, FHWA, and consultant personnel who have been challenged with the task of executing this intent. Specifically, this effort involves using a wide array of information and tools managed by FHWA and professional services provided at the request of NPS—including the Road and Bridge Inventory Programs (RIP and BIP), Pavement Management System software, Bridge Management System software, and constructed project data—within the framework of the FMSS.

The NPS Roads Working Group (RWG) has identified critical objectives, goals, and deliverables associated with its Project Plan. Critical actions and deliverables have been organized into seven general tasks:

1. Current Replacement Value Updates and Transfers
2. Route ID and FMSS Alignment Business Practices
3. NPS Alignment and Data Clean-Up
4. Deferred Maintenance Calculation, Migration and Process Automation
5. Asset and Equipment Specification Template Updates and Migration
6. Inspection Guidance
7. Support Park Asset Management Plans

This document identifies critical support requirements and deliverables requested between the Federal Highways Administration and the National Park Service. Support and deliverables listed below have been organized according to the six general tasks listed above.

## **PROJECT SCOPE**

### **General RWG Work Load Requirements:**

In order to successfully accomplish goals, participation from FHWA personnel on the NPS RWG is critical. See “roles and responsibilities” Section and project schedule for specific roles. RWG responsibilities include the following:

1. Participation on bi-weekly conference calls
2. Participation in 2-3 day RWG face-to-face meetings (2-4 meetings expected annually)
3. Review of pre and post-conference call and meeting documentation
4. Participation in sub-group conference calls for FHWA-relevant subjects (as scheduled, normally bi-weekly)
5. Analyze both agencies business and IT policies procedures to ensure they are compatible.

### **Task 1: Current Replacement Value Updates and Transfers**

**1.1 Roads and Parking Areas:** Provide CRV unit costs for each terrain type (including net construction costs) based on an updated market survey of NPS awarded contracts for NPS roads and parking areas.

**Deliverable:** CRV Unit Costs (based on a 5-year updated market survey)

**Due Date:** January 2009

**Frequency:** Every Year

**1.2 Bridge and Tunnels:** Provide updated CRV unit costs for bridge and tunnel materials and types (net construction costs) based on an updated market survey

**Deliverable:** CRV Unit Costs (based on a 5-year updated market survey)

**Due Date:** January 2009

**Frequency:** Every Year

**1.3** Provide a description of the cost estimating methodology, project data analysis summary, and pilot analysis for all 5-year CRV market survey are updated

**Deliverable:** CRV Unit Cost Market Survey Business Procedures

**Due Date:** January 2008

**Frequency:** Every 5 Years

**1.4 Continue** Maintenance of (do not delete) RIP database that includes a breakdown of total length of terrain type for each matched RIP record. RIP database will include: RIP ID, FMSS Asset Location, Total Terrain Type Quantity.

**Deliverable:** Terrain Type

**Due Date:** Ongoing

**Frequency:** Through 2010



1.5 Provide for review/inclusion of park feedback on FHWA generated terrain values. Specific mechanisms and processes TBD.

**Deliverable:** CRV Terrain Type Costs

**Due Date:** January 2008

**Frequency:** Every year. Inflation and Park Location Factor Adjustments Annually

## **Task 2: Route ID and FMSS Alignment Business Procedures (BP's) and Practices**

2.1 Provide technical consulting to ensure compatibility between FHWA/NPS practices and guidelines. Will require conference call participation, document review, and significant logistical support with parks and RWG to pilot and finalize Business Procedures and Practices.

**Deliverable:** Business Procedures and Practice Review and Implementation

**Due Date:** Started May 2007

**Frequency:** Weekly

2.2 Ensure RIP, BIP, and HPMA databases are updated to align with corresponding assets in FMSS. Use RWG-approved business practices and tools to execute this alignment. This will require monitoring of RIP, BIP and HPMA data to ensure that records are properly aligned. Will require internal communication and training. Will require cross-checking of data with NPS data. Number of records that will be updated is currently unknown. Unpaved roads would be included in the alignment.

**Deliverable:** Structural Database Modification (as necessary)

**Expected Completion Date:** September 2008

**Frequency:** Weekly

## **Task 3: Alignment and Data Clean-Up**

3.1 Review Technical specification; Prepare RIP and BIP databases for alignment process Develop BP's to support creating and maintaining asset alignment. This will require FHWA analysis to ensure that NPS BP's are appropriate and effective.

**Deliverable:** Alignment Tool Development

**Expected Completion Date:** September 2008

**Frequency:** Weekly

3.2 FHWA will provide assistance to the NPS in the execution and implementation of asset alignment through QAQC data support. Work with RWG to ensure that data are accurate and in compliance with RIP business rules. This requires participating in the alignment process using the RWG-developed alignment tool. Specific responsibilities are attached in the document "Alignment Responsibilities FHWA". These are DRAFT responsibilities at this time. Note: There are currently many NPS roads, parking areas, bridges, and tunnels that are aligned or candidates for alignment.

**Deliverable:** Alignment Implementation

**Expected Completion Date:** September 2008

**Frequency:** March-August; weekly

#### **Task 4: Deferred Maintenance Calculation Automation**

4.1 Review Technical specification; Prepare RIP, BIP, and HPMA databases for DM calculation and transfer

**Deliverable:** DM Calculator Technical Specifications Review

**Expected Completion Date:** September 2008

**Frequency:** Weekly

4.2 Assist RWG through QAQC data support for NPS-aligned assets. Review and approve calculation BP's and ensure that all aligned records have DM that is updated and migrated accordingly.

**Deliverable:** DM Calculation Review

**Expected Completion Date:** September 2008

**Frequency:** July-August; weekly

4.3 Provide a worksheet with DM values for all matched paved road, paved parking, bridge and tunnel assets

**Deliverable:** DM not in FMSS Work Orders

**Due Date:** August 2008

**Frequency:** Annually

### **Task 5: Asset and Equipment Specification Template Updates and Migration**

5.1 Review information sharing protocols, including system of record, 'feedback' and communication proposal – Develop BP's to support data transfer

**Deliverable:** Asset and Equipment Information Transfer BP Review and tool development

**Due Date:** September 2008

**Frequency:** Weekly

5.2 Assist with data QAQC of data transfer between FMSS and FHWA databases. Assist in review of data to ensure that all aligned records (currently over 9000) are updated according to RWG business practices.

**Deliverable:** Data Transfer Review

**Due Date:** September 2008

**Frequency:** Weekly

### **Task 6: Inspection Guidance**

**Deliverable:** Review of NPS prepared inspection guidance on an as-requested basis

**Due Date:** As Requested

### **Task 7: Work Order Management and Use**

7.1 Development of BP's for FHWA Incorporation of work performed by parks. FHWA needs to assist in the development business practices for accessing completed/closed road Work Orders (WO's) from FMSS. Develop processes for incorporating these WO's into HPMa in order to adjust DM estimates. Utilize in other FHWA database applications as needed.

**Deliverable:** BP for FHWA access to FMSS WO's. BP for incorporation of FMSS WO's into HPMa. BP for any other utilization of FMSS road WO's.

**Due Date:** September 2008

7.2 Development of BP's to incorporate executable work designed/prepared by FHWA into FMSS. FHWA designs and estimates often are the basis for executable WO's. Frequently these work products generally do not lend themselves to direct



conversion to FMSS WO's. Create links between FHWA specifications and estimates with FMSS WBS codes.

**Deliverable:** BP for creating links between FHWA specifications and estimates with FMSS WBS codes.

**Due Date:** September 2008

#### **Task 8: Information Technology (IT) Support**

**8.1** FHWA IT support to RWG for technical or hardware problems and/or solutions

**Deliverable:** Support as needed

**Due date:** Ongoing

#### **Task 9: Park Asset Management Plans**

**9.1** Develop business practices to support the inclusion of HPMA analysis in PAMPS. Specifically, this may include the production and post-processing of fiscally constrained regional HPMA runs.

**Deliverable:** Business practices for creating HPMA products for inclusion in PAMP's

**Due date:** June, 2008

#### **RWG Roles and Responsibilities**

**NPS PM:** CDR Nathan Tatum, is the Project Manager for the RWG. His responsibility is to track and manage all scope, schedule and budget issues for the project and to ensure that all NPS related tasks and assignments are completed.

**FHWA PM:** James Amenta, Asset Management Specialist is the POC and Project Manager for the RWG. His responsibility is to ensure that all FHWA related tasks and assignments are completed.

**NPS/FHWA Liaison:** Dave Keough is the primary point of contact for all specific task issues and deliverables involving FHWA for this project.

#### **Technical Experts/Task Managers:**

**HPMA related products:** Chris Chang. This includes the calculation of deferred maintenance and maintaining alignment between HPMA and RIP. These products are mainly associated with Tasks 2 and 4.

**CRV information:** Chris Chang. These products are mainly associated with Task 1.

**RIP related products:** Tammy Ratliff. This includes creating and maintaining alignment between RIP, FMSS and HPMA, maintaining terrain values for CRV calculation. These products are mainly associated with Tasks 1, 2, 3 and 5.

**Bridge and tunnel related products:** John Thiel. These include alignment, CRV, and DM data and any other products associated with assets tracked in the FHWA structures (bridges and tunnels) database. All tasks may involve these products.

**IT support to FHWA:** Tom Johnson. Support is on an as-requested basis.

**Other RWG Members:**

There are several other RWG members with a variety of technical and programmatic expertise that may interface with FHWA on a regular basis during the execution of specific tasks. This interface will be coordinated through Mr. Keough. Specific roles will be determined when specific needs arise.



## PROJECT SCHEDULE

Task	Responsibilities	Task Lead	Target Completion	Cost
Task 1.1	Ensure road CRV unit costs for terrain type are updated yearly	Chang	January 2011	\$11,800 for pavement CRV
Task 1.2	Ensure bridge CRV unit costs for terrain type are updated yearly	Thiel	January 2011	\$10,000
Task 1.3	Ensure road and bridge CRV unit cost business procedures are updated	Chang	January 2008	\$4,000
Task 1.4	Maintain RIP databases for each record	Ratliff	January 2008	\$0
Task 1.5	Update and maintain CRV Terrain Type costs	Chang/Thiel	August 2008	\$1,300 pavement CRV
Task 2.1	Ensure business procedures and practices are implemented	Amenta	Began May 2007	\$4,000
Task 2.2	Ensure HPMAs databases are updated to align with corresponding assets in FMSS	Amenta	May 2008	\$4,000
Task 3.1	Develop Business Procedures to support creating and maintaining asset alignment.	Ratliff	October 2007	\$10,000
Task 3.2	Ensure QAOC data alignment for NPS-aligned assets.	Ratliff	September 2008	\$212,500
Task 4.1	Prepare RIP, BIP and HPMAs databases for Deferred Maintenance calculations and transfer	Chang/Thiel	November 2007	\$22,500 for Pavement Spec Review
Task 4.2	Ensure QAQC data accuracy for DM calculations and data migration	Ratliff	November 2007	\$10,000
Task 4.3	Ensure all data not in FMSS work orders are identified.	Chang/Thiel	August 2008	\$20,400 for pavement DM
Task 5.1	Develop Business Procedures to support data transfer	Ratliff	December 2007	\$10,000
Task 5.2	Ensure QAQC for data transfer between FHWA and FMSS	Ratliff	November 2007	\$20,000
Task 6.0	Review NPS generated inspection guidance	Ratliff	As Required	\$0
Task 7.1	Develop Business procedures for FHWA access to FMSS work orders	Amenta	December 2007	\$10,500
Task 7.2	Develop Business Procedures to incorporate work designed by FHWA into FMSS	Amenta	December 2007	\$10,000
Task 8.1	Provide IT support to RWG	Tom Johnson	Ongoing	\$0
Task 9.1	Develop business practices to	Chang	June 2008	\$10,000

	provide HPMA products for PAMP's			
<b>Total Cost</b>				<b>\$371,000</b>

**Agreement**

Based on the foregoing information, the Parties hereby enter into the following Agreement regarding National Park Service Asset Management Implementation:

**ESCALATION MATRIX:**

The purpose of the escalation matrix is to resolve complex problems sooner and more efficiently. As part of this effort, a procedure to manage decisions will be implemented to resolve issues at the team level and define the process to be followed in the event that an issue must be taken to a higher level. The following table identifies the hierarchy for managing decisions;

**RWG ESCALATION MATRIX TABLE**

<b>FHWA</b>	<b>NPS</b>	<b>Time to Resolve</b>
FHWA RWG Lead - Amenta	NPS RWG Lead - Tatum	5 Working Days
FHWA Program Administration Director - Tuggle	NPS Roads Program Manager - Hartsoe	10 Working Days
FHWA EFLHD Division Engineer - Ridenour	NPS Chief Park Facility Management Division - Williams	10 Working Days
FHWA FLH Administrator - Baxter	NPS Associate Director, Park Planning, Facilities and Lands - Shaddock	15 Working Days

**Funding**

1. The FHWA is requesting \$361,000 for FY 2008. This cost includes the completion of all actions listed under Tasks 1 - 8. The estimated cost for future years can not be determined at this time.
2. If, in the course of performing the work or special or unscheduled duties, it becomes evident to the FHWA that there are insufficient funds to complete the actions for that fiscal year, the FHWA shall submit a request to the NPS for additional funds. A complete justification for the increased funds shall be provided. Separate

funding requests for unscheduled work and expenditures will be tracked separately from the routine reauthorization work.

### TERMS OF THE AGREEMENT

This Project Agreement will become effective on the date of the last signature. Either party to this Agreement may terminate participation upon written notice to the other party one hundred and twenty (120) days in advance of the effective date of termination. This agreement may be revised or amended at any time by mutual consent of both parties, and shall be reviewed every five (5) years by both parties.

*IN WITNESS THEREOF*, the parties hereto have caused this Project Agreement to be executed by their duly authorized representatives.



Mr. Mark H Hartsoe, Branch Chief  
Park Roads and Parkway Program,  
National Park Service

Nov 1, 2007  
Date



Mr. Donald R. Tuggle, Director  
Program Administration  
Eastern Federal Lands Highway Division  
Federal Highway Administration

Nov. 7, 2007  
Date