

Session 5.2.2 New York State Accident Location Information System – Analyzing the Past to Provide a Safer Future

Presenter

David Lewis
ESRI
dlewis@esri.com

Co-Presenter

Kevin Hunt
NYS DOT

New York State has more than 10 million licensed drivers and more than 12 million registered vehicles. Each year the DMV records and processes more than 800,000 motor vehicle accidents. A multi-agency collaboration to develop a GIS-based Accident Location Information System (ALIS) is combining several state organizations' information systems to improve the location accuracy and streamline the processing of traffic accidents. A centralized Accident Location Server automates the location processing of electronically transmitted accidents. If accidents cannot be automatically located they are 'kicked out' and put into a queue for processing by DMV staff via an interactive web-based application. ALIS is based on ESRI ArcGIS Server platform and supports 14 different locations methods to support a variety of input location data. The system leverage a state-wide Geodatabase (New York State Data Product) that was designed to improve location of accidents and at the same time be a comprehensive data set to be used more broadly in the New York State GIS community.

The resulting accident location data is available for highway safety applications in New York State. Traffic Engineers from various local and state agencies leverage the data to conduct detailed studies, and produce reports to identify high accident locations or unusual concentrations of a particular type of accident. Once locations are identified, mitigation action such as roadway improvements (better signage, lighting, or drainage), or behavioral changes (increased law enforcement) may be taken. Moreover, this multi-agency collaboration helps substantiate the vision of enterprise GIS beyond the department level and illustrates the concept of the supra-enterprise where interdependent work groups perform their missions independently, but collaborate to achieve broader goals.