

**2009**

**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.

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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



Interstate Route

Traffic volume data for Interstate Routes and some other routes are reported separately by direction, as well as combined.



US Route



Virginia State Route



Frontage Road (F precedes frontage route number)



Secondary Route

## Special Routes



Bus - Business Route

Bypas - Bypass Route

Truck - Truck Route



ALT - Alternate Route

Wve - Wve 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 Maintenance 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  
2009  
Annual Average Daily Traffic Volume Estimates By Section of Route  
City of Manassas

Route	Jurisdiction	Length	AADT	QA	4Tire	Bus	Truck				QC	K Factor	QK	Dir Factor	AAWDT	QW
							2Axle	3+Axle	1Trail	2Trail						
	From: SR 234, WCL Manassas															
28 Nokesville Rd	City of Manassas	0.56	29000	G	98%	0%	1%	1%	1%	0%	F	0.076	F	0.58	32000	G
	To: 155-5 Godwin Dr															
28 Nokesville Rd	City of Manassas	1.22	17000	G	98%	0%	1%	1%	1%	0%	F	0.078	F	0.551	19000	G
	To: Wellington Rd															
28 Center St	City of Manassas	0.80	24000	G	98%	0%	1%	1%	1%	0%	F	0.078	F	0.546	26000	G
	To: Church St															
28 Center St	City of Manassas	0.25	11000	G	98%	0%	1%	1%	1%	0%	F	0.075	F		13000	G
	Combined Traffic Estimates for 2 Parallel Roadways on this Route:		23000	G	98%	0%	1%	1%	1%	0%	F	NA			26000	G
	To: Bus SR 234															
28 Center St	City of Manassas	0.37	13000	G	98%	0%	1%	1%	1%	0%	F	0.071	F		15000	G
	Combined Traffic Estimates for 2 Parallel Roadways on this Route:		26000	G	98%	0%	1%	1%	1%	0%	F	NA			28000	G
	To: Zebedee St															
28 Center St / Prescott Ave	City of Manassas	0.49	13000	N	98%	0%	1%	1%	1%	0%	N	0.071	N		15000	N
	Combined Traffic Estimates for 2 Parallel Roadways on this Route:		33000	N	98%	0%	1%	1%	1%	0%	N	NA			37000	N
	To: ISR 28 P, Centreville Rd															
28 Centreville Rd	City of Manassas	0.86	29000	G	98%	0%	1%	1%	1%	0%	F	0.070	F	0.512	32000	G
	To: Prince William County Line															
	From: SR 28 Center St															
28 Church St	City of Manassas	0.29	12000	G	98%	0%	1%	1%	1%	0%	F	0.083	F		13000	G
	Combined Traffic Estimates for 2 Parallel Roadways on this Route:		23000	G	98%	0%	1%	1%	1%	0%	F	NA			26000	G
	To: Bus SR 234															
28 Church St	City of Manassas	0.35	12000	G	98%	0%	1%	1%	1%	0%	F	0.081	F		14000	G
	Combined Traffic Estimates for 2 Parallel Roadways on this Route:		26000	G	98%	0%	1%	1%	1%	0%	F	NA			28000	G
	To: Quarry Rd															
28 Centerville Rd	City of Manassas	0.47	20000	G	98%	0%	1%	1%	1%	0%	F	0.073	F	0.577	22000	G
	Combined Traffic Estimates for 2 Parallel Roadways on this Route:		33000	N	98%	0%	1%	1%	1%	0%	N	NA			37000	N
	To: SR 28 Prescott Ave															
Bus 234 Dumfries Rd	City of Manassas	0.46	9400	G	97%	0%	2%	0%	1%	0%	F	0.081	F	0.578	10000	G
	To: 155-6 Hastings Dr															
Bus 234 Dumfries Rd	City of Manassas	0.55	13000	G	97%	0%	2%	0%	1%	0%	F	0.083	F	0.671	14000	G
	To: 155-4352 Wellington Rd															
Bus 234 Grant Ave	City of Manassas	0.63	15000	G	98%	1%	1%	0%	0%	0%	F	0.08	F	0.633	16000	G
	To: Prince William St															
Bus 234 Grant Ave	City of Manassas	0.12	20000	G	98%	1%	1%	0%	0%	0%	F	0.077	F	0.615	21000	G
	To: SR 28 Church St															

Virginia Department of Transportation  
 Traffic Engineering Division  
 2009  
 Annual Average Daily Traffic Volume Estimates By Section of Route  
 City of Manassas

Route	Jurisdiction	Length	AADT	QA	4Tire	Bus	-----Truck-----				QC	K Factor	QK	Dir Factor	AAWDT	QW
							2Axle	3+Axle	1Trail	2Trail						
Bus 234 Grant Ave	From: SR 28 Church St City of Manassas	0.44	9200	G	98%	1%	1%	0%	0%	0%	F	0.078	F	0.575	10000	G
Bus 234 Grant Ave	To: Beauregard Ave From: City of Manassas	0.32	9500	G	98%	1%	1%	0%	0%	0%	F	0.079	F	0.569	10000	G
Bus 234 Sudley Rd	To: Sudley Rd From: Grant Ave City of Manassas	1.18	30000	G	98%	1%	1%	0%	0%	0%	C	0.078	F	0.533	33000	G
	To: NCL Manassas															

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Route	Length	AADT	QA	4Tire	Bus	-----Truck-----				QC	K Factor	QK	Dir Factor	AAWDT	QW	Year	
						2Axle	3+Axle	1Trail	2Trail								
<b>City of Manassas</b>																	
(9463/76)	0.15	110	R								NA		NA			1994	
From: Osborne and Bennet																	
To: High School																	
(9528/76)	0.21	NA									NA		NA				
From: Osbourn High School																	
To: Cul-de-Sac																	
(1)	Ashton Ave	0.72	6600	G	99%	0%	1%	0%	0%	0%	C	0.093	F	0.577	7100	G	2009
From: Godwin Dr																	
To: Cockrell Rd																	
(2)	Clover Hill Rd	0.05	3700	G	98%	0%	1%	0%	0%	0%	F	0.092	F	0.637	4000	G	2009
From: SCL Manassas																	
To: Godwin Dr																	
(2)	Clover Hill Rd	0.45	2500	G	98%	0%	1%	0%	0%	0%	F	0.091	F	0.56	2700	G	2009
From: Waterford Dr																	
To: Wellington Rd																	
(2)	Clover Hill Rd	0.78	4000	G	98%	0%	1%	0%	0%	0%	C	0.087	F	0.586	4400	G	2009
From: Wellington Rd																	
To: Ashton Ave																	
(3)	Cockrell Rd	0.27	6400	G	98%	0%	1%	0%	0%	0%	C	0.084	F	0.583	6900	G	2009
From: Ashton Ave																	
To: SR 28 Center Street																	
(4)	Euclid Ave	0.36	5400	G	94%	1%	3%	1%	1%	0%	F	0.087	F	0.572	5900	G	2009
From: Quarry Rd																	
To: Liberia Ave																	
(4)	Euclid Ave	0.34	13000	G	94%	1%	3%	1%	1%	0%	C	0.081	F	0.599	14000	G	2009
From: Liberia Ave																	
To: Manassas NCL																	
(5)	Godwin Dr	0.88	2400	G	98%	0%	1%	0%	0%	0%	F	0.105	F	0.625	2600	G	2009
From: 155-2 Clover Hill Rd																	
To: 155-6 Hastings Dr																	
(5)	Godwin Dr	0.88	11000	G	94%	0%	2%	1%	1%	0%	C	0.091	F	0.532	12000	G	2009
From: 155-6 Hastings Dr																	
To: SR 28 Nokesville Rd																	
(6)	Hastings Dr	1.50	5200	G	97%	0%	2%	0%	0%	0%	C	0.102	F	0.576	5600	G	2009
From: Godwin Dr																	
To: Bus SR 234 Dumfries Rd																	
(6)	Hastings Dr	1.43	3500	G	97%	0%	2%	0%	0%	0%	F	0.078	F	0.561	3800	G	2009
From: Bus SR 234 Richmond Rd																	
To: Liberia Ave																	
(7)	Quarry Rd	0.56	3800	G	98%	0%	1%	1%	0%	0%	F	NA		4200	G	2009	
From: Zebedee St																	
To: Euclid Ave																	
(8)	Signal Hill Rd	0.13	5800	G	98%	0%	1%	1%	0%	0%	F	0.088	F	0.567	6300	G	2009
From: Richmond Ave																	
To: Liberia Ave																	
(107)	Godwin Dr	2.01	16000	G	98%	0%	1%	1%	0%	0%	C	0.08	F	0.515	17000	G	2009
From: SR 28 Nokesville Rd																	
To: Bus SR 234 Sudley Rd																	
(4350)	Lucasville Rd	0.11	5400	G	98%	0%	1%	0%	0%	0%	F	0.097	F	0.716	5900	G	2009
From: 76-692 ; SCL Manassas																	
To: 155-6 Hastings Dr																	
(4352)	Wellington Rd <old Rich	0.60	12000	G	99%	0%	1%	0%	0%	0%	C	0.085	F	0.563	13000	G	2009
From: Bus SR 234 Dumfries Rd																	
To: Fairview Ave																	
(4352)	Richmond Ave	0.99	2400	G	99%	0%	1%	0%	0%	0%	F	0.086	F	0.531	2600	G	2009
From: Fairview Ave																	
To: Liberia Ave																	
(4353)	Wellington Rd <old Fair	0.74	14000	G	98%	0%	1%	0%	0%	0%	C	0.091	F	0.515	15000	G	2009
From: ECL Manassas, 76-3000 Pr Wm Pkwy																	
To: Wellington Rd <old Richmond Rd>																	

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Route	Length	AADT	QA	4Tire	Bus	-----Truck-----				QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
						2Axle	3+Axle	1Trail	2Trail							
<b>City of Manassas</b>																
(4353) Fairview Ave	0.50	8800	G	98%	0%	1%	0%	0%	0%	F	0.090	F	0.650	9500	G	2009
(4355) Main St	0.24	1400	G	98%	1%	1%	0%	0%	0%	C	0.092	F	0.522	1500	G	2009
(4356) Portner Ave	0.43	2000	G	98%	1%	1%	0%	0%	0%	F	0.088	F	0.557	2200	G	2009
(4356) Portner Ave	0.57	3800	G	98%	1%	1%	0%	0%	0%	C	0.081	F	0.601	4100	G	2009
(4357) Sudley Rd	0.76	21000	G	98%	1%	1%	0%	0%	0%	F	0.075	F	0.512	22000	G	2009
(4358) Wellington Rd	0.78	13000	G	98%	0%	1%	0%	0%	0%	C	0.09	F	0.556	14000	G	2009
(4358) Wellington Rd	1.07	12000	G	98%	0%	1%	0%	0%	0%	F	0.095	F	0.602	13000	G	2009
(4358) Wellington Rd	0.61	12000	G	98%	0%	1%	0%	0%	0%	F	0.098	F	0.507	13000	G	2009
(4359) Stonewall Rd	0.38	470	G	98%	0%	1%	0%	0%	0%	F	0.107	F	0.533	510	G	2009
(4359) Stonewall Rd	0.90	4200	G	98%	0%	1%	0%	0%	0%	C	0.08	F	0.523	4600	G	2009
(4361) Liberia Ave	1.77	39000	G	95%	1%	2%	1%	1%	0%	C	0.076	F	0.594	42000	G	2009
(4361) Liberia Ave	1.18	12000	G	95%	1%	2%	1%	1%	0%	F	0.081	F	0.569	13000	G	2009
(4361) Liberia Ave	0.41	9600	G	95%	1%	2%	1%	1%	0%	F	0.092	F	0.524	10000	G	2009
(4365) Stonewall Rd	0.49	3200	G	99%	0%	1%	0%	0%	0%	F	0.092	F	0.717	3500	G	2009
(4365) Stonewall Rd	0.26	3500	G	99%	0%	1%	0%	0%	0%	C	0.098	F	0.609	3800	G	2009
Greenleaf Dr		170	G								0.128	F		190	G	2009
Karlo St		460	G								0.087	F		490	G	2009
Longstreet Dr		310	G								0.097	F		310	G	2009
Meadowview Dr		280	G								0.102	F		310	G	2009
Oak Glen Rd		230	G								0.112	F		250	G	2009

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Route	Length	AADT	QA	4Tire	Bus	-----Truck-----				QC	K Factor	QK	Dir Factor	AAWDT	QW	Year		
						2Axle	3+Axle	1Trail	2Trail									
<b>City of Manassas</b>																		
Peabody St		280	G	From: Stuart Avenue				0.138	F				280	G	2009			
				To: Robson Drive														
Thornwood Ln		390	G	From: Oakglen Rd				0.114	F				430	G	2009			
				To: Bayberry Ave														
Zebedee St		14000	G	98%	0%	1%	1%	1%	0%	F	NA		15000	G	2009			
	Combined Traffic:															26000	G	98%
				From: Center St														
				To: Centreville Rd														

*This link is signed SR 28*