

AGENDA: TSC 11/3/14

ITEM NO. 4: Consider request to establish a MULTI-WAY STOP at the intersection of 4th Street & Illinois Street.

Staff Report:

1. 4th Street and Illinois Street are both classified as "local" streets in a residential area; the speed limit on both streets is 30mph as established by state law.
2. A review of accident records reveals that there have been no accidents at this intersection reported to the Police Department within the last 3 years that are susceptible to correction by stop signs.
3. Speed counts conducted on October 9-10, 2014 show that the average speed on all four approaches are below the 30mph speed limit. However the 85th percentile speed for eastbound and westbound traffic on 4th Street at Illinois Street is 33.21mph and 31.36mph respectively.
4. This intersection does have the potential of school children crossing 4th Street to get to Pinckney Elementary School; however, a pedestrian count taken October 23-24 found no students crossing during either the morning or afternoon crossing periods.
5. There are no sight distance obstructions at this intersection. There is a clear line of sight in all directions.
6. None of the minimum requirements for stop signs as provided in the Manual on Uniform Traffic Control Devices (MUTCD) are currently met; in addition, the MUTCD states that STOP signs should not be used for speed control.
7. vehicle entering the intersection.

MINUTES: TSC 11/3/14

ITEM NO. 4:

Consider request to establish a MULTI-WAY STOP at the intersection of 4th Street & Illinois Street

Woosley reviewed the information provided in the staff report.

Public Comments:

None.

Commission Comments:

None.

MOTION BY COMMISSIONER DEVLIN, SECOND BY COMMISSIONER BOLEY, TO RECOMMEND DENYING THE REQUEST TO ESTABLISH A MULTI-WAY STOP AT THE INTERSECTION OF 4TH STREET & ILLINOIS STREET, THE MOTION CARRIED, 6-0.

David Woosley

From: Lees, Andrew <Andrew.Lees@Payless.com>
Sent: Monday, September 29, 2014 9:34 AM
To: David Woosley
Cc: Lees, Andrew
Subject: Stop Sign for 4th & Illinois Streets

Categories: Important, Refer to TSC

To Whom It May Concern,

Good morning. This is the second request that I am writing in regard to the high traffic area of 4th Street and Illinois Street. There is currently a stop sign on either side of 4th Street, controlling traffic in the North-South directions, but the West-East directions have no stop signs.

There are stop signs at the West-East intersections of 4th Street and Maine Street, and then again at 4th Street and Indiana Street. This allows for an uninterrupted length of street that is a little over one quarter of a mile in length. Given this length of space without a stop sign in the West-East direction, vehicles are able to gain a lot of speed going down the street.

This area is a high traffic area with many children living on all sides of the streets mentioned. Further, this is a highly walked area for children walking to local schools (Pinckney, Central, Little Red School House, Century, etc.). We have noted on multiple occasions where children walking to school, and walking home after school have come close to being hit by cars that are driving, often above the speed limit, down the street in the West-East directions.

For the above mentioned reasons we would like to request stop signs please be installed on 4th Street, in the West-East directions. This would be a tremendous asset for the safety of our neighborhood children, as well as those adults to walk and bicycle to work, walk to and from the hospital, and the local wildlife population.

If you have any questions, or need any further information from myself, or any other individuals in the neighborhood, please do not hesitate to reach out to me at my cell or email below.

Thank you for your time and consideration,

Andy

785-368-6137 – Office
785.218-6726 – Cell
andrew.lees@payless.com

“The value of an idea lies in the using of it.” —Thomas Edison



 *Please consider the environment before printing this e-mail.*

Section 2B.06 STOP Sign Applications

Guidance:

- 01 *At intersections where a full stop is not necessary at all times, consideration should first be given to using less restrictive measures such as YIELD signs (see Sections 2B.08 and 2B.09).*
- 02 *The use of STOP signs on the minor-street approaches should be considered if engineering judgment indicates that a stop is always required because of one or more of the following conditions:*
- A. *The vehicular traffic volumes on the through street or highway exceed 6,000 vehicles per day;*
 - B. *A restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street or highway; and/or*
 - C. *Crash records indicate that three or more crashes that are susceptible to correction by the installation of a STOP sign have been reported within a 12-month period, or that five or more such crashes have been reported within a 2-year period. Such crashes include right-angle collisions involving road users on the minor-street approach failing to yield the right-of-way to traffic on the through street or highway.*

Support:

- 03 The use of STOP signs at grade crossings is described in Sections 8B.04 and 8B.05.

Section 2B.07 Multi-Way Stop Applications

Support:

- 01 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.
- 02 The restrictions on the use of STOP signs described in Section 2B.04 also apply to multi-way stop applications.

Guidance:

- 03 *The decision to install multi-way stop control should be based on an engineering study.*
- 04 *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.*
 - 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.*
 - C. *Minimum volumes:*
 1. *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*
 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 hour; but*
 3. *If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.*
 - 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.*

Option:

- 05 Other criteria that may be considered in an engineering study include:
- A. The need to control left-turn conflicts;
 - B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;
 - 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
 - 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.



Stop Warrant Worksheet



Date: October 9-10, 2014

Location: 4th Street & Illinois Street

Time Period	4th Street							Illinois Street							Grand Total
	EBLL	EB	EBRL	WBLL	WB	WBRL	Total	NBLL	NB	NBRL	SBLL	SB	SBRL	Total	
12-01		2			0		2		0			0		0	2
01-02		1			0		1		0			0		0	1
02-03		1			1		2		0			1		1	3
03-04		1			1		2		0			0		0	2
04-05		2			1		3		0			0		0	3
05-06		6			2		8		0			0		0	8
06-07		16			7		23		0			0		0	23
07-08		46			47		93		5			2		7	100
08-09		17			30		47		3			5		8	55
09-10		14			8		22		1			3		4	26
10-11		11			13		24		0			9		9	33
11-12		14			19		33		3			6		9	42
12-01		14			18		32		6			1		7	39
01-02		13			11		24		4			7		11	35
02-03		19			13		32		2			8		10	42
03-04		28			26		54		5			8		13	67
04-05		28			29		57		3			8		11	68
05-06		30			32		62		1			7		8	70
06-07		19			17		36		3			7		10	46
07-08		10			5		15		1			2		3	18
08-09		7			3		10		0			2		2	12
09-10		3			0		3		2			2		4	7
10-11		5			4		9		0			3		3	12
11-12		4			0		4		0			0		0	4
Totals	0	311	0	0	287	0	598	0	39	0	0	81	0	120	718

The Manual on Uniform Traffic Control Devices (MUTCD) requires an average of **300** vehicles per hour entering the intersection from the main street for each of 8 hours of a day, and an average of **200** entering from the minor street during the same 8 hours.

Average entering volume on main street for 8 highest hours = **52**

Average minor street volume for same 8 hours = **10**



W 4th St

W 4th St

Illinois St

Mississippi St

Maine St

Alabama St

Alabama St

Indiana St

Maine St