2009

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

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.

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	te
(F241)	Frontage Road (F	precedes frontage route number)
(600)	Secondary Route	

Special Routes

Bus	Bus - Business Route
29	Bypas - Bypass Route
	Truck - Truck Route
ALT	ALT - Alternate Route
(220)	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 2009 Annual Average Daily Traffic Volume Estimates By Section of Route City of Fairfax

		City of Fairfax					Tru	ıck			K		Dir		
Route	Jurisdiction	Length AADT (QA	4Tire	Bus		3+Axle			QC	Factor	QK	Factor	AAWDT	Q۷
	From:	WCL Fairfax													
29 Lee Highway	City of Fairfax	0.16 39000	G	99%	0%	0%	0%	0%	0%	F	NA			42000	G
~	To: From:	Jermantown Rd													
29 Lee Highway	City of Fairfax	0.44 36000	G	99%	0%	0%	0%	0%	0%	F	NA			38000	G
~	To. From:	US 50; SR 236 Main	n St												
29 50 Lee Highway	City of Fairfax	0.96 37000	G	99%	0%	0%	0%	0%	0%	F	0.076	F		40000	G
	To: From:	SR 123 Chain Bridge	e Rd												
29 (50) Lee Highway	City of Fairfax		G	99%	0%	0%	0%	0%	0%	F	0.076	F		37000	C
	To:	University Dr													
29) (50) Lee Highway	City of Fairfax		G	99%	0%	0%	0%	0%	0%	F	NA			44000	
29) (30) 200 :	T				0,0		0,0	0,0	0,0	•					
29) (50) Lee Hwy	City of Fairfax	Plantation Parkway 0.68 40000	g G	99%	0%	0%	0%	0%	0%	F	NA			42000	(
29) (50) Lee Hwy	City of Fairfax		<u> </u>	9976	076	0 /6	0 /6	076	076		INA			42000	
~ Las Historia	From:	Draper Drive	_	000/	007		00/	00/	00/		NIA			40000	_
29 (50) Lee Highway	City of Fairfax	0.28 39000	G	99%	0%	0%	0%	0%	0%	F	NA			42000	(
~~	To: From:	US 50													
Lee Highway	City of Fairfax	0.08 39000	N	99%	0%	0%	0%	0%	0%	N	NA			42000	١
<i>~</i>	To: From:	US 50 Fairfax Circl	le												
29 (237) Lee Highway	City of Fairfax	0.13 28000	N	98%	0%	1%	0%	0%	0%	Ν	0.085	Ν	0.529	31000	١
\sim	То	ECL Fairfax													
	From:	WCL Fairfax													
Lee Jackson Hwy	City of Fairfax	0.57 36000	G	98%	0%	1%	1%	1%	0%	F	0.076	F		39000	C
~	To: From:	US 29 S, Lee Highw	vay												
29 Lee Highway	City of Fairfax	0.96 37000	G	99%	0%	0%	0%	0%	0%	F	0.076	F		40000	C
~ · · · · · · · · · · · · · · · · · · ·	To:	SR 123 Chain Bridge	e Rd												
50 29 Lee Highway	City of Fairfax		G	99%	0%	0%	0%	0%	0%	F	0.076	F		37000	G
	To	University Dr													
50 (29) Lee Highway	City of Fairfax		G	99%	0%	0%	0%	0%	0%	F	NA			44000	G
29 200 : "9	To To				0,0		0,0	0,0	0,0	•					
To Loo Hung	City of Fairfax	Plantation Parkway 0.68 40000	y G	99%	0%	0%	0%	0%	0%	F	NA			42000	(
50) (29) Lee Hwy	City of Failtax		<u> </u>	99%	076	0%	U70	070	0%	Г	INA			42000	Ċ
~~	To- From:	Draper Drive	_												
29 Lee Highway	City of Fairfax	0.28 39000	G	99%	0%	0%	0%	0%	0%	F	NA	Factor 420 380 F 400 F 370 440 420 N 0.529 310 F 390 F 400 F 370 440 420 F 370 440 420 420 420 420 420 420 420 420 42	42000	C	
	To: From:	US 29 N, Lee Highw	_												
Arlington Blvd	City of Fairfax	0.28 31000	G	98%	0%	1%	1%	1%	0%	F	0.08	F		34000	(
~ <u> </u>	To: From:	SR 237 Pickett Rd	d												
Arlington Blvd	City of Fairfax	0.03 41000	G	98%	0%	1%	1%	1%	0%	F	NA			45000	G
~	То:	ECL Fairfax													
	From:	SCL Fairfax													
123 Chain Bridge Rd	City of Fairfax	0.47 30000	G	98%	0%	0%	0%	1%	0%	F	0.078	F		32000	G
\smile	То:	Judicial Dr													

Virginia Department of Transportation Traffic Engineering Division

2009 Annual Average Daily Traffic Volume Estimates By Section of Route City of Fairfax

			ity Oi Faiire					Tru	ıck			K		Dir		
Route	Jurisdiction	Length	AADT	QA	4Tire	Bus	2Axle	3+Axle		2Trail	QC	Factor	QK	Factor	AAWDT	QW
_	From:		Judicial Dr													
123) Chain Bridge Rd	City of Fairfax	0.26	24000	G	98%	0%	0%	0%	1%	0%	F	NA			25000	G
	To: From:	S	R 236 Main S													
123 Chain Bridge Rd	City of Fairfax	0.19	22000	G	98%	0%	0%	0%	1%	0%	F	NA			24000	G
	To: From:		Whitehead S													
Chain Bridge Rd	City of Fairfax	0.10	22000	G	98%	0%	0%	0%	1%	0%	F	0.073	F		24000	G
$\overline{}$	To: From:		Kenmore Dr													
Chain Bridge Rd	City of Fairfax	0.58	26000	G	98%	0%	0%	0%	1%	0%	F	0.073	F		28000	G
<u> </u>	To: From:		9; US 50 Lee													
Chain Bridge Rd	City of Fairfax	0.35	42000	G	98%	1%	1%	0%	1%	0%	С	NA			46000	G
	To		66 NCL Fair													
Main Ct	From: City of Fairfax	US 29 Lee High				1%	1%	0%	0%	0%	F	0.077	F		44000	G
Main St	City of Fairfax	0.94	40000	G	99%	170	1%	0%	0%	0%	Г	0.077	Г		44000	G
Main Ot	To: From:	0.04	West St		000/	40/	40/	00/	00/	00/		0.075			42000	
Main St	City of Fairfax	0.21	12000	G	99%	1%	1%	0%	0%	0%	F	0.075	F		13000	G
	Combined Traffic Estimates for 2 Parallel Roadw	rays on this Route.	North St E	G	99%	0%	0%	0%	0%	0%	Г	NA			36000	G
_	From:		Old Lee Hwy	/												
₂₃₆)Main St	City of Fairfax	1.31	36000	G	99%	1%	1%	0%	0%	0%	С	0.082	F		40000	G
<u>~</u>	To: From:		Whitacre Rd													
Little River Tpke	City of Fairfax	0.57	40000	G	98%	0%	1%	0%	1%	0%	F	NA			43000	G
<u> </u>	To:		ECL Fairfax													
	From:		236 W, Mair		200/	201		00/	007	00/	_				00000	_
North St	City of Fairfax	0.30	21000	G	99%	0%	0%	0%	0%	0%	С	NA			23000	G
	Combined Traffic Estimates for 2 Parallel Roadw		236 E, Mair	G St	99%	0%	0%	0%	0%	0%	F	NA			36000	G
	From:		R 236 Main S													
Pickett Rd	City of Fairfax	0.49	26000	G	96%	0%	1%	0%	2%	0%	F	0.082	F		28000	G
201)	Tod		Colonial Ave													
Pickett Rd	From: City of Fairfax	1.17	25000	G	96%	0%	1%	0%	2%	0%	С	0.084	F		27000	G
31). 1011011 110	7				0070			0,0	_,0	0,0		0.00	•		2.000	Ū
237) (50) Arlington Blvd	City of Fairfax	0.28	31000	G Blvd	98%	0%	1%	1%	1%	0%	F	0.08	F		34000	G
237 50 Arlington Blvd	only of Fairfax				JU /0	0 /0	1 /0	1 /0	1 /0	0 /0	'	0.00	'		5-000	3
2027 Coo Lee Highway	City of Fairfax	0.13	29 Lee High 28000	way N	98%	0%	1%	0%	0%	0%	N	0.085	N	0.529	31000	N
237 29 Lee Highway	City Of Fairlax		ECL Fairfax	19	9070	U70	1 70	U70	U70	U70	IN	0.000	IN	0.029	31000	IN

8/4/2010

Virginia Department of Transportation Traffic Engineering Division 2009 Annual Average Daily Traffic Volume Estimates By Section of Route City of Fairfax

Route	Length	AADT	QA	4Tire	Bus		Truck- 3+Axle 17		(JC	K Factor	QK	Dir Factor	AAWDT	QW	Year
City of Fairfax		From				Fairfay (County Line								
F ₂₅₄ Phoenix Dr	0.09	NA				rainax C	County Line			NA			NA		
<u> </u>		To				Fairfax C	County Line								
\sim		From				Fairfax I	High School								
9 ₁₂₈ Rebel Run	0.18	4500	R			***				NA			NA		03/10/200
		10					Lee Hwy								
	0.06	From 190	R			Eleven Oak	k Elem Schoo			 NA			NA		1991
9598 29	0.00	To				Eleven Oak	k Elem Schoo	<u> </u>					INA		1331
		From					6 Main St								
1 Judicial Dr	0.22	13000	G	99%	1%	1%		% 0%	5 F	NA			14000	G	2009
		To				Pag	ge Ave								
1 Judicial Dr	0.43	10000	G	99%	1%	1%		% 0%	5 C	0.085	F		11000	G	2009
		To				SR 123 Ch	ain Bridge Ro								
		From				Unive	ersity Dr								
2 Kenmore Dr	0.19	4300	G	98%	1%	0%		% 0%	6 C	0.12	F	0.688	4700	G	2009
<u> </u>		To				SF	R 123								
O Louton Hall Dr	0.20	From	<u> </u>	000/	10/		Lee Hwy	0/ 00/		0.103	_		F200	0	2000
3 Layton Hall Dr	0.29	4800 To	G	99%	1%	0%	0% C ersity Dr	% 0%	6 C	0.103	F		5300	G	2009
		From	1												
6623) Burke Station Rd	0.17	6300	G	99%	0%	1%	Fairfax	% 0%	6 C	0.086	F		6900	G	2009
0023) = 3	•	To									-				
6623) Burke Station Rd	0.31	6400 From	G	99%	0%	1%	Ann Lane 0% C	% 0%	5 F	0.086	F		6900	G	2009
boza Barrio Giadori ria	0.01	То	Ť	0070	070		6 Main St	70 07			•		0000	Ū	2000
		From				SCL	Fairfax								
Roberts Rd	0.27	8100	G	99%	0%	0%		% 0%	ъ С	0.099	F		8800	G	2009
		Ta				Sag	ger Ave								
6625) Roberts Rd	0.25	3500 From	G	99%	0%	0%		% 0%	5 F	0.093	F		3900	G	2009
\bigcup		To				SR 236	6 Main St								
		From				SCL	Fairfax								
6627) University Dr	0.39	11000	G	97%	2%	1%	0% 0	% 0%	G C	0.093	F		12000	G	2009
		To From				Arms	strong St								
6627) University Dr	0.21	13000	G	97%	2%	1%	0% 0	% 0%	5 F	NA			14000	G	2009
$\overline{}$		To From				So	outh St			<u> </u>					
6627) University Dr	0.11	14000	N	97%	2%	1%	0% 0	% 0%	ν N	NA			15000	Ν	2009
$\overline{}$		To From				SR 230	6 Main St								
6627) University Dr	0.22	14000	G	97%	2%	1%	0% 0	% 0%	₆ F	NA			15000	G	2009
\bigcirc		To From				White	ehead St			_					
6627) University Dr	0.13	10000	G	97%	2%	1%		% 0%	5 F	NA			11000	G	2009
		To					n Hall Dr								
6627) University Dr	0.70	6800	G	97%	2%	Laytor 1%	n Hall Rd 0% C	% 0%	5 F	0.11	F		7400	G	2009
6627 University Dr	0.70	То	Ť	01 70	270		50; Lee Hwy	70 07			•		7400	Ü	2000
		From					6 Main St			i					
Old Lee Hwy	0.41	13000	G	98%	1%	1%		% 0%	₆ F	0.094	F		14000	G	2009
· .		To				Layton	n Hall Rd								
Old Lea Heav	0.40	From	<u> </u>	000/	407		n Hall Dr	0/ 00			_		40000	_	0000
6628) Old Lee Hwy	0.49	15000	G	98%	1%	1%	0% C	% 0%	_b F	0.102	F		16000	G	2009
		From					age Lane								
6628 Old Lee Hwy	0.19	13000	G	98%	1%	1%	0% 0	% 0%	5 F	NA			15000	G	2009
<u> </u>		From					wood Rd								
6628) Old Lee Hwy	0.25	14000	G	98%	1%	1%		% 0%	G C	0.095	F		15000	G	2009
$\overline{}$		To				Cor	nell Rd								

8/4/2010 9

Virginia Department of Transportation Traffic Engineering Division 2009 Annual Average Daily Traffic Volume Estimates By Section of Route City of Fairfax

						City	of Fairfax	(
Route	Length	AADT	QA	4Tire	Bus		Tru 3+Axle			QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
City of Fairfax											_					
6628) Old Lee Hwy	0.15	14000	G	98%	1%	1%	ornell Rd 0%	0%	0%	F	0.092	F		16000	G	2009
6628) Old Lee Hwy	0.55	From 14000	G	98%	1%	1%	ebel Run 0%	0%	0%	F	0.086	F		15000	G	2009
0020)	0.00	To		0070	.,,		60 Lee Hwy		0,0	•		•		.0000		2000
		From					Lee Highwa				ĺ					
Jermantown Rd	0.30	11000	G	98%	1%	1%	0%	0%	0%	С	0.088	F		12000	G	2009
<u> </u>	0.50	From	<u> </u>	000/	407		ee Jackson I		00/					45000		0000
Jermantown Rd	0.50	13000	G	98%	1%	1%	0%	0%	0%	С	0.089	F		15000	G	2009
<u> </u>		To From					sborough C	İ								
Jermantown Rd	0.40	12000	G	98%	1%	1%	0%	0%	0%	F	0.090	F		13000	G	2009
<u> </u>		То				NC	L Fairfax				J					
		From				Co	llier Road									
Addison Rd		290	G								0.097	F		290	G	2009
		To				Sag	er Avenue									
		From				Atla	anta Street									
Confederate Lane		260	G								0.124	F	0.672	260	G	2009
		To				R	eb Street									
		From				Old	Post Road									
Cornwall Rd		580	G								0.101	F		580	G	2009
		To				Park	Hill Place									
		From				Wh	itehead St									
Democracy Ln		840	G								NA			840	G	2009
		To				Layt	on Hall Dr									
		From				US	29, US 50				Ī					
Draper Dr		4100	G								NA			4100	G	2009
		To				King	gsbridge Dr									
		From				Jerm	antown Rd									
Orchard St		2900	G								NA			2900	G	2009
		To				Мс	Lean Ave									
		From					US 50				Ī					
Pickett Rd		19000	G								NA			19000	G	2009
		To				NC	L Fairfax									
		From				Chair	n Bridge Rd									
Sager Ave		2700	G								NA			2700	G	2009
		To				Dv	vight Ave									
		From				Chair	n Bridge Rd									
School St		1500	G			Cinti					0.113	F	0.747	1500	G	2009
		То				Tro	wbridge St									
		From					SR 236				Ī					
Whitacre Rd		4400	G				J. 250				NA			4400	G	2009
TTIMOTO NO		7700 To	Ť			Ba	ccarat Dr							1 100	_	_000
		From									i					
Wilson St		70	G			Howe	rton Avenu	t			0.125	F		70	G	2009
VVIIOUI OL		7U To				No	nan Avenue				0.123	r		70	G	2009
		-	<u> </u>			NOIL	nan Avende	•								

8/4/2010 10