

DATE: November 12, 2020

TO: West Meade Neighborhood Group

FROM: Paul Holzen, Director of Engineering
Jonathan Marston, Assistant Director of Engineering
Adam Moser, Traffic Engineer

SUBJECT: Traffic Calming Request for West Meade Boulevard

Purpose

The purpose of this memo is to summarize the results of the speed and count study that was completed on September 30, 2020. The data was collected because of a request from a group of citizens, that reside on the subject streets, via the process outlined in the City of Franklin Neighborhood Traffic Calming Program (NTCP).

Background & Results

The studies were performed at 2 locations by two devices, as shown in Figure 1. Locations were chosen based on ensuring a majority of the vehicles were traveling at speed, and not in locations where intersections or conflicting/slowing movements could skew the data. Speed and count data were collected over 5 days including weekdays and a weekend for each location.

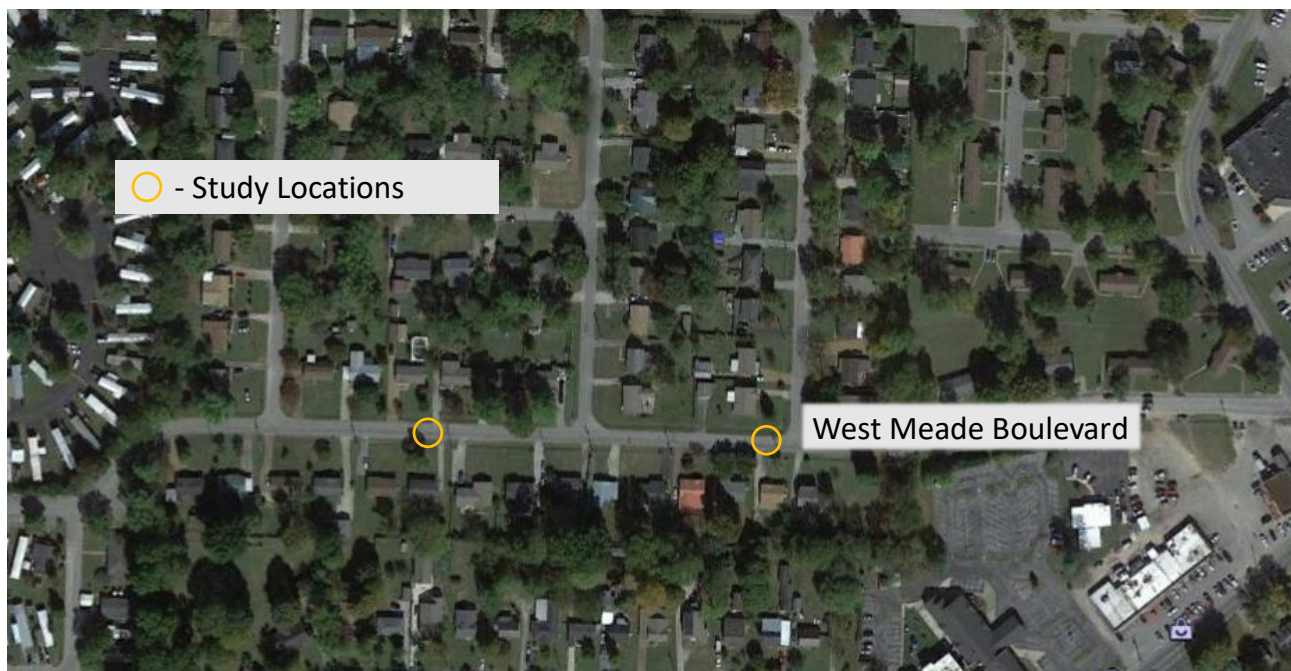


Figure 1 Speed Study Locations

Speed limits are typically set by studying the 85th percentile speed of a roadway as well as the classification of the street and the properties/residents in which the roadway serves. Speed limits on residential streets in Franklin are 25 Miles Per Hour (mph) unless otherwise posted. The streets studied are all 25 mph residential streets.

The speed data summary is shown in Table 1. The highlighted column is the 85th percentile speed. This 85th percentile speed is the speed at which 85% of the vehicles captured are traveling at or below. The 85th percentile speed is used to determine how far over the speed limit vehicles are traveling. Table 2 represents the volume data that was also collected during this study period.

Speed Percentiles (% of vehicles traveling at or below value)																				
Location	5th	10th	15th	20th	25th	30th	35th	40th	45th	50th	55th	60th	65th	70th	75th	80th	85th	90th	95th	100th
601 W Meade	18	20	21	22	23	24	24	25	25	25	26	27	27	28	29	30	30	32	34	63
617 W Meade	19	20	22	23	24	24	25	25	25	26	27	27	28	29	29	30	31	32	35	68

Table 1 Speed Data

Location	Average Vehicles Per Day
601 W Meade	2580
617 W Meade	2408

Table 2 ADT (Volume) Data

The NTCP states that various criteria must be met for a traffic calming project to move forward. These criteria of the program is stated as follows:

- The Average Daily Traffic (ADT) volume for the street is greater than or equal to 150 vehicles per day.
- The 85th percentile speed is at least 4 mph faster than the posted speed limit.
- The posted speed limit is 30 mph or less.
- The street is a through street.
- The maximum grade on the section of roadway that is being considered for traffic calming measures does not exceed seven percent.
- The street is a local street.
- The combination of horizontal and vertical curves along the roadway is not such that would result in inadequate stopping sight distance for motorists as they encounter the traffic calming devices.
- Street must measure longer than 1000 feet between stop signs, sharp, or 90 degree turns.
- The street is not a transit route or a primary emergency access route.

To qualify for the NTCP, all the above criteria must be met in addition to obtaining a total of 6 points from the criteria outlined in Table 3. West Meade does not have any sidewalk on either side of the street. Per the NTCP, 1 point is given for the lack of sidewalks and will go towards meeting the 6 points. West Meade meets all criteria (bullets) outlined above.

Grading System Criteria	
Daily Traffic Volumes	
0 - 150	Not Eligible
151 - 300	1
301 - 500	2
501 - 700	3
751 - 1,000	4
1,001 - 2,000	5
2,001+	Not Eligible**
85th Percentile Speeds*	
0-4 MPH	Not Eligible
4 MPH	1
5 MPH	2
6 MPH	3
7 MPH	4
8 MPH	5
≥ 10 MPH	6
*over speed limit	
** Unless Approved by City Engineer	

Table 3 Points Grading System

The data in Table 1 shows that the 85th percentile speed on West Meade to be 30 and 31 mph which correlates to 2 and 3 points respectively using Table 3. The volume data in Table 2 shows that the daily volume on the roadway is approximately 2580 and 2408 and correlates to 5 points apiece. The volume and speed criteria sum to a value greater than 6 points and therefore qualifies for the NTCP.

Next Steps

This section of West Meade Boulevard does qualify for the Neighborhood Traffic Calming program and will move forward to the next step, which is a public meeting to discuss possible alternatives as well as the petition process that is the responsibility of the neighborhood group. Due to the daily volume being greater than 2,000 vehicles, the City Engineer must approve any traffic calming measures. In discussion with the City Engineer, this street has been approved to move forward with traffic calming, however, speed humps cannot be used due to the high volume on this roadway.

Funding has been severely limited for the traffic calming program. Given the fact that any measure with sizeable construction may take a year or two to fund, the Engineering Department recommends, in the interim, that this section of West Meade be striped with center double yellow lines and white edge lines, as well as enhanced speed limit signing. This will provide a narrowing affect on driver, making them less comfortable and hopefully reducing speeds, as studies have



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shown. This should also be coupled with additional enhanced speed limit signing, that will draw driver's attention to it informing them of the speed limit and that it is a residential area.

A public meeting will be held to share the results of the study and discuss the potential for other traffic calming measures. After this meeting, neighborhood signatures will need to be collected, approving this traffic calming measure.

Please distribute this memo as necessary and let us know some dates and times that work for the public meeting. We will choose a date and time and post signs around the neighborhood notifying residents of the public meeting.

Thank you for staying involved in your community.