

Highway 35 Widening Environmental Assessment



CLIENT: URS Cole-Sherman

Planning



synectics
SAFETY SPECIALISTS

The Ministry of Transportation, Ontario (MTO) Eastern Region initiated an Environment Assessment (EA) project for the widening of 32 kilometres of 2-lane highway (Highway 35) to 4 lanes. URS Cole-Sherman was the design firm responsible for completing the EA. To thoroughly appreciate the safety implications of various design choices, including a divided or undivided median, URS Cole Sherman retained Synectics to develop a quantitative process to evaluate safety.



Synectics utilized the safety evaluation concepts expressed in the MTO's Science of Highway Safety report. The application of these concepts, utilizing an Empirical-Bayes approach to the development of the collision models, was considered a first in Ontario. Synectics was given 6 discrete design cross-sections to evaluate, including several design choices regarding median treatments, lane widths, shoulder widths, and intersection controls. Collision modification factors were researched and built in to the model for use by the URS Cole-Sherman design team.