#### 2008

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

where available

# Special Locality Report 204

Town of Culpeper

Information in this report is included in Report

23

(Culpeper 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

### 2008 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Culpeper

		l own of Culpeper												
Route	Jurisdiction	Length AADT QA	4Tire	Bus		3+Axle			QC	Factor	QK	Factor	AAWDT	Q۷
	From:	BUS US 15 Orange Roa	d											
3) (522) Germanna Hwy	Town of Culpeper	0.96 <b>8300 F</b>	93%	1%	1%	1%	4%	0%	F	0.086	F		9000	F
	To:	ECL Culpeper												
Bus	From:	SCL Culpeper												
<sub>15</sub> ) Orange Rd	Town of Culpeper	1.32 <b>6600 F</b>	98%	0%	1%	1%	1%	0%	С	0.088	F		7100	F
Bus	To- From:	US 522 Germanna Hwy	7											
15) (522) Germanna Highway	Town of Culpeper	0.12 <b>5600 F</b>	97%	1%	1%	0%	1%	0%	С	0.084	F		6100	F
<i></i>	To:	Main Street S												
us Bus	From:	Germanna Highway	000/	407		00/	407	00/	•	0.075	_		45000	
15) (29) (522) Main St	Town of Culpeper	0.26 <b>14000 F</b>	96%	1%	2%	0%	1%	0%	С	0.075	F		15000	I
us Bus	To: From:	204-3651 Orange Rd												
5) (29) (522) Main St	Town of Culpeper	0.59 <b>19000 F</b>	95%	1%	2%	1%	1%	0%	С	0.072	F		21000	-
~	To													
Bus Bus 15 ( 29 ( Main St	Town of Culpeper	US 522 Evans Street 0.20 <b>28000 F</b>	97%	1%	10/	00/	1%	0%	С	NA			29000	
(29) Main St	Town of Culpeper		97%	170	1%	0%	170	0%	C	INA			29000	ı
us Bus	To: From:	Begin SR 229												_
(29) (229) Main St	Town of Culpeper	0.06 <b>28000 F</b>	97%	1%	1%	0%	1%	0%	С	NA			29000	
$\sim$	To:	SR 229, Madison Hwy												
Bus Bus 15 29 Madison Highway	Town of Culpeper	SR 229, Main St 0.22 <b>22000</b> F	97%	0%	1%	1%	1%	0%	С	0.075	F		23000	
15) (29) Widdison Filghway	Town of Guipopei		31 70	070		170	170	070	Ü	0.070	•		20000	
us Bus	From:	Nottingham Street												
15) (29) Madison Highway	Town of Culpeper	0.91 <b>24000 F</b>	98%	0%	1%	0%	1%	0%	С	0.073	F		25000	ı
<del></del>	To:	NCL Culpeper												
ius	From:	SCL Culpeper									_		.=	
Madison Rd	Town of Culpeper	1.27 <b>16000 F</b>	98%	0%	1%	0%	1%	0%	С	0.085	F		17000	I
Bus	To: From:	West Street			ightharpoons									
Madison Rd	Town of Culpeper	0.12 <b>15000</b> F	98%	0%	1%	0%	1%	0%	F	0.078	F		16000	1
~J	To:	US 522, Bus US 15 Fredericks	burg Rd											
Sus Bus	Town of Culpeper	US 15 BUS 0.26 <b>14000 F</b>	96%	1%	20/	00/	40/	00/	С	0.075	F		15000	
29 (15) (522) Main St	Town of Culpeper		90%	170	2%	0%	1%	0%	C	0.075	Г		15000	
us Bus	To: From:	204-3651 Orange Rd												_
(9) (15) (522) Main St	Town of Culpeper	0.59 <b>19000 F</b>	95%	1%	2%	1%	1%	0%	С	0.072	F		21000	I
<del></del>	To	US 522 EVANS STREE	T		<u> </u>									
Bus Bus (15) Main St	Town of Culpeper	0.20 <b>28000 F</b>	97%	1%	1%	0%	1%	0%	С	NA			29000	-
29) (15) Main St	- F		J1 /0	1 /0	1 /0	0 /0	1 /0	0 /0	J	1 1/7			25000	'
us Bus	To: From:	Begin SR 229												
29) (15) (229) Main St	Town of Culpeper	0.06 <b>28000 F</b>	97%	1%	1%	0%	1%	0%	С	NA			29000	F
$\rightarrow$ $\bigcirc$	To:	SR 229, Madison Hwy												

#### Virginia Department of Transportation Traffic Engineering Division

### 2008 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Culpeper

Dest	Lorder Markers	Lavarth	AADT		4	D		Truck				K	01/	Dir		014/
Route	Jurisdiction	Length	AADT	QA	4Tire	Bus	2Axle	3+Axle	1Trail	2Trail	QC	Factor	QK	Factor	AAWDT	QW
Bus Bus	From:	SR	229, Main	St												
29 15 Madison Highway	Town of Culpeper	0.22	22000	F	97%	0%	1%	1%	1%	0%	С	0.075	F		23000	F
Bus Bus	To: From:	NOTTI	NGHAM ST	ΓREET												
Bus Bus (29) (15) Madison Highway	Town of Culpeper	0.91	24000	F	98%	0%	1%	0%	1%	0%	С	0.073	F		25000	F
	To	NC	L CULPEP	ER												
Bus Bus	From:	В	egin SR 229	9												
(229) (15) (29) Main St	Town of Culpeper	0.06	28000	F	97%	1%	1%	0%	1%	0%	С	NA			29000	F
	To: From:		US 15 Bus													
(229) Main St	Town of Culpeper	0.93	9100	F	96%	1%	1%	1%	0%	0%	С	0.1	F		9900	F
	Tor	N	CL Culpepe	er												
	From:	E	CL Culpepe	er												
522 3 Germanna Hwy	Town of Culpeper	0.96	8300	F	93%	1%	1%	1%	4%	0%	F	0.086	F		9000	F
$\bigcirc$	To:		Bus Orange													
Bus	From:		RT 15 BUS													
522 \ 15 \ Germanna Highway	Town of Culpeper	0.12	5600	F	97%	1%	1%	0%	1%	0%	С	0.084	F		6100	F
<u> </u>	To:		IN STREE													
Bus Bus	From:		ermanna Hw										_			_
(522) (15) (29) Main St	Town of Culpeper	0.26	14000	F	96%	1%	2%	0%	1%	0%	С	0.075	F		15000	F
Dur Dur	To: From:	204-3	3651 Orange	e Rd												
Bus Bus (522) (15) (29) Main St	Town of Culpeper	0.59	19000	F	95%	1%	2%	1%	1%	0%	С	0.072	F		21000	F
	To:		Evans St													
~~~	From:	Bus US 15	5, Bus US 29	9 Main S	St											
(522) Evans St	Town of Culpeper	80.0	14000	F	97%	0%	1%	1%	1%	0%	F	NA			16000	F
<u></u>	To:		N West St													
~~~	From:		West Stree													
(522) Evans St	Town of Culp <u>eper</u>	1.44	10000	F	97%	0%	1%	1%	1%	0%	С	0.08	F		11000	F
<u> </u>	To:	W	CL Culpepe	er												

## Virginia Department of Transportation Traffic Engineering Division 2008 Annual Average Daily Traffic Volume Estimates By Section of Route

Town of C	Culpeper
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Route	l enath	AADT	QA	4Tire	Bus		Tru			QC	K	QK	Dir	AAWDT	ΩW	Year
	_0g				240	2Axle	3+Axle	1Trail	2Trail	~~	Factor	Δ	Factor		ς	
Town of Culpeper		From					ans Street									
1 West St/Old Rixeyville R	0.82	3600	F	98%	1%	1%	0%	0%	0%	С	0.136	F		3900	F	2008
1 Old Rixeyville Rd	0.07	1900		98%	1%	Grand 1%	view Avenu 0%	0%	0%	F	0.146	F		2100	F	2008
1 Old Rixeyville Rd	0.01	To		0070	170		n Street N	070	070	'				2100		2000
		From:				Germa	nna Highwa									
(3651) Orange Rd	0.33	6200	F	94%	1%	2%	1%	1%	0%	С	0.094	F		6800	F	2008
		From:	l				ain Street									
(3652) Chandler St	0.17	760	F	96%	1%	1%	est Street 2%	1%	0%	F	0.103	F	0.669	830	F	2008
		To	_			Ea	ast Street									
(3652) Chandler St	0.75	810 From:	F	96%	1%	1%	2%	1%	0%	С	0.117	F	0.558	880	F	2008
<u> </u>		To				ECI	L Culpeper									
C Laurel Ct	0.04	From	Ļ_	000/	00/		ange Road	00/	00/		0.004	_	0.044	0.400	_	2000
(3653) Laurel St	0.84	2200 To:	F	98%	0%	1% Mad	0% lison Road	0%	0%	С	0.081	F	0.644	2400	F	2008
		From:					ıs Main Stre	et N			l					
(3656) Piedmont St	0.27	4700	F	99%	0%	1%	0%	0%	0%	F	0.11	F	0.521	5100	F	2008
$\overline{}$		To:					Brandy Road	1								
(3656) Old Brandy Rd	0.20	4900	F	99%	0%	1%	0%	0%	0%	С	0.098	F		5300	F	2008
,		To					Wine St									
(3656) Old Brandy Rd	0.56	4400	F	99%	0%	1%	ine Street 0%	0%	0%	F	0.098	F		4800	F	2008
(3656) Old Brandy Rd	0.50	To:		3370			ames Madis		070		0.000			4000	'	2000
		From:				Mad	lison Street									
(3657) West St	0.91	4200	F	98%	0%	1%	1%	0%	0%	С	0.107	F	0.53	4600	F	2008
		To:					ans Street									
Bus US 15; Bus US 29		23000	F	97%	1%	Nall 1%	es Mill Rd	1%	0%	С	0.078	F		23000	F	2008
Dus 03 13, Dus 03 23		<b>23000</b> To:	<u> </u>	31 /0	1 /0		Hoffman Ln	1 /0	070		0.070	•		23000	į	2000
		From					Ridge Ave									
Cameron St		790	G								NA			870	G	2008
		To:					Bus S Main	St								
East St		6000	F			Wa	lter Street				0.098	F	0.545	6000	F	2008
Last ot		To:				Ma	son Street				0.000	•	0.545	0000	•	2000
		From				SR 2	29 Main St									
Fairview Rd		270	F								0.115	F	0.507	290	F	2008
		To:					endrick St									
Madison Rd		22000		98%	0%		unders St 0%	1%	0%	С	0.084	F		22000	F	2008
Madison Ru		<b>22000</b> To:		90%	0%	1% Oak	Lawn Dr	170	070	C	0.064	г		22000	Г	2006
		From:	İ				Lawn Blvd									
S Blue Ridge Ave		4600	F	100%	0%	0%	0%	0%	0%	С	0.088	F		4600	F	2008
		To:				S	pring St									
C Fact Ct		From	<u> </u>	070/	00/		handler St	40/	00/			_	0.540	6200	_	2000
S East St		6300 To:	F	97%	0%	1% E1	1% Locust St	1%	0%	С	0.096	F	0.513	6300	F	2008
		From	 				L Culpeper				i					
Sperryville Pike		8400	F	96%	1%	1%	1%	1%	0%	С	0.083	F		8400	F	2008
		To				Wa	ayland Rd									
00.0		From:		000:			dustry Dr		601	_		_			_	
SR 3		11000 <sub>To:</sub>	F	96%	1%	1%	1% Devitt Dr	2%	0%	С	0.087	F		11000	F	2008
		10.	<u> </u>			MC	Devitt Dr									

# Virginia Department of Transportation Traffic Engineering Division 2008 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Culpeper

	Truck												Dir				
Route	Length	AADT	QA	4Tire	Bus		3+Axle			QC	Factor	QK	Factor	AAWDT	QW	Year	
Town of Culpeper			_														
		From:				Ma	dison Rd										
Sunset Lane		5800	F	99%	1%	0%	0%	0%	0%	С	0.095	F		5800	F	2008	
		To	Redbud St														
		From:				Speri	yville Pike	;									
Virginia Avenue		5200	F								0.090	F		5200	F	2008	
		To:				Fii	st Street										