2020

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

where available

Special Locality Report 235

Town of Herndon

Information in this report is included in Report

29

(Fairfax 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
- 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
- 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
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 Route

F241) Frontage Road (F precedes frontage route number)

(600) Secondary Route

Special Routes

Bus Bus - Business Route
Bypas - Bypass Route
Truck - Truck Route
ALT 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 Town of Herndon

Route	Jurisdictio	an Longth	AADT	ΟΛ	4Tire	Ruc		Tru	ıck		QC	K	QK	Dir	AAWDT	01
noute	Junsuictio					Dus	2Axle	3+Axle	1Trail	2Trail	QU	Factor	QIN	Factor	AAWDI	Q
	From:	SCL Herndo				10/	10/	00/	00/	00/	F	0.000	_	0.500	NIA	
28 Elden St	Town of Hern	ndon 0.23	28000	G	98%	1%	1%	0%	0%	0%	Г	0.089	F	0.528	NA	
	To: From:	•	Herndon Pkw								_					
Elden St	Town of Hern	ndon	15000	F	98%	0%	1%	0%	0%	0%	F	0.093	F	0.524	16000	F
	To: From:		Alabama Dı	·												
Elden St	Town of Herr	ndon	14000	F	98%	0%	1%	0%	0%	0%	F	0.095	F	0.519	14000	F
	To: From:		Sterling Rd													
28 Elden St	Town of Hern	ndon	13000	F	98%	0%	1%	0%	0%	0%	С	0.084	F	0.523	13000	F
	Too		Center St				— —									
28 Elden St	Town of Hern	ndon	14000	F	98%	0%	1%	0%	0%	0%	F	0.084	F	0.526	14000	F
- 9	To		Spring St													
28 Elden St	From I Town of Hern	ndon	13000	F	98%	0%	1%	0%	0%	0%	F	0.089	F	0.505	14000	
20) = 100.11 01	To:		-6656 Monro			0,0		0,0	0 / 0	0,0	•	0.000	•	0.000	000	
	From:		5-6656 Elder													
Monroe St	Town of Hern	ndon	4600	F	98%	0%	1%	0%	0%	0%	F	0.098	F	0.520	4800	ı
	To		Pine St													
Monroe St	Town of Hern	ndon	4000	F	98%	0%	1%	0%	0%	0%	С	0.106	F	0.563	4300	
9	To:		Park Ave													
	From:		Monroe St													
Park Ave	Town of Hern	ndon	4600	F	98%	0%	1%	0%	0%	0%	F	0.101	F	0.547	4800	
	To: From:		Grant St				\Box									
28)Park Ave	Town of Herr	ndon	4500	F	98%	0%	2%	0%	0%	0%	F	0.102	F	0.608	4800	- 1
	To:	Ι	Oranesville R	?d												
Dropos illo Dd	Town of Hern	ndan .	Park Ave	NI.	98%	0%	2%	00/	0%	0%	N	0.101	F	0.599	5500	1
Dranesville Rd	TOWN OF HEI	10011	5200	N	90%	0%	<u> </u>	0%	0%	0%	IN	0.101	Г	0.599	5500	'
	To: From:		Worchester S													
28 Dranesville Rd	Town of Hern	ndon	5200	F	98%	0%	2%	0%	0%	0%	С	0.101	F	0.599	5500	ı
	To:	I	Herndon Pkw	/y												
Dranesville Rd	Town of Hern	ndon 0.23	11000	F	99%	0%	1%	0%	0%	0%	F	0.099	F	0.531	12000	- 1
9	To:	1	NCL Herndo	n												
ast	From:	1	WCL Herndo	n												
Dulles Toll Rd	Fairfax County (Ma		36000	G	98%	0%	0%	0%	0%	0%	F	0.112	F		43000	(
	Combined Traffic Estimates for 2 Parallel	'		G	98%	0%	1%	0%	1%	0%	F	0.088	F	0.648	87000	(
	To:	29-7100 Fairfax				0 70		0 70	1 /0	070	•	0.000	•	0.010	0,000	
not.	From				2234011											
est Dulles Toll Rd	Town of Harndan (A		WCL Herndo		08%	0%	10/-	0%	10/	0%	F	0.112	F		44000	(
6/ Builes Toll Flu	•	<i>'</i>									•			0.649		
	Combined Trailic Estimates for 2 Parallel				98%	υ%	1%	0%	1%	0%	F	0.088	Г	0.648	8/000	(
Dulles Toll Rd	Town of Herndon (N Combined Traffic Estimates for 2 Parallel To	Roadways on this Route:		G G	98% 98%	0% 0%	1% 1%	0% 0%	1% 1%	0% 0%	F F	0.112 0.088	F	0.648		44000 87000

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

T	าเพท	0	f H	ern	don	

Route	Length	AADT	QA	4Tire	Bus	2Axle 3+	Truck Axle 1Tra		QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
own of Herndon		From	c.			Herndon S	Pahaal			-					
(202		320	R			Heriidon S	SCHOOI			NA			NA		1991
606)		To	c			Herndon S	School								
		From				SCL Her	ndon								
Van Buren St	0.25	12000	F	99%	1%		% 0%	0%	F	0.095	F	0.523	13000	F	2020
		To From	-			Herndon	Pkwv			\neg —					
Van Buren St	0.23	5200	F	99%	1%	1% 0	% 0%	0%	F	0.093	F	0.510	5500	F	2020
Van Buren St	0.27	6600 From	G	99%	1%	Alabam 1% 0	a Dr % 0%	0%	С	0.096	F	0.593	7000	G	2020
		To	-			Spring	St			—					
Van Buren St	0.25	6500	F	99%	1%		% 0%	0%	F	0.099	F	0.539	6900	F	2020
Van Buren St	0.20	5100	F	99%	1%	1% 0	% 0%	0%	F	0.099	F	0.67	5400	F	2020
Van Buren St	0.20	To	<u> </u>	33 /6	1 /0	Elden		0 /6		0.033	•	0.07	3400	'	2020
		From				Van Bur									
Spring St	0.41	6400	F	99%	0%		% 0%	0%	С	0.093	F	0.557	6800	F	2020
		To													
Spring St	0.22	8100	i G	99%	0%	Victory 1% 0	Dr % 0%	0%	F	0.091	F	0.557	8600	G	2020
004) Opining St	0.22			0070	0 /0			0 /0			,	0.007	0000	J	2020
Spring St	0.19	28000	G	99%	0%	Herndon 1% 0	Pkwy % 0%	0%	F	0.092	F	0.533	30000	G	2020
Spring St	0.19	20000	, G	JJ /0	0 /0	SCL Her		0 %	1"	0.032	'	0.555	30000	G	2020
		From													
Sterling Rd	0.24	30000		99%	0%	1% 0	mdon % 0%	0%	F	0.087	F	0.522	32000	_	2020
Sterling Rd	0.24	30000		99%	076			0%	Г	0.067	г	0.522	32000	Г	2020
Otavlina Dd	0.01	From	<u> </u>	000/	00/	Herndon		00/		0.007		0.551	11000		0000
Sterling Rd	0.31	10000	F	99%	0%	1% 0	% 0%	0%	С	0.087	F	0.551	11000	F	2020
\sim		To From				Crestvie									
Sterling Rd	0.38	14000	F	99%	0%		% 0%	0%	F	0.087	F	0.519	14000	F	2020
		From	c c		S	SR 228 El R 228 Monroe									
656) Elden St	0.67	15000	F	99%	0%		% 0%	0%	F	0.085	F	0.514	16000	F	2020
030) =10011 01	• • • • • • • • • • • • • • • • • • • •	To									-			•	
Elden St	0.35	22000	: <u> </u>	99%	0%	Herndon 1% 0	% 0%	0%	F	0.087	F	0.531	23000	F	2020
656) Elden St	0.55	22000	<u> </u>	33 /6	0 /0	ECL Her		0 /6		0.067	'	0.551	23000	'	2020
		From													
Herndon Pkwy		14000	F	98%	0%	235-6656 Ste	% 0%	0%	С	0.093	F	0.537	14000	E	2020
658) Herridon F Kwy		14000		30 /6	0 76			0 /6		0.033	•	0.557	14000	F F F F F F F F F F F F F F F F F F F	2020
N. I. I. and A. Blanco	0.40	From	┺	000/	00/	SR 228 EI		00/				0.540	0700		000
Herndon Pkwy	0.48	8200	F	98%	0%	1% 1	% 0%	0%	С	0.098	F	0.546	8700	F	2020
\sim		From	-			Campbell									
Herndon Pkwy	0.23	8800	F	98%	0%	1% 1	% 0%	0%	F	0.097	F	0.551	9400	F	2020
		To From				235-6631 Var	Buren St								
Herndon Pkwy	0.95	13000	G	98%	0%		% 0%	0%	F	0.098	F	0.625	14000	G	2020
		To				235-6654 S									
658) Herndon Pkwy	0.61	7900		98%	0%	Spring 1% 1	St 0%	0%	F	0.097	F	0.58	8400	F	2020
Herndon Pkwy	0.01	To		JU /6	0 /0	Elden		0 /6	-	0.037	,	0.50	0-100		2020
		From	:												
Herndon Pkwy		6200		98%	0%	1% 0	% 0%	0%	С	0.102	F	0.660	6600	F	2020
		5200		3070	3,0			0 /0				0.000	5550		_5_(
Horndon Bluns		7400		079/	00/	SR 228 Drane		00/		0.092		0.560	7800	_	2020
Herndon Pkwy		7400	F	97%	0%		% 0%	0%	С	0.032	F	0.569	7000		2020
		From	1	0701	001	235-6883 Cre		001	_	0.001	_	0.500	40000	_	000
Herndon Pkwy		11000	F	97%	0%		% 0%	0%	F	0.091	F	0.532	12000	F	2020
						235-6656 Ste									
Oranda de con Do	0.40	From	<u> </u>	000/	00/	Herndon		00/		0.000	_	0.555	10000	_	0000
Crestview Dr	0.40	9700	F	99%	0%		% 0%	0%	С	0.096	F	0.555	10000	F	2020
		To	1			NCL Hei									

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

						Town of Herndon							
Route	Length	AADT	QA	4Tire	Bus	Truck 2Axle 3+Axle 1Trail 2Trail	QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Herndon													
Ferndale Avenue		3400	G			Elden Street		0.099	F	0.531	3400	G	2020
		To:				Vine Street							
Ferndale Avenue		3700	G			Park Ave		0.101	F	0.553	3700	G	2020
		To:				Herndon Parkway							
		From:				1st Street							
Monroe St		700	F					0.12	F	0.593	700	F	2020
		To:				2nd Street							
		From:				Alabama Dr							
Old Dominion Avenue		100	F					0.163	F	0.5	100	F	2020
		To:				Aspen Dr							

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

_						Truck		K		Dir			
Route	Length A	ADT	QA	4Tire	Bus	2Axle 3+Axle 1Trail 2Trail	QC	Factor	QK	Factor	AAWDT	QW	Year
Town of Herndon													
		From:				South of Spring Street							
Victory Dr	7	730	F					0.098	F	0.522	730	F	2020
		To:				End of Road							

6/13/2021