

## **PROJECT OVERVIEW REPORT**

- 1. UTC Identifying Number 69A3551847102
- 2. Center Identifying Number CAIT-UTC-REG 11
- 3. Project Title Pavement Design for Local Roads and Streets
- Principal Investigator & Contact Information David P. Orr, PE, PhD Director / Senior Engineer Cornell University Local Roads Program Cornell University 416 Riley-Robb Hall Ithaca, NY 14853
- 5. Rutgers/CAIT Project Manager Patrick Szary, Ph.D.
- 6. Customer Principal

Dennis Davis, Vice President, Oneida County Andy Avery, P.E., Chemung County New York State County Highway Superintendents Association 136 Everett Road | Albany, NY 12205

7. Project Description

The primary goal of this proposal is to develop a simple to use tool that would allow a local agency to develop a mechanistic-empirical design for lower volume (<1,000 vpd) highways. The primary focus would be for pavement overlays and rehabilitation. The current tools available use older empirical only methodologies or require overly complicated data inputs. The requires working with local agencies to understand their capacity for data collection; determination of the critical factors that can be accounted for by a local agency; factors that are not available and need to be set up as defaults; and the allowable error of a local pavement design.

8. Implementation of Research Outcomes (or why not implemented)

The final product will be a tool in spreadsheet form that would allow a highway manager without engineering background to determine a reasonable pavement design. The tool will also provide information on when a professional engineer should be involved due to site conditions, traffic, or other critical factors. The final design tool will be shared with the entire local highway community.



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

10. Dates and Budget

Start date: 10/1/2018 End date: 12/31/2019 UTC (CAIT) Dollars: \$48,587 Cost Sharing: \$48,587 Total Dollars: \$97,174

11. Keywords Low-volume, pavement design, seasonality, farm equipment

12. Web Links (Reports and Project Website) <u>https://cait.rutgers.edu/research/pavement-design-for-local-roads-and-streets/</u>