

## **AGENDA – TSC 11/1/10**

ITEM NO. 2: Consider request to establish a MULTIWAY STOP at the intersection of 11<sup>th</sup> Street & Indiana Street.

Facts:

1. 11<sup>th</sup> Street is classified as a “collector” street and Indiana is classified as a “local” street.
2. The criteria for consideration of a MULTIWAY STOP are found in the *Manual on Uniform Traffic Control Devices* (attached).
3. Traffic data obtained September 16-17, 2010 show that the minimum volume of traffic is met for consideration of a MULTIWAY STOP.

## **MINUTES – TSC 11/1/10**

### **ITEM NO. 2:**

**Consider request to establish a MULTI-WAY STOP at the intersection of 11<sup>th</sup> Street & Indiana Street.**

David Woosley presented the information provided in the staff report.

Commissioner Heckler read a statement about his concerns (copy attached).

Commissioner Harden noted that the letter of request mentioned side-impact collisions and advised that a MULTI-WAY STOP doesn't necessarily eliminate those type collisions.

Public comment:

Susan Davis, 1200 Mississippi Street: I live at the bottom of the top of the hill; Indiana is not a flat street, it is also a slope; my experience since the hotel has been in place and all the traffic coming-and-going, is that people get to that corner and they don't know what to do; historically, the stop sign has always been on 11<sup>th</sup> Street so most people think Indiana is a through street, so there is a lot of confusion at the corner; the 4-way stop would alleviate the confusion; most of the neighbors would really like to have it the way it used to be, but we know we can't have that, so the 4-way stop seems to be a good compromise. It is much easier if you are on 11<sup>th</sup> Street to see the Indiana traffic than if you are on Indiana trying to see the 11<sup>th</sup> Street traffic.

Deb Spencer, 1200 Mississippi Street: It is sometimes tough on 11<sup>th</sup> Street when the streets are slick, but it would also be extremely dangerous not to have a stop on 11<sup>th</sup> Street because you could really get up a head of steam coming down that hill; I think a 4-way stop is a good resolution of the whole matter.

Commissioner Novotny: I think to keep it consistent; there should be a 4-way stop since there is now one at 11<sup>th</sup> & Louisiana and at 11<sup>th</sup> & Mississippi.

Commissioner Miller: To me, you're that close to a college campus, especially with sporting events, if you're expecting quickness and efficiency when you're traveling there, you're not going to get that. I'm in favor of the request.

MOTION BY COMMISSIONER MILLER, SECONDED BY COMMISSIONER ZIEGELMEYER, TO RECOMMEND ESTABLISHING A MULTI-WAY STOP AT THE INTERSECTION OF 11<sup>TH</sup> STREET & INDIANA STREET; THE MOTION CARRIED 6-2 (Heckler: see attached statement; Rockrock: making a decision not based on engineering standards is a dangerous precedent).

## 11<sup>th</sup> St Comments

There are many aspects to consider:

- \* The number of cars traveling 11th street which is the overwhelming majority says to keep traffic moving to avoid back up during busy times.

- \* The grades are quite steep on 11th which says keep those vehicles moving. Large vehicles or vehicles with trailers on wet pavement can sometimes have a problem with traction. If a bit of ice begins to form before crews can apply salt or clear the intersection it could be difficult for vehicles coming from both directions.

- \* Indiana which is relatively level poses no traction problems necessarily plus substantially fewer cars traveling on Indiana says that is the street for stop signs.

- \* 4 way stop could induce not necessary back up on 11th street

- \* Crash history must also be considered. Item number 4 below indicates a very busy accident history.

Consider establishing a MULTIWAY STOP at the intersection of 11th Street & Indiana Street.

Facts:

1. 11th Street is classified as a "collector" street and Indiana Street is classified as a "local" street.

2. The criteria for consideration of a MULTIWAY STOP are found in the Manual on Uniform Traffic Control Devices (attached).

3. Traffic counts taken on 14-15 April 2010 show that the minimum required volume of traffic needed to consider a MULTIWAY STOP is not met.

4. Police Department crash records show that there were 2 reported crashes in 2005, 6 reported crashes in 2006, 2 reported crashes in 2007 and 6 reported crashes in 2008, when STOP signs were in place stopping the major flow of traffic.

5. Therefore, it does not appear that a MULTIWAY STOP can be justified at this intersection.

## David Woosley

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**From:** Jonathan Douglass  
**Sent:** Wednesday, September 29, 2010 11:49 AM  
**To:** David Woosley; Charles Soules  
**Cc:** David L. Corliss  
**Subject:** 11th and Indiana City Commission discussion

For staff and TSC use, here are the draft minutes of the City Commission discussion of the stop signs at 11<sup>th</sup> and Indiana.

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### **Receive staff report regarding the September 4, 2010 Oread Tailgate Event.**

Jonathan Douglas, Assistant to the City Manager, presented the staff report. He showed photos of the event and said that the Police and Fire Departments did not have any major concerns to report regarding the event. He said the next scheduled event for September 11, 2010 was cancelled and the applicant would notify the City and the neighbors before the next event.

Mayor Amyx said Nancy Longhurst, Oread Inn, sent a memo regarding a 4-way stop at 11<sup>th</sup> and Indiana Street and thought that concern needed to be addressed soon.

David Corliss, City Manager, said staff could invoke a 90 day temporary regulation by administrative fiat.

Mayor Amyx said he new there was a process whereby notification was given, in making a change to an intersection, for awareness purposes. He said he knew there was another game this week.

Corliss asked the Mayor about his suggestion.

Mayor Amxy said the intersection needed a 4-way stop.

Corliss said if a 4-way stop was the will of the Commission, a temporary 4-way stop could be placed at that intersection until staff could start the process of making it permanent. He said the 4-way stop worked during a construction period. He said he recalled when Indiana went straight through without a stop sign. Staff could change that intersection immediately if that was direction of the Commission and then have further discussion to make that 4-way stop permanent. The City Commission could refer this concern to the Traffic Safety Commission, but there was no law and it had already been reviewed by the TSC. He said staff could follow any process the City Commission wanted. The normal process was to send it to the TSC for a recommendation.

Mayor Amyx said there was not enough time, before Saturday, to make people aware of the 4-way stop

at that intersection.

Corliss said that the most visible change the citizens would see was warning signs before the stop signs and many times it was a larger stop sign to emphasize the point. He said the City had a process that was followed as well, but if the Mayor thought it was a safety concern, the Commission should act on that concern.

Mayor Amyx said that intersection was a safety concern. He said letting people find out about the 4-way stop on the agenda was one thing, but had a concern about inviting 25,000 to 30,000 guests who would not see the City's agenda.

Corliss said if it was the Commission's direction, staff would work to make it a 4-way stop, notifying the police department and the public safety departments through KU, the bus services and those services that relied on that information and then staff could place that 4-way stop as a more formal agenda item.

Mayor Amyx said local citizens hesitated at that intersection.

Commissioner Chestnut suggested asking people, in that area, if that intersection was a safety risk. He said he did not have a problem reinstating the stop signs, but thought TSC or staff should study that intersection.

Mayor Amyx said the City Commission needed to take action during this season. He said he felt there was not something right about that intersection.

Corliss said it would be appropriate for the City Commission to direct staff to install a 4-way stop at the intersection of 11<sup>th</sup> and Indiana and place the item on as a regular agenda item to refer to the Traffic Safety Commission.

Mayor Amyx concurred, but asked if there should be additional warning that there was currently a stop sign at that location.

Corliss said at a minimum staff could flag the stop sign, but there was a hill and he was not sure about the additional "stop ahead" signs.

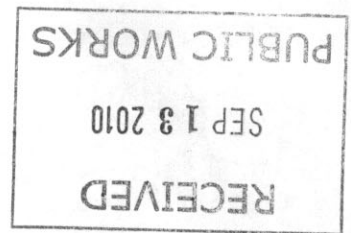
Chuck Soules, Public Works said that staff needed to be careful of the utility locates.

Mayor Amyx called for public comment.

Nancy Longhurst, General Manager of the Oread Inn, spoke regarding the success of the event and also that the Oread staff favored establishment of a 4-way stop at 11<sup>th</sup> and Indiana, and that no event would be held in the right-of-way on September 11, 2010.



**Jonathan Douglass**, *Assistant to the City Manager/City Clerk*



September 9, 2010

Mr. David Woolsey  
Traffic Engineer

Traffic Safety Commissioners  
City Hall, 6<sup>th</sup> & Massachusetts  
Lawrence, KS 66044

Re: Traffic Control at Intersection of 11<sup>th</sup> & Indiana Streets.

Dear Mr. Woolsey and Commissioners:

I am writing to you because of my concern for public safety and because of my personal alarm over the unsafe driving condition that now exists at the intersection of 11<sup>th</sup> and Indiana Streets in Lawrence.

Prior to the construction of the Oread Hotel, the intersection was controlled by a two-way stop sign. Traffic was stopped on 11<sup>th</sup> Street; Indiana was through traffic. Traffic counts which were conducted after construction of the hotel indicated that 11<sup>th</sup> Street carried a higher volume of traffic than Indiana. Consequently, the decision was made to reverse the traffic control signs.

I attended the Traffic Safety Commission meeting last spring and requested that this decision be re-evaluated. As a result, additional traffic counts were conducted in May, with apparently similar results, and the decision was reaffirmed to post stop signs on Indiana Street rather than on 11<sup>th</sup> Street.

It is only a matter of time until there is a fatality accident in this intersection as the result of a side impact collision. East-west sightlines for north-bound and south-bound vehicles on Indiana Street are insufficient to allow a driver to safely determine the time to enter the intersection. This is especially problematic given the speed of vehicles coming down 11<sup>th</sup> Street from the east. I again urge you to re-evaluate this decision because traffic volume is not the only criteria on which to base a traffic safety decision. The risk of loss of life should be the determining factor.

Some of my neighbors have similar concerns and have expressed their agreement by signing below.

Sincerely,

Carol von Tersch  
706 West 12<sup>th</sup> Street

Susan Horn Davis  
1200 Mississippi

Nancy Longhurst  
General Manager, Oread Hotel

Deb Spencer  
1200 Mississippi

**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 16-17, 2010

Location: 11th Street & Indiana Street

Time Period	11th Street							Indiana Street							Grand Total
	EBLL	EB	EBRL	WBLL	WB	WBRL	Total	NBLL	NB	NBRL	SBLL	SB	SBRL	Total	
12-01		44			57		101		42			17		59	160
01-02		32			40		72		34			12		46	118
02-03		35			34		69		26			20		46	115
03-04		7			16		23		10			2		12	35
04-05		3			3		6		7			1		8	14
05-06		4			4		8		4			2		6	14
06-07		18			20		38		12			14		26	64
07-08		55			73		128		60			40		100	228
08-09		95			138		233		63			64		127	360
09-10		109			147		256		71			44		115	371
10-11		142			134		276		94			45		139	415
11-12		164			127		291		105			43		148	439
12-01		240			172		412		178			59		237	649
01-02		209			135		344		130			49		179	523
02-03		272			128		400		159			27		186	586
03-04		247			157		404		164			60		224	628
04-05		251			153		404		174			55		229	633
05-06		227			184		411		158			67		225	636
06-07		186			132		318		149			48		197	515
07-08		144			118		262		107			45		152	414
08-09		131			124		255		118			35		153	408
09-10		111			120		231		92			39		131	362
10-11		82			87		169		75			31		106	275
11-12		63			61		124		54			24		78	202
Totals	0	2871	0	0	2364	0	5235	0	2086	0	0	843	0	2929	8164

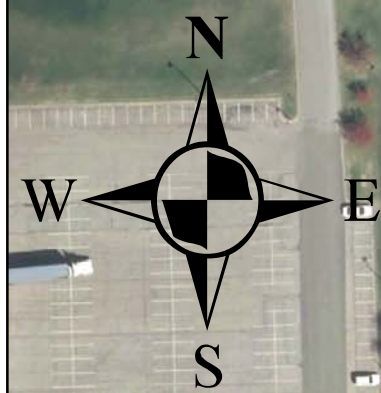
The Manual on Uniform Traffic Control Devices (MUTCD) requires an average of **300** vehicles per hour entering the intersection from the main street for each of 8 hours of a day, and an average of **200** entering from the minor street during the same 8 hours.

Average entering volume on main street for 8 highest hours = **373**

Average minor street volume for same 8 hours = **203**

10/19/2010





W 11th St

Mississippi St

Indiana St

W 11th St

Mississippi St

Louisiana St

College St