Appendix 4.2 Sensitivity Test For Year 2007, 2011, 2016 and 2023

Year 2007 A.M.							Emission Factor for NO_x in gm/km			NO_x E.F.	NO_x E.F.	NO_x E.F.	Emission Factor for RSP in gm/km			RSP E.F.	RSP E.F.	RSP E.F.
							P/C	hgv	n/b	(0.01g/mile-veh)	(0.01g/mile)	(g)	P/C	hgv	n/b	(g/mile-veh)	(g/mile)	(g)
Roads	Length	Length	Total	Number of vehicles			0.64	4.81	7.02				0.03	0.72	0.65			
	m	mile	Q	Car	GV	Bus	P/C	HGV	FBDD, FBSD				P/C	HGV	FBDD, FBSD			
12	320	0.199	200	0	200	0	0	962	0	774.073	154916	308	0	144	0	1.1587	232	46
39	530	0.329	523	0	523	0	0	2518	0	774.073	404640	1333	0	377	0	1.1587	606	200
40	720	0.447	210	0	210	0	0	1010	0	774.073	162555	727	0	151	0	1.1587	243	109
41	460	0.286	733	0	733	0	0	3526	0	774.073	567396	1822	0	528	0	1.1587	849	243
											Total	3990					Total	597

Year 2007 P.M.							Emission Factor for NO_x in gm/km			NO_x E.F.	NO_x E.F.	NO_x E.F.	Emission Factor for RSP in gm/km			RSP E.F.	RSP E.F.	RSP E.F.
							P/C	hgv	n/b	(0.01g/mile-veh)	(0.01g/mile)	(g)	P/C	hgv	n/b	(g/mile-veh)	(g/mile)	(g)
Roads	Length	Length	Total	Number of vehicles			0.64	4.81	7.02				0.03	0.72	0.65			
	m	mile	Q	Car	GV	Bus	P/C	HGV	FBDD, FBSD				P/C	HGV	FBDD, FBSD			
12	320	0.199	307	0	307	0	0	1477	0	774.073	237641	473	0	221	0	1.1587	356	71
39	530	0.329	501	0	501	0	0	2410	0	774.073	387811	1277	0	361	0	1.1587	581	191
40	720	0.447	327	0	327	0	0	1573	0	774.073	253122	1132	0	235	0	1.1587	379	170
41	460	0.286	828	0	828	0	0	3983	0	774.073	640933	1832	0	595	0	1.1587	959	274
											Total	4714					Total	706

Year 2011 A.M.							Emission Factor for NO_x in gm/km			NO_x E.F.	NO_x E.F.	NO_x E.F.	Emission Factor for RSP in gm/km			RSP E.F.	RSP E.F.	RSP E.F.
							P/C	hgv	n/b	(0.01g/mile-veh)	(0.01g/mile)	(g)	P/C	hgv	n/b	(g/mile-veh)	(g/mile)	(g)
Roads			Total	Number of vehicles			0.64	4.11	5.93				0.03	0.6	0.57			
			Q	Car	GV	Bus	P/C	HGV	FBDD, FBSD				P/C	HGV	FBDD, FBSD			
12	320	0.199	214	0	214	0	0	878	0	661.422	141301	261	0	128	0	0.9656	208	41
39	530	0.329	400	0	400	0	0	1644	0	661.422	264589	871	0	240	0	0.9656	388	127
40	720	0.447	228	0	228	0	0	937	0	661.422	150804	675	0	137	0	0.9656	220	56
41	460	0.286	828	0	828	0	0	2681	0	661.422	415373	1167	0	377	0	0.9656	606	173
											Total	3014					Total	440

Year 2011 P.M.							Emission Factor for NO_x in gm/km			NO_x E.F.	NO_x E.F.	NO_x E.F.	Emission Factor for RSP in gm/km			RSP E.F.	RSP E.F.	RSP E.F.
							P/C	hgv	n/b	(0.01g/mile-veh)	(0.01g/mile)	(g)	P/C	hgv	n/b	(g/mile-veh)	(g/mile)	(g)
Roads			Total	Number of vehicles			0.64	4.11	5.93				0.03	0.6	0.57			
			Q	Car	GV	Bus	P/C	HGV	FBDD, FBSD				P/C	HGV	FBDD, FBSD			
12	320	0.199	258	0	258	0	0	1058	0	661.422	170504	339	0	155	0	0.9656	249	49
39	530	0.329	359	0	359	0	0	1476	0	661.422	237451	782	0	215	0	0.9656	347	114
40	720	0.447	274	0	274	0	0	1126	0	661.422	181230	811	0	164	0	0.9656	265	118
41	460	0.286	634	0	634	0	0	2606	0	661.422	419342	1199	0	380	0	0.9656	612	175
											Total	3131					Total	457

Year 2016 A.M.							Emission Factor for NO_x in gm/km			NO_x E.F.	NO_x E.F.	NO_x E.F.	Emission Factor for RSP in gm/km			RSP E.F.	RSP E.F.	RSP E.F.
							P/C	hgv	n/b	(0.01g/mile-veh)	(0.01g/mile)	(g)	P/C	hgv	n/b	(g/mile-veh)	(g/mile)	(g)
Roads			Total	Number of vehicles			0.64	4.11	5.93				0.03	0.6	0.57			
			Q	Car	GV	Bus	P/C	HGV	FBDD, FBSD				P/C	HGV	FBDD, FBSD			
12	320	0.199	204	0	204	0	0	840	0	661.422	135229	269	0	123	0	0.9656	197	39
39	530	0.329	386	0	386	0	0	1585	0	661.422	255309	841	0	232	0	0.9656	373	123
40	720	0.447	218	0	218	0	0	896	0	661.422	144190	645	0	131	0	0.9656	210	94
41	460	0.286	604	0	604	0	0	2482	0	661.422	399499	1142	0	362	0	0.9656	583	167
											Total	2897					Total	423

Year 2016 P.M.							Emission Factor for NO_x in gm/km			NO_x E.F.	NO_x E.F.	NO_x E.F.	Emission Factor for RSP in gm/km			RSP E.F.	RSP E.F.	RSP E.F.
							P/C	hgv	n/b	(0.01g/mile-veh)	(0.01g/mile)	(g)	P/C	hgv	n/b	(g/mile-veh)	(g/mile)	(g)
Roads			Total	Number of vehicles			0.64	4.11	5.93				0.03	0.6	0.57			
			Q	Car	GV	Bus	P/C	HGV	FBDD, FBSD				P/C	HGV	FBDD, FBSD			
12	320	0.199	282	0	282	0	0	1159	0	661.422	186515	371	0	169	0	0.9656	272	54
39	530	0.329	402	0	402	0	0	1652	0	661.422	265892	876	0	241	0	0.9656	388	126
40	720	0.447	300	0	300	0	0	1233	0	661.422	198427	888	0	180	0	0.9656	290	130
41	460	0.286	702	0	702	0	0	2885	0	661.422	464318	1327	0	421	0	0.9656	678	194
											Total	3402					Total	505

Year 2022 A.M.							Emission Factor for NO_x in gm/km			NO_x E.F.	NO_x E.F.	NO_x E.F.	Emission Factor for RSP in gm/km			RSP E.F.	RSP E.F.	RSP E.F.
							P/C	hgv	n/b	(0.01g/mile-veh)	(0.01g/mile)	(g)	P/C	hgv	n/b	(g/mile-veh)	(g/mile)	(g)
Roads			Total	Number of vehicles			0.64	4.11	5.93				0.03	0.6	0.57			
			Q	Car	GV	Bus	P/C	HGV	FBDD, FBSD				P/C	HGV	FBDD, FBSD			
12	320	0.199	220	0	220	0	0	904	0	661.422	145513	289	0	132	0	0.9656	212	42
39	530	0.329	439	0	439	0	0	1804	0	661.422	290364	956	0	263	0	0.9656	424	140
40	720	0.447	244	0	244	0	0	1003	0	661.422	161387	722	0	146	0	0.9656	236	105
41	460	0.286	683	0	683	0	0	2807	0	661.422	451751	1291	0	410	0	0.9656	659	189
											Total	3259					Total	476

Year 2023 P.M.							Emission Factor for NO_x in gm/km			NO_x E.F.	NO_x E.F.	NO_x E.F.	Emission Factor for RSP in gm/km			RSP E.F.	RSP E.F.	RSP E.F.
							P/C	hgv	n/b	(0.01g/mile-veh)	(0.01g/mile)	(g)	P/C	hgv	n/b	(g/mile-veh)	(g/mile)	(g)
Roads			Total	Number of vehicles			0.64	4.11	5.93				0.03	0.6	0.57			
			Q	Car	GV	Bus	P/C	HGV	FBDD, FBSD				P/C	HGV	FBDD, FBSD			
12	320	0.199	282	0	282	0	0	1159	0	661.422	186521	371	0	169	0	0.9656	272	54
39	530	0.329	456	0	456	0	0	1874	0	661.422	301609	993	0	274	0	0.9656	440	145
40	720	0.447	321	0	321	0	0	1319	0	661.422	212317	950	0	193	0	0.9656	310	139
41	460	0.286	792	0	792	0	0	3255	0	661.422	523846	1497	0	475	0	0.9656	765	219
											Total	3811					Total	556