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

LONG-TERM BRIDGE PERFORMANCE PROGRAM

PROGRESS REPORT NO. 8

Report Period: May 1, 2018 – May 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 had conversations with FHWA using email and phone call during this month. Moreover, a meeting is scheduled for 6/20th at TFHRC.

   Total No. of hours: 0

2. **Data Gap Analysis**

   Data gap efforts in May were primarily focused on (1) finalizing the data collection needs and data gaps and collection strategies for the two remaining high priority performance issues (bridge bearings and treated bridge decks), (2) coordinating the preliminary high-level data gap results, findings, and recommendations with the other LTBP teams, (3) addressing comments received regarding the first draft submission of the summary of findings, and (4) drafting the bridge bearings data gap draft summary of findings.

   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 to resolve specific findings as the other tasks progress.

   Task 2.2: Develop Set of Data Collection Needs: No major development of this task.

   Task 2.3: Identify Data Gaps and Collection Strategies: Using the findings from Task 2.1 and Task 2.2, data gaps were identified for bridge bearings. Collection strategies to address these gaps were drafted.

   Task 2.4: Prioritization and Strategic Recommendations: The results from Task 2.1, Task 2.2, and Task 2.3 for bridge bearings were compiled and used to draft prioritized recommendations.

   Task 2.5: Reporting: The Rutgers team received a commented review of the summary of findings draft submission for untreated bridge decks and bridge joints. Each comment was addressed and the final draft submitted. Additionally, the team began drafting the draft summary of findings and recommendations regarding bridge bearings data gaps.

   Co-PI: 3 hours

   Project Engineer: 52 hours

Technician: 15.23

Project Support: 6 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: 10 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 meet with the FHWA team on June 20th.

2. **Data Gap Analysis**

   Per the schedule in the submitted Work Plan, future work in June is anticipated to primarily focus on (1) examination, characterization, and summary of data gaps related to treated bridge decks, (2) compilation of data gap findings for bridge bearings and treated bridge decks, and (3) drafting of the summary of recommendations for bridge bearings.

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

None.

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

Institution	Current Expenditures 5/1/2018 – 5/31/2018	Cumulative Expenditures 10/1/2017 – 5/31/2018
Rutgers, the State University of New Jersey	$ 7,006.00	$ 161,106.37
Bridge Intelligence LLC	$ 1,690.00	$ 12,785.53
New Jersey Institute of Technology	$ 1,050.87	$ 12,180.54

H. Subcontractor's Progress Report

Sub-recipient Name: Bridge Intelligence LLC
Subaward No: 00000286
Principal Investigator: Hooman Parvardeh

LTBP TSSC
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PROGRESS REPORT NO. 5
For the Period from 5/1/2018 through 5/31/2018

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)

Nothing was done during this period.

Number of hours during this period: 0 hour

This task is approximately 30% complete.

Task 2: (Data Gap Analysis)

During this period, Mr. Parvardeh reviewed the progress of the Data Gap Analysis effort and attended a meeting on this task.

Number of hours during this period: 3 hours

This task is approximately 33% complete.

Task 3: (Communication)

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

- Prepared and submitted monthly progress report to FHWA
- Updated the MS project file and submitted it to FHWA

Number of hours during this period: 10 hours

This task is approximately 40% 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	13	$ 1,690.00

Below is a breakdown of level of effort per task:

Task 1	Task 2	Task 3
0	3 hrs	10 hrs

E. Travel
None.

LTBP TSSC – Task Order 1
Federal Contract # DTFH61-17-D00001
For the Period from 5/1/2018 through 5/31/2018

A. Accomplishments/Work Performed

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

Task 2 Data Gap Analysis

During this period, the team at NJIT continued to review literature pertaining to cost and effectiveness of preservation and maintenance methods used by various agencies.

Number of hours during this period: 39.2 hours

B. Work Anticipated During the Next Period

For the next period, the team at NJIT will continue to assist and work on directed documents as directed by Rutgers and FHWA.

C. Changes /Problems

None.

D. Participants & charged Level of Efforts

Personnel Name	Role/Contribution	Total Hours	Billed Cost
Aaron Strand	Technician	39.2	$69/hour

E. Travel
None.