

Office of the City Engineer

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DATE: October 31, 2016

TO: John Rooney, Assistant Commissioner of Public Works / City Engineer

FROM: Ara Molitor, Traffic Engineer

RE: Traffic Study – Intersection of Deane Blvd. and 19th St.

Purpose: Determine if the warrants for intersection control dictate a change in existing conditions for the intersection.

Method: Field observation, traffic counts, crash analysis and sign warrant analysis.

ANALYSIS

Existing Conditions:

- At the intersection of Deane Blvd. and 19th St. the current “stop” control is on 19th St. facing east and west.
- Both streets are two lane, bi-directional local roadways with an asphalt over concrete pavement width of 36 feet face to face.
- There are no existing parking restrictions at this intersection on any approach.
- The neighborhood entirely residential.
- Vision is wide open for three out four corners. The southwest quadrant has a few very mature trees that restrict safe stopping sight distances for traffic approaching the intersection from the west and approaching traffic from the south.

Tube counts were taken to determine the ADT’s of the roadways. Deane Blvd. was determined to have an ADT of 429 veh./day. The ADT for 19th St. similarly was 1643 veh./day. The traffic counts were taken after the 21st St. construction, so the detour route for that construction would not affect the data.

A 5-year crash analysis (2011-2016) was performed on the intersection. During the study period there were 4 crashes at or near the intersection. Of the 4 accidents, 0 were correctable. Two of the accidents also happened this year (2016) during the period of construction closure on 21st Street two blocks to the south which forced a lot of detouring traffic onto 19th Street.

The current control conditions and ADT’s for the intersection and analysis do warrant a “Stop” control (2000 < ADT > 8000 veh/day). The existing conditions have 19th Street stopping and yielding right of way to Deane Blvd. even though the ADT of 19th St. is approximately 4 times that of Deane Blvd.

RECOMMENDATIONS

- Switch “Stop” Control from 19th Street to Deane Blvd. The ADT for 19th Street is nearly four times as much as Deane Blvd.