

**2020**

**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**

The reported 2020 AADTs represent the best estimate of 2020 average daily traffic, however, this year's AADTs do vary from normal traffic in the years prior to 2020 due to COVID-19. The reported AADTs may not represent typical traffic for a given day or period within the year as the drastic seasonal variations were normalized through the factoring process. The 2020 publications are therefore colored to draw users attention to the fact that uses of the 2020 published estimates versus alternative data sources should be determined at users' discretion based on the objectives or nature of the analyses being performed.

The estimated 2020 DVMT for the entire state maintained network total to 208,000,000, which has trended down by 11 percent compared to the 2019 level of 234,000,000. For most traffic links across the state, the estimated 2020 AADTs are also seen to have decreased from their 2019 levels.

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.

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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 buses.

**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.

Virginia Department of Transportation  
 Traffic Engineering Division  
 2020  
 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: WCL Marion; 86-730 Washington Ave															
11 S Main St	Town of Marion	0.52	7000	G	98%	0%	1%	0%	0%	0%	C	0.084	F	0.587	7500	G
	To: Greenway Ave															
11 S Main St	Town of Marion		6700	G	98%	0%	1%	0%	0%	0%	F	0.085	F	0.571	7100	G
	To: College St															
11 Main St	Town of Marion		6800	G	98%	0%	1%	0%	0%	0%	F	0.081	F	0.519	7200	G
	To: SR 16 S Commerce Street															
11 16 Main St	Town of Marion	0.08	8700	G	99%	0%	0%	0%	0%	0%	F	0.080	F	0.507	9200	G
	To: East Main St															
11 16 Main St	Town of Marion	0.17	12000	G	99%	0%	0%	0%	0%	0%	F	0.080	F	0.507	12000	G
	To: 119-4453 Chatham Hill Rd; Lee St															
11 16 Main St	Town of Marion	0.94	13000	G	99%	0%	0%	0%	0%	0%	C	0.081	F	0.519	14000	G
	To: SR 16 Park Blvd															
11 N Main St	Town of Marion	0.20	13000	G	98%	0%	1%	0%	1%	0%	F	0.089	F	0.544	13000	G
	To: 119-4459 Keller Lane															
11 N Main St	Town of Marion	0.65	8700	G	98%	0%	1%	0%	1%	0%	C	0.092	F	0.51	9300	G
	To: ECL Marion															
	From: SCL Marion															
16 S Commerce St	Town of Marion		3100	G	96%	0%	1%	1%	2%	0%	C	0.085	F	0.556	3300	G
	To: I-81															
16 S Commerce St	Town of Marion		6200	G	96%	0%	1%	1%	2%	0%	F	0.082	F	0.559	6600	G
	To: SR 217 State St															
16 S Commerce St	Town of Marion	0.68	5700	G	96%	0%	1%	1%	2%	0%	F	0.082	F	0.557	6000	G
	To: US 11 Main St															
16 11 Main St	Town of Marion	0.08	8700	G	99%	0%	0%	0%	0%	0%	F	0.080	F	0.507	9200	G
	To: East Main St															
16 11 Main St	Town of Marion	0.17	12000	G	99%	0%	0%	0%	0%	0%	F	0.080	F	0.507	12000	G
	To: Chatham Hill Rd; Lee St															
16 11 Main St	Town of Marion	0.94	13000	G	99%	0%	0%	0%	0%	0%	C	0.081	F	0.519	14000	G
	To: US 11 Main St															
16 Park Blvd	Town of Marion	1.27	4000	G	99%	0%	1%	0%	0%	0%	C	0.085	F	0.571	4300	G
	To: NCL Marion															
	From: SR 16 S Commerce St															
16 Ramp to I-81 N at Exit 45	Town of Marion (Maint: 86)		850	G								0.098	F		850	G
	To: I-81 N															
	From: Ramps SR 16 N032B; SR 16 S032B															
16 Ramp to I-81 S at Exit 45	Town of Marion (Maint: 86)	0.13	1900	G								0.123	F		1900	G
	To: I-81 S															



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							2Axle	3+Axle	1Trail	2Trail						
North 	From: WCL Marion															
	Town of Marion (Maint: 86)	0.22	15000	A	75%	1%	1%	1%	21%	1%	F	0.113	A	15000	A	
Combined Traffic Estimates for 2 Parallel Roadways on this Route:			29000	A	76%	1%	1%	1%	20%	1%	F	0.101	A	0.556	29000	A
North 	From: ECL Marion															
	Town of Marion (Maint: 86)	0.27	15000	A	75%	1%	1%	1%	21%	1%	F	0.113	A	15000	A	
Combined Traffic Estimates for 2 Parallel Roadways on this Route:			29000	A	76%	1%	1%	1%	20%	1%	F	0.101	A	0.556	29000	A
North 	From: SR 16 Commerce St															
	Town of Marion (Maint: 86)	0.68	12000	G	75%	1%	1%	1%	21%	1%	F	0.074	F	12000	G	
Combined Traffic Estimates for 2 Parallel Roadways on this Route:			25000	G	76%	1%	1%	1%	20%	1%	F	0.078	F	0.519	26000	G
North 	From: I-81 North															
	Ramp I-81 N Exit 45 to SR 16 Town of Marion (Maint: 86)		1800	G								0.122	F	1800	G	
To: SR 16 S Commerce St																
South 	From: WCL Marion															
	Town of Marion (Maint: 86)	0.22	14000	A	78%	1%	1%	1%	18%	1%	F	0.113	A	14000	A	
Combined Traffic Estimates for 2 Parallel Roadways on this Route:			29000	A	76%	1%	1%	1%	20%	1%	F	0.101	A	0.556	29000	A
South 	From: ECL Marion															
	Town of Marion (Maint: 86)	0.90	14000	A	78%	1%	1%	1%	18%	1%	F	0.113	A	14000	A	
Combined Traffic Estimates for 2 Parallel Roadways on this Route:			29000	A	76%	1%	1%	1%	20%	1%	F	0.101	A	0.556	29000	A
South 	From: SR 16 Commerce St															
	Town of Marion (Maint: 86)	0.37	13000	G	78%	1%	1%	1%	18%	1%	F	0.089	F	13000	G	
Combined Traffic Estimates for 2 Parallel Roadways on this Route:			25000	G	76%	1%	1%	1%	20%	1%	F	0.081	F	0.538	26000	G
South 	From: I-81 South															
	Ramp I-81 S Exit 45 to SR 16 Town of Marion (Maint: 86)	0.20	990	G								0.103	F	1100	G	
To: I-81 South Exit 45B to SR 16																
217 	From: Bagley Circle															
	State St Town of Marion (Maint: 86)		940	G	98%	0%	1%	0%	1%	0%	C	0.139	F	0.83	1000	G
To: SR 16 S Commerce Street																

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Route	Length	AADT	QA	4Tire	Bus	-----Truck----- 2Axle 3+Axle 1Trail 2Trail				QC	K Factor	QK	Dir Factor	AAWDT	QW	Year	
<b>Town of Marion</b>																	
(F9)	0.11	10	R								NA			NA		10/13/2017	
			From	SCL Marion													
			To	SCL Marion													
(1)	N Church St	0.22	1100	G	97%	0%	1%	1%	0%	0%	C	0.087	F	0.529	1200	G	2020
			From	Lee Street													
			To	Catron Street													
(2)	Fowler St	0.02	970	G	99%	0%	1%	0%	0%	0%	C	0.101	F	0.585	1000	G	2020
			From	WCL Marion													
			To	Chatham Hill Cir													
(3)	Pendleton St		2800	G	99%	0%	0%	0%	0%	0%	C	0.099	F	0.557	3000	G	2020
			From	Commerce St													
			To	E Main St													
(4452)	Poston St		290	G	99%	0%	1%	0%	0%	0%	C	0.099	F	0.737	310	G	2020
			From	US 11 Main St													
			To	W Cherry St													
(4452)	W Cherry St		760	G	98%	0%	1%	1%	0%	0%	C	0.099	F	0.737	810	G	2020
			From	Poston St													
			To	119-4453 S Church St													
(4452)	E Cherry St	0.16	2400	G	99%	0%	1%	0%	0%	0%	C	0.100	F	0.535	2500	G	2020
			From	SR 16 Commerce St													
			To	SCL Marion													
(4453)	S Church St	0.77	1800	G	98%	0%	1%	1%	0%	0%	C	0.095	F	0.558	1900	G	2020
			From	US 11; E Main St													
			To	Lee St													
(4453)	N Church St	0.11	1000	G	97%	0%	2%	0%	0%	0%	C	0.096	F	0.546	1100	G	2020
			From	N Church St													
			To	US 11; N Main St													
(4453)	Lee St	0.31	1700	G	99%	0%	0%	0%	0%	0%	C	0.104	F	0.697	1800	G	2020
			From	US 11; N Main St													
			To	Chilhowie St													
(4453)	Chatham Hill Rd	0.15	4300	G	98%	0%	1%	0%	0%	0%	F	0.083	F	0.564	4500	G	2020
			From	Chilhowie St													
			To	NCL Marion													
(4453)	Chatham Hill Rd	1.16	2000	G	98%	0%	1%	0%	0%	0%	C	0.085	F	0.558	2100	G	2020
			From	WCL Marion													
			To	119-1 N Church St													
(4454)	Chilhowie St	0.60	2100	G	99%	0%	0%	0%	0%	0%	F	0.089	F	0.524	2200	G	2020
			From	Chilhowie St													
			To	Chatham Hill Rd													
(4454)	Chilhowie St	0.36	1300	G	99%	0%	0%	0%	0%	0%	C	0.098	F	0.516	1400	G	2020
			From	Chatham Hill Rd													
			To	US 11 Main St													
(4459)	Keller Lane	0.70	790	G	99%	0%	1%	0%	0%	0%	C	0.107	F	0.592	840	G	2020
			From	N Main St													
			To	NCL Marion													
(4461)	Johnston Rd	0.15	1000	G	97%	0%	1%	1%	1%	0%	C	0.109	F	0.536	1100	G	2020
			From	ECL Marion													
			To	US 11 Main St													
	1st St		320	G								0.105	F	0.622	340	G	2020
			From	Look Ave													
			To	Lincoln Ave													
	Baughman Avenue		1200	G	98%	0%	1%	0%	0%	0%	C	0.105	F	0.541	1200	G	2020
			From	Country Club Rd													
			To	Meadow Dr													
	Callan Lane		2900	G	99%	0%	0%	0%	0%	0%	C	0.099	F	0.577	2900	G	2020
			From	Prater Ln													
			To	SR 16 Park Blvd													

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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							
<b>Town of Marion</b>																
Catron St		230	G							0.126	F	0.507	240	G	2020	
Catron St		430	G							0.108	F	0.529	460	G	2020	
Cumberland St		200	G							0.129	F	0.567	210	G	2020	
Dalton St		220	G							0.102	F	0.589	240	G	2020	
Dogwood Dr		90	G							0.154	F	0.606	90	G	2020	
E Main St		630	G							0.111	F	0.549	670	G	2020	
Hulldale Ave		100	G							0.134	F	0.6	100	G	2020	
Look Ave		320	G							0.126	F	0.579	340	G	2020	
Magnolia St		120	G							0.129	F	0.59	130	G	2020	
Magnolia St		150	G							0.132	F	0.78	160	G	2020	
Mt View Dr		130	G							0.176	F	0.571	140	G	2020	
Park St		300	G							0.107	F	0.602	320	G	2020	
Patton Ave		49	G							0.158	F	0.6	50	G	2020	
Pearl St		360	G							0.12	F	0.531	380	G	2020	
Prater St		1600	G	99%	0%	1%	0%	0%	0%	C 0.107	F	0.519	1600	G	2020	
S Iron St		750	G							0.104	F	0.513	800	G	2020	
Wassona Dr		840	G							0.108	F	0.659	890	G	2020	
Wassona Dr		870	G	99%	0%	1%	0%	0%	0%	C 0.106	F	0.667	920	G	2020	
Wolfe Ave		230	G							0.152	F	0.617	240	G	2020	