2010

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.

Route	Jurisdiction	on Length		QA	A 4Tire	e Bus		Tru	ck		QC	K	QK	Dir	ΛΛ\Λ/DT	Ο\/
Noute	Julistiction	Lengui	AADT	QА	41116	Dus	2Axle	3+Axle	1Trail	2Trail	QC	Factor	QI	Factor	4100	QVV
	From:	V	CL Buchan	an												
11 Main St	Town of Buchanan (Maint: 11)	0.43	3900	N	95%	1%	1%	2%	2%	0%	Ν	0.094	Ν	0.565	4100	Ν
\bigcirc	To:	11	625 Mt Joy	Rd												
	From:	11	625 Mt Jay	Rd												
(11) Main St	Town of Buchanan (Maint: 11)	2.09	4200	F	95%	1%	1%	2%	2%	0%	С	0.093	F	0.559	4400	F
<u> </u>	То	SR	43 Parkway	/ Dr												
(11) (43) Main St	Town of Buchanan (Maint: 11)	0.18	4700	F	95%	1%	1%	2%	2%	0%	F	0.091	F	0.531	4900	F
<u>~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ </u>	To: From:	5	R 43 First S	St			_									
11 Main St	Town of Buchanan (Maint: 11)	0.78	2900	F	95%	1%	1%	2%	2%	0%	F	0.087	F	0.598	3000	F
	To:	N	CL Buchan	an												
	From:	SCL Buchanan														
(43) Parkway Dr	Town of Buchanan (Maint: 11)	0.64	360	N	97%	1%	1%	1%	0%	0%	Ν	0.097	Ν	0.6	380	Ν
	To	US	11 S, Mair	ı St			\lnot									
(43) (11) Main St	Town of Buchanan (Maint: 11)	0.18	4700	F	95%	1%	1%	2%	2%	0%	F	0.091	F	0.531	4900	F
	To- From:	US	11 N, Maii	ı St			_									
(43) First St	Town of Buchanan (Maint: 11)	0.82	1900	F	89%	2%	2%	5%	2%	0%	F	0.115	F	0.631	2000	F
\smile	То:	o: NCL Buchanan														

						TOWIT	OI DUCITA	lilali								
Route	Length	AADT	QA	4Tire	Bus		Tr			QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Buchanan		Fron	1:													
617 Schoolhouse Rd	0.75	500	R				25 N, Pico I				NA			NA		05/04/2010
(617) Newtown Rd	0.26	420 From	R				Red Horse				NA			NA		05/04/2010
		Fron	1:				Newtown R nd End; Gap									
(617) Kessler Lane	0.07	80	R			200	a zna, ou				NA			NA		05/19/2010
<u> </u>		Te):			US	11 Main S	t								
625) Pico Rd	0.37	680	N	95%	3%	1%	L Buchanar 1%	0%	0%	N	0.111	N	0.628	710	N	2010
625 Pico Rd	0.30	1300	F	95%	3%	11-617 S 1%	Schoolhous 1%	e Rd 0%	0%	С	0.176	F	0.552	1400	F	2010
010		Te):			US 1	1 S, Main	St								
625) Mt Joy Rd	0.25	440	" <u> </u>	95%	3%	US 1 1%	1 N, Main 1%	St 0%	0%	F	0.119	F	0.755	460	F	2010
(625) Mt Joy Rd		To):				L Buchana									
<u> </u>		Fron				Ι	Dead End									
627 Red Horse Lane	0.40	230 T	. R		11.6	17 Newton	vn Rd; Sch	oolhousa I	P.d.		NA			NA		05/19/2010
		Fron	1:		11-0		11 Main S		Cu .							
(1301) Bedford St	0.07	240	R			0.5	11 Wan 5				NA			NA		05/01/200
11)		Te):			11-	1305 Lowe	;								
(401 0:	2.22	Fron				11-1314	Albemarle	Ave			Ц.,					05/04/000
(1302) 13th St	0.20	290 Te	R			ZUS	11 Main S	+			NA			NA		05/01/2007
		Fron	n:				Dead End									
1303 Bridge St	0.03	80	R				oud Did				NA			NA		05/04/2010
		To Fron): 1:			Jefferson	Forest Box	ındary			_					
1303 Bridge St	0.07	100	R								NA			NA		05/01/2007
<u> </u>		Fron	1:			11-1318	North Wa	ter St								
(1303) Bridge St	0.24	240	R								NA			NA		05/01/200
(1303) Bridge St	0.15	Fron	R			11-13	322 Fourth	St			NA			NA		05/01/200
Bridge St	0.13	Т				Ι	Dead End							INA		03/01/200
		Fron	1:			SR	43 First St									
(1304) Fairview St	0.42	240	R								NA			NA		05/01/200
<u> </u>		To	1				11 Main S									
(1305) Lowe	0.69	Fron 540	R			US 1	1 S, Main	St			NA			NA		05/01/200
(1305) Lowe		To				US 1	1 N, Main	St								
		Fron				11-130	04 Fairview	/ St								
(1306) Fairview St	0.17	110	R) IF 1				NA			NA		05/01/200
		Fron					Dead End	1.			L					
(1307) Boyd St	0.61	240	R			11-1	316, 16th S	ot			NA			NA		05/01/200
(1307) Boyd St		To				US	11 Main S	t								
		Fron				11-131	10 Culpepe	r St								
1308 19th St	0.22	720	R			TIC	11 Main C				NA			NA		05/01/2007
-		Fron					11 Main S L Buchanar				I					
(1309) 14th St	0.16	40	R			EC	L DUCHAHAI	1			NA			NA		05/01/2007
117		To				11-1	307 Boyd S	St								
		Fron				0.14 MS	SCL Buch	nanan								
Culpeper St	0.39	190	R				216 161 1	1.			NA			NA		05/01/2007
		Th	,			11-1	316, 16th S	st								

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						1000110	f Buchanan								
Route	Length	AADT	QA	4Tire	Bus		Truck 3+Axle 1Tra		Ω C	K actor	QK	Dir Factor	AAWDT	QW	Year
Town of Buchanan		Fron	i			11 12	16 164 64								
(1310) Culpeper St	0.44	40	R			11-13	16, 16th St			NA			NA		05/01/200
119		Tr				De	ead End								
		Fron				De	ead End								
(1311) Washington St	0.02	10	R							NA			NA		05/01/200
		Fron				11-13	07 Boyd St			}—					
(1311) Washington St	0.03	30	R							NA			NA		05/19/201
<u> </u>		Fron				Dead	l End; Gap]					
Washington St	0.03	20	R							NA _			NA		05/01/200
Markington Ot	0.07	From	ᄂᢩ			US 1	1 Main St						NIA		05/04/000
Washington St	0.07	160	R			11.1	305 Lowe			NA T			NA		05/01/200
		Fron					ead End								
1312) James River Terrace	0.71	160	R			D	au Enu			NA			NA		05/01/200
James River Terrace	_	To				US 1	1 Main St]					
		Fron				ECL	Buchanan								
1313) 16th St	0.23	70	R	·						NA			NA		05/01/200
		To				US 1	1 Main St								
<u> </u>		Fron				11-13	17, 17th St]					
1314 Albemarle Ave	0.30	60	R			ъ	15.1			NA			NA		05/01/200
		Fron					ead End			1					
1315) Bridge St	0.20	80	R			De	ead End			J NA			NA		05/01/200
(1315) Bridge St	0.20	To	<u> </u>			11-13	07 Boyd St			1			INA		03/01/20
(1316) 16th St		Fron	i				Albemarle Ave			i					
	0.12	80	R			11 15111	noonane 1110			NA			NA		05/01/200
		To				11-13	07 Boyd St]					
		Fron				11-1314	Albemarle Ave								
1317) 17th St	0.09	130	R							NA			NA		05/01/200
<u> </u>		To				11-132	0 Spotswood								
Newth Westers Of	0.00	Fron	ᄂᢩ			11-130	3 Bridge St						NIA		05/04/00
North Water St	0.09	30	R			Old	l Mill Rd			NA T			NA		05/01/200
		Fron					h Water St								
1318) Old Mill Rd	0.15	60	R							NA			NA		05/04/20
<u> </u>		To				US 1	1 Main St								
0.10	0.45	Fron	ᄂᢩ			11-130	3 Bridge St						NIA		05/04/00
1319 3rd St	0.15	80	R			IIC 1	1 Main St			NA T			NA		05/01/200
		Fron	l				08, 19th St			1					
Spottswood Ave	0.23	70	R			11-13	08, 19111 51			NA			NA		05/01/200
Spottswood Ave		Tr				11-13	16, 16th St]					
		Fron				11-617	Newtown Rd								
Newtown Rd	0.43	440	R							NA			NA		05/01/200
		To				11-13	08, 19th St								
$\overline{}$		Fron				De	ead End								
1322) 4th St	0.15	190	R							NA			NA		05/01/200
		From				11-130	3 Bridge St]					
1322) 4th St	0.25	80	R			г.	and End			NA			NA		05/01/200
			<u> </u>				ead End			<u> </u>					
Southwest Ave	0.20	110	R			De	ead End			J NA			NA		05/01/20
1323 Southwest Ave	0.20	TO			1	1-1312 Jan	nes River Terrace	:		1			INA		03/01/200
		Fron					Old Mill Rd			1					
Pattonsburg Lane	0.20	60	R			11-1310	Ju min nu			NA			NA		05/19/201
11)		To				De	ead End			1					

Route	Length	AADT	QA	4Tire	Bus	Truck 2Axle 3+Axle 1Trail	2Trail	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								
(1327) Spottswood South	0.10	270	R						NA			NA		05/01/2007
11)		To				Dead End								
		From				11-1329 Chenault St								-
1328 20th St	0.06	50	R						NA			NA		05/19/2010
11)		То				11-1327 Spottswood South								
		From				Cul-de-Sac								
(1329) Chenault St	0.15	180	R			·			NA			NA		05/19/2010
11)		To				11-1328, 20th St								