2010

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	2Axle	Tru 3+Axle			QC	K Factor	QK Dir Factor	AAWDT	QW
	From:	WCL Pembro	ke											
460 W Main St	Town of Pembroke (Maint: 35)	0.86 12000	G	91%	0%	1%	1%	7%	0%	F	NA		12000	G
	To: From:	35-626 Castle A	Ave											
460	Town of Pembroke (Maint: 35)	0.73 12000	G	91%	0%	1%	1%	7%	0%	F	NA		12000	G
	To:	ECL Pembro	кe											

						I own of	Pembroke	-								
Route	Length	AADT	QA	4Tire	Bus		Truck 3+Axle 1		2Trail	QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Pembroke		Fron	n:			IIS	460 WB									
618 Collins Ave	0.03	190	R								NA			NA		07/25/2008
618 Collins Ave	0.12	140 From	R			US	460 EB				NA			NA		02/27/2006
35		Tr	o-			ECL I	Pembroke									
		Fron	1:			U	S 460									
619 Mays Hollow Rd	0.29	130	R			NCL I	Pembroke				NA			NA		07/25/2008
		Fron	1:				Pembroke				i					
623 River Rd	0.42	740	G	99%	1%	0%	0% ()%	0%	F	0.105	F	0.599	780	G	2010
		Fron	1:				E, Snidow St W, Snidow St									
623 Cascade Dr	0.08	1000	G	99%	1%	0%)%	0%	F	0.092	F	0.615	1100	G	2010
<u> </u>	1.07	1200	G	99%	1%	US 460,	Virginia Ave	0%	0%	С	0.102	F	0.504	1200	G	2010
623 Cascade Dr	1.07	1200 To		99%			oroke, Hendri				0.102	Г	0.504	1200	G	2010
		Fron	n:				Pembroke				i					
626	0.03	480	R			SCLI	СПОТОКС				NA			NA		04/17/2002
		To Fron	1:			35-140	7 Fourth St									
626 Castle Rock Rd	0.11	1500	R								NA			NA		07/25/2008
$\overline{}$		Fron			35-	1405 Castle	Rock Dr; Sec	ond S	t		⇉┈					
626 Castle Rock Rd	0.30	1800 To	R			LIS 4	60 EAST				NA			NA		07/25/2008
		Fron	1:				st Virginia A	ve								
626 Mill St	0.49	610	G	98%	0%	1%)%	0%	С	0.121	F	0.506	640	G	2010
		Fron	1.				uth Cascade E 3 NORTH)r			-					
626 Johnson Rd	0.10	90	R			33 02	STORTI				NA			NA		02/27/2006
359		To	:			NCL I	Pembroke									
\sim		Fron	n:			De	ad End									
G31 Giles St	0.06	40	R								NA —			NA		07/30/2008
0.12-2-01	0.40	Fron				35-74	7 Hoge St							NIA		07/00/0000
G31) Giles St	0.12	100	R			35-140/	4 Snidow St				NA			NA		07/30/2008
		Fron	r:				6 Mill Rd				_					
695 Peck St	0.20	120	R			35 62	<u> </u>				NA			NA		07/25/2008
35		Te):			35-623	Cascade Dr									
<u> </u>		Fron				SCL I	Pembroke									
(701) Morrison Ave	0.18	30	R			II	S 460				NA			NA		04/17/2002
		Fron	1:				astle Rock Ro	1			+					
727 First St	0.25	80	R			33 020 C	astro Rock Re				NA			NA		07/25/2008
.35.		To	:			35-1420, S	CL Pembrok	e								
		Fron	n:			U	S 460									
742 Pembroke St	0.22	430	R								NA			NA		07/30/2008
		Fron				35-1412	W, Circle Dr				<u> </u>					
Pembroke St	0.03	400	R								NA 			NA		07/30/2008
Damb rate Ot	0.40	Fron				35-141:	5 Circle Dr							NIA		07/20/2000
Pembroke St	0.10	190	R				t Y				NA			NA		07/30/2008
(742) Pembroke St	0.01	110 From	R			Beg	in Loop				NA			NA		07/30/2008
742 Pembroke St		To To	_			35-140	9 Circle Dr				— —					
742 Pembroke St	0.25	100 Fron	R			55-170	, слею 191				NA			NA		07/30/2008
35)		To.				35-1417	7 Orchard St				\neg —					
742 Pembroke St	0.15	48	R								NA			NA		07/30/2008
		Te):			35-1412	E, Circle Dr		-							

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Route	Length	AADT	QA	4Tire	Bus		Truck 3+Axle 1Tra			K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Pembroke		From				25 141	2 E. Cinala Du								
742 Pembroke St	0.09	90	R			33-141	2 E, Circle Dr			NA			NA		07/30/2008
(35)		To				Е	and Loop			1					
		From	:			35-6	531 Giles St			1					
747 Hoge St	0.04	70	R							NA			NA		07/30/2008
		To From				35-14	02 Wilson St								
747 Hoge St	0.16	120	R							NA			NA		07/25/2008
		To	:				4 E, Snidow St W, Snidow St			+-					
747 Hilton St	0.05	440	R			33-1404	r w, Sindow St			NA			NA		07/25/2008
(35)		To	-			1	US 460			¬					
747 Hilton St	0.06	50 From	R				CB 100			NA			NA		07/25/2008
35'		To	:			D	Pead End								
_		From	:			35-0	526 Mill St								
754 Ridge Rd	0.25	30	R							NA			NA		07/25/200
		To	c			D	Dead End								
O =11 0:		From				35-14	04 Snidow St			<u> </u>					
Ellen St	0.06	230 To	R			,	110 460			NA			NA		03/27/200
		From					US 460								
(1402) Wilson St	0.12	120	R			35-7	47 Hoge St			 NA			NA		03/27/200
(1402) Wilson St	0.12	To	Ė			35-14	04 Snidow St			i''			14/ (00/21/200
		From					460; 35-626								
1403 Hillcrest Ave	0.12	320	R				,			NA			NA		02/27/200
35		To	-			35-14	113; 35-1414								
Hillcrest Ave	0.13	20 From	R				,			NA			NA		02/27/200
35		To	:			35-6	526 Mill St								
_		From				1	US 460								
Snidow St	0.02	270	R							NA			NA		07/30/2008
		To From				35-6	531 Giles St								
(1404) Snidow St	0.05	160	R							NA			NA		03/27/200
		To From				35-14	02 Wilson St			」 —					
Snidow St	0.04	310	R							NA			NA		03/27/200
		To From				35-747	W, Hilton St			_					
(1404) Snidow St	0.02	410	R							NA			NA		03/27/2006
35)		To From				35-74	7 E, Hoge St			_					
1404 Snidow St	0.14	470	R							NA			NA		03/27/2006
		To	:				623 WEST Vest, Cascade Dr			+-					
(1404) Snidow St	0.03	1400	G	99%	1%	0%	0% 0%	0%	F	0.103	F	0.541	1500	G	2010
Snidow St		To	:			35-623	East, River Rd			1					
Code dans Ct	0.47	From	<u> </u>			35-	623 EAST						NIA		00/07/000
Snidow St	0.17	930	R							NA 			NA		03/27/2006
Codidanii Ct	0.45	From	┖┯			35-14	401 Ellen St						NIA		00/07/000
(1404) Snidow St	0.15	1000	R							NA 			NA		03/27/2006
0.1101	0.00	From	<u> </u>			35-626	Castle Rock Rd						NIA.		00/07/000/
Snidow St	0.02	1300 To	R				US 460			NA			NA		03/27/2006
		From								+-					
(1405) Second St	0.07	70	R			SCL	Pembroke			NA			NA		03/27/2006
(1405) Second St	0.07					25 525	0 4 0 4 0 5						. 4/ 1		33/21/2000
(1405) Castle Rock Dr	0.05	60 From	R			35-626	Castle Rock Rd			NA			NA		03/27/2006
(1405) Castle Rock Dr	0.05	00								¬'\			INA		00/21/2000
_															
(1405) Castle Rock Dr	0.05	10 From	R			35-140	8 College Ave			NA			NA		03/27/2006

						Town of Pemb	oroke							
Route	Length	AADT	QA	4Tire	Bus	T 2Axle 3+Axl		QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Pembroke		Fron				25 626 G . 4 P.	1.0.1							
(1406) Third St	0.06	40	R			35-626 Castle Ro	оск ка		NA			NA		03/27/200
Third St		т				35-1408 College	e Ave							
		Fron	i:			35-626 Castle Ro	ock Rd							
1407 Fourth St	0.06	40	R						NA			NA		03/27/200
		To):			35-1408 College								
(1408) College Ave	0.05	Fron 30	·L			35-1407 Fourth	h St		NA			NA		03/27/200
College Ave	0.03	30							INA			INA		03/21/200
(1408) College Ave	0.05	70 Fron	R			35-1406 Third	1 St		NA			NA		03/27/200
(1408) College Ave	0.00	To):			35-1405 Castle R	ock Dr		i i					00/21/200
		Fron	1:			US 460								
1409 Lilly Dr	0.20	45	R						NA			NA		03/13/200
-		Fron	<u></u>			35-1415 Circle	Dr							
(1409) Circle Dr	0.05	10	R						NA			NA		03/13/200
		Te):			35-742 Pembrol	ke St							
Cmith Hollow Dd	0.40	Fron				US 460						NIA		02/27/200
Smith Hollow Rd	0.18	50	R			Dead End			NA T			NA		02/27/200
		Fron	1:			Dead End			1					
Pembroke Park Lane	0.12	60	R			Dead End			NA			NA		03/29/200
(1411) Pembroke Park Lane		Te):			35-626 Castle Ro	ock Rd							
		Fron	1:			35-742 S, Pembro	oke St							
1412 Circle Dr	0.20	70	R						NA			NA		03/13/200
		To				35-742 N, Pembr	oke St							
Diversion Ct	0.10	Fron				Dead End						NΙΔ		02/27/200
Riverview St	0.10	20	R						NA —			NA		02/27/200
(1413) Riverview St	0.15	40 Fron	R			35-1403; 35-14	414		NA			NA		02/27/200
(1413) Riverview St	0.13	40	»:			Dead End						INA		02/21/200
		Fron	1:			35-1403; 35-14			İ					
(1414) Center St	0.04	240	R				-		NA			NA		02/27/200
35		Fron				35-1416 Smith	n St							
1414 35 Center St	0.05	100	R						NA			NA		02/27/200
33)		To Fron				35-1418 High	St		٦—					
(1414) Center St	0.16	40	R						NA			NA		02/27/200
35)		Te):			Dead End								
O 01 1 5		Fron	1:			35-742 Pembrol	ke St							
1415 Circle Dr	0.10	40	R			35-1409 Circle Dr;	Lilly Dr		NA			NA		03/13/200
		Fron				0.08 MS 35-1414 C								
(1416) Smith St	0.08	20	R			0.08 MS 33-1414 C	enter st		NA			NA		02/27/200
(1416) Smith St		т				35-1414 Cente	or St							
1416) Smith St	0.43	110 From	R			33-1414 Cente	151		NA			NA		02/27/200
(1416) Smith St		To				Dead End								
		Fron	1:			35-742 Pembrol	ke St							
1417 Orchard St	0.17	10	R						NA			NA		03/13/200
		To				Dead End								
Lligh Ct	0.04	Fron				Dead End						NI A		00/07/000
(1418) High St	0.04	8	R						NA			NA		02/27/200
◯ Lligh Ct	0.00	Fron				35-1414 Cente	er St		N1A			NI A		00/07/000
(1418) High St	0.03	10	R						NA			NA		02/27/200
	0.00	Fron	R			0.03 MS 35-1414 C	Center St		NIA			NA		02/27/200
High St	0.08	10				Dead End			NA			INA		02/27/200
			•											

Route	Length	AADT	QA	4Tire	Bus	2Axle			2Trail	QC	K Factor	QK	Dir Factor	AAWDT	QW	Year	
Town of Pembroke		From	:			C	ul-de-Sac				1						
(1419) Croft Manner	0.10	30	R				ur-ue-sac				NA			NA		02/27/2006	
(1419) Croft Manner		т				35-0	526 Mill S	t									
		From	:			35-0	626 Mill S	t									
1421 Fisher Dr	r 0.10		R								NA	IA		NA		02/27/2006	
35		То				Γ	ead End										
		From	:	Dead End													
9161 Eastern Elem/Mid Scho	0.05	370	R								NA			NA		09/05/2008	
35)		To	:				US 460										