TSC\_AGENDA\_2.5.07\_ITEM3

RECALVED

OCT 12 2006

PUBLIC WORKS

Dear Mr. Woosley

I am writing as a concerned parent and resident of Lawrence. I live at 552 Arrowhead Dr. Just 2 blocks North of Peterson Rd. My goal in writing you this letter is to have a four way stop put in at the corner of Peterson rd and Arrowhead dr. There are several reasons why I feel this should happen.

- 1. This is a major crossing for school children. I know there are signs up for 20 mph during the morning and afternoon. However, this crossing is used several times a day for families coming and going to the park by the Deerfield school as well.
- 2. The speed limit on Peterson Rd is set for 40 mph except during the school crossing times. I feel this is set to high for vehicles to get slowed down in time for people in the cross walk.
- 3. During the morning hours there have been many times when the traffic is backed up down Arrowhead waiting for the traffic on Peterson.
- 4. My main concern is for the safety of all the children that use this crosswalk. This neighborhood has grown, and I feel this would help protect everyone.

Thank you for time, please feel free to contact me any time.

Gary McAlister 552 Arrowhead DR Lawrence Ks 66049 785-749-3136

## **Manual on Uniform Traffic Control Devices**

#### **Section 2B.07 Multiway Stop Applications**

#### Support:

Multiway stop control can be useful as a safety measure at intersections if certain traffic conditions exist.

Safety concerns associated with multiway stops include pedestrians, bicyclists, and all road users expecting other road users to stop. Multiway stop control is used where the volume of traffic on the intersecting roads is approximately equal.

The restrictions on the use of STOP signs described in Section 2B.05 also apply to multiway stop applications.

#### Guidance:

The decision to install multiway stop control should be based on an engineering study.

The following criteria should be considered in the engineering study for a multiway STOP sign installation:

- A. Where traffic control signals are justified, the multiway 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. A crash problem, as indicated by 5 or more reported crashes in a 12-month period that are susceptible to correction by a multiway stop installation. Such crashes include right- and left-turn collisions as well as right-angle collisions.

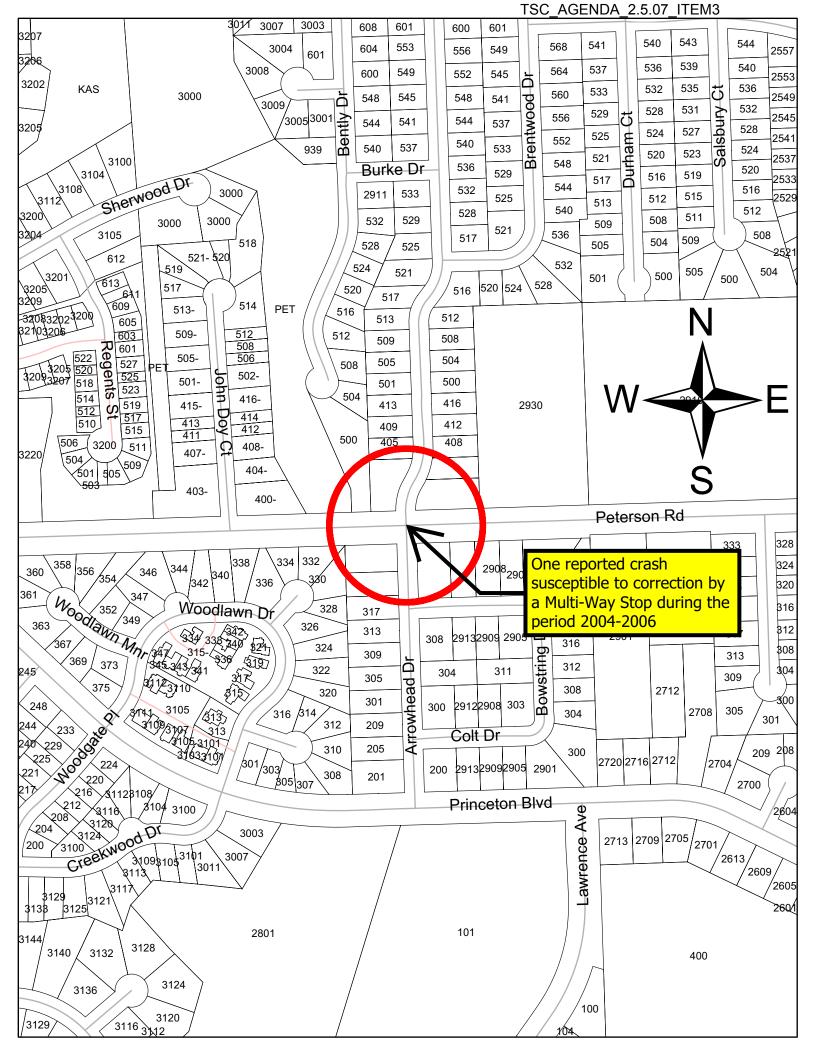
#### C. Minimum volumes:

- 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 65 km/h or exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the above values.
- 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.

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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 reasonably safely 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 multiway stop control would improve traffic operational characteristics of the intersection.





### City of Lawrence, Kansas Traffic Engineering Division

# STOP

## **Multiway Stop Warrant Worksheet**

Date: 12 December 2006 Location: Arrowhead Drive & Peterson Road

Time		Peterson Road					Arrowhead Drive							Grand	
Period	EBLL	EB	EBRL	WBLL	WB	WBRL	Total	NBLL	NB	NBRL	SBLL	SB	SBRL	Total	Total
12-01		17			39		56		0			2		2	58
01-02		1			16		17		0			1		1	18
02-03		9			6		15		0			2		2	17
03-04		8			8		16		0			5		5	21
04-05		18			15		33		2			1		3	36
05-06		46			11		57		4			10		14	71
06-07		111			41		152		3			57		60	212
07-08		252			157		409		24			121		145	554
08-09		156			157		313		12			62		74	387
09-10		99			83		182		11			36		47	229
10-11		102			99		201		11			32		43	244
11-12		120			137		257		13			44		57	314
12-01		151			155		306		17			28		45	351
01-02		136			117		253		11			36		47	300
02-03		127			133		260		10			43		53	313
03-04		164			185		349		27			36		63	412
04-05		140			238		378		15			45		60	438
05-06		204			331		535		34			60		94	629
06-07		113			194		307		35			64		99	406
07-08		84			125		209		27			42		69	278
08-09		47			87		134		26			24		50	184
09-10		73			78		151		14			9		23	174
10-11		56			66		122		1			18		19	141
11-12		36			42		78		1			5		6	84
Totals	0	2270	0	0	2520	0	4790	0	298	0	0	783	0	1081	5871

Note: Speed limit on Peterson is 40mph

The Manual on Uniform Traffic Control Devices (MUTCD) requies an average of 210 vehicles per hour entering the intersection from the main street for each of 8 hours of a day, and an average of 140 entering from the minor street during the same 8 hours.

Average entering volume on main street for 8 highest hours = 357

Average minor street volume for same 8 hours = **80**