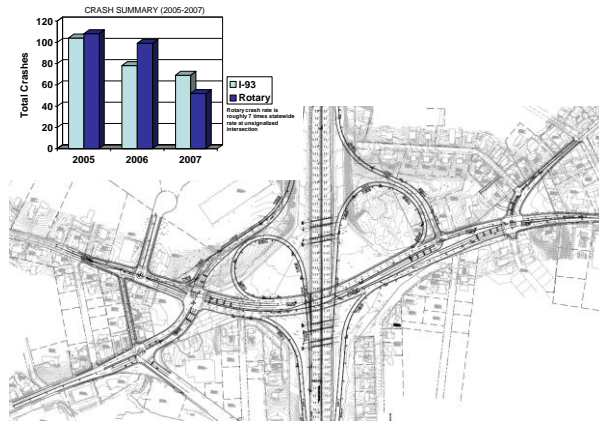


I-93/Methuen Rotary Preliminary/Final Design Massachusetts Department of Transportation Methuen, MA

Duration: 2012 -2014
Project Cost: \$5,000,000
Firm Fee: \$160,000
Role: Sub-consultant



TrafInfo was part of a team on this high priority project for MassDOT/Highways. Methuen Rotary Interchange (Exit 46) off of Interstate 93 in the City of Methuen, MA was identified as a high crash location with a crash rate roughly seven times the statewide average.

TrafInfo was responsible for all the traffic engineering related tasks for the preparation of the Environmental Assessment/Draft Environmental Impact Report (EA/DEIR) document. The firm organized an extensive traffic data collection effort including vehicle classification counts and a license plate origin-destination survey for the existing rotary. TrafInfo was responsible for all safety assessment including computation of crash rates, identification of high crash locations and assessment of geometry factors for the safety problems. The firm performed capacity and level of service analysis on the freeway, ramp junctions, signalized and unsignalized intersections as well as at the rotary using the latest roundabout analysis methodology in the 2010 Highway Capacity Manual.

Using the Massachusetts Statewide Travel Demand Forecasting model in TransCAD, TrafInfo updated traffic forecasts for the project area. Latest socio-economic forecasts were obtained from the regional planning agencies and the growth in population, households and employment allocated to various Traffic Analysis Zones based upon land use growth plans. The firm then developed a CORSIM-based micro-simulation model for the entire project area. Based upon this modeling, design refinements were developed to manage the queuing within the interchange. The model was also utilized in providing information for the air quality and noise assessments.

TrafInfo worked with the highway design engineers in the assessment of two interchange alternatives and the development of the intersection geometry and lane configuration. TrafInfo staff participated in the public involvement process including presentations to the Interchange Task Force (ITF) and the reviewing federal and state agencies.

TrafInfo was responsible for preparing the PS&E for the ITS components on the project.