# 2016

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

where available

# Special Locality Report

# 280

Town of Pembroke

Information in this report is included in Report

# 35

(Giles 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	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 29 ALT 220	Bus - Business Ro Bypas - Bypass R Truck - Truck Rou ALT - Alternate Ro Wye - Wye Route	oute te oute											
		Southbound or Westbound direction lanes of a numbered route a different road facility than the other direction.											
600		inenance Jurisdiction number is displayed below the Secondary Rout											

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	Longth AADT	~	ATire	Due		Truck			QC	К	QK Dir	AAWDT	<u></u>
	Junsaiction	Length AADT	QA	4Tire	Bus	2Axle	3+Axle	1Trail	2Trail	QU	Factor	Factor	AAVUDI	QVV
	From:	WCL Pembro	ke											
(460) W Main St	Town of Pembroke (Maint: 35)	0.86 <b>13000</b>	G	89%	1%	1%	1%	8%	1%	С	0.089	0.567	13000	G
	To: From:	35-626 Castle	Ave											
Virginia Ave	Town of Pembroke (Maint: 35)	0.73 <b>13000</b>	G	90%	0%	1%	1%	8%	0%	F	0.089	0.626	14000	G
$\searrow$	Τœ	ECL Pembro	ĸe											

						Town o	f Pembr	oke								
Route	Length	AADT	QA	4Tire	Bus		Tru 3+Axle			QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Pembroke		From					160 1170									
618 Collins Ave	0.03	170	R				460 WB				NA			NA		05/23/2014
618 Collins Ave	0.12	200 From	R			US	5 460 EB				NA			NA		06/05/2011
	-	Te	5:			ECL	Pembroke	<u>,</u>								
2		From	<b>1</b> .			τ	JS 460									
619 Mays Hollow Rd	0.29	80	R								NA			NA		05/23/2014
0		Te	52				Pembroke									
(623) River Rd	0.42	From 960	G	99%	0%		Pembroke 0%	0%	0%	F	0.091		0.522	1000	G	2016
623) River Rd	0=	т		0070	0,0		E, Snidov		0,0	•			0.011		0.	2010
		From		000/	00/		W, Snidov		00/	-					0	0010
623 Cascade Dr	0.08	940	G	99%	0%	0%	0%	0%	0%	F	0.105		0.639	990	G	2016
	1.07	From		000/	00/		Virginia		00/		0 104		0.500	1 400	~	0010
623 Cascade Dr	1.07	1400 <sub>т</sub>	G	99%	0%	0% NCL Pem	0% broke Her	0%	0%	С	0.104		0.569	1400	G	2016
		From	1		33-088,				li Ku							
626) Castle Rock Rd	0.03	480	R			SCL	Pembroke	;			NA			NA		04/17/2002
(626) Castle Rock Rd	0.00	-100				25.14		<u>G</u> ,								0 1/ 1//2002
626 Castle Rock Rd	0.11	From 960	R			35-140	07 Fourth	St			NA			NA		06/17/2014
(626) Castle Rock Rd	0.11	300				405.0.1	<b>D</b> 1 D	0 10	•.					11/3		00/17/2014
626) Castle Rock Rd	0.30	1300	R		35-14	405 Castle	Rock Dr;	Second S	St		NA			NA		06/17/2014
626 35 Castle Rock Rd	0.50	1 <b>500</b>				US 4	460 EAST	1						IN-A		00/17/2014
0		Fron	12		١	US 460 W		ia Ave								
626 Mill St	0.49	550	G	100%	0%	0%	0%	0%	0%	С	0.113		0.531	580	G	2016
		Te	o: 1:			35-623 So										
(626) Johnson Rd	0.10	110	R			35-0251	N, Cascado				NA			NA		05/05/2011
626 Johnson Rd		т				NCL	Pembroke	e								
		From	n:			D	ead End									
631 Giles St	0.06	40	R								NA			NA		05/23/2014
35		т				35-74	47 Hoge S	t								
631 Giles St	0.12	From <b>80</b>	R					-			NA			NA		05/23/2014
35		T	o:			35-140	4 Snidow	St								
2		From				35-62	26 Mill Ro	1								
695 Peck St	0.20	140	<u> </u>								NA			NA		05/23/2014
<u> </u>		Te				35-623	Cascade	Dr								
	0.40	From	L			SCL	Pembroke	2								04/47/0000
(701) Morrison Ave	0.18	<b>30</b>	R			I	JS 460				NA			NA		04/17/2002
		From						LDJ								
(727) First St	0.25	100	R			35-626 C	Castle Rocl	K Rđ			NA			NA		06/15/2014
(727) First St	0.20	т				35-1420,	SCL Pemt	oroke								00,10,2011
		From	1:				), W Main									
742 Pembroke St	0.22	470	R				,	~.			NA			NA		05/23/2014
35		т				35-1412	W, Circle	Dr								
(742) Pembroke St	0.03	370 From	R			55 1112	, u, ener				NA			NA		05/23/2014
(742) Pembroke St		Т	2			35-14	15 Circle I	)r								
742 Pembroke St	0.10	150 From	R			55 11		51			NA			NA		05/23/2014
35		т				Be	gin Loop									
(742) Pembroke St	0.01	100 From	R			ы	200p				NA			NA		05/23/2014
(742) Pembroke St		Т				35 140	09 Circle I	)r						<u> </u>		
(742) Pembroke St	0.25	From <b>100</b>	R			55-140		<i>.</i>			NA			NA		05/23/2014
(742) Pembroke St		т	4			35 1/1	7 Orchard	St								
(742) Pembroke St	0.15	From 50	R			33-141		31			NA			NA		05/23/2014
(742) Pembroke St		т				35-1412	2 E, Circle	Dr								

Route	Length	AADT	QA	4Tire	Bus	1	Fruck		QC	ĸ	QK	Dir	AAWDT	QW	Year
Town of Pembroke						2Axle 3+Ax		21 rail		Factor		Factor			
(742) Pembroke St	0.09	From <b>80</b>	R			35-1412 E, Circ	cle Dr			NA			NA		05/23/2014
(742) Pembroke St		To				End Loop	1								
		From	L			35-631 Giles	s St								
(747) Hoge St	0.04	60	R							NA			NA		05/23/2014
(747) Hoge St	0.16	From				35-1402 Wilso	on St			NA			NA		05/23/2014
(747) Hoge St	0.16	<b>100</b> то	R			35-1404 E, Snid	low St						NA		03/23/2014
		From				35-1404 W, Snic									
(747) Hilton St	0.05	390	R							NA			NA		05/23/2014
(747) Hilton St	0.06	From 50	Ļ			US 460 W Ma	in St			NA			NA		05/23/2014
(747) Hilton St	0.00	50 To	R			Dead End	l						NA		03/23/2014
		From				35-626 Mill									
(754) Ridge Rd 0.25	30	R							NA			NA		05/23/2014	
		To				Dead End									
	0.00	From				35-1404 Snido	ow St						NIA		04/05/0011
(1401) Ellen St	0.06	360 <sup>To</sup>	R			US 460, W Ma	ain St			NA			NA		04/05/2011
		From				35-747 Hoge									
(1402) Wilson St	0.12	140	R							NA			NA		03/15/2011
35		To				35-1404 Snido	ow St								
	0.40	From	<u> </u>			US 460; 35-6	526								00/00/00/11
(1403) Hillcrest Ave	0.12	300	R							NA			NA		02/22/2011
(1403) Hillcrest Ave	0.13	From 30	R			35-1413; 35-1	414			NA			NA		02/22/2011
(1403) 35 Hillcrest Ave	0.13	30 To				35-626 Mill	St						NA		02/22/2011
		From	-			US 460, W Ma									
(1404) Snidow St	0.02	250	R			·				NA			NA		05/24/2014
		To				35-631 Giles	s St								
1404 Snidow St	0.05	150	R							NA			NA		03/15/2011
		To				35-1402 Wilso	on St								
(1404) Snidow St	0.04	290	R							NA			NA		03/15/2011
C Criidaw Ct	0.00	From				35-747 W, Hilt	ton St						NIA		02/15/2011
(1404) Snidow St	0.02	410	R							NA			NA		03/15/2011
	0.14	430	R			35-747 E, Hog	ge St			NA			NA		03/15/2011
(1404) Snidow St	0.14	To				35-623 W, Casc	ade Dr						1.17		00/10/2011
	0.00	From		000/	00/	35-623 West, Cas		00/	-	0.450		0.50	4500	0	0010
(1404) Snidow St	0.03	1400 <sup>To</sup>	G	99%	0%	0% 0% 35-623 East, Riv		0%	F	0.156		0.52	1500	G	2016
		From				35-623 E, Rive									
(1404) Snidow St	0.17	1100	R							NA			NA		03/15/2011
		From	<u> </u>			35-1401 Eller	n St								
(1404) Snidow St	0.15	810	R							NA			NA		03/15/2011
(1404) Snidow St	0.02	1300	Ļ			35-626 Castle Ro	ock Rd			NA			NA		03/15/2011
(1404) Shidow St	0.02	1300 <sup>To</sup>	R			US 460							NA		03/13/2011
		From				SCL Pembro	oke			1					
(1405) Second St	0.07	90	R							NA			NA		03/31/2011
		To				35-626 Castle Re	ock Rd			<u> </u>					
(1405) Castle Rock Dr	0.05	80	R							NA			NA		03/31/2011
		To				35-1408 Colleg	e Ave								
(1405) Castle Rock Dr	0.05	10 <sup>To</sup>	R				1			NA			NA		03/31/2011
		10	1			Dead End									

Route	Length	AADT	QA 4Tire	Bus	Truck 2Axle 3+Axle 1Trail	C)C	K Factor	QK F	Dir actor	AAWDT	QW	Year
Town of Pembroke						21141	Factor	Г	actor			
Third St	0.06	<b>40</b>	R		35-626 Castle Rock Rd		NA			NA		02/24/2011
35		To			35-1408 College Ave							
	0.00	From			35-626 Castle Rock Rd					NIA		00/04/0011
(1407) Fourth St	0.06	<b>30</b>	R		35-1408 College Ave		NA			NA		02/24/2011
		From			35-1407 Fourth St							
College Ave	0.05	30	R				NA			NA		02/24/2011
		To			35-1406 Third St							
(1408) College Ave	0.05	<b>49</b>	R		25 1405 Coatle Book Dr		NA			NA		02/24/2011
		From			35-1405 Castle Rock Dr US 460 W Main St							
Lilly Dr	0.20	60	R		03400 W Main St		NA			NA		03/15/2011
35		To			35-1415 Circle Dr		_					
(1409) 35 Circle Dr	0.05	10	R				NA			NA		03/15/2011
		To			35-742 Pembroke St							
(1410) Smith Hollow Rd	0.18	From <b>40</b>	R		US 460		NA			NA		03/31/2011
(1410) Smith Hollow Rd	0.18	<b>40</b>	n		Dead End					NA		03/31/2011
		From			Dead End							
Pembroke Park Lane	0.12	100	R				NA			NA		03/31/2011
		To			35-626 Castle Rock Rd							
(1412) Circle Dr	0.20	From <b>80</b>	R		35-742 S, Pembroke St		NA			NA		03/15/2011
(1412) Circle Dr	0.20	то	n		35-742 N, Pembroke St					NA.		03/13/2011
		From			Dead End							
Riverview St	0.10	20	R				NA			NA		02/22/2011
		To			35-1403; 35-1414		⊐—					
(1413) 35) Riverview St	0.15	60	R				NA			NA		02/22/2011
<u> </u>		To			Dead End							
(1414) Center St	0.04	270	R		35-1403; 35-1413		NA			NA		03/23/2011
(1414) 35		То			35-1416 Smith St							
(1414) 35 Center St	0.05	110 From	R		55-1410 Siniui St		NA			NA		03/23/2011
35		To			35-1418 High St		<b>—</b>					
(1414) 35 Center St	0.16	70	R				NA			NA		03/23/2011
		To	-		Dead End							
(1415) Circle Dr	0.10	From	R		35-742 Pembroke St		NA			NA		03/15/2011
(1415) Circle Dr	0.10	То	n	3	35-1409 Circle Dr; Lilly Dr							00/10/2011
		From			0.08 MS 35-1414 Center St							
(1416) Smith St	0.08	50	R				NA			NA		05/18/2011
		To			35-1414 Center St							
(1416) Smith St	0.43	150	R		5 15 1		NA			NA		05/18/2011
<u> </u>		To			Dead End							
(1417) Orchard St	0.17	40	R		35-742 Pembroke St		NA			NA		05/18/2011
(1417) Orchard St	-	To			Dead End							
		From			Dead End							
High St	0.04	8	R				NA			NA		05/16/2011
	0.00	From			35-1414 Center St					N 1 4		05/40/00/
(1418) 35 High St	0.03	10	R				NA			NA		05/16/2011
High St	0.00	From		0	0.03 MS 35-1414 Center St					NIA		05/16/0011
High St	0.08	10 <sup>To</sup>	R		Dead End		NA			NA		05/16/2011

Route	Length	AADT	QA	4Tire	Bus	Truck 2Axle 3+Axle 1Trail 2Trai	00	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Pembroke		From				Cul-de-Sac							
(1419) Croft Manner	0.10	60	R			Cul-uc-Sac		NA			NA		03/29/2011
(1419) 35 Croft Manner		To				35-626 Mill St							
		From				35-626 Mill St							05/20/2011
(1421) Fisher Dr	0.10	30	R					NA			NA		
35		То				Dead End							
		From				Dead End							
(9161) Eastern Elem/Mid So	chool 0.05	370	R					NA			NA		09/05/2008
35		То				US 460							