2017

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.

1 Trail 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
- 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	ute

Frontage Road (F precedes frontage route number)

(600) Secondary Route

Special Routes

Bus Bus - Business Route
Bypas - Bypass Route
Truck - Truck Route
ALT ALT - Alternate Route
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 2017

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

		Town of Culpep					ıck			K	Dir		
Route	Jurisdiction	Length AADT (QA 4Tir	e Bus		3+Axle			QC	Factor	QK Factor	AAWDT	QV
	From:	BUS US 15 Orange R											
3)(522)Germanna Hwy	Town of Culpeper	0.96 8400	F 96%	0%	1%	1%	2%	0%	F	0.093	0.532	8900	F
	To:	ECL Culpeper										AAWD7 8900 7800 5400 12000 18000 22000 23000 19000 14000 18000 18000 18000	
Bus 15 Orange Rd	From:	SCL Culpeper											
Orange Rd	Town of Culpeper	1.32 7400	F 98%	0%	1%	1%	0%	0%	С	0.090	0.559	7800	F
Bus	To: From:	US 522 Germanna H	łwy										
5) (522) Germanna Highway	Town of Culpeper	0.12 5100	F 97%	0%	1%	0%	1%	0%	С	0.092	0.538	5400	F
9) (622)	To:	Main Street S											
us Bus	From:	Germanna Highwa											
5) (29) (522) Main St	Town of Culpeper	0.26 11000	F 98%	0%	1%	0%	1%	0%	С	0.077	0.526	12000	
us Bus	To: From:	204-3651 Orange R	Rd										
5) (29) (522) Main St	Town of Culpeper	0.59 17000	F 98%	0%	1%	0%	1%	0%	F	0.077	0.526	18000	
15) (29) (322)	To												
us Bus	From:	US 522 Evans Stree											
5) (29) Main St	Town of Culpeper	0.20 17000	F 97%	0%	1%	0%	1%	0%	С	0.075	0.541	18000	
us Bus	To: From:	Begin SR 229											
us Bus 5) (29) (229) Main St	Town of Culpeper	0.06 17000	F 97%	0%	1%	0%	1%	0%	С	0.075	0.541	18000	
3) (29) (229)	To:	SR 229, Madison Hy		0 70		070	1 /0	070	Ŭ	0.070	0.011	10000	
us Bus	From:	SR 229, Main St	_										
5 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Town of Culpeper	0.22 21000	F 98%	0%	1%	0%	0%	0%	С	0.082	0.547	22000	
- Bus	To- From:	Nottingham Street	t		\Box \vdash								
us Bus 5 29 Madison Highway	Town of Culpeper	0.91 22000	F 98%	0%	1%	0%	0%	0%	С	0.083	0.537	23000	
5) (29) Madison Flighway	To:	NCL Culpeper	1 007	0 70		0 /0	0 70	0 70	Ü	0.000	0.007	20000	
is .	From:	SCL Culpeper			1								_
9 Madison Rd	Town of Culpeper		F 98%	0%	1%	0%	0%	0%	С	0.086	0.511	19000	
9)	To						• , •		-				
us	From:	West Street											
9 Madison Rd	Town of Culpeper	****	F 98%	0%	1%	0%	1%	0%	F	0.083	0.524	14000	
us Bus	To: From:	US 522, Bus US 15 Frederic US 15 BUS	cksburg Rd										
9) (15) (522) Main St	Town of Culpeper		F 98%	0%	1%	0%	1%	0%	С	0.077	0.526	12000	
9) (13) (322)	- Campapan					0,0	. , 0	0,0	Ū	0.0	0.020	000	
us Bus	From:	204-3651 Orange R											
9) (15) (522) Main St	Town of Culpeper	0.59 17000	F 98%	0%	1%	0%	1%	0%	F	0.077	0.526	18000	
In Pile	Tro- From:	US 522 EVANS STR	EET		\Box \vdash								
us Bus 29 (15) Main St	Town of Culpeper	0.20 17000	F 97%	0%	1%	0%	1%	0%	С	0.075	0.541	18000	
(3) (15) Wall St	Town of Oulpeper		• 37 /	0 /0	1 /0	U /6	1 /0	0 /6	J	0.073	0.541	10000	
us Bus	To- From:	Begin SR 229											
29) (15) (229) Main St	Town of Culpeper	0.06 17000	F 97%	0%	1%	0%	1%	0%	С	0.075	0.541	18000	F
	To:	SR 229, Madison Hy	wy										

4/10/2018 7

Virginia Department of Transportation Traffic Engineering Division 2017

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

Route	Jurisdiction	Longth	ength AADT		4Tire	Puo		Truck			QC	K	QK	Dir	AAWDT	OW
noute	Julisdiction	Lengin	AADI	QA	41116	bus	2Axle	3+Axle	1Trail	2Trail	QU	Factor	QIN	Factor	r	QVV
Bus Bus	From:	SR	229, Main	St												
(29) (15) Madison Highway	Town of Culpeper	0.22	21000	F	98%	0%	1%	0%	0%	0%	С	0.082		0.547	22000	F
Bus Bus	To: From:	NOTTI	NGHAM S	TREET			\Box \vdash									
Bus (29) (15) Madison Highway	Town of Culpeper	0.91	22000	F	98%	0%	1%	0%	0%	0%	С	0.083		0.537	23000	F
\bigcirc	To:	NC	L CULPEP	ER												
Bus Bus	From:	F	Begin SR 22	9												
229) (15) (29) Main St	Town of Culpeper	0.06	17000	F	97%	0%	1%	0%	1%	0%	С	0.075		0.541	18000	F
	To:		US 15 Bus				\neg \vdash									
229)Main St	Town of Culpeper	0.93	7900	F	97%	2%	1%	0%	0%	0%	С	0.099		0.521	8400	F
	To:	N	CL Culpepe	er												
	From:	F	CL Culpepe	>r												
522 3 Germanna Hwy	Town of Culpeper	0.96	8400	F	96%	0%	1%	1%	2%	0%	F	0.093		0.532	8900	F
	To:	US 15	Bus Orange	e Road												
Bus	From:		RT 15 BUS													
522 15 Germanna Highway	Town of Culpeper	0.12	5100	F	97%	0%	1%	0%	1%	0%	С	0.092		0.538	5400	F
\rightarrow	To:	To: MAIN STREET S														
Bus Bus	From:	G	ermanna Hv	vy												
522 $\left\{15\right\}$ $\left\{29\right\}$ Main St	Town of Culpeper	0.26	11000	F	98%	0%	1%	0%	1%	0%	С	0.077		0.526	12000	F
\ \ \ \ \ \ \	To	204-	3651 Orang	e Rd			\neg \vdash									
Bus Bus 522 15 29 Main St	Town of Culpeper	0.59	17000	F	98%	0%	1%	0%	1%	0%	F	0.077		0.526	18000	F
	To:		Evans St													
	From:	Bus US 1:	5, Bus US 2	9 Main	St											
522 Evans St	Town of Culpeper	0.08	6700	F	98%	0%	1%	0%	1%	0%	F	0.086		0.552	7100	F
~ <i>_</i>	To:		N West St													
~~	From:	N	West Stree	et												
522 Evans St	Town of Culpeper	1.44	10000	F	98%	0%	1%	0%	1%	0%	С	0.088		0.617	11000	F
	To:	W	CL Culpep	er												

4/10/2018

Virginia Department of Transportation Traffic Engineering Division 2017 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Culpeper

						Town of Culper	ber							
Route	Length	AADT	QA	4Tire	Bus	Tru 2Axle 3+Axle	-		QC	K Factor	QK Dir Factor	AAWDT	QW	Year
Town of Culpeper		F				T 0:								
1 West St/Old Rixeyvill	le Rd0.82	2300	F	99%	0%	Evans Street 0% 0%	0%	0%	С	0.094	0.504	2400	F	2017
1 Old Rixeyville Rd	0.07	1700 To	G	99%	0%	Grandview Aven 0% 0% Main Street N	0%	0%	F	0.136		1800	G	2017
		From				Germanna Highw	01/							
Orange Rd	0.33	6300 To	F	96%	1%	1% 1% Main Street	1%	0%	С	0.079	0.522	6700	F	2017
G652) Chandler St	0.08	720	F	99%	0%	West Street	0%	0%	С	0.107	0.56	760	F	2017
G ₃₆₅₂) Chandler St	0.09	1100 From	F	97%	1%	Bus US 15 1% 1%	0%	0%	F	0.099	0.526	1200	F	2017
G ₆₅₂ Chandler St	0.75	880 From	F	97%	1%	East Street 1% 1%	0%	0%	С	0.086	0.518	940	F	2017
		То				ECL Culpeper								
3653 Laurel St	0.84	2000 To	F	96%	1%	Orange Road 3% 0% Madison Road	0%	0%	С	0.08	0.529	2100	F	2017
		From				US 15 Bus Main Str	eet N							
Piedmont St	0.27	4300 _{To}	F	99%	0%	1% 0% Old Brandy Roa	0%	0%	F	0.09	0.549	4500	F	2017
Old Brandy Rd	0.20	5200 To	F	99%	0%	Piedmont St 1% 0% Wine St	0%	0%	С	0.088	0.52	5500	F	2017
Old Brandy Rd	0.56	4400	F	99%	0%	Wine Street 1% 0%	0%	0%	F	0.092	0.547	4700	F	2017
<u> </u>		То			US	15 Bus James Madi	son Hwy							
West St	0.91	3700 To	F	100%	0%	Madison Street 0% 0% Evans Street	0%	0%	С	0.113	0.571	3900	F	2017
		From				Nalles Mill Rd								
Bus US 15; Bus US	29	23000 _{To}	G	97%	1%	1% 0% Ira Hoffman Ln	1%	0%	С	0.078	0.523	23000	G	2017
		From				Blue Ridge Ave	;							
Cameron St		410	F							0.141	0.664	430	F	2017
		To				US 29 Bus S Mair	St							
East St		4800	F			Walter Street				0.103	0.514	4800	F	2017
		From				Mason Street								
Fairview Rd		240	F			SR 229 Main S	1			0.099	0.593	250	F	2017
		To				Hendrick St					0.000		•	
		From				Saunders St								
Madison Rd		22000	G	98%	0%	1% 0%	1%	0%	С	0.084	0.510	22000	G	2017
						Oak Lawn Dr								
S Blue Ridge Ave		4600 To	G	100%	0%	Oak Lawn Blvd 0% 0% Spring St	0%	0%	С	0.088	0.781	4600	G	2017
		From				E Chandler St								
S East St		6400 _{To}	G	97%	0%	1% 1% E Locust St	1%	0%	С	0.096	0.513	6400	G	2017
		From				WCL Culpeper								
Sperryville Pike		8400 To	G	96%	1%	1% 1% Wayland Rd	1%	0%	С	0.083	0.599	8400	G	2017
		From				Industry Dr								
SR 3		11000	G	96%	1%	1% 1%	2%	0%	С	0.087	0.537	11000	G	2017
		То	<u> </u>			McDevitt Dr								

4/10/2018 9

Virginia Department of Transportation Traffic Engineering Division 2017 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Culpeper

Route Town of Culpeper	Length	AADT	QA	4Tire	Bus		Tru 3+Axle			QC	K Factor	QK	Dir Factor	AAWDT	QW	Year	
From Madison Rd																	
Sunset Lane		5800	G	99%	1%	0%	0%	0%	0%	С	0.095		0.579	5800	G	2017	
		To	Redbud St														
-	From	Sperryville Pike															
Virginia Avenue		5500	F								0.088		0.607	5500	F	2017	
-		To				Fir	st Street										

4/10/2018 10