2020

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

where available

Special Locality Report 151

City of Fairfax

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 City of Fairfax

		City of Fairfax			Truck			K		Dir		
Route	Jurisdiction	Length AADT QA 4	Tire Bus		3+Axle 1Trai		QC	Factor	QK	Factor	AAWDT	С
~~	From:	WCL Fairfax							_			
Lee Highway	City of Fairfax	0.16 28000 G 9	9% 0%	0%	0% 0%	0%	F	0.088	F	0.603	30000	(
Lag Highway	City of Fairfay	Jermantown Rd	00/ 00/	00/	00/ 00/	00/	F	0.001	F	0.606	24000	
Lee Highway	City of Fairfax		9% 0%	0%	0% 0%	0%	Г	0.081	Г	0.606	24000	(
29) (50) Lee Highway	City of Fairfax	US 50; SR 236 Main St 0.96 22000 G 99	9% 0%	0%	0% 0%	0%	F	0.083	F	0.541	24000	
9) (50) Lee Highway	oity of Famax		70 070	——————————————————————————————————————	070 070	0 70	•	0.000	•	0.541	24000	
9 (50) Lee Highway	City of Fairfax	SR 123 Chain Bridge Rd 0.21 21000 G 99	9% 0%	0%	0% 0%	0%	F	0.075	F	0.629	23000	
9) (30) =00 :	To-				0,0 0,0	0,70	•	0.070	•	0.020		
) (50) Lee Highway	City of Fairfax	University Dr 0.59 27000 G 99	9% 0%	0%	0% 0%	0%	F	0.081	F	0.604	29000	
3 3	To	Plantation Parkway										
) (50) Lee Hwy	City of Fairfax	-	9% 0%	0%	0% 0%	0%	F	0.083	F	0.626	40000	
	To	Draper Drive										
(50) Lee Highway	City of Fairfax		9% 0%	0%	0% 0%	0%	F	0.091	F	0.517	30000	
	Tai	US 50										
Lee Highway	City of Fairfax		9% 0%	0%	0% 0%	0%	Ν	0.091	F	0.517	30000	
)	To:	US 50 Fairfax Circle		<u> </u>								
(237)Lee Highway	City of Fairfax		7% 0%	1%	1% 0%	0%	Ν	0.087	F	0.529	NA	
	To:	ECL Fairfax										
\	From:	WCL Fairfax										
Lee Jackson Hwy	City of Fairfax	0.57 24000 G 9	1%	1%	0% 0%	0%	F	0.077	F	0.616	26000	
· · · · · · · · · · · · · · · · · · ·	From	US 29 S, Lee Highway	2001 001		001 001	201		0.000		0.544	0.4000	
Lee Highway	City of Fairfax	0.96 22000 G 9	9% 0%	0%	0% 0%	0%	F	0.083	F	0.541	24000	
\ 1.50 150	To: From:	SR 123 Chain Bridge Rd	00/ 00/	00/	00/ 00/	00/		0.075		0.000	00000	
Lee Highway	City of Fairfax	0.21 21000 G 9	9% 0%	0%	0% 0%	0%	F	0.075	F	0.629	23000	
Lee Highway	City of Foirfox	University Dr 0.59 27000 G 99	9% 0%	0%	0% 0%	0%	F	0.081	F	0.604	29000	
Lee Highway	City of Fairfax		1976 076	0%	0% 0%	0%	Г	0.061	г	0.004	29000	
29 Lee Hwy	City of Fairfax	Plantation Parkway 0.68 37000 G 99	9% 0%	0%	0% 0%	0%	F	0.083	F	0.626	40000	
Lee Hwy	Oity of Famax			——————————————————————————————————————	070 070	0 /8	•	0.000	•	0.020	40000	
29 Lee Highway	City of Fairfax	Draper Drive 0.28 28000 F 9	9% 0%	0%	0% 0%	0%	F	0.091	F	0.517	30000	
(29) 200 r ng.may	To-				070 070	070	•	0.001	•	0.017	00000	
Arlington Blvd	City of Fairfax	US 29 N, Lee Highway 0.28 33000 G 9	1%	1%	0% 0%	0%	F	0.080	F	0.543	36000	
201)		SR 237 Pickett Rd	.,.		270			2.300				
Arlington Blvd	City of Fairfax		1%	1%	0% 0%	0%	N	0.085	F	0.592	31000	
, ,	To:	ECL Fairfax										
	From:	SCL Fairfax										
Chain Bridge Rd	City of Fairfax		7% 0%	1%	1% 1%	0%	F	0.075	F	0.558	24000	
	To:	Judicial Dr										

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

				4			Tru	ck			K	01/	Dir	A A) A/DT	- 014
Route	Jurisdiction	Length AAD	ΓQA	4Tire	Bus	2Axle	3+Axle	1Trail	2Trail	QC	Factor	QK	Factor	AAWDT	QW
Chain Bridge Dd	From:			97%	0%	10/	10/	10/	0%	F	0.086	F	0.571	14000	F
123 Chain Bridge Rd	City of Fairfax		_	9/%	0%	1%	1%	1%	0%	Г	0.066	Г	0.571	14000	Г
123)Chain Bridge Rd	City of Fairfax	SR 236 M 0.19 1100		97%	0%	1%	1%	1%	0%	F	0.086	F	0.61	12000	F
123 Chain Bhuge Hu	Oity of Fairlax		_	31 /6	0 /0	1 /0	1 /0	1 /0	0 /0		0.000	'	0.01	12000	'
123)Chain Bridge Rd	City of Fairfax	Whitehea 0.10 1000		97%	0%	1%	1%	1%	0%	F	0.088	F	0.642	11000	F
23 Onain Bridge Hd	Oity of Fairlax		_	31 /6	0 /6	1 /6	1 /0	1 /0	0 /6	'	0.000	'	0.042	11000	
23) Chain Bridge Rd	City of Fairfax	0.58 1200		97%	0%	1%	1%	1%	0%	F	0.086	F	0.592	13000	F
23 Chair Bridge Hu	Oily of Fairlax		_	31 /6	0 /6	1 /0	1 /0	1 /0	0 /6	'	0.000	'	0.532	13000	
23)Chain Bridge Rd	City of Fairfax	US 29; US 50 0.35 3100	-	97%	0%	1%	1%	1%	0%	F	0.078	F	0.504	34000	G
23 Onain Bridge Hu	To:	I- 66 NCL		31 /6	0 /6	1/0	1 /0	1 /0	0 /6	'	0.076	'	0.504	34000	G
	From:	US 29 Lee Highway; US		keon Huzy											
Main St	City of Fairfax	0.94 2800		99%	0%	0%	0%	0%	0%	F	0.073	F	0.622	30000	G
.30) " "	To	West													
36) Main St	City of Fairfax	7700		99%	0%	0%	0%	0%	0%	F	0.08	F	0.583	8100	F
30)	Combined Traffic Estimates for 2 Parallel Roady			99%	1%	0%	0%	0%	0%	F	0.076	F	0.574	24000	G
	To:	North S													
	From:	Old Lee		000/	00/		00/	00/	00/	_	0.070	_	0.54		
Main St	City of Fairfax	1.31 2900	0 G	99%	0%	0%	0%	0%	0%	С	0.078	F	0.51	NA	
	To	Whitacre		200/	00/		00/	00/	00/		0.000	_	0.504	00000	
Little River Tpke	City of Fairfax	0.57 3000 ECL Fai	-	99%	0%	0%	0%	0%	0%	F	0.083	F	0.521	32000	G
	Erono														
North St	City of Fairfax	SR 236 W, 1 0.30 1500		98%	1%	0%	0%	0%	0%	С	0.090	F	0.581	16000	G
North St	Combined Traffic Estimates for 2 Parallel Roady			99%	1%	0%	0%	0%	0%	F	0.076	F	0.574	24000	G
	To:	SR 236 E, I		0070	170		0 70	0 70	0 70	•	0.070	•	0.07 1	21000	ŭ
	From:	SR 236 M	ain St												
Pickett Rd	City of Fairfax	0.49 1800		95%	0%	1%	1%	3%	0%	F	0.088	F	0.539	19000	F
	To	Colonial	Ave												
Pickett Rd	City of Fairfax	1.17 1700		95%	0%	1%	1%	3%	0%	С	0.089	F	0.523	18000	F
<i>y</i>	Too	US 50 Arling	on Blvd												
Arlington Blvd	City of Fairfax	0.28 3300		98%	1%	1%	0%	0%	0%	F	0.080	F	0.543	36000	G
	To	US 29 Lee H	iohway												
237) (29) Lee Highway	From: City of Fairfax	0.13 2500		97%	0%	1%	1%	0%	0%	N	0.087	F	0.529	NA	
23)	To:	ECL Fai													

Virginia Department of Transportation Traffic Engineering Division 2020

Annual Average Daily Traffic Volume Estimates By Section of Route

City of Fairfax -----Truck-----Dir AAWDT QW Bus Length AADT QA QK Route 4Tire Year 2Axle 3+Axle 1Trail 2Trail Factor Factor Fairfax County Fairfax County Line Phoenix Dr 0.09 30 N NA NA 02/02/2015 Fairfax County Line City of Fairfax Fairfax High School (9128) Rebel Run 4600 R NA NA 03/09/2009 US 29 Lee Hwy Eleven Oak Elem School 9598 190 R NA NA 1991 Eleven Oak Elem School SR 236 Main St Judicial Dr 0.22 7600 F 98% 0% 1% 0% 0% 0% 0.087 F 0.526 8000 F 2020 1 Page Ave 6000 0% 1% 0% С F Judicial Dr 0.43 98% 0% 0% 0.09 0.551 6300 2020 1 SR 123 Chain Bridge Rd SR 123 Chain Bridge Rd F 0.19 2700 F 98% 0% 0% С 0.089 F 0.562 2900 2020 2) Kenmore Dr 1% 1% 0% University Dr University Dr 99% 0% 0% 0% С 0.099 F 0.29 3200 0% 0% F 0.54 3400 2020 3 Layton Hall Dr Old Lee Hwy SCL Fairfax 0% С F Burke Station Rd F 99% 0% 1% 0% 0.099 F 0.627 4100 2020 0.17 3900 0% (6623) Barbara Ann Lane Burke Station Rd 0.31 3900 F 99% 0% 1% 0% 0% 0% 0.097 F 0.606 4200 F 2020 (6623) SR 236 Main St SCL Fairfax С 0.27 4700 F 99% 0% 0% 0% 0% 0% 0.102 F 0.566 5000 F 2020 Roberts Rd 6625 Sager Ave 0.25 2000 G 99% 0% 0% 0% 0% 0% F 0.093 0.616 2100 G 2020 Roberts Rd (6625) SR 236 Main St SCL Fairfax 0.38 3900 F 95% 1% 3% 0% 0% С 0.090 F 0.555 4100 F 2020 University Dr 0% (6627) Armstrong St 0.21 11000 G 95% 1% 3% 0% F 0.092 F 0.536 11000 G 2020 6627 University Dr 0% 0% South St University Dr 0.12 4900 N 95% 1% 3% 0% 0% 0% Ν 0.102 F 0.535 5200 Ν 2020 6627 SR 236 Main St 0.21 4900 F 95% 1% 3% 0% 0% 0% F 0.102 0.535 5200 F 2020 6627 University Dr Whitehead St 4700 F F F 0.12 95% 1% 3% 0% 0% 0.104 F 0.503 5000 2020 6627 University Dr 0% Layton Hall Dr Layton Hall Rd F University Dr 0.72 2300 95% 1% 3% 0% 0% 0% 0.107 0.578 2400 2020 (6627) 29 & 50; Lee Hwy SR 236 Main S 0.41 8300 F 98% 0% 1% 0% 0% 0% F 0.089 0.515 8800 F 2020 (6628) Old Lee Hwy Layton Hall Rd Layton Hall Dr 0.49 9500 F 98% 0% 1% 0% 0% F 0.088 0.523 10000 F 2020 Old Lee Hwy 0% (6628) Heritage Lane Old Lee Hwy 0.19 8300 F 98% 0% 1% 0% 0% 0% F 0.091 0.529 8800 F 2020 (6628) Brookwood Rd С 9200 F 0.25 8700 98% 0% 1% 0% 0.093 0.535 2020 Old Lee Hwy 0% 6628 Cornell Rd

6/13/2021

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

Citv		

						0.07										
Route	Length	AADT	QA	4Tire	Bus			uck 1Trail		QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
City of Fairfax																
6628 Old Lee Hwy	0.15	9000	F	98%	0%	1%	ornell Rd 0%	0%	0%	F	0.094	F	0.563	9600	F	2020
6628) Old Lee Hwy	0.55	8200 To:	F	98%	0%	1%	ebel Run 0% 50 Lee Hw	0%	0%	F	0.093	F	0.548	8700	F	2020
		From:									1					
6634) Jermantown Rd	0.30	10000	F	97%	1%	2%	Lee Highv 0%	0%	0%	С	0.09	F	0.510	11000	F	2020
6634) Jermantown Rd	0.50	12000	F	98%	0%	US 50 Le 1%	ee Jackson 1%	1 Hwy 0%	0%	С	0.09	F	0.693	13000	F	2020
(6634) Jermantown Rd	0.40	11000 To:	F	97%	1%	2%	sborough (0%	0%	F	0.088	F	0.729	11000	F	2020
							CL Fairfax									
Addison Rd		230	F				llier Road				0.111	F	0.942	230	F	2020
		10:				Sage	ger Avenue	<u> </u>								
Confederate Lane		190 To	G				anta Street	į.			0.118	F	0.667	190	G	2020
							eb Street									
Cornwall Rd		400 To:	G				Post Road				0.122	F	0.619	400	G	2020
							Hill Place									
Democracy Ln		590	G				itehead St				0.107	F	0.511	590	G	2020
		10.					ton Hall D									
Draper Dr		2900 To:	G				29, US 50				0.087	F	0.653	2900	G	2020
		10.				King	gsbridge D	r								
Overleand Ot		From:				Jerma	nantown Ro	d				_	0.004	0000	0	0000
Orchard St		2000 _{To:}	G			27	I aam A-				0.133	F	0.624	2000	G	2020
							Lean Ave									
Pickett Rd		From:	-				US 50				0.088	F	0.652	13000	G	2020
I IONGIL INU		13000 To:	G			NC	CL Fairfax				0.000	'	0.002	13000	u	2020
		From:					n Bridge R									
Sager Ave		1900	G			Chall	i bridge K	tu			0.114	F	0.668	1900	G	2020
		To:				Dv	vight Ave						2.300	. 300		
		From:					n Bridge R									
School St		920	F			Chair	- Drage R				0.111	F	0.635	920	F	2020
		To:				Trov	wbridge St	t								
		From:				٤	SR 236									
Whitacre Rd		3000	G								0.129	F	0.799	3000	G	2020
		To				Ba	ccarat Dr									
		From:				Howe	erton Aven	nue								
												_	0.000	00	_	0000
Wilson St		90	F								0.111	F	0.636	90	F	2020

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