2011

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 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	AADT	QA	4Tire	Bus		Truck e 3+Axle 1Trail			QC	K Factor	QK	Dir Factor	AAWDT	QW
	From:	W	/CL Pembro	ke												
(460) W Main St	Town of Pembroke (Maint: 35)	0.86	12000	F	90%	1%	1%	1%	8%	0%	F	0.085	F		12000	F
	To: From:	35-	-626 Castle	Ave												
(460)	Town of Pembroke (Maint: 35)	0.73	12000	F	90%	1%	1%	1%	8%	0%	F	0.086	F		12000	F
	To:	F	CL Pembrol	ke												

						Town	of Pembr	oke								
Route	Length	AADT	QA	4Tire	Bus		Tru 3+Axle		2Trail	QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Pembroke		From				119	S 460 WB				1					
618 Collins Ave	0.03	190	R								NA			NA		07/25/2008
618) Collins Ave	0.12	200 From	R			U	S 460 EB				NA			NA		06/05/2011
(618) Collins Ave	0.12	To				ECL	Pembroke	:								00/00/2011
		From				1	US 460									
619 Mays Hollow Rd	0.29	130	R								NA			NA		07/25/2008
33)		To				NCI	. Pembroke	;								
<u> </u>		From					Pembroke									
623 Rocky Hollow Rd	0.42	1100	F	98%	1%	0%	1%	0%	0%	F	0.107	F		1100	F	2011
		From					4 E, Snidov W, Snidov									
623 Cascade Dr	0.08	1100	F	98%	1%	0%	1%	0%	0%	F	0.112	F		1100	F	2011
Canada Da	4.07	From	<u> </u>	000/	40/		, Virginia A		00/					4.400		0044
623 Cascade Dr	1.07	1400 To	F	98%	1%	0%	1% nbroke, Her	0%	0%	С	0.098	F		1400	F	2011
		From			33-000,				rica							
626) Castle Rock Rd	0.03	480	R			SCI	Pembroke				NA			NA		04/17/2002
626 Castle Rock Rd	0.00	-100					.==							14/1		0-1/11/2002
626) Castle Rock Rd	0.11	1500	R			35-14	07 Fourth S	St			NA			NA		07/25/2008
626) Castle Rock Rd	0.11	1300												IVA		01/23/2000
(626) Castle Rock Rd	0.20	1800	<u> </u>		35-1	1405 Castle	e Rock Dr;	Second S	t		NIA			NA		07/25/2008
626 Castle Rock Rd	0.30	Tout	R			LIS	460 EAST				NA			INA		07/25/2008
		From	ı				est Virgini	a Ave								
626 Mill St	0.49	510	F	99%	1%	0%	0%	0%	0%	С	0.125	F		530	F	2011
35)		To	:				outh Cascac									
626) Johnson Rd	0.10	110	R			35-623	N, Cascade	: Dr			NA			NA		05/05/2011
626 Johnson Rd	0.10	To				NCI	Pembroke							INA		03/03/2011
		From					ead End	,			1					
G31) Giles St	0.06	40	R				eau Enu				NA			NA		07/30/2008
G31 Giles St	0.00	т.				25.5	15 TY 6							107		01700/2000
631) Giles St	0.12	100 From	R			35-7	47 Hoge St	i .			NA			NA		07/30/2008
631 Giles St	0.12	To				35-14	04 Snidow	St			\dashv			IVA		01/30/2000
		From					26 Mill Rd									
695 Peck St	0.20	120	R			33 0	20 Min Ru				NA			NA		07/25/2008
35		To				35-62	3 Cascade I	Or								
		From	:			SCL	Pembroke	:								
Morrison Ave	0.18	30	R								NA			NA		04/17/2002
(35)		To	:			1	US 460									
		From				35-626	Castle Rock	c Rd								
(727) First St	0.25	80	R								NA			NA		07/25/2008
		To	<u> </u>				SCL Pemb									
Damburdua Ct	0.00	From	Ь			US 46	0, W Main	St						NIA		07/00/0000
Pembroke St	0.22	430	R								NA 			NA		07/30/2008
		From				35-1412	2 W, Circle	Dr			ᆜ ;;					
Pembroke St	0.03	400	R								NA			NA		07/30/2008
<u> </u>		To From				35-14	15 Circle D)r			\neg					
742 Pembroke St	0.10	190	R								NA			NA		07/30/2008
<u> </u>		From				Ве	gin Loop	_			_					
742 Pembroke St	0.01	110	R								NA			NA		07/30/2008
		To From				35-14	09 Circle D)r								
Pembroke St	0.25	100	R								NA			NA		07/30/2008
		To From				35-14	17 Orchard	St			\supset					
742 Pembroke St	0.15	48	R								NA			NA		07/30/2008
30		To	:			35-141	2 E, Circle	Dr								

Route	Length	AADT	QA	4Tire	Bus	Tr	uck	CC	K	QK	Dir	AAWDT	QW	Year
Town of Pembroke						2Axle 3+Axle		Frail	Factor		Factor			
	0.09	90	R			35-1412 E, Circle	Dr		NA			NA		07/30/2008
(742) Pembroke St	0.09	90	┌╲			End Loop						INA		01/30/2000
		Fron	:			35-631 Giles S	St		ĺ					
747 Hoge St	0.04	70	R				·		NA			NA		07/30/2008
		To Fron	-			35-1402 Wilson	St							
747 Hoge St	0.16	120	R						NA			NA		07/25/200
<u></u>		To	:			35-1404 E, Snido								
747) Hilton St	0.05	440	R			35-1404 W, Snido	w St		NA			NA		07/25/200
(747) Hilton St		т				US 460 W Main	St							
747 Hilton St	0.06	50 From	R	-		US 400 W IVIAIII	. St		NA			NA		07/25/200
735		To	:			Dead End								
		Fron	:			35-626 Mill S	t							
754 Ridge Rd	0.25	30	R						NA			NA		07/25/200
		To	:			Dead End								
\sim		Fron				35-1404 Snidow	St							
(1401) Ellen St	0.06	360	R			HO 400 WIM:	G.		NA			NA		04/05/201
			1			US 460, W Mair								
(1402) Wilson St	0.12	140	R			35-747 Hoge S	t		NA			NA		03/15/201
(1402) Wilson St	0.12	140 Ti	$\overline{}$			35-1404 Snidow	St					INA		03/13/201
		Fron	:			US 460; 35-62			i i					
1403) Hillcrest Ave	0.12	300	R			05 400, 55-02	<u> </u>		NA			NA		02/22/201
Hillcrest Ave		Т				35-1413; 35-14	1.4							
Hillcrest Ave	0.13	30 From	R			33-1413, 33-14	14		NA			NA		02/22/201
		Tr				35-626 Mill S	t							
		Fron	:			US 460, W Mair	ı St							
Snidow St	0.02	270	R						NA			NA		07/30/200
		Fron				35-631 Giles S	St							
1404 Snidow St	0.05	150	R						NA			NA		03/15/201
		Tr Fron				35-1402 Wilson	St							
1404 35 Snidow St	0.04	290	R						NA			NA		03/15/201
		To Fron				35-747 W, Hilton	n St							
Snidow St	0.02	410	R	•					NA			NA		03/15/201
337		To From	-			35-747 E, Hoge	St							
Snidow St	0.14	430	R						NA			NA		03/15/201
33)		Fron	:			35-623 W, Cascad								
(1404) Snidow St	0.03	1300	F	98%	1%	35-623 West, Casca 0% 1%)% F	0.097	F		1300	F	2011
(1404) Snidow St	0.00	Т	Ė	0070	170	35-623 East, Rive		,,,,	0.007	·		1000	•	2011
O		Fron				35-623 E, River	Rd		<u> </u>					
1404 Snidow St	0.17	1100	R						NA			NA		03/15/201
		Fron	:			35-1401 Ellen	St							
(1404) Snidow St	0.15	810	R						NA			NA		03/15/201
		Fron	:			35-626 Castle Roc	k Rd							-
1404 Snidow St	0.02	1300	R			***			NA			NA		03/15/201
		Tr	<u> </u>			US 460			+					
(1405) Second St	0.07	90	<u> </u>			SCL Pembrok	<u>e</u>		NA			NA		03/24/204
Second St	0.07	90	R						INA			INA		03/31/201
Castle Beels Dr	0.05	Fron	<u> </u>			35-626 Castle Roc	k Rd		NIA.			NΙΛ		03/24/204
(1405) Castle Rock Dr	0.05	80	R						NA			NA		03/31/201
Cootle Dardy Dr	0.05	Fron				35-1408 College	Ave					NI A		02/24/201
(1405) Castle Rock Dr	0.05	10 To	R			Dead End			NA			NA		03/31/201
			1			Dead Elid								

							2.5.10							
Route	Length	AADT	QA	4Tire	Bus		Truck de 1Trail 2Trai	()(.	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Pembroke		Fron				25 (2) C	1- D.1							
1406 Third St	0.06	40	R			35-626 Castle R	ock Rd		NA			NA		02/24/2011
35		Tr				35-1408 Colleg	e Ave							
$\widehat{}$		Fron				35-626 Castle R	ock Rd							
1407 Fourth St	0.06	30	R			25 1400 C-11-			NA			NA		02/24/2011
		Fron	ı			35-1408 Colleg 35-1407 Four			1					
(1408) College Ave	0.05	30	R			33-1407 Four	ıı sı		NA			NA		02/24/2011
College Ave		То				35-1406 Thir	rd St							
(1408) College Ave	0.05	49 From	R			33 1400 Tim	d Di		NA			NA		02/24/2011
35		To	00			35-1405 Castle I	Rock Dr							
O		Fron				US 460 W Ma	iin St							
1409 Lilly Dr	0.20	60	R						NA			NA		03/15/2011
<u> </u>		Fron				35-1415 Circl	e Dr		<u> </u>					
Circle Dr 35	0.05	10	R			35-742 Pembro	oko Ct		NA			NA		03/15/2011
		Fron					ike St							
Smith Hollow Rd	0.18	40	R			US 460			NA			NA		03/31/2011
		Tr				Dead End	i							
		Fron	1:			Dead End	1							
Pembroke Park Lane	0.12	100	R						NA			NA		03/31/2011
		To	:			35-626 Castle R	ock Rd							
Cirolo Dr	0.00	From				35-742 S, Pemb	roke St					NΙΔ		02/45/2044
(1412) Circle Dr	0.20	80	R			35-742 N, Pemb	proke St		NA T			NA		03/15/2011
		Fron	ı:			Dead End								
Riverview St	0.10	20	R			Dead Lik			NA			NA		02/22/2011
		T-	_			35-1403; 35-	1414							
(1413) Riverview St	0.15	60 From	R						NA			NA		02/22/2011
35/		Te	:			Dead End	I							
\sim		Fron				35-1403; 35-	1413							
(1414) Center St	0.04	270	R						NA			NA		03/23/2011
<u> </u>	0.05	Fron				35-1416 Smi	h St		⇉┈					00/00/0044
(1414) Center St	0.05	110	R						NA			NA		03/23/2011
0.000	0.40	Fron				35-1418 Hig	h St					NIA		00/00/0044
(1414) Center St	0.16	70	R			Dead End	1		NA T			NA		03/23/2011
		Fron	n:			35-742 Pembro								
(1415) Circle Dr	0.10	60	R						NA			NA		03/15/2011
35		Tr	h.			35-1409 Circle Dr	; Lilly Dr							
\circ		Fron				0.08 MS 35-1	414							
1416 Smith St	0.08	50	R						NA			NA		05/18/2011
<u> </u>		Fron				35-1414 Cent	er St		<u> </u>					.=///
1416 Smith St	0.43	150	R			Dead End	1		NA T			NA		05/18/2011
		Fron	<u>.</u>											
(1417) Orchard St	0.17	40	R			35-742 Pembro	oke St		NA			NA		05/18/2011
Orchard St	_	To				Dead End	i							
		Fron	1:			Dead End	i							
1418 High St	0.04	8	R						NA			NA		05/16/2011
		To Fron				35-1414 Cent	er St		\exists					
High St	0.03	10	R						NA			NA		05/16/2011
		Fron				0.03 MS 35-1	414		_					
(1418) High St	0.08	10 Tr	R			D. 17	1		NA			NA		05/16/2011
		Te	"[Dead End	ı							

Route	Length	AADT	QA	4Tire	Bus	Truck2Axle 3+Axle 1Trail 2Trail	QC	K Factor	QK	Dir Factor	AAWDT	QW	Year	
Town of Pembroke			_											
		From:				Cul-de-Sac								
Croft Manner	0.10	60	R					NA			NA		03/29/2011	
35		To				35-626 Mill St								
		From:				35-626 Mill St								
1421 Fisher Dr	0.10	30	R					NA			NA		05/20/2011	
35		To:		Dead End										
		From:				Dead End					NA		09/05/2008	
9161 Eastern Elem/Mid School	ol 0.05	370	R					NA						
35		To:				US 460								