

I-91 & Route 68, Interchange Improvements Wallingford, CT

Project Description:

Location
Wallingford, CT

Owner
ConnDOT

Duration
1998 - 2001

AI Engineers, Inc. (AI) prepared the preliminary design traffic study in October 1996 for the Connecticut Department of Transportation (See Location Map to left). The following is a brief summary of the project requirements: The 1996 existing traffic conditions were modeled based on the traffic volume count and the inventory of the traffic signal timings obtained in the field on May 1996. The 2015 design year traffic volumes were obtained from the Connecticut Department of Transportation. The 2015 traffic design flows were analyzed under six different alternates.

Alternates were compared based on intersection level of service and traffic flow between intersections. The traffic flow between intersections was determined based upon turbulence due to entering or exiting traffic. In addition, a signal coordination study using the Highway Capacity Manual Arterial software was performed in both directions during the AM and PM peak hours. Study determined that the interchange should be maintained with traffic signal modifications.

Final Design Plans were prepared that maintained the location of the existing ramps and included widening of the existing Route 68 Bridge over I-91, as well as the addition of turning lanes.

For the Final Design, AI prepared the traffic signal plans for seven (7) other intersections along Route 68, the signing and pavement marking plans, as well as specifications and estimates.

