2020

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

where available

Special Locality Report 330

Town of Woodstock

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 The reported 2020 AADTs represent the best estimate of 2020 average daily traffic, however, this year's AADTs do vary from normal traffic in the years prior to 2020 due to COVID-19. The reported AADTs may not represent typical traffic for a given day or period within the year as the drastic seasonal variations were normalized through the factoring process. The 2020 publications are therefore colored to draw users attention to the fact that uses of the 2020 published estimates versus alternative data sources should be determined at users' discretion based on the objectives or nature of the analyses being performed.

The estimated 2020 DVMT for the entire state maintained network total to 208,000,000, which has trended down by 11 percent compared to the 2019 level of 234,000,000. For most traffic links across the state, the estimated 2020 AADTs are also seen to have decreased from their 2019 levels.

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 buses.

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.

1Trail 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
- M 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

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 Rou	ıte	
F241	Frontage Road (F	precedes frontage route number)	
600	Secondarv Route		
		Special Routes	
Bus 29 ALT 220	Bus - Business Ro Bypas - Bypass R Truck - Truck Rou ALT - Alternate Ro Wye - Wye Route	Route ute oute	
1,1		; Southbound or Westbound direction lanes of a numbered route a different road facility than the other direction.	
600 154		ainenance Jurisdiction number is displayed below the Secondary Rout intenance Jurisdiction is different than the jurisdiction in the title of the	

Virginia Department of Transportation Traffic Engineering Division 2020 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Woodstock																	
Route	Jurisdiction	n	Length	AADT	QA	4Tire	Bus		Tru 3+Axle	-		QC	K Factor	QK	Dir Factor	AAWDT	QW
11 Main St	From Town of Woodstock	(Maint: 85)	0.22	L Woodstoe 7500	F	99%	0%	1%	0%	0%	0%	С	0.093	F	0.515	7900	F
11 Main St	Tau From Town of Woodstock	(Maint: 85)	0.30	akeview D1 8300	F	98%	0%	1%	0%	1%	0%	С	0.091	F	0.517	8800	F
11 Main St	Town of Woodstock	(Maint: 85)	0.65	W Reserve 9300	G	98%	1%	1%	0%	0%	0%	С	0.084	F	0.506	9800	G
11 Main St	Town of Woodstock	(Maint: 85)	0.85	ian Spring I 9000 W North St	F	99%	0%	1%	1%	0%	0%	С	0.092	F	0.531	9600	F
11 Main St	From Town of Woodstock To	(Maint: 85)	0.53	7000 TU Woodsto	N ck	96%	0%	1%	1%	1%	0%	Ν	0.093	F	0.506	7400	Ν
42 W Reservoir Rd	From Town of Woodstock	(Maint: 85)	WC 0.44	CL Woodsto 7700	^{ck}	99%	0%	0%	0%	1%	0%	С	0.094	F	0.543	8200	F
42 W Reservoir Rd	Town of Woodstock	(Maint: 85)	0.41	I-81 13000	F	97%	0%	1%	1%	1%	0%	С	0.086	F	0.531	14000	F
42) W Reservoir Rd	From Town of Woodstock To	(Maint: 85)	0.22	Susan Ave 13000 Main Street	F	97%	0%	1%	1%	1%	0%	С	0.086	F	0.518	14000	F
North	From:		SC	L Woodsto	ck												
(81)	Town of Woodstock	(Maint: 85)	0.38	20000	Α	70%	1%	1%	1%	25%	2%	F	0.114	А		19000	А
\bigcirc	Combined Traffic Estimates for 2 Parallel	Roadways on th	is Route:	39000	Α	71%	1%	1%	1%	24%	2%	F	0.103	А	0.500	38000	А
N I 4 I-	Tor		SR 4	2 Reservoir	Rd												
North (81)	Town of Woodstock	(Maint: 85)	1.41	19000	F	70%	1%	1%	1%	25%	2%	F	0.069	F		19000	F
01	Combined Traffic Estimates for 2 Parallel	, ,			F	71%	1%	1%	1%	24%	2%	F	0.069	F	0.51	38000	F
	To	,		L Woodsto	ck												
South	From:		SC	L Woodsto	ck												
(81)	Town of Woodstock	(Maint: 85)	0.69	19000	Α	73%	1%	1%	1%	23%	2%	F	0.113	А		19000	А
\checkmark	Combined Traffic Estimates for 2 Parallel	Roadways on th	is Route:	39000	Α	71%	1%	1%	1%	24%	2%	F	0.103	Α	0.500	38000	А
South	To- Fron:		SR 4	2 Reservoir	Rd							_		_			
South	Town of Woodstock	(Maint: 85)	1.00	20000	F	73%	1%	1%	1%	23%	2%	F	0.078	F		20000	F
	Combined Traffic Estimates for 2 Parallel	. ,			F	71%	1%	1%	1%	24%	2%	F	0.072	F	0.534	38000	F
	To:			L Woodsto	ck												

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Devite	1			47		Truck-			К		Dir		0.04	Maran
Route	Length	AADT	QA	4Tire	Bus	2Axle 3+Axle 1T	rail 2Trai	I QC	Factor	QK	Factor	AAWDT	QW	Year
Town of Woodstock		From:				SR 42 Reservoir Rd								
(9745) W W Robinson H Sch		1700 To:	R			Cul-de-Sac			NA			NA		09/08/2014
		From:	<u> </u>			US 11 Main St								
1 Indian Spring Rd	0.18	480	F	97%	1%		% 0%	С	0.109	F	0.692	510	F	2020
		To:				Water St								
2 Lakeview Dr	0.09	From: 1200	F	98%	0%	<u>Main St</u> 1% 0% 0	% 0%	С	0.103	F	0.65	1300	F	2020
		Tor			- /-	ECL Woodstock				-				
		From:				Reservoir Rd							_	
(3) Ox Rd	0.56	4200	F	98%	1%	1% 0% 0 Massanutten Heights Rd	% 0%	F	0.1	F	0.508	4400	F	2020
		From				Ox Rd								
4 Massanutten Heights Re	d 0.33	1700	F	96%	0%		% 0%	F	0.106	F	0.522	1800	F	2020
\smile		To:				Commerce St								
Commerce St	0.08	From: 1700	F	98%	0%	Massunutten Hghts Rd 1% 0% 0	% 0%	С	0.108	F	0.526	1800	F	2020
5 Commerce St	0.00	To:		50 /0	0 /0	W Spring St	/3 0/8	0	0.100		0.520	1000		2020
		From:				Main St								
6 Mill Rd	0.20	1100	F	98%	1%		% 0%	F	0.094	F	0.518	1200	F	2020
		To:				ECL Woodstock								
(7) E Reservoir Rd	0.20	From: 4900	F	98%	0%	Water St 1% 1% 0	% 0%	С	0.101	F	0.504	5200	F	2020
7 E Reservoir Rd	0.20	To:		0070	070	Main St	/0 0/0	0	0.101	•	0.004	0200	1	2020
	0.00	From:	_	000/	00/	ECL Woodstock	00/	-	0.100	-	0.501	000	-	0000
7 E Reservoir Rd	0.33	870 To:	F	98%	0%	1% 0% 1 Water St	% 0%	F	0.102	F	0.521	920	F	2020
		From:				W Spring St								
8 Summit Ave	0.52	820	F	99%	0%	0% 0% 0	% 0%	С	0.116	F	0.514	880	F	2020
		To:				North St								
9 Water St	0.51	From: 2300	F	98%	0%	<u>330-7 Reservior Rd</u> 1% 1% 0	% 0%	С	0.105	F	0.566	2400	F	2020
(g) Water of	0.01	2000		5078				0	0.100	1	0.000	2400		2020
9 Water St	0.27	From: 2400	F	97%	0%	330-1 Indian Springs Roa 1% 1% 1	a % 0%	F	0.104	F	0.585	2600	F	2020
\odot		To				330-12 Hughes Street								
9 Water St	0.22	2200	F	98%	0%		% 0%	С	0.114	F	0.52	2300	F	2020
		To: From:				High Street								
9 Water St	0.68	2000	F	99%	0%		% 0%	С	0.11	F	0.5	2200	F	2020
		To: From:				Mill Rd								
(11) Church St	0.12	100	F	98%	0%	Spring St 0% 0% 1	% 0%	С	0.15	F	0.667	110	F	2020
		To:			- / -	Hughes St		-		-			-	
~		From:				Church St								
(12) Hughes St	0.10	120	F	98%	0%		% 0%	F	0.153	F	0.533	130	F	2020
		To: From:				Water St								
(13) Hollingsworth Rd	0.39	1000	F	98%	0%	Water St 1% 0% 1	% 0%	С	0.114	F	0.589	1100	F	2020
		To:				Lupton Rd								
		From:				North St				_			_	
(14) Lee St	0.35	360 To:	F	98%	0%	1% 1% 0 NCL Woodstock	% 0%	С	0.115	F	0.606	380	F	2020
		From:				WCL Woodstock								
(1960) North St	0.33	1700	F	97%	0%		% 0%	С	0.108	F	0.622	1800	F	2020
\bigcirc		From:				Summit Ave								
(1960) North St	0.43	2200	F	99%	0%	0% 0% 0	% 0%	С	0.107	F	0.558	2300	F	2020
\smile		To				Main St								

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Route	Length	AADT	QA	4Tire	Bus		Tru 3+Axle	-		QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Woodstock		From	1			WCI	XX7 1.	1								
(1961) W Spring St	0.36	1100	F	95%	0%	1%	Woodstoc 1%	<u>к</u> 3%	0%	F	0.118	F	0.621	1200	F	2020
(1961) W Spring St	0.52	From 1200	F	97%	0%	1%	nmit Ave 1%	1%	0%	С	0.112	F	0.570	1300	F	2020
\bigcirc		To	To: Main St													
(1961) E Spring St	0.09	From 440	F	99%	0%	0%	1 Main St 0%	0%	0%	С	0.105	F	0.568	470	F	2020
\bigcirc		To				C	urch St									
\sim				330-11 Church St												
(1961) E Spring St		360	F	99%	0%	0%	0%	0%	0%	F	0.108	F	0.6	360	F	2020
\bigcirc		To		330-9 Water St												
		From		Summit Ave												
Locust St		120	F								0.247	F	0.667	120	F	2020
		То		Commerce St												