2020
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

The reported 2020 AADTs represent the best estimate of 2020 average daily traffic, however, this year's AADTs do vary from normal traffic in the years prior to 2020 due to COVID-19. The reported AADTs may not represent typical traffic for a given day or period within the year as the drastic seasonal variations were normalized through the factoring process. The 2020 publications are therefore colored to draw users attention to the fact that uses of the 2020 published estimates versus alternative data sources should be determined at users' discretion based on the objectives or nature of the analyses being performed.

The estimated 2020 DVMT for the entire state maintained network total to 208,000,000, which has trended down by 11 percent compared to the 2019 level of 234,000,000. For most traffic links across the state, the estimated 2020 AADTs are also seen to have decreased from their 2019 levels.

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.

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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 buses.

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
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
2020
Annual Average Daily Traffic Volume Estimates By Section of Route
City of Manassas

Route	Jurisdiction	Length	AADT	QA	4Tire	Bus	Truck 2Axle	Truck 3+Axle	Truck 1Trail	Truck 2Trail	QC	K Factor	QK	Dir Factor	AAWDT	QW
	From: SR 234, WCL Manassas															
28 Nokesville Rd	City of Manassas	0.56	**34000**	**G**	97%	1%	1%	1%	1%	0%	F	0.082	F	0.504	37000	G
	To: 155-5 Godwin Dr From:															
28 Nokesville Rd	City of Manassas	1.22	**18000**	**G**	97%	1%	1%	1%	1%	0%	F	0.082	F	0.504	19000	G
	To: Wellington Rd From:															
28 Center St	City of Manassas	0.80	**22000**	**G**	97%	1%	1%	1%	1%	0%	F	0.083	F	0.57	24000	G
	To: Church St From:															
28 Center St	City of Manassas	0.25	**10000**	**G**	97%	1%	1%	1%	1%	0%	F	0.087	F		11000	G
	Combined Traffic Estimates for 2 Parallel Roadways on this Route:		**20000**	**G**	97%	1%	1%	1%	1%	0%	F	0.08	F	0.512	22000	G
	To: Bus SR 234 Grant Ave From:															
28 Center St	City of Manassas	0.37	**11000**	**G**	97%	1%	1%	1%	1%	0%	F	0.077	F		12000	G
	Combined Traffic Estimates for 2 Parallel Roadways on this Route:		**23000**	**G**	97%	1%	1%	1%	1%	0%	F	0.078	F	0.696	25000	G
	To: Zebedee St From: Center St															
28 Zebedee St	City of Manassas	0.09	**6800**	**G**	97%	1%	1%	1%	1%	0%	F	0.073	F		7200	G
	Combined Traffic Estimates for 2 Parallel Roadways on this Route:		**19000**	**G**	97%	1%	1%	1%	1%	0%	F	0.077	F	0.572	20000	G
	This link is signed SR 28															
	To: 1SR 28 P, Centreville Rd From:															
28 Centreville Rd	City of Manassas	1.10	**29000**	**G**	97%	1%	1%	1%	1%	0%	F	0.075	F	0.524	31000	G
	To: Prince William County Line															
	From: SR 28 Center St															
28 P Church St	City of Manassas	0.24	**10000**	**G**	97%	1%	1%	1%	1%	0%	F	0.081	F		11000	G
	Combined Traffic Estimates for 2 Parallel Roadways on this Route:		**20000**	**G**	97%	1%	1%	1%	1%	0%	F	0.08	F	0.512	22000	G
	To: Bus SR 234 Grant Ave From:															
28 P Church St	City of Manassas	0.38	**12000**	**G**	97%	1%	1%	1%	1%	0%	F	0.087	F	0.606	13000	G
	Combined Traffic Estimates for 2 Parallel Roadways on this Route:		**23000**	**G**	97%	1%	1%	1%	1%	0%	F	0.078	F	0.696	25000	G
	To: SR 28 Centreville Rd From:															
Bus 234 Dumfries Rd	City of Manassas	0.46	**7900**	**G**	97%	1%	1%	0%	0%	0%	F	0.085	F	0.602	8400	G
	To: 155-6 Hastings Dr From:															
Bus 234 Dumfries Rd	City of Manassas	0.55	**11000**	**G**	97%	1%	1%	0%	0%	0%	F	0.091	F	0.59	11000	G
	To: 155-4352 Wellington Rd From:															
Bus 234 Grant Ave	City of Manassas	0.63	**12000**	**G**	97%	1%	1%	1%	1%	0%	F	0.083	F	0.63	13000	G
	To: Prince William St From:															
Bus 234 Grant Ave	City of Manassas	0.12	**15000**	**G**	97%	1%	1%	1%	1%	0%	F	0.080	F	0.628	16000	G
	To: SR 28 Church St From:															
Bus 234 Grant Ave	City of Manassas	0.44	**7000**	**G**	97%	1%	1%	1%	1%	0%	F	0.087	F	0.555	7500	G
	To: Beauregard Ave															

Virginia Department of Transportation
Traffic Engineering Division
2020
Annual Average Daily Traffic Volume Estimates By Section of Route
City of Manassas

Route	Jurisdiction		Length	AADT	QA	4Tire	Bus	Truck 2Axle	Truck 3+Axle	Truck 1Trail	Truck 2Trail	QC	K Factor	QK	Dir Factor	AAWDT	QW
Bus 234 Grant Ave	City of Manassas	From: Beauregard Ave	0.32	6200	G	97%	1%	1%	1%	1%	0%	F	0.093	F	0.542	6600	G
		To: Sudley Rd															
Bus 234 Sudley Rd	City of Manassas	From: Grant Ave	1.18	21000	G	97%	1%	1%	1%	1%	0%	C	0.08	F	0.531	22000	G
		To: NCL Manassas															

Virginia Department of Transportation
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2020
Annual Average Daily Traffic Volume Estimates By Section of Route
City of Manassas

Route	Length	AADT	QA	4Tire	Bus	Truck 2Axle	Truck 3+Axle	Truck 1Trail	Truck 2Trail	QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
City of Manassas																
9463 76		**110**	**R**								NA			NA		1994
From: Osborne and Bennet																
To: High School																
9528 76 Tudor Ln		**2500**	**R**								NA			NA		12/11/2013
From: Osbourn High School																
To: Cul-de-Sac																
1 Ashton Ave	0.72	**6600**	**G**	99%	1%	0%	0%	0%	0%	C	0.097	F	0.551	7100	G	2020
From: Godwin Dr																
To: Cockrell Rd																
2 Clover Hill Rd	0.05	**3600**	**G**	98%	0%	1%	1%	0%	0%	C	0.079	F	0.658	3800	G	2020
From: SCL Manassas																
To: Godwin Dr																
2 Clover Hill Rd	0.45	**1700**	**G**	98%	1%	1%	0%	0%	0%	C	0.087	F	0.566	1800	G	2020
From: Godwin Dr																
To: Waterford Dr																
2 Clover Hill Rd	0.78	**2800**	**G**	97%	1%	1%	1%	0%	0%	C	0.088	F	0.522	3000	G	2020
From: Waterford Dr																
To: Wellington Rd																
3 Cockrell Rd	0.29	**4800**	**G**	97%	1%	1%	0%	0%	0%	C	0.095	F	0.677	5100	G	2020
From: Ashton Ave																
To: SR 28 Center St																
4 Euclid Ave	0.38	**4100**	**G**	95%	1%	2%	1%	1%	0%	F	0.1	F	0.577	4300	G	2020
From: Quarry Rd																
To: Liberia Ave																
4 Euclid Ave	0.32	**11000**	**G**	95%	1%	2%	1%	1%	0%	C	0.094	F	0.682	11000	G	2020
From: Liberia Ave																
To: Manassas NCL																
5 Godwin Dr	0.88	**1600**	**G**	97%	0%	1%	2%	0%	0%	C	0.109	F	0.648	1700	G	2020
From: 155-2 Clover Hill Rd																
To: 155-6 Hastings Dr																
5 Godwin Dr		**9100**	**G**	93%	1%	1%	3%	1%	0%	C	0.099	F	0.529	9700	G	2020
From: 155-6 Hastings Dr																
To: SR 28 Nokesville Rd																
6 Hastings Dr	1.50	**4100**	**G**	96%	1%	1%	1%	0%	0%	C	0.108	F	0.639	4400	G	2020
From: Godwin Dr																
To: Bus SR 234 Dumfries Rd																
6 Hastings Dr		**4400**	**G**	96%	1%	1%	1%	0%	0%	F	0.087	F	0.665	4700	G	2020
From: Bus SR 234 Richmond Rd																
To: Liberia Ave																
7 Quarry Rd	0.03	**NA**									NA			NA		
From: SR 28 SB, Centreville Rd																
To: SR 28 NB, Zebedee St																
7 Quarry Rd	0.56	**4200**	**G**	97%	0%	1%	1%	1%	0%	F	0.089	F	0.579	4500	G	2020
From: SR 28 NB, Zebedee St																
To: Euclid Ave																
8 Signal Hill Rd	0.13	**4400**	**G**	97%	0%	1%	1%	1%	0%	F	0.097	F	0.632	4800	G	2020
From: Richmond Ave																
To: Liberia Ave; ECL Manassas																
9 Richmond Ave	0.07	**170**	**G**	98%	0%	1%	1%	0%	0%	F	0.136	F	0.569	180	G	2020
From: Dead End																
To: Fairview Ave																
9 Richmond Ave	0.94	**2600**	**G**	98%	0%	1%	1%	0%	0%	C	0.103	F	0.553	2800	G	2020
From: Fairview Ave																
To: Liberia Ave																
10 Center St		**2800**	**G**	98%	1%	1%	0%	0%	0%	C	0.092	F	0.771	3000	G	2020
From: SR 28 Zebedee St																
To: Prescott Ave																
107 Godwin Dr	2.01	**12000**	**G**	97%	0%	1%	1%	1%	0%	C	0.085	F	0.525	13000	G	2020
From: SR 28 Nokesville Rd																
To: Bus SR 234 Sudley Rd																

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City of Manassas

Route	Length	AADT	QA	4Tire	Bus	Truck 2Axle	Truck 3+Axle	Truck 1Trail	Truck 2Trail	QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
City of Manassas																
(4350) Lucasville Rd	0.11	**4100**	**G**	98%	0%	1%	0%	0%	0%	F	0.101	F	0.662	4400	G	2020
From: 76-692, SCL Manassas																
To: 155-6 Hastings Dr																
(4352) Wellington Rd	0.59	**14000**	**G**	98%	1%	1%	1%	0%	0%	C	0.095	F	0.525	14000	G	2020
From: Bus SR 234 Dumfries Rd																
To: Fairview Ave																
(4353) Wellington Rd <old Fairview Ave>		**13000**	**G**	98%	1%	1%	0%	0%	0%	C	0.096	F	0.505	14000	G	2020
From: ECL Manassas, 76-3000 Pr Wm Pkwy																
To: Wellington Rd <old Richmond Rd>																
(4353) Fairview Ave	0.50	**9600**	**G**	98%	1%	1%	0%	0%	0%	F	0.084	F	0.568	10000	G	2020
From: Wellington Rd <old Richmond Ave>																
To: SR 28 Center St																
(4355) Main St	0.24	**920**	**G**	94%	4%	1%	1%	0%	0%	C	0.097	F	0.642	980	G	2020
From: Center St																
To: Portner Ave																
(4356) Portner Ave	0.43	**1600**	**G**	97%	1%	1%	0%	0%	0%	C	0.095	F	0.523	1700	G	2020
From: Bus SR 234 Grant Ave																
To: Sudley Rd																
(4356) Portner Ave	0.57	**2700**	**G**	96%	2%	2%	0%	0%	0%	C	0.085	F	0.58	2900	G	2020
From: Sudley Rd																
To: Liberia Ave																
(4357) Prescott Ave	0.26	**8200**	**G**	96%	2%	2%	0%	0%	0%	F	0.088	F	0.566	8700	G	2020
From: Center St																
To: SR 28 Centreville Rd																
(4357) Sudley Rd	0.76	**16000**	**G**	96%	2%	2%	0%	0%	0%	F	0.080	F	0.522	17000	G	2020
From: Bus SR 234 Grant Ave, Sudley Rd																
To: WCL Manassas																
(4358) Wellington Rd		**12000**	**G**	98%	0%	1%	1%	0%	0%	C	0.100	F	0.549	12000	G	2020
From: SR 28 Nokesville Rd; Center St																
To: Clover Hill Rd																
(4358) Wellington Rd	0.61	**12000**	**G**	98%	0%	1%	1%	0%	0%	F	0.097	F	0.514	13000	G	2020
From: Clover Hill Rd																
To: Bus SR 234 Dumfries Rd																
(4359) Stonewall Rd	0.38	**140**	**G**	90%	1%	2%	4%	2%	0%	C	0.165	F	0.73	150	G	2020
From: Dead End																
To: Center St																
(4359) Stonewall Rd	0.90	**3200**	**G**	98%	0%	1%	0%	0%	0%	C	0.091	F	0.535	3400	G	2020
From: Center St																
To: Bus SR 234 Sudley Rd																
(4361) Liberia Ave	1.76	**31000**	**G**	98%	0%	1%	0%	0%	0%	F	0.074	F	0.579	NA		2020
From: 155-4353 Wellington Rd <old Fairview Ave>																
To: SR 28 Centreville Rd																
(4361) Liberia Ave	1.19	**9100**	**G**	98%	0%	1%	0%	0%	0%	C	0.080	F	0.52	9600	G	2020
From: SR 28 Centreville Rd																
To: 155-4365 Stonewall Rd																
(4361) Liberia Ave	0.41	**8100**	**G**	98%	0%	1%	0%	0%	0%	F	0.085	F	0.535	8600	G	2020
From: 155-4365 Stonewall Rd																
To: NCL Manassas, 76-1530 Lomond Dr South																
(4365) Stonewall Rd	0.49	**1700**	**G**	97%	1%	1%	1%	0%	0%	C	0.109	F	0.810	1900	G	2020
From: Bus SR 234 Sudley Rd																
To: Stonewall Ct																
(4365) Stonewall Rd	0.26	**2600**	**G**	98%	1%	1%	0%	0%	0%	C	0.088	F	0.63	2800	G	2020
From: Stonewall Ct																
To: Liberia Ave																
Greenleaf Dr		**110**	**G**								0.114	F	0.561	120	G	2020
From: Shannon Rd																
To: Cedar Ridge Dr																
Karlo St		**360**	**G**								0.105	F	0.518	380	G	2020
From: Sarajevo Court																
To: Tito Court																

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Route	Length	AADT	QA	4Tire	Bus	Truck 2Axle	Truck 3+Axle	Truck 1Trail	Truck 2Trail	QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
City of Manassas																
Longstreet Dr		**310**	**G**								0.101	F	0.577	310	G	2020
From: Jackson Ave																
To: Weems Rd																
Meadowview Dr		**180**	**G**								0.121	F	0.613	190	G	2020
From: Grant Ave																
To: Virginia Ave																
Oak Glen Rd		**190**	**G**								0.116	F	0.614	210	G	2020
From: Bayberry Ave																
To: Thornwood Lane																
Peabody St		**210**	**G**								0.122	F	0.778	210	G	2020
From: Stuart Ave																
To: Robson Dr																
Thornwood Lane		**320**	**G**								0.124	F	0.540	340	G	2020
From: Oakglen Rd																
To: Bayberry Ave																