

TASK ORDER PROPOSAL REQUEST (TOPR #09001)
For TPF-5(039), “FWD Calibration Center and Operational Improvements”,
FHWA Contract DTFH61-04-C-00041

The following work is required to achieve the objectives of the task order for contract DTFH61-04-C-00041. With the exception of Tasks 1 and 3 being the priority, the tasks described are not necessarily in chronological order or in order of significance, urgency or importance. The contractor and COTR will determine the order with which work will proceed based on time and budget considerations.

STATEMENT OF WORK

TASK 1. FWD CALIBRATION CENTER QUALITY ASSURANCE AND TECHNICAL ASSISTANCE SERVICES

Provide Technical Support for and service to the FWD Calibration Centers hosted by states participating in the pooled fund study. Technical support shall include the following:

- Reference load cell calibrations
- Hardware replacement
- A/D board calibration
- Software support
- Calibration center operator training and certification as needed
- Telephone support, e-mail communications
- Troubleshooting
- Quality assurance reviews

Quality Assurance review checklist and reports with certifications to the calibration center operators shall be prepared and submitted to FHWA under this task.

TASK 2. SOFTWARE UPDATES AND MAINTENANCE

The FWD Calibration protocol is conducted using software program, WinFWDCal, developed under a previous Task Order of this contract. The program reads input from the FWD computer and produces all required outputs. It is anticipated that updates to the existing software will be needed in response to unforeseen bugs, or to feedback for functional improvements identified by users. The software may also require evaluation on evolving software platforms, such as Microsoft Vista. The contractor shall continue to make these software modifications and updates on an ongoing basis in coordination with the COTR.

Updated executable software, documented source code and user manual(s) will be prepared and submitted to FHWA under this task.

TASK 3. TRANSFER OF LONG-TERM CALIBRATION CENTER SUPPORT STEWARDSHIP

The contractor will provide training and demonstration to the AMRL to assume the stewardship role for FWD Calibration Quality Assurance Certification and Technical Support. This will include travel expenses, equipment setup and knowledge transfer on the calibration system, software, procedure and quality assurance certification process for the long-term FWD calibration center support team. Travel expenses are envisioned for 2 AMRL representatives to

attend QA reviews as appropriate, hands on training sessions and attendance to the annual FWD Calibration Center operator meeting. (6- to 8- person trips planned, maximum \$10,000 travel costs)

TASK 4. CALIBRATION SYSTEM IMPROVEMENTS

The contractor shall investigate, and if feasible, development of the following items to improve the FWD calibration:

- Update AASHTO R 33-03, “Calibrating the Reference Load Cell Used for Reference Calibrations for Falling Weight Deflectometer.”
- Commercially available load cells – Identify, test and integrate commercially available load cells to replace the current custom reference load cells. This is intended to expand load range and reduce cost.

Guide for on-site calibration, as well as a technical memoranda shall be prepared and submitted to FHWA, as appropriate.

TASK 5. COMMUNICATION, COORDINATION, AND REPORTING

This includes gathering information relevant to ongoing work and participating in and coordinating one TAC meeting and one FWD User Group meeting, as well as teleconferences and correspondence by phone, fax and e-mail. Possibly, travel costs of the Pooled Fund supported calibration centers will be provided by the project funds.

Final report – As a minimum, document the project activities, approach, and outcomes including a comprehensive operations activity list and improvements to the procedures of the FWD Calibration Center Quality Assurance and Technical Assistance Services, if applicable.

PERIOD OF PERFORMANCE SCHEDULE AND DELIVERABLES

The following is a preliminary list of deliverables expected from the contractor:

- Updated software, documented source code and user manual(s), as prepared under task 2.
- Quality Assurance Review checklist and reports with certifications to the calibration center operators, as prepared under task 1.
- Updated AASHTO R 33-03, “Calibrating the Reference Load Cell Used for Reference Calibrations for Falling Weight Deflectometer”, as prepared under task 4.
- Technical memoranda, if appropriate.
- Final Report, as prepared under task 5.
- Quarterly progress reports shall be prepared and submitted according to Section G of the original contract.

The period of performance of this TO shall not exceed 12 months, including time reserved for review and edit of the deliverables.