## 2017

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

where available

# **Special Locality Report**

## 126

City of Radford

Information in this report is included in Report

## 60

(Montgomery 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	Interstate Route	Traffic volume data for Interstate Routes and some other routes are reported separately by direction, as well as combined.										
29	Interstate Route are reported separately by direction, as well as combined. US Route Virginia State Route Frontage Road (F precedes frontage route number) Secondarv Route Special Routes Bus - Business Route Bvpas - Bvpass Route Truck - Truck Route ALT - Alternate Route Wve - Wve Route connector											
7	Virginia State Route											
(F241)	Frontage Road (F	precedes frontage route number)										
600												
		Special Routes										
Bus 29 ALT 220	Bypas - Bypass R Truck - Truck Rou ALT - Alternate Ro	oute te oute										
		Southbound or Westbound direction lanes of a numbered route a different road facility than the other direction.										
600		inenance Jurisdiction number is displayed below the Secondary Rount ntenance Jurisdiction is different than the jurisdiction in the title of the										

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 2017 Annual Average Daily Traffic Volume Estimates By Section of Route City of Radford

Route	luvia distign	Length	AADT	QA	A 4Tire	Bus		Truck				К	QK _ Dir	AAWDT	0.00
Roule	Jurisdiction						2Axle	3+Axle	1Trail	2Trail	QC	Factor	Factor	AAVUDT	QW
~~	From:		/CL Radfor												
(11) Lee Hwy	City of Radford (Maint: 60)	0.21	27000	G	97%	0%	0%	1%	1%	0%	F	0.093	0.542	29000	G
~	To: From:	SF	R 232, First	St											
(11) Norwood St	City of Radford	0.26	19000	G	98%	0%	1%	1%	1%	0%	F	0.089	0.547	20000	G
<u> </u>	Tor		Grove Ave												
(11) E Main St	City of Radford	0.77	13000	G	98%	0%	1%	1%	1%	0%	С	0.081	0.558	13000	G
$\bigcirc$	Top	SR	177 Tyler A	Ave											
11 E Main St	City of Radford	0.93	11000	G	98%	0%	1%	1%	1%	0%	F	0.093	0.512	12000	G
$\bigcirc$	Too		Whitehall St	t											
E Main St	City of Radford	1.46	5300	G	98%	0%	0%	1%	0%	0%	С	0.105	0.616	5600	G
$\bigcirc$	To:	E	CL Radford	1											
	From:	SCL F	Radford; Ro	ck Rd											
(177)Tyler Ave	City of Radford	0.86	8700	G	98%	0%	1%	0%	1%	0%	F	0.096	0.555	9300	G
$\smile$	To		Auburn Ave	:											
(177)Tyler Ave	City of Radford	0.78	12000	G	98%	0%	1%	0%	1%	0%	F	0.095	0.544	12000	G
$\smile$	Too		Adams St												
(177)Tyler Ave	City of Radford	0.44	9100	G	96%	1%	2%	0%	1%	0%	С	0.080	0.551	9700	G
$\bigcirc$	To:	US	11 E Main	St											
	From:	S	CL Radford	1											
(232) W Main St	City of Radford	2.71	5500	G	98%	0%	1%	0%	1%	0%	С	0.102	0.567	5900	G
<u> </u>	To	В	olling Stree	t											
(232)First St	City of Radford	0.63	8200	G	98%	0%	1%	0%	1%	0%	F	0.097	0.568	8700	G
$\smile$	To	W	adsworth S	St											
(232)First St	City of Radford	0.31	9400	G	98%	0%	1%	0%	1%	0%	F	0.099	0.510	10000	G
$\smile$	Ta		Arlington St												
(232)First St	City of Radford	0.20	13000	G	98%	0%	1%	0%	1%	0%	F	0.092	0.511	14000	G
	To:	US	11 Norwood	d St											

#### Virginia Department of Transportation Traffic Engineering Division 2017 Annual Average Daily Traffic Volume Estimates By Section of Route City of Radford

						City of	t Radfor	a								
Route	Length	AADT	QA	4Tire	Bus		Tru 3+Axle	••••		QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
City of Radford						27 0010	017040	1 I I U	Linai		i dotoi		1 dotor			
	0.45	From		070/	00/		Radford	10/	00/	0			0.044	0000	0	0017
1 Quarry Rd	0.15	2400 To	G	97%	0%	1%	2% 32 1st St	1%	0%	С	0.114		0.644	2600	G	2017
		From	1				irst St									
(4650) Forest Ave	1.23	760	G	98%	0%	1%	0%	0%	0%	С	0.131		0.699	810	G	2017
4030)		To	-		• / •		ock Rd	• / •	• / •	-					÷.	
		From				For	est Ave									
(4651) Seventh St	0.47	450	G	99%	1%	1%	0%	0%	0%	С	0.11		0.628	480	G	2017
$\bigcirc$		To				Penc	ileton St									
	0.05	From		000/	00/		32 First St	10/	00/		0.100		0.00	0000	~	0017
4652 Rock Rd	0.85	2200	G	98%	0%	0%	1%	1%	0%	F	0.126		0.63	2300	G	2017
	0.50	From	Ļ	000/	00/		est Ave	10/	00/				0.500	0100	~	0017
4652 Rock Rd	0.53	2900	G	98%	0%	0%	1%	1%	0%	F	0.109		0.506	3100	G	2017
	. – .	From			<b></b>		sworth St		<b></b>							
(4652) Rock Rd	1.74	5800	G	98%	0%	0%	1%	1%	0%	С	0.112		0.557	6200	G	2017
		From					Tyler Av								-	
(4652) Rock Rd	0.33	2300 <sub>To</sub>	G	98%	0%	0%	1%	1%	0%	F	0.119		0.534	2500	G	2017
			1				Camp Rd									
(4653) Pendleton St	0.53	From 660	G	97%	1%	Fi 1%	irst St 0%	0%	0%	С	0.113		0.6	700	G	2017
(4653) Pendleton St	0.55	000 To	G	91 /0	1 /0		ghth St	0 /6	0 /0	U	0.113		0.0	700	a	2017
		From					ileton St									
(4653) Eighth St	0.67	1400	G	97%	1%	2%	1%	0%	0%	С	0.111		0.547	1500	G	2017
$\bigcirc$		From				Wads	sworth St				—					
(4653) Eighth St	0.39	800	G	97%	1%	2%	1%	0%	0%	F	0.117		0.507	850	G	2017
$\bigcirc$		To					lker St									
(4653) Walker St	0.53	3700	G	97%	1%	2%	ghth St 1%	0%	0%	F	0.102		0.580	3900	G	2017
(4653) Walker St	0.00	Та	<u> </u>	07.70	170		irst St	070	0,0				0.000	0000	ŭ	2017
		From					ond Ave									
(4654) Noblin St	0.25	3200	G	99%	0%	1%	0%	0%	0%	С	0.112		0.541	3400	G	2017
0		To					mett Ave									
(4654) Hammett Ave	0.10	From		99%	00/		oblin St 0%	00/	09/	С	0.116		0 5 4 0	2400	0	2017
(4654) Hammett Ave	0.16	3200 To	G	99%	0%	1% SR 17	7 Tyler St	0%	0%	U	0.110		0.549	3400	G	2017
		From														
(4655) Preston St	0.52	1200	G	98%	0%	1%	ghth St 0%	0%	0%	С	0.102		0.558	1300	G	2017
4655)		To			• / •		irst St	• / •	• / •	-					÷.	
		From				US 11	E Main S	t								
(4656) Grove Ave	0.76	3300	G	99%	0%	0%	0%	0%	0%	С	0.102		0.544	3500	G	2017
$\bigcirc$		To				Tyl	ler Ave									
		From				Ro	ock Rd									
(4657) Wadsworth St	0.90	4000	G	98%	0%	1%	0%	0%	0%	С	0.097		0.608	4200	G	2017
		To				Eig	ghth St									
(4657) Wadsworth St	0.53	4500	G	98%	0%	1%	0%	0%	0%	F	0.092		0.504	4800	G	2017
$\bigcirc$		To				Fi	irst St									
	4 00	From		000/	0.01		ock Rd	0.01	00/				0.504	4000	0	0017
4659 Park Rd	1.09	1500	G	99%	0%	0%	0%	0%	0%	С	0.110		0.584	1600	G	2017
	0.01	From	Ļ	0000/	0.01		ond Ave	001	0.6.1				0.501	1000	N.1	
4659 Park Rd	0.31	1500	Ν	99%	0%	0%	0%	0%	0%	Ν	0.110		0.584	1600	Ν	2017
		From					cott St			_						
(4659) Seventh St	0.08	1200 To	G	99%	0%	0%	0%	0%	0%	F	0.102		0.556	1200	G	2017
~		To					ılker St									
(4661) Second Ave	0.98	From		070/	0%	Sund 2%	iell Park	0%	0%	С	0.122		0 645	6700	G	2017
(4661) Second Ave	0.90	5400 To	G	97%	0%		0% ove Ave	U70	0%	U	0.122		0.645	5700	G	2017
			I			Gro	NC AVE									

#### Virginia Department of Transportation Traffic Engineering Division 2017 Annual Average Daily Traffic Volume Estimates By Section of Route City of Radford

						Oity	UI HAUIU	лu								
Route	Length	AADT	QA	4Tire	Bus		Tr 3+Axle			QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
City of Radford																
$\frown$		From					Rock Rd								•	
(4663) Auburn Ave	0.06	3700	G	97%	1%	1%	1%	0%	0%	С	0.104		0.563	4000	G	2017
0		Τι	r		EC	L Radfor	d; 60-688	Rock Rd								
		Fron				No	orwood St								_	
Jefferson St		8000	G								0.096		0.568	8800	G	2017
		То	0			Т	yler Ave									
		From 130				Ro	bertson St									
Ninth St		G								0.149		0.546	140	G	2017	
		To	0			Wa	dsworth S	t								
		c	Seventh St									0.532	3700	G	2017	
Scott St		3400	G	G												в (
		То	c			I	Park Rd									
		Fron	c			Wa	dsworth S	t								
Sundell Dr		2300	G								0.145		0.597	2500	G	2017
		Te	c			I	Park Rd									
		Fron	r.			G	rove Ave									
Third Ave		1900	G								0.11		0.601	2000	G	2017
		То	c			No	orwood St									