
Nassau County Traffic Sign Inventory and Management



Client/Owner: Nassau County Dept. of Public Works

Project Location: Nassau County, NY

GPI developed a computerized traffic sign management system for this large municipality. The intent of the sign management system was to consolidate sign data information to enhance the inventory, management, and maintenance responsibilities of the County. The work included developing and implementing a field data collection methodology to inventory sign specific data for 20,000 sign panels located on County roads. The field system utilized a hand-held computer with interfaces to global positioning system receivers and color digital cameras. The system included the implementation of an on-line MUTCD sign library, attaching a sign to any sign record. GPI partnered with 3M and Facet to provide digital video imaging. The sign locations were collected with GPS equipment so that the sign locations could be displayed in conjunction with the County's existing GIS base mapping. The sign management system provided for an interactive interface allowing the end user to "click" on a sign location and the database record for that sign appears.

To facilitate data collection and integration into the County's enterprise-wide GIS system, GPI developed upload/ download automation routines allowing the County to easily move sign asset information between the Cartegraph sign management system that was previously in place and the newly developed ESRI ArcGIS environment. Sign asset maintenance is performed by Nassau County sign maintenance staff with the aid of rugged PDA field computers running ESRI's ArcPad 6. Nassau County is able to keep their sign data updated showing an accurate digital picture of the current signage in the County as well as historical records.

The system provides an interactive history log form that details the work order number, crew, activity, reasons for activity, and supplemental information. This work history information is associated with each sign panel so that it is possible to rollback the history logs to a specific date. Included in the history, are nearly 10,000 records that have been scanned into the management system and linked to the sign inventory. County personnel were trained in the use of the system, including both classroom and practical field training.