PROJECT OVERVIEW REPORT

1. Center Identifying Number
   NJIT RU9379

2. Project Title
   Development of NJ Rates for the NJCMS Incident Delay Model

3. Principal Investigator
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5. Project Description
   The Congestion Management System used by the New Jersey Department of Transportation (NJCMS) contains a model that estimates the non-recurring delay caused by incidents on highways. The NJCMS model uses rates for different incident types as inputs, which were determined from national studies. To make better predictions of non-recurring delay for New Jersey highways, NJ specific incident rates are needed. These incident rates should be developed for the nine categories of incidents for peak and off-peak periods (fatal, personal injury, property damage, mechanical/electrical, stall, flat tire, abandoned, debris, other). In addition, percent blockage of lanes and shoulders, percent capacity remaining, response time, and clearance times need to be determined for incidents. A feasibility study is required to determine if and how Police Accident Reports, Traffic Operations Databases, Emergency Service Patrol Records, and other existing incident data can be integrated and utilized to generate consistent and accurate estimates of the input parameters for the NJCMS non-recurring delay model. This study would decide if new data in the form of actual field observations of incidents (from the beginning to the end of an incident) would be reasonable and useful to supplement and tie together the existing data. The feasibility and cost effectiveness studies of various methods and technologies to collect this continuous incident observation data will be examined.

6. Dates and Budget
   Start date: 7/1/2006*
   End date: 9/30/2007
   Total Dollars: $71,995

7. Keywords
   Traffic congestion, Congestion management systems, Freeways, Arterial highways, Traffic incidents, Incident detection, Incident management, Highway operations, Traffic delay, New Jersey, Emergency management