

Riverside Drive Between 20th Street and Hillcrest Road Speed Study

Date: March 18, 2016

Requestor: Mr. Parker Agelasto via Council Ordinance No. 2016-096

Speed (Posted at 35mph) and Traffic Data

Location	85 th Percentile Speed*	Mean Speed*	24 hr traffic
Bet. 21 st St and 22 nd St	30.6mph	26.3mph	3,048
Bet. 29 th St and 30 th St	37.7mph	32.9mph	1,888

*85th Percentile Speed: The speed at or below which 85 percent of a sample of free flowing vehicles is traveling; this is typically used as a baseline for establishing the speed limit. The Institute of Transportation Engineers' Committee 4M-25 Speed Zoning Guidelines Recommended Practice says the speed limit within a speed zone shall be set at the nearest 5 MPH increment to the 85th percentile speed. Also when speed limits are artificially low, the enforcement tolerance must be high.

*Mean Speed: The average speed is calculated as the sum of all speeds divided by the number of speed observations.

Crash Data

A crash study between 1-1-13 and 12-31-15 revealed a crash rate** of 2.9 crashes per million vehicle miles traveled.

**The combination of crash frequency (crashes per year) and vehicle exposure (traffic volumes or miles traveled) results in a crash rate. Crash rates are expressed as "crashes per Million Vehicle Miles Traveled" (MVMT) for roadway segments.

Street Characteristics

Riverside Drive is a two-way two lane street throughout the study area. The typical section is mostly curvy with rolling terrain. The adjacent land usage is residential on the south side and the James River on the north side including the James River Park.

Riverside Drive is functionally classified as an Urban Collector.

Curve warning signs are posted along the corridor. A new rapid rectangular flashing beacon and crosswalk is marked at 21st St. Centerline markings exist along the corridor.

Recommendations

Given the sampled speeds, the street characteristics, crash rate, Riverside Drive should be reduced to 30mph.