

## **AGENDA: TSC 11/7/16**

ITEM NO. 4: Consider request for a MULTI-WAY STOP at the intersection of 21<sup>st</sup> Street & Tennessee Street.

Staff Report:

1. 21<sup>st</sup> Street is classified at a "collector" street and Tennessee Street is classified as a "local" street, both in a residential area.
2. 21<sup>st</sup> Street currently stops for Tennessee Street.
3. The *Manual on Uniform Traffic Control Devices* provides the following criteria for consideration of a Multi-Way Stop sign installation: "Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation".
4. Traffic crash data obtained from the Police Department found that there were five reported crashes at the intersection during the period October 2014-September 2015; in addition, there have been 11 reported crashes at the intersection during the period 2014-2016.
5. Therefore, this intersection meets the minimum criteria for consideration of a Multi-Way Stop installation.

## **MINUTES: TSC 11/7/16**

### ITEM NO. 4:

Consider request for a MULTI-WAY STOP at the intersection of 21<sup>st</sup> Street and Tennessee Street.

Woosley reviewed the information provided in the staff report.

Public Comments:

None.

Commission Discussion:

Commissioner Jones: Sometimes the street is very busy and sometimes there is not a sole on it; I can certainly understand if we can do something preventative, it would be advantageous to do so, at minimal cost.

Commissioner Koprince: It seems like the crash history speaks for itself, a lot of crashes at the same intersection in a short period of time.

**MOTION BY COMMISSIONER KOPRINCE, SECOND BY COMMISSIONER CRAWFORD, TO RECOMMEND ESTABLISHING A MULTI-WAY STOP AT THE INTERSECTION OF 21<sup>ST</sup> STREET AND TENNESSEE STREET; THE MOTION CARRIED, 8-0.**

## David Woosley

---

**From:** pblackman <jax\_x@yahoo.com>  
**Sent:** Friday, October 07, 2016 12:07 PM  
**To:** David Woosley  
**Subject:** stop sign need

Hi, I got your name from Lisa Larsen. I live near an intersection where many accidents happen: 21st & Tennessee. I believe a 4-way stop rather than a 2-way stop would be helpful.

People think it's a one-way street because it was one-way before they crossed 19th street coming south. Other people think it's a 4-way stop and continue out into the speeding traffic. There are accidents about once a month and pedestrians/bicyclists tend to cross the street without realizing how dangerous it is. People speed down the street as well and animals have been killed. Just pulling out of our driveways can be dangerous.

A few weeks ago a drunk driver plowed into a tree in my front yard. He said he saw a squirrel. I believe he saw a car and was on the wrong side of the road at 2am, going too fast.

I fear that someone is going to be injured or killed if the traffic isn't slowed down.

Thank you,  
Perrin Blackman  
2111 Tennessee

## 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 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:

- 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.



City of Lawrence, Kansas  
Traffic Engineering Division  
Crash Diagram



Location: **21st Street & Tennessee Street**

Date: **2013-2016**



Tennessee Street

17-Apr-14  
2-Mar-14  
30-Dec-14  
28-Mar-15  
15-Jul-16  
2-Oct-16



4-May-15  
28-Aug-15

29-Oct-14

27-Apr-16

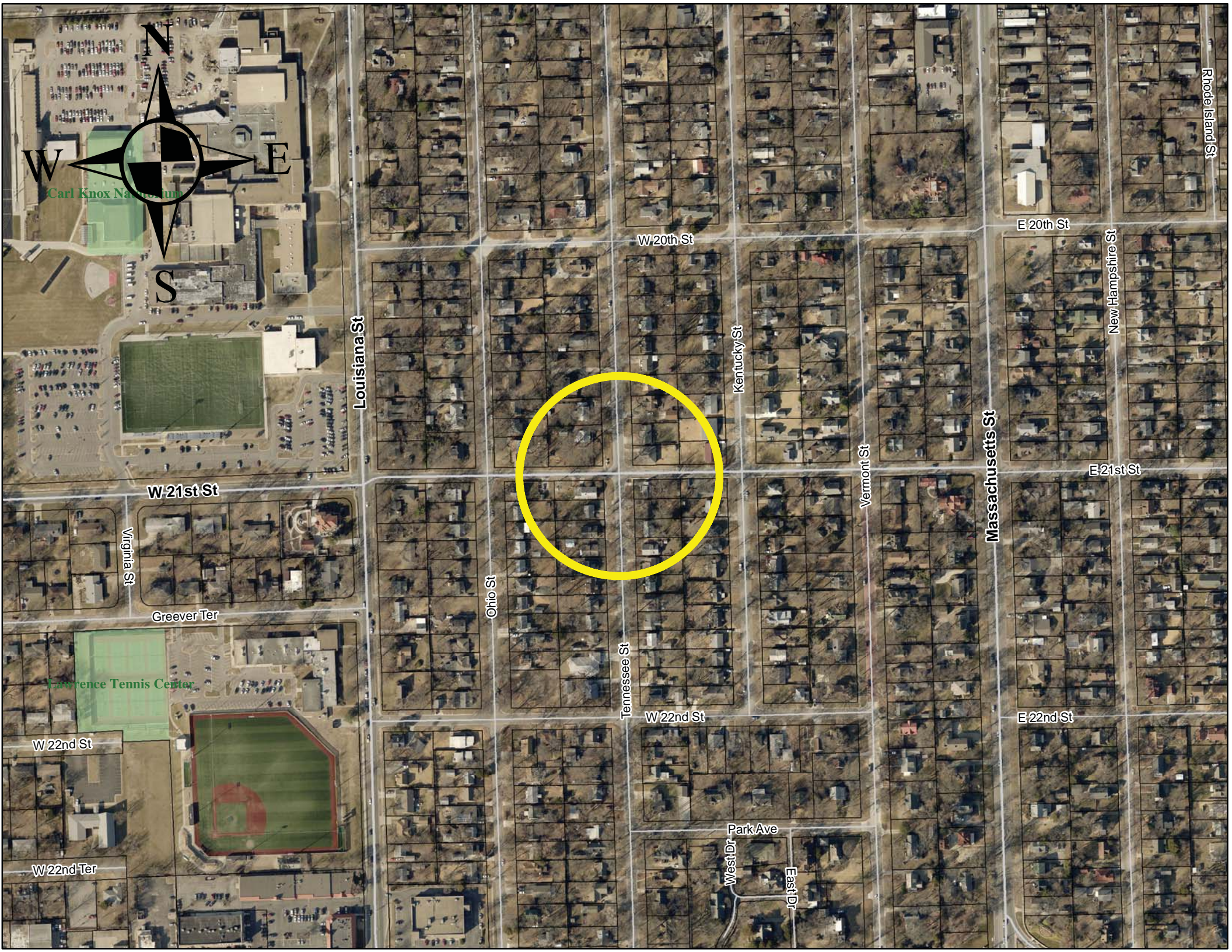
12-Apr-16



21st Street

Notes: \_\_\_\_\_





Carl Knox Natatorium

Lawrence Tennis Center

Louisiana St

W 21st St

Virginia St

Greever Ter

W 22nd St

W 22nd Ter

W 20th St

Kentucky St

Tennessee St

W 22nd St

Vermont St

Massachusetts St

New Hampshire St

E 20th St

E 21st St

E 22nd St

Park Ave

West Dr

East Dr

Rhode Island St