2002

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

where available

Special Locality Report 321

Town of Warsaw

Prepared By

Virginia Department of Transportation Mobility Management Division

In Cooperation With

U.S. Department of Transportation Federal Highway Administration

Virginia Department of Transportation Mobility Management 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 at VDOT Mobility Management's 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's Mobility Management 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

Peak Hour: The estimate of the traffic volume for the 30th highest traffic volume occurring in a one-year period divided by the AADT for the same one-year period.

QK: Quality of the Peak Hour estimate:

- A Factor based on 30th Highest Hour Observed During 12 Months of Continuous Traffic Data
- B Factor based on 30th Highest Hour Observed During Less than 12 Months of Continuous Traffic Data
- Factor based on Highest Hour Collected at in a 48 Hour Weekday Period
- M Factor based on Manual Estimate of 30th Highest 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

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

7 Virginia State Route

(600) Secondary Route

Special Routes

Bus Bus - Business Route
Bypas - Bypass Route
Truck - Truck Route
ALT 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 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.

						10WITOT VV at Se	avv								
Route	Length	AADT	QA	4Tire	Bus	Tru 2Axle 3+Axle			()(:	Peak Hour	QK	Dir Factor	AAWDT	QW	Year
Town of Warsaw				From:		NCL Warsaw		i							
3	0.20	6500	N	91%	1%	2% 1%	5%	0%	N	0.083	Ν	0.579	6500	Ν	2002
				To: From:		SR 3 Bus									
3	0.11	6800	G	90%	1%	US 360, SR 3 Bu 3% 1%	5%	0%	F	0.081	F	0.568	6800	G	2002
3	••••			To:	.,,	SCL Warsaw	0,0	0,0		0.00	•				
Bus				From:		SR 3									
3	0.77	12000	N	93%	0%	3% 1%	3%	0%	N	0.087	N	0.622	12000	Ν	2002
Bus				To: From:		US 360									
3 (360)	0.78	12000	G	93%	0%	3% 1%	3%	0%	F	0.087	F	0.622	12000	G	2002
$\bigcirc \bigcirc$				To:		E SR 3									
~~~	2.02	14000	N	93%	0%	WCL Warsaw 3% 1%	3%	0%	N	0.096	N	0.529	14000	N	2002
360	2.02	14000	IN	93%	076		370	070	IN	0.090	IN	0.529	14000	IN	2002
260	0.78	12000	G	From: 93%	0%	W SR 3 Bus 3% 1%	3%	0%	F	0.087	F	0.622	12000	G	2002
360	0.70	.2000		To:	070	E SR 3 Bus, SR			•	0.001	•	0.022	12000		2002
360	0.37	7900	G	From: 93%	0%	3% 1%	3%	0%	F	0.085	F	0.564	7900	G	2002
000)				To:		ECL Warsaw									
				From:		SCL Warsaw									
624	0.10	110	N	т.,		**************************************				NA			0	Ν	1998
				To: From:		US 360 EAST									
649	0.34	180	R	FIOIII.		US 360 EAST				NA			NA		09/11/200
39	0.01			To		US 360 WEST							10.		00/11/200
				From:		SR 3									
690	0.20	1000	G	98%	0%	1% 0%	1%	0%	F	0.113	F	0.537	1000	G	2002
				To:		NCL WARSAW	1								
	0.13	190	R	From:		US 360				NA			NA		10/17/2001
700	0.13			To:	NCL Warsaw						INA		10/17/200		
				From:											
1000	0.25	70	R						NA			NA		09/11/2001	
79				To:		Cul-de-Sac									
$\bigcirc$	0.75	000	•	From:	00/	US 360	00/	00/	0	0.000	_	0.574	000	0	0000
(1001)	0.75	360	G	96% To:	0%	3% 0% NCL WARSAW	2%	0%	С	0.092	F	0.571	360	G	2002
				From:		SR 3		1							
1002	0.23	280	R	<u> </u>		DIC 3				NA			NA		09/26/200
79)				To:		79-1001									
$\bigcirc$	2.25	4455	_	From:		SR 3									00/4/255
1003	0.23	1100	R	To:		US 360				NA			NA		09/11/200
				From:	TIC	360; SR 3 BUS; BEG	INLOOL	)							
1004	0.17	300	R		<u>US</u> .	JOU, DIK J BUS, BEU	II LOOI			NA			NA		09/11/200
79				To:		79-1036									
1004	0.13	310	R	From:		., 1000				NA			NA		09/11/200
(N)				To:		END LOOP									
$\bigcirc$			_	From:		79-1012									10.55
(1005)	0.18	30	R							NA			NA		1998
	0.17			From:		79-1006	_			ALA			NI A		4000
1005	0.17	80	R							NA			NA		1998
_	0.00	110	P	From:		79-1020				NIA			NIA		1000
1005	0.08	110	R	To		79-690		1		NA			NA		1998
						1,7-0,70									

Route	Length	AADT	QA	4Tire	Bus 2Axle 3+Axle 1Trail 2Trail	(1)(')	QK Dir Factor	AAWDT C	)W Year
Cown of Warsaw				From:	79-1012				
1006	0.08	310	R			NA		NA	09/11/200
	0.10	520	R	To: From:	79-1005	NA NA		NA	09/11/200
1006	0.10	320	IX	To	SR 3	INA		INA	09/11/200
				From:	US 360; 79-624				
1007	0.13	1900	R	To	Dead End	NA I		NA	09/11/200
				From:	US 360				
1008	0.19	130	R	<u></u>		NA		NA	09/26/200
				To:	79-1002				
1000	0.09	200	R	From:	79-1028	NA		NA	1998
1009	0.00			To	79-1014 SOUTH				1000
1009	0.02	240	R	From:	77-1014 500 111	NA		NA	1998
				To:	79-1014 NORTH				
1009	0.06	260	R			NA		NA	1998
$\overline{}$				To: From:	79-1010 SOUTH	<del></del>			
1009	0.03	320	R			NA		NA	1998
<u></u>	0.05	650	R	From:	79-1010 NORTH	NA		NA	09/11/200
1009	0.05	650	K	To	US 360	INA ]		INA	09/11/200
				From:	WCL WARSAW				
1010	0.06	10	R			NA		NA	1998
				To: From:	79-1011	<del></del>			
1010	0.09	100	R	To	79-1009	NA I		NA	1998
				From:	79-1009 SOUTH				
1010	0.14	30	R	To	79-1018	NA I		NA	1998
				From:	79-1014	l			
1011	0.09	20	R	<u> </u>	77 1011	NA		NA	1998
79				To:	79-1010				
	0.11	60	R	From:	Dead End	NA NA		NA	1998
1012	0.11	00	K	To:	70 1005	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		INA	1990
1012	0.08	110	R	From:	79-1005	NA		NA	1998
79				To: From:	79-1006	ļ			
1012	0.28	70	R			NA		NA	1998
				To:	Dead End				
1013	0.18	150	R	From:	US 360; 79-1016	NA NA		NA	09/11/200
1013)	0.10			To	Dead End	1.0.		10/	00/11/200
				From:	WCL WARSAW				
1014	0.04	20	R			NA		NA	1998
	0.00	40		From:	79-1011	NA.		NIA	4000
1014)	0.09	40	R	_		NA		NA	1998
1014	0.15	46	R	From:	79-1009	NA		NA	1998
797	3.10			To:	79-1018				
				From:	Cul-de-Sac				
1015	0.23	100	R			NA		NA	09/11/200
	0.00	200		To: From:	0.23 MN Cul-de-Sac	)		N1.A	00/44/000
1015	0.33	280	R	To:	79-1036	NA		NA	09/11/200

					TOWITOI	vv al Saw							
Route	Length	AADT	QA	4Tire	Rue	Truck 3+Axle 1Trail 2Tra	C)C:	Peak Hour	QK	Dir Factor	AAWDT	QW	Year
Town of Warsaw				From:	79.	1036	1						
1015	0.09	870	R	<u> </u>	1)-	1030	_	NA			NA		09/11/2001
79				To:	US	360							
				From:	79-	1017							1000
1016	0.40	410	R	To:	IIC	360	7	NA			NA		1998
				From:		d End	1						
1017	0.04	80	R	<u> </u>	Dea	a Dia	_	NA			NA		1998
79				To: From:	79-	1016	1—						
1017	0.07	170	R	rioni.				NA			NA		1998
				To: From:	79-	1023	]						
1017	0.10	90	R	. —			_	NA			NA		1998
				To:		d End							
	0.05	80	R	From:	SCL W	ARSAW	_	NA			NA		1998
1018	0.03	00	IX.	т			-	INA			INA		1990
(1019)	0.10	110	R	From:	79-	1014		NA			NA		1998
(018) 79 (018)	0.10		• • •	To:	70	1010							1000
(1018)	0.08	170	R	From:	/9-	1010	_	NA			NA		1998
(19719)				To:	79-	-649	1						
				From:	US	360							
1019	0.15	60	R	_			_	NA			NA		1998
				To:		d End							
	0.12	40	R	From:	79-	1005		NA			NA		1998
1020	0.12	70		To-	NCL W	ARSAW	7	INA			IVA		1000
				From:		1022							
1021	0.15	680	R					NA			NA		1998
79				To:	US	360							
	0.40	4400		From:	SI	R 3	J	NI A			NIA		4000
1022	0.18	1100	R				_	NA			NA		1998
$\bigcap$	0.04	1400	R	From:	79-	1021	_	NA			NA		1998
1022	0.04	1400	K	To:	Dea	d End	7	INA			INA		1990
				From:		d End	l						
1023	0.16	80	R	<u>.                                    </u>			_	NA			NA		1998
79				To:	79-	1017							
$\bigcirc$			_	From:	Dea	d End							
1027	0.15	60	R	To:	70	-649	7	NA			NA		1998
				From:		1029	1						
1028	0.13	110	R	<u> </u>	/9-	1043	_	NA			NA		1998
				To:	79-	1009	¬						
1028	0.02	20	R	From:	1)-		_	NA			NA		1998
79				To:	Dea	d End							
				From:	US	360							
1033	0.17	130	R					NA			NA		1998
				From:	79-	1034	]						10
1033	0.09	80	R	To:	D	d End	7	NA			NA		1998
				From:			1						
1034	0.05	50	R		/9-	1033	_	NA			NA		1998
1034				To:	Cul-c	le-Sac	1						

Route	Length	AADT	QA	4Tire	Bus	Tru 2Axle 3+Axle			QC	Peak Hour	QK	Dir Factor	AAWDT	QW	Year
Town of Warsaw															
$\bigcirc$			_	From:		US 360									201111000
(1035)	0.07	410	R							NA			NA		09/11/200
				To: From:		79-1037									
1035	0.22	160	R							NA			NA		09/11/200
				To-		79-1038		<u> </u>							
1035	0.04	10	R	_						NA			NA		09/11/200
79				To:		Dead End									
_				From:		79-1004									
1036	0.04	610	R							NA			NA		1998
79				To:		79-1015									
				From:		79-1035									
(1037)	0.18	130	R							NA			NA		1998
				To- From:		0.18 MN 79-103	5								
1037	0.02	20	R	110111						NA			NA		1998
79				To:		Dead End									
				From:		Cul-de-Sac									
1038	0.16	100	R							NA			NA		1998
79				To:		79-1035									
1038	0.05	20	R	From:		.,, 1035				NA			NA		1998
79				To:		Cul-de-Sac									