Multi-Way Stop Application:

Section 2B.07 Multi-Way Stop Applications Support:

- Multi-way stop control can be useful as a safety measure at intersections if certain traffic conditions exist. Safety concerns associated with multi-way stops include pedestrians, bicyclists, and all road users expecting other road users to stop. Multi-way stop control is used where the volume of traffic on the intersecting roads is approximately equal.
- 2. The restrictions on the use of STOP signs described in Section 2B.04 also apply to multi-way stop applications.

Guidance:

- 3. The decision to install multi-way stop control should be based on an engineering study.
- 4. The following criteria should be considered in the engineering study for a multi-way STOP sign installation:
 - A. Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.

Not Justified

B. Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.

No, 12-month period with 5 or more correctible crashes in the last 5 years. (1 crash in 2021 that was correctable)

- C. Minimum volumes:
 - The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and Yes (387 vehicles per hour)
 - 2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hours; but

No (130 vehicles/pededstrians/bicycles per hour)

3. If the 85th percentile approach speed of a major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.

85th Percentile is below 40 MPH

D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.

Criteria B: No Criteria C1: Yes

Criteria C2: No (130<160)

Does not qualify for exemption.

Option:

Other criteria that may be considered in an engineering study include:

A. The need to control left-turn conflicts;

No (1 crash in last 15 years)

B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;

Pedestrian volumes are not high (10 from 8:00 – 9:00 am)

C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and

No Sight distance concern

D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.

No. During observations 8:00 – 9:00 AM, Julian Street queue was backed up about 6 vehicles during peak times.