

Ability to Turn Onto or Off of North Avenue (Gap Analysis)

- » The study team counted and timed turning vehicles during the AM (7:15-7:30) and PM (5:15-5:30) peak traffic periods (a total of 58 side streets and driveways at these five locations):
 - Near West Hillsdale
 - East of Pilgrim Parkway to East Rockway
 - Hollyhock/129th area
 - Wirth Park/Glen Cove area
 - Mound Zion/Walnut Grove area
- » National traffic engineering standards set the “driver acceptability” gap time to make a right-turn onto a road, such as North Avenue, at **6.5 seconds**. The gap time standard to make a left-turn onto North Avenue is **7.5 seconds**. Actual waiting times longer than the standards negatively affect driver behavior and traffic operations, resulting in rushed turning movements onto North Avenue traffic (increasing crash potential) and/or travel diversion to other intersections.
- » A total of 451 turning vehicles were monitored for their wait times – 292 in the AM and 159 in the PM.
- » The percentage of turning vehicles waiting longer than the gap time standard are summarized below:

Left Turns onto North Avenue from either North or South Side	
AM (prevailing traffic is eastbound) 64% – 84% of vehicles wishing to turn left onto North Avenue waited more than 7.5 seconds	PM (prevailing traffic is westbound) 85% – 97% of vehicles wishing to turn left onto North Avenue waited more than 7.5 seconds

Right Turns onto North Avenue			
South-Side Driveway or Intersection	AM	41% – 61%	PM
	of vehicles wishing to turn right onto North Avenue waited more than 6.5 seconds		of vehicles waiting to turn right onto North Avenue waited more than 6.5 seconds
North-Side Driveway or Intersection	AM	20% – 38%	PM
	of vehicles wishing to turn right onto North Avenue waited more than 6.5 seconds		of vehicles wishing to turn right onto North Avenue waited more than 6.5 seconds