

2005

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

where available

Special Locality Report

154

Town of Christiansburg

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 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

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
2005
Annual Average Daily Traffic Volume Estimates By Section of Route
Town of Christiansburg

Route	Jurisdiction	Length	AADT	QA	4Tire	Bus	-----Truck-----				QC	K Factor	QK	Dir Factor	AAWDT	QW
							2Axle	3+Axle	1Trail	2Trail						
		From:	SCL Christiansburg Near I-81													
8 W Main St	Town of Christiansburg (Maint: 60)	0.22	12000	G	96%	1%	1%	1%	1%	0%	F	0.102	F	0.575	13000	G
		To:	Old SCL Christiansburg													
8 W Main St	Town of Christiansburg	0.77	13000	G	96%	1%	1%	1%	1%	0%	C	0.086	F	0.500	14000	G
		To:	US 11; Radford St													
		From:	WCL Christiansburg													
11 Radford St	Town of Christiansburg	1.40	11000	G	98%	0%	1%	1%	1%	0%	C	0.097	F	0.518	12000	G
		To:	SR 8 W Main St													
		From:	SR 8, Radford St													
11 W Main St	Town of Christiansburg	0.30	4900	G	98%	0%	1%	1%	1%	0%	F	0.095	F	0.567	5300	G
		To:	Bus US 460 S Franklin St													
11 Bus 460 E Main St	Town of Christiansburg	0.12	8100	G	98%	0%	1%	1%	1%	0%	F	0.093	F	0.513	8800	G
		To:	Roanoke St													
		From:	E Main St													
11 Bus 460 Roanoke St	Town of Christiansburg	0.11	12000	G	98%	0%	1%	1%	1%	0%	F	0.092	F	0.507	13000	G
		To:	Craig St													
11 Bus 460 Roanoke St	Town of Christiansburg	0.98	14000	G	98%	0%	1%	1%	1%	0%	F	0.092	F	0.550	15000	G
		To:	SR 111 Depot St													
11 Bus 460 Roanoke St	Town of Christiansburg	0.86	17000	G	97%	0%	1%	1%	1%	0%	C	0.095	F	0.553	18000	G
		To:	US 460													
11 Roanoke St	Town of Christiansburg (Maint: 60)	1.15	16000	G	95%	0%	1%	1%	2%	0%	C	0.09	F	0.546	17000	G
		To:	I-81													
11 460 Roanoke St	Town of Christiansburg (Maint: 60)	0.09	9600	N	95%	0%	1%	1%	2%	0%	N	0.112	N	0.643	11000	N
		To:	Tower Rd, Hampton Rd													
11 460 Roanoke St	Town of Christiansburg	2.01	9600	G	95%	0%	1%	1%	2%	0%	F	0.112	F	0.643	11000	G
		To:	ECL Christiansburg													
		From:	SCL Christiansburg													
North 81	Town of Christiansburg (Maint: 60)	3.90	22000	G	70%	1%	1%	1%	26%	2%	F	0.069	F		22000	G
	Combined Traffic Estimates for 2 Parallel Roadways on this Route:		44000	G	71%	1%	1%	1%	25%	2%	F	0.074	F	0.552	44000	G
		To:	US 11, US 460													
North 81	Town of Christiansburg (Maint: 60)	0.77	24000	A	71%	1%	1%	1%	25%	2%	C	0.103	A		24000	A
	Combined Traffic Estimates for 2 Parallel Roadways on this Route:		47000	A	72%	1%	1%	1%	24%	2%	C	NA			47000	A
		To:	NCL Christiansburg													
		From:	SCL Christiansburg													
South 81	Town of Christiansburg (Maint: 60)	4.27	22000	G	72%	1%	1%	1%	24%	2%	F	0.085	F		22000	G
	Combined Traffic Estimates for 2 Parallel Roadways on this Route:		44000	G	71%	1%	1%	1%	25%	2%	F	0.074	F	0.552	44000	G
		To:	US 11, US 460													

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							2Axle	3+Axle	1Trail	2Trail						
South 81	From: US 11, US 460 Town of Christiansburg (Maint: 60) Combined Traffic Estimates for 2 Parallel Roadways on this Route:	0.34	23000	A	73%	1%	1%	1%	23%	2%	C	0.11	A	23000	A	
	To: NCL Christiansburg		47000	A	72%	1%	1%	1%	24%	2%	C	NA		47000	A	
111 Cambria Street	From: US 460 Town of Christiansburg	0.79	6600	G	95%	0%	1%	3%	1%	0%	C	0.099	F	0.541	7200	G
111 Cambria Street	From: Ellett Rd Town of Christiansburg	0.39	6600	G								NA		7000	G	
111 Depot Street	From: Depot St Cambria St Town of Christiansburg	0.97	4900	G	97%	0%	1%	1%	1%	0%	F	0.092	F	0.537	5400	G
111 Depot Street	From: Park St Town of Christiansburg	0.11	5800	G	97%	0%	1%	1%	1%	0%	C	0.089	F	0.552	6400	G
114 Peppers Ferry Road	From: US 11 WCL Christiansburg Town of Christiansburg	1.44	13000	G	98%	0%	1%	0%	1%	0%	C	0.094	F	0.571	15000	G
114 Peppers Ferry Road	From: Bus US 460 Town of Christiansburg	0.63	14000	G	98%	0%	0%	0%	1%	0%	C	0.095	F	0.544	15000	G
460 11 Roanoke St	From: US 460 I-81 Town of Christiansburg (Maint: 60)	0.09	9600	N	95%	0%	1%	1%	2%	0%	N	0.112	N	0.643	11000	N
460 11 Roanoke St	From: Tower Rd, Hampton Rd Town of Christiansburg	2.01	9600	G	95%	0%	1%	1%	2%	0%	F	0.112	F	0.643	11000	G
Bus 460 N Franklin St	From: ECL Christiansburg NCL Christiansburg Town of Christiansburg (Maint: 60)	0.97	13000	N	90%	1%	1%	1%	7%	1%	N	0.087	N	0.505	14000	N
Bus 460 11 E Main St	From: SR 114 Peppers Ferry Rd US 11 Main St Town of Christiansburg	0.12	8100	G	98%	0%	1%	1%	1%	0%	F	0.093	F	0.513	8800	G
Bus 460	From: Roanoke St SR 114 Peppers Ferry Rd Town of Christiansburg (Maint: 60)	0.66	22000	G	90%	1%	1%	1%	7%	1%	F	0.091	F	0.518	23000	G
Bus 460 11 Roanoke St	From: US 460 E Main St Town of Christiansburg	0.11	12000	G	98%	0%	1%	1%	1%	0%	F	0.092	F	0.507	13000	G
Bus 460 11 Roanoke St	From: Craig St Town of Christiansburg	0.98	14000	G	98%	0%	1%	1%	1%	0%	F	0.092	F	0.550	15000	G
Bus 460	From: SR 111 Depot St US 460 Town of Christiansburg (Maint: 60)	0.18	16000	G	98%	0%	1%	0%	0%	0%	F	0.089	N	0.588	17000	G
	To: WCL Christiansburg															

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							2Axle	3+Axle	1Trail	2Trail						
Bus 460 N Franklin St	From: WCL Christiansburg Town of Christiansburg (Maint: 60)	0.11	32000	G	98%	0%	1%	0%	0%	0%	F	0.089	F	0.588	35000	G
Bus 460 N Franklin St	To: SR 111 Cambria St Town of Christiansburg	1.38	26000	G	98%	0%	1%	0%	0%	0%	C	0.090	F	0.542	28000	G
Bus 460 11 Roanoke St	To: Depot St From: SR 111 Depot St Town of Christiansburg	0.86	17000	G	97%	0%	1%	1%	1%	0%	C	0.095	F	0.553	18000	G
Bus 460 N Franklin St	To: US 460 From: Depot St Town of Christiansburg	0.28	10000	G	98%	0%	1%	0%	0%	0%	F	0.084	F	0.507	11000	G
	To: US 11 Main St															

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						2Axle	3+Axle	1Trail	2Trail							
Town of Christiansburg																
(F60) Flanagan Dr	0.04	NA														
(F62)	0.41	NA														
(F63) Brammer Lane	0.24	NA														
(F856)	0.13	NA														
(1) Falling Branch Rd	0.46	40	G	99%	0%	0%	0%	0%	0%	F	0.381	F	0.594	40	G	2005
(3500)	0.14	2200	G	99%	0%	0%	0%	0%	0%	F	0.108	F	0.617	2400	G	2005
(3501) S Franklin St	1.21	5600	G	99%	0%	0%	0%	0%	0%	C	0.105	F	0.686	6100	G	2005
(3501) S Franklin St	0.57	6200	G	99%	0%	0%	0%	0%	0%	F	0.092	F	0.773	6800	G	2005
(3502) Phlegar St	0.08	5000	G	99%	0%	1%	0%	0%	0%	F	0.1	F	0.575	5500	G	2005
(3502) First St	0.40	5300	G	99%	0%	1%	0%	0%	0%	C	0.107	F	0.581	5800	G	2005
(3503) Depot St	0.12	8600	G	99%	0%	0%	0%	0%	0%	F	0.091	F	0.574	9500	G	2005
(3503) Depot St	0.14	10000	G	97%	0%	1%	1%	1%	0%	F	0.090	F	0.572	11000	G	2005
(3503) Depot St	0.41	14000	G	97%	0%	1%	1%	1%	0%	C	0.088	F	0.542	15000	G	2005
(3503) Depot St	0.91	2600	G	97%	0%	1%	1%	1%	0%	F	0.101	F	0.591	2800	G	2005
(3504) Park St	0.87	1800	G	99%	0%	0%	0%	0%	0%	C	0.097	F	0.516	2000	G	2005
(3505) E Main St	0.17	1700	G	99%	0%	0%	0%	0%	0%	F	0.099	F	0.521	1900	G	2005
(3506) Ellett Rd	0.39	2000	G	98%	0%	1%	0%	0%	0%	C	0.110	F	0.599	2200	G	2005
Alleghany St		2200	G								0.103	F		2400	G	2005
Church St		400	G								0.086	F		440	G	2005
Clearview Drive		2800	G								0.111	F	0.573	2800	G	2005

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						2Axle	3+Axle	1Trail	2Trail							
<u>Town of Christiansburg</u>																
Electric Way		400	G			From: Fisher St				0.149	F			440	G	2005
						To: Simmons Rd										
North Drive		320	G			From: Depot Street				0.118	F	0.632	320	G	2005	
						To: E. Main Street										
Republic Road		310	G			From: Lester Street				0.137	F	0.547	310	G	2005	
						To: Park Street										
Ridge Rd		90	G			From: Overhill Rd				0.127	F		90	G	2005	
						To: Dogwood Terrace										
Summitridge Road		700	G			From: Briarwood Drive				0.105	F	0.6	700	G	2005	
						To: S. Franklin Street										