PROJECT OVERVIEW REPORT

1. UTC Identifying Number
   69A3551847102

2. Center Identifying Number
   CAIT-UTC-REG25

3. Project Title
   Investigation of Balanced Mixture Design for New York State Asphalt Mixtures

4. Principal Investigator & Contact Information
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7. Project Description
   Current asphalt design procedures are solely based on volumetric principles and lack a valid methodology to ensure performance of the asphalt mixture considered during design. This research focuses on a state of the art practice called Balanced Mixture Design (BMD), where the gradation and optimum asphalt content are not solely selected by the volumetrics of the mixture, but by the rutting and fatigue cracking resistance. The objectives of the study are to:
   1. Evaluate the current performance of NYSDOT asphalt mixtures across the state; 2. Redesign the asphalt mixtures utilizing the BMD methodology; and 3. Recommend performance tests and finalize a design procedure methodology for NYSDOT adoption and implementation.

8. Implementation of Research Outcomes (or why not implemented)
   Training and specifications around the new design method will be developed and implemented within the NY State. In addition, the impact of cost savings of the new design will be assessed using a performance-cost analysis.

9. Impacts/Benefits of Implementation (actual, not anticipated)
    To Be Determined

10. Dates and Budget
    Start date: 11/1/2019
    End date: 10/31/2020
    UTC (CAIT) Dollars: $80,000
    Cost Sharing: $ 0
    Total Dollars: $80,000

11. Keywords
    Balanced Mixture Design, fatigue cracking, rutting resistance, optimum asphalt content

12. Web Links (Reports and Project Website)
    https://cait.rutgers.edu/research/investigation-of-balanced-mixture-design-for-new-york-state-asphalt-mixtures/