Project Title: C-06-01: Work Zone Accident Models Project
PIN: R020.74.881
Responsible Unit: Construction Division
Project Manager: Melander, Thomas

Project Goal:
Analysis and identification of work zone traffic accidents, with particular attention to the occurrence and mitigation of rear-end vehicle accidents. The analysis and reporting of data, in a useful format, responds to Department needs. This project will build upon work previously performed under SPR project C-01-61, Frequency of Work Zone Accidents on Construction Projects.

Actions Proposed:
Researchers for SPR project C-01-61: Frequency of Work Zone Accidents on Construction Projects performed a fairly comprehensive study and provided insightful recommendation. However, the study did not address using secondary data sources such as traffic count data, road network geometry, vehicle, driver information, and construction contracts, work zone duration, variations in intensity of work, and meteorological database. Analyzing additional information resources to those used in the initial project will provide a product that will produce valuable information for the Department to use to have safer work zones.

Anticipated Work Products and Accomplishments:
This proposed project will develop models using more representative samples from additional, supplementary data sources to enhance the explanatory power of research models and to develop appropriate statistical models including traffic volumes, traffic accident history, lane closures, and work zones during construction, peak, and the off season. The quality of data and the measures for quantifying variables include: grouping different types of work zones together, sample sizes of work zone type, accident history of work zone area, and modeling duration. This project will conduct a comprehensive exploratory data analysis, identify supplementary data sources to enhance the power of models, develop appropriate statistical models of interest, and examine specific hypotheses of interest, which will enable NYSDOT to draw credible and conclusive results.

Proposed Budget: $27,000