

## **Managing Left-Turns Along Carp Road**

There are presently over 60 existing driveways along Carp Road between Hazeldean Road and Highway 417. With planned development/redevelopment, there will be an increased demand for north and southbound left-turn movements at/between intersections.

Left-turns on urban roadways create several challenges as they are a necessary means of access to/from a site, but they also increase vehicular conflicts and potentially, collisions and delay. The most common types of treatment of mid-block left-turns include a non-traversable median, mountable medians, two-way left-turn lane and undivided roadways.

According to available research, an undivided four-lane roadway is considered appropriate when the annual average daily traffic (AADT) volumes are less than 18,000 combined with active access points (driveways with more than 10 movements an hour) are at densities of 60 per mile and left-turn percentages less than 10%. Higher AADT volumes (upto 28,000 AADT) with lower driveway densities and left-turn percentages would also allow for an undivided roadway.

Given the projected AADT of approximately 29,000, combined with the current active driveway density that is not anticipated to decrease in the future, an undivided four-lane Carp Road is not recommended. However, there may be an opportunity for an undivided roadway to be implemented as a first phase of project implementation, provided that two-way left-turns lanes are available.