2008

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

2008 Annual Average Daily Traffic Volume Estimates By Section of Route City of Fairfax

		City of Fair					Tru	ıck		i	K	Г)ir	
Route	Jurisdiction	Length AADT	QA	4Tire Bus	AAWD	T QV								
~~	From:	WCL Fairfa												
29 Lee Highway	City of Fairfax	0.16 40000	F	99%	0%	0%	0%	0%	0%	F	NA		42000	F
	Ta: From:	Jermantown l	Rd											
29 Lee Highway	City of Fairfax	0.44 37000	F	99%	0%	0%	0%	0%	0%	F	NA		39000	F
<u> </u>	To: From:	US 50; SR 236 M	Iain St			\Box \vdash								
29 (50) Lee Highway	City of Fairfax	0.96 38000	F	99%	0%	0%	0%	0%	0%	F	0.076	F	40000	F
	To: From:	SR 123 Chain Bri	dge Rd			\neg \vdash								
29 \ \(\sum_{50} \) Lee Highway	City of Fairfax	0.21 36000	F	99%	0%	0%	0%	0%	0%	F	0.076	F	38000	F
	Tax	University D)r			<u> </u>								
29) (50) Lee Highway	City of Fairfax	0.59 42000	F	99%	0%	0%	0%	0%	0%	F	NA		44000	F
	To: From:	Plantation Park	wav											
29 (50) Lee Hwy	City of Fairfax	0.68 41000	F	99%	0%	0%	0%	0%	0%	F	NA		43000	F
	To	Draper Driv	e											
29 \ \(\sum_{50} \) Lee Highway	City of Fairfax	0.28 40000	F	99%	0%	0%	0%	0%	0%	F	NA		42000	F
	To: From:	US 50												
29 Lee Highway	City of Fairfax	0.08 40000	N	99%	0%	0%	0%	0%	0%	N	NA		42000	
29) =55 :g	To:			0070			0,0	0,0	0,0	•			000	•
29 (237) Lee Highway	City of Fairfax	US 50 Fairfax C 0.13 29000	N	98%	1%	1%	0%	0%	0%	N	ΝΔ		32000	N
29 Lee Highway	To:	ECL Fairfa		3070	170		070	070	070	.,	14/		02000	
	From:	WCL Fairfa				Ť								
50 Lee Jackson Hwy	City of Fairfax	0.57 36000	F	98%	0%	1%	1%	1%	0%	F	0.076	F	39000	F
	To:	US 29 S, Lee Hi	ohway			<u> </u>								
50 \ 29 Lee Highway	City of Fairfax	0.96 38000	F	99%	0%	0%	0%	0%	0%	F	0.076	F	40000	F
	To:	SR 123 Chain Bri	dan Dd											
50 29 Lee Highway	City of Fairfax	0.21 36000	F	99%	0%	0%	0%	0%	0%	F	0.076	F	38000	F
30) (29)	To						- , -			-				
50 (29) Lee Highway	City of Fairfax	University D 0.59 42000	F	99%	0%	0%	0%	0%	0%	F	NA		44000	F
50) (29) 250 i iigiiiid)	To Tank				070		070	070	070	•			11000	
50 (29) Lee Hwy	City of Fairfax	Plantation Park 0.68 41000	way F	00%	0%	0%	0%	0%	0%	F	NΙΔ		43000	F
50) (29) Lee Hwy	City of Fairfax			3376	070	070	076	070	076	'	INA		43000	'
50) (29) Lee Highway	City of Foirfox	Draper Driv 0.28 40000	е F	000/	00/	00/	00/	00/	00/		NΙΔ		42000	F
50) (29) Lee Highway	City of Fairfax			9976	076	<u> </u>	0 /6	076	0 /6		INA		42000	
Aulia etan Dhud	From:	US 29 N, Lee Hi		000/	00/		40/	40/	00/		0.00	_	24000	
Arlington Blvd	City of Fairfax	0.28 31000	F	98%	0%	1%	1%	1%	0%	۲	0.08	F	34000	F
~	To: From:	SR 237 Pickett												
Arlington Blvd	City of Fairfax	0.03 60000	G	98%	0%	1%	1%	1%	0%	F	NA		66000	G
	10.	ECL Fairfa												
Chair Dridge Dd	From:	SCL Fairfa		000/	00/		40/	40/	00/	_	0.070	_	20022	_
123)Chain Bridge Rd	City of Fairfax	0.47 28000	F	98%	υ%	0%	1%	1%	υ%	F	0.078	F	30000	F

Virginia Department of Transportation Traffic Engineering Division

2008 Annual Average Daily Traffic Volume Estimates By Section of Route City of Fairfax

			Ly OI Faille					Tru	ıck			K		Dir		
Route	Jurisdiction	Length	AADT	QA	4Tire	Bus	2Axle	3+Axle		2Trail	QC	Factor	QK	Factor	AAWDT	Q۷
	From:		Judicial Dr													
23) Chain Bridge Rd	City of Fairfax	0.26	22000	F	98%	0%	0%	1%	1%	0%	F	NA			23000	F
<u>~</u>	Ta: From:	SF	R 236 Main S	St												
123) Chain Bridge Rd	City of Fairfax	0.19	20000	F	98%	0%	0%	1%	1%	0%	F	NA			22000	F
<u>~</u>	Ta: From:	V	Whitehead St	t												
23) Chain Bridge Rd	City of Fairfax	0.10	21000	F	98%	0%	0%	1%	1%	0%	F	0.073	F		22000	ı
<u>~</u>	Ta: From:]	Kenmore Dr													
23 Chain Bridge Rd	City of Fairfax	0.58	24000	F	98%	0%	0%	1%	1%	0%	F	0.073	F		26000	F
<u> </u>	To: From:	US 29	; US 50 Lee	e Hwy												
23) Chain Bridge Rd	City of Fairfax	0.35	39000	F	98%	1%	1%	0%	1%	0%	С	NA			42000	I
<u> </u>	To:	I- 6	6 NCL Fairf	fax												
	From:	US 29 Lee Highv														
Main St	City of Fairfax	0.94	40000	F	99%	1%	1%	0%	0%	0%	F	0.077	F		44000	I
	To: From:		West St													
Main St	City of Fairfax	0.21	12000	F	99%	1%	1%	0%	0%	0%	F	0.075	F		13000	
	Combined Traffic Estimates for 2 Parallel Roa			F	99%	0%	0%	0%	0%	0%	F	NA			36000	I
	From:		North St E Old Lee Hwy	7												
Main St	City of Fairfax	1.31	37000	F	99%	1%	1%	0%	0%	0%	С	0.082	F		40000	1
	Ta	,	Whitacre Rd													
236 Little River Tpke	City of Fairfax	0.57	40000	F	97%	1%	1%	0%	1%	0%	F	NA			44000	F
	To:]	ECL Fairfax													
	From:	SR	236 W, Mair	n St												
North St	City of Fairfax	0.30	21000	F	99%	0%	0%	0%	0%	0%	С	NA			23000	I
5)	Combined Traffic Estimates for 2 Parallel Roa			F	99%	0%	0%	0%	0%	0%	F	NA			36000	ı
	To:	SR	236 E, Main	St												
	From:		236 Main S		2001	00/	40/	00/	00/	00/	_	0.000	_		00000	
Pickett Rd	City of Fairfax	0.49	26000	F	96%	0%	1%	0%	2%	0%	F	0.082	F		28000	l
	To: From:		Colonial Ave										_			_
Pickett Rd	City of Fairfax	1.17	25000	F	96%	0%	1%	0%	2%	0%	С	0.084	F		28000	ı
<u> </u>	To: From:		0 Arlington 1													
37) (50) Arlington Blvd	City of Fairfax	0.28	31000	F	98%	0%	1%	1%	1%	0%	F	0.08	F		34000	I
~ ~ _ ~	To: From:	US	29 Lee High	way												
237) (29) Lee Highway	City of Fairfax	0.13	29000	N	98%	1%	1%	0%	0%	0%	Ν	NA			32000	1
\sim	To:]	ECL Fairfax													

6/26/2009

Virginia Department of Transportation Traffic Engineering Division 2008 Annual Average Daily Traffic Volume Estimates By Section of Route City of Fairfax

						City of F	alitax								
Route	Length	AADT	QA	4Tire	Bus		Truck Axle 1Trail		QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
ity of Fairfax		From				Fairfax Cou	unty Lina			<u> </u>					
Phoenix Dr	0.09	NA				Tairiax Cot	inty Line			NA			NA		
		To				Fairfax Cou	ınty Line								
O		From				Fairfax Hig	h School								
Rebel Run	0.18	1700	R			US 29 Le	a I Ivan			NA NA			NA		1991
		From			ī					<u> </u>					
9136	0.08	290	R		1	Fairfax Eleme	itary School			NA			NA		1991
9136		To			I	Fairfax Elemen	ntary School								
		From				Eleven Oak E	lem School								
9598	0.06	190	R							NA			NA		1991
		To				Eleven Oak E									
	0.00	From	Ļ	000/	40/	SR 236 N		00/					4.4000	_	2000
1 Judicial Dr	0.22	13000	F	99%	1%	1% (0% 0%	0%	F	NA —			14000	F	2008
	0.40	From	<u> </u>	000/	40/	Page A		00/		0.005			44000		2000
1 Judicial Dr	0.43	11000 _{To}	F	99%	1%	1% (SR 123 Chair	0% 0%	0%	С	0.085	F		11000	F	2008
		From				Univers									
2 Kenmore Dr	0.19	4400	F	98%	1%		1% 0%	0%	С	0.12	F	0.688	4800	F	2008
\mathcal{D}		To				SR 1									
		From				Old Lee	Hwy								
3 Layton Hall Dr	0.29	4900	F	99%	1%	0% (0%	0%	С	0.103	F		5300	F	2008
		To				Univers	ity Dr								
	0.47	From	<u> </u>	000/	201	SCL Fa		201	_		_		0000	_	200
Burke Station Rd	0.17	6400	F	99%	0%	1% (0% 0%	0%	С	0.086	F		6900	F	2008
Durles Ctation Dd	0.04	From	┶	000/	00/	Barbara A		00/		0.000			7000		2000
Burke Station Rd	0.31	6400 _{To}	F	99%	0%	1% (SR 236 N	0% 0% Jain St	0%	F	0.086	F		7000	F	2008
		From				SCL Fa									
Roberts Rd	0.27	8100	F	99%	0%		0% 0%	0%	С	0.099	F		8800	F	2008
		To				Sager	Δνε								
Roberts Rd	0.25	3600 From	F	99%	0%		0% 0%	0%	F	0.093	F		3900	F	2008
		То				SR 236 N	Iain St								
		From				SCL Fa	irfax								
Oniversity Dr	0.39	11000	F	97%	2%	1% (0% 0%	0%	С	0.093	F		12000	F	2008
<u> </u>		To From				Armstro	ng St								
University Dr	0.21	13000	F	97%	2%	1% (0%	0%	F	NA			14000	F	2008
<u> </u>		To From				South									
0627 University Dr	0.11	14000	N	97%	2%	1% (0%	0%	Ν	NA			15000	Ν	2008
~		To From				SR 236 N									
0627 University Dr	0.22	14000	F	97%	2%	1% (0% 0%	0%	F	NA			15000	F	2008
<u>~</u>		To From				Whitehe									
0627 University Dr	0.13	10000	F	97%	2%		0% 0%	0%	F	NA			11000	F	2008
<u> </u>		To From				Layton F Layton F									
Oniversity Dr	0.70	6900	F	97%	2%		0% 0%	0%	F	0.11	F		7500	F	2008
<i>.</i>		To				US 29 & 50									
		From				SR 236 N	Iain St	_							
Old Lee Hwy	0.41	13000	F	98%	1%		0%	0%	F	0.094	F		14000	F	2008
		To From				Layton H									
Old Lee Hwy	0.49	15000	F	98%	1%		0% 0%	0%	F	0.102	F		16000	F	2008
0020, 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		To							•						
<u> </u>	0.10	14000	F	98%	10/	Heritage							45000		2008
6628) Old Lee Hwy	0.19	14000	Г	90 /n	1%	1% (0%	0%	F	NA			15000	F	2000

6/26/2009 9

Virginia Department of Transportation Traffic Engineering Division 2008 Annual Average Daily Traffic Volume Estimates By Section of Route City of Fairfax

						City	of Fairfax	Κ								
Route	Length	AADT	QA	4Tire	Bus		Tru 3+Axle			QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
ity of Fairfax		From:				D	1 1 D.1				1					
Old Lee Hwy	0.25	14000	F	98%	1%	1%	0%	0%	0%	С	0.095	F		15000	F	2008
Old Lee Hwy	0.15	15000	F	98%	1%	1%	ornell Rd 0%	0%	0%	F	0.092	F		16000	F	2008
Old Lee Hwy	0.55	14000	F	98%	1%	1%	ebel Run 0%	0%	0%	F	0.086	F		15000	F	2008
		To:				US 5	0 Lee Hwy	•								
		From				US 29	Lee Highwa	ay								
Jermantown Rd	0.30	11000	F	98%	1%	1%	0%	0%	0%	С	0.088	F		12000	F	2008
<u> </u>		To				US 50 Le	e Jackson I	Hwy			-					
Jermantown Rd	0.50	13000	F	98%	1%	1%	0%	0%	0%	С	0.089	F		15000	F	2008
<u> </u>	0.40	From	<u> </u>	2001	407		sborough Ct		00/					40000		0000
Jermantown Rd	0.40	12000	F	98%	1%	1%	0%	0%	0%	F	0.090	F		13000	F	2008
_		10:	1				L Fairfax									
A 1 11 15 1		From:	<u> </u>			Col	llier Road					_		000	_	0000
Addison Rd		290	F			e.	a A v				0.097	F		290	F	2008
		10.	<u> </u>				er Avenue									
0 ()		From	<u> </u>			Atla	ınta Street					_	0.070	000	_	000
Confederate Lane		260	F				1.0				0.124	F	0.672	260	F	2008
		To:				Re	eb Street									
		From				Old	Post Road					_				
Cornwall Rd		580	F								0.101	F		580	F	2008
		To:				Park	Hill Place									
		From:				Wh	itehead St									
Democracy Ln		840	G								NA NA			840	G	2008
		To				Layt	on Hall Dr									
		From:				US	29, US 50									
Draper Dr		4100	G								NA			4100	G	2008
		To:				King	sbridge Dr									
		From:				Jerm	antown Rd									
Orchard St		2900	G								NA			2900	G	2008
		To:				Mc	Lean Ave									
		From				-	US 50									
Pickett Rd		19000	G								NA			19000	G	2008
		To:				NC	L Fairfax									
		From				Chair	n Bridge Rd	ı								
Sager Ave		2700	G								NA			2700	G	200
o		To				Dw	vight Ave									
		From:					n Bridge Rd	1								
School St		1500	F			Citali	. Driuge NO	-			0.113	F	0.747	1500	F	2008
		To:	_			Tro	wbridge St				<u> </u>	•		. 300	-	
		From:														
Whitacre Rd		4400	G				SR 236				NA			4400	G	2008
WITHOUTE INC		4400 To:				Pa.	ccarat Dr							7-100	J	2000
			l													
MCI C		From:	<u> </u>			Howe	rton Avenu	e				_		70	_	000
Wilson St		70	F								0.125	F		70	F	2008
		To:				Norn	nan Avenue	;								

6/26/2009 10