

Intersection	A	B	B																		
Brewster Street and School Street/Cottage Row																					
Eastbound - LT	C	D	D																		
Eastbound - R	A	A	A																		
Westbound - LT	B	C	C																		
Westbound - R	C	C	C																		
Northbound - L	B	C	B																		
Northbound - TR	B	C	C																		
Southbound - L	B	D	D																		
Southbound - TR	B	C	C																		
Intersection	B	C	C																		
Charles Street and Herb Hill Road																					
Eastbound - LT	C	C	C																		
Eastbound - R	A	A	A																		
Westbound - LTR	C	C	C																		
Northbound - L	C	C	C																		
Northbound - T	B	B	B																		
Northbound - R	B	B	B																		
Southbound - L	C	C	B																		
Southbound - TR	C	C	C																		
Intersection	C	B	C																		
Dickson St and Herb Hill Rd/Garvies Point Rd				INTERSECTION NOT ANALYZED OTHER THAN SHOWING LOS																	
Westbound - LR	F	F	F																		
Northbound - TR																					
Southbound - LT	A	A	A																		
Intersection																					
Forest Avenue and Lattingtown Road/Ford Street																					
Eastbound - L	A	A	A																		
Eastbound - TR	A	A	A																		
Westbound - LTR	A	A	A																		
Northbound - LTR	B	C	B																		
Southbound - LT	B	C	B																		
Intersection	A	A	A																		
Northern Boulevard (Route 25A) and Glen Cove Rd																					
Eastbound - L	E	F	F		332	494	465	371	562	532	12%	14%	14%	25	8.19	43.58	3,800	1,023	1,820	1,414	
Eastbound - TR	D	F	F		652	1,258	882	652	1,258	882	0%	0%	0%								
Westbound - L	E	F	F		301	412	611	301	412	611	0%	0%	0%	25	8.19	43.58	3,800	1,458	1,314	1,668	
Westbound - TR	F	F	F		1,157	902	1,057	1,157	902	1,057	0%	0%	0%								
Northbound - L	F	F	F		142	184	236	142	184	236	0%	0%	0%	25	8.25	43.53	3,800	1,279	1,556	1,566	
Northbound - T	D	D	D		782	994	948	860	1,130	1,082	9.97%	14%	14%								
Northbound - R	B	B	B		277	242	248	277	242	248	0%	0%	0%								
Southbound - L	F	E	E		25	39	48	25	39	48	0%	0%	0%	25	8.25	43.53	3,800	1,720	1,465	1,447	
Southbound - T	F	E	D		1,057	947	878	1,165	1,066	993	10%	13%	13%								
Southbound - R	C	B	B		476	300	349	530	360	406	11%	20%	16%								
Intersection	F	F	F																		
Driveway/Witte Lane and Bryant Avenue																					
Eastbound - LTR	B	B	B																		
Westbound - L	E	D	D																		
Westbound - TR	B	B	B																		
Northbound - LTR	B	C	B																		
Southbound - L	D	B	A																		
Southbound - TR	B	A	A																		
Intersection	C	C	B																		

Brewster Street and School Street/Cottage Row																						
Eastbound - LT	C	D	D																			
Eastbound - R	A	A	A																			
Westbound - LT	B	C	C																			
Westbound - R	C	C	C																			
Northbound - L	B	C	B																			
Northbound - TR	B	C	C																			
Southbound - L	B	D	D																			
Southbound - TR	B	C	C																			
Intersection	B	C	C																			
Charles Street and Herb Hill Road																						
Eastbound - LT	C	C	C																			
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Westbound - LTR	C	C	C																			
Northbound - L	C	C	C																			
Northbound - T	B	B	B																			
Northbound - R	B	B	B																			
Southbound - L	C	C	B																			
Southbound - TR	C	C	C																			
Intersection	B	B	B																			
Dickson St and Herb Hill Rd/Garvies Point Rd			INTERSECTION NOT ANALYZED OTHER THAN SHOWING LOS																			
Westbound - LR	F	F	F																			
Northbound - TR																						
Southbound - LT	A	A	A																			
Intersection																						
Forest Avenue and Lattingtown Road/Ford Street																						
Eastbound - L	A	A	A																			
Eastbound - TR	A	A	A																			
Westbound - LTR	A	A	A																			
Northbound - LTR	B	C	B																			
Southbound - LT	B	C	B																			
Intersection	A	A	A																			
Northern Boulevard (Route 25A) and Glen Cove Rd																						
Eastbound - L	E	F	F			332	494	465	368	566	531	11%	15%	14%	25	8.19	43.58	3,800	1,020	1,824	1,413	
Eastbound - TR	D	F	F			652	1,258	882	652	1,258	882	0%	0%	0%								
Westbound - L	E	E	F			301	412	611	301	412	611	0%	0%	0%	25	8.19	43.58	3,800	1,458	1,314	1,668	
Westbound - TR	F	F	F			1,157	902	1,057	1,157	902	1,057	0%	0%	0%								
Northbound - L	F	F	F			142	184	236	142	184	236	0%	0%	0%	25	8.25	43.53	3,800	1,273	1,564	1,565	
Northbound - T	D	D	D			782	994	948	854	1,138	1,081	9%	14%	14%								
Northbound - R	B	B	B			277	242	248	277	242	248	0%	0%	0%								
Southbound - L	F	E	E			25	39	48	25	39	48	0%	0%	0%	25	8.25	43.53	3,800	1,738	1,466	1,446	
Southbound - T	F	D	D			1,057	947	878	1,177	1,067	992	11%	13%	13%								
Southbound - R	C	B	B			476	300	349	536	360	406	13%	20%	16%								
Intersection	F	F	F																			
Driveway/Witte Lane and Bryant Avenue																						
Eastbound - LTR	B	B	B																			
Westbound - L	E	D	D																			
Westbound - TR	B	B	B																			
Northbound - LTR	B	C	B																			
Southbound - L	D	B	A																			
Southbound - TR	B	A	A																			
Intersection	C	C	B																			

Updated Synchro Available (April 2011)

*Labeled as "107 Northbound" in April 2011 Volume Data

2) Emission Factors based on NYSDOT ESB MOBILE6 CO Emission Factor Table and Vehicle Distribution by Functional Class:

NYSDOT Table EF1 (up to 25 mph) for Year 2016:

Emission Factors:	Queue (0 mph)	5 mph	10 mph	15 mph	20 mph	25 mph
Passenger Car	45.46	12.76	10.26	9.53	9.16	8.96
LDGT1	37.37	10.55	8.47	7.83	7.51	7.32
LDGT2	40.16	11.35	9.12	8.44	8.1	7.91
LDGT3	40.19	11.17	8.86	8.15	7.8	7.6
LDGT4	41.08	11.44	9.08	8.36	8	7.8
HDGV2B	81.3	25.98	17.29	12.15	9.03	7.08
HDGV3	100.73	32.19	21.42	15.06	11.18	8.77
HDGV4	100.63	32.16	21.4	15.04	11.17	8.76
HDGV5	118.07	37.74	25.11	17.65	13.11	10.28
HDGV6	123.05	39.33	26.16	18.39	13.66	10.72
HDGV7	140.5	44.9	29.88	21	15.6	12.24
HDGV8A	151.19	48.32	32.15	22.6	16.78	13.17
LDDV	9.13	3.11	2.35	1.89	1.59	1.4
LDDT12	3.15	1.06	0.78	0.61	0.5	0.43
LDDT34	3.58	1.2	0.87	0.67	0.54	0.46
HDDV2B	2.52	0.82	0.57	0.41	0.31	0.24
HDDV3	3.05	0.99	0.69	0.49	0.37	0.3
HDDV4	3.97	1.3	0.89	0.65	0.49	0.39
HDDV5	3.78	1.23	0.85	0.61	0.46	0.37
HDDV6	4.86	1.59	1.09	0.79	0.6	0.47
HDDV7	5.93	1.94	1.34	0.96	0.73	0.58
HDDV8A	9.99	3.26	2.25	1.62	1.23	0.97
HDDV8B	7.75	2.53	1.74	1.26	0.95	0.75
HDGB	165.43	52.87	35.18	24.73	18.36	14.41
HDDBT	26.42	8.63	5.95	4.29	3.24	2.56
HDDBS	11.02	3.6	2.48	1.79	1.35	1.07
MC	217.05	51.75	26.99	18.96	15.27	13

NYSDOT Vehicle Distributions for Region 10:

	Urban Arterial 14/16	Urban Local 17/19
LDGV	54.16%	55.25%
LDGT1	6.69%	6.83%
LDGT2	22.14%	22.60%
LDGT3	7.49%	7.36%
LDGT4	3.40%	3.34%
HDGV2B	1.10%	0.77%
HDGV3	0.32%	0.22%
HDGV4	0.16%	0.11%
HDGV5	0.14%	0.10%
HDGV6	0.09%	0.06%
HDGV7	0.10%	0.07%
HDGV8A	0.11%	0.07%
LDDV	0.13%	0.13%
LDDT12	0.22%	0.22%
LDDT34	0.61%	0.60%
HDDV2B	0.17%	0.11%
HDDV3	0.17%	0.12%
HDDV4	0.23%	0.16%
HDDV5	0.25%	0.17%
HDDV6	0.20%	0.14%
HDDV7	0.39%	0.27%
HDDV8A	0.48%	0.33%
HDDV8B	0.39%	0.27%
HDGB	0.10%	0.07%
HDDBT	0.20%	0.13%
HDDBS	0.20%	0.13%
MC	0.36%	0.37%

Resulting Composite Emission Factors:

Emission Factors:	Urban Arterial 14/16	Urban Local 17/19
Queue (0 mph)	43.58	43.53
5 mph	12.30	12.26
10 mph	9.72	9.72
15 mph	8.88	8.91
20 mph	8.44	8.49
25 mph	8.19	8.25

3) Applicable factors in Table 3c:

Table 3C. PEAK HOUR TRAFFIC VOLUME THRESHOLDS AT ANY APPROACH FOR SIGNALIZED INTERSECTIONS

QUEUE EMISSION FACTOR (GRAMS/HOUR)

	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270
2.5	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
5.0	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	3930	3670	3333	3157	2769	2593
7.5	4000	4000	4000	4000	4000	4000	3828	3742	3454	3298	3040	2900	2730	2570	2333	2182	1969	1893
10.0	3800	3727	3481	3379	3202	3101	2878	2845	2654	2498	2390	2250	2111	1970	1933	1832	1637	1543
12.5	3075	2927	2856	2679	2602	2501	2378	2279	2179	2048	2015	1850	1804	1720	1633	1557	1474	1418
15.0	2562	2427	2381	2279	2202	2094	2028	1929	1841	1773	1740	1675	1604	1507	1483	1410	1361	1318
17.5	2199	2142	2031	1979	1914	1869	1796	1729	1666	1623	1540	1500	1454	1407	1358	1310	1292	1280
20.0	1927	1892	1815	1754	1689	1669	1621	1604	1528	1498	1415	1371	1354	1322	1292	1285	1254	1248
22.5	1727	1710	1665	1613	1589	1556	1521	1454	1403	1373	1340	1296	1285	1272	1242	1216	1163	1148
25.0	1627	1585	1542	1513	1454	1431	1396	1366	1328	1298	1283	1258	1210	1172	1167	1097	1063	1041
27.5		1481	1429	1402	1354	1331	1296	1266	1228	1210	1183	1158	1110	1072	1067	1047	1000	953
30.0			1329	1302	1279	1256	1211	1166	1153	1116	1083	1070	1060	997	979	972	921	903

4) Summary table for the intersections (both scenarios):

Intersection	Pass Level 1 Screening?	Pass Level 2 Screening?	Pass Level 3 Screening?	Air Quality Analysis Required?
Glen Cove Ave/Brewster St and Pratt Blvd/Charles St	No	NA	NA	No
Glen Cove Avenue and Charles Street	No	NA	NA	No
Glen Cove Avenue and Morris Avenue	No	NA	NA	No
Brewster Street and Herb Hill Road/Mill Hill Road	No	NA	NA	No
Glen Cove Avenue and Shore Road	No	NA	NA	No

Glen Cove Avenue and Sea Cliff Avenue	No	NA	NA	No
Glen Cove Avenue and Glen Head Road	No	NA	NA	No
Glen Cove Road/Route 107 Split	Yes	Yes	No	No
Glen Cove Road and Glen Head Road	Yes	Yes	No	No
Route 107 and Glen Head Road	Unsignalized Intersection – Excluded from Analysis			
Glen Cove Avenue and Back Road	No	NA	NA	No
Glen Cove Road and Back Road/Mary Lane	Yes	Yes	No	No
Pratt Boulevard and Continental Place/Bridge St	No	NA	NA	No
Brewster Street and School Street/Cottage Row	No	NA	NA	No
Charles Street and Herb Hill Road	No	NA	NA	No
Dickson St and Herb Hill Rd/Garvies Point Rd	Yes	Stop-controlled Intersection – Excluded from Analysis		
Forest Avenue and Lattingtown Road/Ford Street	No	NA	NA	No
Northern Boulevard (Route 25A) and Glen Cove Rd	Yes	Yes	No	No
Driveway/Witte Lane and Bryant Avenue	No	NA	NA	No