### 2011

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

where available

## Special Locality Report 103

City of Buena Vista

Information in this report is included in Report

81

(Rockbridge 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
<b>29</b> }	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

### 2011 Annual Average Daily Traffic Volume Estimates By Section of Route City of Buena Vista

Doute	Lorda Parta a	Lavarda	AADT	QA	4Tire	Bus		Truck			00	K	01/	Dir	A A)A/DT	0147
Route	Jurisdiction	Length					2Axle	3+Axle	1Trail	2Trail	QC	Factor	QK	Factor	AAWDT	QVV
~~	From:	WC	CL Buena V	ista												
(60) Lexington Ave	City of Buena Vista	80.0	11000	G	94%	0%	1%	1%	4%	0%	F	0.094	F	0.501	11000	G
~	To: From:	A	lleghany Av	/e												
60 Lexington Ave	City of Buena Vista	0.53	10000	G	94%	0%	1%	1%	4%	0%	С	0.096	F	0.501	11000	G
<del></del>	To: From:		Beech Ave													
60 29th St	City of Buena Vista	1.31	4600	G	92%	0%	1%	2%	5%	0%	С	0.111	F	0.531	4900	G
<del>~</del>	To:	EC	L Buena Vi	ista												
~~	From:		L Buena Vi			407			40.		_		_			_
Magnolia Ave	City of Buena Vista	0.97	3600	G	92%	1%	1%	2%	4%	0%	С	0.1	F	0.618	3900	G
~~	From		2nd St					407								_
Magnolia Ave	City of Buena Vista	1.09	7400	G	96%	0%	1%	1%	2%	0%	С	0.101	F	0.518	7900	G
~	To: From:		15th St													
501 Magnolia Ave	City of Buena Vista	0.71	3300	G	99%	1%	1%	0%	0%	0%	С	0.112	F	0.565	3500	G
~~~	To: From:		25th St													
501 Park Ave	City of Buena Vista	0.28	4000	G	99%	0%	0%	0%	0%	0%	С	0.096	F	0.608	4300	G
	From:		Beech Ave Park Ave													
501 Beech Ave	City of Buena Vista	0.12	11000	G	95%	1%	1%	1%	3%	0%	С	0.096	F	0.529	12000	G
<i></i>	То:		29th St												3900 7900 3500 4300	
ALT	From:		Park Ave													
501 Beech Ave	City of Buena Vista	0.37	7500	G	95%	1%	1%	1%	3%	0%	С	0.092	F	0.527	8000	G
ALT	To: From:		22nd St													
501 Sycamore Ave	City of Buena Vista	0.38	6300	G	95%	0%	1%	1%	3%	0%	С	0.090	F	0.534	6800	G
<del>~</del>	To:		18th St										-			
ALT	From:															
501 Sycamore Ave	City of Buena Vista	0.03	6000	G	95%	0%	1%	1%	3%	0%	F	0.09	F	0.532	6400	G
•	10:		16th St													

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## Virginia Department of Transportation Traffic Engineering Division 2011 Annual Average Daily Traffic Volume Estimates By Section of Route City of Buena Vista

						City of Buer	na Vista								
Route	Length	AADT	QA	4Tire	Bus	2Axle 3+/	Truck Axle 1Trail	2Trail	QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
City of Buena Vista															
Catalan Aug	0.04	From	<u> </u>	070/	00/	US 60 29		00/		0.115	_	0.050	0.400	0	0044
1 Catalpa Ave	0.31	2300 <sub>To</sub>	G	97%	0%	1% 1'		0%	С	0.115	F	0.653	2400	G	2011
		From								<u> </u>					
3350) Rockbridge Ave	0.49	2000	G	98%	0%	29th S	% 0%	0%	С	0.101	F	0.566	2200	G	2011
Rockbridge Ave	0.40	To	Ť	3070	070	Catalpa		070			•	0.000	2200	Ü	2011
		From				Rockbridg									
Gatalpa Ave	0.45	3000	G	97%	0%		% 1%	0%	С	0.11	F	0.601	3200	G	2011
<u> </u>		То	:	8	1-631 Old	l Buena Vista R	d; 81-704 Mid	ldle Rd							
<u> </u>		From				US 60 Lexing								_	
S <sub>351</sub> Long Hallow Rd	0.96	1400	G	99%	0%		% 0%	0%	С	0.111	F	0.604	1400	G	2011
<u> </u>		10				Catalpa	Ave								
O		From				Magnolia				<u>_</u>	_			_	
3353) 17th St	0.43	1400 <sub>To</sub>	G	98%	1%		% 0%	0%	С	0.114	F	0.552	1500	G	2011
						Cedar A	Ave								
<u> </u>		From				13th S				<u> </u>					
Maple Ave	1.04	250	G	100%	0%	0% 0	% 0%	0%	С	NA			270	G	2011
<u> </u>		To From	:			25th Hal	f St								
3354) Walnut Ave	0.34	710	G	100%	0%	0% 0	% 0%	0%	F	0.111	F	0.647	760	G	2011
<u> </u>		To	:			Ridge A									
Didna A	0.00	From	<u> </u>	000/	00/	Walnut		00/		0.102	_	0.547	1200	0	2011
Ridge Ave	0.28	1200 <sub>To</sub>	G	99%	0%	1% 1'	% 0%	0%	С	0.103	F	0.547	1200	G	2011
			1												
C 04Th Ct	0.40	From	<u> </u>	000/	40/	Magnolia		00/		0.404	_	0.750	4400	0	0044
E 24Th St	0.43	1000 <sub>To</sub>	G	99%	1%		% 0%	0%	С	0.124	F	0.759	1100	G	2011
			1			Cedar A									
O a day A	0.00	From	<u> </u>	070/	40/	13th S		00/		0.407	_	0.000	000	0	0044
Cedar Ave	0.96	340 To	G	97%	1%		% 0%	0%	С	0.127	F	0.622	360	G	2011
		From				24th S				<u> </u>					
C 24 ct Ct	0.42			000/	40/	Magnolia		00/		0.100	_	0.510	600	0	2011
E 21st St	0.43	650 To	G	98%	1%	1% 0° Cedar A	% 0%	0%	С	0.128	F	0.512	690	G	2011
			1							<u> </u>					
10th Ct	0.47	From	<u> </u>	000/	00/	Magnolia		00/		0.407	_	0.550	4000	0	0044
3359) 13th St	0.47	1500	G	99%	0%		% 0%	0%	С	0.107	F	0.552	1600	G	2011
			1			Cedar A									
4046 04	4.00	From		000/	00/	WCL Buen		00/		0.110	_	0.50	2000	0	0044
3360) 10th St	1.28	2800 To	G	98%	0%		% 0%	0%	С	0.112	г	0.59	3000	G	2011
		10	1			Magnolia									
001-01		From	<u> </u>			Sycamore	Ave			0.447	_	0.550	000	_	0044
20th St		340	G			0.1.4				0.117	F	0.558	360	G	2011
		10	1			Cedar A									
05.4/0.04		From	<u> </u>			Maple A	Ave				_	0.045	000	_	0011
25 1/2 St		620 To	G			XX 1 .	<u> </u>			0.109	F	0.615	660	G	2011
			1			Walnut									
		From				Lombardy	Ave			<u> </u>	_				
38th St		410 To	G			0.1				0.172	F	0.862	440	G	2011
			<u> </u>			Catalpa .				<u> </u>					
411. 61		From	<u> </u>			Linden A	Ave				_	0.55=		_	
4th St		430	G							0.117	F	0.695	460	G	2011
		To	<u> </u>			Sycamore	Ave								
		From	:			6th Stre									
Magnolia Avenue		6700	G	94%	1%	1% 1	% 2%	0%	С	NA			6700	G	2011
		То	=			9th Stre	eet								
		From				US 60 Lexing	gton Ave								
Orchard Avenue		1500	G	99%	0%	0% 0'	% 0%	0%	С	NA			1500	G	2011
O TOTICITA / WOLLAG															

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## Virginia Department of Transportation Traffic Engineering Division 2011 Annual Average Daily Traffic Volume Estimates By Section of Route City of Buena Vista

Route City of Buena Vista	Length	AADT	QA	4Tire	Bus	Truck 2Axle 3+Axle 1Trail 2Trail	QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
Spruce Ave		From  60	G			23rd St 24th St		0.204	F	0.833	70	G	2011

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