

**City of Lawrence
Traffic Safety Commission Agenda
November 3, 2008-7:00 PM
City Commission Room, City Hall**

ITEM NO. 2: Consider request to establish a MULTI-WAY STOP at the intersection of 11th Street & Louisiana Street and at the intersection of 11th Street & Mississippi Street.

Facts:

1. The *Manual on Uniform Traffic Control Devices* requires a minimum average of 300 vehicles per hour for each of 8 separate hours during a day on the main street and an average of 200 vehicles per hour for the same 8 hours on the minor street.
2. Traffic data collected on September 30-October 1 found an average of 308 vehicles per hour on 11th Street and an average of 107 vehicles per hour on Louisiana Street.
3. Traffic data collected on September 30-October 1 found an average of 454 vehicles per hour on 11th Street and an average of 176 vehicles per hour on Mississippi Street.

ACTION: Provide recommendation to the City Commission.

**City of Lawrence
Traffic Safety Commission
November 3, 2008 Minutes**

ITEM NO. 2:

Consider request to establish a MULTI-WAY STOP at the intersection of 11th Street & Louisiana Street and at the intersection of 11th Street & Mississippi Street.

David Woosley presented the information provided in the staff report and provided an e-mail from the public and a memo from the Public Works Department (attached).

Commissioner Harden asked what the crash history was; Woosley advised that it was not significant enough to warrant a MULTI-WAY STOP.

Public comment:

Peg Livingood, University of Kansas: 11th Street & Louisiana is a very steep intersection and pedestrians trying to cross the street can not see vehicles coming up the hill until they are virtually at the crossing; it is also difficult for vehicles coming up the hill to see pedestrians. We recognize the concerns with inclement weather and the impacts with vehicles trying to get started again on a steep slope, but the safety of pedestrians is a concern 365 days a year. This is the crossing used by students to get

to GSP Corbin. We would be willing to conduct a pedestrian study and provide that information if that would be helpful. In addition, with all the construction in the area, there are a number of streets closed which may have an effect on the current traffic count.

Commissioner Smith asked if this was city property or KU property; Woosley advised that 11th Street is a city street.

Commissioner Hagen: It would be helpful to get the pedestrian data.

Commissioner Miller: It would be helpful to have new traffic counts when the construction in the area is completed; I think we should delay this.

Commissioner Woods asked about the intersection of 11th & Mississippi: Livingood responded that prior to the temporary stop signs, there were massive backups on 11th Street, but traffic is now flowing much easier and pedestrians can cross much easier.

Commissioner Smith asked if we usually install signs from private property; Woosley advised that if a private roadway enters an intersection that is designated as a MULTI-WAY STOP, the city would install the STOP sign.

Commissioner Miller: I think we should table the request for 11th & Louisiana.

Commissioner Smith: The one at 11th & Mississippi clearly does not meet the criteria.

Commissioner Harden: I would encourage the city to develop a "Safe Routes to School" program throughout the city; there are federal funds available to assist; Shoeb Uddin advised that the city is working on such a program.

MOTION BY COMMISSIONER MILLER, SECONDED BY COMMISSIONER ZIEGELMEYER, TO TABLE THE REQUEST TO ESTABLISH A MULTI-WAY STOP AT THE INTERSECTION OF 11TH STREET & LOUISIANA STREET UNTIL ROAD CLOSURE DETOURS ARE REMOVED AND PEDESTRIAN INFORMATION CAN BE OBTAINED ; THE MOTION CARRIED 8-1 (Woods: the city is against it; there haven't been any accidents; I don't think the signs are warranted).
MOTION BY COMMISSIONER SMITH, SECONDED BY COMMISSIONER MILLER, TO RECOMMEND DENIAL OF THE REQUEST TO ESTABLISH A MULTI-WAY STOP AT THE INTERSECTION OF 11TH STREET & MISSISSIPPI STREET; THE MOTION CARRIED 9-0.

David WoosleyITEM NO. 2

From: Livingood, Peg [peggy@ku.edu]
Sent: Tuesday, September 16, 2008 1:39 PM
To: David Woosley
Cc: Charles Soules; Modig, James E; Witt, Mark D; Kaiser, Danny; Crupper, Dennis; Paulette, Marion Waller
Subject: Permanent stop sign requests

David:

Following up on our August 25 meeting with both you and Chuck Soules, the University of Kansas would like to make the following requests:

1. Permanently post the stop signs at 11th and Mississippi Street: With the confusing offset alignment of this intersection, the flow of cross traffic and the safety of pedestrians crossing Mississippi Street have been an ongoing concern. Temporary four-way stop signs were installed at 11th and Mississippi this past summer due to the construction of the Oread Inn project. With the installation of these signs, we have noticed improved safety for pedestrian crossings and improved traffic flow for vehicles. We would like to request that the posting of these signs become permanent, with the accompanying stop bars installed on the pavement.
2. Permanently post the stop signs at 11th and GSP/Corbin entrance drive (Louisiana Street): the sight lines at this intersection are extremely poor due to the steep slopes on 11th Street, making it difficult for cars to see pedestrians crossing 11th Street at the GSP/Corbin crosswalk. Again, temporary four-way stop signs were installed at this intersection over the summer with the Oread Inn construction. The stop signs have improved the pedestrian safety at this crossing since cars are now required to stop, allowing for increased time and reduced speeds for vehicles to note pedestrian traffic. We would like to request that the posting of these signs become permanent, with the accompanying stop bars installed on the pavement.

If you have any questions or require additional information about these requests, please let me know. Thank you.

Peg

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10/17/2008

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.

Option:

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

ALL WAY

Stop Warrant Worksheet



Date: September 30-October 1, 2008

Location: 11th Street (S) & Mississippi Street

Time Period	Mississippi Street							11th Street							Grand Total
	NBLL	NB	NBRL	SBLL	SB	SBRL	Total	EBLL	EB	EBRL	WBLL	WB	WBRL	Total	
12-01		8			30		38					54		54	92
01-02		10			25		35					25		25	60
02-03		7			10		17					9		9	26
03-04		3			4		7					6		6	13
04-05		6			9		15					4		4	19
05-06		4			19		23					14		14	37
06-07		7			31		38					23		23	61
07-08		28			280		308					124		124	432
08-09		64			342		406					167		167	573
09-10		91			351		442					149		149	591
10-11		126			278		404					147		147	551
11-12		149			253		402					151		151	553
12-01		239			339		578					187		187	765
01-02		103			213		316					155		155	471
02-03		185			275		460					172		172	632
03-04		186			238		424					183		183	607
04-05		175			229		404					204		204	608
05-06		213			305		518					216		216	734
06-07		73			228		301					184		184	485
07-08		60			163		223					125		125	348
08-09		63			109		172					129		129	301
09-10		44			119		163					124		124	287
10-11		37			88		125					82		82	207
11-12		16			53		69					62		62	131
Totals	0	1897	0	0	3991	0	5888	0	0	0	0	2696	0	2696	8584

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 = **454**

Average minor street volume for same 8 hours = **176**

10/2/2008



ALL WAY

Stop Warrant Worksheet



Date: September 30-October 1, 2008

Location: 11th Street & Louisiana Street

Time Period	11th Street							Louisiana Street							Grand Total
	EBLL	EB	EBRL	WBLL	WB	WBRL	Total	NBLL	NB	NBRL	SBLL	SB	SBRL	Total	
12-01		36			32		68		42					42	110
01-02		28			12		40		25					25	65
02-03		12			5		17		10					10	27
03-04		3			3		6		7					7	13
04-05		5			2		7		3					3	10
05-06		5			2		7		8					8	15
06-07		13			14		27		9					9	36
07-08		65			95		160		39					39	199
08-09		116			123		239		64					64	303
09-10		106			92		198		69					69	267
10-11		103			81		184		65					65	249
11-12		130			75		205		89					89	294
12-01		169			96		265		112					112	377
01-02		128			107		235		66					66	301
02-03		183			91		274		93					93	367
03-04		170			108		278		99					99	377
04-05		204			121		325		89					89	414
05-06		224			118		342		120					120	462
06-07		192			107		299		115					115	414
07-08		120			84		204		99					99	303
08-09		99			71		170		111					111	281
09-10		108			75		183		131					131	314
10-11		102			71		173		73					73	246
11-12		68			32		100		66					66	166
Totals	0	2389	0	0	1617	0	4006	0	1604	0	0	0	0	1604	5610

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 = **308**

Average minor street volume for same 8 hours = **107**

