### 2011

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

where available

# Special Locality Report 329

Town of Wise

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.

### Virginia Department of Transportation Traffic Engineering Division 2011 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Wise

Route	Jurisdiction	Length	AADT	QA	4Tire	Bus		Tru 3+Axle			QC	K Factor	QK	Dir Factor	AAWDT	QW
	From:		SCL Wise					0 17 0 00				. 40.0.		. 4515.		
23	Town of Wise (Maint: 97)	0.42	22000	N	95%	0%	1%	1%	4%	0%	N	0.101	Ν		24000	Ν
(23)	To:		23 South o		0070	070		170	470	070	.,	0.101	.,		24000	
	From:	Bus US 23			Rd											
Orby Cantrell Hwy	Town of Wise (Maint: 97)	1.44	14000	G	95%	0%	1%	1%	4%	0%	F	0.089	F	0.554	14000	G
(23)	То:		NCL Wise													
Pue	From:		Orby Cantre													
Bus 23 Norton Rd	Town of Wise	0.21	12000	G Hwy	98%	0%	1%	0%	1%	0%	С	0.09	F	0.521	12000	G
23 Norton Rd	TOWITOI WISE	0.21	12000		30 /0	U /0	1 /0	U /0	1 /0	U /0	C	0.09	Г	0.021	12000	G
Bus	To: From:	SCL Wise; 97	'-757 Nortoi	n Coebu	rn Rd											
(23) Norton Rd	Town of Wise	0.43	15000	G	98%	0%	1%	0%	1%	0%	F	0.092	F	0.504	16000	G
(23) Horisi Ha	1011110111100				0070	070		070	170	070	•	0.002	•	0.001	10000	Ŭ
Bus	To: From:	I	E Cherry St													
23 Norton Rd	Town of Wise	0.57	15000	G	99%	0%	0%	0%	0%	0%	F	0.093	F	0.514	16000	G
	To:	1	Main Street													
Bus	From:		Norton Rd													
(23) Main St	Town of Wise	0.36	7100	G	99%	0%	0%	0%	0%	0%	F	0.088	F	0.535	7600	G
0	To:		Hall Ave													
Bus	From:		пан Ave													
23 Main St	Town of Wise	0.42	4400	G	99%	0%	0%	0%	0%	0%	С	0.093	F	0.515	4600	G
<u> </u>	To	Ac	ddington Av	/e												
Bus	From:										_		_			_
(23) Main St	Town of Wise	0.11	4500	G	99%	0%	0%	0%	0%	0%	F	0.107	F	0.610	4800	G
~	To:		NCL Wise													

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## Virginia Department of Transportation Traffic Engineering Division 2011 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Wise

Route	Longth	AADT	QA	4Tire	Bus	Truck				QC	K	QK	Dir	AAWDT	0\\	Year
Route	Lengui			411re		2Axle	3+Axle	1Trail	2Trail	QC	Factor	QK	Factor	AAWDI	QVV	i <del>C</del> al
Town of Wise		From														
D: 10.114	0.04			2001	201		3 Main Str		201			_	0.050	0400	•	0014
252) Birchfield Ave	0.64	2000	G	98%	0%	1%	0%	1%	0%	F	0.122	F	0.652	2100	G	2011
		From					ke Street									
252) Birchfield Rd	0.20	3200	G	98%	0%	1%	Lake St 0%	1%	0%	F	0.106	F	0.618	3300	G	201
252) Birchfield Rd	0.20	<b>3200</b> To		30 /6	070		CL Wise	1 /0	070	'	0.100	•	0.010	3300	G	201
		From	. <del>.</del>													
Main Ct	0.40			000/	00/		orton Rd	40/	00/			_	0.540	40000	0	004
253) Main St	0.46	12000 <sub>To</sub>	G	98%	0%	1%	0%	1%	0%	F	0.089	F	0.542	13000	G	2011
		From					ark Ave Main St									
Park Ave	0.27	12000	G	98%	0%	1%	0%	1%	0%	F	0.095	F	0.613	13000	G	201
Park Ave	0.21	12000		3070	070			1 70	070		0.000	•	0.010	10000	Ü	201
<u> </u>		From					arden Dr					_				
253) Hurricane Rd	0.30	7400	G	98%	0%	1%	0%	1%	0%	F	0.098	F	0.57	7900	G	201
		To From				]	Lake St									
253) Hurricane Rd	0.55	3900	G	98%	0%	1%	0%	1%	0%	С	0.096	F	0.601	4200	G	201
		To	:			N	CL Wise									
		From	:			Hurrican	e Rd; Park	Ave								
255) Darden Dr	0.47	7900	G	99%	0%	1%	0%	0%	0%	С	0.106	F	0.546	8100	G	201
200)		To	:			E	CL Wise									
		From	:			US 23 Or	by Cantrell	Hwv								
1278 Addington Ave	0.33	2700	G	98%	1%	1%	0%	0%	0%	F	0.105	F	0.659	2800	G	201
1276)										-	_					
O Laba Ot For	0.00	From	<u> </u>	000/	40/		as US 23	00/	00/			_	0.500	5400		004
Lake St Ext	0.66	4900	G	98%	1%	1%	0%	0%	0%	F	0.101	F	0.583	5100	G	201
		To From				Bire	chfield Rd		•							
1278) Lake St	0.56	4600	G	98%	1%	1%	0%	0%	0%	С	0.123	F	0.565	4800	G	201
$\smile$		To				Vir	ginia Ave									
1278) Lake St	0.15	4400 From	G	98%	1%	1%	0%	0%	0%	F	0.117	F	0.621	4600	G	201
1270) 2010 01	00	To	Ť	55,5	. , ,		ricane Rd	0,0		•	<u> </u>	•	0.021	.000	•	
		From	:													
Ridgefield Rd		180	G			Cre	stview Dr				NA			200	G	201
Riugelielu Ru		To				0	hand I are -				INA			200	G	201
		10	1			Orc	hard Lane									

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