

**BROAD SREET AND CASSADY AVENUE
BEXLEY, OHIO
REQUEST FOR NORTHBOUND LEFT TURN PHASE
TRAFFIC STUDY**

SUMMARY:

A review of the accidents occurring at the intersection indicates that there is not a history of accidents involving the northbound left turn movement. The accident history does not support the need for a northbound left turn phase.

A review of the signal timing indicates it would be desirable to increase the time for the yellow and all red clearance intervals. The increase of these times by 1 second would further reduce the accident potential for the northbound left turn movement as well as the other north and southbound movements.

Recommendation: Increase the north and southbound yell and all red clearance intervals according the desired settings in the table below.

SIGNAL CLEARANCE TIMES:

The yellow and all red signal clearance times for the original settings, Existing settings, and desired settings are summarized in the table below. The desired settings are calculated to comply with current practices. The new settings would give an additional 1 second for northbound traffic to clear the intersection before east west traffic is given a green signal. We recommend that the clearance times be set according to the desired settings.

CLEARANCE TIMES SUMMARY				
		Original Settings	Existing Settings	Desired Settings
E-W Broad St	Yellow	3.9 sec	3.9 sec	4.0 sec
	All Red	2.0 sec	2.0 sec	2.0 sec
N-S Cassady Ave	Yellow	3.2 sec	3.0 sec	3.2 sec
	All Red	1.6 sec	1.6 sec	2.4 sec

ACCIDENTS:

The accidents that have occurred over the last four years are summarized in the table below. Of the 21 accidents that occurred none involved northbound left turns. Eleven were angle accidents with 4 north or southbound motorists at fault. Increasing the north and southbound yellow and all red clearance intervals will decrease the potential for these accidents. Increasing the clearance times would also further reduce the potential for north and southbound turning accidents.

We must point out that traffic signals have almost never prevented all traffic accidents. Typically they reduce angle accidents but increase rear end accidents. The accident rate at Broad and Cassady is relatively low.

ACCIDENT SUMMARY				
	YEAR			
	2014 (10 months)	2013	2012	2011
ACCIDENT TYPE				
Rear End	1	2	1	3
Angle	0	2	3	6
Turning	2	0	0	0
Sideswipe	0	0	0	1
TOTAL	3	4	4	10

E.P. FERRIS & ASSOCIATES, Inc.

Joseph A. Ridgeway Jr

Joseph A. Ridgeway, Jr., P.E.
Senior Vice President