

PROJECT AGREEMENT

FY10-15 REAUTHORIZATION RESOURCE PAPER

U.S. Department of the Interior
National Park Service

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

March 14, 2007

PROJECT BACKGROUND

Previously, the Federal Highway Administration (FHWA), Eastern Federal Lands Highway Division (EFLHD) conducted a comprehensive pavement management analysis for budget reauthorization evaluation for the National Parks Service (NPS) for the FY04 –FY09 Highway Trust Fund Reauthorization. The first set of analyses were conducted in 2001-02, the results of which are highlighted in the March 2003 Pavement Management Findings Report. The report was based on Cycle 2 data that contained approximately 4700 miles of paved roads from 78 large national parks. The approaches developed at the time were deemed appropriate for a network-level analysis to determine resource needs or deferred maintenance costs for the NPS paved roadway system.

The FHWA and NPS conducted a more comprehensive network inventory and condition assessment as part of Cycle 3 surveys. This cycle covered 432 park units, with 194 parks covered by Automated Road Analyzer (ARAN) surveys. In all, over 5800 miles of condition survey data collected between 2001 and 2004. Following the availability of the complete NPS Cycle 3 database in February 2005, ARA was contracted to conduct further analyses of condition projections and budget reauthorization requirements.

The Cycle 3 budget reauthorization analyses involved the investigation of a variety of resource allocation strategies that covered a gamut of expected budget allocations from the Transportation Equity Act for the 21st Century (TEA-21).

Once again the NPS has requested assistance to complete a comprehensive analysis for the FY10-FY15 Reauthorization for the Highway Trust Fund for use by the NPS for budget projections. The precise scope of the work to be completed is listed below in the Project Scope. The NPS has also requested that the analyses continue out to the year 2016 which is the Centennial year for the NPS.

PROJECT SCOPE

The NPS FY10-FY15 Reauthorization Resource Paper will require technical evaluation and analyses for all of the roadway and bridge data collected since the last reauthorization. The following information will be required from the FHWA:

Task 1: Pavement Performance/Budget Analyses

The NPS is looking for the budget requirements for several given levels of performance based on the Pavement Condition Rating (PCR). There will be several different analyses required. These analyses will account for both the entire road network as well as select subgroups of the network (e.g., Functional Classes 1 and 7, 8). These analyses will be performed at a national network level and will model the timeframe of 2010 - 2016, inclusive.

Specific Pavement Management analyses runs will include but are not limited to the following:

- a. Do nothing;

- b. Unlimited budget scenario to produce and maintain an average PCR of 95;
 - i. Network Level
 - ii. Functional Classes 1, 7, and 8 only, rest of system deteriorates
- c. Budget required to continue predicted 2009 PCR ;
 - i. Network Level (PCR \pm 56)
 - ii. Functional Class 1, 7, and 8 (PCR \pm 60) and maintain rest of system
- d. Pavement Preservation scenario;
 - i. Identify how much money is required for Pavement Preservation from 2010 to 2015; and 2016
- e. Budget requirements for various PCR conditions (60, 65, 75, 85, 95) on Functional Classes 1, 7 and 8 analyses;
- f. Budget requirements for various PCR conditions (56, 65, 75, 85, 95) on the network level analyses;

Results for each analysis will be expressed as:

- g. Annual average pavement budget required from 2010 to 2015; and 2016
 - i. Graph showing various Funding vs. Time (2010-2016)
 - 1. Graph for Network Level (56, 65, 75, 85, 95)
 - 2. Graph for Functional Class 1, 7, and 8 (60, 65, 75, 85, 95)
- h. Resulting average PCR in each year, 2010 - 2015; and 2016
 - i. Graph showing various Funding vs. Time (2010-2016)
 - 1. Graph for Network Level (56, 65, 75, 85, 95)
 - 2. Graph for Functional Class 1, 7, and 8 (60, 65, 75, 85, 95)

Note: Data from g.i.1 and h.i.1 can be combined into one graph for network level analyses

Data from g.i.2 and h.i.2 can be combined into one graph for Functional Class 1, 7, and 8 analyses

- i. % pavements in good/fair/poor condition for each of the years 2010 through 2015 inclusive; and 2016
 - i. Graph for Network Level analyses
 - ii. Graph for Functional Class 1, 7 and 8 analyses

- j. For specific analyses from those above, Deferred Maintenance (DM) and Current Replacement Value (CRV) for each of the years 2010 through 2015, and 2016.
- k. The FHWA will assist the NPS in the calculation of Facility Condition Index (FCI) and the development of a correlation between FCI and PCR.

Additionally, the NPS requests technical assistance from the FHWA in order to develop other pertinent benchmarks and analysis strategies from the various runs.

It is expected that further analyses will be required after the May 31th, 2007 date as new information becomes available.

Task 2: Bridge Performance/Budget Analyses –

Similar to roadway requirements, the NPS is also requesting budget requirements for differing bridge performance levels, based primarily on the FCI. Several analyses will be run for differing scenarios, similar to that outlined above for pavements. Other standard bridge industry performance levels will be examined, including Health Index (HI), Structural Deficiency (SD), and Structural Evaluation, a coding item required under the National Bridge Inspection Standards (NBIS) that best summarizes bridge condition. Correlations between each performance level will be clarified after further analysis where necessary.

Results from each analysis will be expressed in a format consistent with those related to pavements, so that the bridge and pavement results can ultimately be assessed in a combined or separate manner as needed.

Additionally, the NPS requests technical assistance from the FHWA in order to develop other pertinent benchmarks and analysis strategies from the various runs.

It is expected that further analyses will be required after the May 31th, 2007 date as new information becomes available.

Task 3: Analyses of road and bridge inventory information including but not limited to:

- a. Paved road miles and structures by state and NPS Region;
- b. Deficient structures by state and NPS Region;
- c. Structure estimated remaining life and future replacement costs;
- d. Dollars obligated by state over the course of SAFETEA-LU; and
- e. Current pavement condition (good/fair/poor) by functional class.

Task 4: Safety Needs Analyses-

A high (national) level estimate of safety improvement needs based on an analysis of existing data, as performed by CH2MHill in TO 42.

Specific desired analyses include:

- a. Summary of parks showing highest number of accidents, by type Facility Investment Plan (FIP), covering a 5 year period.
- b. Summary of these accidents broken down into causal categories, as possible.
- c. Estimate of generic solutions by type of causal categories.
- d. Other analyses, as needed.

Task 5: Congestion Needs Analyses:

A high (national) level estimate of congestion improvement needs based on an analysis of existing data.

Specific desired analyses include:

- a. Use existing studies and data to define the context of congestion problems in the NPS. (Review all data collected on Congestion Management System development (i.e. Volpe Study, FHWA, FLH)).
- b. To the extent possible, use the above analysis to identify representative congestions conditions. For example, outline the different conditions/locations where congestion occurs in the NPS, i.e. recurring, nonrecurring. Entry gates, visitor centers, parking lots, roads, etc.
- c. To the extent possible, use the above analysis to identify possible threshold measures for evaluating congestion for these different congestion conditions.
- d. Make recommendations for the development of additional information, as needed and pilot studies

Task 6a: Triage Studies Data Analysis:

Due to the existing network condition (modeled as PCR = 59 in FY 2006 and trending downward), it is likely that improvements to the entire road and bridge network may not be feasible under reasonably anticipated Park Roads and Parkways Program budgets. Because of this, the NPS wants to investigate a critical subset of its network road mileage and bridges which it could improve.

Initially, this critical subset would be comprised of Parks which represent those with the greatest visitation, vehicle miles traveled, accidents, and congestion (as defined by NPS). Further refinement to these scenarios could come from variations of the above factors or other factors.

The completion of this analysis will occur after the completion of **Tasks 1, 2, 3, 4, 5, 7** with a due date of May 31, 2007.

Task 6b: Triage Study Report Addendum

The presentation of the Triage Study Data Analysis will be an addendum to **Task 7** (The Resource Paper). The addendum will be added to the Resource Paper and submitted to the NPS by June 15, 2007

Task 7: Resource Paper:

FHWA will develop a FY10 -- FY16 Reauthorization Resource document that summarizes all the analyses from **Tasks 1** through **5** above.

Task 8: Other Studies/Analyses as directed by the NPS

The NPS would like to have the ability to request analyses that may not conform or may be more detailed than the analyses in items 1 through 7.

Task 9: GIS Network Analyses

FHWA will perform GIS analyses in support of the Reauthorization process.

PROJECT SCHEDULE

Task	Task Lead	Target Completion	Cost
Task 1	Chang	5/15/2007	\$100,000
Task 2	Thiel	5/15/2007	\$20,000
Task 3	Chang/Thiel	5/15/2007	\$5,000
Task 4	Schertz	5/15/2007	\$40,000
Task 5	Field	5/15/2007	\$15,000
Task 7	Amenta	5/31/2007	\$30,000
Task 6a (Triage Studies Data Analysis)	Chang	5/31/2007	\$40,000
Task 6b (Triage Study Addendum)	Amenta	6/15/2007	\$10,000
Task 8 (Other Studies/Analyses as directed by the NPS)	Chang	TBD	TBD
Task 9	VanGilder	TBD	\$25,000
Total Cost			\$285,000

Note: Bi-Weekly meeting will be conducted between the NPS and the FHWA to coordinate data analysis and report generation.

Agreement

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

Authority

WHEREAS, Section 601 of the Economy Act (31 U.S.C. 1535), and 23 U.S.C. 308(a) authorizes the Federal Highway Administration (FHWA) to perform engineering and other services in connection with the survey of highways for other Government cooperating agencies;

WHEREAS, the National Park Service Organic Act of August 25, 1916, 39 Stat. 535 (codified at 16 U.S.C. 1 *et seq.*) provides authority for the NPS to enter into this Agreement;

WHEREAS, an Interagency Agreement was entered into by the National Park Service and the Federal Highway Administration by date of May 19, 1983, authorizing cooperation and mutual assistance including RIP; and

WHEREAS, Title 23 U.S.C. 970.204(a,b,c,d,e,f,g) requires the FHWA and NPS to develop management system for pavements, bridge, safety, and congestion;

Funding

1. The FHWA is requesting \$285,000 for FY 2007. This cost includes the completion of all actions listed under Tasks 1 - 7 and Task 9. 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.

REQUIRED AND STANDARD CLAUSES

1. Non-Discrimination: The parties will abide by the provisions of Executive Order 11246, as amended; shall be in compliance with the requirements of Title VI of the Civil Rights Act of 1964, as amended (78 Stat. 252; 42 U.S.C. 2000(d) *et seq.*); Title V, Section 504 of the Rehabilitation Act of 1973 (87 Stat. 394; 29 U.S.C. 794) as amended; the Age

Discrimination Act of 1975, as amended (89 Stat. 728; 42 U.S.C. 6101 *et seq.*); and with all other Federal laws and regulations prohibiting discrimination on grounds of race, color, national origin, handicap, religion, or sex in employment and in providing facilities and services to the public.

2. Public Laws: Nothing herein contained shall be deemed to be inconsistent with or contrary to the purpose of or intent of any Act of Congress establishing, affecting, or relating to the MOA. No member of, or delegate to, or Resident Commissioner in Congress shall be admitted to any share or part of this MOA, or to any benefits that may arise therefore, unless the share or part or benefit is for the general benefit of a corporation or company.
3. ANTI-DEFICIENCY ACT: Pursuant to the Anti-Deficiency Act, 31 U.S.C. §1341(a)(1) (1994), nothing contained in this Agreement shall be construed as binding the United States to expend any sum in excess of appropriations made by Congress for the purposes of this Agreement, or as involving the United States in any contract or other obligation for the further expenditure of money in excess of such appropriations.
4. The parties accept responsibility for any property damage, injury, or death caused by the acts or omissions of their respective employees, acting within the scope of their employment, or their contractors, to the fullest extent permitted by law. All claims will be handled pursuant to applicable law.
5. Contracts awarded by the FHWA in the performance of this Project Agreement will include requirements for the contractor to indemnify and hold harmless the Government from all claims for injuries or damage resulting from its operations, or arising out of the negligent performance of the contract. In the event the United States is paid for damages to property owned by the NPS, then said payment will be forwarded to the NPS.
6. This Project Agreement is subject to all laws governing Federal procurements and to all regulations and rules promulgated there under, whether now in force or hereafter enacted or promulgated. Nothing in this Project Agreement shall be construed as in any way impairing the general powers of the NPS for supervision, regulation, and control of its property under such applicable laws, regulations, and rules.
7. In the event that a claim is brought under the Federal Tort Claims Act (28 U.S.C. 2671, *et seq.*) against more than one party, it shall be the responsibility of the party receiving the claim to coordinate with any other named party regarding responsibility to investigate any such claim, to issue an administrative determination as required by that Act, and to assist in the defense of any litigation arising from any such claim. All other parties to this Project Agreement named in any such claim will cooperate in this effort.
8. The parties shall abide by the provisions of Section 1913 (Lobbying with Appropriated Monies) of 18 U.S.C., which states:

No part of the money appropriated by any enactment of Congress shall, in the absence of express authorization by Congress, be used directly or indirectly to pay for any personal

service, advertisement, telegram, telephone, letter, printed or written matter, or other device, intended or designed to influence in any manner a Member of Congress, to favor or oppose, by vote or otherwise, any legislation or appropriation by Congress, whether before or after the introduction of any bill or resolution proposing such legislation or appropriation; but this shall not prevent officers or employees of the United States or of its departments or agencies from communicating to Members of Congress on the request of any Member or to Congress, through the proper official channels, requests for legislation or appropriations which they deem necessary for the efficient conduct of public business.

Whoever, being an officer or employee of the United States or of any department or agency thereof, violates or attempts to violate this section, shall be fined under this title or imprisoned not more than one year, or both; and after notice and hearing by the superior officer vested with the power of removing him, shall be removed from office or employment.

TERM 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.

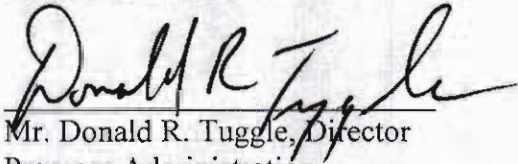
IN WITNESS THEREOF, the parties hereto have caused this Project Agreement to be executed by their duly authorized representatives.



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

March 13, 2007

Date



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

03/19/07

Date