2020

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

where available

Special Locality Report

137

City of Williamsburg

Information in this report is included in Report

47

(James City 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.

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

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	ıte	
F241	Frontage Road (F	precedes frontage route number)	
600	Secondarv Route		
		Special Routes	
Bus 29 ALT 220	Bus - Business Ro Bypas - Bypass R Truck - Truck Rou ALT - Alternate Ro Wye - Wye Route	Route ute oute	
1,1		; Southbound or Westbound direction lanes of a numbered route a different road facility than the other direction.	
600 154		ainenance Jurisdiction number is displayed below the Secondary Rout intenance Jurisdiction is different than the jurisdiction in the title of the	

Virginia Department of Transportation Traffic Engineering Division 2020 Annual Average Daily Traffic Volume Estimates By Section of Route City of Williamsburg															
Route	Jurisdiction	Length AADT	QA	4Tire	Bus		Tru 3+Axle	-		QC	K Factor	QK	Dir Factor	AAWDT	QW
5)(199)	From: City of Williamsburg (Maint: 47)	WCL Williamsb 0.24 33000	urg G	97%	0%	1%	1%	1%	0%	F	0.088	F	0.565	35000	G
	To:	SR 31, SR 199													
5 Jamestown Rd	City of Williamsburg	SR 31 Jamestown Rd; 0.27 6700	; <u>SR 199</u> G	98%	0%	1%	1%	0%	0%	F	0.109	F	0.620	7100	G
5 Jamestown Rd	City of Williamsburg	137-7073 John Tyler Me 1.50 7300	G	^{Iwy} 98%	0%	1%	1%	0%	0%	С	0.097	F	0.616	7700	G
~	To: From:	137-7075 Bounda													
5 Boundary St	City of Williamsburg	Jamestown Ro 0.07 7500	G	98%	0%	1%	1%	0%	0%	F	0.096	F	0.559	8000	G
5 Boundary St		Francis St	<u>u</u>	0070	0 /0	170	170	070	070		0.000	•	0.000	0000	G
	From:	Boundary St													
5 Francis St	City of Williamsburg	0.09 5800 SR 132 Henry 3	G St	98%	0%	1%	1%	0%	0%	F	0.106	F	0.527	6100	G
	From:	Francis St								_		_			-
(5) (132) Henry St	City of Williamsburg	0.38 3700	G	98%	0%	1%	1%	0%	0%	F	0.081	F	0.618	3900	G
\diamond \diamond	To: From:	SR 162 Lafayette SR 132 Henry													
5 Lafayette St	City of Williamsburg	0.33 8300	G	97%	1%	1%	0%	0%	0%	F	0.105	F	0.531	8900	G
5 Lafayette St	City of Williamsburg	Capital Landing 0.73 7000	Rd G	97%	1%	1%	0%	0%	0%	С	0.104	F	0.551	7400	G
5 60 Page St	City of Williamsburg	US 60 Page S 0.25 11000	G	98%	0%	1%	0%	0%	0%	С	0.09	F	0.567	12000	G
$\overline{(5)}$ $\overline{(60)}$ Page St	City of Williamsburg	Second St 0.31 12000	G	98%	0%	1%	0%	0%	0%	F	0.092	F	0.576	13000	G
5 Capitol Landing Rd	City of Williamsburg	US 60 Page S 0.62 5500	t G	98%	0%	1%	0%	0%	0%	С	0.079	F	0.543	5800	G
	To:	SR 143 Merrima													
	From:	WCL Williamsb	iiro												
31 Jamestown Rd	City of Williamsburg	0.04 13000	G	98%	1%	1%	0%	0%	0%	F	0.087	F	0.579	14000	G
au Jamostown Bd		State Maintenance B		98%	1%	1%	0%	0%	0%	F	0.087	F	0.579	14000	G
(31) Jamestown Rd	City of Williamsburg	0.02 13000	G	30%	1 70	1 70	0%	0 /0	0 %	1-	0.007	1-	0.579	14000	u
		SR 5; SR 199			_					_					
Pichmond Pd	From:	WCL Williamsb		009/	00/	10/	0.9/	0.0/	0.9/	F	0.000	F	0 500	20000	G
60 Richmond Rd	City of Williamsburg	1.37 18000	G	99%	0%	1%	0%	0%	0%	F	0.083	F	0.500	20000	G
	From	Ironbound Rd								-					
60 Richmond Rd	City of Williamsburg	0.30 21000	G	99%	0%	1%	0%	0%	0%	С	0.077	F	0.551	NA	
~	To: From:	Bypass Rd Diahmand Rd	1					_				_			
60 Bypass Rd	City of Williamsburg	Richmond Rd 0.11 20000	G	99%	0%	0%	0%	0%	0%	С	0.077	F	0.541	NA	
~	To: From:	NCL Williamsbu	urg												
60 Bypass Rd	City of Williamsburg	0.50 11000	G	98%	0%	1%	0%	0%	0%	С	0.093	F	0.587	12000	G
		Parkway Dr													

Virginia Department of Transportation Traffic Engineering Division 2020 Annual Average Daily Traffic Volume Estimates By Section of Route City of Williamsburg																
Route	Jurisdiction	Length	AADT	QA 4	Tire	Bus		Tru 3+Axle			QC	K Factor	QK	Dir Factor	AAWDT	QW
60 Bypass Rd	From: City of Williamsburg	0.16	Parkway Dr 9300	G	98%	0%	1%	0%	0%	0%	F	0.093	F	0.595	9800	G
\bigcirc	Ta	SR 5 C	apitol Landing	g Rd												
60 5 Page St	City of Williamsburg	0.31	12000		98%	0%	1%	0%	0%	0%	F	0.092	F	0.576	13000	G
60 5 Page St	City of Williamsburg		econd Street 11000	G	98%	0%	1%	0%	0%	0%	С	0.09	F	0.567	12000	G
60 5 Page St			fayette St; Yo		0.0	070	1/0	078	070	070	0	0.00	•	0.007	12000	u
	From:		fayette St; Pa													
60 York St	City of Williamsburg	0.60	10000		98%	1%	1%	0%	0%	0%	С	0.103	F	0.555	11000	G
\sim	To:	ECI	. Williamsbur	g												
	From:		SR 199													
132 Henry St South	City of Williamsburg	1.77	2200	G	98%	0%	1%	1%	1%	0%	С	0.091	F	0.578	2400	G
<u> </u>	Tac	Ir	eland Street													
(132)Henry St South	City of Williamsburg	0.08	2700	F	98%	0%	1%	1%	1%	0%	F	0.091	F	0.578	2800	F
\smile	To: From:	SR 5 He	enry St; Franc	eis St												
$\begin{pmatrix} 132 \end{pmatrix} \begin{pmatrix} 5 \end{pmatrix}$ Henry St	City of Williamsburg	0.38	SR 5 3700	G	98%	0%	1%	1%	0%	0%	F	0.081	F	0.618	3900	G
132 5 Henry St			RANCIS ST	u a	0 /0	0 /8	1 /0	1 /0	0 /0	0 /8		0.001		0.010	5500	u
	From:		Lafayette St													
132 Henry St North	City of Williamsburg	0.44	4000	G	97%	1%	2%	1%	0%	0%	С	0.085	F	0.526	4200	G
(132)N.Henry St	City of Williamsburg	0.16	SR 132 Y 5700	G	97%	1%	2%	1%	0%	0%	F	0.091	F	0.531	6100	G
			k County Line		JT 70	170	2 /0	170	070	070		0.001	•	0.001	0100	u
Mue	From:															
Wye	City of Williamsburg	0.29	onial Parkway 4200		98%	1%	1%	0%	0%	0%	С	0.098	F	0.611	4400	G
132			32 N.Henry S		0,0	170		070	070	070	Ũ	0.000	•	0.011	4400	G
	From:		. Williamsbur													
(143) Merrimac Trail	City of Williamsburg	0.90	5400		98%	0%	1%	0%	0%	0%	С	0.093	F	0.533	5800	G
(143)	,							• / •	• / •	• • •	-					-
(143)Merrimac Trail	City of Williamsburg		apital Landing 7500		98%	0%	1%	0%	0%	0%	С	0.090	F	0.505	8000	G
143 Wieminac Main			k County Line		90 /0	0 /0	1 /0	0 /8	0 /0	0 /8	U	0.090	'	0.505	8000	G
	From:															
199 5	City of Williamsburg (Maint:	47) 0.24		G	97%	0%	1%	1%	1%	0%	F	0.088	F	0.565	35000	G
	To: From:		R 31 Jamestov													
(199)	City of Williamsburg (Maint:		33000 City County I		97%	0%	1%	1%	1%	0%	F	0.088	F	0.551	36000	G
(199)	City of Williamsburg (Maint:		33000		97%	0%	1%	1%	1%	0%	Ν	0.088	F	0.551	36000	Ν
	To:		. Williamsbur													
	From:		5 Ironbound 1													
(321)Monticello Ave	City of Williamsburg (Maint:		15000		99%	0%	0%	0%	0%	0%	С	0.091	F	0.514	16000	G
	To:		Compton Dr													

Virginia Department of Transportation Traffic Engineering Division 2020 Annual Average Daily Traffic Volume Estimates By Section of Route City of Williamsburg													
Route	Jurisdiction	Length AADT QA 4Tire E	Bus 2Axle 3+Axle 1Trail 2Trail QC K QK Dir AAWD Factor Factor Factor	t qw									
90003 Colonial Parkway	From City of Williamsburg (Maint: 999)	James City County Line) 5700 G York County Line	0.091 F 0.649 5900	G									

Virginia Department of Transportation Traffic Engineering Division 2020 Annual Average Daily Traffic Volume Estimates By Section of Route																
						City of \	Villiamsbur	ġ								
Route	Length	AADT	QA	4Tire	Bus		Truck 3+Axle 1⊺			QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
City of Williamsburg		From				P	D 1									
7075 Richmond Rd	0.37	15000	G	98%	0%	<u>ву</u> 1%	/pass Rd 0% ()%	0%	С	0.085	F	0.542	16000	G	2020
(7075) Richmond Rd	0.95	From 8300	G	97%	0%	Mon 2%	ticello Ave 0% 0)%	0%	С	0.087	F	0.505	8800	G	2020
		To: From:					istead Ave				7					
7075 Francis St		4700	G	99%	0%	1%	ry St South 0% (Valler St)%	0%	С	0.096	F	0.508	5000	G	2020
		From					hmond Rd									
(7077) Lafayette St	0.12	7800	G	99%	0%	1%)%	0%	F	0.098	F	0.552	8300	G	2020
(7077) Lafayette St	0.82	From: 8500	G	99%	0%		acon St)%	0%	F	0.099	F	0.57	9000	G	2020
\bigcirc		To				H	lenry St									
(7079) Second St	0.19	From: 10000	G	98%	0%	1%	Page St 0% ()%	0%	F	0.09	F	0.563	11000	G	2020
(7079) Second St	0.22	From: 11000	G	98%	0%	Pai 1%	rkway Dr 0% ()%	0%	С	0.088	F	0.544	12000	G	2020
	-	Та					County Line			_						
	From		000/	00/		ty County Line		00/	0		_	0 5 4 7	0700	•		
(7081) Iron Bound Rd	0.57	8200 To	G	99%	0%	1%)%	0%	С	0.087	F	0.547	8700	G	2020
(7081) Iron Bound Rd	0.05	From 11000 To	G	99%	0%	1%	nghill Rd 0% (hmond Rd)%	0%	F	0.079	F	0.545	11000	G	2020
		From					bound Rd									
7082 Longhill Rd	0.63	3800 _{то}	G	99%	0%	1% WCL	0% (Williamsburg)%	0%	С	0.093	F	0.65	4100	G	2020
		From				Co	mpton Dr									
7083 Monticello Ave	0.35	13000 _{то}	G			D: 1					0.085	F	0.519	14000	G	2020
		From					hmond Rd Page St									
(7086) Penniman Rd	0.49	2800	G	98%	0%	1%	0% 0)%	0%	С	0.087	F	0.668	3000	G	2020
<u> </u>		To					County Line									
Carters Grove Country	y Rd	370	G	97%	1%	2%	ourse Entrance 0% ()%	0%	С	0.117	F	0.696	370	G	2020
		To				William	sburg Avenue									
Holly Hills Dr		From: 630	G	99%	1%	Jone: 1%	s Mill Lane 0% ()%	0%	С	0.115	F	0.503	630	G	2020
-		To				Sir Thom	as Lunsford D	r								
Matoaka Court		From: 820	G			Mount V	ernon Avenue	;			0.103	F	0.735	820	G	2020
		02U To				Rich	mond Road				0.100		0.700	020	G	2020
Patrick Henry Dr		From: 560	G	99%	0%	Pine 0%	y Creek Dr 0% ()%	0%	С	0.108	F	0.516	560	G	2020
		To	~	0070	570		Valtz Dr		575				0.010		с —	
Quarterpath Rd		From: 860	G			S	SR 199				0.098	F	0.644	920	G	2020
Guartorpath nu		To				Y	York St				0.030		0.044	520	u	2020
C England Ct		From				William	sburg Avenue				0.080	F	0 520	1000	C	2020
S England St		1900 ^{To}	G			Fra	ncis Street				0.089	r	0.536	1900	G	2020