

From: White, William carter.white@vdot.virginia.gov
 Subject: Irvington Traffic Studies
 Date: January 10, 2022 at 4:20 PM
 To: muchapman@verizon.net
 Cc: David Beale david.beale@vdot.virginia.gov

Sorry for not getting this information to you sooner.

Our Traffic Engineering Section performed the below information.

Without doing a full speed study and based solely on drivers' behaviors, the preliminary conclusions are that the speeds are posted on the low side. A 30mph to 35mph speed limit would more accurately represent the driver population.

Route	ADT	Posted	Ave	85th
VA-200	3,033*	25	28	33.0
SR-634	1,497*	25	30	35.6 KC
SR-635	1,100**	25	25	30.

*Observed

**AADT

Regarding vehicle classification, we typically see 3-6% truck traffic, so these numbers are in line. On SR-635, the higher single-unit (SU) trucks (6.5%) are likely due to the boat repair shop.

Route	ADT	Cars/PU	Bus/SU	Trucks
VA-200	3,033*	94.1%	2.5%	2.9%
SR-634	1,497*	96.0%	1.9% ³⁰	1.7% ^{K 4281 58}
SR-635	1,100**	89.5%	6.5% ⁷²	3.8% ^{#2 = 114}

*Observed

**AADT

***Some vehicles were unclassified creating totals not equal to 100%

MAP

<https://goo.gl/maps/mPVLgCYsbkXZvUpf7>

If you have any questions, please contact David Beale, Resident Engineer at (804-333-7941) or myself (Carter White) at (804-333-7942)

Default Report Title
 Use Preferences to Define Titles

SPEED DATA ANALYSIS

Location

Latitude: 37.658320
 Longitude: -76.419939

Analysis Time Period



Start End
 7/15/2021 7/20/2021
 12:00 PM 12:00 PM

Vehicles Analyzed

Speed Limit

SPEED
 LIMIT

CLASS DATA ANALYSIS

Location



Latitude: 37.658320
Longitude: -76.419939

Analysis Time Period



Start	End
7/15/2021 12:00 AM	7/20/2021 12:12 PM

Vehicles Analyzed



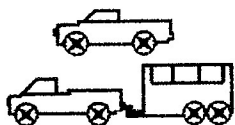
3,141

Motorcycles



Class 1
Motorcycles
Volume: 37
Pct of Total: 1.2%
Length: 78 Inches

2 Axle Long



Class 3
2 Axle Long
Volume: 762
Pct of Total: 24.3%
Length: 167 Inches

2 Axle 6 Tire



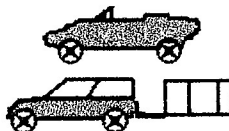
Class 5
2 Axle 6 Tire
Volume: 198
Pct of Total: 6.3%
Length: 187 Inches

Unclassed



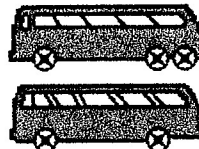
Class 0
Unclassed
Volume: 10
Pct of Total: 0.3%
Length: 180 Inches

Cars Trailers



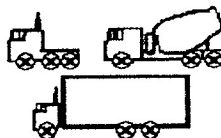
Class 2
Cars Trailers
Volume: 2,011
Pct of Total: 64.0%
Length: 134 Inches

Buses

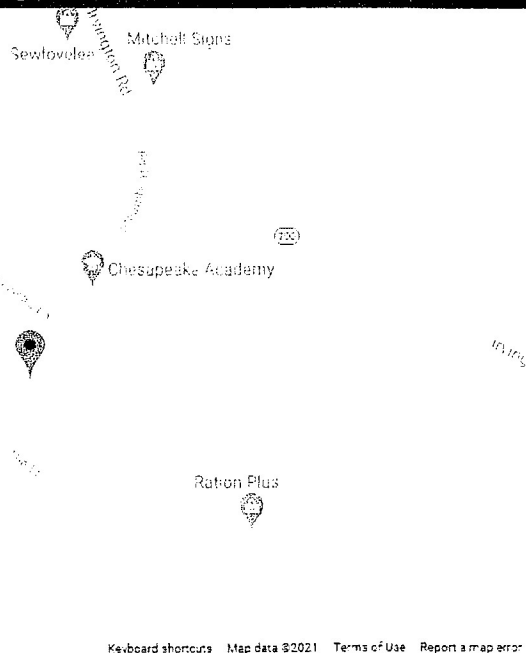


Class 4
Buses
Volume: 2
Pct of Total: 0.1%
Length: 282 Inches

3 Axle Single

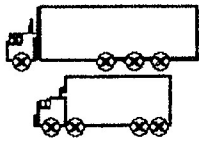


Class 6
3 Axle Single
Volume: 2
Pct of Total: 0.1%
Length: 261 Inches



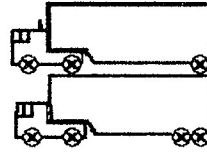
CLASS DATA ANALYSIS

4 Axle Single



Class 7
4 Axle Single
Volume: 0
Pct of Total: 0.0%
Length: 0 Inches

<5 Axl Double



Class 8
<5 Axl Double
Volume: 119
Pct of Total: 3.8%
Length: 442 Inches

5 Axle Double



Class 9
5 Axle Double
Volume: 0
Pct of Total: 0.0%
Length: 0 Inches

>6 Axl Double



Class 10
>6 Axl Double
Volume: 0
Pct of Total: 0.0%
Length: 0 Inches

<6 Axl Multi



Class 11
<6 Axl Multi
Volume: 0
Pct of Total: 0.0%
Length: 0 Inches

6 Axle Multi



Class 12
6 Axle Multi
Volume: 0
Pct of Total: 0.0%
Length: 0 Inches

<	10	15	20	25	30	35	40	45	50	55	60	65	70	75
50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
9	14	19	24	29	34	39	44	49	54	59	64	69	74	>
16	102	396	2528	7312	3492	593	102	45	22	21	14	7	9	19

CHART 1

CLASSIFICATION

Chart 2 lists the values of the classification bins and the total traffic volume accumulated for each bin.

Most of the vehicles classified during the study were Passenger Vehicles. The number of Passenger Vehicles in the study was 8156 which represents 54 percent of the total classified vehicles. The number of Vans & Pickups in the study was 6106 which represents 40 percent of the total classified vehicles. The number of Busses & Trucks in the study was 378 which represents 3 percent of the total classified vehicles. The number of Tractor Trailers in the study was 436 which represents 3 percent of the total classified vehicles.

6%

<	15	21	24	28	32	38	44							
50	50	50	50	50	50	50	50							
17	20	23	27	31	37	43	>							
8156	5612	494	69	123	202	178	184							

CHART 2

HEADWAY

During the peak traffic period, on 07/16/2021 at [12:45 PM-01:00 PM] the average headway between vehicles was 10 seconds. During the slowest traffic period, on 07/16/2021 at [01:45 AM-02:00 AM] the average headway between vehicles was 900 seconds.

WEATHER

The roadway surface temperature over the period of the study varied between 81.00 and 144.00 degrees F.

07/26/2021 10:36 AM

Page: 1

**MH Corbin Traffic Analyzer Study
Computer Generated Summary Report
City: Irvington
Street: King Carter Drive
Location: 37.682352, -76.422215**

A study of vehicle traffic was conducted with the device having serial number 406707. The study was done in the EB & WB lane at King Carter Drive in Irvington, Va in Lancaster county. The study began on 07/15/2021 at 12:00 PM and concluded on 07/20/2021 at 12:00 PM, lasting a total of 120.00 hours. Traffic statistics were recorded in 15 minute time periods. The total recorded volume showed 7,483 vehicles passed through the location with a peak volume of 47 on 07/17/2021 at [02:45 PM-03:00 PM] and a minimum volume of 0 on 07/15/2021 at [11:30 PM-11:45 PM]. The AADT count for this study was 1,497.

SPEED

Chart 1 lists the values of the speed bins and the total traffic volume for each bin. At least half the vehicles were traveling in the 25 - 30 MPH range or lower. The average speed for all classified vehicles was 30 MPH with 84.69% vehicles exceeding the posted speed of 25 MPH. 0.21% percent of the total vehicles were traveling in excess of 55 MPH. The mode speed for this traffic study was 25MPH and the 85th percentile was 35.57 MPH.

<	10	15	20	25	30	35	40	45	50	55	60	65	70	75
50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
9	14	19	24	29	34	39	44	49	54	59	64	69	74	>
2	37	154	597	2564	2515	957	200	41	13	4	3	1	1	7

CHART 1

14
31436
31
13
087
51436
40
36

CLASSIFICATION

Chart 2 lists the values of the classification bins and the total traffic volume accumulated for each bin.

Most of the vehicles classified during the study were Passenger Vehicles. The number of Passenger Vehicles in the study was 4293 which represents 58 percent of the total classified vehicles. The number of Vans & Pickups in the study was 2887 which represents 39 percent of the total classified vehicles. The number of Busses & Trucks in the study was 142 which represents 2 percent of the total classified vehicles. The number of Tractor Trailers in the study was 124 which represents 2 percent of the total classified vehicles.

< to 17	18 to 20	21 to 23	24 to 27	28 to 31	32 to 37	38 to 43	44 to 50								
4293	2727	160	32	77	48	38	71								

CHART 2

124 TT
142 BT
5266
25 x
164
53
11

HEADWAY

During the peak traffic period, on 07/17/2021 at [02:45 PM-03:00 PM] the average headway between vehicles was 18.75 seconds. During the slowest traffic period, on 07/15/2021 at [11:30 PM-11:45 PM] the average headway between vehicles was 900 seconds.

WEATHER

The roadway surface temperature over the period of the study varied between 79.00 and 145.00 degrees F.