PROJECT OVERVIEW REPORT

1. Center Identifying Number
   NJAPA-RU9247

2. Project Title
   Laboratory Evaluation of Foamed Warm Mix Asphalt

3. Principal Investigator
   Thomas Bennert, Ph.D.
   Center for Advanced Infrastructure and Transportation (CAIT)
   Rutgers University
   100 Brett Rd. Piscataway, NJ 08854-8058

4. External Principal
   Brian Tobin
   New Jersey Asphalt Pavement Association
   91 Fieldcrest Avenue
   Edison, NJ 08837-3627

5. Project Description
   Many of New Jersey’s asphalt suppliers have elected to invest in Warm Mixed Asphalt systems that utilize water to foam the asphalt. Foaming the asphalt binder reduces the viscosity of the asphalt binder by increasing its surface area. Theoretically, this provides a more uniform coating on the aggregates, as well increasing the workability of the asphalt mixture. Unfortunately, limited research and data has been reported on the use and performance of foamed asphalt for warm mix asphalt. This project will evaluate the potential mix design changes that may be required to allow foamed WMA, as well as the general material performance. A laboratory investigation generating foamed warm mix asphalt will be conducted.

6. Dates and Budget
   Start date: 5/01/10
   End date: 4/30/12
   Total Dollars: $32,000

7. Keywords
   Warm mix asphalt, hot mix asphalt, foaming, asphalt binders