2007

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.

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.

		City of Ma	anassas												
Route	Jurisdiction	Length AAD	T QA	4Tire	Bus		Tru 3+Axle			QC	K Factor	QK	Dir Factor	AAWDT	QW
	From:	SR 234, WCI													
28 Nokesville Rd	City of Manassas	0.56 280 0	00 F	97%	0%	1%	1%	1%	0%	F	0.076	F	0.58	31000	F
$\overline{}$	To: From:	155-5 God													
28 Nokesville Rd	City of Manassas	1.22 170 0	00 F	96%	0%	2%	0%	1%	0%	С	0.078	F	0.551	19000	F
	To- From:	Wellingt													
28) Center St	City of Manassas	0.80 230 0	00 F	98%	0%	1%	0%	0%	0%	С	0.078	F	0.546	25000	F
<u>~</u>	To- From:	Church	h St												
28) Center St	City of Manassas	0.25 110 0	00 F	97%	0%	1%	1%	1%	0%	F	0.075	F		12000	F
	Combined Traffic Estimates for 2 Parallel Roadways on	this Route: 2300	00 F	97%	0%	1%	1%	1%	0%	F	0.079	F	0.54	25000	F
	To: From:	Bus SR	234												
28) Center St	City of Manassas	0.37 130 0	00 F	97%	0%	1%	1%	1%	0%	F	0.071	F		14000	F
	Combined Traffic Estimates for 2 Parallel Roadways on	this Route: 2500	00 F	97%	0%	1%	1%	1%	0%	F	0.072	F	0.543	28000	F
	To	Zebede	e St			\neg \vdash									
28 Center St / Prescott Ave	City of Manassas	0.49 130 0	00 N	97%	0%	1%	1%	1%	0%	Ν	0.071	Ν		14000	Ν
	Combined Traffic Estimates for 2 Parallel Roadways on	this Route: 3200	00 N	97%	0%	1%	1%	1%	0%	Ν	NA			36000	Ν
	Tou	1SR 28 P, Cer	ntreville Rd												
28 Centreville Rd	City of Manassas	0.86 280 0		97%	0%	1%	1%	1%	0%	F	0.070	F	0.512	31000	F
	To:	Prince William	County Line	:											
	From:	SR 28 Ce	nter St												
(28) Church St	City of Manassas	0.29 120 0	00 F	97%	0%	1%	1%	1%	0%	F	0.083	F		13000	F
	Combined Traffic Estimates for 2 Parallel Roadways on	this Route: 2300	00 F	97%	0%	1%	1%	1%	0%	F	0.079	F	0.54	25000	F
	To- From:	Bus SR	234			\neg \vdash									
28 Church St	City of Manassas	0.35 120 0	00 F	97%	0%	1%	1%	1%	0%	F	0.081	F		13000	F
P	Combined Traffic Estimates for 2 Parallel Roadways on	this Route: 2500	00 F	97%	0%	1%	1%	1%	0%	F	0.072	F	0.543	28000	F
	To	Quarry	Rd			<u> </u>									
28 Centerville Rd	City of Manassas	0.47 1900		97%	0%	1%	1%	1%	0%	F	0.073	F	0.577	21000	F
	Combined Traffic Estimates for 2 Parallel Roadways on	this Route: 3200	00 N	97%	0%	1%	1%	1%	0%	Ν	NA			36000	Ν
	To:	SR 28 Prese	cott Ave												
Bus	From:	SCL Mar	nassas												
234) Dumfries Rd	City of Manassas	0.46 970	0 F	97%	0%	2%	0%	1%	0%	F	0.081	F	0.578	11000	F
	To:	155-6 Hast	tings Dr			\neg \vdash									
Bus Dumfries Rd	City of Managage	0.55 1300		070/	0%	20/	09/	10/	00/	F	0.083	F	0.671	14000	F
Dumfries Rd	City of Manassas			97%	U%	2%	0%	1%	0%	г	0.083	г	0.071	14000	F
Bus	Ta: From:	155-4352 Rich	hmond Ave			├									
Grant Ave	City of Manassas	0.63 150 0	00 F	98%	1%	1%	0%	0%	0%	F	0.08	F	0.633	17000	F
<u> </u>	To	D: W.	u: C.												
		Prince With	Iliam St												
Bus 234 Grant Ave	City of Manassas	Prince Wil		98%	1%	1%	0%	0%	0%	F	0.077	F	0.615	22000	F

Route	Jurisdiction .	Length	AADT	QA	4Tire	Bus		Tru 3+Axle			QC	K Factor	QK	Dir Factor	AAWDT	QW
Bus	From:	SR	28 Church	St												
(234) Grant Ave	City of Manassas	0.44	9500	F	98%	1%	1%	0%	0%	0%	F	0.078	F	0.575	10000	F
	To: From:	Be	auregard A	ve			_									
Bus 234 Grant Ave	City of Manassas	0.32	9800	F	98%	1%	1%	0%	0%	0%	F	0.079	F	0.569	11000	F
\smile	To:		Sudley Rd													
Bus	From:		Grant Ave													
(₂₃₄)Sudley Rd	City of Manassas	1.18	31000	F	98%	1%	1%	0%	0%	0%	С	0.078	F	0.533	34000	F
	To	N	CL Manass	as												

							i iviariass									
Route	Length	AADT	QA	4Tire	Bus		3+Axle			QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
City of Manassas		From							211011		1 40101		- 40101			
2463)	0.15	110	R			Osborr	ne and Benr	net			NA			NA		1994
9463		To				Hi	gh School									
		From				Osbour	n High Sch	ool								
9528)	0.21	NA									NA			NA		
		То				Cı	ul-de-Sac									
A a butana A a a	0.70	From	<u> </u>	000/	00/		odwin Dr	00/	00/			_	0.577	7000	_	0007
1 Ashton Ave	0.72	6800 To	F	99%	0%	1%	0% ockrell Rd	0%	0%	С	0.093	F	0.577	7300	F	2007
		From					Manassas									
2 Clover Hill Rd	0.05	3900	F	98%	0%	1%	0%	0%	0%	F	0.092	F	0.637	4200	F	2007
<u>- </u>		To					odwin Dr									
2 Clover Hill Rd	0.45	2600 From	F	98%	0%	1%	0%	0%	0%	F	0.091	F	0.56	2800	F	2007
		To					terford Dr									
2 Clover Hill Rd	0.78	4100 From	F	98%	0%	1%	0%	0%	0%	С	0.087	F	0.586	4500	F	2007
<u>- </u>		To				Wel	llington Rd									
		From				As	hton Ave									
3 Cockrell Rd	0.27	6600	F	98%	0%	1%	0%	0%	0%	С	0.084	F	0.583	7100	F	2007
<u> </u>		To	<u> </u>			SR 28	Center Stre	eet								
Constitution	0.00	From	Ļ	0.407	40/		uarry Rd	407	001		0.007	_	0.570	0400		000=
4 Euclid Ave	0.36	5600	F	94%	1%	3%	1%	1%	0%	F	0.087	F	0.572	6100	F	2007
<u> </u>		From					beria Ave								_	
4 Euclid Ave	0.34	13000 To	F	94%	1%	3%	1%	1%	0%	С	0.081	F	0.599	14000	F	2007
		From	l				assas NCL				+					
5 Godwin Dr	0.88	2500	F	98%	0%	155-2 (Clover Hill 0%	0%	0%	F	0.105	F	0.625	2700	F	2007
5 Godwin Dr	0.00	2300		30 70	070				070	'	0.100	•	0.020	2700	•	2001
5 Godwin Dr	0.88	12000	F	94%	0%	155-6 2%	Hastings D	1%	0%	С	0.091	F	0.532	13000	F	2007
5 Godwin Dr	0.00	То	Ė	J-170	070		Nokesville		070		0.031	•	0.002	13000	•	2001
		From					odwin Dr				ì					
6 Hastings Dr	1.50	5400	F	97%	0%	2%	0%	0%	0%	С	0.102	F	0.576	5800	F	2007
		To					Dumfries									
O Haatia aa Da	4.40	From	F	070/	00/		Richmond		00/		0.070	_	0.504	2000	_	2007
6 Hastings Dr	1.43	3600 _{To}	r	97%	0%	2%	0% beria Ave	0%	0%	F	0.078	F	0.561	3900	F	2007
		From					ebedee St									
7 Quarry Rd	0.56	4500	G	98%	0%	1%	1%	0%	0%	F	NA			5000	G	2007
1) 2223,12		To					ıclid Ave			-						
		From				Rich	nmond Ave									
8 Signal Hill Rd	0.13	6000	F	98%	0%	1%	1%	0%	0%	F	0.088	F	0.567	6500	F	2007
<u> </u>		То				Lil	beria Ave									
		From					Nokesville									
107) Godwin Dr	2.01	16000	F	98%	0%	1%	1%	0%	0%	С	0.08	F	0.515	17000	F	2007
		10					SR 234									
Luccovillo Pd	0.11	From	<u> </u>				L MANAS				0.007	_	0.716	6100	_	2007
Lucasville Rd	0.11	5600	F	98%	0%	1%	0% Hastings Dr	0% ive	0%	F	0.097	F	0.716	6100	F	2007
		From					rant Ave	- / •			1					
(4352) Richmond Ave	0.60	12000	F	99%	0%	1%	0%	0%	0%	С	0.085	F	0.563	13000	F	2007
		To		- / -												
A352) Richmond Ave	0.99	2500 From	F	99%	0%	1%	rview Ave 0%	0%	0%	F	0.086	F	0.531	2700	F	2007
4352) Richmond Ave	0.00		Ė	3070	3,0		beria Ave	370	3,0	•		•	2.001	50	•	2001
		From	1		ECL N		76-3000 Pr	· Wm Pkv	/y		Ī					
4353) Wellington Rd	0.74	14000	F	98%	0%	1%	0%	0%	0%	С	0.091	F	0.515	15000	F	2007
\ /		To					rview Ave									

						City of i	vianassas	i								
Route	Length	AADT	QA	4Tire	Bus		Truck 3+Axle 1	•	2Trail	QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
City of Manassas		From														
Fairview Ave	0.50	9100 To	F	98%	0%	1%	ngton Rd 0% Center St	0%	0%	F	0.090	F	0.650	9900	F	2007
		From	:				nter St				i					
Main St	0.24	1500 _{To}	F	98%	1%	1%		0%	0%	С	0.092	F	0.522	1600	F	2007
		From	:				nt Ave									
Portner Ave	0.43	2100	F	98%	1%	1%	0%	0%	0%	F	0.088	F	0.557	2300	F	2007
Portner Ave	0.57	3900 From	F	98%	1%	1%	0% eria Ave	0%	0%	С	0.081	F	0.601	4300	F	2007
		From									l l					
Sudley Rd	0.76	21000 To	F	98%	1%	1%	eville Rd 0% R 234	0%	0%	F	0.075	F	0.512	23000	F	2007
		From	:				Manassas				-					
Wellington Rd	0.78	13000	F	98%	0%	1%	0%	0%	0%	С	0.09	F	0.556	14000	F	2007
Wellington Rd	1.07	12000	F	98%	0%	1%	R 28 0%	0%	0%	С	0.095	F	0.602	14000	F	2007
<u> </u>		To From					r Hill Rd									
Wellington Rd	0.61	13000 то	F	98%	0%	1% SF	0% R 234	0%	0%	F	0.098	F	0.507	14000	F	2007
		From				Dea	ad End									
Stonewall Rd	0.38	490	F	98%	0%	1%	0% nter St	0%	0%	F	0.107	F	0.533	530	F	2007
Stonewall Rd	0.90	4400 From	F	98%	0%	1%		0%	0%	С	0.08	F	0.523	4700	F	2007
		From	:				Fairview Av	e			l					
Liberia Ave	1.77	40000	F	95%	1%	2%	1%	1%	0%	С	0.076	F	0.594	43000	F	2007
Liberia Ava	1 10	From	<u></u>	050/	40/		entreville Rd		00/		0.001	г	0.500	12000	г	2007
Liberia Ave	1.18	12000	F	95%	1%	2%		1%	0%	F	0.081	F	0.569	13000	F	2007
Liberia Ave	0.41	9900 To	F	95%	1%	2%		1%	0%	F	0.092	F	0.524	11000	F	2007
		From	<u>1 </u>		NCL M	·	1530 Lomon	u Dr S	oum							
Stonewall Rd	0.49	3300	F	99%	0%	1%		0%	0%	F	0.092	F	0.717	3600	F	2007
Ot	0.00	From	<u> </u>	000/	00/		ewall Ct	00/	00/				0.000	0000	_	000
Stonewall Rd	0.26	3600 To	F	99%	0%	1% Libe	0% eria Ave	0%	0%	С	0.098	F	0.609	3900	F	2007
Crossle-f D-		From				Shan	nnon Rd				0.400			400		2007
Greenleaf Dr		180 To	F			Cedar	Ridge Dr				0.128	F		190	F	2007
		From	:								_					
Karlo St		470	F				jevo Ct				0.087	F		510	F	2007
		From					ito Ct				- 					
Longstreet Dr		310 To	F				son Ave ems Rd				0.097	F		310	F	2007
		From	<u> </u>								<u> </u>					
Meadowview Dr		290 To	F				inia Ave				0.102	F		320	F	2007
			<u>. </u>				inia Ave				<u> </u>					
Oak Glen Rd		230	F				erry Ave				0.112	F		250	F	2007
		To				Thornv	wood Lane									

						,	manaoo	<u></u>								
Route	Length	AADT	QA	4Tire	Bus		3+Axle			QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
City of Manassas			_													
		From:				Stua	art Avenue									
Peabody St		280	F								0.138	F		280	F	2007
		To				Rob	son Drive									
		From:				Oa	kglen Rd									
Thornwood Ln		410	F								0.114	F		440	F	2007
		To:				Bay	berry Ave									
		From:				C	enter St									
Zebedee St		14000	G	97%	0%	1%	1%	1%	0%	F	NA			15000	G	2007
Combir	ned Traffic:	26000	G	97%	0%	1%	1%	1%	0%	F	NA			28000	G	
					T	his link is	s signed	SR 28								
		To:					treville Rd									