

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	Ì
From:	Eric Lom, City Traffic Engineer	
Date:	June 7, 2023	
Re:	Change to intersection traffic control at the Homestead $\mbox{Dr}/\mbox{Linwood}\mbox{Av}$ intersection	

Based on requests from multiple citizens and Alderperson Wolff, Traffic Section staff recently completed an intersection control evaluation for the Homestead Dr / Linwood Av intersection.

This four-legged intersection is located 0.4 miles west of Mason St and 0.1 miles south of Northland Av. The land use in this area is primarily residential. Both streets are functionally classified as *local*. The existing intersection control is a two-way stop, with Linwood Av traffic stopping. Yield signs were replaced with stop signs in 2010 because of substandard sight lines.

In a typical intersection control study, we consider traffic volumes, crash history, safe approach speeds, etc. In this case, the entering volume of this intersection is relatively low, at 930 vehicles per day. A review of crash records indicated zero reportable crashes for the recent five-year period of 2018 through 2022. Based on this, and other factors, two-way stop control is considered appropriate.

However, at two-way stop-controlled intersections, State/Federal guidelines state that the roadway with the lower volume should be the roadway that stops. Collected traffic count data shows that Linwood Av carries significantly more traffic than Homestead Dr (540 cars/day vs 390 cars/day), which indicates the orientation of the stop signs should be reversed. Additionally, reversal of the stop sign orientation would allow for a safer, controlled crossing of Homestead Drive for school children heading to and from Highland Elementary School.

Based on this, we recommend reversing the orientation of the stop signs at this intersection.

To accomplish this, the following ordinance action is required:

- 1. *Repeal:* "Install stop signs on Linwood Avenue at Homestead Drive."
- 2. Create: "Install stop signs on Homestead Drive at Linwood Avenue."