

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

**LONG-TERM BRIDGE PERFORMANCE PROGRAM**

PROGRESS REPORT NO. 18

Report Period: March 1, 2019 – March 31, 2019

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 few correspondences with the FHWA team over the email.

Co-PI: 1 hour

### **2. Data Gap Analysis**

The Bridge Intelligence team developed the dashboard using the data from the first state. The details are shown in the subcontractor section.

Co-PI: 41 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

Project Support: 3 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 FHWA to set up a meeting for the month of April.

### **2. Data Gap Analysis**

Work in April is anticipated to focus on converting the XML data from the second state and develop the dashboard for maintenance data for the second state.

### **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)**

<b>Institution</b>	<b>Current Expenditures 3/1/2019 – 3/31/2019</b>	<b>Cumulative Expenditures 10/1/2017 – 3/31/2019</b>
Rutgers, the State University of New Jersey	\$ 201.00	\$ 314,688.12
Bridge Intelligence LLC	\$ 6,760.00	\$ 39,045.53
New Jersey Institute of Technology	-	\$ 69,642.68



## **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. 17**

**For the Period from 3/1/2019 through 3/31/2019**

## 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 had a few correspondences with the FHWA team over the email.

Number of hours during this period: 1 hours

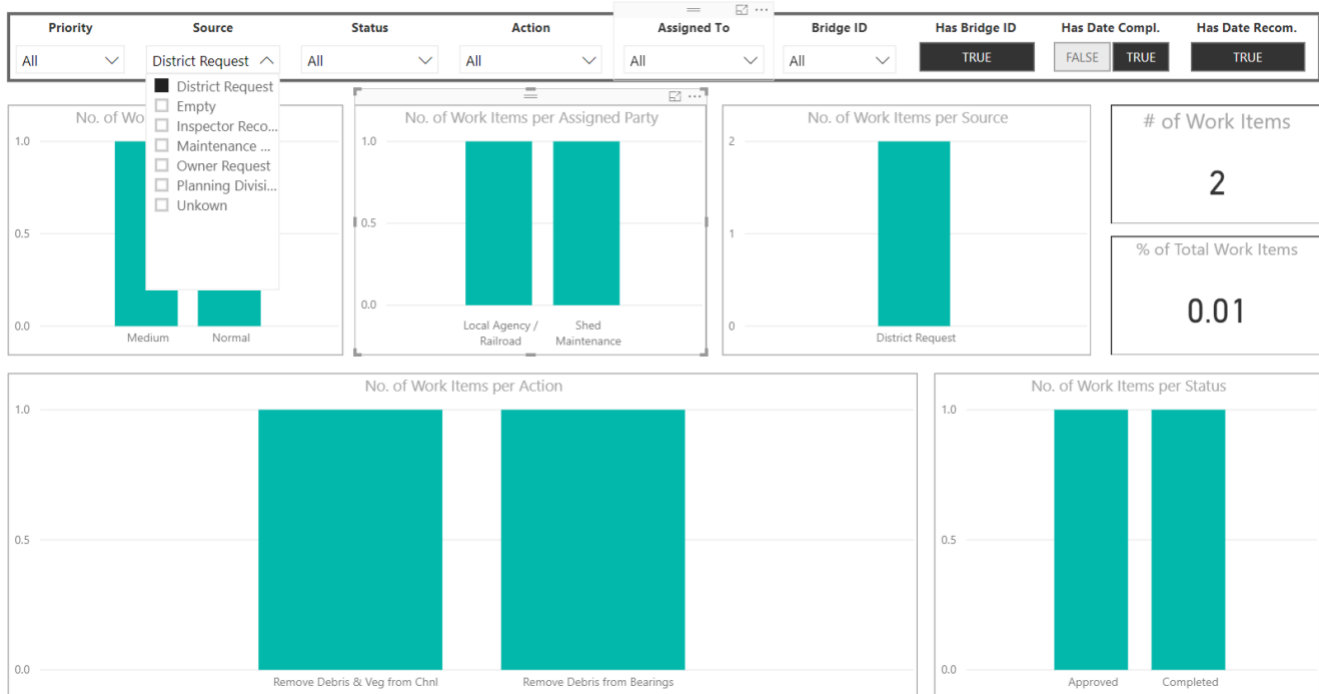
### Task 2: (Data Gap Analysis)

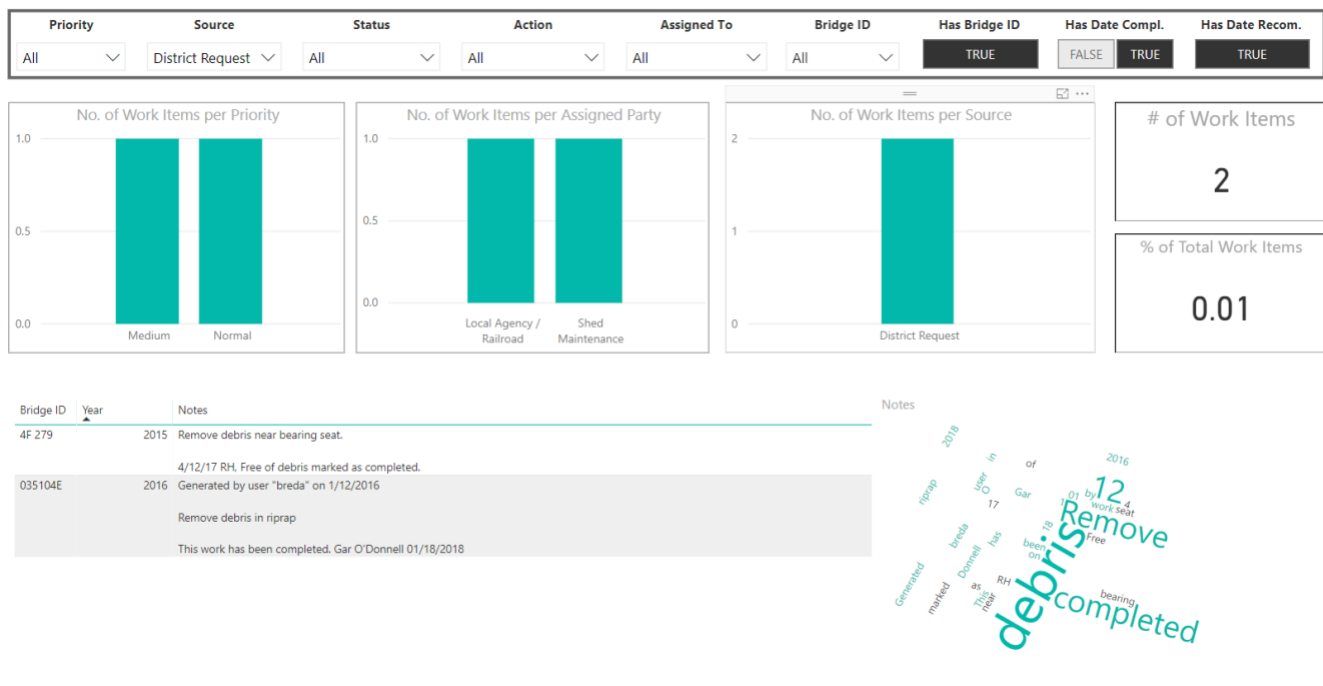
During this period, Mr. Parvardeh worked on analyzing data from state #1. Mr. Parvardeh completely cleaned the maintenance data from this state and developed a query and visualization tool which allows user to query the data and see different charts to be able to freely answer different questions. Screenshots from this tool is shown below.

## State #1 Work Items Dashboard



## State #1 Work Items Dashboard





Number of hours during this period: 41 hours

### 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

### B. Work Anticipated During the Next Period

- Convert maintenance data from state #2 from XML to tabular format.
- Work on the analysis of maintenance data from state #2.
- Develop the Rutgers LTBP progress report and submit to FHWA

### C. Changes /Problems

None.

#### D. Participants & charged Level of Efforts

Personnel Name	Role/Contribution	Total Hours	Billed Cost
Hooman Parvardeh	Principal	52	\$ 6,760.00

Below is a breakdown of level of effort per task:

Task 1	Task 2	Task 3
1 hr	41 hrs	10 hrs

#### E. Travel

None.