

**2010 Metrolina
NOx Emissions**

Model	VMT	MPH	NOX RATES			NOX kg/day
			IM	No IM	Comp	
Cabarrus AM Peak						
Rural Interstate	0	0	3.226	3.388	3.236	0
Rural Principal Arterial	39,137	48	1.374	1.468	1.380	54
Rural Minor Arterial	54,563	55	1.184	1.282	1.190	65
Rural Major Collector	85,592	41	0.903	1.003	0.909	78
Rural Minor Collector	58,238	40	0.941	1.040	0.947	55
Rural Local	101,475	27	1.070	1.170	1.076	109
Urban Interstate	283,117	41	1.507	1.596	1.512	428
Urban Other Freeway/Xprwy	0	0	2.248	2.439	2.259	0
Urban Principal Arterial	175,627	29	0.828	0.934	0.834	147
Urban Minor Arterial	175,370	28	0.830	0.936	0.836	147
Urban Collector	136,495	28	0.820	0.926	0.826	113
Urban Local	194,792	25	0.872	0.979	0.878	171
Cabarrus	1,304,407		94%	6%		1,366
Cabarrus Midday						
Rural Interstate	0	0	3.226	3.388	3.236	0
Rural Principal Arterial	50,131	53	1.468	1.562	1.474	74
Rural Minor Arterial	58,234	60	1.284	1.382	1.290	75
Rural Major Collector	108,082	47	0.940	1.041	0.946	102
Rural Minor Collector	69,883	44	0.966	1.065	0.972	68
Rural Local	144,229	27	1.070	1.170	1.076	155
Urban Interstate	365,826	66	2.254	2.344	2.259	827
Urban Other Freeway/Xprwy	0	0	2.248	2.439	2.259	0
Urban Principal Arterial	258,318	31	0.820	0.924	0.826	213
Urban Minor Arterial	269,511	30	0.818	0.923	0.824	222
Urban Collector	204,017	31	0.806	0.910	0.812	166
Urban Local	307,158	25	0.872	0.979	0.878	270
Cabarrus	1,835,387		94%	6%		2,172
Cabarrus PM Peak						
Rural Interstate	0	0	3.226	3.388	3.236	0
Rural Principal Arterial	44,204	47	1.360	1.454	1.366	60
Rural Minor Arterial	59,752	54	1.171	1.268	1.177	70
Rural Major Collector	95,074	39	0.894	0.995	0.900	86
Rural Minor Collector	72,496	40	0.941	1.040	0.947	69
Rural Local	121,280	28	1.063	1.162	1.069	130
Urban Interstate	303,175	38	1.483	1.572	1.488	451
Urban Other Freeway/Xprwy	0	0	2.248	2.439	2.259	0
Urban Principal Arterial	205,112	27	0.841	0.948	0.847	174
Urban Minor Arterial	200,979	26	0.843	0.951	0.849	171
Urban Collector	163,145	27	0.826	0.933	0.832	136
Urban Local	228,418	24	0.881	0.989	0.887	203
Cabarrus	1,493,635		94%	6%		1,549
Cabarrus Night						
Rural Interstate	0	0	3.226	3.388	3.236	0
Rural Principal Arterial	30,527	56	1.540	1.634	1.546	47
Rural Minor Arterial	35,345	62	1.343	1.441	1.349	48
Rural Major Collector	62,154	52	0.984	1.085	0.990	62
Rural Minor Collector	36,687	48	0.998	1.097	1.004	37
Rural Local	76,559	27	1.070	1.170	1.076	82
Urban Interstate	208,978	68	2.254	2.344	2.259	472
Urban Other Freeway/Xprwy	0	0	2.248	2.439	2.259	0
Urban Principal Arterial	149,799	41	0.828	0.930	0.834	125
Urban Minor Arterial	151,703	38	0.814	0.917	0.820	124
Urban Collector	96,669	38	0.804	0.907	0.810	78
Urban Local	152,071	26	0.865	0.971	0.871	133
Cabarrus	1,000,492		94%	6%		1,208
Cabarrus 24 Hour						
Rural Interstate	0					0
Rural Principal Arterial	163,999					235
Rural Minor Arterial	207,894					258
Rural Major Collector	350,902					327
Rural Minor Collector	237,303					229
Rural Local	443,543					476
Urban Interstate	1,161,096					2,178
Urban Other Freeway/Xprwy	0					0
Urban Principal Arterial	788,856					659
Urban Minor Arterial	797,563					664
Urban Collector	600,325					493
Urban Local	882,440					776
Cabarrus	5,633,921		model kg / day	NOX		6,295
						total model emissions
						6,295
						emissions budget
						7,324
						budget minus model
						1,029

**2010 Metrolina
NOx Emissions**

	Model		NOX RATES			NOX kg/day
	VMT	MPH	IM	No IM	Comp	
Gaston AM Peak						
Rural Interstate	25,436	46	1.403	1.475	1.409	36
Rural Principal Arterial	57,510	54	1.104	1.187	1.111	64
Rural Minor Arterial	74,757	43	0.782	0.867	0.790	59
Rural Major Collector	81,694	39	0.667	0.756	0.675	55
Rural Minor Collector	40,871	40	0.702	0.790	0.710	29
Rural Local	71,556	28	0.793	0.880	0.801	57
Urban Interstate	467,251	43	1.126	1.204	1.133	529
Urban Other Freeway/Xprway	23,230	52	0.995	1.080	1.003	23
Urban Principal Arterial	254,148	30	0.614	0.706	0.622	158
Urban Minor Arterial	223,531	31	0.609	0.700	0.617	138
Urban Collector	55,677	29	0.608	0.701	0.616	34
Urban Local	204,996	24	0.659	0.754	0.668	137
Gaston	1,580,656		91%	9%		1,320
Gaston Midday						
Rural Interstate	29,867	61	1.883	1.955	1.889	56
Rural Principal Arterial	58,954	57	1.168	1.252	1.176	69
Rural Minor Arterial	92,506	49	0.825	0.911	0.833	77
Rural Major Collector	103,172	48	0.710	0.799	0.718	74
Rural Minor Collector	47,274	41	0.708	0.795	0.716	34
Rural Local	98,521	28	0.793	0.880	0.801	79
Urban Interstate	567,935	63	1.606	1.685	1.613	916
Urban Other Freeway/Xprway	27,647	55	1.037	1.122	1.045	29
Urban Principal Arterial	353,147	35	0.604	0.695	0.612	216
Urban Minor Arterial	315,101	36	0.603	0.694	0.611	193
Urban Collector	76,646	26	0.623	0.718	0.632	48
Urban Local	331,455	24	0.659	0.754	0.668	221
Gaston	2,102,225		91%	9%		2,013
Gaston PM Peak						
Rural Interstate	26,332	58	1.744	1.816	1.750	46
Rural Principal Arterial	59,572	56	1.144	1.228	1.152	69
Rural Minor Arterial	84,034	42	0.776	0.862	0.784	66
Rural Major Collector	93,540	40	0.670	0.758	0.678	63
Rural Minor Collector	48,684	40	0.702	0.790	0.710	35
Rural Local	87,152	29	0.787	0.874	0.795	69
Urban Interstate	501,310	42	1.116	1.194	1.123	563
Urban Other Freeway/Xprway	23,736	53	1.010	1.094	1.018	24
Urban Principal Arterial	296,590	29	0.619	0.711	0.627	186
Urban Minor Arterial	260,299	31	0.609	0.700	0.617	161
Urban Collector	67,312	21	0.659	0.758	0.668	45
Urban Local	241,963	24	0.659	0.754	0.668	162
Gaston	1,790,525		91%	9%		1,488
Gaston Night						
Rural Interstate	18,045	62	1.942	2.014	1.948	35
Rural Principal Arterial	35,719	58	1.192	1.275	1.199	43
Rural Minor Arterial	52,622	51	0.845	0.931	0.853	45
Rural Major Collector	62,123	52	0.739	0.828	0.747	46
Rural Minor Collector	25,387	41	0.708	0.795	0.716	18
Rural Local	53,520	28	0.793	0.880	0.801	43
Urban Interstate	345,349	63	1.606	1.685	1.613	557
Urban Other Freeway/Xprway	17,479	56	1.059	1.144	1.067	19
Urban Principal Arterial	200,624	40	0.615	0.705	0.623	125
Urban Minor Arterial	177,355	40	0.611	0.702	0.619	110
Urban Collector	39,612	30	0.604	0.696	0.612	24
Urban Local	172,749	24	0.659	0.754	0.668	115
Gaston	1,200,585		91%	9%		1,180
Gaston 24 Hour						
Rural Interstate	99,681					174
Rural Principal Arterial	211,755					245
Rural Minor Arterial	303,920					247
Rural Major Collector	340,529					239
Rural Minor Collector	162,216					116
Rural Local	310,750					248
Urban Interstate	1,881,846					2,566
Urban Other Freeway/Xprway	92,092					95
Urban Principal Arterial	1,104,508					685
Urban Minor Arterial	976,286					601
Urban Collector	239,248					152
Urban Local	951,163					635
Gaston	6,673,992		model kg / day	NOX		6,002
						total model emissions
						6,002
						emissions budget
						7,647
						budget minus model
						1,645

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NOx Emissions**

	Model		NOX RATES			NOX kg/day
	VMT	MPH	IM	No IM	Comp	
Iredell AM Peak						
Rural Interstate	266,749	53	2.121	2.202	2.132	569
Rural Principal Arterial	0	0	2.393	2.580	2.419	0
Rural Minor Arterial	29,785	19	1.139	1.249	1.154	34
Rural Major Collector	57,251	31	0.891	0.993	0.905	52
Rural Minor Collector	50,100	26	0.964	1.068	0.979	49
Rural Local	127,366	29	1.056	1.154	1.070	136
Urban Interstate	0	0	2.727	2.903	2.752	0
Urban Other Freeway/Xprway	0	0	2.248	2.439	2.275	0
Urban Principal Arterial	21,787	25	0.856	0.964	0.871	19
Urban Minor Arterial	35,463	24	0.859	0.969	0.874	31
Urban Collector	16,202	23	0.858	0.968	0.873	14
Urban Local	88,298	25	0.872	0.979	0.887	78
Iredell	693,002		86%	14%		983
Iredell Midday						
Rural Interstate	370,711	65	2.820	2.902	2.831	1,050
Rural Principal Arterial	0	0	2.393	2.580	2.419	0
Rural Minor Arterial	45,731	21	1.106	1.213	1.121	51
Rural Major Collector	81,453	34	0.884	0.985	0.898	73
Rural Minor Collector	68,514	26	0.964	1.068	0.979	67
Rural Local	192,808	30	1.049	1.147	1.063	205
Urban Interstate	0	0	2.727	2.903	2.752	0
Urban Other Freeway/Xprway	0	0	2.248	2.439	2.275	0
Urban Principal Arterial	36,503	26	0.848	0.956	0.863	32
Urban Minor Arterial	55,607	26	0.843	0.951	0.858	48
Urban Collector	25,522	21	0.879	0.992	0.895	23
Urban Local	149,756	24	0.881	0.989	0.896	134
Iredell	1,026,605		86%	14%		1,682
Iredell PM Peak						
Rural Interstate	288,726	53	2.121	2.202	2.132	616
Rural Principal Arterial	0	0	2.393	2.580	2.419	0
Rural Minor Arterial	33,126	17	1.179	1.292	1.195	40
Rural Major Collector	62,431	28	0.906	1.010	0.921	57
Rural Minor Collector	56,535	24	0.982	1.088	0.997	56
Rural Local	149,523	29	1.056	1.154	1.070	160
Urban Interstate	0	0	2.727	2.903	2.752	0
Urban Other Freeway/Xprway	0	0	2.248	2.439	2.275	0
Urban Principal Arterial	25,715	22	0.884	0.996	0.900	23
Urban Minor Arterial	39,720	22	0.879	0.991	0.895	36
Urban Collector	19,540	20	0.891	1.005	0.907	18
Urban Local	104,442	24	0.881	0.989	0.896	94
Iredell	779,758		86%	14%		1,099
Iredell Night						
Rural Interstate	205,075	68	2.820	2.902	2.831	581
Rural Principal Arterial	0	0	2.393	2.580	2.419	0
Rural Minor Arterial	26,826	38	1.018	1.115	1.032	28
Rural Major Collector	47,253	43	0.914	1.015	0.928	44
Rural Minor Collector	34,522	38	0.935	1.034	0.949	33
Rural Local	98,772	32	1.044	1.141	1.058	104
Urban Interstate	0	0	2.727	2.903	2.752	0
Urban Other Freeway/Xprway	0	0	2.248	2.439	2.275	0
Urban Principal Arterial	18,929	35	0.810	0.913	0.824	16
Urban Minor Arterial	30,819	35	0.806	0.909	0.820	25
Urban Collector	11,215	32	0.803	0.907	0.818	9
Urban Local	71,717	26	0.865	0.971	0.880	63
Iredell	545,128		86%	14%		903
Iredell 24 Hour						
Rural Interstate	1,131,261					2,815
Rural Principal Arterial	0					0
Rural Minor Arterial	135,467					153
Rural Major Collector	248,389					226
Rural Minor Collector	209,670					205
Rural Local	568,470					606
Urban Interstate	0					0
Urban Other Freeway/Xprway	0					0
Urban Principal Arterial	102,933					89
Urban Minor Arterial	161,610					140
Urban Collector	72,479					64
Urban Local	414,213					369
Iredell	3,044,493		model kg / day	NOX		4,667
						total model emissions
						4,667
						emissions budget
						5,637
						budget minus model
						970

**2010 Metrolina
NOx Emissions**

	Model		NOX RATES			NOX kg/day
	VMT	MPH	IM	No IM	Comp	
Lincoln AM Peak						
Rural Interstate	0	0	3.226	3.388	3.231	0
Rural Principal Arterial	92,202	56	1.540	1.634	1.543	142
Rural Minor Arterial	108,770	34	1.008	1.106	1.011	110
Rural Major Collector	59,472	55	1.014	1.115	1.017	60
Rural Minor Collector	68,976	42	0.954	1.053	0.957	66
Rural Local	148,637	29	1.056	1.154	1.059	157
Urban Interstate	0	0	2.727	2.903	2.732	0
Urban Other Freeway/Xprwy	0	0	2.248	2.439	2.254	0
Urban Principal Arterial	21,731	41	0.828	0.930	0.831	18
Urban Minor Arterial	11,647	22	0.879	0.991	0.882	10
Urban Collector	5,329	27	0.826	0.933	0.829	4
Urban Local	36,807	25	0.872	0.979	0.875	32
Lincoln	553,572		97%	3%		601
Lincoln Midday						
Rural Interstate	0	0	3.226	3.388	3.231	0
Rural Principal Arterial	110,378	58	1.601	1.695	1.604	177
Rural Minor Arterial	155,256	39	1.021	1.119	1.024	159
Rural Major Collector	74,570	56	1.029	1.130	1.032	77
Rural Minor Collector	82,004	46	0.980	1.080	0.983	81
Rural Local	207,820	29	1.056	1.154	1.059	220
Urban Interstate	0	0	2.727	2.903	2.732	0
Urban Other Freeway/Xprwy	0	0	2.248	2.439	2.254	0
Urban Principal Arterial	29,950	41	0.828	0.930	0.831	25
Urban Minor Arterial	17,200	24	0.859	0.969	0.862	15
Urban Collector	7,513	31	0.806	0.910	0.809	6
Urban Local	59,312	25	0.872	0.979	0.875	52
Lincoln	744,003		97%	3%		811
Lincoln PM Peak						
Rural Interstate	0	0	3.226	3.388	3.231	0
Rural Principal Arterial	97,306	54	1.488	1.582	1.491	145
Rural Minor Arterial	119,020	32	1.013	1.111	1.016	121
Rural Major Collector	66,364	54	1.005	1.105	1.008	67
Rural Minor Collector	80,452	43	0.960	1.059	0.963	77
Rural Local	174,039	29	1.056	1.154	1.059	184
Urban Interstate	0	0	2.727	2.903	2.732	0
Urban Other Freeway/Xprwy	0	0	2.248	2.439	2.254	0
Urban Principal Arterial	23,337	39	0.820	0.923	0.823	19
Urban Minor Arterial	12,680	20	0.902	1.017	0.905	11
Urban Collector	6,152	28	0.820	0.926	0.823	5
Urban Local	43,086	25	0.872	0.979	0.875	38
Lincoln	622,436		97%	3%		668
Lincoln Night						
Rural Interstate	0	0	3.226	3.388	3.231	0
Rural Principal Arterial	62,279	62	1.746	1.841	1.749	109
Rural Minor Arterial	98,324	48	1.092	1.190	1.095	108
Rural Major Collector	42,638	57	1.044	1.145	1.047	45
Rural Minor Collector	42,371	48	0.998	1.097	1.001	42
Rural Local	106,194	29	1.056	1.154	1.059	112
Urban Interstate	0	0	2.727	2.903	2.732	0
Urban Other Freeway/Xprwy	0	0	2.248	2.439	2.254	0
Urban Principal Arterial	17,730	48	0.864	0.967	0.867	15
Urban Minor Arterial	8,910	29	0.824	0.929	0.827	7
Urban Collector	4,009	34	0.798	0.902	0.801	3
Urban Local	31,541	25	0.872	0.979	0.875	28
Lincoln	413,995		97%	3%		470
Lincoln 24 Hour						
Rural Interstate	0					0
Rural Principal Arterial	362,166					573
Rural Minor Arterial	481,371					498
Rural Major Collector	243,043					249
Rural Minor Collector	273,804					267
Rural Local	636,690					674
Urban Interstate	0					0
Urban Other Freeway/Xprwy	0					0
Urban Principal Arterial	92,747					78
Urban Minor Arterial	50,437					44
Urban Collector	23,002					19
Urban Local	170,745					149
Lincoln	2,334,006		model kg / day	NOX		2,550
						total model emissions
						2,550
						emissions budget
						2,948
						budget minus model
						398

**2010 Metrolina
NOx Emissions**

	Model		NOX RATES			NOX kg/day
	VMT	MPH	IM	No IM	Comp	
Mecklenburg AM Peak						
Rural Principal Arterial	38,997	36	0.938	1.022	0.946	37
Rural Minor Arterial	30,094	24	0.809	0.902	0.818	25
Rural Major Collector	4,957	21	0.740	0.839	0.750	4
Rural Minor Collector	41,446	36	0.703	0.792	0.712	30
Rural Local	75,648	30	0.793	0.880	0.802	61
Urban Interstate	1,568,060	43	1.136	1.215	1.144	1,794
Urban Other Freeway/Xprway	1,244,496	51	0.991	1.077	1.000	1,244
Urban Principal Arterial	988,703	24	0.658	0.757	0.668	660
Urban Minor Arterial	1,054,663	24	0.654	0.753	0.664	700
Urban Collector	858,563	22	0.662	0.762	0.672	577
Urban Local	1,460,174	22	0.686	0.785	0.696	1,016
Urban HOV	17,739	63	0.834	0.932	0.844	15
Mecklenburg	7,383,540		90%	10%		6,162
Mecklenburg Midday						
Rural Principal Arterial	47,929	45	0.990	1.074	0.998	48
Rural Minor Arterial	41,784	29	0.775	0.865	0.784	33
Rural Major Collector	6,675	33	0.672	0.763	0.681	5
Rural Minor Collector	51,452	41	0.719	0.808	0.728	37
Rural Local	102,072	29	0.798	0.886	0.807	82
Urban Interstate	2,111,029	57	1.396	1.476	1.404	2,964
Urban Other Freeway/Xprway	1,499,691	56	1.070	1.156	1.079	1,618
Urban Principal Arterial	1,490,516	28	0.635	0.730	0.645	961
Urban Minor Arterial	1,603,237	28	0.631	0.726	0.641	1,027
Urban Collector	1,274,938	26	0.634	0.731	0.644	821
Urban Local	2,333,678	22	0.686	0.785	0.696	1,624
Urban HOV	372	65	0.862	0.960	0.872	0
Mecklenburg	10,563,374		90%	10%		9,219
Mecklenburg PM Peak						
Rural Principal Arterial	44,494	36	0.938	1.022	0.946	42
Rural Minor Arterial	34,756	24	0.809	0.902	0.818	28
Rural Major Collector	5,213	26	0.699	0.794	0.709	4
Rural Minor Collector	51,959	35	0.700	0.790	0.709	37
Rural Local	91,573	30	0.793	0.880	0.802	73
Urban Interstate	1,732,493	41	1.116	1.196	1.124	1,947
Urban Other Freeway/Xprway	1,432,907	49	0.966	1.052	0.975	1,397
Urban Principal Arterial	1,140,464	22	0.674	0.775	0.684	780
Urban Minor Arterial	1,233,393	23	0.662	0.761	0.672	829
Urban Collector	997,406	21	0.670	0.772	0.680	678
Urban Local	1,734,473	21	0.694	0.795	0.704	1,221
Urban HOV	7,426	66	0.862	0.960	0.872	6
Mecklenburg	8,506,557		90%	10%		7,043
Mecklenburg Night						
Rural Principal Arterial	28,810	49	1.037	1.121	1.045	30
Rural Minor Arterial	27,138	42	0.787	0.875	0.796	22
Rural Major Collector	3,175	40	0.681	0.771	0.690	2
Rural Minor Collector	26,405	45	0.737	0.826	0.746	20
Rural Local	48,316	29	0.798	0.886	0.807	39
Urban Interstate	1,232,772	61	1.529	1.609	1.537	1,895
Urban Other Freeway/Xprway	792,406	59	1.131	1.218	1.140	903
Urban Principal Arterial	834,541	37	0.620	0.713	0.629	525
Urban Minor Arterial	862,191	37	0.617	0.709	0.626	540
Urban Collector	676,265	36	0.608	0.700	0.617	417
Urban Local	1,123,488	24	0.670	0.767	0.680	764
Urban HOV	0	0	1.358	1.548	1.377	0
Mecklenburg	5,655,505		90%	10%		5,157
Mecklenburg 24 Hour						
Rural Principal Arterial	160,230					157
Rural Minor Arterial	133,772					107
Rural Major Collector	20,020					14
Rural Minor Collector	171,262					123
Rural Local	317,609					255
Urban Interstate	6,644,354					8,600
Urban Other Freeway/Xprway	4,969,500					5,161
Urban Principal Arterial	4,454,224					2,926
Urban Minor Arterial	4,753,484					3,096
Urban Collector	3,807,172					2,493
Urban Local	6,651,813					4,625
Urban HOV	25,537					22
Mecklenburg	32,108,976		model kg / day	NOX		27,581
			total model emissions			27,581
			emissions budget			34,526
			budget minus model			6,945

**2010 Metrolina
NOx Emissions**

	Model VMT	MPH	NOX RATES			NOX kg/day
			IM	No IM	Comp	
Rowan AM Peak						
Rural Interstate	0	0	3.226	3.388	3.237	0
Rural Principal Arterial	39,222	32	1.260	1.355	1.267	50
Rural Minor Arterial	22,512	56	1.206	1.303	1.213	27
Rural Major Collector	129,961	50	0.962	1.063	0.969	126
Rural Minor Collector	85,794	46	0.980	1.080	0.987	85
Rural Local	111,572	28	1.063	1.162	1.070	119
Urban Interstate	330,253	58	1.904	1.994	1.910	631
Urban Other Freeway/Xprwy	0	0	2.248	2.439	2.261	0
Urban Principal Arterial	93,605	35	0.810	0.913	0.817	76
Urban Minor Arterial	166,826	37	0.811	0.914	0.818	136
Urban Collector	97,162	32	0.803	0.907	0.810	79
Urban Local	165,402	25	0.872	0.979	0.879	145
Rowan	1,242,309		93%	7%		1,475
Rowan Midday						
Rural Interstate	0	0	3.226	3.388	3.237	0
Rural Principal Arterial	48,347	51	1.425	1.519	1.432	69
Rural Minor Arterial	28,949	59	1.266	1.364	1.273	37
Rural Major Collector	153,042	55	1.014	1.115	1.021	156
Rural Minor Collector	97,117	49	1.006	1.105	1.013	98
Rural Local	153,548	28	1.063	1.162	1.070	164
Urban Interstate	392,896	60	1.978	2.067	1.984	780
Urban Other Freeway/Xprwy	0	0	2.248	2.439	2.261	0
Urban Principal Arterial	134,044	36	0.813	0.916	0.820	110
Urban Minor Arterial	248,870	38	0.814	0.917	0.821	204
Urban Collector	134,574	30	0.808	0.913	0.815	110
Urban Local	264,752	25	0.872	0.979	0.879	233
Rowan	1,656,138		93%	7%		1,961
Rowan PM Peak						
Rural Interstate	0	0	3.226	3.388	3.237	0
Rural Principal Arterial	42,579	42	1.301	1.395	1.308	56
Rural Minor Arterial	25,270	54	1.171	1.268	1.178	30
Rural Major Collector	140,107	51	0.973	1.074	0.980	137
Rural Minor Collector	98,091	46	0.980	1.080	0.987	97
Rural Local	127,100	28	1.063	1.162	1.070	136
Urban Interstate	355,433	58	1.904	1.994	1.910	679
Urban Other Freeway/Xprwy	0	0	2.248	2.439	2.261	0
Urban Principal Arterial	105,925	33	0.814	0.918	0.821	87
Urban Minor Arterial	190,181	35	0.806	0.909	0.813	155
Urban Collector	115,562	27	0.826	0.933	0.833	96
Urban Local	195,251	25	0.872	0.979	0.879	172
Rowan	1,395,499		93%	7%		1,644
Rowan Night						
Rural Interstate	0	0	3.226	3.388	3.237	0
Rural Principal Arterial	26,538	59	1.629	1.724	1.636	43
Rural Minor Arterial	16,449	61	1.314	1.412	1.321	22
Rural Major Collector	96,980	57	1.044	1.145	1.051	102
Rural Minor Collector	52,577	50	1.014	1.113	1.021	54
Rural Local	86,639	28	1.063	1.162	1.070	93
Urban Interstate	221,373	61	2.037	2.126	2.043	452
Urban Other Freeway/Xprwy	0	0	2.248	2.439	2.261	0
Urban Principal Arterial	72,564	43	0.837	0.940	0.844	61
Urban Minor Arterial	148,533	44	0.837	0.939	0.844	125
Urban Collector	66,997	37	0.802	0.905	0.809	54
Urban Local	134,295	25	0.872	0.979	0.879	118
Rowan	922,945		93%	7%		1,125
Rowan 24 Hour						
Rural Interstate	0					0
Rural Principal Arterial	156,687					218
Rural Minor Arterial	93,180					116
Rural Major Collector	520,090					521
Rural Minor Collector	333,579					334
Rural Local	478,859					512
Urban Interstate	1,299,955					2,542
Urban Other Freeway/Xprwy	0					0
Urban Principal Arterial	406,138					335
Urban Minor Arterial	754,410					621
Urban Collector	414,294					339
Urban Local	759,699					668
Rowan	5,216,891		model kg / day	NOX		6,205
						6,205
						7,193
						988

**2010 Metrolina
NOx Emissions**

	Model		NOX RATES			NOX kg/day
	VMT	MPH	IM	No IM	Comp	
Union AM Peak						
Rural Interstate	0	0	3.226	3.388	3.244	0
Rural Principal Arterial	69,006	47	1.360	1.454	1.370	95
Rural Minor Arterial	26,887	50	1.112	1.209	1.123	30
Rural Major Collector	207,169	44	0.919	1.020	0.930	193
Rural Minor Collector	75,488	43	0.960	1.059	0.971	73
Rural Local	248,215	30	1.049	1.147	1.060	263
Urban Interstate	0	0	2.727	2.903	2.746	0
Urban Other Freeway/Xprway	22,309	28	1.184	1.281	1.195	27
Urban Principal Arterial	147,902	34	0.812	0.916	0.823	122
Urban Minor Arterial	149,472	28	0.830	0.936	0.842	126
Urban Collector	62,092	33	0.801	0.904	0.812	50
Urban Local	219,573	26	0.865	0.971	0.877	192
Union	1,228,112		89%	11%		1,171
Union Midday						
Rural Interstate	0	0	3.226	3.388	3.244	0
Rural Principal Arterial	93,788	49	1.388	1.482	1.398	131
Rural Minor Arterial	32,403	54	1.171	1.268	1.182	38
Rural Major Collector	284,623	46	0.932	1.033	0.943	268
Rural Minor Collector	97,751	45	0.971	1.070	0.982	96
Rural Local	335,799	30	1.049	1.147	1.060	356
Urban Interstate	0	0	2.727	2.903	2.746	0
Urban Other Freeway/Xprway	28,572	38	1.187	1.282	1.197	34
Urban Principal Arterial	211,885	38	0.818	0.921	0.829	176
Urban Minor Arterial	222,162	32	0.813	0.917	0.824	183
Urban Collector	88,528	37	0.802	0.905	0.813	72
Urban Local	339,448	27	0.858	0.963	0.870	295
Union	1,734,958		89%	11%		1,650
Union PM Peak						
Rural Interstate	0	0	3.226	3.388	3.244	0
Rural Principal Arterial	74,384	45	1.329	1.423	1.339	100
Rural Minor Arterial	31,572	48	1.092	1.190	1.103	35
Rural Major Collector	231,755	43	0.914	1.015	0.925	214
Rural Minor Collector	87,209	43	0.960	1.059	0.971	85
Rural Local	291,228	30	1.049	1.147	1.060	309
Urban Interstate	0	0	2.727	2.903	2.746	0
Urban Other Freeway/Xprway	21,583	28	1.184	1.281	1.195	26
Urban Principal Arterial	162,826	33	0.814	0.918	0.825	134
Urban Minor Arterial	172,859	26	0.843	0.951	0.855	148
Urban Collector	71,932	31	0.806	0.910	0.817	59
Urban Local	258,899	26	0.865	0.971	0.877	227
Union	1,404,246		89%	11%		1,336
Union Night						
Rural Interstate	0	0	3.226	3.388	3.244	0
Rural Principal Arterial	52,019	50	1.402	1.496	1.412	73
Rural Minor Arterial	17,362	57	1.226	1.324	1.237	21
Rural Major Collector	159,077	50	0.962	1.063	0.973	155
Rural Minor Collector	51,509	46	0.980	1.080	0.991	51
Rural Local	169,951	30	1.049	1.147	1.060	180
Urban Interstate	0	0	2.727	2.903	2.746	0
Urban Other Freeway/Xprway	15,685	47	1.265	1.361	1.276	20
Urban Principal Arterial	119,610	45	0.845	0.948	0.856	102
Urban Minor Arterial	130,474	40	0.819	0.921	0.830	108
Urban Collector	44,569	42	0.818	0.921	0.829	37
Urban Local	178,076	29	0.846	0.949	0.857	153
Union	938,332		89%	11%		901
Union 24 Hour						
Rural Interstate	0					0
Rural Principal Arterial	289,196					399
Rural Minor Arterial	108,224					125
Rural Major Collector	882,623					830
Rural Minor Collector	311,958					305
Rural Local	1,045,192					1,108
Urban Interstate	0					0
Urban Other Freeway/Xprway	88,150					107
Urban Principal Arterial	642,223					534
Urban Minor Arterial	674,967					565
Urban Collector	267,121					218
Urban Local	995,995					867
Union	5,305,648		model kg / day NOX			5,058
			total model emissions			5,058
			emissions budget			5,660
			budget minus model			602