

Ord. 2016-097

**Semmes Avenue
Between Forest Hill Avenue and 22nd Street
Speed Study**

Date: March 22, 2016

Requestor: Mr. Parker Agelasto via Council Ordinance No. 2016-097

Speed (Posted at 35mph) and Traffic Data

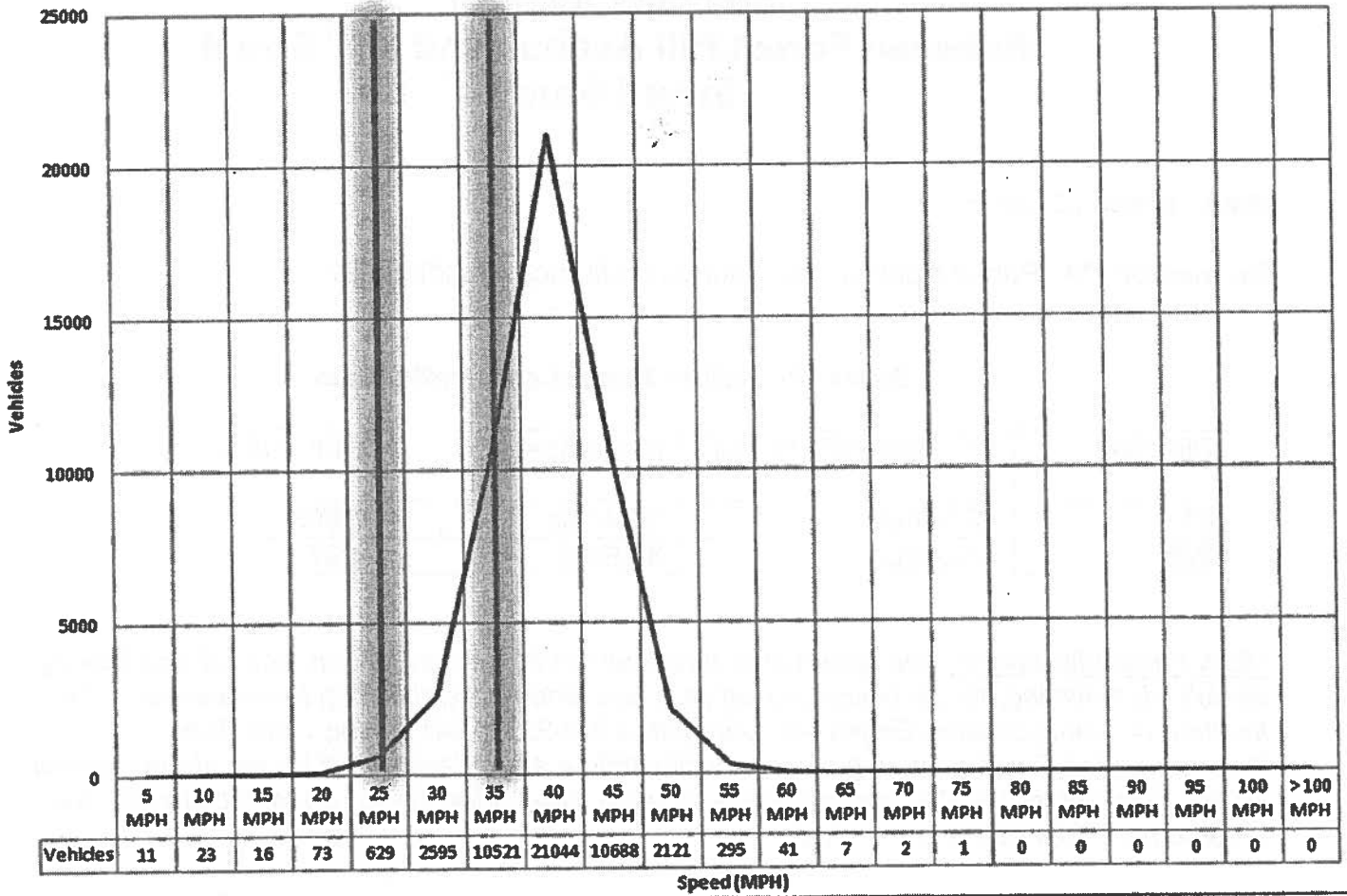
Direction	85 th Percentile Speed*	Mean Speed*	24 hr traffic
EB	42.19mph	36.4mph	7,065
WB	43.56mph	37.5mph	4,370

****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.*

Direction	% samples 25mph and under	% samples 35 mph and over
EB	0.9%	93.3%
WB	3.8%	86.6%

Semmes Avenue Speed Distribution (48 HR)



Crash Data

An earlier crash study between 22nd St and 34th St revealed a crash rate** of 3.9 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

Semmes Avenue is a two-way four lane divided street throughout the study area. A parking lane is marked in both directions between 34th St and 24th St. The grade is relatively flat for this same section with downgrades at each end.

A fire station is located between 22nd St and 24th St. Patrick Henry School of Science and Arts is between 34th St and Forest Hill Avenue/Dundee Avenue. Bus stops are located throughout the Semmes Avenue corridor.

Semmes Avenue is functionally classified as an Urban Other Principal Arterial and is on the U.S. Department of Transportation's National Highway System.

Traffic signals with pedestrian signals and crosswalk markings on each leg exist at these intersections:

- 26th St.
- Forest Hill Ave

Crosswalk markings exist on all legs at the intersection of 28th St.

A 25mph speed zone is present on Semmes Avenue approaching the Patrick Henry School of Science and Arts. This is activated during school start and end times.

Enhanced speed penalty signs exist and cover the section between Forest Hill Avenue/Dundee Avenue and 22nd Street. (City Council Resolution No. 2014-R69-73)

Recommendations

Given the sampled speeds, the 25mph school speed zone, the street characteristics, crash rate, gaps in traffic created by the traffic signals at 26th Street and at Forest Hill Avenue, Semmes Avenue should remain posted at 35mph.

Sergeant B. H. Eikerenkoetter, Jr. of the Special Operations Division of the Richmond Police Department advises that with a 25mph zone the increases in summonses would most likely double if the speed limit were reduced by 10mph and the number of reckless driving summonses would increase substantially.

