

Appendix L. Vehicle Miles of Travel (VMT) and Speeds

Appendix L contains tables for each sub-area showing vehicle miles of travel (VMT) and speeds by facility type, analysis year, and time of day.

Durham County

LG3	Functional Class	Modeled 2015		Modeled 2025		Modeled 2035	
		2015 AM	Speed	2025 AM	Speed	2035 AM	Speed
11	urban Interstate	564,986	64	653,743	61	713,463	62
12	urban freeway	363,107	52	572,528	52	647,477	52
13	other principal arterial	269,391	40	268,658	41	289,762	40
14	minor arterial	334,760	38	359,378	37	404,652	37
15	collector	140,734	40	134,864	39	164,849	37
16	urban local	262,954	22	278,279	22	316,000	22
21	rural interstate	46,713	61	59,561	39	63,192	35
22	other principal arterial	8,780	41	10,207	34	10,543	32
23	rural minor arterial	73,463	49	87,593	47	105,962	53
24	major collector	46,330	45	50,638	41	60,575	38
25	minor collector	10,686	41	10,356	39	10,947	39
26	rural local	32,866	28	38,844	27	37,946	27
	total	2,154,771		2,524,678		2,825,368	

LG3	Functional Class	2015 PM		2025 PM		2035 PM	
		VMT	Speed	VMT	Speed	VMT	Speed
11	urban Interstate	750,761	58	853,140	55	952,321	57
12	urban freeway	494,045	47	750,315	45	849,588	45
13	other principal arterial	364,613	33	396,238	36	424,761	35
14	minor arterial	531,155	34	596,069	33	654,938	32
15	collector	234,548	36	230,588	34	283,689	33
16	urban local	480,394	22	514,885	21	572,129	21
21	rural interstate	60,110	54	77,329	35	81,515	34
22	other principal arterial	11,237	39	12,841	32	13,161	30
23	rural minor arterial	92,551	45	110,702	44	134,425	50
24	major collector	71,243	42	80,914	36	90,605	33
25	minor collector	15,691	41	14,573	39	15,324	39
26	rural local	58,939	27	64,039	25	63,468	27
	total	3,165,287		3,701,633		4,135,925	

LG3	Functional Class	2015 OP		2025 OP		2035 OP	
		VMT	Speed	VMT	Speed	VMT	Speed
11	urban Interstate	1,196,287	65	1,383,488	62	1,517,367	63
12	urban freeway	748,426	51	1,162,559	53	1,318,708	52
13	other principal arterial	568,449	40	586,737	41	630,616	40
14	minor arterial	780,327	38	847,412	37	948,221	36
15	collector	319,800	40	314,229	39	388,681	38
16	urban local	681,548	22	711,724	21	790,543	21
21	rural interstate	80,896	69	104,411	68	117,730	66
22	other principal arterial	18,328	44	20,554	43	22,053	42
23	rural minor arterial	124,742	55	150,705	55	185,805	55
24	major collector	91,913	46	88,539	43	100,230	42
25	minor collector	19,244	42	19,119	39	20,159	39
26	rural local	63,734	27	65,842	26	64,428	25
	total	4,693,695		5,455,320		6,104,541	

Daily total **10,013,753** **11,681,600** **13,065,834**

Wake County

LG3	Functional Class	Modeled 2015		Modeled 2025		Modeled 2035	
		2015 AM		2025 AM		2035 AM	
		VMT	Speed	VMT	Speed	VMT	Speed
11	urban Interstate	1,805,036	56	2,162,419	52	2,053,802	51
12	urban freeway	585,704	56	810,057	46	946,304	42
13	other principal arterial	1,311,223	43	1,567,634	38	1,838,096	38
14	minor arterial	1,427,070	38	1,761,468	35	2,023,977	35
15	collector	624,979	38	836,578	34	962,235	32
16	urban local	1,282,816	25	1,625,661	25	1,904,190	25
21	rural interstate	17,779	62	26,257	57	32,222	51
22	other principal arterial	50,310	53	126,250	50	143,585	47
23	rural minor arterial	43,737	46	82,657	42	105,519	43
24	major collector	47,718	47	77,940	44	101,958	48
25	minor collector	22,288	37	35,934	33	48,683	36
26	rural local	73,983	25	111,461	22	134,346	23
	total	7,292,643		9,224,316		10,294,921	

LG3	Functional Class	2015 PM		2025 PM		2035 PM	
		VMT	Speed	VMT	Speed	VMT	Speed
		11	urban Interstate	2,445,216	49	2,891,988	43
12	urban freeway	833,822	46	1,239,788	39	1,415,079	39
13	other principal arterial	1,857,351	35	2,188,507	30	2,511,091	31
14	minor arterial	2,267,224	32	2,756,449	28	3,091,162	28
15	collector	1,028,979	33	1,355,303	28	1,542,551	26
16	urban local	2,272,834	24	2,861,860	23	3,286,564	23
21	rural interstate	33,656	48	54,572	45	60,626	37
22	other principal arterial	67,314	51	215,368	49	238,313	45
23	rural minor arterial	72,793	43	128,226	38	168,216	40
24	major collector	63,096	45	114,553	38	154,523	42
25	minor collector	38,035	35	66,340	30	86,939	34
26	rural local	131,456	25	197,336	22	227,880	22
	total	11,111,775		14,070,291		15,641,247	

LG3	Functional Class	2015 OP		2025 OP		2035 OP	
		VMT	Speed	VMT	Speed	VMT	Speed
		11	urban Interstate	3,639,454	63	4,456,481	62
12	urban freeway	1,091,108	58	1,507,417	55	1,750,343	55
13	other principal arterial	2,862,454	45	3,456,785	41	3,911,727	41
14	minor arterial	3,189,284	41	3,882,122	39	4,481,332	38
15	collector	1,309,944	39	1,716,214	37	1,971,610	37
16	urban local	2,953,424	24	3,710,514	24	4,363,893	24
21	rural interstate	33,227	63	47,154	60	60,413	58
22	other principal arterial	89,663	55	214,606	57	241,099	53
23	rural minor arterial	80,178	47	150,634	45	202,433	46
24	major collector	86,347	47	145,860	44	175,499	46
25	minor collector	38,729	38	69,501	35	91,258	37
26	rural local	136,480	23	199,506	22	239,859	22
	total	15,510,291		19,556,794		21,536,743	

Daily total **33,914,709** **42,851,401** **47,472,912**

Granville County (modeled portion)

LG3	Functional Class	Modeled 2015		Modeled 2025		Modeled 2035	
		2015 AM		2025 AM		2035 AM	
		VMT	Speed	VMT	Speed	VMT	Speed
11	urban Interstate	-	-	-	-	-	-
12	urban freeway	-	-	-	-	-	-
13	other principal arterial	-	-	-	-	-	-
14	minor arterial	2,701	34	2,990	29	3,062	25
15	collector	12,348	32	12,766	30	14,604	30
16	urban local	-	-	-	-	-	-
21	rural interstate	134,479	68	178,356	62	194,829	60
22	other principal arterial	-	-	-	-	-	-
23	rural minor arterial	-	-	3,844	47	4,656	46
24	major collector	96,004	42	126,684	40	146,943	40
25	minor collector	39,959	37	55,732	33	68,243	34
26	rural local	35,575	17	43,576	16	49,786	16
	total	321,065		423,949		482,123	

LG3	Functional Class	2015 PM		2025 PM		2035 PM	
		VMT	Speed	VMT	Speed	VMT	Speed
11	urban Interstate	-	-	-	-	-	-
12	urban freeway	-	-	-	-	-	-
13	other principal arterial	-	-	-	-	-	-
14	minor arterial	3,047	31	4,008	19	3,999	17
15	collector	16,486	25	17,394	24	19,643	23
16	urban local	-	-	-	-	-	-
21	rural interstate	167,203	66	218,853	56	236,838	56
22	other principal arterial	-	-	-	-	-	-
23	rural minor arterial	-	-	7,984	46	9,727	45
24	major collector	128,633	41	177,353	38	204,571	38
25	minor collector	57,734	35	86,134	29	103,265	32
26	rural local	56,774	17	68,955	16	78,343	16
	total	429,876		580,682		656,387	

LG3	Functional Class	2015 OP		2025 OP		2035 OP	
		VMT	Speed	VMT	Speed	VMT	Speed
11	urban Interstate	-	-	-	-	-	-
12	urban freeway	-	-	-	-	-	-
13	other principal arterial	-	-	-	-	-	-
14	minor arterial	4,179	37	4,681	36	4,821	36
15	collector	23,362	32	22,233	29	24,546	27
16	urban local	-	-	-	-	-	-
21	rural interstate	223,906	70	305,816	69	346,219	68
22	other principal arterial	-	-	-	-	-	-
23	rural minor arterial	-	-	8,809	47	9,751	46
24	major collector	177,974	46	210,472	46	237,381	46
25	minor collector	55,846	38	82,176	37	99,240	38
26	rural local	71,673	17	91,254	16	102,103	16
	total	556,940		725,440		824,060	

Daily total **1,307,882** **1,730,071** **1,962,570**

Franklin County (modeled portion)

LG3	Functional Class	Modeled 2015 2015 AM		Modeled 2025 2025 AM		Modeled 2035 2035 AM	
		VMT	Speed	VMT	Speed	VMT	Speed
11	urban Interstate	-	-	-	-	-	-
12	urban freeway	-	-	-	-	-	-
13	other principal arterial	34,437	54	46,419	50	50,770	48
14	minor arterial	20,220	39	23,463	35	27,044	34
15	collector	6,455	52	6,153	43	7,050	43
16	urban local	13,894	23	18,391	23	21,505	23
21	rural interstate	-	-	-	-	-	-
22	other principal arterial	59,069	60	75,239	59	87,361	58
23	rural minor arterial	61,417	52	72,206	48	83,382	48
24	major collector	55,604	48	75,547	46	86,890	45
25	minor collector	48,580	43	53,456	39	60,595	39
26	rural local	40,849	18	51,816	17	60,313	17
	total	340,525		422,688		484,910	

LG3	Functional Class	2015 PM		2025 PM		2035 PM	
		VMT	Speed	VMT	Speed	VMT	Speed
11	urban Interstate	-	-	-	-	-	-
12	urban freeway	-	-	-	-	-	-
13	other principal arterial	46,601	52	59,504	46	63,474	44
14	minor arterial	30,815	33	36,741	29	42,042	26
15	collector	9,658	51	9,837	42	12,126	41
16	urban local	25,274	24	31,863	23	36,885	23
21	rural interstate	-	-	-	-	-	-
22	other principal arterial	77,355	59	94,839	57	110,855	55
23	rural minor arterial	82,684	51	97,196	47	111,981	46
24	major collector	83,773	47	109,492	44	123,857	41
25	minor collector	68,232	43	82,009	38	93,549	38
26	rural local	68,675	18	87,890	17	102,520	17
	total	493,067		609,369		697,290	

LG3	Functional Class	2015 OP		2025 OP		2035 OP	
		VMT	Speed	VMT	Speed	VMT	Speed
11	urban Interstate	-	-	-	-	-	-
12	urban freeway	-	-	-	-	-	-
13	other principal arterial	68,908	55	92,714	52	102,711	51
14	minor arterial	44,661	40	49,890	38	56,121	37
15	collector	13,524	52	14,328	42	16,732	42
16	urban local	32,925	23	40,932	22	47,938	22
21	rural interstate	-	-	-	-	-	-
22	other principal arterial	103,265	60	131,704	59	154,459	59
23	rural minor arterial	110,443	53	126,478	49	148,610	49
24	major collector	104,932	49	146,142	47	164,486	46
25	minor collector	93,738	44	97,178	39	110,021	39
26	rural local	90,299	17	113,078	17	129,918	17
	total	662,694		812,443		930,995	

Daily total

1,496,285

1,844,501

2,113,195

Johnston County (modeled portion)

LG3	Functional Class	Modeled 2015 2015 AM		Modeled 2025 2025 AM		Modeled 2035 2035 AM	
		VMT	Speed	VMT	Speed	VMT	Speed
11	urban Interstate	46,692	67	60,015	64	67,694	65
12	urban freeway	-	-	-	-	-	-
13	other principal arterial	44,142	43	51,437	35	54,022	33
14	minor arterial	44,588	43	50,703	40	71,809	49
15	collector	23,360	44	28,577	37	33,016	35
16	urban local	59,234	30	61,074	28	73,039	28
21	rural interstate	125,262	73	155,034	71	173,690	73
22	other principal arterial	107,133	62	163,390	55	182,806	49
23	rural minor arterial	11,864	46	13,777	46	14,826	45
24	major collector	177,184	49	213,497	46	238,912	44
25	minor collector	45,513	45	49,805	39	57,263	39
26	rural local	154,740	24	180,976	22	208,972	22
	total	839,712		1,028,284		1,176,049	

LG3	Functional Class	2015 PM		2025 PM		2035 PM	
		VMT	Speed	VMT	Speed	VMT	Speed
11	urban Interstate	61,505	64	79,611	55	90,316	62
12	urban freeway	-	-	-	-	-	-
13	other principal arterial	61,838	34	65,924	29	68,510	27
14	minor arterial	62,807	38	72,640	35	112,102	44
15	collector	40,557	39	44,124	34	49,430	32
16	urban local	103,944	27	107,915	26	130,798	26
21	rural interstate	167,120	70	204,723	66	230,242	70
22	other principal arterial	138,544	52	236,874	41	253,733	34
23	rural minor arterial	15,278	45	17,472	45	18,340	44
24	major collector	256,377	47	302,998	43	337,896	41
25	minor collector	71,947	43	81,508	37	92,490	36
26	rural local	249,684	23	299,689	22	341,361	21
	total	1,229,601		1,513,478		1,725,220	

LG3	Functional Class	2015 OP		2025 OP		2035 OP	
		VMT	Speed	VMT	Speed	VMT	Speed
11	urban Interstate	90,869	69	114,153	71	128,913	70
12	urban freeway	-	-	-	-	-	-
13	other principal arterial	95,767	45	111,314	43	118,291	41
14	minor arterial	96,777	45	109,201	44	146,973	50
15	collector	49,996	45	58,445	39	67,582	38
16	urban local	132,817	29	136,064	26	160,165	27
21	rural interstate	252,056	74	304,138	75	342,093	75
22	other principal arterial	208,294	64	309,574	63	350,770	59
23	rural minor arterial	22,058	47	25,861	46	28,338	46
24	major collector	338,259	51	403,459	48	458,568	47
25	minor collector	84,849	45	91,617	40	102,957	40
26	rural local	314,675	23	369,163	22	414,009	21
	total	1,686,418		2,032,989		2,318,656	

Daily total

3,755,731

4,574,751

5,219,925

Orange County

LG3	Functional Class	Modeled 2015 2015 AM		Modeled 2025 2025 AM		Modeled 2035 2035 AM	
		VMT	Speed	VMT	Speed	VMT	Speed
11	urban Interstate	210,131	67	253,384	67	284,241	68
12	urban freeway	77,830	41	83,224	39	86,897	37
13	other principal arterial	97,630	35	112,761	30	118,505	28
14	minor arterial	109,396	34	131,706	32	143,969	31
15	collector	17,534	38	28,706	38	32,778	38
16	urban local	77,739	20	95,390	20	104,309	20
21	rural interstate	248,105	68	278,405	68	319,718	68
22	other principal arterial	-	-	-	-	-	-
23	rural minor arterial	49,523	52	56,114	50	62,180	49
24	major collector	78,792	48	94,385	46	106,571	46
25	minor collector	40,262	42	47,529	39	54,831	38
26	rural local	47,699	21	57,081	22	67,377	22
total		1,054,640		1,238,683		1,381,376	

LG3	Functional Class	2015 PM		2025 PM		2035 PM	
		VMT	Speed	VMT	Speed	VMT	Speed
11	urban Interstate	301,486	62	360,711	62	407,463	63
12	urban freeway	102,841	37	111,881	33	113,910	32
13	other principal arterial	131,244	29	150,540	24	156,133	22
14	minor arterial	172,704	32	211,036	29	227,469	28
15	collector	36,724	35	55,107	36	64,582	35
16	urban local	139,997	21	175,090	20	188,549	20
21	rural interstate	335,527	66	379,664	64	442,411	65
22	other principal arterial	-	-	-	-	-	-
23	rural minor arterial	65,280	51	74,286	48	81,640	48
24	major collector	130,545	47	152,470	46	171,753	45
25	minor collector	61,673	41	73,300	38	88,237	38
26	rural local	80,211	21	95,162	22	113,425	22
total		1,558,232		1,839,247		2,055,572	

LG3	Functional Class	2015 OP		2025 OP		2035 OP	
		VMT	Speed	VMT	Speed	VMT	Speed
11	urban Interstate	459,673	68	549,887	67	616,248	67
12	urban freeway	168,271	39	177,126	42	185,364	41
13	other principal arterial	213,137	36	251,390	32	262,764	30
14	minor arterial	242,715	35	302,351	34	327,938	34
15	collector	46,369	37	73,264	38	79,970	37
16	urban local	196,314	20	239,726	20	259,799	20
21	rural interstate	556,195	68	626,207	68	723,834	68
22	other principal arterial	-	-	-	-	-	-
23	rural minor arterial	89,916	52	101,730	50	112,750	50
24	major collector	174,985	48	210,877	47	234,580	47
25	minor collector	80,313	42	96,087	39	110,109	39
26	rural local	102,972	21	120,136	21	137,547	21
Total		2,330,860		2,748,782		3,050,095	

Daily total

4,943,732

5,826,712

6,487,853

Johnston County (non-modeled portion)

Johnston County VMT	2015	2025	2035
Urban Interstate	127,055	116,869	115,273
Other Freeway & Expressway	0	0	0
Other Principal Arterial	69,418	63,853	62,981
Minor Arterial	24,378	22,424	22,118
Urban Collector	34,670	32,350	31,987
Urban Local	20,345	18,714	18,459
Rural Interstate	731,422	672,787	663,595
Other PA	274,213	252,231	248,785
Minor Arterial	86,914	79,947	78,855
Rural Major Collector	343,801	316,240	311,920
Rural Minor Collector	88,622	81,517	80,404
Rural Local	174,371	160,393	158,201
Total	1,975,211	1,817,327	1,792,577
Speed	Year	Year	Year
	2015	2025	2035
Urban Interstate	63	63	63
Other Freeway & Expressway	0	0	0
Other Principal Arterial	29	29	29
Minor Arterial	32	32	32
Urban Collector	31	31	31
Urban Local	31	31	31
Rural Interstate	66	66	66
Other PA	47	47	47
Minor Arterial	44	44	44
Rural Major Collector	43	43	43
Rural Minor Collector	42	42	42
Rural Local	42	42	42

Franklin County (non-modeled portion)

Franklin County VMT	2015	2025	2035
Urban Interstate	0	0	0
Other Freeway & Expressway	0	0	0
Other Principal Arterial	9,612	8,200	7,891
Minor Arterial	10,995	9,380	9,026
Urban Collector	0	0	0
Urban Local	5,333	4,549	4,378
Rural Interstate	0	0	0
Other PA	67,065	57,211	55,055
Minor Arterial	76,936	65,631	63,158
Rural Major Collector	83,514	71,243	68,558
Rural Minor Collector	39,287	33,515	32,251
Rural Local	29,156	24,872	23,935
Total	321,899	274,602	264,252

Speed	Year 2015	Year 2025	Year 2035
Urban Interstate	0	0	0
Other Freeway & Expressway	0	0	0
Other Principal Arterial	29	29	29
Minor Arterial	32	32	32
Urban Collector	0	0	0
Urban Local	31	31	31
Rural Interstate	0	0	0
Other PA	47	47	47
Minor Arterial	44	44	44
Rural Major Collector	43	43	43
Rural Minor Collector	42	42	42
Rural Local	42	42	42

Granville County (non-modeled portion)

Granville County VMT	2015	2025	2035
Urban Interstate	50,436	43,174	42,368
Other Freeway & Expressway	0	0	0
Other Principal Arterial	36,161	30,955	30,377
Minor Arterial	38,389	32,861	32,248
Urban Collector	24,994	21,395	20,995
Urban Local	11,365	9,728	9,547
Rural Interstate	290,149	248,370	243,733
Other PA	14,889	12,745	12,507
Minor Arterial	32,825	28,099	27,574
Rural Major Collector	207,203	177,368	174,056
Rural Minor Collector	63,048	53,969	52,962
Rural Local	47,146	40,357	39,604
Total	816,605	699,021	685,971

Speed	Year	Year	Year
	2015	2025	2035
Urban Interstate	63	63	63
Other Freeway & Expressway	0	0	0
Other Principal Arterial	29	29	29
Minor Arterial	32	32	32
Urban Collector	31	31	31
Urban Local	31	31	31
Rural Interstate	65	66	66
Other PA	46	46	46
Minor Arterial	44	44	44
Rural Major Collector	43	43	43
Rural Minor Collector	42	42	42
Rural Local	42	42	42

Person County

Person County VMT	2015	2025	2035
Urban Interstate	0	0	0
Other Freeway & Expressway	0	0	0
Other Principal Arterial	177,601	204,048	230,495
Minor Arterial	38,187	43,963	49,739
Urban Collector	35,379	40,731	46,082
Urban Local	24,669	28,400	32,131
Rural Interstate	0	0	0
Other PA	69,592	80,118	90,644
Minor Arterial	203,726	234,541	265,355
Rural Major Collector	177,902	204,811	231,719
Rural Minor Collector	167,295	192,599	217,904
Rural Local	99,159	114,158	129,156
Total	993,510	1,143,367	1,293,225

Speed	Year 2015	Year 2025	Year 2035
Urban Interstate	0	0	0
Other Freeway & Expressway	0	0	0
Other Principal Arterial	28	27	27
Minor Arterial	31	31	31
Urban Collector	31	31	30
Urban Local	31	31	31
Rural Interstate	0	0	0
Other PA	46	46	45
Minor Arterial	42	42	41
Rural Major Collector	43	43	43
Rural Minor Collector	42	42	42
Rural Local	42	42	42