2010

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

where available

Special Locality Report 164

Town of Appalachia

Information in this report is included in Report

97

(Wise 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	3+Axle		2Trail	QC	K Factor	QK	Dir Factor	AAWDT	QW
Bus	From:	SCL Appalac	hia												
∑ ₂₃ Main St	Town of Appalachia (Maint: 97)	1.98 7100	N								NA			7300	Ν
	To:	NCL Appalac	hia												
	From:	Bus US 23, ALT	ıs US 23, ALT US 58												
(78) Callahan Ave	Town of Appalachia (Maint: 97)	1.39 3000	F	64%	1%	1%	2%	32%	0%	F	0.100	F	0.595	3200	F
	To:	WCL Appalachia													
-	From:	WCL Appalac	hia												
160)	Town of Appalachia (Maint: 97)	1.71 760	N	75%	1%	1%	3%	21%	0%	Ν	0.113	Ν	0.553	810	Ν
	To:	SR 68													

7/1/2011 7

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Route	Length	AADT	QA	4Tire	Bus		Axle 1Trail	QC Fac	()K	Factor	AAWDT	QW	Year
Town of Appalachia		From				Dead E	End	1					
601	1.01	280	R			Detta E	ж	N	A		NA		07/16/200
97)		To				SR 78	8						
\bigcirc		From				97-60	1						
669	0.02	60	R			CD 76	2	N	A		NA		07/16/200
		From				SR 78							
(1204)	0.05	100	R			97-60	1	 N	Δ		NA		03/29/200
1301	0.00	To				97-130)2	i	`		1471		00/20/200
		From				97-1303 Che	estnut St						
1302	0.15	90	R					N	A		NA		03/29/200
97)		То				97-130	01						
\sim		From				97-60	1						
(1303) Chestnut St	0.06	180	R			05.12	22	N	4		NA		03/29/200
		10				97-130							
1304) Bell Ave	0.08	420	R			US 2:	3	 N	۸		NA		03/28/200
Bell Ave	0.06	420	ĸ					IN	٦		INA		03/20/200
1304) Bell Ave	0.07	260 From	R			97-1305 He	enry St		۸		NA		02/20/200
1304 Bell Ave	0.07	∠00 To	K			97-1333 Rich	amond St	N	٠		INA		03/28/200
		From				Dead E		<u> </u>					
1305 97 Henry St	0.40	370	R			Dead L	anu	N	Ą		NA		03/28/200
97		To				97-1304 Be	ell Ave						
		From				US 2:	3						
1306) Oak St	0.15	130	R					N	A		NA		03/28/20
		То				Dead E	and						
O		From				Bus US	23						
(1307) Railroad Ave	0.36	460 To	R					N	A		NA		03/28/200
						Dead E							
1308) Depot St	0.07	From 1700	R			SR 78	8	I N	۸		NA		03/28/200
Depot St	0.07	То	IX			Dead E	End		`		INA		03/20/200
		From				97-1310 Br		i					
1309 Kilbourne Ave	0.13	650	R			77 1310 B1	OWILDE	N	A		NA		03/28/200
97		To				97-1312 Ri	iver St						
1309 Kilbourne Ave	0.07	1100 From	R			71-1312 K	ivel bt	N	A		NA		03/28/200
97		To				97-1308 De	epot St						
		From			9	7-1319 Powell S	St; Spruce St						
1310 Brown St	0.31	740	R					N	A		NA		03/28/200
<u></u>		To From				97-1315 Blon	ndell Ave	 					
1310 Brown St	0.05	270	R					N	A		NA		03/28/200
<u> </u>		To				97-1313 Di	ixon St						
<u> </u>		From				97-1309 Kilbo	ourne Ave						
(1311) Cornett St	0.05	160	R					N	A		NA		03/28/200
$\overline{\bigcirc}$		To From				97-1315 Blon	ndell Ave						
Cornett St	0.05	70	R			02 1010 5:		N	A		NA		03/28/200
		To				97-1313 Di							
1312) River St	0.05	510	R			97-1309 Kilbo	ourne Ave	 N	Δ		NA		03/28/200
(1312) River St	0.00	To	11			97-1315 Blor	ndell Ave	IN.	•		11/7		JJ/20/200
		From				97-1317 Wi		<u> </u>					
1313 Dixon St	0.17	90	R			,, 1517 W		N	A		NA		03/28/200
97		To				97-1311 Co	rnett St						
		From				Dead E	End						
1314 Templeton St	0.22	80	R					N	A		NA		03/28/200
91/		To				97-1313 Di	ixon St						

Route	Length	AADT	QA	4Tire	Bus		Truc	:k		nc –	Ctor QK	Dir Factor	AAWDT	QW	Year
Town of Appalachia										. u		. 40101			
(1315) Blondell Ave	0.26	390	" R			97-13	16 Harding S	t			Α		NA		03/28/2007
(1315) Blondell Ave		т				97-13	312 River St								
		From	1:			D	Dead End								
1316 Harding St	0.11	210	R							N	Α		NA		03/28/2007
<u> </u>		Т					5 Blondell A								
() W/1 01	0.40	From				97-1315	5 Blondell A	ve			•		N.1.A		00/00/0007
(1317) Wilson St	0.10	40	R			07.13	313 Dixon St			N	A		NA		03/28/2007
		Fron	1:				Dead End								
(1319) Spruce St	0.05	120	R			L	Dead Elid				Α		NA		03/29/2007
(1319) Spruce St						07.13	321 Inman St								
1319) Spruce St	0.25	1100 From	R			<i>91</i> =1.	521 Hillian 5t				Α		NA		03/28/2007
(1319) Spruce St		т.				07.12	10 Dayrum Ct								
1319 Powell St	0.16	430 From	R			97-13	310 Brown St				A		NA		03/28/2007
(1319) Powell St	00	т.				07.1	220 Di C4								00/20/2001
1319 Railroad Dr	0.04	420 From	R			97-1	328 Pine St				A		NA		03/28/2007
(1319) Railroad Dr	0.04	T					SR 78			i	^		14/1		00/20/2001
		Fron	1:				Dead End			Ī					
(1320) Spruce St	0.02	210	R				eua zna				Α		NA		03/29/2007
Spruce St		Т):				US 23								
		Fron	1:			В	us US 23								
1321 Inman St	0.15	1800	R							N	Α		NA		03/29/2007
		Т):			97-13	19 Spruce St								
Roberts St		Fron	1:			97-13	19 Spruce St								
	0.29	540	R							<u> </u>	A		NA		03/29/2007
		11	<u>"</u>				Dead End								
Correll Ct	0.05	From	" R			97-13	19 Spruce St				A		NA		03/29/2007
1323 Carroll St	0.05	150				97-1	326 Fifth St			, i	A		INA		03/29/2007
		Fron	1:				325 Wise St			i					
(1324) Edmond St	0.10	190	R			<i>71</i> -1.	323 WISC ST				Α		NA		03/29/2007
Edmond St		Т				97-1	326 Fifth St			1					
		Fron	1:			Г	Dead End								
(1325) Wise St	0.09	170	R							N	Α		NA		03/29/2007
97)		Т):			97-132	24 Edmond S	t							
		From	1:			0.08 1	MW 97-1327								
1326 Fifth St	0.54	49	R								A		NA		03/29/2007
<u> </u>		Т	1				Dead End								
0:44-04	0.04	From				97-1	326 Fifth St						NIA		00/00/0007
(1327) Sixth St	0.04	48 T	R			Г	Dead End				A		NA		03/29/2007
		Fron			07			11 C4		1					
(1328) Pine St	0.02	300	R		97	-1319 Kai	lroad Dr; Po	well St			Α		NA		03/28/2007
(1328) Pine St	0.02	Т					US 23						107		00/20/2001
		From	n:				US 23								
1329 Kentucky Ave	0.10	710	R							N	Α		NA		03/29/2007
97		T):			97-13	30 Mouser S	t							
_		Fron	1:				97-601								
Mouser St	0.04	670	R	_	_	_		_	_	N	Α		NA		03/29/2007
		Fron	1:			97-1329	Kentucky A	ve							
1330	0.29	140	R							N	Α		NA		03/29/2007
<u> </u>		Т):				US 23								
\bigcirc		Fron				В	us US 23								
(1332) Lee St	0.15	610	R			0= :-	a D: :	~ .			A		NA		03/28/2007
~		T).			97-133	3 Richmond	St		ļ					

Route	Length	AADT	QA	4Tire	Bus	2Axle 3+A		2Trail	QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Appalachia															
		From				97-1304 Bell	Ave								
(1333) Richmond St	0.06	70	R							NA			NA		03/28/2007
97		Tr				97-1332 Le	e St								
		Fron				Dead En	i								
Richmond St	0.09	60	R							NA			NA		03/28/2007
97)		To				97-1304 Bell	Ave								
		Fron				Appalachia Eleme	ntary Sch								
9677) W River Rd	0.05	110	R							NA			NA		04/12/2007
97		To				97-1321 Inm	an St								
		Fron				Appalachia High	School								
9779	0.29	470	R							NA			NA		03/28/2007
97)		To				US 23									

7/1/2011 10