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# Preston Village

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## Traffic Data Summary

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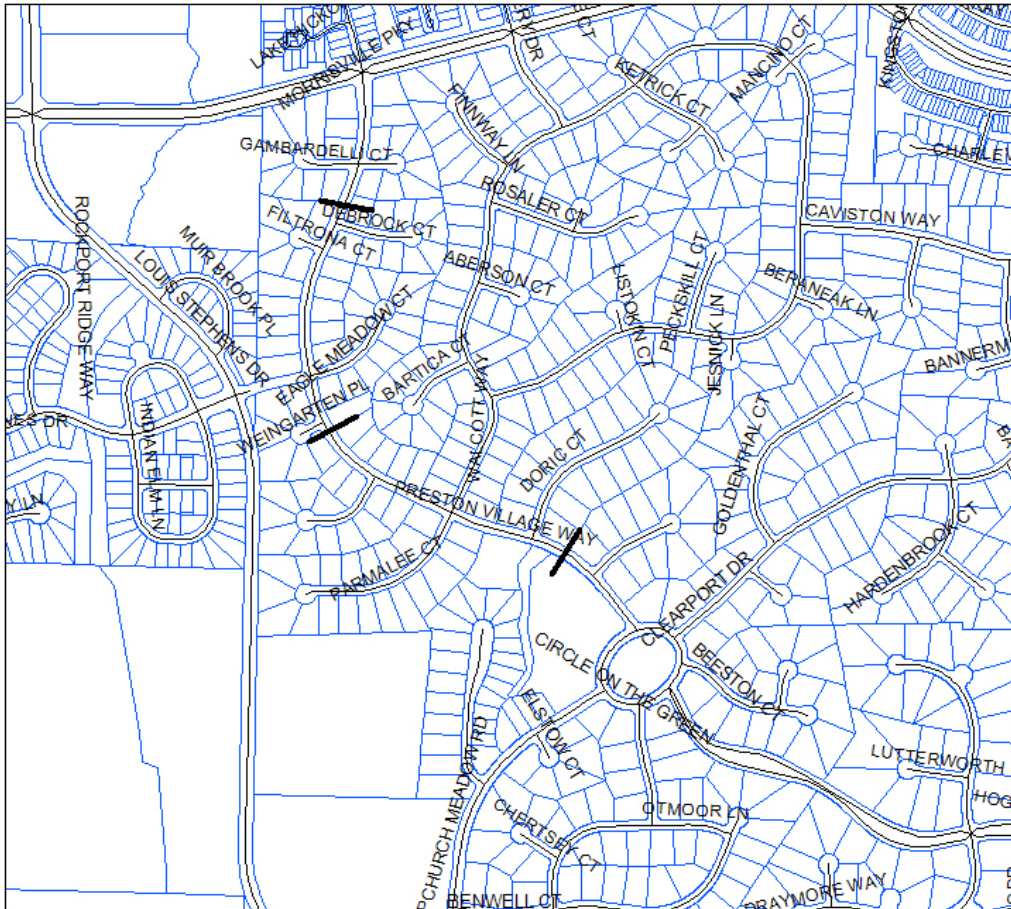
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# Preston Village Traffic Data Summary

## Introduction

The following summary provides results from traffic count data which was collected at locations along Preston Village Way within the Preston Village neighborhood in Cary, North Carolina. Data and results are to be used for analysis of potential traffic calming measures along this street. The 2013 count locations are displayed below.

## Preston Village



### Legend

— Count Locations:  
200, 506, & 700 Preston Village Way  
Not to Scale



## Preston Village Traffic Data Summary

### Average Daily Traffic

Average Daily Traffic (ADT) is the total vehicle volume during a given time period (in whole days), greater than one day and less than one year, divided by the number of days in that time period. It is common to see a fluctuation in the average daily traffic along a road. Therefore, these values listed below are averages of the 24 hour counts that are comprised in the data sets. The ADT data is presented below for the traffic counts that were conducted along Preston Village Way.

Road	Year	ADT (vehicles per day)
200 Preston Village Way	2013	1,290
506 Preston Village Way	2013	877
700 Preston Village Way	2013	938

### Roadway and Speed Data

Speed data was collected along Preston Village Way from 2 p.m. on February 25, 2013 until 11 a.m. on March 1, 2013. Preston Village Way is classified as Collector Street with a posted speed limit of 25 mph. The count locations were determined based on field analysis and review by Town staff. The results of the data collection effort are given below.

Road	Date	Mean (Average) Speed (mph)		
		NB	SB	Average
200 Preston Village Way	2/2013	29	32	31
506 Preston Village Way	2/2013	27	26	27
700 Preston Village Way	2/2013	25	23	24

Road	Date	50 <sup>th</sup> Percentile Speed (mph)		
		NB	SB	Average
200 Preston Village Way	2/2013	28	31	30
506 Preston Village Way	2/2013	27	26	27
700 Preston Village Way	2/2013	26	24	25

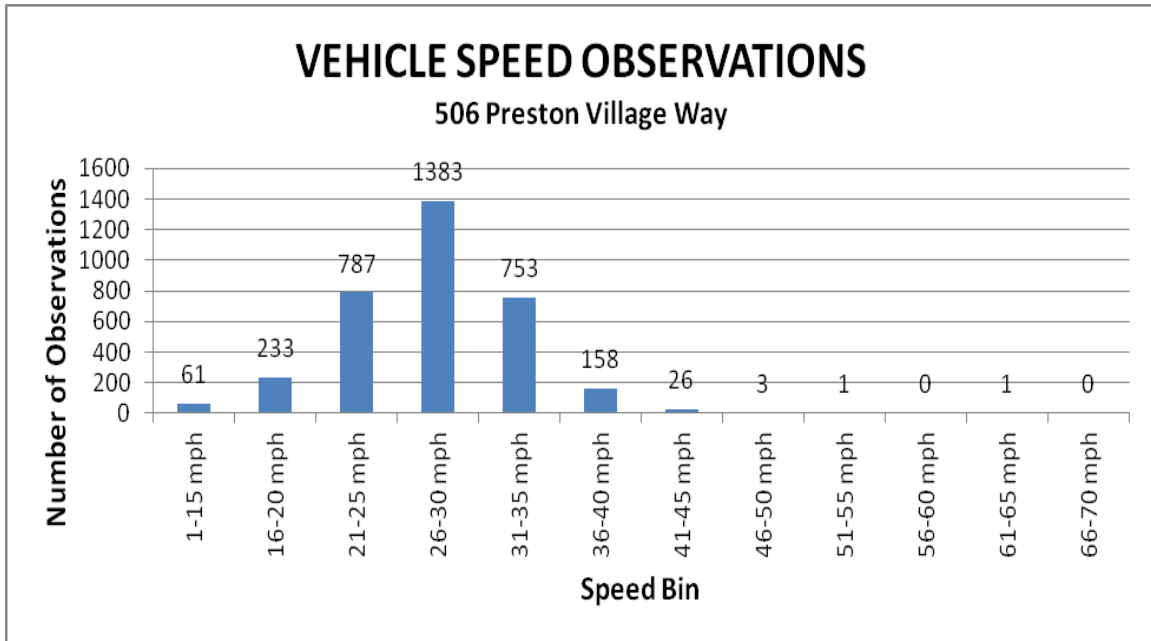
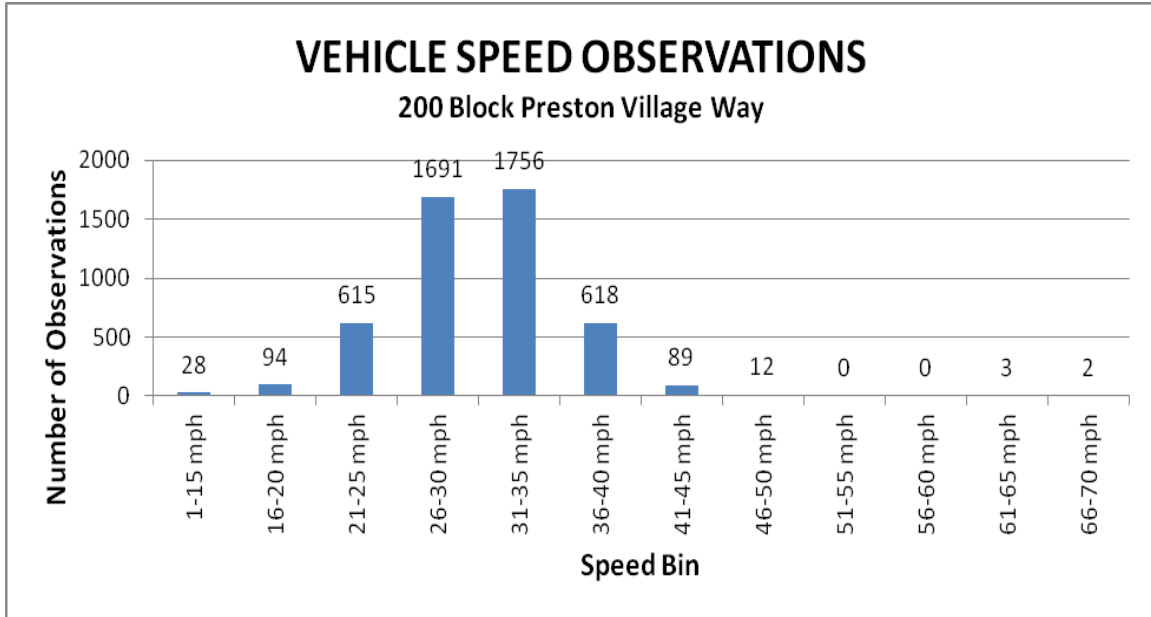
Road	Date	85 <sup>th</sup> Percentile Speed (mph)		
		NB	SB	Average
200 Preston Village Way	2/2013	33	36	35
506 Preston Village Way	2/2013	33	31	32
700 Preston Village Way	2/2013	33	31	32

Based on the data collected, the speed results are typical for what has been observed along most Collector Streets in Cary, but higher than the posted speed limit of 25 mph. Generally, the 85<sup>th</sup> percentile speed should closely resemble the posted speed limit, which the data indicates a range of speeds between 32 mph and 35 mph; whereby, the speeds indicated are moderately higher than the posted speed limit of 25 mph.

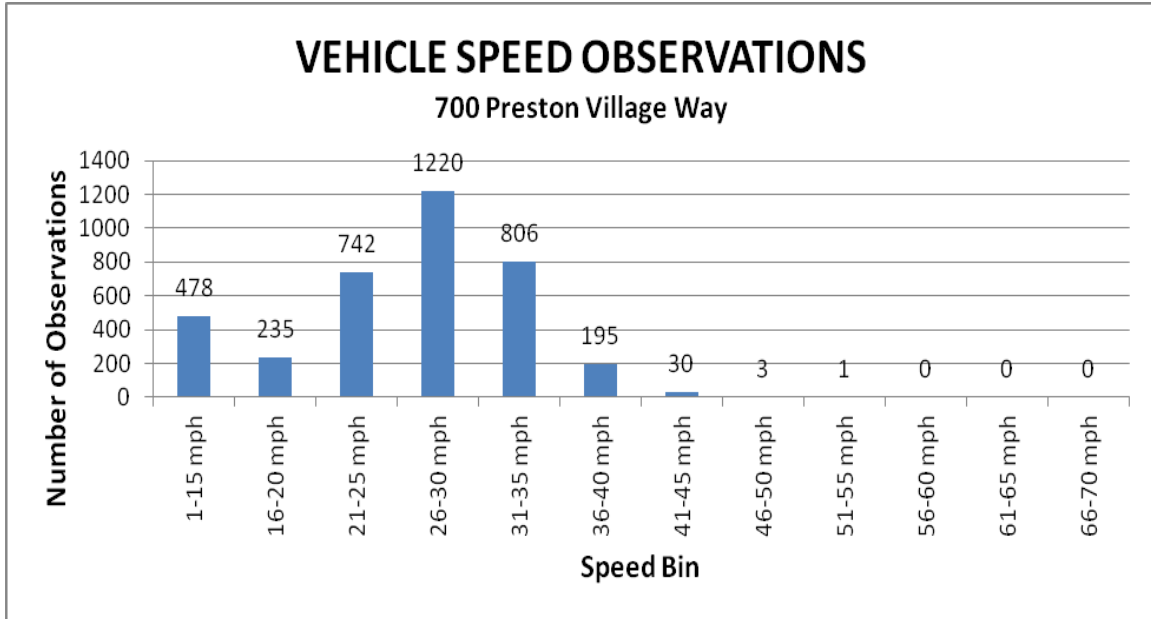
## Preston Village Traffic Data Summary

### Number of Vehicles Detected in Each Speed Bin

Most traffic streams have speeds that are normally distributed. This means that most values for speed typically occur in a central range, with fewer values occurring outside of this range on either the high or the low side. Few drivers will drive extremely fast or extremely slow in comparison to others. The figure below shows the comparison of the speed distributions and the number of vehicles detected in each speed bin for both count locations.



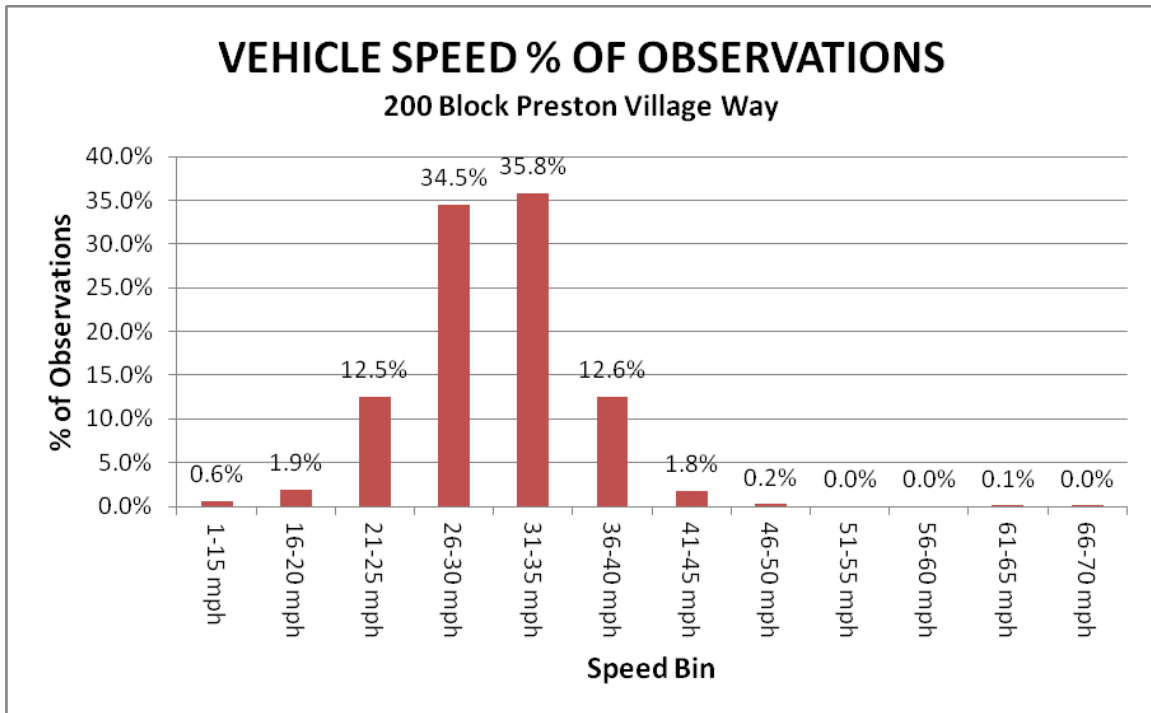
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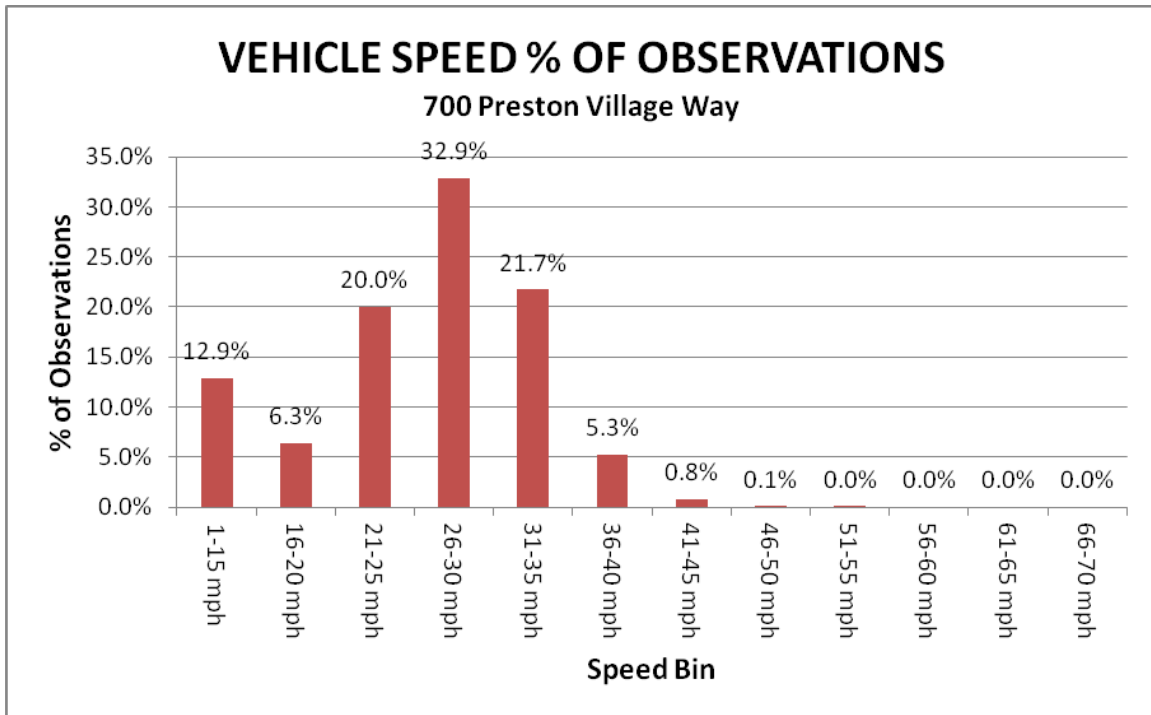
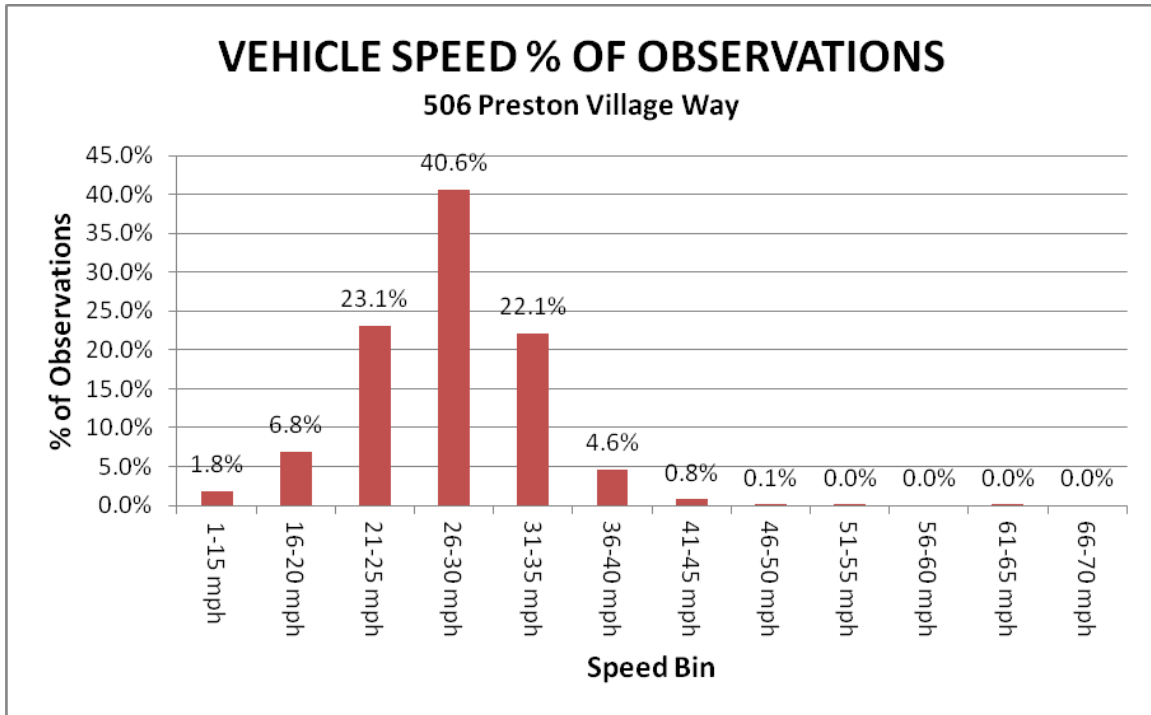
The figures above show the pattern of speed distribution at each of the three count locations on Preston Village Way. Based on the data, the locations do exhibit a pattern of normal distribution, as the bulk number of observations is in a central range and the average speeds range from 24 mph to 31 mph.

### Percentage of Vehicles in Each Speed Bin

The figure below shows the comparison of the percentage of observations detected in each speed bin for both locations.



## Preston Village Traffic Data Summary



Based on the percentage of observations for each speed bin, the highest percentage of vehicles travel between the speeds of 31 -35 mph near the 200 block of Preston Village Way. Near 506 and 700 Preston Village Way the highest percentage of vehicles for each speed bin occurs between 26 and 30 mph. The speed bin ranges indicate a large percentage of vehicles are exceeding the posted speed limit of 25 mph.