2016

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

where available

Special Locality Report 155

City of Manassas

Information in this report is included in Report

76

(Prince William 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	

(F241)	Frontage Road (F precedes frontage route number)

(600) Secondary Route

Virginia State 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.

					_		Trı	uck			K		Dir		_
Route	Jurisdiction	Length A	AADT G	A 4Tire	Bus	2Axle	3+Axle	1Trail	2Trail	QC	Factor	QK	Factor	AAWDT	Q'
	From:		WCL Manass												
Nokesville Rd	City of Manassas	0.56 3	31000 I	97%	1%	1%	1%	1%	0%	F	0.088		0.547	33000	
	Tre- From:		Godwin Dr												
28 Nokesville Rd	City of Manassas	1.22 1	18000 I	97%	1%	1%	1%	1%	0%	F	0.086		0.55	19000	
	To: From:		lington Rd												
28 Center St	City of Manassas	0.80 2	21000 I	97%	1%	1%	1%	1%	0%	F	0.086		0.578	23000	
$\overline{}$	To: From:		hurch St												
28) Center St	City of Manassas			97%		1%	1%	1%	0%	F	0.084	_		11000	
<u> </u>	Combined Traffic Estimates for 2 Parallel Roadways on the	nis Route: 2	20000 I	97%	1%	1%	1%	1%	0%	F	0.081	F	0.515	22000	
	To: From:		234 Grant Av												
28) Center St	City of Manassas		11000 I			1%	1%	1%	0%	F	0.075	_		12000	
~	Combined Traffic Estimates for 2 Parallel Roadways on the			97%	1%	1%	1%	1%	0%	F	0.081	F	0.715	24000	
	From:		ebedee St Center St												
28) Zebedee St	City of Manassas			97%	1%	1%	1%	1%	0%	F	0.075			11000	
	Combined Traffic Estimates for 2 Parallel Roadways on the	nis Route: 2	21000 I	97%	1%	1%	1%	1%	0%	F	0.082	F	0.720	23000	
		This link is	s signed S	R 28											
	To: From:	1SR 28 P,	, Centreville												
28) Centreville Rd	City of Manassas	1.10 2	26000 I	97%	1%	1%	1%	1%	0%	F	0.077		0.522	28000	
\smile	Tα	Prince Will	liam County l	ine											
	From:		8 Center St												
28 Church St	City of Manassas	-		97%	1%	1%	1%	1%	0%	F	0.083	_		11000	
	Combined Traffic Estimates for 2 Parallel Roadways on the	nis Route: 2	20000 I	97%	1%	1%	1%	1%	0%	F	0.081	F	0.515	22000	
	To: From:		234 Grant Av		121										
28 Church St	City of Manassas		11000 I		1%	1%	1%	1%	0%	F	0.089	_	0.502	12000	
	Combined Traffic Estimates for 2 Parallel Roadways on the		22000 I		1%	1%	1%	1%	0%	F	0.081	F	0.715	24000	
D	From:														
Bus 234 Dumfries Rd	City of Manassas		Manassas 9600 I	97%	1%	1%	0%	0%	0%	F	0.088		0.597	10000	
234) 2 4	To Take			0.70	.,,		0,0	0,0	0,0	•	0.000		0.00.	.0000	
Bus	From:		Hastings Dr												
Dumfries Rd	City of Manassas	0.55 1	14000 I	97%	1%	1%	0%	0%	0%	F	0.081		0.64	15000	
Bus	To: From:	155-4352	Wellington l	Rd											
Grant Ave	City of Manassas	0.63 1	15000 I	97%	1%	1%	0%	0%	0%	F	0.081		0.64	16000	
	To	Prince	e William St												
Bus 234)Grant Ave	City of Manassas		20000 I	97%	1%	1%	0%	0%	0%	F	0.081		0.574	21000	
234 Grant Ave	Oity Of Mariassas			31/0	1 /0	1 /0	U /0	0 /0	0 /0	'	0.001		0.074	21000	
Bus	To: From:	SR 28	8 Church St												
234 Grant Ave	City of Manassas			97%	1%	1%	0%	0%	0%	F	0.082		0.582	9500	
<u> </u>	To:	Beau	regard Ave												

Virginia Department of Transportation Traffic Engineering Division 2016

Annual Average Daily Traffic Volume Estimates By Section of Route City of Manassas

Route	Jurisdiction	Length AADT	QA	4Tire	Bus		Tru 3+Axle	-	2Trail	QC	K Factor	QK Dir Factor	AAWDT	QW
Bus	From:	Beauregard A	ve											
(234) Grant Ave	City of Manassas	0.32 8100	F	97%	1%	1%	0%	0%	0%	F	0.082	0.552	8700	F
	To:	Sudley Rd												
Bus	From:	Grant Ave												
Bus (234)Sudley Rd	City of Manassas	1.18 26000	F	97%	1%	1%	0%	0%	0%	С	0.082	0.528	28000	F
	To:	NCL Manass	ıs											

4/27/2017 8

						City of Manas	sas								
Route	Length	AADT	QA	4Tire	Bus	Tri 2Axle 3+Axle		2Trail	QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
City of Manassas		F				0.1				1					
	0.15	110	R			Osborne and Ben	inet			NA			NA		1994
(9463) 76	0.15	To	Ë			High School							INA		1334
		From				Osbourn High Scl	hool			i					
9528 Tudor Ln	0.21	2500	R							NA			NA		12/11/201
76		To				Cul-de-Sac									
		From				Godwin Dr									
(1) Ashton Ave	0.72	8000	F	99%	0%	1% 0%	0%	0%	С	0.093		0.569	8500	F	2016
		10.				Cockrell Rd									
2 Clover Hill Rd	0.05	From: 5200	<u>└</u>	97%	1%	SCL Manassas 2% 0%	0%	0%	F	0.132		0.817	5500	F	2016
2 Clover Hill Rd	0.03	5200		31 /0	1 /0		0 /0	0 /0	'	0.132		0.017	3300	'	2010
2 Clover Hill Rd	0.45	From		97%	1%	Godwin Dr 2% 0%	00/	0%	F	0.097		0.610	2600	F	2016
2 Clover Hill Rd	0.45	2400	<u>г</u>	9170	1 70		0%	0%	Г	0.097		0.618	2600	Г	2016
Clayer Hill Dd	0.70	From	<u> </u>	079/	10/	Waterford Dr		00/		0.004		0.550	2000		2016
2 Clover Hill Rd	0.78	3700 To:	F	97%	1%	2% 0% Wellington Ro	0%	0%	С	0.094		0.558	3900	F	2016
		From:				Ashton Ave	•								
3 Cockrell Rd	0.27	6500	F	98%	1%	1% 0%	0%	0%	С	0.093		0.627	6900	F	2016
3) 555		То	Ė		.,,	SR 28 Center S								-	
		From:				Quarry Rd									
4 Euclid Ave	0.36	5600	F	95%	1%	2% 1%	1%	0%	F	0.095		0.581	6000	F	2016
\bigcirc		То	-			Liberia Ave									
4 Euclid Ave	0.34	12000	G	98%	1%	1% 0%	0%	0%	F	0.098		0.556	12000	G	2016
		To				Manassas NCI	L								
		From				155-2 Clover Hill	Rd								
5 Godwin Dr	0.88	2400	F	98%	1%	1% 0%	0%	0%	F	0.105		0.672	2500	F	2016
$\overline{}$		To:				155-6 Hastings	Dr								
5 Godwin Dr	0.88	11000	F	94%	1%	1% 3%	1%	0%	С	0.092		0.524	12000	F	2016
\smile		To	1			SR 28 Nokesville	Rd								
O 11 11 5		From				Godwin Dr									
6 Hastings Dr	1.50	5400	F	97%	1%	2% 1%	0%	0%	С	0.139		0.503	5700	F	2016
		From				Bus SR 234 Dumfri Bus SR 234 Richmo									
6 Hastings Dr	1.43	5500	F	97%	1%	2% 1%	0%	0%	F	0.099		0.686	5800	F	2016
		To				Liberia Ave									
		From:	:			SR 28 SB, Centrevi	lle Rd								
7 Quarry Rd	0.03	NA								NA			NA		
\bigcirc		To:				SR 28 NB, Zebede	ee St								
7 Quarry Rd	0.56	5800	F	96%	0%	1% 2%	1%	0%	F	0.093		0.607	6200	F	2016
<u> </u>		To				Euclid Ave									
		From:				Richmond Ave									
8 Signal Hill Rd	0.13	6100	F	96%	0%	1% 2%	1%	0%	F	0.087		0.577	6500	F	2016
		To	1		L	iberia Ave; ECL M	anassas								
O Biologo I A	0.07	From	<u> </u>	000/	401	Dead End	001	061				0.744	400		0010
9 Richmond Ave	0.07	170	G	98%	1%	1% 1%	0%	0%	F	0.14		0.741	180	G	2016
<u> </u>		From:	<u> </u>			Fairview Ave									
Richmond Ave	0.94	3300 To	F	98%	1%	1% 1%	0%	0%	С	0.089		0.514	3500	F	2016
		- 10				Liberia Ave	a.								
(10) Center St	0.23	4300		98%	0%	SR 28 Zebedee 1% 0%	St 0%	0%	С	0.085		0.706	4600	F	2016
(10) Center St	0.23	4300 To	ŕ	3070	U-76	Prescott Ave		U %	U	0.065		0.700	4000	Г	2010
		From				CD 20 NT-1 '11	D.4								
(107) Godwin Dr	2.01	15000	<u>└</u>	96%	0%	SR 28 Nokesville	Rd 1%	0%	С	0.083		0.523	16000	F	2016

						Oity Oi	Manaoo	uo							
Route	Length	AADT	QA	4Tire	Bus		Tru 3+Axle	-		QC	K Factor	QK Dir Factor	AAWDT	QW	Year
City of Manassas		From	1			76 600 6	OC M				-				
Lucasville Rd	0.11	4900	F	97%	1%	1%	SCL Mana: 0%	o%	0%	F	0.107	0.608	5200	F	2016
Lucasville Rd	0.11	4300	Ė	37 76	1 /0		Hastings D		0 70		0.107	0.000	3200		2010
		From					34 Dumfrie				1				
Wellington Rd	0.59	16000	F	98%	1%	1%	0%	0%	0%	С	0.092	0.518	17000	F	2016
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		To					view Ave								
		From	1		ECL N	Manassas, '	76-3000 Pı	· Wm Pk	WV						
Wellington Rd <old< td=""><td>Fairview7Ave</td><td>e>17000</td><td>F</td><td>99%</td><td>0%</td><td>1%</td><td>0%</td><td>0%</td><td>0%</td><td>С</td><td>0.095</td><td>0.556</td><td>18000</td><td>F</td><td>2016</td></old<>	Fairview7Ave	e>17000	F	99%	0%	1%	0%	0%	0%	С	0.095	0.556	18000	F	2016
		To					<old richi<="" td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></old>								
Fairview Ave	0.50	13000	F	99%	Welli 0%	ington Rd < 1%	old Richn	nond Ave	> 0%	F	0.086	0.59	14000	F	2016
Fairview Ave	0.50	To	Ė	33 /6	0 78		3 Center St		0 76	'	0.000	0.55	14000	'	2010
		From					enter St								
Main St	0.24	1000	F	96%	2%	2%	0%	0%	0%	С	0.118	0.579	1100	F	2016
1333)		To	Ė				tner Ave							•	
		From	1				234 Grant	Ave							
Portner Ave	0.43	2000	F	96%	1%	2%	0%	0%	0%	F	0.102	0.508	2100	F	2016
\mathcal{L}		To	_			Çıı	dley Rd								
Portner Ave	0.57	3800 From	F	96%	1%		0%	0%	0%	С	0.092	0.653	4000	F	2016
		To					eria Ave								
		From				C	enter St								-
Prescott Ave	0.26	10000	F	96%	1%	2%	0%	0%	0%	F	0.092	0.570	11000	F	2016
		To	_			SR 28 C	Centreville	Rd							
Sudley Rd	0.76	20000	F	96%	1%	2%	0%	0%	0%	F	0.084	0.536	21000	F	2016
		To			Bus	SR 234 G	rant Ave, S	Sudley Ro	l						
		From	1			WCL	Manassas								
Wellington Rd	0.78	14000	F	99%	0%	1%	0%	0%	0%	С	0.096	0.575	15000	F	2016
<u> </u>		To			SR	28 Nokes	ville Rd; C	enter St							
Wellington Rd	1.08	15000	F	99%	0%	1%	0%	0%	0%	F	0.095	0.584	16000	F	2016
		To	-			Clov	er Hill Rd								
Wellington Rd	0.61	15000	F	99%	0%	1%	0%	0%	0%	F	0.095	0.508	16000	F	2016
		To				Bus SR 23	34 Dumfrie	s Rd							
		From	:			De	ead End								
Stonewall Rd	0.38	230	F	98%	1%	1%	0%	0%	0%	F	0.129	0.714	240	F	2016
		To	_			C	enter St								
Stonewall Rd	0.90	4400 From	F	98%	1%	1%	0%	0%	0%	С	0.100	0.524	4600	F	2016
		To					234 Sudley								
		From	L	1	55-4353	Wellingto	n Rd <old< td=""><td>Fairview</td><td>Ave></td><td></td><td></td><td></td><td></td><td>-</td><td></td></old<>	Fairview	Ave>					-	
Liberia Ave	1.77	36000	F	96%	1%	1%	1%	1%	0%	С	0.075	0.615	38000	F	2016
\mathcal{L}		To	-			SR 28 C	Centreville	Rd							
Liberia Ave	1.18	12000	F	98%	1%	1%	0%	0%	0%	С	0.083	0.542	13000	F	2016
		Te					Stonewal						-		
Liberia Ave	0.41	11000	F	98%	1%	1%	0%	0%	0%	F	0.087	0.504	11000	F	2016
		To					-1530 Lon								
		From	1				234 Sudley								
Stonewall Rd	0.49	2700	F	98%	1%	1%	0%	0%	0%	F	0.107	0.723	2900	F	2016
\mathcal{L}		To	4			Stor	newall Ct								
Stonewall Rd	0.26	3500 From	F	98%	1%	1%	0%	0%	0%	С	0.089	0.579	3700	F	2016
		To					eria Ave	- / -	- / -						
		From	1				nnon Rd								
Greenleaf Dr		140	F			5110					0.129	0.55	150	F	2016
		To				Ceda	r Ridge Dr								
		From				Sara	evo Court								
Karlo St		510	F								0.096	0.5	540	F	2016
		To				Tit	to Court								
								_	_						

Route	Length	AADT	QA	4Tire	Bus	Truck2Axle 3+Axle 1Trail 2Trail	QC	K Factor	QK	Dir Factor	AAWDT	QW	Yea	
of Manassas														
		Fron				Jackson Ave								
Longstreet Dr		380	F					0.118		0.594	380	F	201	
		T		Weems Rd										
		Fron				Grant Ave								
Meadowview Dr		240	F					0.106		0.732	260	F	201	
		Te				Virginia Ave								
		Fron				Bayberry Ave								
Oak Glen Rd		240	F					0.12		0.546	250	F	201	
		Te		Thornwood Lane										
		Fron				Stuart Ave								
Peabody St		260	F					0.127		0.657	260	F	201	
		Te				Robson Dr						F F		
		Fron				Oakglen Rd								
Thornwood Lane		360	F					0.131		0.6	380	F	201	
		Te				Bayberry Ave								