

2019
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.

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

-  Interstate Route Traffic volume data for Interstate Routes and some other routes are reported separately by direction, as well as combined.
-  US Route
-  Virginia State Route
-  Frontage Road (F precedes frontage route number)
-  Secondary Route

Special Routes

-  Bus - Business Route
-  Bypass - Bypass Route
-  Truck - Truck Route
-  ALT - Alternate Route
-  Wve - Wve 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 Maintenance Jurisdiction number is displayed below the Secondary Route Number if the Maintenance Jurisdiction is different than the jurisdiction in the title of the report.

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 Traffic Engineering Division
 2019
 Annual Average Daily Traffic Volume Estimates By Section of Route
 Town of Marion

Route	Jurisdiction	Length	AADT	QA	4Tire	Bus	-----Truck-----				QC	K Factor	QK	Dir Factor	AAWDT	QW	
							2Axle	3+Axle	1Trail	2Trail							
From: [] 11 S Main St	Town of Marion	0.52	8100	F	98%	0%	1%	0%	0%	0%	C	0.084	F	0.587	8600	F	
To: []																	
From: [] 11 S Main St	Town of Marion	0.40	7700	F	98%	0%	1%	0%	0%	0%	F	0.085	F	0.571	8200	F	
To: []																	
From: [] 11 Main St	Town of Marion	0.41	7800	F	98%	0%	1%	0%	0%	0%	F	0.081	F	0.519	8300	F	
To: []																	
From: [] 11 16 Main St	Town of Marion	0.08	10000	F	99%	0%	0%	0%	0%	0%	F	0.080	F	0.507	11000	F	
To: []																	
From: [] 11 16 Main St	Town of Marion	0.17	13000	F	99%	0%	0%	0%	0%	0%	F	0.080	F	0.507	14000	F	
To: []																	
From: [] 11 16 Main St	Town of Marion	0.94	15000	F	99%	0%	0%	0%	0%	0%	C	0.081	F	0.519	16000	F	
To: []																	
From: [] 11 N Main St	Town of Marion	0.20	15000	F	98%	0%	1%	0%	1%	0%	F	0.089	F	0.544	15000	F	
To: []																	
From: [] 11 N Main St	Town of Marion	0.65	10000	F	98%	0%	1%	0%	1%	0%	C	0.092	F	0.51	11000	F	
To: []																	
From: [] 16 S Commerce St	Town of Marion	0.25	3600	F	96%	0%	1%	1%	2%	0%	C	0.085	F	0.556	3800	F	
To: []																	
From: [] 16 S Commerce St	Town of Marion	0.05	7200	F	96%	0%	1%	1%	2%	0%	F	0.082	F	0.559	7700	F	
To: []																	
From: [] 16 S Commerce St	Town of Marion	0.68	6600	F	96%	0%	1%	1%	2%	0%	F	0.082	F	0.557	7000	F	
To: []																	
From: [] 16 11 Main St	Town of Marion	0.08	10000	F	99%	0%	0%	0%	0%	0%	F	0.080	F	0.507	11000	F	
To: []																	
From: [] 16 11 Main St	Town of Marion	0.17	13000	F	99%	0%	0%	0%	0%	0%	F	0.080	F	0.507	14000	F	
To: []																	
From: [] 16 11 Main St	Town of Marion	0.94	15000	F	99%	0%	0%	0%	0%	0%	C	0.081	F	0.519	16000	F	
To: []																	
From: [] 16 Park Blvd	Town of Marion	1.27	4700	F	99%	0%	1%	0%	0%	0%	C	0.085	F	0.571	5000	F	
To: []																	
From: [] 16 Ramp to I-81 N at Exit 45	Town of Marion (Maint: 86)	0.24	1000	G								0.098	F		1000	G	
To: []																	
From: [] 16 Ramp to I-81 S at Exit 45	Town of Marion (Maint: 86)	0.13	2300	G								0.123	F		2300	G	
To: []																	

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Route	Jurisdiction	Length	AADT	QA	4Tire	Bus	-----Truck-----				QC	K Factor	QK	Dir Factor	AAWDT	QW
							2Axle	3+Axle	1Trail	2Trail						
North 81	From: WCL Marion															
	Town of Marion (Maint: 86)	0.22	17000	A	78%	1%	1%	1%	19%	1%	F	0.109	A	17000	A	
	Combined Traffic Estimates for 2 Parallel Roadways on this Route:		33000	A	79%	1%	1%	1%	17%	1%	F	0.101	A	0.552	33000	A
North 81	To: ECL Marion															
	From: SCL Marion															
	Town of Marion (Maint: 86)	0.27	17000	A	78%	1%	1%	1%	19%	1%	F	0.109	A	17000	A	
Combined Traffic Estimates for 2 Parallel Roadways on this Route:			33000	A	79%	1%	1%	1%	17%	1%	F	0.101	A	0.552	33000	A
North 81	To: SR 16 Commerce St															
	From: NCL Marion															
	Town of Marion (Maint: 86)	0.68	15000	G	78%	1%	1%	1%	19%	1%	F	0.074	F	15000	G	
Combined Traffic Estimates for 2 Parallel Roadways on this Route:			30000	G	79%	1%	1%	1%	17%	1%	F	0.078	F	0.519	30000	G
North 81	To: I-81 North															
	From: SR 16 S Commerce St															
	Town of Marion (Maint: 86)	0.15	2100	G								0.122	F	2100	G	
Ramp I-81 N Exit 45 to SR 16																
South 81	To: WCL Marion															
	From: SCL Marion															
	Town of Marion (Maint: 86)	0.22	16000	A	81%	1%	1%	1%	16%	1%	F	0.114	A	16000	A	
Combined Traffic Estimates for 2 Parallel Roadways on this Route:			33000	A	79%	1%	1%	1%	17%	1%	F	0.101	A	0.552	33000	A
South 81	To: ECL Marion															
	From: SCL Marion															
	Town of Marion (Maint: 86)	0.90	16000	A	81%	1%	1%	1%	16%	1%	F	0.114	A	16000	A	
Combined Traffic Estimates for 2 Parallel Roadways on this Route:			33000	A	79%	1%	1%	1%	17%	1%	F	0.101	A	0.552	33000	A
South 81	To: SR 16 Commerce St															
	From: NCL Marion															
	Town of Marion (Maint: 86)	0.37	15000	G	81%	1%	1%	1%	16%	1%	F	0.089	F	15000	G	
Combined Traffic Estimates for 2 Parallel Roadways on this Route:			30000	G	79%	1%	1%	1%	17%	1%	F	0.081	F	0.538	30000	G
South 81	To: I-81 South															
	From: I-81 South Exit 45B to SR 16															
	Town of Marion (Maint: 86)	0.20	1100	G								0.103	F	1200	G	
Ramp I-81 S Exit 45 to SR 16																
217	To: Bagley Circle															
	From: SR 16 S Commerce Street															
	Town of Marion (Maint: 86)	2.20	1100	F	98%	0%	1%	0%	1%	0%	C	0.139	F	0.83	1200	F

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Route	Length	AADT	QA	4Tire	Bus	-----Truck-----				QC	K Factor	QK	Dir Factor	AAWDT	QW	Year	
						2Axle	3+Axle	1Trail	2Trail								
Town of Marion																	
(F9)	0.11	10	R								NA			NA		10/13/2017	
			From	SCL Marion													
			To	SCL Marion													
(1)	N Church St	0.22	1300	F	97%	0%	1%	1%	0%	0%	C	0.087	F	0.529	1300	F	2019
			From	Lee Street													
			To	Catron Street													
(2)	Fowler St	0.02	1100	F	99%	0%	1%	0%	0%	0%	C	0.101	F	0.585	1200	F	2019
			From	WCL Marion													
			To	Chatham Hill Cir													
(3)	Pendleton St	0.11	3300	F	99%	0%	0%	0%	0%	0%	C	0.099	F	0.557	3500	F	2019
			From	Commerce St													
			To	E Main St													
(4452)	Poston St	0.03	340	F	99%	0%	1%	0%	0%	0%	C	0.099	F	0.737	360	F	2019
			From	US 11 Main St													
			To	W Cherry St													
(4452)	W Cherry St	0.41	880	F	98%	0%	1%	1%	0%	0%	C	0.099	F	0.737	940	F	2019
			From	Poston St													
(4452)	E Cherry St	0.16	2800	F	99%	0%	1%	0%	0%	0%	C	0.100	F	0.535	2900	F	2019
			From	119-4453 S Church St													
			To	SR 16 Commerce St													
(4453)	S Church St	0.77	2000	F	98%	0%	1%	1%	0%	0%	C	0.095	F	0.558	2200	F	2019
			From	SCL Marion													
(4453)	N Church St	0.11	1200	F	97%	0%	2%	0%	0%	0%	C	0.096	F	0.546	1300	F	2019
			From	US 11; E Main St													
(4453)	Lee St	0.31	2000	F	99%	0%	0%	0%	0%	0%	C	0.104	F	0.697	2100	F	2019
			From	Lee St													
(4453)	Chatham Hill Rd	0.15	4900	F	98%	0%	1%	0%	0%	0%	F	0.083	F	0.564	5200	F	2019
			From	N Church St													
(4453)	Chatham Hill Rd	1.16	2300	F	98%	0%	1%	0%	0%	0%	C	0.085	F	0.558	2400	F	2019
			From	US 11; N Main St													
			To	Chilhowie St													
(4454)	Chilhowie St	0.60	2400	F	99%	0%	0%	0%	0%	0%	F	0.089	F	0.524	2600	F	2019
			From	NCL Marion													
(4454)	Chilhowie St	0.36	1500	F	99%	0%	0%	0%	0%	0%	C	0.098	F	0.516	1600	F	2019
			From	WCL Marion													
(4454)	Chilhowie St	0.14	70	F	85%	1%	11%	1%	1%	0%	C	0.152	F	0.571	70	F	2019
			From	119-1 N Church St													
			To	Chatham Hill Rd													
(4459)	Keller Lane	0.70	910	F	99%	0%	1%	0%	0%	0%	C	0.107	F	0.592	970	F	2019
			From	US 11 Main St													
			To	N Main St													
(4461)	Johnston Rd	0.15	1200	F	97%	0%	1%	1%	1%	0%	C	0.109	F	0.536	1200	F	2019
			From	NCL Marion													
			To	ECL Marion													
	1st St		370	F								0.105	F	0.622	390	F	2019
			From	US 11 Main St													
			To	Look Ave													
	Baughman Avenue		1400	G	98%	0%	1%	0%	0%	0%	C	0.105	F	0.541	1400	G	2019
			From	Lincoln Ave													
			To	Country Club Rd													
	Callan Lane		3600	G	99%	0%	0%	0%	0%	0%	C	0.099	F	0.577	3600	G	2019
			From	Meadow Dr													
			To	Prater Ln													
			To	SR 16 Park Blvd													

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						2Axle	3+Axle	1Trail	2Trail							
Town of Marion																
From: Catron St						Sprinkle Ave										
To: Catron St	260		F							0.126	F	0.507	280	F	2019	
From: Catron St						Wolfe Ave										
To: Catron St	490		F							0.108	F	0.529	530	F	2019	
From: Catron St						Prescott Ave										
To: Catron St						Chilhowie St										
From: Cumberland St						Clinton Ave										
To: Cumberland St	230		F							0.129	F	0.567	240	F	2019	
From: Cumberland St						Hulldale Ave										
To: Cumberland St						Hulldale Ave										
From: Dalton St						Hulldale Ave										
To: Dalton St	250		F							0.102	F	0.589	270	F	2019	
From: Dalton St						Greenway St										
From: Dogwood Dr						Magnolia St										
To: Dogwood Dr	100		F							0.154	F	0.606	110	F	2019	
From: Dogwood Dr						Dead End										
From: E Main St						Oak St										
To: E Main St	730		F							0.111	F	0.549	780	F	2019	
From: E Main St						Cedar St										
From: Hulldale Ave						Cumberland St										
To: Hulldale Ave	110		F							0.134	F	0.6	120	F	2019	
From: Hulldale Ave						Dead End										
From: Look Ave						1st Street										
To: Look Ave	370		F							0.126	F	0.579	400	F	2019	
From: Look Ave						Chilhowie St										
From: Magnolia St						Dogwood Dr										
To: Magnolia St	140		F							0.129	F	0.59	150	F	2019	
From: Magnolia St						Hemlock St										
To: Magnolia St	170		F							0.132	F	0.78	180	F	2019	
From: Magnolia St						Veteran St										
From: Mt View Dr						Golf View										
To: Mt View Dr	150		F							0.176	F	0.571	160	F	2019	
From: Mt View Dr						Country Club Rd										
From: Park St						Cherry St										
To: Park St	350		F							0.107	F	0.602	370	F	2019	
From: Park St						Dead End S Of Cherry										
From: Patton Ave						Cumberland St										
To: Patton Ave	60		F							0.158	F	0.6	60	F	2019	
From: Patton Ave						Dead End										
From: Pearl St						E. Cherry St										
To: Pearl St	410		F							0.12	F	0.531	440	F	2019	
From: Pearl St						E. High St										
From: Prater St						Sprinkle Ave										
To: Prater St	2000		G	99%	0%	1%	0%	0%	0%	C	0.107	F	0.519	2000	G	2019
From: Prater St						Callan Ln										
From: S Iron St						E High St										
To: S Iron St	870		F							0.104	F	0.513	920	F	2019	
From: S Iron St						Walnut St										
From: Wassona Dr						Wassona Dr										
To: Wassona Dr	970		F	95%	0%	0%	3%	1%	0%	C	0.108	F	0.659	1000	F	2019
From: Wassona Dr						Hemlock St										
To: Wassona Dr	1000		F	99%	0%	1%	0%	0%	0%	C	0.106	F	0.667	1100	F	2019
From: Wassona Dr						Magnolia St										
From: Wolfe Ave						Oakley St										
To: Wolfe Ave	270		F							0.152	F	0.617	280	F	2019	
From: Wolfe Ave						Dover St										