

Using GIS to prioritize Pedestrian Safety Improvements

Presenter

Jason Hahn, PE
Michael Baker Jr., Inc.
jhahn@mbakercorp.com

Co-Presenter

The New Jersey Department of Transportation (NJDOT) contracted Michael Baker Jr. Inc., (Baker) to perform research, planning and design development efforts to develop a Geographic Information System (GIS)-based Pedestrian Safety Management System (PSMS) to prioritize pedestrian improvements in New Jersey. The primary goal of the PSMS was to determine if a user-friendly system could be developed to analyze and prioritize pedestrian improvements at locations throughout the state based on safety and facility data. A rating system and subsequent analysis engine was created, which assigns points for each defined subcategory to develop a numerical score for several different criteria. Criterion scores are then combined to assign a total numerical value for each roadway segment. The presentation will focus on the challenges of collecting, analyzing, and determining relevant criteria and the application of GIS to prioritize sections of the roadway network.