

**2005**

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

where available

**Special Locality Report**

**119**

Town of Marion

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.

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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 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 Peak Hour 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 Peak Hour 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  
 Bypas - Bypass Route  
 Truck - Truck Route  
 ALT - Alternate Route  
 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 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  
2005  
Annual Average Daily Traffic Volume Estimates By Section of Route  
Town of Marion

Route	Jurisdiction	Length	<b>AADT</b>	<b>QA</b>	4Tire	Bus	Truck				QC	K Factor	QK	Dir Factor	AAWDT	QW
							2Axle	3+Axle	1Trail	2Trail						
11 S Main St	Town of Marion	0.52	8600	G	98%	1%	1%	0%	0%	0%	C	0.083	F	0.611	9400	G
11 S Main St	Town of Marion	0.40	8800	G	98%	1%	1%	0%	0%	0%	F	0.083	F	0.599	9600	G
11 Main St	Town of Marion	0.41	9300	G	98%	1%	1%	0%	0%	0%	F	0.080	F	0.528	10000	G
11 16 Main St	Town of Marion	1.19	17000	G	98%	1%	1%	0%	0%	0%	C	0.081	F	0.546	18000	G
11 E Main St	Town of Marion	0.20	13000	G	98%	1%	1%	0%	0%	0%	F	0.079	F	0.593	14000	G
11 Main St	Town of Marion	0.04	19000	G	97%	1%	1%	0%	1%	0%	F	0.094	F	0.532	21000	G
11 Main St	Town of Marion	0.13	18000	G	97%	1%	1%	0%	1%	0%	F	0.089	F	0.53	20000	G
11 N Main St	Town of Marion	0.07	13000	G	97%	1%	1%	0%	1%	0%	F	0.092	F	0.54	14000	G
11 N Main St	Town of Marion	0.41	11000	G	97%	1%	1%	0%	1%	0%	C	0.104	F	0.544	12000	G
16 S Commerce Street	Town of Marion	0.25	6000	G	98%	1%	1%	0%	0%	0%	F	NA			6400	G
16 S Commerce Street	Town of Marion	0.05	8200	G	98%	1%	1%	0%	0%	0%	F	0.096	F	0.589	9000	G
16 S Commerce Street	Town of Marion	0.68	7800	G	98%	1%	1%	0%	0%	0%	F	0.093	F	0.528	8600	G
16 11 Main St	Town of Marion	1.19	17000	G	98%	1%	1%	0%	0%	0%	C	0.081	F	0.546	18000	G
16 Park Blvd	Town of Marion	1.27	5700	G	98%	0%	1%	0%	0%	0%	C	0.089	F	0.619	6200	G
North 81	From: WCL Marion														18000	G
	Town of Marion (Maint: 86) 0.22 18000 G 75% 1% 1% 1% 22% 1% F 0.064 F														18000	G
	Combined Traffic Estimates for 2 Parallel Roadways on this Route: 34000 G 77% 1% 1% 1% 20% 1% F NA														35000	G
North 81	To: ECL Marion															
	From: SCL Marion															
	Town of Marion (Maint: 86) 0.27 18000 G 75% 1% 1% 1% 22% 1% F 0.064 F														18000	G
Combined Traffic Estimates for 2 Parallel Roadways on this Route: 34000 G 77% 1% 1% 1% 20% 1% F NA															35000	G
To: SR 16																

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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 	From:	SR 16														
	Town of Marion (Maint: 86)	0.68	14000	G	75%	1%	1%	1%	22%	1%	F	0.072	F		14000	G
	Combined Traffic Estimates for 2 Parallel Roadways on this Route:	31000		G	77%	1%	1%	1%	20%	1%	F	0.079	F	0.593	31000	G
South 	From:	WCL Marion														
	Town of Marion (Maint: 86)	0.22	16000	G	78%	1%	1%	1%	18%	1%	F	0.086	F		17000	G
	Combined Traffic Estimates for 2 Parallel Roadways on this Route:	34000		G	77%	1%	1%	1%	20%	1%	F	NA			35000	G
South 	From:	ECL Marion														
	Town of Marion (Maint: 86)	0.90	16000	G	78%	1%	1%	1%	18%	1%	F	0.086	F		17000	G
	Combined Traffic Estimates for 2 Parallel Roadways on this Route:	34000		G	77%	1%	1%	1%	20%	1%	F	NA			35000	G
South 	From:	SR 16														
	Town of Marion (Maint: 86)	0.37	17000	G	78%	1%	1%	1%	18%	1%	F	0.083	F		17000	G
	Combined Traffic Estimates for 2 Parallel Roadways on this Route:	31000		G	77%	1%	1%	1%	20%	1%	F	0.079	F	0.593	31000	G
	From:	Dead End														
	Town of Marion (Maint: 86)	2.20	1100	G	99%	0%	0%	0%	1%	0%	C	0.128	F	0.881	1200	G
	To:	SR 16														

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Route	Length	AADT	QA	4Tire	Bus	Truck				QC	K Factor	Dir Factor	AAWDT	QW	Year	
						2Axle	3+Axle	1Trail	2Trail							
<b>Town of Marion</b>																
(F9)	0.11	NA				From: SCL Marion					NA			NA		
						To: SCL Marion										
(1) N Church St	0.22	1400	G	99%	0%	0%	0%	0%	0%	F	0.096	F	0.536	1500	G	2005
						From: Lee Street										
						To: Catron Street										
(2) Rte 645 Fowler St	0.02	1900	G	98%	0%	1%	0%	1%	0%	C	0.094	F	0.603	2100	G	2005
						From: WCL Marion										
						To: Chatham Hill Cir										
(3) Pendleton St	0.11	4500	G	99%	0%	1%	0%	0%	0%	C	0.096	F	0.558	4900	G	2005
						From: Commerce St										
						To: E Main St										
(4452) Poston St	0.39	420	G	99%	0%	1%	0%	0%	0%	F	0.1	F	0.606	460	G	2005
						From: US 11 Main St										
						To: W Cherry St										
(4452) E Cherry St	0.21	3200	G	98%	0%	1%	0%	1%	0%	C	0.1	F	0.532	3500	G	2005
						From: S Park St										
						To: SR 16 Commerce St										
(4453) S Church St	0.77	2200	G	98%	0%	1%	0%	1%	0%	F	0.088	F	0.583	2500	G	2005
						From: SCL Marion										
						To: US 11; E Main St										
(4453) N Church St	0.11	1500	G	99%	0%	0%	0%	0%	0%	C	0.101	F	0.515	1600	G	2005
						From: Lee St										
						To: N Church St										
(4453) Lee St	0.31	1400	G	97%	0%	2%	1%	0%	0%	C	0.098	F	0.587	1500	G	2005
						From: US 11; N Main St										
						To: US 11; N Main St										
(4453) Chatham Hill Rd	0.15	5300	G	98%	0%	1%	0%	1%	0%	F	0.085	F	0.55	5800	G	2005
						From: Chilhowie St										
(4453) Chatham Hill Rd	1.16	2200	G	98%	0%	1%	0%	1%	0%	C	0.097	F	0.567	2400	G	2005
						To: NCL Marion										
(4454) Chilhowie St	0.96	2700	G	98%	1%	1%	0%	1%	0%	C	0.086	F	0.617	3000	G	2005
						From: WCL Marion										
(4454) Chilhowie St	0.14	1900	G	99%	0%	0%	0%	0%	0%	F	NA			2000	G	2005
						To: Chatham Hill Cir										
						From: Chilhowie St										
(4459) Keller Lane	0.70	1100	G	99%	0%	0%	0%	0%	0%	C	0.096	F	0.562	1200	G	2005
						To: N Main St										
						From: N Main St										
(4461) Johnston Rd	0.15	2400	G	96%	0%	1%	0%	2%	0%	C	0.133	F	0.763	2600	G	2005
						To: US 11 Main St										
1st Street	380	G				From: Look Ave					0.102	F		410	G	2005
						To: Lincoln Ave										
Catron St	340	G				From: Sprinkle Ave					0.112	F	0.682	370	G	2005
						To: Wolfe Ave										
Catron St	620	G				From: Prescott Ave					0.103	F	0.568	680	G	2005
						To: Chilhowie St										
Cumberland St	330	G				From: Clinton Ave					0.116	F	0.648	360	G	2005
						To: Hulldale Ave										
Dalton St	260	G				From: Hulldale Ave					0.144	F	0.625	290	G	2005
						To: Greenway St										

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						2Axle	3+Axle	1Trail	2Trail						
<b>Town of Marion</b>															
Dogwood Dr	130	G								0.155	F	0.544	140	G	2005
E Main St	1200	G								0.085	F	0.693	1400	G	2005
Hulldale Ave	49	G								0.175	F	0.6	50	G	2005
Look Ave	480	G								0.093	F	0.514	530	G	2005
Magnolia St	200	G								0.119	F	0.5	220	G	2005
Magnolia St	260	G								0.125	F	0.52	280	G	2005
Mt View Dr	180	G								0.103	F	0.558	200	G	2005
Park St	460	G								0.094	F	0.555	510	G	2005
Patton Ave	80	G								0.201	F	0.632	90	G	2005
Pearl St	550	G								0.118	F	0.556	600	G	2005
Pendleton St	4700	G								0.087	F	0.517	5200	G	2005
S Iron St	940	G								0.087	F	0.527	1000	G	2005
Wassona Dr	1300	G								0.098	F	0.608	1400	G	2005
Wassona Dr	1400	G	99%	0%	0%	0%	0%	0%	0%	C 0.11	F	0.508	1600	G	2005
Wolfe Ave	300	G								0.105	F	0.507	330	G	2005