### 2015

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

where available

# Special Locality Report 119

Town of Marion

Information in this report is included in Report

86

(Smyth 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

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	

(F241)	Frontage Road (F precedes frontage route number)

(600) Secondary Route

Virginia State 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 2015

#### Annual Average Daily Traffic Volume Estimates By Section of Route Town of Marion

						Tru	ck			K	Dir		
Route	Jurisdiction	Length AADT QA	4Tire	Bus	2Axle	3+Axle	1Trail	2Trail	QC	Factor	QK Factor	AAWDT	QW
~~~ au : a:	From:	WCL Marion; 86-730 Washingto		00/		201	201	00/	_	0.004	0.000	10000	_
11 S Main St	Town of Marion	0.52 <b>9400 G</b>	99%	0%	0%	0%	0%	0%	С	0.094	0.636	10000	G
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	From	Greenway Ave	200/	00/		00/	00/	00/		0.000	0.040	0500	
11 S Main St	Town of Marion	0.40 <b>9000 G</b>	99%	0%	0%	0%	0%	0%	F	0.092	0.610	9500	G
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	From	College St	200/	00/		00/	00/	00/		0.000	0.500	0700	
11 Main St	Town of Marion	0.41 <b>9200 G</b>	99%	0%	0%	0%	0%	0%	F	0.082	0.509	9700	G
~ C	To: From:	SR 16 S Commerce Street							_				
11 (16) Main St	Town of Marion	0.08 <b>11000 G</b>	99%	0%	0%	0%	0%	0%	F	0.082	0.549	11000	G
~ ~	To- From:	East Main St											
(11) (16) Main St	Town of Marion	0.17 <b>14000 G</b>	99%	0%	0%	0%	0%	0%	F	0.082	0.549	15000	G
<del>*</del> •	To: From:	119-4453 Chatham Hill Rd; Le											
(11) (16) Main St	Town of Marion	0.94 <b>15000 G</b>	99%	0%	0%	0%	0%	0%	С	0.096	0.508	16000	G
<del>*</del> * *	To: From:	SR 16 Park Blvd											
11 N Main St	Town of Marion	0.20 <b>13000 G</b>	98%	0%	0%	0%	1%	0%	F	0.095	0.514	14000	G
<u> </u>	T <sub>O</sub> .	119-4459 Keller Lane											
11 N Main St	Town of Marion	0.65 <b>10000 G</b>	98%	0%	0%	0%	1%	0%	С	0.097	0.528	11000	G
<u> </u>	То:	ECL Marion											
	From:	SCL Marion											
16 S Commerce St	Town of Marion	0.25 <b>4500 G</b>	97%	0%	1%	0%	1%	0%	С	0.083	0.552	4800	G
$\overline{\bigcirc}$	To: From:	I-81											
16 S Commerce St	Town of Marion	0.05 <b>8000 G</b>	97%	0%	1%	0%	1%	0%	F	0.086	0.539	8500	G
	To: From:	SR 217 State St											
16 S Commerce St	Town of Marion	0.68 <b>6900 G</b>	97%	0%	1%	0%	1%	0%	F	0.085	0.555	7300	G
<u> </u>	To: From:	US 11 Main St											
16) (11) Main St	Town of Marion	0.08 <b>11000 G</b>	99%	0%	0%	0%	0%	0%	F	0.082	0.549	11000	G
	To: From:	East Main St											
16) (11) Main St	Town of Marion	0.17 <b>14000 G</b>	99%	0%	0%	0%	0%	0%	F	0.082	0.549	15000	G
	To	Chatham Hill Rd; Lee St			<b>—</b>								
16) (11) Main St	Town of Marion	0.94 <b>15000 G</b>	99%	0%	0%	0%	0%	0%	С	0.096	0.508	16000	G
	_Τα	US 11 Main St											
16) Park Blvd	Town of Marion	1.27 <b>4800 G</b>	99%	0%	0%	0%	0%	0%	С	0.092	0.6	5100	G
	To:	NCL Marion											
	From	SR 16 S Commerce St											
16 Ramp to I-81 N at Exit 45	Town of Marion (Maint: 86)	0.24 <b>1000 G</b>								0.098		1000	G
$\smile$	Tor	I-81 N											11000 G 4800 G 8500 G 7300 G 11000 G 15000 G 5100 G
	From:	Ramps SR 16 N032B; SR 16 S	032B										
(16) Ramp to I-81 S at Exit 45	Town of Marion (Maint: 86)	0.13 <b>2200 G</b>								0.123		2200	G
$\smile$	To:	I-81 S											

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#### Virginia Department of Transportation Traffic Engineering Division 2015

#### Annual Average Daily Traffic Volume Estimates By Section of Route Town of Marion

Davita	li. ali aki a		AADT		4T:us	Dua		Tru	ıck		00	K	ΟK	Dir	A A \ A \ D T	- 014
Route	Jurisdictio	on Length	AADT	QA	4Tire	Bus	2Axle	3+Axle	1Trail	2Trail	QC	Factor	QK	Factor	AAWDT	QV
North	From:		WCL Mario	n												
North 81)	Town of Marion (N	,	15000	Α	79%	1%	1%	1%	18%	1%	F	0.117			15000	Α
$\smile$	Combined Traffic Estimates for 2 Parallel			Α	80%	1%	1%	1%	17%	1%	F	0.103	Α	0.54	31000	Α
	To:		ECL Marior													
North 81	Town of Marion (N		SCL Marior	1 <b>A</b>	79%	1%	1%	1%	18%	1%	_	0.117			15000	А
81)	`	,			80%	1%	1%	1%	17%	1%	F	0.117	Α	0.54	31000	
	Combined Traffic Estimates for 2 Parallel	noadways on this houte.	31000	Α	80%	170	1%	170	17%	170	Г	0.103	А	0.54	31000	Α
orth	To: From:	SR	16 Commerc	ce St												
lorth 81	Town of Marion (N	Maint: 86) 0.68	15000	G	79%	1%	1%	1%	18%	1%	F	0.074			15000	G
	Combined Traffic Estimates for 2 Parallel	Roadways on this Route:	28000	G	80%	1%	1%	1%	17%	1%	F	0.081	F	0.538	29000	G
	To:		NCL Marior	n												
orth	From:		I-81 North													
Ramp I-81 N Exit 45 to	SR 16 Town of Marion (N	Maint: 86) 0.15	2100	G								0.122			2100	G
	To:	SR 1	6 S Comme	rce St												
puth	From:		WCL Mario	n												
81)	Town of Marion (N	Maint: 86) 0.22	15000	Α	81%	1%	1%	1%	15%	1%	F	0.112			15000	Α
	Combined Traffic Estimates for 2 Parallel	Roadways on this Route:	31000	Α	80%	1%	1%	1%	17%	1%	F	0.103	Α	0.54	31000	Δ
	To:		ECL Marior	1												
outh 81	From:		SCL Marior								_					_
81)	Town of Marion (N	,	15000	Α	81%	1%	1%	1%	15%	1%	F	0.112			15000	Α
	Combined Traffic Estimates for 2 Parallel	Roadways on this Route:	31000	Α	80%	1%	1%	1%	17%	1%	F	0.103	Α	0.54	31000	P
a th	To: From:	SR	16 Commerc	ce St												
outh 81	Town of Marion (N	Maint: 86) 0.37	14000	G	81%	1%	1%	1%	15%	1%	F	0.089			14000	G
01)	Combined Traffic Estimates for 2 Parallel	,		G	80%	1%	1%	1%	17%	1%	F	0.081	F	0.538	29000	9
	To:		NCL Marior		00 70	1 /0		1 /0	17 /0	1 /0	'	0.001	'	0.550	23000	
outh	From:		I-81 South													
Ramp I-81 S Exit 45 to	SR 16 Town of Marion (M	Maint: 86) 0.20	1100	G								0.103			1100	C
81) Hamp For O Exit 40 to	To:		th Exit 45B		6							0.100			1100	•
	From:		Bagley Circl		-											
State St	Town of Marion (N		1200	e G	98%	0%	1%	0%	1%	0%	С	0.131		0.861	1300	G
/ / / Joraio Oi	TOWIT OF MATION (I	via.i.i. 00) 2.20	1200	u	JU /0	0 / 0	1 /0	0 /0	1 /0	0 / 0	0	0.101		0.001	1000	C

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# Virginia Department of Transportation Traffic Engineering Division 2015 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Marion

						TOWIT OF MATION	·								
Route	Length	AADT	QA	4Tire	Bus				QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Marion		From	.1			CCI Marian									
(F9)	0.11	20	R			SCL Marion				NA			NA		04/24/2014
(F9)	0	To	· · · ·			SCL Marion				TÎ.					0 .// _ 0 .
		From				Lee Street									
1 N Church St	0.22	1700	G	97%	1%	1% 1% Catron Street	0%	0%	F	0.088		0.524	1800	G	2015
2 Fowler St	0.02	1700	G	98%	1%	WCL Marion 0% 1%	0%	0%	С	0.106		0.602	1800	G	2015
		To				Chatham Hill Cir									
		From	12			Commerce St									
3 Pendleton St	0.11	4000 <sub>To</sub>	G	99%	0%	0% 0% E Main St	0%	0%	С	0.094		0.569	4200	G	2015
		From				US 11 Main St									
Poston St	0.03	350	G	99%	0%	0% 0% W Cherry St	0%	0%	F	0.115		0.761	370	G	2015
		From				Poston St									
W Cherry St	0.41	1100	G	99%	0%	0% 0%	0%	0%	F	0.117		0.544	1100	G	2015
(4452) E Cherry St	0.16	3200 From	G	99%	0%	119-4453 S Church S 0% 0%	0%	0%	С	0.103		0.52	3400	G	2015
		10	2			SR 16 Commerce S	<u>t</u>								
(4453) S Church St	0.77	2200	G	99%	0%	SCL Marion 0% 0%	0%	0%	F	0.095		0.557	2300	G	2015
<u> </u>		From				US 11; E Main St									
N Church St	0.11	1500	G	97%	1%	1% 1% Lee St	0%	0%	С	0.096		0.513	1500	G	2015
O 1 0:	2.04	From		000/	00/	N Church St	20/	00/				0.754	0000	_	0045
(4453) Lee St	0.31	2500 To	G	99%	0%	1% 0% US 11; N Main St	0%	0%	C	0.103		0./51	2600	G	2015
		From	:			US 11; N Main St									
Chatham Hill Rd	0.15	3800	G	99%	1%	0% 0%	0%	0%	F	0.085		0.546	4000	G	2015
(4453) Chatham Hill Rd	1.16	2400	G	99%	1%	Chilhowie St	00/	00/		0.000		0.500	2500	G	2015
Chatnam Hill Rd	1.10	<b>2400</b>		33 /o	1 /0	NCL Marion	Truck	G	2013						
		From				WCL Marion				<del>-  </del>					
(4454) Chilhowie St	0.60	3200	G	99%	0%	0% 0%	0%	0%	F	0.092		0.601	3400	G	2015
		To	-			119-1 N Church St				NA NA NA NA O.524 1800 CO O.094 O.569 4200 CO O.095 O.557 2300 CO O.096 O.513 1500 CO O.096 O.513 1500 CO O.095 O.523 2500 CO O.099 O.523 2500 CO					
(4454) Chilhowie St	0.36	2100 From	G	99%	0%	0% 0%	0%	0%	С	0.097		0.617	2200	G	2015
		From		2221		Chatham Hill Rd		221							2215
Chilhowie St	0.14	1300 To	G	99%	0%	0% 0%	0%	0%	-	0.122		0.923	1400	G	2015
		From	1			US 11 Main St									
(4459) Keller Lane	0.70	1100	G	99%	0%	N Main St 0% 0%	0%	0%	С	0.098		0 535	1200	G	2015
Keller Lane	0.70	To	<u> </u>	0070	0 70	NCL Marion	0 70	0 70				0.000	1200	ŭ	2010
		From				ECL Marion				i					
(4461) Johnston Rd	0.15	1200	G	98%	1%	1% 0%	1%	0%	С	0.128		0.586	1300	G	2015
		To				US 11 Main St									
		From				Look Ave									
1st St		410	G							0.108		0.702	440	G	2015
		Tr	1			Lincoln Ave									
Daughman A		From		000/	00/	Country Club Rd	00/	00/	-	0.105		0 5 4 4	1400	_	0015
Baughman Avenue		1400 To	G	98%	0%	1% 0% Meadow Dr	υ%	υ%	Ü	0.105		0.541	1400	G	2015
		From	<u>.                                    </u>							+					
Callan Lane		3500	G	99%	0%	Prater Ln 0% 0%	0%	0%	С	0.099		0.577	3500	G	2015
		To	<u> </u>	-070	2 / 0	SR 16 Park Blvd	- / -	3,3					3000	<u> </u>	_0.0
			-												

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# Virginia Department of Transportation Traffic Engineering Division 2015 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Marion

					rown	of Mari	on									
Route	Length AADT	QA	4Tire	Bus			uck 1Trail		QC	K Factor	QK	Dir Factor	AAWDT	QW	Year	
own of Marion	From				Coo	inkle Ave										
Catron St	350	G			Spr	inkie Ave				0.101		0.595	370	G	2015	
oution of	To	Ť			W	olfe Ave						0.000	070	ŭ	2010	
	From				Pre	scott Ave										
Catron St	660	G								0.089		0.61	700	G	2015	
	To				Chi	lhowie St										
0 1 1 10:	From:	<u> </u>			Cli	nton Ave						0.504	0.40	•	004	
Cumberland St	<b>320</b>	G			77.1	111 4				0.093		0.524	340	G	2015	
		1				ldale Ave										
Dalton St	From:	G			Hul	ldale Ave				0.101		0.547	320	G	2015	
Dailon St	300 <sub>To:</sub>	<u> </u>			Gra	enway St				0.101		0.547	320	G	2013	
	From	! :														
Dogwood Dr	130	G			Ma	gnolia St				0.129		0.765	130	G	2014	
Dogwood Di	To				D	ead End				0.123		0.703	150	u	2015	
	From					Oak St										
E Main St	980	G			•	Jan Ol				0.111		0.5	1000	G	201	
2 Main of	To	Ť			C	edar St				<u> </u>		3.3		_	_5.	
	From:					berland S	t									
Hulldale Ave	80	G			Cuir	ocrana 5				0.163		0.571	90	G	201	
	To				D	ead End										
	From				15	st Street				I						
Look Ave	410	G								0.098		0.541	440	G	201	
	To	Chilhowie St														
	From:				Dog	gwood Dr										
Magnolia St	170	G								0.137		0.509	180	G	201	
	To: From:				Не	mlock St				<b>—</b> —						
Magnolia St	<b>220</b> Prom.	G								0.119		0.667	230	230 G	201	
	Τα				Ve	eteran St										
	From:				Go	olf View										
Mt View Dr	180	G										0.5	200	G	201	
	To				Coun	try Club R	ld									
	From	Cherry St														
Park St	380	G								0.106		0.631	400	G	201	
	To				Dead En	d S Of Cl	nerry									
	From				Cum	berland S	t									
Patton Ave	90	G								0.189		0.647	90	G	201	
	To				D	ead End										
	From				E. 0	Cherry St										
Pearl St	600	G								0.113		0.603	630	G	201	
	To	<u> </u>				Hiigh St										
D	From:	<u> </u>	2021	00/		inkle Ave		201				0.540	1000	•	004	
Prater St	1900 <sub>то:</sub>	G	99%	0%	1%	0%	0%	0%	С	0.107		0.519	1900	G	201	
		1				allan Ln										
S Iron St	Prom:	<u> </u>			Е	High St				0.100		0 505	000	0	2011	
S Iron St	910 <sub>To</sub>	G			W	alnut St				0.108		0.525	960	G	201	
	From	l														
Wassona Dr	1300	G	95%	0%		ssona Dr 3%	10/	<b>Nº</b> /	С	0.101		0.577	1400	G	2011	
vvassulia Di	1300		JU %	U-70	0%		1%	0%	U	0.101		0.577	1400	G	201	
14/ 5	From:		0011			mlock St						0 = 5 =	.=			
Wassona Dr	1500 <sub>то:</sub>	G	99%	0%	0%	0%	0%	0%	С	0.096		0.563	1500	G	201	
		<u> </u>				gnolia St										
14/-16 A	From:	لبا			0	akley St		-				0.50:	202	^	00.1	
Wolfe Ave	<b>270</b>	G			**	~				0.133		0.534	290	G	201	
	10:	1			D	over St										

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