#### **AGENDA: TSC 4/6/15**

ITEM NO. 2:

Consider establishing a MULTI-WAY STOP at the intersection of 9<sup>th</sup> Street & Crestline Drive.

#### Staff Report:

- 1. At the February 2015 Traffic Safety Commission meeting the Commission heard a request to establish a school crosswalk at the intersection of 9<sup>th</sup> Street & Crestline Drive; the request was denied, however, the Commission requested that the intersection be studied for a MULTI-WAY STOP.
- 2. Traffic volume and crash data show that two (2) of the criteria for consideration of a MULTI-WAY STOP installation are met.
- 3. Criteria B; there were five (5) reported crashes during the period June 26, 2012 June 17, 2013.
- 4. Criteria D; there were four (4) reported crashes during the period May 22-2013 January 16, 2014, and, the volume obtained during November 2014 exceeded 80% of the requirement.

MINUTES: TSC 4/6/15

#### ITEM NO. 2:

Consider establishing a MULTI-WAY STOP at the intersection of 9<sup>th</sup> Street & Crestline Drive.

Woosley reviewed the information provided in the staff report and noted additional correspondence received on this item.

#### **Public Comments:**

Jeanne Peas, 2905 Stratford Road, President, Sunset Hills Neighborhood Association: We have heard from quite a few people regarding this; some have been against it; some have been for it; I'm here to say that we support whatever the Commission and the recommendation is for this intersection; I see that there are probably some advantages, for instance, safety with crossing, slowing down the traffic, maybe diverting the traffic to 6<sup>th</sup> Street or Bob Billings Parkway; one of the concerns we have is backing-up of traffic during the work-hour commute, down 9<sup>th</sup> Street to Rockledge or Centennial; perhaps it would be possible to do this temporarily to see how it operates.

#### Commission Discussion:

Commissioner Rothrock asked how soon this intersection might be signalized; Woosley advised that it probably wasn't a candidate for signalization any time soon.

Commissioner Boley asked if 9<sup>th</sup> Street is a minor arterial; Woosley advised that he thought it is (it actually is a collector at this location).

Commissioner Devlin asked if a temporary could be considered; Woosley advised that it could be considered.

Commissioner Rothrock stated that he thought it should either be approved or denied; if it needed to be looked-at again in the future, that could be done.

MOTION BY COMMISSIONER ROTHROCK, SECOND BY COMMISSIONER DEVLIN, TO RECOMMEND ESTABLISHING A MULTI-WAY STOP AT THE INTERSECTION OF 9<sup>TH</sup> STREET & CRESTLINE DRIVE; THE MOTION CARRIED, 6-0.

### **David Woosley**

From: Shannan Johnson < lkbeauty4@gmail.com>
Sent: Thursday, October 30, 2014 10:18 AM

To: David Woosley

**Subject:** School cross walk needed

Follow Up Flag: Follow up Flag Status: Flagged

Categories: Refer to TSC

My name is Shannan Johnson. I am requesting a school cross walk be placed at the intersection of ninth and Crestline street for West Junior High students to cross safely.

My children lillyanna 13, and Auryn 12 were struck by a car on Oct. 29 2014 crossing this intersection on their way to school. A similar accident happened last year at this same intersection. My children are thankfully alright but, would like to get the steps in motion to prevent this from occurring again.

Thank you Shannan Johnson My number I can be reached at 785 304 1491 Page 52 2009 Edition

#### **Section 2B.06 STOP Sign Applications**

Guidance:

- 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).
- 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:

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:

- 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.
- The restrictions on the use of STOP signs described in Section 2B.04 also apply to multi-way stop applications. *Guidance*:
- The decision to install multi-way stop control should be based on an engineering study.
- 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 85<sup>th</sup>-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:

- 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.

Sect. 2B.06 to 2B.07 December 2009



# City of Lawrence, Kansas Traffic Engineering Division

# ALL WAY Stop Warrant Worksheet



Location: 9th Street & Crestline Drive Date: November 10-11, 2014

Time	9th Street								Crestline Drive						
Period	EBLL	EB	EBRL	WBLL	WB	WBRL	Total	NBLL	NB	NBRL	SBLL	SB	SBRL	Total	Total
12-01		12			25		37		8			3		11	48
01-02		7			20		27		5			2		7	34
02-03		2			12		14		1			1		2	16
03-04		2			5		7		1			0		1	8
04-05		10			6		16		3			1		4	20
05-06		36			19		55		10			4		14	69
06-07		78			52		130		40			14		54	184
07-08		288			189		477		212			66		278	755
08-09		284			149		433		131			33		164	597
09-10		212			167		379		69			33		102	481
10-11		178			207		385		64			21		85	470
11-12		198			242		440		75			27		102	542
12-01		225			302		527		83			32		115	642
01-02		237			247		484		80			28		108	592
02-03		217			272		489		97			40		137	626
03-04		308			369		677		130			76		206	883
04-05		301			411		712		157			44		201	913
05-06		286			524		810		201			41		242	1052
06-07		228			316		544		115			49		164	708
07-08		111			224		335		95			25		120	455
08-09		94			162		256		75			21		96	352
09-10		66			120		186		66			23		89	275
10-11		31			71		102		27			14		41	143
11-12		27			52		79		18			6		24	103
Totals	0	3438	0	0	4163	0	7601	0	1763	0	0	604	0	2367	9968

The Manual on Uniform Traffic Control Devices (MUTCD) requies 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 = **584**

> > 188 Average minor street volume for same 8 hours =

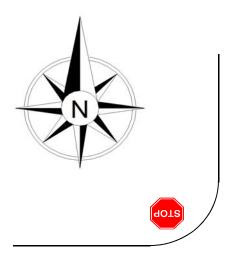
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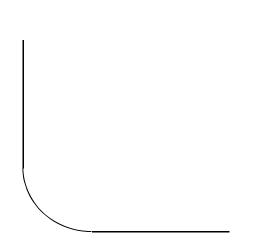


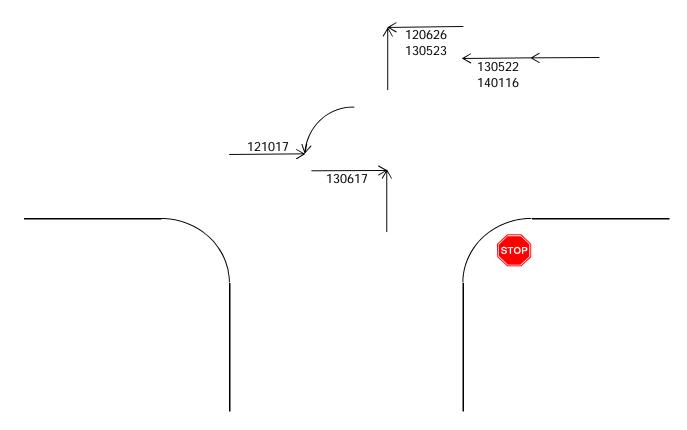
## City of Lawrence, Kansas Traffic Engineering Division **Crash Diagram**



Location: 9th Street & Crestline Drive Date: June 2012-May 2014

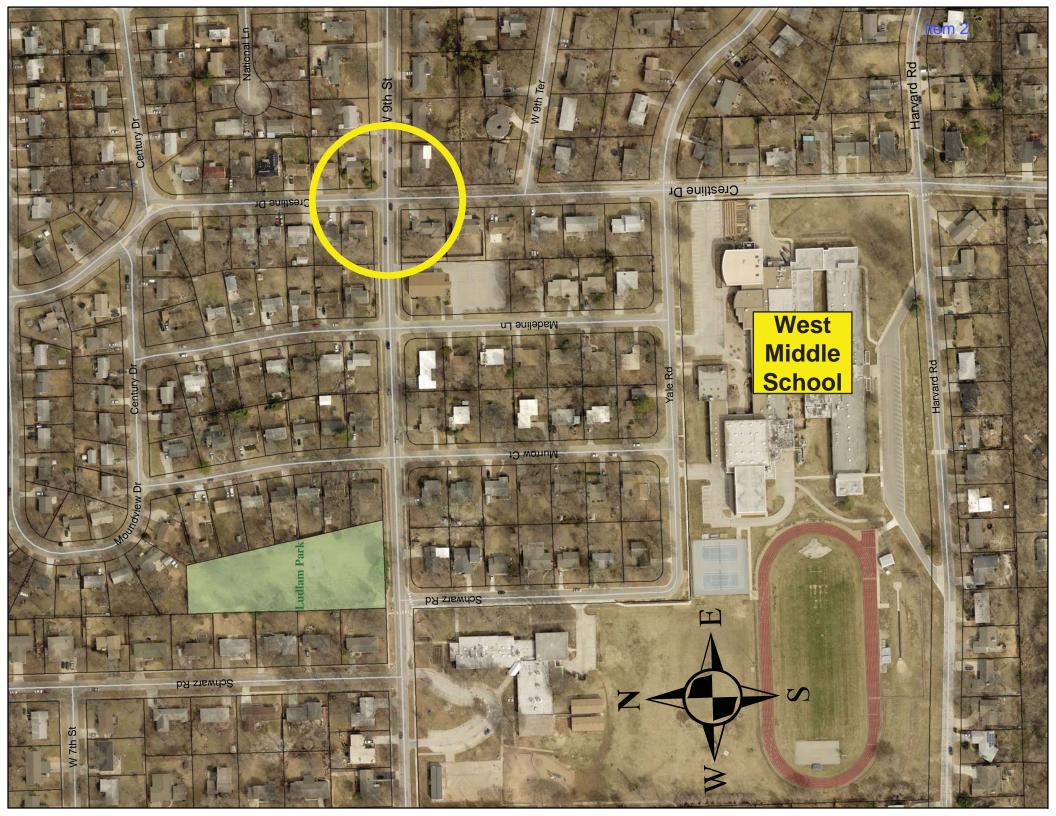






Notes: <u>5 reported crashes during the period June 2012-June 2013</u>: 120626, 121017, 130522, 130523 & 130617

4 reported crashes during the period May 2013-May 2014: 130522, 130523, 130617 & 140116



#### **David Woosley**

From: Jon Dunham <jondun@sunflower.com>
Sent: Saturday, March 28, 2015 1:48 PM

To:David WoosleyCc:gerald peesSubject:9th & Crestline

3/28/2015 Mr. Woosley,

I live immediately south of West Junior High and frequently use the intersection of 9th and Crestline. On the April 6th Agenda, the issue of a 4 way stop at 9th and Crestline will be addressed and I am totally in favor of this being implemented. Turning either direction at this intersection is a big gamble at most times of the day, especially when West lets out and parents are transporting their non-walking kids. The traffic levels between 3 and 4 in the afternoon are simply too high with 9th street traffic not being forced to slow down. Please implement this as soon as possible. I'm not sure a protected crosswalk would then be needed if there were stop signs limiting traffic at this intersection.

Thank you, Jon Dunham 2712 Westdale Cir

#### **David Woosley**

From: Clare Doveton <studio@claredoveton.com>

**Sent:** Monday, April 06, 2015 9:35 AM

To: David Woosley

**Subject:** Concerns on 9th Street

To the Traffic Safety Commission,

I currently own a house on 9th Street between Centennial Park and Sunset Hills Elementary School. There has been a huge increase of traffic on this street since all the construction on 6th last year and it is becoming increasingly difficult to feel comfortable with children walking to school (Sunset Hills Elementary and West), riding bikes and skateboards to the park (as there are currently no crosswalks on Centennial Park - ZERO) or families walking to the Merc (as there are no sidewalks to the Merc from our neighborhood)

I know there is a multi-way stop being considered by the Traffic Safety Commission tonight, and this seems like a step in the right direction. But I encourage the city to look at other ways to keep West 9th street a safe place for children to walk and families to grow by looking at other ways to calm the traffic on this street, as it holds a wonderful park and elementary school. Current conditions are flat out dangerous for our kids and I no longer feel comfortable having my 12 year old ride his bike to the park or the grocery school. Where is he supposed to cross? lowa? There isn't a bike lane, a crosswalk or a sidewalk at present. Without a traffic calming circle, crosswalks, stop signs, etc. you have cars zooming down a hill past children walking to school with no stop until they are past a park and an elementary school. Please help us figure out how to keep this a safe, residential neighborhood. Being able to walk to the school, the park, and the Merc is why we live here.

Thank you for your time and considerations,

Clare Doveton