

DEPARTMENT OF PUBLIC WORKS

Engineering Division – Traffic Section 2625 E. Glendale Avenue

Appleton, WI 54911

TEL (920) 832-5580 FAX (920) 832-5570

To: Municipal Services Committee

From: Eric Lom, Traffic Engineer

**Date:** June 17, 2020

**Re:** Intersection traffic control at the Marquette Street / McDonald Street intersection

Follow-Up to Six-Month Trial Period

Based on our annual crash records analysis, the Traffic Section recently reviewed the traffic control at the intersection of Marquette Street and McDonald Street, and subsequently initiated a six-month trial period to change from yield control to two-way stop control. This intersection is located five blocks east of Meade Street and two blocks north of Glendale Avenue. The land use in this area is residential.

In a typical intersection control study, we consider traffic volumes, crash history, safe approach speeds, etc. In this case, the estimated entering volume of this intersection is low, at approximately 590 vehicles per day. A review of crash records indicated three crashes for the recent five-year period of 2015 through 2019, resulting in a crash rate that was in the top five worst for yield-controlled intersections in Appleton. The critical approach speed for the intersection was found to be approximately 9 mph due primarily to vegetation and the home located in the northeast quadrant of the intersection. Both streets are classified as *local*.

While this intersection does not meet the volume threshold for stop control, the critical approach speed is below the standard and the crash rate is above the standard for yield control. As such, we recommend maintaining the two-way stop control that was implemented for the trial period.

## To accomplish this, the following ordinance action is required:

1. Create: "Install Stop signs on Marquette Street at McDonald Street."