TRANSPORTATION POOLED FUND PROGRAM
QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): FHWA HIBT

INSTRUCTIONS:
Project Managers and/or research project investigators should complete a quarterly progress report for each calendar quarter during which the projects are active. Please provide a project schedule status of the research activities tied to each task that is defined in the proposal; a percentage completion of each task; a concise discussion (2 or 3 sentences) of the current status, including accomplishments and problems encountered, if any. List all tasks, even if no work was done during this period.

Transportation Pooled Fund Program Project # *(i.e, SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX)*	**Transportation Pooled Fund Program - Report Period:**
TPF-5(227)	☐ Quarter 1 (January 1 – March 31) ☐ Quarter 2 (April 1 – June 30) ☑ Quarter 3 (July 1 – September 30) ☐ Quarter 4 (October 1 – December 31)

Project Title:		
Continued Advancements in Load and Resistance Factor Design (LRFD) for Foundations, Substructures and Other Geotec		
Name of Project Manager(s):	**Phone Number:**	**E-Mail**
Silas Nichols	202-366-1554	silas.nichols@dot.gov
Lead Agency Project ID:	**Other Project ID (i.e., contract #):**	**Project Start Date:**
Multiple	Multiple	Varies
Original Project End Date:	**Current Project End Date:**	**Number of Extensions:**
Varies		

Project schedule status:

☐ On schedule ☑ On revised schedule ☐ Ahead of schedule ☐ Behind schedule

Overall Project Statistics:

Total Project Budget	Total Cost to Date for Project	Percentage of Work Completed to Date
580,000	245,000	42%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
125,000 (21%)	125,000	20%

Project Description:

This project is broken into several sub-tasks to address specific Load and Resistance Factor Design (LRFD) research and deployment needs for State DOTs. Tasks include but are not limited to:

1. Development of technical guidance for design of shallow foundations
2. Development of comprehensive design problems in LRFD
3. Evaluation of capacity determination for large diameter driven piles
4. LRFD guidance for design and construction of driven piles
5. Evaluation of load and resistance factors for abutment design
6. Update of LRFD Seismic Design Guidance

The pooled fund is leveraging funds against other sources, so as to maximize the benefits to participating states and to best advance the practice. The objective of each task is to address a gap in the transition from allowable stress design (ASD) to LRFD identified by state DOTs and other transportation partners.

Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):

Developed and awarded contracts for update to guidance and training for Seismic Design of Foundations and Geotechnical Features, including the development of a web based training module.

Anticipated work next quarter:

During the next quarter, it is anticipated that:

1. Award contract for LRFD Substructure Technical Guidance and Training.
2. Design and Construction of Driven Piles contract will be awarded. Manual development is anticipated for 12 months.
3. Scope of work being completed for guidance on Lateral Load on Deep Foundations. Expected that this quarter, contract will be completed.
4. Begin development of LRFD Seismic Design Training

Significant Results:

No significant results this quarter.

Circumstance affecting project or budget. (Please describe any challenges encountered or anticipated that might affect the completion of the project within the time, scope and fiscal constraints set forth in the agreement, along with recommended solutions to those problems).

Primary circumstance affecting project is leveraged funding from other sources to begin work. This problem appears to be solved.

Potential Implementation:

Current and previously completed work will assist DOTs and transportation partners in establishing a minimum standard of care for design and construction of foundations in an LRFD template. The developed guidance addresses gaps, questions and difficulties users have had in translating practice from ASD.