### 2020

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

where available

## Special Locality Report 321

Town of Warsaw

Information in this report is included in Report



(Richmond 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 Town of Warsaw																	
Route	Jurisdiction	Len	th A		QA	4Tire	Bus		Tru	ck		QC	К	QK	Dir	AAWDT	0₩
noute	Junsalction	on Length			QA	41110	Dus	2Axle	xle 3+Axle 1Tra		2Trail	QU	Factor	GIV	Factor		QVV
	From		NCL	. Warsaw													
3 Historyland Hwy	Town of Warsaw (Mai	aint: 79) 0.2	0 5	5400	Ν	93%	0%	1%	1%	4%	0%	Ν	0.08	F	0.551	5300	Ν
$\smile$	To		Bus SF	R 3 Main	St												
	From		,	Bus Rich													
( <sub>3</sub> ) Historyland Hwy	Town of Warsaw (Mai	aint: 79) 0.1	16	6700	G	92%	1%	2%	2%	3%	0%	F	0.111	F	0.589	6500	G
$\smile$	To		SCL	Warsaw													
Bus	From:	S	R 3 His	toryland I	Hwy												
3 Main St	Town of Warsaw (Mai	aint: 79) 0.7	7 1	2000	Ν	95%	1%	1%	1%	3%	0%	Ν	0.084	F	0.609	12000	Ν
$\bigcirc$	To:	US 360 Richmond Rd															
Bus	From:		US 36	60; Main S	St												
3) (360) Richmond Rd	Town of Warsaw (Mai	aint: 79) 0.7	8 <b>1</b> 3	2000	G	95%	1%	1%	1%	3%	0%	F	0.084	F	0.609	12000	G
$\lor$	To:	S	R 3 His	toryland I	Hwy												
	From:		WCI	Warsaw	,												
(360) Richmond Rd	Town of Warsaw (Mai	aint: 79) 2.0	2 1	2000	Ν	95%	1%	1%	1%	3%	0%	Ν	0.103	А	0.591	13000	Ν
	Tat	,	NV C														
Bus	From:		w S	SR 3 Bus													
(360) (3) Richmond Rd	Town of Warsaw (Mai	aint: 79) 0.7	<b>3 1</b>	2000	G	95%	1%	1%	1%	3%	0%	F	0.084	F	0.609	12000	G
$\checkmark \lor$	To		E SR 3	Bus, SR	3												
(360) Richmond Rd	Town of Warsaw (Mai			5900	G	95%	1%	1%	1%	3%	0%	F	0.086	F	0.662	5800	G
	To:			Warsaw		5070	170		. /0	070	0,0		0.000		0.00L	0000	5

				Vi		Department of T ffic Engineering 2020									
		Anr	nual Av	verage [	Daily Tı	raffic Volume Es Town of Wars		By Sec	ction o	f Route					
Route	Length	AADT	QA	4Tire	Bus	Tru 2Axle 3+Axle			QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Warsaw		From				SCL Warsaw									
624 Sabine Hall Rd	0.10	<b>70</b>	N			US 360 E, Richmor	nd Rd			NA			NA		06/08/2016
		From				US 360 W, Richmo									
(649) Meadowbrook Rd	0.26	110 To:	R			US 360 E, Richmor	nd Rd			NA			NA		03/26/2019
		From				SR 3 Bus									
690 Menokin Rd	0.20	640 To	G	96%	1%	2% 0% NCL Warsaw	1%	0%	С	0.121	F	0.534	630	G	2020
		From				US 360 Richmond	Rd								
(700) Selftown Rd	0.13	210 To:	R			NCL Warsaw				NA			NA		04/10/2019
		From				SR 3									
Harris Ave	0.25	50 To	R							NA			NA		04/03/2019
		From				Cul-de-Sac US 360 Richmond	Rd								
(1001) Hamilton Blvd	0.75	280	G	99%	0%	0% 1%	0%	0%	С	0.13	F		270	G	2020
		To				Bus SR 3 SR 3									
(1002) Belleville Lane	e Lane 0.23	270	R			3K 3				NA			NA		03/26/2019
/9		To				79-1001 Hamilton	Blvd								
(1003) St Johns St	From: 670	R			SR 3				NA			NA		03/26/2019	
79		To				US 360 Richmond	Rd								
(1004) Court Circle	0.17	From: 470	R		US	360 Richmond Rd;	Bus SR 3			NA			NA		03/26/2019
(1004) Court Circle	0.17	-110				79-1036 Campus	Dr								00/20/2010
(1004) Court Circle		180	R							NA			NA		06/15/2016
		To				End Loop 79-1012 Sunset L									
(1005) Lakeside Dr	0.18	70	R			79-1012 Sullset L	ane			NA			NA		06/15/2016
(/9)		To				79-1006 Ridgeway 79-1006 Rideway									
Lakeside Dr	0.17	46	R							NA			NA		06/15/2016
	0.09	From				79-1020 Ivy La	ne						NIA		06/15/0016
Lakeside Dr	0.08	80 To	R			79-690 Menokin	Rd			NA			NA		06/15/2016
		From				79-1012 Sunset L	ane								
Ridgeway Rd	0.08	190	R							NA			NA		03/26/2019
(1006) Ridgeway Rd	0.10	Tom From	R			79-1005 Lakeside	Dr			NA			NA		03/26/2019
(1006) Ridgeway Rd		То				SR 3									
(1007) Sabine Hall Rd		From: 560	R			US 360 Richmond	Rd			NA			NA		06/25/2019
(1007) Sabine Hall Rd		<b>300</b> To:	n			Dead End							11/1		00/20/2019
	0.40	From				US 360 Richmond	Rd						NA		00/00/0010
1008 79 Pine St	0.19	60 To	R			79-1002 Belleville	Lane			NA	03/26/2019				
		From				79-1028 Level B									
(1009) Washington Ave	0.09	130	R							NA			NA		06/15/2016
(1009) Washington Ave	0.02	Tam Fram 180	R			79-1014 S, E Monro	e Ave			NA			NA		06/15/2016
79	0.02	From			7	79-1014 N, W Monro	be Ave								
(1009) Washington Ave	0.06	220 From	R							NA			NA		06/15/2016
		Τα			7	79-1010 S, E Jefferso	on Ave								

					Trat	Department of Transpo ffic Engineering Divisio 2020	on							
		Anr	iual A	verage I	Daily Tr	raffic Volume Estimate Town of Warsaw	es By Sec	ction o	f Route					
Route	Length	AADT	QA	4Tire	Bus	Truck		QC	K	QK	Dir	AAWDT	QW	Year
Town of Warsaw						2Axle 3+Axle 1Tra	i zirali		Factor		Factor			
	0.00	From			7	79-1010 S, E Jefferson Ave						NIA		00/15/0010
(1009) Washington Ave	0.03	260	R						NA			NA		06/15/2016
(1009) Washington Ave	0.05	380	R		79	9-1010 N, W Jefferson Ave			NA			NA		03/26/2019
(1009) Washington Ave		To				US 360 Richmond Rd								
		From				WCL Warsaw								
(1010) W Jefferson Ave	0.06	49	R						NA			NA		06/15/2016
	0.09	170				79-1011 Madison Ave			NA			NA		06/15/2016
(1010) W Jefferson Ave	0.09	To	R			79-1009 Washington Ave						NA		00/13/2010
		From				9-1009 S, Washington Ave								/ _ / _ / _ / _ /
(1010) E Jefferson Ave	0.14	<b>48</b>	R			79-1018 Memorial Dr			NA			NA		06/15/2016
		From	l			79-1018 Weinorian Dr 79-1014 W Monroe Ave								
(1011) Madison Ave	0.09	60	R			7)-1014 W Wolldon Two			NA			NA		06/15/2016
79		To	ļ			79-1010 W Jefferson Ave								
		From				Dead End								
(1012) Sunset Lane	0.11	40	R						NA			NA		03/23/2016
	0.00	From				79-1005 Lakeside Dr						NIA		00/15/0010
(1012) Sunset Lane	0.08	120	R				NA			NA		06/15/2016		
(1012) Sunset Lane	0.28	From 60	R			79-1006 Ridgeway Rd			NA			NA		03/23/2016
(1012) Sunset Lane	0.20	То				Dead End						NA		03/23/2010
		From				US 360 Richmond Rd								
(1013) Jones Lane	0.18	260	R						NA			NA		06/25/2019
		To				Dead End								
	0.04	From:				WCL Warsaw						NA		06/15/0016
(1014) W Monroe Ave	0.04	10	R						NA			NA		06/15/2016
(1014) W Monroe Ave	0.09	From From	R			79-1011 Madison Ave			NA			NA		06/15/2016
(1014) W Monroe Ave	0.00	7 <b>0</b>				70 1000 Westinsten Ass						nn a		00/10/2010
(1014) E Monroe Ave	0.15	90 From	R			79-1009 Washington Ave			NA			NA		06/15/2016
(1014) E Monroe Ave		To				79-1018 Memorial Dr								
$\sim$		From				Cul-de-Sac								
U015 Wallace St	0.23	90	R						NA			NA		04/03/2019
	0.00	From				0.23 MN Cul-de-Sac								00/05/0010
(1015) Wallace St	0.33	570	R						NA			NA		06/25/2019
(1015) Wallace St	0.09	640	R			79-1036 Campus Dr			NA			NA		06/15/2016
(1015) Wallace St	0.03	<b>040</b> To:				US 360 Richmond Rd						11/1		00/10/2010
		From			7	9-1017 West Morgan Lane								
Morgan Lane	0.41	360	R						NA			NA		06/08/2016
		To				US 360 Richmond Rd								
(1017) West Morgan Lane	0.04	From: 20	R			Dead End			NA			NA		03/23/2016
(1017) West Morgan Lane	0.04	20				70.101634						NA		03/23/2010
(1017) Morgan Lane	0.07	160 From	R			79-1016 Morgan Lane			NA			NA		06/08/2016
(1017) Morgan Lane		To				79-1023 Quail Trail			<u>_</u>					
Morgan Lane	0.10	40	R			, You Yuun Hun			NA			NA		03/23/2016
79		Τα				Dead End								
	0.07	From				SCL Warsaw								00/15/00/15
(1018) Memorial Dr	0.07	48	R						NA			NA		06/15/2016
	0.08	From				79-1014 E Monroe Ave			NIA			NIA		06/15/2016
(1018) Memorial Dr	0.08	90 To	R			79-1010 E Jefferson Ave			NA			NA		06/15/2016
			-											

				Vi		Department of Transportation (ffic Engineering Division 2020							
		Anr	nual A	verage l	Daily Tı	raffic Volume Estimates By Se Town of Warsaw	ection o	f Route					
Route	Length	AADT	QA	4Tire	Bus	Truck 2Axle 3+Axle 1Trail 2Tra	00	K Factor	OK	Dir actor	AAWDT	QW	Year
Town of Warsaw		From	-			79-1010 E Jefferson Ave							
(1018) Memorial Dr	0.08	160	R					NA			NA		06/15/2016
		To				79-649 Meadowbrook Rd							
(1019) Gordon Lane	0.15	From <b>70</b>	R			US 360 Richmond Rd		NA			NA		06/08/2016
(1019) Gordon Lane	0.15	То	- n			Dead End					INA.		00/00/2010
		From	-			79-1005 Lakeside Dr							
1020 Ivy Lane	0.12	30	R					NA			NA		06/15/2016
		To				NCL Warsaw							
	o / -	From				79-1022 Walnut St							
(1021) Maple St	0.15	690 To	R			US 360 Richmond Rd		NA			NA		06/08/2016
		From				SR 3 Historyland Hwy							
(1022) Walnut St	0.18	1500	R			SR 3 Historyland Hwy		NA			NA		06/08/2016
(1022) Walnut St	0.1.0	т				70 1021 Marta St							00,00,2010
(1022) Walnut St	0.04	From 1600	1 R			79-1021 Maple St		NA			NA		06/08/2016
(1022) Walnut St		То				Dead End							
		From	-			Dead End		ſ					
(1023) Quail Trail	0.16	50	R					NA			NA		03/23/2016
		To	9 4		7	79-1017 West Morgan Lane							
	o / -	From				Dead End							
(1027) Sturman Lane	0.15	<b>40</b>	R			79-649 Meadowbrook Rd		NA			NA		03/23/2016
		From											
(1028) Level Blvd	0.13	60	R			79-1029 Georgia Ave		NA			NA		06/15/2016
(1028) 79 Level Blvd	0.1.0	Ta				70 1000 Westinsten Ass							00,10,2010
(1028) Level Blvd	0.02	From 20	R			79-1009 Washington Ave		NA			NA		03/23/2016
(1028) 79 Level Blvd	0.01	To				Dead End							00/20/2010
		From	:			US 360 Richmond Rd							
Lee Ave	0.17	90	R					NA			NA		06/08/2016
(79)		To				79-1034 Jackson Court							
(1033) Lee Ave	0.09	70	R			79-1034 Jackon Court		NA		NA			03/23/2016
(1033) 79	0.00	To	·			Dead End							00/20/2010
		From	-			79-1033 Lee Ave							
Jackson Court	0.05	20	R					NA			NA		03/23/2016
		To	-			Cul-de-Sac							
		From				US 360 Richmond Rd							
1035 College Ave	0.07	340	R					NA			NA		03/26/2019
		From				79-1037 Atkinson Dr		<u> </u>					
(1035) College Ave	0.22	170	R					NA			NA		03/26/2019
	0.04	From	<u> </u>			79-1038 Freedom Way							0.4/00/0040
(1035) College Ave	0.04	10 To	R			Dood End		NA			NA		04/03/2019
		From				Dead End							
(1036) Campus Dr	0.04	410	R			79-1004 Court Circle		NA			NA		06/15/2016
(1036) Campus Dr		To				79-1015 Wallace St							
(1037) Atkinson Dr		From				79-1035 College Ave							
	0.18	110	R					NA			NA		06/08/2016
		To			0.1	18 MN 79-1035 College Ave		<b>_</b>					
(1037) Atkinson Dr	0.02	60	R					NA			NA		03/23/2016
13		To				Dead End							
		From	-			Cul-de-Sac							
Freedom Way	0.16	70	R			70 1025 (0.11)		NA		NA		03/23/2016	
~		To				79-1035 College Ave							

	Virginia Department of Transportation Traffic Engineering Division 2020 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Warsaw													
Route	Length	AADT	QA	4Tire	Bus	Truck 2Axle 3+Axle 1Trail 2Trail	QC	K Factor	QK	Dir Factor	AAWDT	QW	Year	
Town of Warsaw			-											
		From	:			79-1035 College Ave								
(1038) Freedom Way	0.05	30	R					NA			NA		03/23/2016	
		To	:			Cul-de-Sac								