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

**LONG-TERM BRIDGE PERFORMANCE PROGRAM**

PROGRESS REPORT NO. 7

Report Period: April 1, 2018 – April 30, 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 a meeting with Dr. Rob Zobel at the 2018 National Bridge Preservation conference in Orlando, FL on 4/11 and discussed the status of the LTBP program.

Co-PI: 4.5 hours

Project Support: 6 hours

* 1. **Data Gap Analysis**

Data gap efforts in April 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), and (2) coordinating the preliminary high-level data gap results, findings, and recommendations with the other LTBP teams.

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 in April.

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 in the last week of April and began to address the comments for the final submission.

Co-PI: 3 hours

Project Engineer: 118 hours

Technician: 39.15

Project Support: 5 hours

* 1. **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: 9 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.

* 1. **Data Gap Analysis**

Per the schedule in the submitted Work Plan, future work in May will primarily focus on (1) addressing the comments provided by the COR regarding the untreated bride decks and bridge deck joints summary of findings draft submission, (2) compile the data gap findings for bridge bearings, and (3) draft the summary of recommendations for bridge bearings.

* 1. **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)**

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| **Institution** | **Current Expenditures**  **4/1/2018 – 4/30/2018** | **Cumulative Expenditures**  **10/1/2017 – 4/30/2018** |
| Rutgers, the State University of New Jersey | $ 15,685.87 | $ 161,106.37 |
| Bridge Intelligence LLC | $ 2,141.37 | $ 11,095.53 |
| New Jersey Institute of Technology | $ 2,701.74 | $ 11,129.67 |

**H. Subcontractor’s Progress Report**