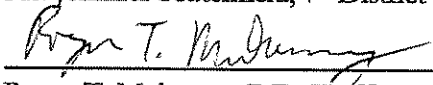


Lexington-Fayette Urban County Government  
DEPARTMENT OF ENVIRONMENTAL QUALITY & PUBLIC WORKS

Jim Gray  
Mayor

David L. Holmes  
Commissioner

**DIVISION OF TRAFFIC ENGINEERING  
MEMORANDUM**

TO: Ms. Jennifer Scutchfield, 7<sup>th</sup> District Councilmember  
FROM:   
Roger T. Mulvaney, P.E., Traffic Engineer  
DATE: August 28, 2014  
SUBJECT: Ellerslie Park Boulevard Speed Limit Analysis

A speed limit study was completed for Ellerslie Park Boulevard. Traffic speed data was collected in both directions of travel at two locations along Ellerslie Park Boulevard. Collection points for both westbound and eastbound Ellerslie Park Boulevard were located near 177 Ellerslie Park Boulevard and near 224 Ellerslie Park Boulevard.

The Federal Highway Administration's *Manual on Uniform Traffic Control Devices (MUTCD)* Section 2B.13 addresses speed limits by stating "When a speed limit is to be posted, it should be within 5 mph of the 85<sup>th</sup> percentile speed of free-flowing traffic. Other factors that may be considered when establishing speed limits are the following:

- A. Road surface characteristics, shoulder conditions, grade, alignment, and sight distance;
- B. The pace speed;
- C. Roadside development and environment;
- D. Parking practices and pedestrian activity; and
- E. Reported crash experience for at least a 12-month period."

The findings of the speed analysis on Ellerslie Park Boulevard are as follows:

- A. No speed limit signs are currently posted on Ellerslie Park Boulevard. Since Ellerslie Park Boulevard is classified as a residential collector, the speed limit per Lexington Fayette County Urban Government ordinance is 35 mph. The width of each lane of Ellerslie Park Boulevard is 20.5 feet. A median island is present along most parts of Ellerslie Park Boulevard in the study area. Ellerslie Park Boulevard has a sidewalk provided on either side of the roadway throughout the study area

B. The following table is a summary of the data collected along Ellerslie Park Boulevard:

Ellerslie Park Boulevard Location	Direction of Travel	Average Daily Traffic	Speed Range for 1/2 of the Vehicles	Speed Limit	Average Speed	Percent Exceeding Posted Speed Limit	85 <sup>th</sup> Percentile Speed
177 Ellerslie Park Blvd	SB	471	30 – 35 mph	35 mph	30 mph	3.30	35.10 mph
177 Ellerslie Park Blvd	NB	458	25 – 30 mph	35 mph	29 mph	3.82	34.96 mph
229 Ellerslie Park Blvd	SB	171	25 – 30 mph	35 mph	25 mph	2.07	30.63 mph
229 Ellerslie Park Blvd	NB	184	25 – 30 mph	35 mph	23 mph	0.61	29.00 mph

The pace speed is the 10 mph range that contains the highest number of the observed speeds. The high end of that range is usually very close to the 85<sup>th</sup> percentile speed. Our equipment does not calculate the pace speed. The 85<sup>th</sup> percentile speeds along Ellerslie Park Boulevard were found to be in the range of 29.00 mph in the northbound direction near 229 Ellerslie Park Boulevard to 35.10 mph in the southbound direction near 177 Ellerslie Park Boulevard. The 85<sup>th</sup> percentile speed, or the speed at which 85% of the vehicles are traveling at or below, is based on the theory that a large majority of drivers are reasonable and prudent, do not want to have a crash, and want to reach their destination in the shortest amount of time possible. The average speeds were in the 23 to 30 mph range. In three of the sections studied on Ellerslie Park Boulevard, most drivers travelled in the 25 - 30 mph range and in the other section studied, most drivers travelled in the 30 - 35 mph range.

- C. The properties along Ellerslie Park Boulevard are typically zoned for single family residential units. The private residences that line Ellerslie Park Boulevard typically have driveways accessing this road.
- D. Parking is permitted along Ellerslie Park Boulevard. Parking can have a calming effect on traffic. Parked cars narrow the travel lane and therefore affect the driver's perception causing her or him to slow down.
- E. In the last three years, there have zero recorded vehicular collisions on Ellerslie Park Drive.



**Aerial of Ellerslie Park Boulevard Vicinity**

**Conclusion:** Based on the limited access in and out of the Ellerslie neighborhood and local environment of that development, the Division of Traffic Engineering recommends that the speed limit on Ellerslie Park Boulevard be changed to and posted as 25 mph.

If you have any questions, please contact me at anytime. My email address is [rmulvaney@lexingtonky.gov](mailto:rmulvaney@lexingtonky.gov).

RTM

Roger T. Mulvaney, P.E.  
Division of Traffic Engineering

cc: Bob Elliott, Citizen  
David L. Holmes, Commissioner of Environmental Quality & Public Works  
Dowell Hoskins-Squier, P.E., Director of Traffic Engineering  
Jim Woods, P.E., P.L.S., Deputy Director of Traffic Engineering  
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