

**MoDOT/MTI Structures Research Program
Progress Report – 6/30/2021**

Title: Developing Implementation Strategies for Risk Based Inspection

Project Number: TR201910

Principal Investigator (PI): Glenn Washer

Co-PI(s): Henry Brown

Award date:	11/01/2018		
Scheduled completion date:	12/31/2021	% of project completed to date:	70.0%
Total budget:	\$400,000.00	% of budget expended to date:	97.0%
Draft report due:	09/30/2021	Final report due:	11/30/2021

Provide a short description of the **work currently underway**.

Use [additional notes section](#) if you need to provide more information.

Back-casting for each state is underway. This task has been affected by data quality issues from the NBI data collected and analyzed as part of the report. These issues are being resolved with some coding to correct data fragmentation and recalculation of Time-in-Condition-Rating (TICR). Minor updates to the spreadsheet to determine inspection intervals and attribute tables are being made to reflect changes made for the interim report. The research team is also in the process of requesting access to bridge inspection reports and any other information pertaining to bridges selected for back-casting from the states. A letter will be sent to the states to request this information in the near future.

For the upcoming quarter: There are two states that have joined the study since the original round of RAP meetings were held in 2019. Planning for training and initial project meeting with these states will be initiated in the next quarter, based on the assumption that in-person meetings would again be possible in the next quarter.

A project teleconference with participating states is also being planned for the beginning of next quarter to update states on project status and progress.

Provide a short description of the **noteworthy activities/accomplishments** during this reporting period.

Use [additional notes section](#) if you need to provide more information.

The interim report was completed and submitted to MoDOT for initial review. This report will be discussed and distributed in conjunction with an upcoming conference call with participating states being held to update participants on project progress.

In addition, a spreadsheet was developed to determine inspection intervals for individual states. The spreadsheet incorporates input from the RAP meetings in each of the initial states to score individual bridges as part of the risk analysis. The attribute names for states were updated to match the attributes in the NCHRP 782 report. In addition, the table linking attributes to states' bridge inspection manuals was updated.

Identify **issues or problems** that need to be addressed.

Use [additional notes section](#) if you need to provide more information.

The project progress has been affected by the pandemic and is significantly behind schedule. This includes the first interim report, which was submitted this quarter. The project schedule and funding need to be updated in the upcoming quarter to reflect the additional states that have joined the study since the original schedule and funding were established, and to reflect the challenges the research team has had in completing certain tasks (Interim report I) due to the pandemic. The unavailability of the PI to be focused on the report, which is quite lengthy, has delayed the completion of the report. Data quality issues noted above have delayed the project also; this issue is actively being resolved and is expected to be resolved very soon.

Provides dates for when the **next progress report or presentation** due:

- September 30, 2021 (Quarterly report)

Additional notes:

A contract amendment needs to be processed since the total commitment amount is \$850,000 while the original budget was \$400,000. This is due to the participation of additional states in the study. Connecticut has recently committed to joining the study.