

Pavement Evaluation & Rehabilitation Design Lincoln Ave. and Green St. in Urbana, Illinois



The city of Urbana, Illinois, has a transportation infrastructure that serves traffic from its more than 35,000 residents as well as businesses, commercial traffic, and more than thirty thousand students of the University of Illinois on a daily basis. To improve rideability and access for citizens and commuters, Applied Pavement Technology, Inc. (APTech) evaluated portions of three pavement sections along Lincoln Avenue and Green Street, including an intersection and adjacent pavement areas.

In November 2005, APTech performed evaluation activities for Urbana, including falling weight deflectometer testing to evaluate the pavement's load-carrying capability, coring to assess layer thicknesses and subsurface conditions, and dynamic cone penetrometer testing to assess the subgrade support conditions. This project was particularly challenging due to the fact that each evaluated section had different lane-specific bus traffic, as well as variations in pavement cross-sections both in the longitudinal and transverse directions. APTech analyzed the field data to develop appropriate rehabilitation designs and recommendations to keep traffic moving in this bustling campus town.