2019

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

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 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.

1 Trail 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

Special Routes

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	ute

Frontage Road (F precedes frontage route number)

Bus	Bus - Business Route
20	Bypas - Bypass Route
(23)	Truck - Truck Route
ALT	ALT - Alternate Route
(220)	Wye - Wye Route connector
(9	

Secondary Route

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 2019

Annual Average Daily Traffic Volume Estimates By Section of Route Town of Herndon

						_		Tru	ıck			K		Dir		
Route	Jurisdiction	n Length	AADT	QA	4Tire	Bus		3+Axle			QC	Factor	QK	Factor	AAWDT	Q۷
	From:	SCL Herndon														
₂₂₈)Elden St	Town of Hern	idon 0.24	38000	F	97%	1%	1%	0%	0%	0%	F	0.089	F	0.528	NA	
<u> </u>	To: From:	Н	erndon Pkw	/y												
228)Elden St	Town of Hern	ndon 0.16	23000	G	98%	0%	1%	0%	0%	0%	F	0.087	F	0.589	24000	G
<u> </u>	To:		Alabama Dr				\neg \vdash									
228 Elden St	Town of Hern		20000	G	98%	0%	1%	0%	0%	0%	F	0.086	F	0.536	21000	(
	To-T		Sterling Rd													
Elden St	From: L Town of Hern		15000	G	98%	0%	1%	0%	0%	0%	С	0.079	F	0.532	16000	(
220) = 0000 01	TF								• , •				-			
228)Elden St	From Town of Hern	idon 0.09	Center St 16000	G	98%	0%	1%	0%	0%	0%	F	0.075	F	0.534	17000	(
28 Liden St	TOWN OF HEILI	0.09	10000	G	90 /6	0 /0	1 /0	0 /6	0 /6	0 /6	'	0.073	'	0.554	17000	•
	To: From:		Spring St								_					
Elden St	Town of Hern		16000	G	98%	0%	1%	0%	0%	0%	F	0.078	F	0.532	17000	(
<u> </u>	To: From:		6656 Monro -6656 Elden													
228 Monroe St	L Town of Hern		6400	G	98%	1%	1%	0%	0%	0%	F	0.1	F	0.590	6700	(
226)	- F	0.00				1 70		070	070	070	•	0.1	•	0.000	0700	`
Manyon Ct	Town of Hern	ndon 0.26	Pine St 5400	G	98%	1%	1%	00/	0%	00/	С	0.095	F	0.611	5700	,
Monroe St	Town of herri	10011 0.26	Park Ave	G	90%	170	1%	0%	0%	0%	C	0.095	Г	0.011	5700	(
	From:		Monroe St													
228)Park Ave	Town of Hern		6600	G	98%	1%	1%	0%	0%	0%	F	0.095	F	0.562	7000	(
	To		Grant St													
228)Park Ave	From:L Town of Herne	ndon 0.14	7000	G	98%	1%	1%	0%	0%	0%	F	0.095	F	0.597	7400	(
20)	To:		ranesville R				Ť	• / •	• , •		-		-			
	From:		Park Ave													
Dranesville Rd	Town of Hern	ndon 0.08	7700	N	98%	1%	1%	0%	0%	0%	Ν	0.092	F	0.581	8200	1
<u> </u>	To	V	Vorchester S	St			\neg \vdash									
Dranesville Rd	Town of Hern	ndon 0.26	7700	G	98%	1%	1%	0%	0%	0%	С	0.092	F	0.581	8200	(
	To	ŭ	erndon Pkw	78.7												
228)Dranesville Rd	From L Town of Hern		17000	G	99%	0%	1%	0%	0%	0%	F	0.094	F	0.614	18000	(
226) Brancoville ria	To:		CL Herndon		0070	0 70		070	0 70	070	•	0.004	•	0.014	10000	`
ast	From		/CL Herndo				1									
267) Dulles Toll Rd	L Town of Herndon (N		48000	F	98%	0%	0%	0%	0%	0%	F	0.112	F		57000	-
07 201100 1011110	Combined Traffic Estimates for 2 Parallel F	,		F	98%	0%	1%	0%	1%	0%	F	0.088	F	0.648	116000	
	Tor	29-7100 Fairfax				0 70		0 /0	1 /0	0 /0	'	0.000	'	0.040	110000	'
lost	From		CL Herndo				$\overline{}$									
Vest 267 Dulles Toll Rd	Town of Herndon (M		50000	F	98%	0%	1%	0%	1%	0%	F	0.112	F		59000	
207 Builds Toll Tid	Combined Traffic Estimates for 2 Parallel F	,	98000	F	98%	0%	1%	0%	1%	0%	F	0.088	F	0.648	116000	
	Combined Traine Latinates for a raidle f	noadways on this noute.		Г	JU /0	U /0	1 /0	U /0	1 /0	U /0		0.000		0.040	110000	Г

4/16/2020 7

Virginia Department of Transportation Traffic Engineering Division 2019 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Herndon

						rown or nemi	2011								
Route	Length	AADT	QA	4Tire	Bus	Tr			QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Herndon		From				II 1 C-1	.1			1					
(2020	0.28	320	R			Herndon Schoo)]			NA			NA		1991
9606)		To				Herndon School	ol								
		From				SCL Herndon									
6631) Van Buren St	0.25	22000	G	99%	1%	1% 0%	0%	0%	F	0.099	F	0.544	24000	G	2019
		To From				Herndon Pkwy	/								
6631) Van Buren St	0.23	8400	G	99%	1%	1% 0%	0%	0%	F	0.103	F	0.6	8900	G	2019
<u> </u>		To				Alabama Dr									
OGG31) Van Buren St	0.27	8900	G	99%	1%	1% 0%	0%	0%	С	0.096	F	0.593	9500	G	2019
		To From				Spring St									
OGG31) Van Buren St	0.25	11000	G	99%	1%	1% 0%	0%	0%	F	0.091	F	0.543	11000	G	2019
$\overline{}$		To				Coral Rd									
S631) Van Buren St	0.20	7400	G	99%	1%	1% 0%	0%	0%	F	0.095	F	0.608	7900	G	2019
<u> </u>		To				Elden St									
$\widehat{}$		From				Van Buren St									
Spring St	0.41	10000	G	99%	0%	0% 0%	0%	0%	С	0.093	F	0.587	11000	G	2019
<u> </u>		To From				Victory Dr									
Spring St	0.22	11000	G	99%	0%	0% 0%	0%	0%	F	0.091	F	0.557	12000	G	2019
		To From				Herndon Pkwy	/								
Spring St	0.19	38000	G	99%	0%	0% 0%	0%	0%	F	0.092	F	0.533	40000	G	2019
<u> </u>		To				SCL Herndon									
$\widehat{}$		From				WCL Herndon									
Sterling Rd	0.24	37000	G	99%	0%	0% 0%	0%	0%	F	0.083	F	0.520	39000	G	2019
<u> </u>		To From				Herndon Pkw									
Sterling Rd	0.31	12000	G	99%	0%	0% 0%	0%	0%	С	0.08	F	0.692	13000	G	2019
<u> </u>		To From				Crestview Dr									
Sterling Rd	0.38	16000	G	99%	0%	0% 0%	0%	0%	F	0.076	F	0.697	17000	G	2019
<u> </u>		To From			C	SR 228 Elden S									
Elden St	0.72	19000	G	99%	<u>s</u>	R 228 Monroe St; E 0% 0%	0%	0%	F	0.078	F	0.524	20000	G	2019
5656) = 10011 01	•	To							•	_	-			-	
6656) Elden St	0.30	30000	G	99%	0%	Herndon Pkwy	0%	0%	F	0.085	F	0.543	32000	G	2019
Elden St	0.00	To	Ť	0070	0 70	ECL Herndon		0 70	•		·	0.010	02000	Ğ	2010
		From				235-6656 Sterling									
6658) Herndon Pkwy	1.02	21000	G	98%	1%	1% 0%	0%	0%	С	0.097	F	0.578	22000	G	2019
		Tα				SR 228 Elden S									
Herndon Pkwy	0.48	13000	G	98%	1%	1% 0%	0%	0%	С	0.101	F	0.644	14000	G	2019
,		To				Campbell Way									
6658) Herndon Pkwy	0.23	13000	G	98%	1%	1% 0%	0%	0%	F	0.098	F	0.647	14000	G	2019
,		To								 1					
6658) Herndon Pkwy	0.95	18000	G	98%	1%	235-6631 Van Bur 1% 0%	0%	0%	F	0.098	F	0.625	19000	G	2019
5656)	0.00	То	Ť	0070	1 70	235-6654 Spring		0 70	•		·	0.020	10000	Ğ	
		From				Spring St									
Herndon Pkwy	0.61	14000	G	98%	1%	1% 0%	0%	0%	F	0.091	F	0.513	14000	G	2019
		To	<u> </u>			Elden St									
Lloweder Division	1 10	From	<u> </u>	000/	001	Elden St	001	00/		0.105	_	0.700	11000	_	0010
Herndon Pkwy	1.42	10000	G	98%	0%	1% 0%	0%	0%	С	0.105	F	0.730	11000	G	2019
		From				SR 228 Dranesvill					_				
Herndon Pkwy	1.32	11000	G	98%	1%	1% 0%	0%	0%	С	0.087	F	0.606	11000	G	2019
<u> </u>		To From				235-6883 Crestvie									
6660) Herndon Pkwy	0.38	15000	G	98%	1%	1% 0%	0%	0%	F	0.082	F	0.53	16000	G	2019
$\overline{}$		To				235-6656 Sterling	Rd								

4/16/2020 8

Virginia Department of Transportation Traffic Engineering Division 2019 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Herndon

						. •										
Route	Length	AADT	QA	4Tire	Bus		Trı 3+Axle			QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Herndon																
		From	L				ndon Pkwy					_			_	
6883) Crestview Dr	0.40	12000	G	98%	1%	1%	0%	0%	0%	С	0.102	F	0.603	13000	G	2019
<u> </u>		To				NCI	L Herndon									
		From:				Eld	len Street									
Ferndale Avenue		4800	G								0.099	F	0.531	4800	G	2019
		To				Vi	ne Street									
		From:				P	ark Ave									
Ferndale Avenue		4700	G								0.101	F	0.553	4700	G	2019
		To:				Hernd	lon Parkwa	ay								
		From:				1:	st Street									
Monroe St		990	G								0.103	F	0.659	990	G	2019
		To				2r	nd Street									
		From:				Ala	abama Dr									
Old Dominion Avenue 160									0.126	F	0.595	160	G	2019		
		To				A	spen Dr									
		From:				South o	f Spring St	root								
Victory Dr		870	South of Spring Street							0.1	F	0.506	870	G	2019	
violory Di		To:				En	d of Road				—ĭ∵	•	0.500	570	J	2010
			I			Enc	a or Koad				ı					

4/16/2020 9