# 2010

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

where available

# Special Locality Report 299

Town of Shenandoah

Information in this report is included in Report

69

(Page 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.

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	te
(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)	Wye - Wye Route connector	

- 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.

Route	Jurisdiction .	Length AAL	T QA	4Tire	Bus	2Axle	Tru 3+Axle			QC	K Factor	QK	Dir Factor	AAWDT	QW
	From:	SCL Shen	andoah												
340	Town of Shenandoah (Maint: 69)	1.22 <b>540</b>	) N	96%	1%	1%	1%	1%	0%	Ν	0.091	N	0.502	5800	N
	To: From:	69-706 Jur	ior Ave			_									
340 Fifth St	Town of Shenandoah (Maint: 69)	0.65 <b>570</b>	) G	95%	1%	1%	1%	2%	0%	F	0.089	F	0.521	6200	G
	То:	NCL Sher	andoah												

						I own of S	Shenan	doan								
Route	Length	AADT	QA	4Tire	Bus	2Axle		uck 1Trail	2Trail	QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Shenandoah		From	.1			D 1: 1	G .	v ·			-1					
602) Maryland Ave	0.37	4200	G	99%	0%	Rockinghar 0%	m County 1%	0%	0%	С	0.098	F	0.626	4600	G	2010
602 Maryland Ave	0.37	4200		99 /6	0 /6			0 /6	0 /6	C	0.090		0.020	4000	G	2010
<u> </u>		From					S 340									
602 Maryland Ave	0.42	2600	G	99%	0%	0%	1%	0%	0%	F	0.101	F	0.603	2800	G	2010
		To				ECL S	henandoa	ıh								
$\sim$		From				69-602 N										
683 1st St	0.38	840	G	99%	0%	0%	0%	0%	0%	С	0.097	F	0.594	910	G	2010
		То				69-1013	3 Second	St								
683	0.35	340 From	R								NA			NA		04/07/20
683)		To				60.70	6 60 700									
	0.73	270 From	R			69-70	6; 69-780	)			NA			NA		00/05/20
683	0.73	<b>210</b> To				NCI C	henandoa	. L.						INA		09/05/20
			<u> </u>													
O		From				SCL S	henandoa	ıh			<u> </u>					
Eighth St	0.27	170	R								NA			NA		04/27/20
<u> </u>		To From				69-602 N	1aryland	Ave								
702 Eighth St	0.15	250	R								NA			NA		04/27/20
		To	:			69-1006	Denver A	Ave								
		From				De	ad End									
704) Quincy Ave	0.28	440	R			DC	ad Liid				NA			NA		04/07/20
Quincy Ave	0.20															0 1/01/20
		From				U	S 340									
Quincy Ave	0.12	720	R								NA NA			NA		04/07/20
		To				ECL S	henandoa	ah								
		From				69	9-683									
706 Junior Ave	0.25	200	G	97%	2%	0%	0%	0%	0%	С	0.133	F	0.849	220	G	2010
· · · · · · · · · · · · · · · · · · ·		To	:			US 34	0 Fifth S	t								
		From	:			1	st St									
708) Shenandoah Ave	0.21	300	R				St Dt				NA			NA		04/07/20
Shenandoah Ave	0.21	000														0 1/01/20
O 61		From					S 340								_	
708 Shenandoah Ave	0.36	450	G	99%	0%	0%	0%	0%	0%	С	0.098	F	0.593	490	G	2010
$\overline{}$		To	c:			69-719; EC	L Shena	ndoah								
_		From	:			N	1st St									
712 Senior Ave	0.31	260	R								NA			NA		04/07/20
69/		To	:			US 34	0 Fifth S	t								
		From	:			69-708; EC	T. Shenai	ndoah			Ī					
719 Ninth St	0.10	240	R			0, 700, 20	22 51101111	indotai.			NA			NA		04/27/20
7,19	00															0 ./2./20
<u> </u>		From				69-602 N	Iaryland A	Ave			ᆜ					
719 Ninth St	0.10	160	R								NA			NA		04/27/20
		To	:			69-1016 Pe	nnsylvani	ia Ave								
		From	:			De	ad End									
720 Seventh St	0.34	290	R								NA			NA		04/27/20
69		To				69-602 N	Moreland	Avo								
720) Seventh St	0.18	240 From	R			09-002 IV	Tai yiaiiu 2	Ave			NA			NA		04/27/20
Seventh St	0.10	<b>2-70</b> To				60 1006	Denver A	A vo						14/-1		04/21/20
											L					
		From	:			69-720	Seventh	St								
721) Osceola Ave	0.09	170	R								NA NA			NA		04/27/20
$\overline{}$		To				ECL S	henandoa	ah								
		From				69-1020	Central A	Ave								
725 N First St	0.18	130	R								NA			NA		04/27/20
69-7		т.				(0.710	Cor:- '	***								
	0.40	From				69-712	Senior A	ve			N14	•		NIA.		04/07/00
N First Ct		90	R								NA			NA		04/07/20
N First St	0.10					CO 5500	7:11:									
725 N First St	0.10	То				69-729 V										
		To					Villiams A									
N First St  N First St  North Fourth St	0.10	То									NA			NA		04/07/20

Route	Length	AADT	QA	4Tire	Bus	•			Truck- xle 17		(	C F	K actor	QK	Dir Factor	, AA	WDT	QW	Year
Town of Shenandoah		Fron	n:										ī						
North Fourth St	0.20	50	R				69-700	6 Junio	r Ave				NA				NA		04/07/2009
( A)		Tr	n.			6	59-729	Willia	ms Ave				]						
		Fron	n:				69-78	0 N Fi	rst St				]						
729 Williams Ave	0.23	160	R										NA				NA		04/07/2009
<u> </u>		Tr. Fron	n:				US 3	340 Fift	th St				<b>—</b>						
729 Williams Ave	0.12	200	R										NA				NA		04/07/2009
n9		To	D:				D	ead En	ıd										
O		Fron	<u> </u>				69-6	83; 69-	-706				]						
780 N First St	0.19	<b>90</b>	R				ro 730 i	XV:11:	A				NA				NA		04/27/2000
						- 0			ms Ave				1						
1004) Virginia Ave	0.21	1200	R R				69-6	683 1st	St				NA				NA		04/07/2009
Virginia Ave	0.21	1200											11/1				INA		04/01/2008
Nineinia A.v.	0.45	Fron					J	US 340	)								NIA		04/07/2009
1004 Virginia Ave	0.15	620	R				60.10	008 Six	th St				NA T				NA		04/07/2008
		Fron	n-										1						
1005) A St	0.09	50	R				09-700	6 Junio	Ave				NA				NA		04/07/2009
1005 A St	0.00	Ti	-				69-712	2 Senio	or Ave				i i						0 1/01/2000
		Fron	n:				69-10	)15 Thi	rd St				Ì						
1006 Denver Ave	0.08	240	R										NA				NA		04/07/2009
69)		Te	D:					340; C											
	0.40	Fron	<u> </u>				69-1	1009; 0	Gap								N.1.A		0.4/0.0/0.00
Denver Ave	0.42	490	. R				69-6	92; 69-	745				NA T				NA		04/09/2009
		Fron	n:										<del>                                     </del>						
1007) Pulaski Ave	0.26	310	R				D	ead En	id				NA				NA		04/07/2009
Pulaski Ave	0.20	υ.υ	. —					110 2 10					 ¬						0 1/01/2000
1007) Pulaski Ave	0.06	380 From	R				·	US 340	)				NA				NA		04/14/2009
Pulaski Ave	0.00	70 <b>0</b>					D	ead En	ıd				7				14/1		04/14/2000
		Fron	n:					vadale					Ì						
1008) Sixth St	0.20	120	R				Silen	rudure	1110				NA				NA		04/27/2000
Sixth St		Т					9-602 1	Maryla	nd Ave				<b>1</b>						
1008) Sixth St	0.20	150 From	R				J)-002 I	iviaiyia	iid / ivc				NA				NA		04/27/2000
Sixth St		To	D:			6	59-1004	4 Virgii	nia Ave										
		Fron	n:				D	ead En	ıd										
1009 Fifth St	0.42	100	R										NA				NA		04/07/2009
69		To Fron	-			6	59-1004	4 Virgii	nia Ave				<del> </del>						
1009 69 Fifth St	0.04	110	R										NA				NA		04/07/2009
69/		Te	D:			6	59-1006	6 Denv	er Ave										
		Fron				US	340; N	ICL Sh	enandoa	ìh									
1010 Marcus St	0.07	180	R										NA				NA		04/09/2009
		To Fron	n:				69-101	1 Greg	gory St				]						
1010 Marcus St	0.02	70	R										NA				NA		04/09/2009
		Te	D:				D	ead En	ıd										
$\bigcirc$		Fron	<u> </u>			69	9-1012	Edge V	Wood Di										
1011 Gregory St	0.14	<b>70</b>	R				50 101	1037	α.				NA				NA		04/07/2009
			0.				69-101												
Edge Wood Dr	0.10	400	<u> </u>				US 3	340 Fift	th St				NIA				NΙΛ		04/07/2000
Edge Wood Dr	0.10	180	R										NA				NA		04/07/2009
<u></u>	0.00	Fron				(	69-101	1 Greg	gory St				II.				NIA.		04/07/0000
1012 Edge Wood Dr	0.23	140	R				D	ead En	ıd				NA T				NA		04/07/2009
		Fron											<del>                                     </del>						
1013) Second St	0.08	70	R			69-	-/08 S	nenand	loah Ave	9			J NA				NA		04/07/2009
(1013) Second St	0.00	7 U											11/				11/7		U-1/1/2008

							Sheriando								
Route	Length	AADT	QA	4Tire	Bus		Truck 3+Axle 1		QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Shenandoah		From	1			60, 602	N. 1. 1.4								
(1013) Second St	0.34	330	R			69-602	Maryland Ave			NA			NA		04/07/2009
(1013) Second St	0.0 .	To				69-	683 1st St			<u> </u>					0 1, 01, 1200
		From	1			69-708 S	henandoah Av	e							
1015 Third St	0.07	140	R							NA			NA		04/07/2009
69		To From				69-602	Maryland Ave			7—					
1015 Third St	0.34	310	R							NA			NA		04/07/2009
		To From				69-100	6 Denver Ave			_					
1015 Third St	0.10	260	R							NA			NA		04/07/2009
03)		То				(	69-683								
<u> </u>		From	<u> </u>			69-	683 1st St			J					
(1016) Pennsylvania Ave	0.07	440	R							NA			NA		04/27/200
		To From				69-101	13 Second St			_					
Pennsylvania Ave	0.08	510	R							NA			NA		04/07/2009
$\overline{}$		To From				69-10	15 Third St								
(1016) Pennsylvania Ave	0.07	770	R							NA			NA		04/07/2009
		From				Ţ	US 340								
(1016) Pennsylvania Ave	0.07	450	R							NA			NA		04/27/2000
		From				69-10	009 Fifth St			_					
(1016) Pennsylvania Ave	0.07	310	R							NA			NA		04/27/2000
<u> </u>		To From				69-10	008 Sixth St			]-					
1016 Pennsylvania Ave	0.08	280	R							NA			NA		04/27/2000
		To From				69-7	720; 7th St			_					
1016 Pennsylvania Ave	0.07	200	R							NA			NA		04/27/2000
		To From				69-70	)2 Eighth St			_					
Pennsylvania Ave	0.07	110	R							NA			NA		04/27/2000
		То				69-7	19 Ninth St								
		From				D	ead End								
(1017) Long Ave	0.43	390 To	R			60,602	Mondond Avo			NA			NA		09/05/2006
		From	<u> </u>				Maryland Ave								
	0.14	NA Proin				Ct	ıl-de-Sac			NA			NA		
(1018)	0.14	To				69-602	Maryland Ave						IVA		
		From					ead End			İ					
(1019) Warren Ave	0.14	50	R				euu zau			NA			NA		06/05/2009
69		To				69-1023	3, S Second St								
		From					69-683								
(1020) Central Ave	0.20	260	R							NA			NA		09/05/2006
119		To				Ţ	US 340								
$\bigcirc$		From	<u> </u>			D	ead End			J					
(1022) 69	0.13	<b>70</b>	R			60.1026	2 0 0 10			NA			NA		09/05/2006
							3, S Second St			+					
(1023) S Second St	0.21	170	R			Page Cou	nty Line; 69-69	93		NA			NA		06/07/2009
(1023) S Second St	0.21	.,,								14/1			INA		30/01/2008
(1023) S Second St	0.12	160	R			Lit	erty Ave			NA			NA		09/05/2006
S Second St	0.12	To	<u> </u>			69-10	22; 69-1023						INA		03/03/2000
		From					ead End			+					
(1024)	0.06	50	R			<u>D</u>	Cau Enu			NA			NA		09/05/2006
1024		To					69-683								
		From				D	ead End								
1026	0.19	320	R							NA			NA		09/05/2006
69		To				τ	US 340								

Town of Shenandoah
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Route Town of Shenandoah	Length	AADT	QA	4Tire	Bus	Truck 2Axle 3+Axle 1Trail 2Tr	( )	C K Factor	QK	Dir Factor	AAWDT	QW	Year
Grandios Ave	0.04	From: 210	R			69-692; 69-745; 69-1006 ECL Shenandoah		NA			NA		04/09/2009