PROJECT OVERVIEW REPORT

1. Center Identifying Number
   NJIT RU8466

2. Project Title
   Variability of Travel Times on New Jersey Highways

3. Principal Investigator
   Dr. Maria Boile
   Center for Advanced Infrastructure and Transportation (CAIT)
   Rutgers University
   100 Brett Rd. Piscataway, NJ 08854-8058

4. External Principal
   Dr. Steven Chien
   New Jersey Institute of Technology
   University Heights, 225 Colton Hall Newark, NJ 07102

5. Project Description
   The New Jersey Department of Transportation has planned to evaluate the variability of travel times for some of New Jersey’s congested highways. In order to identify highways with high variability in day-to-day travel times to work, obtaining good estimates with high accuracy of non-recurring delay from incidents (e.g., accidents and work zone activities) is critical. However, it is a challenge to design a data collection plan to establish a reliable database containing enough samples to reflect time-varying travel time information (e.g., mean and standard deviation of travel times) suitable for transportation modeling and planning. The objectives of this study are:
   
   (1) To measure travel times for repetitive day-to-day trips in the AM peak period on 15-20 congested New Jersey highways;
   (2) To study the variability of travel times on these highways and determine good estimates of non-recurring delay (e.g., accidents and work zone activities);
   (3) To identify problematic highways with high variability in day-to-day travel times to work.

6. Dates and Budget
   Start date: 7/1/2007*
   End date: 2/28/2009
   Total Dollars: $88,637

7. Keywords
   Traffic congestion, Congestion management systems, Travel times, Non-Recurring delays, Traffic incidents, Incident management, Highway operations