2019

Virginia Department of Transportation Daily Traffic Volume Estimates Including Vehicle Classification Estimates

where available

Special Locality Report 306

Town of Strasburg

Information in this report is included in Report

85

(Shenandoah County)

Prepared By

Virginia Department of Transportation Traffic Engineering Division

In Cooperation With

U.S. Department of Transportation Federal Highway Administration

Virginia Department of Transportation Traffic Engineering Division Traffic Monitoring Section

The Virginia Department of Transportation (VDOT) conducts a program where traffic count data are gathered from sensors in or along streets and highways and other sources. From these data, estimates of the average number of vehicles that traveled each segment of road are calculated. VDOT periodically publishes booklets listing these estimates.

One of these booklets, titled "Average Daily Traffic Volumes with Vehicle Classification Data, on Interstate, Arterial and Primary Routes" includes a list of each Interstate and Primary highway segment with the estimated Annual Average Daily Traffic (AADT) for that segment. AADT is the total annual traffic estimate divided by the number of days in the year. This booklet also includes information such as estimates of the percentage of the AADT made up by 6 different vehicle types, ranging from cars to double trailer trucks; estimated Annual Average Weekday Traffic (AAWDT), which is the number of vehicles estimated to have traveled the segment of highway during a 24 hour weekday averaged over the year; as well as Peak Hour and Peak Direction factors used by planners to formulate design criteria.

In addition to the Primary and Interstate publication, one hundred books are published periodically, one for each of 100 areas across the state defined by VDOT for record-keeping purposes. These books include traffic volume estimates for roads within the county, cities, and towns within the area. These books are titled "Daily Traffic Volumes Including Vehicle Classification Estimates, where available; Jurisdiction Report numbers 00 through 99".

Also available are a number of reports summarizing the average Vehicle Miles Traveled (VMT) in selected jurisdictions and other categories of highways. There are many different ways to present traffic volume summary information. Because the user determines the value of each presentation, the reports have been redesigned based on user requests and feedback. The people of the VDOT Traffic Engineering Division Traffic Monitoring Section who produce these books welcome requests for other helpful ways of presenting the summary information.

A compact disc (CD) is available that includes files in the Adobe® Portable Document Format (PDF) that can be displayed, searched, and printed using common desktop computer equipment. The CD includes the publications described above as well as a number of other reports, including specialized VMT summaries and smaller AADT reports for each city and town separately.

Publication Notes

Parallel Roads

For road inventory and management purposes, some roadways are counted separately by direction and have separately published traffic estimates for each direction of travel. Examples of such roadways are the interstate system and routes with separated facilities and (usually) one-way traffic facilities in urban areas. In these publications, they are referred to as parallel roads. As a convenience for the users of the publication, the listing for segments of roads with parallel segments are published with both the traffic estimates for their own direction of travel (e.g. I-95 Northbound) as well as the estimate of the total of all traffic on the same route including parallel roadways (all directions of I-95). The publication will have a "Combined Traffic Estimates for Parallel Roadways on this Route" or "Combined Traffic" identifiers for the combined direction of travel estimates.

Roadways such as I-395 with a North segment, a South segment and a separate Reversible lane segment will have the estimate for more than two parallel roadways included in the entire combined traffic estimate.

Some routes have very complicated paths through cities and towns. These parallel paths may be too complex to allow a relationship between nearby sections of the opposite direction on the same route. In this case, to indicate that the traffic estimates for such a road segment may not include all directions of traffic on that route, the line that would list the combined values will indicate "NA" for not available.

VDOT's traffic monitoring program includes more than 100,000 segments of roads and highways ranging from several mile sections of Interstate highways to very short sections of city streets. Due to problems experienced obtaining some traffic count data, and the level of quality necessary to maintain confidence in the data, no estimate is currently available for some segments of roadway. These segments are included in the publications indicating "NA" for not available. It is the intention of the VDOT Traffic Engineering Division Traffic Monitoring group to obtain the data necessary and to report traffic volume estimates on all road segments included in these publications.

Many of the road segments in this program are local secondary roads. The amount and detail of data collected on these roads are not as great as the data collected on higher volume roads. The vehicle classification, average weekday traffic volumes, and the theoretical design hour traffic volumes are not calculated for these roads. The publications indicate "NA" for the information that is not available.

This publication is based on a traffic monitoring program initiated in 1997. Because the data collection techniques and statistical evaluation processes are different than those used in previous years, comparison with previous publications may be misleading.

Glossary of Terms:

Route: The Route Number assigned to this segment of roadway with the master inventory route number if this is an overlapping route, with official street or highway name if available.

Length: Length of the traffic segment in miles.

AADT: Annual Average Daily Traffic. The estimate of typical daily traffic on a road segment for all days of the week, Sunday through Saturday, over the period of one year.

QA: Quality of AADT:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- F Factored Short Term Traffic Count Data
- G Factored Short Term Traffic Count Data with Growth Element
- H Historical Estimate
- M Manual Uncounted Estimate
- N AADT of Similar Neighboring Traffic Link
- O Provided By External Source
- R Raw Traffic Count, Unfactored

4Tire: Percentage of the traffic volume made up of motorcycles, passenger cars, vans and pickup trucks.

Bus: Percentage of the traffic volume made up of busses.

2Axle Truck: Percentage of the traffic volume made up of 2 axle single unit trucks (not including pickups and vans).

3+Axle Truck: Percentage of the traffic volume made up of single unit trucks with three or more axles.

1 Trail Truck: Percentage of the traffic volume made up of units with a single trailer.

2Trail Truck: Percentage of the traffic volume made up of units with more than one trailer.

QC: Quality of Classification Data:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- C Short Term Classified Traffic Count Data
- F Factored Short Term Traffic Count Data
- H Historical Estimate
- M Mass Collective Average
- N Classification Estimates of Similar Neighboring Traffic Link

K Factor: The estimate of the portion of the traffic volume traveling during the peak hour or design hour.

QK: Quality of the K Factor estimate:

- A Factor based on 30th Highest Hour Observed During at least 250 days of Continuous Traffic Data
- B Factor based on other Hour Observed During Less than 250 days of Continuous Traffic Data
- F Factor based on Highest Hour Collected at in a 48 Hour Weekday Period
- M Factor based on Manual Estimate of design hour
- N Design Hour Factor (K Factor) of Similar Neighboring Traffic Link
- O Provided by External Source

Dir Factor: The estimate of the portion of the traffic volume traveling in the peak direction during the peak hour..

AAWDT: Average Annual Weekday Traffic. The estimate of typical traffic over the period of one year for the days between Monday through Thursday inclusive.

QW: Quality of AAWDT:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- F Factored Short Term Traffic Count Data
- G Factored Short Term Traffic Count Data with Growth Element
- Manual Uncounted Estimate
- N AAWDT of Similar Neighboring Traffic Link
- O Provided by External Source

Year: Year for which the published values are appropriate. If the Quality of AADT (QA) is "R", the year is the year that the raw traffic count was collected, and if available,

Route Shield Legend

Route Systems

Special Routes

North 81	Interstate Route	Traffic volume data for Interstate Routes and some other routes are reported separately by direction, as well as combined.							
29	US Route								
7	Virginia State Route								

Frontage Road (F precedes frontage route number)

Bus	Bus - Business Route
20	Bypas - Bypass Route
(23)	Truck - Truck Route
ALT	ALT - Alternate Route
(220)	Wye - Wye Route connector
(9	

Secondary Route

P - Parallel Route; Southbound or Westbound direction lanes of a numbered route where they are on a different road facility than the other direction.

The VDOT Maintainenance Jurisdiction number is displayed below the Secondary Route Number if the Maintenance Jurisdiction is different than the jurisdiction in the title of the report.

Virginia Department of Transportation Traffic Engineering Division 2019

Annual Average Daily Traffic Volume Estimates By Section of Route Town of Strasburg

Route	Jurisdiction	Longth	AADT	ΟΛ	QA 4Tire Bus			Truck		QC	K	QK	Dir	AAWDT	OW/	
noute	Junsaiction	Length	AADI	QA	41116	Du5	2Axle	3+Axle	1Trail	2Trail	QU	Factor	QK	Factor	AAWDI	QW
	From	S	CL Strasbu	g												
11 Stover Ave	Town of Strasburg (Maint: 85)	0.38	6400	G	98%	1%	1%	0%	0%	0%	С	0.094	F	0.570	6700	G
\checkmark	To:		King St													
	From:		Stover Ave													
11 King St	Town of Strasburg (Maint: 85)	0.24	6400	N	98%	1%	1%	0%	0%	0%	Ν	0.094	F	0.570	6700	Ν
~	To:		Holliday St													
11 King St	Town of Strasburg (Maint: 85)	0.16	6700	G	98%	1%	1%	0%	0%	0%	F	0.094	F	0.527	7100	G
11) 19 51	To:		5 Massanuti		0070	1 70		0 70	0 / 0	070	•	0.001	•	0.027	7100	_
	From		R 55 King S													
11 55 N Massanutten St	Town of Strasburg (Maint: 85)		12000	G	98%	0%	0%	0%	1%	0%	F	0.09	F	0.532	13000	G
* •	To: From:	SR 55 N	John Mars	hall Hw	y											
11 N Massanutten St	Town of Strasburg (Maint: 85)	0.70	13000	G	98%	0%	0%	0%	1%	0%	С	0.093	F	0.587	13000	G
	To:	N	CL Strasbu	rg												
	From	V	CL Strasbu	ro												
55) John Marshall Hwy	Town of Strasburg (Maint: 85)		3500	G	96%	1%	1%	1%	2%	0%	С	0.088	F	0.560	3700	G
33),	To:		W, Massani			.,,	- i			- 7	_					-
	From:		1 Massanuti													
55) (11) N Massanutten St	Town of Strasburg (Maint: 85)	0.23	12000	G	98%	0%	0%	0%	1%	0%	F	0.09	F	0.532	13000	G
	To:		1 Massanutt	ten St												
	From:	US 11	E, Massanu	itten St												
55 King St	Town of Strasburg (Maint: 85)	0.60	6400	G	97%	0%	1%	0%	2%	0%	С	0.095	F	0.532	6800	G
\smile	To:		Eberly St													
55) Front Royal Rd	Town of Strasburg (Maint: 85)	0.58	3900	G	97%	0%	1%	0%	2%	0%	F	0.101	F	0.576	4100	G
55 Front Royal Rd	Town of Strasburg (Maint. 65)		CL Strasbu		31/0	0 /0	1/0	0 /0	£ /0	0 /0	'	0.101	'	0.570	4100	G
		E	CL Strasbu	g												

4/17/2020 7

Virginia Department of Transportation Traffic Engineering Division 2019 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Strasburg

						TOWIT OF OTIGO	ourg								
Route	Length	AADT	QA	4Tire	Bus	Tr 2Axle 3+Axle			QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Strasburg		From				F 11: 0				1					
Third St	0.07	0	R			Franklin St				NA			NA		08/25/2014
Third St	0.07	Tα				King St									00/20/20:
		From	1			Capon St				Î					
1 Branch St	0.26	350	G	98%	1%	1% 0%	0%	0%	С	0.122	F	0.681	370	G	2019
		To	:			Franklin St									
O 0 1 10	0.10	From		2221		85-1210 Frankli					_	^	0.10		2212
2 Orchard St	0.18	290 To	G	98%	1%	1% 0% US 11 Stover A	0%	0%	F	0.121	F	0.575	310	G	2019
		From			CD										
3 Eberly St	0.10	340	G	98%	1%	1% 0%	0%	0%	F	0.132	F	0.547	360	G	2019
(3) =20) 5.	00	To	Ť	0070		Bowman Hill Rd; I			•		•	0.0.7		O .	_0.0
		From				Queen St									
4 Aileen Ave	0.28	230	G	96%	2%	1% 0%	1%	0%	С	0.179	F	0.767	240	G	2019
		To	:			Dead End									
O		From				King St									
(5) Sharpe St	0.08	330	G	98%	1%	1% 0%	0%	0%	F	0.190	F		350	G	2019
			<u> </u>			Queen St									
6 Hite Ln	0.30	100	G			0.30 ME US 1	.1			0.138	F	0.531	100	G	2019
6 Hite Ln	0.50	100								0.130	•	0.551	100	ч	2013
Radio Station Rd	0.54	1300 From	G			US 11 Old Valley	Pike			0.087	F	0.614	1300	G	2019
6 Radio Station Rd	0.54	1300 To				Dead End				0.007	•	0.014	1300	G	2019
		From				Orchard St									
(1966) Franklin St	0.18	420	G	97%	2%	0% 0%	0%	0%	С	0.110	F	0.549	450	G	2019
		Τα				Branch St									
		From				85-638 WCL Stra	sburg								
(1967) Ash St	0.77	1100	G	98%	1%	0% 0%	0%	0%	С	0.110	F	0.578	1100	G	2019
		To From				306-1971 Capoi	n St								
(1967) Washington St	0.37	2700	G	98%	1%	0% 0%	0%	0%	F	0.109	F	0.73	2800	G	2019
$\frac{\circ}{\circ}$		To From				US 11 N Massanu									
(1967) Washington St	0.43	1900	G	99%	0%	0% 0%	0%	0%	С	0.105	F	0.521	2000	G	2019
<u> </u>		From				Virginia St									
(1967) Washington St	0.18	830	G	99%	0%	0% 0%	0%	0%	F	0.104	F	0.528	880	G	2019
		To				Eberly St; ECL Str	asburg								
(1971) Capon St	0.16	2500	G	99%	0%	King St 0%	0%	0%	F	0.095	F	0.574	2700	G	2019
(1971) Capon St	0.10	2300		33 /6	0 78		0 /0	0 78	'	0.033	•	0.574	2700	ч	2013
(1971) Capon St	0.50	2000 From	G	99%	0%	Branch St 0% 0%	0%	0%	С	0.103	F	0.509	2100	G	2019
(1971) Capon St	0.50	2000 To		JJ /0		SR 55 John Marsha		0 /6		0.103	•	0.509	2100	G	2019
		From				85-648 SCL Stras				l					
(1974) Holliday St	0.30	2300	G	95%	4%	0% 1%	0%	0%	С	0.246	F	0.566	2500	G	2019
,		To				High St									
(1974) Holliday St	0.07	3500 From	G	95%	4%	0% 1%	0%	0%	F	0.255	F	0.607	3800	G	2019
		To				Queen St									
(1974) Holliday St	0.08	2800 From	G	95%	4%	0% 1%	0%	0%	F	0.157	F	0.517	2900	G	2019
		To	_			US 11 King S									
(1974) Holliday St	0.08	1600 From	G	95%	4%	0% 1%	0%	0%	F	0.123	F	0.691	1700	G	2019
		Tα			.,,	Washington S									
		From				Sharpe St									
(1975) Queen St	0.19	420	G	97%	2%	1% 0%	0%	0%	F	0.138	F	0.952	440	G	2019
$\overline{}$		To From				Holliday St									
(1975) Queen St	1.10	2100 From	G	97%	2%	1% 0%	0%	0%	С	0.143	F	0.578	2200	G	2019
\bigcirc		To	:			SR 55 Front Roya	al Rd								

4/17/2020 8

Virginia Department of Transportation Traffic Engineering Division 2019 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Strasburg

Route	Length	AADT	QA	4Tire	Bus	Truck				QC	K	QK	Dir	AAWDT	QW	Year
rioute	Lengui	AADI	Q,A			2Axle	3+Axle	1Trail	2Trail	QU	Factor	QIV	Factor	AAWDI	QVV	i Cai
Town of Strasburg																
		From				I	ligh St									
Fort St		240	G								0.146	F	0.805	240	G	2019
		To	Queen St													
		From				East C	Queen Stre	et								
Massanuten Street		3200	G	97%	1%	1%	0%	0%	0%	С	0.095	F	0.589	3200	G	2019
		То				SR 55	King Stre	et								
		From				1	US 11									
Thompson Street		820	G	99%	0%	0%	0%	0%	0%	С	0.105	F	0.747	820	G	2019
		To				Le	e Street									

4/17/2020 9