

Federal Contract # DTFH61-17D00001 – Task Order #1

LONG-TERM BRIDGE PERFORMANCE PROGRAM

PROGRESS REPORT NO. 6

Report Period: March 1, 2018 – March 31, 2018

Prepared For:

Federal Highway Administration

Prepared By:



A. Account of work performed in this period

1. Coordination and Meetings Between the Contractor, FHWA LTBP Team, and State Highway Departments

The Rutgers team attended a meeting at FHWA Turner Fairbank on 3/6. The purpose of the meeting was to meet with the HDR team and help FHWA and the HDR team to prepare for the data collection contract.

Co-PI: 16 hours

Project Support: 1 hour

2. Data Gap Analysis

The majority of work performed in March focused on compiling the draft summary of findings and recommendations (Task 2.5) for two high priority performance issues: (1) untreated bridge decks and (2) bridge deck joints. The following is a breakdown of effort per task:

Task 2.1: Examine, Characterize, and Summarize LTBP Protocols for Data Collection Efforts: This task focuses on examining and structuring the data that may be obtained from all current LTBP data collection protocols pertinent to each high priority performance issue. This task was largely completed in previous months as it was needed, in part with Task 2.2 Data Collection Needs, to complete Task 2.3 the Data Gap Analysis. The current data collection protocols were examined as a whole (instead of a single examination relating to each individual high priority performance issue) in the previous months, and as a result this task is largely completed. It is anticipated, however, that this task will be revisited in the coming months to resolve specific findings related to the other tasks.

Task 2.2: Develop Set of Data Collection Needs: The majority of this task pertaining to untreated bridge decks and bridge deck joints was completed in previous months. No major development of this task in March.

Task 2.3: Identify Data Gaps and Collection Strategies: The majority of this task pertaining to untreated bridge decks and bridge deck joints was completed in previous months. No major development of this task in March.

Task 2.4: Prioritization and Strategic Recommendations: The majority of this task pertaining to untreated bridge decks and bridge deck joints was completed in previous months. No major development of this task in March.

Task 2.5: Reporting: The majority of the work performed in March focused on Task 2.5 Report. A draft summary of findings and recommendations was compiled and submitted in March for two high priority performance issues: untreated bridge decks and bridge deck joints. The goal of this report was

to present the data gap analysis in a streamlined manner with only the necessary background information needed to understand the origins and influence of the identified data gaps. The draft report included a definition of the data use cases and bridge performance framework, a summary of the data gap analysis work plan, results of the LTBP protocol audit, a summary of the identified data gaps, and a summary of recommendations to fill the identified data gaps.

Co-PI: 5 hours

Project Engineer: 129.5 hours

Technician: 125.79

Project Support: 10 hours

3. Communication

The Rutgers team prepared the electronic version of the monthly progress report and submitted it to FHWA. Moreover, the Rutgers team updated the MS Project file showing the project milestone and submitted it to FHWA.

Co-PI: 8 hours

B. Work to be accomplished during the next period

1. Coordination and Meetings Between the Contractor, FHWA LTBP Team, and State Highway Departments

The Rutgers team will reach out to the FHWA team to set up a monthly meeting.

2. Data Gap Analysis

Per the schedule in the submitted Work Plan, future work in April will continue in developing data collection needs and identifying data gaps and collection strategies for the two remaining high priority performance issues: bridge bearings and treated bridge decks. Additionally, a review of the draft summary by the COR is expected to be received by the Rutgers Team in April. Upon receipt of the review, the Rutgers Team will revise the summaries and recommendations accordingly.

3. Communication

The Rutgers team will prepare the electronic version of the monthly progress report and will submit it to FHWA. Moreover, the Rutgers team will submit the updated MS Project file to FHWA.

C. Problems/Recommended Solutions

No problems encountered during this period.

D. How the results of the work performed supports one or more of the FHWA, DOT and LTBP Goals

All of the work conducted under this task order aims to ensure that the LTBP program collects the data required to realize the following four use cases: (1) Advance research in bridge deterioration and predictive modeling, (2) Advance research in cost analysis, (3) Support improved bridge design methods, and (4) Quantify the effectiveness of bridge maintenance, preservation, repair, and rehabilitation strategies. These use cases encapsulate the overarching goals of the LTBP program and its vision for positively impacting the practice of bridge engineering.

E. Purchases and Rentals

Nothing was purchased or rented during this period.

F. Travel Details for Reporting Period

On 3/6, the following personnel travelled to TFHRC for a meeting with the FHWA and HDR team.

- Dr. Frank Moon
- Mr. Shane Mott
- Mr. Hooman Parvardeh

G. Current and Cumulative Expenditures (cost shown includes benefits and overhead)

Institution	Current Expenditures 2/1/2018 – 2/28/2018	Cumulative Expenditures 10/1/2017 – 2/28/2018
Rutgers, the State University of New Jersey	\$ 16,643.50	\$ 145,420.50
Bridge Intelligence LLC	\$ 3,788.16	\$ 8,954.16
New Jersey Institute of Technology	\$ 8,427.93	\$ 8,427.93

H. Subcontractor's Progress Report

Sub-recipient Name: Bridge Intelligence LLC

Subaward No: 00000286

Principal Investigator: Hooman Parvardeh

LTBP TSSC

Federal Contract # DTFH61-17-D00001

PROGRESS REPORT NO. 3

For the Period from 3/1/2018 through 3/31/2018

A. Accomplishments/Work Performed

The following is a complete account of all accomplishments and work performed on each task during this reporting period.

Task 1: (Coordination and Meetings between the Rutgers and FHWA LTBP Team)

During this period, Mr. Parvardeh was invited to a meeting at FHWA TFHRC on 3/6. The purpose of the meeting was to help the FHWA and HDR team to prepare for the data collection efforts.

Number of hours during this period: 16 hours

This task is approximately 23% complete.

Task 2: (Data Gap Analysis)

During this period, Mr. Parvardeh attended a meeting related to the development of the Data Gap Analysis and also assisted Dr. Devitis with the development of the Data Gap Analysis.

Number of hours during this period: 5 hours

This task is approximately 18% complete.

Task 3: (Communication)

During this period, Mr. Parvardeh performed the following tasks:

- Modified the MS Project to be ready for monthly progress submittal
- Prepared and submitted monthly progress report for February including updated MS project

Number of hours during this period: 8 hours

This task is approximately 26% complete.

B. Work Anticipated During the Next Period

During the next period, Mr. Parvardeh will perform the following tasks:

- Set up, prepare, participate in the monthly conference call
- Prepare and submit minutes for the monthly conference call
- Support the LTBP Data Gap Analysis effort
- Prepare and submit monthly progress report

C. Changes /Problems

None.

D. Participants & charged Level of Efforts

Personnel Name	Role/Contribution	Total Hours	Billed Cost
Hooman Parvardeh	Principal	29	\$ 3,770.00

Below is a breakdown of level of effort per task:

Task 1	Task 2	Task 3
16 hrs	5 hrs	8 hrs

E. Travel

On 3/6/2018, Mr. Parvardeh travelled to Washington DC for a meeting at the TFHRC.

The purpose of this meeting was to assist the FHWA and HDR team for the commencement of the data collection project. This meeting was request by Dr. Zobel.

Below are the details for the cost of this travel:

- Mileage: \$64.96 (Drive to and from Dr. Moon's house)
- Tolls: \$5.2
- Per diem \$64

Total cost of travel: \$134.16