

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

LONG-TERM BRIDGE PERFORMANCE PROGRAM

PROGRESS REPORT NO. 20

Report Period: April 1, 2019 – May 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: 1.5 hour

2. Data Gap Analysis

The Bridge Intelligence team worked with the Rutgers team to wrap up the study of maintenance data. The details are shown in the subcontractor section.

Co-PI: 48.7 hours

Senior Engineer: 83.25

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: 18 hours

Project Support: 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 project is finished.

2. Data Gap Analysis

The project is finished.

3. Communication

The project is finished.

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 4/1/2019 – 5/31/2019	Cumulative Expenditures 10/1/2017 – 5/31/2019
Rutgers, the State University of New Jersey	\$ 16,008.00	\$ 330,696.12
Bridge Intelligence LLC	\$ 9,138.80	\$ 48,184,.33
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. 19

For the Period from 4/1/2019 through 5/31/2019

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: 1.5 hours

Task 2: (Data Gap Analysis)

During this period, Mr. Parvardeh converted the XML maintenance data from state 2 to a tabular format which is appropriate for analysis. Afterwards, Mr. Parvardeh worked on cleaning the data to make it ready for analysis. Then, Mr. Parvardeh completely developed similar query and visualization tool which allows the user to query the data and see different charts to be able to freely answer different questions. Screenshots from this tool is shown below.

To access the dashboards, you can use the following links.

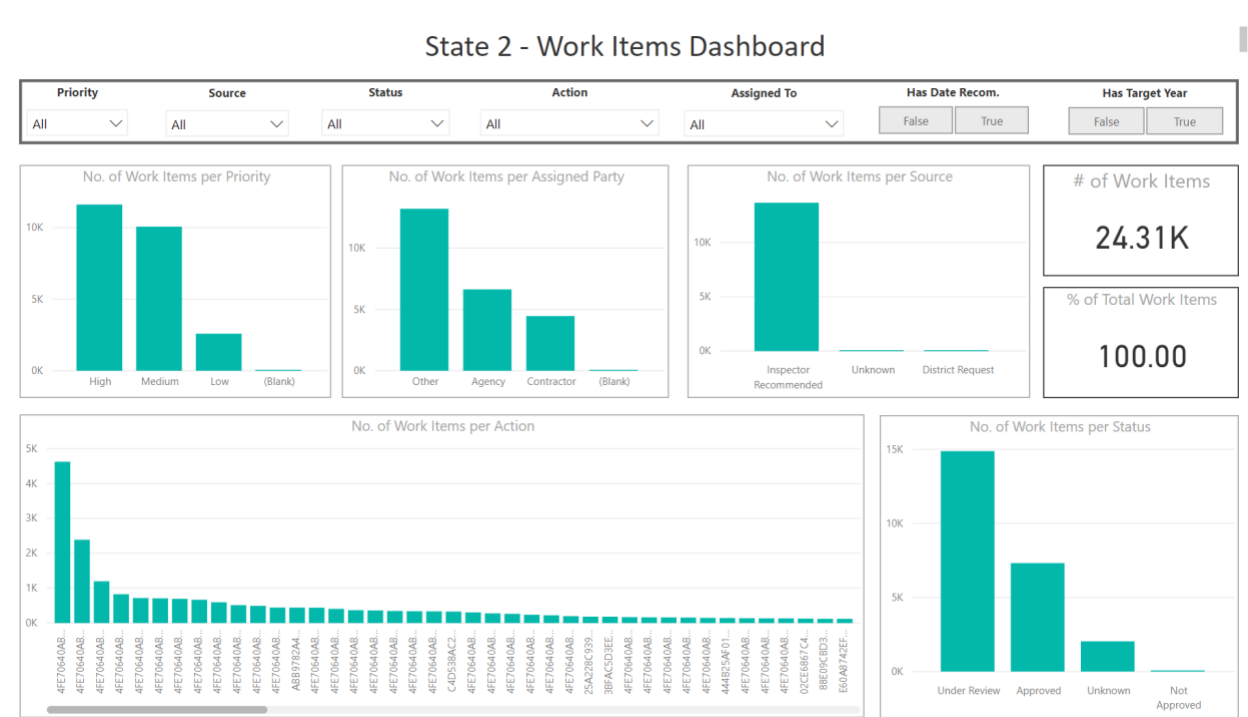
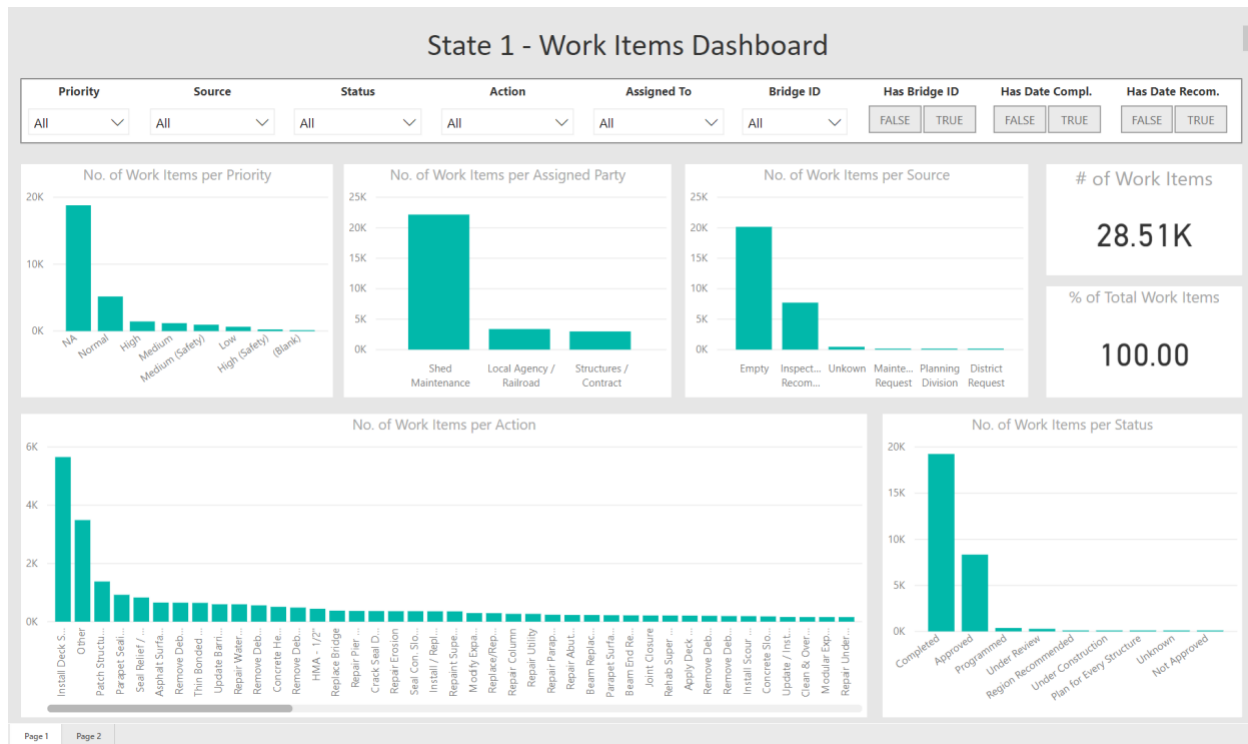
State1:

<https://app.powerbi.com/view?r=eyJrIjoiN2RkZjE3MTU0NDIwOC00ZjJkLTk5ZTI0NWFiNzU3ODJlNjY5IiwidCI6IjZjI0MDk2LTdiMjktNDQ1NC1iOWVlLTlmMDQyMjI4M2FiMiIsImMiOiJ9>

State2:

<https://app.powerbi.com/view?r=eyJrIjoiYmYyOGJhYTItYmNhYy00MTNlLWE0NTctZThjNDJhNGU0YzlmIiwidCI6IjZjI0MDk2LTdiMjktNDQ1NC1iOWVlLTlmMDQyMjI4M2FiMiIsImMiOiJ9>

Below you can see screenshots of dashboards from both states:



Lastly, Mr. Parvardeh developed a draft report and submitted it to Rutgers for final review and modifications.

Number of hours during this period: 48.7 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: 18 hours

B. Work Anticipated During the Next Period

None.

C. Changes /Problems

None.

D. Participants & charged Level of Efforts

Personnel Name	Role/Contribution	Total Hours	Billed Cost
Hooman Parvardeh	Principal	68.2	\$ 9,138.80

Below is a breakdown of level of effort per task:

Task 1	Task 2	Task 3
1 hr	48.7 hrs	18 hrs

E. Travel

None.