### 2014

# 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

#### 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

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	

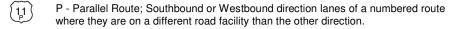
(F241)	Frontage Road (F precedes frontage route number)

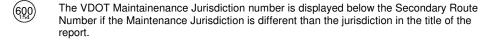
(600) Secondary Route

#### Special Routes

Bus	Bus - Business Route
[29]	Bypas - Bypass Route
	Truck - Truck Route
ALT	ALT - Alternate Route
(220)	Wve - Wve Route connector

Virginia State Route





#### Virginia Department of Transportation Traffic Engineering Division 2014

#### Annual Average Daily Traffic Volume Estimates By Section of Route Town of Woodstock

			Length AADT QA 4Tire Bus				Trı	ıck			K	-014	Dir			
Route	Jurisdiction	n Leng	Length <b>AADT</b>		4Tire	Bus	2Axle	3+Axle	1Trail	2Trail	QC	Factor	QK	Factor	AAWDT	Q
~	From:		SCL Woodsto													
Main St	Town of Woodstock	(Maint: 85) 0.23	2 7800	F	98%	0%	1%	1%	0%	0%	F	0.092	F	0.549	8200	ŀ
~	To- From:		Lakeview D	r												_
11 Main St	Town of Woodstock	(Maint: 85) 0.3	8600	F	98%	0%	1%	1%	0%	0%	F	0.091	F	0.538	9100	ا
<u> </u>	To: From:		42, W Reserv													
1) Main St	Town of Woodstock	(Maint: 85) 0.6	12000	F	98%	0%	1%	0%	0%	0%	С	0.089	F	0.546	13000	
<u>~</u>	To: From:		Indian Spring													
1) Main St	Town of Woodstock	(Maint: 85) 0.8	10000	F	98%	0%	1%	0%	0%	0%	F	0.092	F	0.532	11000	
	To: From:		W North S	t												
Main St	Town of Woodstock	(Maint: 85) 0.5		N	97%	1%	1%	0%	1%	0%	Ν	0.092	Ν	0.570	7900	
	To:		NCL Woodst	ock												
)	From:	(14.1	WCL Woodst								_		_			
W Reservoir Rd	Town of Woodstock	(Maint: 85) 0.4	7100	F	96%	0%	1%	0%	2%	0%	F	0.086	F	0.569	7500	
	To: From:	(14.1	I-81		.=./											
W Reservoir Rd	Town of Woodstock	(Maint: 85) 0.4	14000	F	97%	1%	1%	0%	1%	0%	С	0.081	F	0.505	14000	
	To: From:		Susan Ave													
W Reservoir Rd	Town of Woodstock	(Maint: 85) 0.23		F	97%	1%	1%	0%	1%	0%	F	0.083	F	0.538	16000	
	10.		Main Stree													_
th ⊃	From:	(Maint: 05) 0.00	SCL Woodsto		750/	10/	10/	10/	010/	00/	_	0.110	^		00000	
Ð	Town of Woodstock	,		A	75%	1%	1%	1%	21%	2%	-	0.119	Α		20000	
	Combined Traffic Estimates for 2 Parallel I			Α	76%	1%	1%	1%	20%	2%	F	NA			39000	
<u>t</u> h	To: From	9	R 42 Reservo	r Rd												_
<u>ī</u> )	Town of Woodstock	(Maint: 85) 1.4	21000	F	75%	1%	1%	1%	21%	2%	F	0.071	F		21000	
	Combined Traffic Estimates for 2 Parallel I	Roadways on this Rout	e: <b>45000</b>	F	76%	1%	1%	1%	20%	2%	F	0.069	F	0.51	43000	
	To:		NCL Woodst	ock												
th	From:		SCL Woodsto													
7	Town of Woodstock	• •		Α	77%	1%	1%	1%	19%	2%	F	0.115	Α		19000	
,	Combined Traffic Estimates for 2 Parallel I	Roadways on this Rout	e: <b>42000</b>	Α	76%	1%	1%	1%	20%	2%	F	NA			39000	
th	To: From:	(	R 42 Reservo	ir Rd												
th	Town of Woodstock	(Maint: 85) 1.0	23000	F	77%	1%	1%	1%	19%	2%	F	0.070	F		22000	
·)	Combined Traffic Estimates for 2 Parallel I	,	e: <b>45000</b>	F	76%	1%	1%	1%	20%	2%	F	0.069	F	0.51	43000	
	To:	,	NCL Woodst	ock		-			-						_	

4/21/2015 7

## Virginia Department of Transportation Traffic Engineering Division 2014 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Woodstock

						TOWITO	i vvoous	lock								
Route	Length	AADT	QA	4Tire	Bus		Trı 3+Axle			QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Woodstock		From				CD 42	Reservoir	DA								
(9745) W W Robinson H Sch	0.71	1700	R			SK 42	Keservon	Ku			NA			NA		09/08/201
85		To				C	ul-de-Sac									
		From:					11 Main S									
(1) Indian Spring Rd	0.18	560	F	98%	0%	1%	0%	0%	0%	С	0.1	F	0.533	590	F	2014
		From					Vater St									
2 Lakeview Dr	0.09	1100	F	98%	0%	1%	Main St 0%	0%	0%	F	0.104	F	0.53	1200	F	2014
2		To:					Woodstoc									
		From:				Re	servoir Rd									
3 Ox Rd	0.56	3800	F	99%	0%	0%	0%	0%	0%	С	0.103	F	0.513	4000	F	2014
<u> </u>		To					tten Heigh	ts Rd								
Magaznuttan Haighta F	24 0 22	From:	F	99%	10/	0%	Ox Rd 0%	0%	00/	С	0.112	F	0.555	1000	F	2014
4 Massanutten Heights F	nu 0.33	1800 To:		9970	1%		mmerce St	076	0%		0.112	Г	0.555	1900	Г	2014
		From					utten Hght	s Rd								
5 Commerce St	0.08	1800	F	98%	1%	0%	0%	0%	0%	С	0.112	F	0.671	1900	F	2014
$\overline{}$		То				W	Spring St									
		From					Main St									
6 Mill Rd	0.20	1300	F	98%	0%	1%	0%	0%	0%	F	0.154	F	0.800	1400	F	2014
		From:					Woodstoc	k								
7 E Reservoir Rd	0.20	4300	F	98%	1%	0%	Vater St 1%	0%	0%	F	0.114	F	0.680	4500	F	2014
7 E Noscivoli Na	0.20	To:	<u> </u>	0070	170		Main St	0 70	070			•	0.000	4000	•	2014
O		From:					Woodstoc									
7 E Reservoir Rd	0.33	600 To:	F	98%	1%	0%	1%	0%	0%	С	0.106	F	0.606	640	F	2014
		From					Vater St									
8 Summit Ave	0.52	710	F	98%	0%	1%	Spring St 0%	0%	0%	С	0.108	F	0.585	740	F	2014
0 11		To					North St									-
_		From:				330-7	Reservior	Rd								
9 Water St	0.51	2100	F	98%	1%	0%	0%	0%	0%	С	0.098	F	0.527	2200	F	2014
		To: From:				330-1 Ind	ian Springs	Road			$\Box$					
(9) Water St	0.27	2600	F	98%	1%	0%	0%	0%	0%	F	0.145	F	0.739	2700	F	2014
<u> </u>		To:				330-12	Hughes St									
(9) Water St	0.22	2100	F	98%	1%	0%	0%	0%	0%	F	0.100	F	0.513	2200	F	2014
<u> </u>		From					gh Street									
(9) Water St	0.68	2000 To:	F	98%	1%	0%	0%	0%	0%	F	0.099	F	0.521	2100	F	2014
		From:					Mill Rd									
(11) Church St	0.12	140	F	98%	1%	0%	pring St 0%	0%	0%	С	0.134	F	0.619	150	F	2014
(11) Church St	0.12	To	•	0070	170		ughes St	0 70	070		-0.10+	•	0.010	100	•	2014
		From:					hurch St									
(12) Hughes St	0.10	160	F	98%	1%	0%	1%	0%	0%	С	0.188	F	0.583	170	F	2014
$\bigcirc$		To				1	Vater St									
(1.5.15 may 11.5.1	0.00	From		0001	401		Vater St	001	001	-		_	0.700	070	_	0011
13 Hollingsworth Rd	0.39	830 To:	F	98%	1%	1%	0% upton Rd	0%	0%	С	0.111	F	0.708	870	F	2014
		From									+					
(14) Lee St	0.35	330	F	98%	1%	0%	North St 0%	0%	0%	С	0.197	F	0.737	350	F	2014
···		To					Woodstoc							<del>-</del>		
		From				WCI	Woodstoo	k								
(1960) North St	0.33	1400	F	98%	0%	1%	1%	0%	0%	F	0.103	F	0.724	1400	F	2014
<u> </u>		To:				Su	mmit Ave									
(1960) North St	0.43	1800	F	98%	0%	1%	1%	0%	0%	С	0.102	F	0.672	1900	F	2014
$\overline{}$		To				]	Main St									

4/21/2015 8

## Virginia Department of Transportation Traffic Engineering Division 2014 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Woodstock

Route	Length	AADT	QA	4Tire	Bus			uck 1Trail		QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Woodstock																
		Fron				WCL	Woodstoo	k								
(1961) W Spring St	0.36	1100	F	98%	1%	1%	1%	0%	0%	F	0.112	F	0.506	1100	F	2014
		To From				Sur	nmit Ave									
(1961) W Spring St	0.52	1100	F	98%	1%	1%	1%	0%	0%	С	0.106	F	0.583	1200	F	2014
		To: Main St														
		Fron				US 1	1 Main S	t								
(1961) E Spring St	0.09	360	F	98%	1%	1%	1%	0%	0%	F	0.144	F	0.573	380	F	2014
		To: Church St														
		Fron	i:			330-1	1 Church	St								
(1961) E Spring St	0.10	240	F	98%	1%	1%	1%	0%	0%	F	0.187	F	0.624	250	F	2014
	To: 330-9 Water St															
		Fron	ı			Sur	nmit Ave									
Locust St		90	F								0.176	F	0.514	90	F	2014
		To	0			Con	nmerce St									

4/21/2015 9