

May 5, 2026



Honorable Willis T. Thompson
Mayor, City of Vicksburg
1401 Walnut Street
Vicksburg, MS 39180

Re: Traffic Calming Study at Bellaire Drive, west of Bell Place

Dear Mayor Thompson:

Per the City's request, Neel-Schaffer has conducted a traffic volume and vehicle speed study at Bellaire Dr, west of Bell Pl, in Vicksburg. Bellaire Dr is a two-lane public street serving primarily residential neighborhoods, with a posted speed limit of 20 mph. A 24-hour traffic volume and vehicle speed count was conducted on April 23, 2026, and is provided as an attachment to this memo.

The following section summarizes the key traffic performance measures evaluated in the study, including:

- Daily traffic volume (vehicles per day, veh/day)
- Peak traffic periods and associated volumes
- Average travel speed (miles per hour, mph)
- 85th percentile speed – the speed at or below which 85-percent of vehicles are travelling on the roadway
- 10-mph pace speed and pace volume – the 10-mph speed range containing the highest number of observed vehicles in the speed study

Together, these performance indicators provide insight into driver behavior and operating conditions, and they are intended to assist decision makers in identifying the affected locations and determining the appropriate traffic calming solutions.

A total of 217 vehicles were recorded during the study period. Peak hour volumes occurred during both the morning (7:00 AM - 8:00 AM) and evening (4:00 PM - 5:00 PM) periods, with 24 vehicles observed in each peak hour. The average speed was 23 mph, and the 85th percentile speed was 30 mph.

Most vehicles traveled within a relatively narrow speed range, with approximately 61-percent operating between 19 and 28 mph (the 10-mph pace). While 71-percent of drivers exceeded the posted 20 mph speed limit, a smaller portion were traveling at speeds more typically considered speeding with regards to enforcement. Specifically, 74 vehicles, or about 34-percent

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of the total, were observed traveling 25 mph or higher. Within this group, 23-percent of vehicles (51 vehicles) traveled between 26 and 30 mph, 9-percent (20 vehicles) between 31 and 35 mph, and about 1-percent (3 vehicles) exceeded 35 mph, with a maximum observed speed of 37 mph. The most speeding (speed > 20 mph) happened during the same busy time in the afternoon, between 4:00 pm to 5:00 pm.

This study found that the studied segment of Bellaire Drive may exhibit speeding concerns that could warrant traffic-calming measures. The observed 85th-percentile speed of 30 mph exceeds the posted speed limit of 20 mph by 10 mph, and more than 71-percent of vehicles were recorded traveling above the posted limit. Given these findings, speed-control measures such as increased police enforcement, speed humps, or enhanced speed-limit signage could be considered to improve compliance and neighborhood safety.

Prior to implementation, factors including community feedback, roadway conditions, and appropriate design and spacing criteria should be carefully evaluated. A conceptual layout exhibit for the speed humps is included herewith should the City decide to install speed humps along this section of roadway.

If you have any questions or comments regarding this analysis, please call me at (601) 534-1794.

Sincerely,
Neel-Schaffer, Inc.



Brian Robbins, P.E.
Senior Project Engineer

Attachments



Site 1 (Bellaire Dr, west of Bell Pl)
B. Traffic Counts Based on Vehicle Speed

Time	By Vehicle Speed									60min
	<15 mph	16-20 mph	21-25 mph	26-30 mph	31-35 mph	36-40 mph	41-45 mph	46-50 mph	> 50 mph	Total
0000 - 0100	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	1	0	0	0	0	0	0	1
0500 - 0600	0	1	1	1	0	0	0	0	0	3
0600 - 0700	3	0	3	1	0	0	0	0	0	7
0700 - 0800	6	5	4	7	2	0	0	0	0	24
0800 - 0900	0	2	4	1	1	0	0	0	0	8
0900 - 1000	0	3	2	3	2	0	0	0	0	10
1000 - 1100	1	2	3	1	1	0	0	0	0	8
1100 - 1200	1	2	2	2	2	0	0	0	0	9
1200 - 1300	2	2	4	5	1	0	0	0	0	14
1300 - 1400	0	3	4	4	2	0	0	0	0	13
1400 - 1500	0	3	5	5	1	0	0	0	0	14
1500 - 1600	0	4	5	6	2	0	0	0	0	17
1600 - 1700	0	4	13	5	0	2	0	0	0	24
1700 - 1800	4	1	6	3	1	0	0	0	0	15
1800 - 1900	0	2	5	2	2	1	0	0	0	12
1900 - 2000	1	4	7	2	1	0	0	0	0	15
2000 - 2100	2	4	5	1	0	0	0	0	0	12
2100 - 2200	0	1	1	1	1	0	0	0	0	4
2200 - 2300	0	0	5	1	0	0	0	0	0	6
2300 - 2400	0	0	0	0	1	0	0	0	0	1
Session Total	20	43	80	51	20	3	0	0	0	217
Session Percentage	9.2	19.8	36.9	23.5	9.2	1.4	0.0	0.0	0.0	

15th Percentile	17 mph
50th Percentile	23 mph
85th Percentile	30 mph
95th Percentile	33 mph

10mph Pace Speed	19-28 mph
Number in Pace	132
Percent in Pace (%)	60.8
>PSL (20 mph)	154
>PSL % (20 mph) (%)	71.0
Mean Speed (Average)	23 mph
Maximum Speed	37 mph










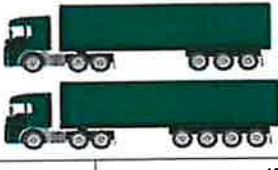



Date: April 23, 2026

Site 1 (Bellaire Dr, west of Bell Pl)

A. Traffic Counts Based on Vehicle Classification

Time	By Vehicle Classification									60min Total
	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9-13	
0000 - 0100	0	0	0	0	0	0	0	0	0	0
0100 - 0200	0	0	0	0	0	0	0	0	0	0
0200 - 0300	0	0	0	0	0	0	0	0	0	0
0300 - 0400	0	0	0	0	0	0	0	0	0	0
0400 - 0500	0	0	1	0	0	0	0	0	0	1
0500 - 0600	0	3	0	0	0	0	0	0	0	3
0600 - 0700	0	5	1	1	0	0	0	0	0	7
0700 - 0800	0	14	5	0	5	0	0	0	0	24
0800 - 0900	0	4	2	0	2	0	0	0	0	8
0900 - 1000	0	5	3	0	2	0	0	0	0	10
1000 - 1100	0	3	2	0	3	0	0	0	0	8
1100 - 1200	0	7	2	0	0	0	0	0	0	9
1200 - 1300	0	9	2	0	1	2	0	0	0	14
1300 - 1400	0	11	1	0	1	0	0	0	0	13
1400 - 1500	0	9	2	0	3	0	0	0	0	14
1500 - 1600	0	14	2	0	1	0	0	0	0	17
1600 - 1700	0	11	7	1	5	0	0	0	0	24
1700 - 1800	0	10	3	0	2	0	0	0	0	15
1800 - 1900	1	10	1	0	0	0	0	0	0	12
1900 - 2000	0	8	2	0	3	0	0	2	0	15
2000 - 2100	0	9	2	0	1	0	0	0	0	12
2100 - 2200	0	4	0	0	0	0	0	0	0	4
2200 - 2300	0	5	1	0	0	0	0	0	0	6
2300 - 2400	0	1	0	0	0	0	0	0	0	1
Session Total	1	142	39	2	29	2	0	2	0	217
Session Percentage	0.5	65.4	18.0	0.9	13.4	0.9	0.0	0.9	0.0	

FHWA Vehicle Classifications

<p>1. Motorcycles 2 axles, 2 or 3 tires</p> 	<p>2. Passenger Cars 2 axles, can have 1- or 2-axle trailers</p> 	<p>3. Pickups, Panels, Vans 2 axles, 4-tire single units Can have 1 or 2 axle trailers</p> 	<p>4. Buses 2 or 3 axles, full length</p> 
<p>5. Single Unit 2-Axle Trucks 2 axles, 6 tires (dual rear tires), single-unit</p> 	<p>6. Single Unit 3-Axle Trucks 3 axles, single unit</p> 	<p>7. Single Unit 4 or More-Axle Trucks 4 or more axles, single unit</p> 	<p>8. Single Trailer 3- or 4-Axle Trucks 3 or 4 axles, single trailer</p> 
<p>9. Single Trailer 5-Axle Trucks 5 axles, single trailer</p> 	<p>10. Single Trailer 6 or More-Axle Trucks 6 or more axles, single trailer</p> 	<p>11. Multi-Trailer 5 or Less-Axle Trucks 5 or less axles, multiple trailers</p> 	
<p>12. Multi-Trailer 6-Axle Trucks 6 axles, multiple trailers</p> 		<p>13. Multi-Trailer 7 or More-Axle Trucks 7 or more axles, multiple trailers</p> 	

NOTE:
 SPEED HUMP ADVANCE WARNING SIGNS (W17-1) SHALL BE
 PLACED APPROX. 100' BEFORE THE SPEED HUMPS BUT AVOID
 INTERFERENCE, CONFLICTS, OR SITE ISSUES WITH OTHER ROAD SIGNS



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NO.	DATE	DESCRIPTION

CITY OF VICKSBURG - SPEED HUMP STUDY

 BELLAIRE DRIVE
 VICKSBURG, MS



PROPOSED SPEED HUMP LAYOUT	
WORK NUMBER	REVISION NUMBER
WK-1	1