

11/14/13

King Ave speeds were studied between Olentangy River Road and High Street.

- Posted speed limit is 25 MPH (temporary from Spring Sandusky Interchange (SSI) traffic management project)
- The segment studied is 1.06 miles long
- 14,457 vehicles counted in 24 hours
- The 85th percentile speed was 34.01 MPH
- The calculated speed is 34 MPH
- The recommended speed limit is 30 MPH; an increase of 5 MPH from the existing posted temporary speed limit, but a reduction of 5 MPH from prior to the Spring Sandusky project.

King Avenue landuse is mixed with some residential and small retail. The intersections of Cannon Drive and Neil Ave are major access points to the Ohio State University. On-street parking is partially permitted and there are three uncontrolled crosswalk on the segment. King Avenue is a shared bike route. King Ave is classified on the Columbus Thoroughfare Plan as a 4-2 arterial. Recommend proceeding with journalizing the 30 MPH speed limit with ODOT.



Location of Speed Study

400 200 0 400 Feet



Ohio Department of Transportation SPEED ZONE WARRANT SHEET



Rev. 4/8/11 (Editorial) EW

Complete all Green Shaded areas.	
Road Name: King Ave	Road No.:
County: Franklin	Township/City/Village: Columbus
Begin Study At: Olentangy River Rd	End Study At: High St
Length: 1.06 miles	Existing Speed Limit: 25 (temp)
ODOT SLM:	ODOT SLM:
Average Daily Traffic (ADT):	14457

For further guidance in completing this form, see the Traffic Engineering Manual, section 1203.

No. of Houses or Farms	(Hold Cursor Here for More Info)	1	Must have direct access to the roadway being studied.
No. of Small Businesses, Apts./Condos	(Hold Cursor Here for More Info)	0	Must have direct access to the roadway being studied.
No. of Medium Businesses, Apts./Condos	(Hold Cursor Here for More Info)	5	Must have direct access to the roadway being studied.
No. of Major Businesses, Apts./Condos	(Hold Cursor Here for More Info)	0	Must have direct access to the roadway being studied.
No. of Minor Street Intersections	(Hold Cursor Here for More Info)	14	Subdivision, Residential, or Other streets that mainly serve the residents of that street.
No. of Major Street Intersections	(Hold Cursor Here for More Info)	0	Streets which serve both the residents and commuters of the area.
No. of Signalized Intersections	(Hold Cursor Here for More Info)	5	Do not include intersections at the beginning or end of the section.
Lane Width	(Round down to nearest foot)	10	Average lane width of through traffic lanes.
Shoulder Width	(Round down to nearest foot)	0	General width of paved and/or non-paved shoulder throughout the section.
Crashes	(Latest three years of data)	66	Only include crashes within the section, excluding animal and side street crashes.
85%tile Speed of Traffic		34.01	Average of the 85% speed at all locations where speed samples were taken.
10-mph Pace Speed of Traffic	25 to	34	Average of the Pace speed at all locations where speed samples were taken.
Roadway Characteristics	(Enter letter and number or use Drop Down Box)	B3	Hold cursor over alphabetic value below to view description then enter letter and number.

Roadway Characteristics Examples			
B3	B2	B1	A1
C	A3	A2	A1
Calculation Sheet		Characteristics	
To View Calculation Sheet or Examples of Characteristics and Crashes to Include, use Buttons to Right.		Crashes to Include	

Calculated Speed	34 MPH
Requested Speed Limit	30 MPH
Approved Speed Limit	MPH

Test Runs*

* Completed by ODOT for comparison or verification of calculated speed.

Study by: Jodi Stefanik Include the related Resolution(s) when submitting this form.

Additional considerations and comments:

Three uncontrolled crosswalks on the segment. On-street parking partially permitted. Shared bike route. Six bike crashes and two pedestrian crashes (2010-12) used B3 for urban characteristics. King Ave is a major access point for The Ohio State university at Cannon Drive and Neil Ave.

Area landuse is mostly residential with small commercial businesses. Battelle headquarters (major business) is located at the western part of the study area.

**Nu-Metrics Traffic Analyzer Study
 Computer Generated Summary Report
 City: COLUMBUS
 Street: KING AVE BET OLENTANGY RIVER RD**

A study of vehicle traffic was conducted with HI-STAR unit number 5675. The study was done in the BI-DIR lane at KING AVE BET OLENTANGY RIVER RD in COLUMBUS, OH in FRANKLIN county. The study began on Apr/03/13 at 11:00 and concluded on Apr/04/13 at 11:00, lasting a total of 24.00 hours. Traffic statistics were recorded in 15 minute time periods. The total recorded volume showed 14457 vehicles passed through the location with a peak volume of 326 on Apr/03/13 at [17:00-17:15] and a minimum volume of 5 on Apr/04/13 at [04:30-04:45]. The AADT count for this study was 14,457.

SPEED

Chart 1 lists the values of the speed bins and the total traffic volume for each bin. At least half the vehicles were traveling in the 25 - 30 MPH range or lower. The average speed for all classified vehicles was 29 MPH with 40.60% vehicles exceeding the posted speed of 25 MPH. The HI-STAR found 0.14 percent of the total vehicles were traveling in excess of 55 MPH. The mode speed for this traffic study was 25MPH and the 85th percentile was 34.33 MPH.

< to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to >					
68	284	676	2169	5208	4187	1098	237	108	68	27	19	1	0	0					

CHART 1

CLASSIFICATION

Chart 2 lists the values of the classification bins and the total traffic volume accumulated for each bin. Most of the vehicles classified during the study were Vans & Pickups. The number of Passenger Vehicles in the study was 0 which represents 0 percent of the total classified vehicles. The number of Vans & Pickups in the study was 9518 which represents 67 percent of the total classified vehicles. The number of Busses & Trucks in the study was 0 which represents 0 percent of the total classified vehicles. The number of Tractor Trailers in the study was 4632 which represents 0 percent of the total classified vehicles.

< to 21	22 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 139	140 to >												
9518	4343	164	48	34	13	30	0												

CHART 2

HEADWAY

During the peak traffic period, on Apr/03/13 at [17:00-17:15] the average headway between vehicles was 2.752 seconds. During the slowest traffic period, on Apr/04/13 at [04:30-04:45] the average headway between vehicles was 150 seconds.

WEATHER

The roadway surface temperature over the period of the study varied between 37.00 and 85.00 degrees F.