



DEPARTMENT OF PUBLIC WORKS
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To: Municipal Services Committee
From: Eric Lom, P.E., City Traffic Engineer
Date: February 27, 2024
Re: Recommended switch to all-way stop control at Capitol Dr / Conkey St intersection
Follow-up to a six-month trial

General

In response to safety concerns, the Traffic Section recently reviewed the intersection control at the Capitol Drive / Conkey Street intersection, and subsequently initiated a six-month evaluation period to change from two-way stop control to all-way stop control. This intersection is located 0.3 miles north of Northland Avenue (CTH OO) and 0.2 miles east of Roemer Road. While both roadways are functionally classified as “Local,” both effectively function as “Collector” roadways as a result of the recent traffic signal installation at the Conkey St / Northland Av (CTH OO) intersection. The posted speed limit on both roadways is 30 mph.

Evaluation

The Federal Highway Administration (FHWA) states that certain criteria should typically be met in order to justify the implementation of all-way stop control. This typically involves evaluation of traffic volumes, crash experience, and the functional classification of the roadways. Designated *School Safe Walking Routes* are also considered when appropriate.

The busiest eight hours of the day are used to evaluate FHWA’s traffic volume criteria. At the Capitol/Conkey intersection, the volumes are approximately 51% of the levels necessary to satisfy the volume-related all-way stop warrant.

However, the main concern we heard about this intersection was regarding the number and severity of crashes, which involved eleven reportable crashes over a five-year period, and numerous injuries. This yields a crash rate of 3.6 crashes per million entering vehicles, which is much higher than the city-wide average (0.22) for two-way stop-controlled intersections.

Recommendation

While the traffic volumes at this intersection do not meet FHWA guidelines for all-way stop control, this intersection had a crash rate that was unusually high. It is likely the crash problem would continue to get worse as more development occurs in the subject area, resulting in higher traffic volumes. However, since the start of the all-way stop evaluation period, there have been zero reported crashes. Additionally, we have not received any negative feedback regarding the six-month evaluation.

Based on this, we recommend making the changes permanent. To accomplish this, the following ordinance action is required:

1. **Create:** “Install all-way stop control at the Capitol Drive / Conkey Street intersection.”