2009

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

where available

Special Locality Report 180

Town of Buchanan

Information in this report is included in Report

11

(Botetourt 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 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)	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.

Virginia Department of Transportation Traffic Engineering Division

2009 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Buchanan

Route	Jurisdiction	Longth		QA	4Tire	e Bus		Truck				K	QK	Dir	AAWDT	Ο\/
Roule	Julisdiction	n Length	AADT	QA	41IIE	bus	2Axle	3+Axle	1Trail	2Trail	QC	Factor	QN	Factor	AAWDI	QVV
	From:	V	CL Buchan	an												
11 Main St	Town of Buchanan (Maint: 11)	0.43	4300	N	94%	1%	1%	1%	3%	0%	Ν	0.097	Ν	0.556	4600	Ν
\bigcirc	To:	11	625 Mt Joy	Rd												
~~	From:	11	625 Mt Jay	Rd												
(11) Main St	Town of Buchanan (Maint: 11)	2.09	4300	G	94%	1%	1%	1%	3%	0%	С	0.09	F	0.542	4500	G
<u> </u>	То	SR	43 Parkway	/ Dr			\neg \vdash								4500 G 5300 G 3200 G	
(11) (43) Main St	Town of Buchanan (Maint: 11)	0.18	5000	G	94%	1%	1%	1%	3%	0%	F	0.09	F	0.531	5300	G
* *	To		R 43 First S	St												
11 Main St	Town of Buchanan (Maint: 11)	0.78	3100	G	94%	1%	1%	1%	3%	0%	F	0.088	F	0.565	3200	G
	To:	N	CL Buchan	an												
	From:	S	CL Buchana	an												
(43) Parkway Dr	Town of Buchanan (Maint: 11)	0.64	380	N	97%	1%	1%	0%	1%	0%	Ν	0.113	Ν	0.629	400	Ν
<u> </u>	To	US	11 S, Mair	ı St			<u> </u>									
(43) (11) Main St	Town of Buchanan (Maint: 11)	0.18	5000	G	94%	1%	1%	1%	3%	0%	F	0.09	F	0.531	5300	G
	To: From:	US	11 N, Maiı	n St												
(43) First St	Town of Buchanan (Maint: 11)	0.82	1800	G	91%	2%	2%	3%	2%	0%	F	0.126	F	0.636	1900	G
\smile	То:	N	CL Buchan	an												

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Virginia Department of Transportation Traffic Engineering Division 2009 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Buchanan

							Buchanan									
Route	Length	AADT	QA	4Tire	Bus		Truck 3+Axle 1T		2Trail	QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Buchanan		From	1			11 (25	N. D D.1									
617 Schoolhouse Rd	0.75	430	R				N, Pico Rd				NA			NA		11/29/2004
617) Newtown Rd	0.26	From Prom				11-627 Re	ed Horse Lane				NA			NA		
(617) Newtown Rd	0.20	To					wtown Rd; Ga	p						147 (
(617) Kessler Lane	0.07	40	R			Dead	End; Gap				NA			NA		11/29/2004
(617) Kessler Lane	0.07	To				US 1	1 Main St							INA		11/29/2004
		From				SCL	Buchanan									
625) Pico Rd	0.37	650	N	97%	2%	0%	0% 09	%	0%	N	0.123	N	0.646	680	N	2009
Pigo Pd	0.20	From		079/	2%		thoolhouse Rd	0/	00/	С	0.183		0.571	1500		2000
625) Pico Rd	0.30	1400 To	G	97%	2%	0% US 11	0% 0° S, Main St	%	0%	C	0.183	F	0.571	1500	G	2009
O		From				US 11	N, Main St				J					
625 Mt Joy Rd	0.25	480 To	G	97%	2%	0%	0% 0° Buchanan	%	0%	F	0.100	F	0.794	500	G	2009
		From	:				ad End									
(627) Red Horse Lane	0.40	100	R			В	dd Elid				NA			NA		11/29/2004
(1)		То	-		11-61	7 Newtown	Rd; Schoolho	use R	Rd							
Dodford Ct	0.07	From	Ļ			US 1	1 Main St							NIA		05/04/0007
(1301) Bedford St	0.07	240 To	R			11-13	305 Lowe				NA			NA		05/01/2007
		From	:				Albemarle Ave									
(1302) 13th St	0.20	290	R			11 15111	11001144110 1170				NA			NA		05/01/2007
11)		То	US 11 Main St													
O Deliter Or	0.00	From	:			De	ad End							NIA		
1303 Bridge St	0.03	NA									NA			NA		
(1303) Bridge St	R			Jefferson F	orest Boundary	У			NA			NA		05/01/2007		
1303 Bridge St	Bridge St 0.07 100					11 1210 N				1471		00/01/2007				
1303 Bridge St	0.24	240 From	R			11-13161	North Water St				NA			NA		05/01/2007
117		To	-			11-132	2 Fourth St									
(1303) Bridge St	0.15	60 From	R								NA			NA		05/01/2007
10		То					ad End									
Fointion St	0.42	240				SR 4	3 First St				NIA.			NA		05/01/2007
1304 Fairview St	0.42	240 To	R			US 1	1 Main St				NA			INA		03/01/2007
		From					S, Main St									
(1305) Lowe	0.69	540	R								NA			NA		05/01/2007
<u></u>		То					N, Main St									
(1306) Fairview St	0.17	110	R			11-1304	Fairview St				NA			NA		05/01/2007
(1306) Fairview St	0.17	110	Ü			De	ad End							INA		03/01/2007
		From	-			11-13	16 16th St									
(1307) Boyd St	0.61	240	R								NA			NA		05/01/2007
<u> </u>		То	<u> </u>				1 Main St									
(1308) 19th St	0.22	720	R			11-1310	Culpeper St				NA			NA		05/01/2007
(1308) 19th St	0.22	To				US 1	1 Main St									00/01/2001
_		From					Buchanan									
1309 14th St	0.16	40	R								NA			NA		05/01/2007
		To	<u> </u>				07 Boyd St									
(1310) Culpeper St	0.39	From 190	R			0.14 MS S	SCL Buchanan				NA			NA		05/01/2007
(1310) Culpeper St	5.00	То	· ` `			11-13	16 16th St							. 17.1		30/0//2001

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Virginia Department of Transportation Traffic Engineering Division 2009 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Buchanan

						100011	of Buchana	AI I							
Route	Length	AADT	QA	4Tire	Bus		Truc e 3+Axle		DC .	K actor	QK	Dir Factor	AAWDT	QW	Year
Town of Buchanan		From													
(1310) Culpeper St	0.44	40	R			11-	1316 16th St			I NA			NA		05/01/200
(1310) Culpeper St		To]	Dead End								
		From]	Dead End								
(1311) Washington St	0.02	10	R						1	NA			NA		05/01/200
		From				11-1	1307 Boyd St								
(1311) Washington St	0.03	20	R						1	NΑ			NA		04/02/200
<u> </u>		From				De	ad End; Gap								
1311 Washington St	0.03	20	R						1	NA			NA		05/01/200
Markington Ot	0.07	From				US	S 11 Main St						NIA		05/04/000
Washington St	0.07	160 To	R			11.	-1305 Lowe		ľ	۱A I			NA		05/01/200
		From					Dead End								
1312 James River Terrace	0.71	160	R				Dead Elid		<u> </u>	NA			NA		05/01/200
117		To				US	3 11 Main St								
		From				EC	L Buchanan								
1313) 16th St	0.23	70	R						١	NA			NA		05/01/200
\subseteq		To					S 11 Main St								
(1314) Albemarle Ave	0.30	From	R			11-	1317 17th St			NA NA			NA		05/01/200
	0.30	To				1	Dead End			I			INA		03/01/200
		From					Dead End								
Bridge St	0.20	80	R				Detta Ena		١	NA			NA		05/01/200
		To				11-	1307 Boyd St								
		From				11-131	4 Albemarle A	ve							
(1316) 16th St	0.12	80	R						1	NA			NA		05/01/200
<u> </u>		To					1307 Boyd St								
1317) 17th St	0.09	130	R			11-131	4 Albemarle A	ve		NA NA			NA		05/01/200
	0.09	To	Γ.			11-13	320 Spotswood	i	- 1	I			INA		03/01/200
		From					303 Bridge St								
North Water St	0.09	30	R						١	NA			NA		05/01/200
11)		To From					old Mill Rd								
1318) Old Mill Rd	0.15	NA				No	orth Water St			NA NA			NA		
Old Mill Rd	0.10	To				US	S 11 Main St			ľ			14/1		
		From					303 Bridge St								
1319 3rd St	0.15	80	R				Ĭ		١	NΑ			NA		05/01/200
11)		To				US	11 Main St								
		From				11-	1308 19th St								
1320 Spottswood Ave	0.23	70	R			11	1216 16th St		1	NA I			NA		05/01/200
		From					1316 16th St	1							
Newtown Rd	0.43	440	R			11-01	7 Newtown Ro	а		I NA			NA		05/01/200
1321) Newtown Rd	00	To				11-	1308 19th St			Ĺ					00/01/200
		From]	Dead End								
1322) 4th St	0.15	190	R						١	NΑ			NA		05/01/200
<u> </u>		To From		_		11-1	303 Bridge St								
1322) 4th St	0.25	80	R						١	NΑ			NA		05/01/200
\sim		To					Dead End								
Courthwest A	0.00	110	D]	Dead End						A1A		OE/04/001
Southwest Ave	0.20	110 To	R			11-1312 T	ames River Te	errace	<u> </u>	۱A I			NA		05/01/200
		From			1		18 Old Mill Ro								
Pattonsburg Lane	0.20	40	R			11-13	15 Old Willi K	u	1	NA NA			NA		03/22/200
11)	-	To]	Dead End								

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Route	Length	AADT	QA	4Tire	Bus	Truck 2Axle 3+Axle 1Tra		QC	K Factor	QK	Dir Factor	AAWDT	QW	Year	
Town of Buchanan															
		From				11-1306 Fairview St									
(1325) 3rd St	0.13	20	R						NA			NA		05/01/2007	
11)		To				Dead End									
		From				11-1321 Newtown Rd						NA			
(1327) Spottswood South	0.10	270	R						NA					05/01/2007	
		To		Dead End											
			11-1329 Chenault St												
(1328) 20th St	0.06	70	R						NA			NA		03/22/2004	
11)		To	: 11-1327 Spottswood South												
		From				Cul-de-Sac									
(1329) Chenault St	0.15	50	R						NA			NA		03/22/2004	
11)		To				11-1328 20th St									

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