

Completed



Possible Removal of the Stop Signs on Boon Street
At the Intersection of Boon & Rose
City Engineering Department
June 6th, 2018

Criteria for Multi-Way Stop

Based on MUTCD 2009 Edition Standards

Criterion 1: Crash Experience

This criterion is **not satisfied** because there were no accidents at this intersection in the past 12 months that could have been prevented by a Multi-Way Stop.

Criterion 2: 8-hour Vehicular Volume

This criterion is **not satisfied** because the vehicles per hour entering the intersection of Boon Street & Rose coming from Boon is 87, which does not exceed the required minimum 300 vehicles per hour for any 8 hours of an average day with an average delay to vehicular traffic of 3.80 seconds. The vehicles per hour entering the intersection from Rose is 79 with an average delay to vehicular traffic of 1.40 seconds, which does not exceed the required minimum 200 vehicles per hour for the same 8 hours and the minimum average delay time of 30 seconds per vehicle during the peak hour.

Criterion 3: Major Road Approach Speed

This criterion is **not satisfied** because the 85th-percentile approaching speeds of traffic on Rose or Boon does not exceed the required minimum of 40 mph.

Additional Notes

The level of service of the intersection was found to be a **level C** with an average control delay of 2.60 seconds per vehicle.

It should further be noted that, out of 129 cars, there were approximately 90 rolling stop during the time period of observation. All of these rolling stops occurred as traffic was continuing straight on Boon towards Garfield.

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M. S.

Date: 06/6/2018

Reviewed By:

J. Ford

Date:

8/13/18

Location	Rose & Boon St
Day, Date	Wednesday June 6 th 2018
Conditions	Cloudy, 72°F
Time	12:00-1:00pm
Gap Length	8.5
Observer	Matthew Sexton

G = W/4 + 3

About 12' per lane
8' for parking

STOP WARRANT FIELD OBSERVATIONS

PEDESTRIANS		SCHOOL CHILDREN		HANDICAP	
0		0		0	
GAPS					LINE OF CARS WAITING LONGER THAN 5 CARS
27 Gaps with average length of 130 seconds					0
STOP TIME DELAY					
1	0	3	4	1	6
2	3	0	2	0	1
3	1	3	2	0	2
4	2	1	1	1	1
5	1	0	0	0	0
6	1	2	1	1	0
7	2	1	1	1	0
8	1	1	1	1	0
9	1	1	1	1	0
10	1	1	1	1	0
11	1	1	1	1	0
12	1	1	1	1	0
13	1	1	1	1	0
14	1	1	1	1	0
15	1	1	1	1	0
16	1	1	1	1	0
17	1	1	1	1	0
18	1	1	1	1	0
19	1	1	1	1	0
20	1	1	1	1	0
21	1	1	1	1	0
22	1	1	1	1	0
23	1	1	1	1	0
24	1	1	1	1	0
25	1	1	1	1	0
26	1	1	1	1	0
27	1	1	1	1	0

Purpose of this study was to evaluate the need for the stop signs on Boon street. There was almost always two cars at the stop signs when traffic present. Most of the cars were headed east towards Gearfield. Very limited number of gaps.