

Appendix 3.7 Emission Inventory for Portal Emissions
Interim Phase (Year 2030)

Source Name	Description	Percentage for Portal	Length (m)	Portal ID	Road Link ID	No. of Portal Sources	Hour	Q (veh/hr)	Total Emission Factor				Total Emission Rate				Emission Rate (from Portal Sources)				Daily Emission Rate / Diurnal Profile (from 1st 50m for Each Portal Source)				Daily Emission Rate / Diurnal Profile (from 2nd 50m for Each Portal Source)							
									NO (g/mile-veh)	NO ₂ (g/mile-veh)	RSP (g/mile-veh)	FSP (g/mile-veh)	NO (g/s)	NO ₂ (g/s)	RSP (g/s)	FSP (g/s)	NO (g/s)	NO ₂ (g/s)	RSP (g/s)	FSP (g/s)	NO (g/s) / %	NO ₂ (g/s) / %	RSP (g/s) / %	FSP (g/s) / %	NO (g/s) / %	NO ₂ (g/s) / %	RSP (g/s) / %	FSP (g/s) / %				
A	Enclosure A (From Yuen Long Highway (WB) To Long Tin Road)	100%	148	Portal : A1-A6	9235	6	1	522	0.6582	0.0655	0.0337	0.0311	8.781E-03	8.739E-04	4.495E-04	4.144E-04	8.781E-03	8.739E-04	4.495E-04	4.144E-04	1.1%	0.8%	1.1%	1.1%	1.1%	0.8%	1.1%	1.1%				
							2	354	0.6590	0.0689	0.0341	0.0314	5.952E-03	6.221E-04	3.084E-04	2.833E-04	5.952E-03	6.221E-04	3.084E-04	2.833E-04	0.7%	0.6%	0.8%	0.8%	0.7%	0.6%	0.8%	0.8%	0.7%	0.6%	0.8%	0.8%
							3	252	0.6711	0.0736	0.0349	0.0321	4.315E-03	4.730E-04	2.247E-04	2.064E-04	4.315E-03	4.730E-04	2.247E-04	2.064E-04	0.5%	0.4%	0.6%	0.6%	0.5%	0.4%	0.6%	0.6%	0.5%	0.4%	0.6%	0.6%
							4	199	0.6719	0.0768	0.0353	0.0325	3.414E-03	3.903E-04	1.793E-04	1.652E-04	3.414E-03	3.903E-04	1.793E-04	1.652E-04	0.4%	0.3%	0.4%	0.4%	0.4%	0.3%	0.4%	0.4%	0.4%	0.3%	0.4%	0.4%
							5	202	0.6841	0.0815	0.0361	0.0333	3.524E-03	4.199E-04	1.860E-04	1.713E-04	3.524E-03	4.199E-04	1.860E-04	1.713E-04	0.4%	0.4%	0.5%	0.5%	0.4%	0.4%	0.5%	0.5%	0.4%	0.4%	0.5%	0.5%
							6	296	0.7086	0.0880	0.0374	0.0344	5.353E-03	6.648E-04	2.825E-04	2.596E-04	5.353E-03	6.648E-04	2.825E-04	2.596E-04	0.7%	0.6%	0.7%	0.7%	0.7%	0.6%	0.7%	0.7%	0.7%	0.6%	0.7%	0.7%
							7	770	0.7618	0.0990	0.0397	0.0365	1.498E-02	1.946E-03	7.804E-04	7.175E-04	1.498E-02	1.946E-03	7.804E-04	7.175E-04	1.9%	1.7%	2.0%	1.9%	1.9%	1.7%	2.0%	1.9%	1.9%	1.7%	2.0%	1.9%
							8	1820	0.8764	0.1202	0.0440	0.0405	4.076E-02	5.589E-03	2.047E-03	1.884E-03	4.076E-02	5.589E-03	2.047E-03	1.884E-03	5.1%	5.0%	5.1%	5.1%	5.1%	5.0%	5.1%	5.1%	5.0%	5.1%	5.1%	
							9	2003	0.7726	0.1092	0.0394	0.0362	3.954E-02	5.591E-03	2.014E-03	1.854E-03	3.954E-02	5.591E-03	2.014E-03	1.854E-03	4.9%	5.0%	5.0%	5.0%	4.9%	5.0%	5.0%	5.0%	4.9%	5.0%	5.0%	
							10	1736	0.8876	0.1338	0.0445	0.0410	5.936E-02	8.931E-03	1.973E-03	1.816E-03	5.936E-02	8.931E-03	1.973E-03	1.816E-03	4.9%	5.3%	4.9%	4.9%	4.9%	5.3%	4.9%	4.9%	5.3%	4.9%	4.9%	
							11	1574	0.9248	0.1463	0.0467	0.0430	3.719E-02	5.884E-03	1.879E-03	1.729E-03	3.719E-02	5.884E-03	1.879E-03	1.729E-03	4.6%	5.3%	4.7%	4.7%	4.6%	5.3%	4.7%	4.7%	5.3%	4.7%	4.7%	
							12	1517	0.8773	0.1369	0.0441	0.0406	3.400E-02	5.304E-03	1.710E-03	1.574E-03	3.400E-02	5.304E-03	1.710E-03	1.574E-03	4.2%	4.7%	4.3%	4.3%	4.2%	4.7%	4.3%	4.3%	4.7%	4.3%	4.3%	
							13	2190	0.9187	0.1487	0.0459	0.0423	5.141E-02	5.141E-03	2.568E-03	2.364E-03	5.141E-02	5.141E-03	2.568E-03	2.364E-03	6.4%	7.4%	6.4%	6.4%	6.4%	7.4%	6.4%	6.4%	7.4%	6.4%	6.4%	
							14	2244	0.9064	0.1452	0.0443	0.0408	5.196E-02	8.326E-03	2.536E-03	2.336E-03	5.196E-02	8.326E-03	2.536E-03	2.336E-03	6.4%	7.4%	6.3%	6.3%	6.4%	7.4%	6.3%	6.3%	7.4%	6.3%	6.3%	
							15	2347	0.9225	0.1518	0.0451	0.0415	5.531E-02	9.104E-03	2.488E-03	2.281E-03	5.531E-02	9.104E-03	2.488E-03	2.281E-03	6.9%	8.1%	6.8%	6.8%	6.9%	8.1%	6.8%	6.8%	8.1%	6.8%	6.8%	
							16	2460	0.8799	0.1422	0.0429	0.0395	5.529E-02	8.934E-03	2.693E-03	2.479E-03	5.529E-02	8.934E-03	2.693E-03	2.479E-03	6.9%	8.0%	6.7%	6.7%	6.9%	8.0%	6.7%	6.7%	8.0%	6.7%	6.7%	
							17	2627	0.9155	0.1407	0.0444	0.0409	6.143E-02	9.443E-03	2.977E-03	2.742E-03	6.143E-02	9.443E-03	2.977E-03	2.742E-03	7.6%	8.4%	7.4%	7.4%	7.6%	8.4%	7.4%	7.4%	8.4%	7.4%	7.4%	
							18	2972	0.8700	0.1233	0.0420	0.0387	6.606E-02	9.363E-03	3.187E-03	2.936E-03	6.606E-02	9.363E-03	3.187E-03	2.936E-03	8.2%	8.4%	8.0%	8.0%	8.2%	8.4%	8.0%	8.0%	8.4%	8.0%	8.0%	
							19	3172	0.7199	0.0892	0.0354	0.0327	5.833E-02	7.272E-03	2.871E-03	2.646E-03	5.833E-02	7.272E-03	2.871E-03	2.646E-03	7.2%	6.5%	7.2%	7.2%	7.2%	6.5%	7.2%	7.2%	6.5%	7.2%	7.2%	
							20	2572	0.6892	0.0796	0.0351	0.0323	4.528E-02	5.229E-03	2.304E-03	2.122E-03	4.528E-02	5.229E-03	2.304E-03	2.122E-03	5.6%	4.7%	5.8%	5.8%	5.6%	4.7%	5.8%	5.8%	4.7%	5.8%	5.8%	
							21	2017	0.7016	0.0741	0.0350	0.0323	3.616E-02	3.821E-03	1.806E-03	1.662E-03	3.616E-02	3.821E-03	1.806E-03	1.662E-03	4.5%	3.4%	4.5%	4.5%	4.5%	3.4%	4.5%	4.5%	3.4%	4.5%	4.5%	
							22	1845	0.7019	0.0702	0.0344	0.0317	3.308E-02	3.307E-03	1.622E-03	1.493E-03	3.308E-02	3.307E-03	1.622E-03	1.493E-03	4.1%	3.0%	4.1%	4.1%	4.1%	3.0%	4.1%	4.1%	3.0%	4.1%	4.1%	
							23	1806	0.6916	0.0616	0.0336	0.0309	3.190E-02	2.841E-03	1.549E-03	1.426E-03	3.190E-02	2.841E-03	1.549E-03	1.426E-03	4.0%	2.5%	3.9%	3.9%	4.0%	2.5%	3.9%	3.9%	2.5%	3.9%	3.9%	
							24	1360	0.6783	0.0639	0.0335	0.0308	2.358E-02	2.221E-03	1.165E-03	1.072E-03	2.358E-02	2.221E-03	1.165E-03	1.072E-03	2.9%	2.0%	2.9%	2.9%	2.9%	2.0%	2.9%	2.9%	2.0%	2.9%	2.9%	
							Daily	-	-	-	-	-	-	-	-	-	8.070E-01	1.118E-01	4.002E-02	3.684E-02	8.070E-01	1.118E-01	4.002E-02	3.684E-02	1.793E-01	2.485E-02	8.892E-03	8.187E-03	8.966E-02	1.242E-02	4.446E-03	4.093E-03
B	Enclosure B (From Long Tin Road to TYST Interchange)	100%	83	Portal : B1-B10	9161	10	1	448	0.4775	0.0588	0.0220	0.0202	3.068E-03	3.777E-04	1.411E-04	1.297E-04	3.068E-03	3.777E-04	1.411E-04	1.297E-04	1.4%	1.1%	1.4%	1.4%	1.4%	1.1%	1.4%	1.4%				
							2	304	0.4756	0.0614	0.0222	0.0205	2.069E-03	2.672E-04	9.676E-05	8.930E-05	2.069E-03	2.672E-04	9.676E-05	8.930E-05	0.9%	0.7%	0.9%	0.9%	0.9%	0.7%	0.9%	0.9%	0.7%	0.9%		
							3	216	0.4818	0.0652	0.0230	0.0211	1.493E-03	2.019E-04	7.113E-05	6.532E-05	1.493E-03	2.019E-04	7.113E-05	6.532E-05	0.7%	0.6%	0.7%	0.7%	0.7%	0.6%	0.7%	0.7%	0.6%	0.7%	0.7%	
							4	171	0.4964	0.0702	0.0239	0.0220	1.215E-03	1.718E-04	5.855E-05	5.377E-05	1.215E-03	1.718E-04	5.855E-05	5.377E-05	0.6%	0.5%	0.6%	0.6%	0.6%	0.5%	0.6%	0.6%	0.5%	0.6%	0.6%	
							5	173	0.5112	0.0753	0.0249	0.0228	1.269E-03	1.869E-04	6.177E-05	5.673E-05	1.269E-03	1.869E-04	6.177E-05	5.673E-05	0.6%	0.5%	0.6%	0.6%	0.6%	0.5%	0.6%	0.6%	0.5%	0.6%	0.6%	
							6	254	0.5356	0.0821	0.0261	0.0241	1.950E-03	2.991E-04	9.514E-05	8.774E-05	1.950E-03	2.991E-04	9.514E-05	8.774E-05	0.9%	0.8%	0.9%	0.9%	0.9%	0.8%	0.9%	0.9%	0.8%	0.9%	0.9%	
							7	662	0.6064	0.0979	0.0291	0.0268	5.752E-03	9.284E-04	2.758E-04	2.538E-04	5.752E-03	9.284E-04	2.758E-04	2.538E-04	2.6%	2.6%	2.7%	2.7%	2.6%	2.6%	2.7%	2.7%	2.6%	2.6%	2.7%	
							8	1566	0.7312	0.1250	0.0337	0.0311	1.640E-02	2.805E-03	7.567E-04	6.972E-04	1.640E-02	2.805E-03	7.567E-04	6.972E-04	7.5%	7.9%	7.4%	7.4%	7.5%	7.9%	7.4%	7.4%	7.9%	7.4%	7.4%	
							9	1735	0.6650	0.1171	0.0312	0.0288	1.653E-02	2.911E-03	7.755E-04	7.148E-04	1.653E-02	2.911E-03	7.755E-04	7.148E-04	7.5%	8.2%	7.6%	7.6%	7.5%	8.2%	7.6%	7.6%	8.2%	7.6%	7.6%	
							10	1497	0.7689	0.1416	0.0356	0.0328	1.649E-02	3.038E-03	7.634E-04	7.038E-04	1.649E-02	3.038E-03	7.634E-04	7.038E-04	7.5%	8.5%	7.4%	7.4%	7.5%	8.5%	7.4%	7.4%	8.5%	7.4%	7.4%	
							11	1356	0.8152	0.1561	0.0382	0.0351	1.584E-02	3.034E-03	7.416E-04	6.830E-04	1.584E-02	3.034E-03	7.416E-04	6.830E-04	7.2%	8.5%	7.2%	7.2%	7.2%	8.5%	7.2%	7.2%	8.5%	7.2%	7.2%	
							12	1311	0.7707	0.1454	0.0359	0.0331	1.448E-02	2.730E-03	6.740E-04	6.209E-04	1.448E-02	2.730E-03	6.740E-04	6.209E-04	6.6%	7.7%	6.6%	6.6%	6.6%	7.7%	6.6%	6.6%	7.7%	6.6%	6.6%	
							13	1125	0.6834	0.1211	0.0331	0.0305	1.102E-02	1.951E-03	5.337E-04	4.912E-04	1.102E-02	1.951E-03	5.337E-04	4.912E-04	5.0%	5.5%	5.2%	5.2%	5.0%	5.5%	5.2%	5.2%	5.5%	5.2%	5.2%	
							14	1151	0.6786	0.1176	0.0319	0.0293	1.118E-02	1.939E-03	5.255E-04	4.837E-04	1.118E-02	1.939E-03	5.255E-04	4.837E-04	5.1%	5.4%	5.1%	5.1%	5.1%	5.4%	5.1%	5.1%	5.4%	5.1%	5.1%	
							15	1192	0.7130	0.1272	0.0334	0.0308	1.218E-02	2.173E-03																		

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Source Name	Description	Percentage for Portal	Length (m)	Portal ID	Road Link ID	No. of Portal Sources	Hour	Q (veh/hr)	Total Emission Factor				Total Emission Rate				Emission Rate (from Portal Sources)				Daily Emission Rate / Diurnal Profile (from 1st 50m for Each Portal Source)				Daily Emission Rate / Diurnal Profile (from 2nd 50m for Each Portal Source)										
									NO (g/mile-veh)	NO ₂ (g/mile-veh)	RSP (g/mile-veh)	FSP (g/mile-veh)	NO (g/s)	NO ₂ (g/s)	RSP (g/s)	FSP (g/s)	NO (g/s)	NO ₂ (g/s)	RSP (g/s)	FSP (g/s)	NO (g/s) / %	NO ₂ (g/s) / %	RSP (g/s) / %	FSP (g/s) / %	NO (g/s) / %	NO ₂ (g/s) / %	RSP (g/s) / %	FSP (g/s) / %							
D	Enclosure D (From Long Hon Road to Yuen Long Highway (WB))	100%	179	Portal : D1-D14	9167	14	1	111	0.2528	0.0330	0.0086	0.0079	8.677E-04	1.132E-04	2.947E-05	2.700E-05	8.677E-04	1.132E-04	2.947E-05	2.700E-05	1.1%	0.7%	0.9%	0.9%	1.1%	0.7%	0.9%	0.9%							
							2	74	0.2628	0.0364	0.0093	0.0085	6.044E-04	8.360E-05	2.136E-05	1.957E-05	6.044E-04	8.360E-05	2.136E-05	1.957E-05	0.7%	0.5%	0.6%	0.6%	0.7%	0.5%	0.6%	0.6%	0.7%	0.5%	0.6%	0.6%			
							3	52	0.2691	0.0391	0.0098	0.0091	4.359E-04	6.333E-05	1.591E-05	1.473E-05	4.359E-04	6.333E-05	1.591E-05	1.473E-05	0.5%	0.4%	0.5%	0.5%	0.5%	0.4%	0.5%	0.5%	0.5%	0.4%	0.5%	0.5%	0.5%		
							4	41	0.2796	0.0426	0.0106	0.0098	3.540E-04	5.398E-05	1.337E-05	1.238E-05	3.540E-04	5.398E-05	1.337E-05	1.238E-05	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	
							5	41	0.2905	0.0463	0.0113	0.0105	3.687E-04	5.876E-05	1.438E-05	1.331E-05	3.687E-04	5.876E-05	1.438E-05	1.331E-05	0.5%	0.4%	0.4%	0.4%	0.5%	0.4%	0.4%	0.4%	0.5%	0.4%	0.4%	0.4%	0.4%		
							6	60	0.3019	0.0501	0.0121	0.0112	5.554E-04	9.218E-05	2.233E-05	2.064E-05	5.554E-04	9.218E-05	2.233E-05	2.064E-05	0.7%	0.6%	0.6%	0.7%	0.7%	0.6%	0.6%	0.7%	0.7%	0.6%	0.6%	0.7%	0.6%	0.7%	
							7	153	0.3239	0.0562	0.0133	0.0123	1.534E-03	2.662E-04	6.303E-05	5.827E-05	1.534E-03	2.662E-04	6.303E-05	5.827E-05	1.9%	1.7%	1.8%	1.8%	1.9%	1.7%	1.8%	1.8%	1.9%	1.7%	1.8%	1.8%	1.9%	1.7%	
							8	358	0.3677	0.0675	0.0154	0.0141	4.068E-03	7.470E-04	1.700E-04	1.565E-04	4.068E-03	7.470E-04	1.700E-04	1.565E-04	5.0%	4.9%	4.9%	4.9%	5.0%	4.9%	4.9%	4.9%	5.0%	4.9%	4.9%	4.9%	4.9%	4.9%	
							9	400	0.3185	0.0594	0.0140	0.0129	3.936E-03	7.344E-04	1.727E-04	1.590E-04	3.936E-03	7.344E-04	1.727E-04	1.590E-04	4.8%	4.8%	5.0%	5.0%	4.8%	4.8%	5.0%	5.0%	4.8%	4.8%	5.0%	5.0%	4.8%	4.8%	
							10	318	0.3640	0.0686	0.0156	0.0143	3.580E-03	6.742E-04	1.531E-04	1.406E-04	3.580E-03	6.742E-04	1.531E-04	1.406E-04	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%
							11	275	0.3946	0.0764	0.0170	0.0156	3.354E-03	6.489E-04	1.444E-04	1.328E-04	3.354E-03	6.489E-04	1.444E-04	1.328E-04	4.1%	4.2%	4.2%	4.2%	4.1%	4.2%	4.2%	4.2%	4.1%	4.2%	4.2%	4.2%	4.2%	4.2%	
							12	273	0.3709	0.0699	0.0157	0.0145	3.129E-03	5.894E-04	1.327E-04	1.221E-04	3.129E-03	5.894E-04	1.327E-04	1.221E-04	3.8%	3.8%	3.9%	3.9%	3.8%	3.8%	3.9%	3.9%	3.8%	3.8%	3.9%	3.9%	3.8%	3.8%	
							13	386	0.4692	0.1008	0.0214	0.0197	5.596E-03	1.020E-03	2.553E-04	2.350E-04	5.596E-03	1.020E-03	2.553E-04	2.350E-04	6.8%	7.8%	7.4%	7.4%	6.8%	7.8%	7.4%	7.4%	6.8%	7.8%	7.4%	7.4%	6.8%	7.8%	
							14	394	0.4714	0.0977	0.0206	0.0190	5.746E-03	1.191E-03	2.512E-04	2.313E-04	5.746E-03	1.191E-03	2.512E-04	2.313E-04	7.0%	7.8%	7.3%	7.3%	7.0%	7.8%	7.3%	7.3%	7.0%	7.8%	7.3%	7.3%	7.0%	7.8%	
							15	407	0.4989	0.1059	0.0220	0.0203	6.273E-03	1.331E-03	2.768E-04	2.547E-04	6.273E-03	1.331E-03	2.768E-04	2.547E-04	7.7%	8.7%	8.0%	8.0%	7.7%	8.7%	8.0%	8.0%	7.7%	8.7%	8.0%	8.0%	7.7%	8.7%	
							16	433	0.4719	0.0983	0.0206	0.0190	6.317E-03	1.315E-03	2.762E-04	2.542E-04	6.317E-03	1.315E-03	2.762E-04	2.542E-04	7.7%	8.6%	8.0%	8.0%	7.7%	8.6%	8.0%	8.0%	7.7%	8.6%	8.0%	8.0%	7.7%	8.6%	
							17	466	0.4701	0.0970	0.0202	0.0186	6.773E-03	1.397E-03	2.914E-04	2.685E-04	6.773E-03	1.397E-03	2.914E-04	2.685E-04	8.3%	9.1%	8.5%	8.5%	8.3%	9.1%	8.5%	8.5%	8.3%	9.1%	8.5%	8.5%	8.3%	9.1%	
							18	538	0.4058	0.0800	0.0173	0.0159	6.745E-03	1.330E-03	2.874E-04	2.645E-04	6.745E-03	1.330E-03	2.874E-04	2.645E-04	8.2%	8.7%	8.3%	8.3%	8.2%	8.7%	8.3%	8.3%	8.2%	8.7%	8.3%	8.3%	8.2%	8.7%	
							19	602	0.3119	0.0566	0.0134	0.0123	5.803E-03	1.052E-03	2.484E-04	2.289E-04	5.803E-03	1.052E-03	2.484E-04	2.289E-04	7.1%	6.8%	7.2%	7.2%	7.1%	6.8%	7.2%	7.2%	7.1%	6.8%	7.2%	7.2%	7.1%	6.8%	
							20	493	0.2818	0.0499	0.0123	0.0113	4.295E-03	7.605E-04	1.871E-04	1.723E-04	4.295E-03	7.605E-04	1.871E-04	1.723E-04	5.2%	5.0%	5.4%	5.4%	5.2%	5.0%	5.4%	5.4%	5.2%	5.0%	5.4%	5.4%	5.2%	5.0%	
							21	387	0.2880	0.0458	0.0113	0.0104	3.444E-03	5.480E-04	1.351E-04	1.244E-04	3.444E-03	5.480E-04	1.351E-04	1.244E-04	4.2%	3.6%	3.9%	3.9%	4.2%	3.6%	3.9%	3.9%	4.2%	3.6%	3.9%	3.9%	4.2%	3.6%	
							22	354	0.2889	0.0419	0.0103	0.0095	3.160E-03	4.578E-04	1.129E-04	1.037E-04	3.160E-03	4.578E-04	1.129E-04	1.037E-04	3.9%	3.0%	3.3%	3.3%	3.9%	3.0%	3.3%	3.3%	3.9%	3.0%	3.3%	3.3%	3.9%	3.0%	
							23	346	0.2650	0.0337	0.0087	0.0080	2.833E-03	3.601E-04	9.256E-05	8.501E-05	2.833E-03	3.601E-04	9.256E-05	8.501E-05	3.5%	2.3%	2.7%	2.7%	3.5%	2.3%	2.7%	2.7%	3.5%	2.3%	2.7%	2.7%	3.5%	2.3%	
							24	259	0.2691	0.0363	0.0092	0.0085	2.157E-03	2.913E-04	7.389E-05	6.782E-05	2.157E-03	2.913E-04	7.389E-05	6.782E-05	2.6%	1.9%	2.1%	2.1%	2.6%	1.9%	2.1%	2.1%	2.6%	1.9%	2.1%	2.1%	2.6%	1.9%	
													Daily	-	-	-	-	8.193E-02	1.536E-02	3.441E-03	3.167E-03	8.193E-02	1.536E-02	3.441E-03	3.167E-03	7.803E-03	1.463E-03	3.277E-04	3.016E-04	3.901E-03	7.315E-04	1.638E-04	1.508E-04		
E	Enclosure E (From Long Hon Road to TYST Interchange)	100%	180	Portal : E1-E10	9169	10	1	200	1.0118	0.0892	0.0536	0.0493	6.272E-03	5.531E-04	3.321E-04	3.054E-04	6.272E-03	5.531E-04	3.321E-04	3.054E-04	1.7%	1.4%	1.7%	1.7%	1.7%	1.4%	1.7%	1.4%							
							2	135	0.9851	0.0893	0.0527	0.0485	4.129E-03	3.744E-04	2.209E-04	2.034E-04	4.129E-03	3.744E-04	2.209E-04	2.034E-04	1.1%	1.0%	1.1%	1.1%	1.1%	1.0%	1.1%	1.1%	1.1%	1.0%	1.1%				
							3	96	0.9921	0.0926	0.0532	0.0489	2.956E-03	2.760E-04	1.584E-04	1.458E-04	2.956E-03	2.760E-04	1.584E-04	1.458E-04	0.8%	0.7%	0.8%	0.8%	0.8%	0.7%	0.8%	0.8%	0.8%	0.7%	0.8%	0.8%			
							4	76	0.9830	0.0943	0.0531	0.0488	2.311E-03	2.218E-04	1.248E-04	1.147E-04	2.311E-03	2.218E-04	1.248E-04	1.147E-04	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%		
							5	77	0.9901	0.0977	0.0535	0.0492	2.357E-03	2.325E-04	1.274E-04	1.171E-04	2.357E-03	2.325E-04	1.274E-04	1.171E-04	0.6%	0.6%	0.7%	0.7%	0.6%	0.6%	0.7%	0.7%	0.6%	0.6%	0.7%	0.7%	0.6%		
							6	112	1.0139	0.1029	0.0545	0.0502	3.535E-03	3.586E-04	1.901E-04	1.749E-04	3.535E-03	3.586E-04	1.901E-04	1.749E-04	1.0%	0.9%	1.0%	1.0%	1.0%	0.9%	1.0%	1.0%	1.0%	0.9%	1.0%	1.0%			
							7	292	1.1161	0.1173	0.0585	0.0538	1.012E-02	1.063E-03	5.299E-04	4.876E-04	1.012E-02	1.063E-03	5.299E-04	4.876E-04	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%			
							8	689	1.3013	0.1425	0.0653	0.0601	2.785E-02	3.050E-03	1.397E-03	1.286E-03	2.785E-02	3.050E-03	1.397E-03	1.286E-03	7.5%	7.8%	7.2%	7.2%	7.5%	7.8%	7.2%	7.2%	7.5%	7.8%	7.2%	7.2%			
							9	713	1.1723	0.1293	0.0595	0.0548	2.597E-02	2.864E-03	1.319E-03	1.215E-03	2.597E-02	2.864E-03	1.319E-03	1.215E-03	7.0%	7.3%	6.8%	6.8%	7.0%	7.3%	6.8%	6.8%	7.0%	7.3%	6.8%	6.8%			
							10	611	1.2664	0.1452	0.0641	0.0590	2.403E-02	2.756E-03	1.216E-03	1.120E-03	2.403E-02	2.756E-03	1.216E-03	1.120E-03	6.5%	7.1%	6.3%	6.3%	6.5%	7.1%	6.3%	6.3%	6.5%	7.1%	6.3%	6.3%			
							11	543	1.2930	0.1538	0.0658	0.0606	2.182E-02	2.595E-03	1.111E-03	1.023E-03	2.182E-02	2.595E-03	1.111E-03	1.023E-03	5.9%	6.6%	5.8%	5.8%	5.9%	6.6%	5.8%	5.8%	5.9%	6.6%	5.8%	5.8%			
							12	532	1.2284	0.1456	0.0622	0.0573	2.029E-02	2.404E-03	1.027E-03	9.456E-04	2.029E-02	2.404E-03	1.027E-03	9.456E-04	5.5%	6.2%	5.3%	5.3%	5.5%	6.2%	5.3%	5.3%	5.5%	6.2%	5.3%	5.3%			
							13	403	1.4657	0.1694	0.0769																								

Appendix 3.7 Emission Inventory for Portal Emissions
Interim Phase (Year 2030)

Source Name	Description	Percentage for Portal	Length (m)	Portal ID	Road Link ID	No. of Portal Sources	Hour	Q (veh/hr)	Total Emission Factor				Total Emission Rate				Emission Rate (from Portal Sources)				Daily Emission Rate / Diurnal Profile (from 1st 50m for Each Portal Source)				Daily Emission Rate / Diurnal Profile (from 2nd 50m for Each Portal Source)							
									NO (g/mile-veh)	NO ₂ (g/mile-veh)	RSP (g/mile-veh)	FSP (g/mile-veh)	NO (g/s)	NO ₂ (g/s)	RSP (g/s)	FSP (g/s)	NO (g/s)	NO ₂ (g/s)	RSP (g/s)	FSP (g/s)	NO (g/s) / %	NO ₂ (g/s) / %	RSP (g/s) / %	FSP (g/s) / %	NO (g/s) / %	NO ₂ (g/s) / %	RSP (g/s) / %	FSP (g/s) / %				
G	Enclosure G (From Yuen Long Highway (WB) to Long Hon Road)	100%	181	Portal : G1-G16	9164	16	1	84	1.2721	0.1154	0.0692	0.0636	3.338E-03	3.029E-04	1.815E-04	1.669E-04	3.338E-03	3.029E-04	1.815E-04	1.669E-04	1.7%	1.5%	1.8%	1.8%	1.7%	1.5%	1.8%	1.8%				
							2	57	1.2709	0.1176	0.0691	0.0635	2.268E-03	2.098E-04	1.232E-04	1.134E-04	2.268E-03	2.098E-04	1.232E-04	1.134E-04	1.2%	1.0%	1.2%	1.2%	1.2%	1.0%	1.2%	1.2%	1.0%	1.2%	1.2%	
							3	41	1.2504	0.1178	0.0682	0.0628	1.596E-03	1.504E-04	8.703E-05	8.011E-05	1.596E-03	1.504E-04	8.703E-05	8.011E-05	0.8%	0.7%	0.9%	0.9%	0.8%	0.7%	0.9%	0.8%	0.9%	0.8%	0.9%	
							4	32	1.2493	0.1199	0.0681	0.0627	1.266E-03	1.215E-04	6.897E-05	6.349E-05	1.266E-03	1.215E-04	6.897E-05	6.349E-05	0.7%	0.6%	0.7%	0.7%	0.7%	0.6%	0.7%	0.7%	0.6%	0.7%	0.7%	
							5	33	1.2482	0.1221	0.0680	0.0626	1.288E-03	1.260E-04	7.014E-05	6.456E-05	1.288E-03	1.260E-04	7.014E-05	6.456E-05	0.7%	0.6%	0.7%	0.7%	0.7%	0.6%	0.7%	0.7%	0.6%	0.7%	0.7%	
							6	49	1.2470	0.1242	0.0679	0.0625	1.896E-03	1.888E-04	1.032E-04	9.496E-05	1.896E-03	1.888E-04	1.032E-04	9.496E-05	1.0%	0.9%	1.0%	1.0%	1.0%	0.9%	1.0%	1.0%	0.9%	1.0%	1.0%	
							7	127	1.3066	0.1329	0.0700	0.0644	5.196E-03	5.284E-04	2.785E-04	2.561E-04	5.196E-03	5.284E-04	2.785E-04	2.561E-04	2.7%	2.6%	2.8%	2.8%	2.7%	2.6%	2.8%	2.7%	2.6%	2.8%	2.8%	
							8	302	1.4253	0.1483	0.0743	0.0683	1.347E-02	1.402E-03	7.017E-04	6.453E-04	1.347E-02	1.402E-03	7.017E-04	6.453E-04	7.1%	6.9%	7.0%	7.0%	7.1%	6.9%	7.0%	7.1%	6.9%	7.0%	7.0%	
							9	290	1.3322	0.1368	0.0707	0.0650	1.208E-02	1.241E-03	6.408E-04	5.898E-04	1.208E-02	1.241E-03	6.408E-04	5.898E-04	6.3%	6.1%	6.4%	6.4%	6.3%	6.1%	6.4%	6.3%	6.1%	6.4%	6.4%	
							10	257	1.4097	0.1494	0.0744	0.0685	1.131E-02	1.199E-03	5.973E-04	5.498E-04	1.131E-02	1.199E-03	5.973E-04	5.498E-04	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%
							11	229	1.4211	0.1540	0.0756	0.0695	1.017E-02	1.102E-03	5.413E-04	4.976E-04	1.017E-02	1.102E-03	5.413E-04	4.976E-04	5.3%	5.4%	5.4%	5.4%	5.3%	5.4%	5.4%	5.3%	5.4%	5.4%	5.4%	
							12	226	1.3668	0.1486	0.0716	0.0659	9.566E-03	1.047E-03	5.051E-04	4.643E-04	9.566E-03	1.047E-03	5.051E-04	4.643E-04	5.0%	5.2%	5.0%	5.0%	5.0%	5.2%	5.0%	5.0%	5.0%	5.0%	5.0%	
							13	256	1.2206	0.1475	0.0641	0.0589	9.769E-03	1.180E-03	5.127E-04	4.713E-04	9.769E-03	1.180E-03	5.127E-04	4.713E-04	5.1%	5.8%	5.1%	5.1%	5.1%	5.8%	5.1%	5.1%	5.1%	5.1%	5.1%	
							14	254	1.2072	0.1452	0.0629	0.0579	9.577E-03	1.152E-03	4.992E-04	4.589E-04	9.577E-03	1.152E-03	4.992E-04	4.589E-04	5.0%	5.7%	5.0%	5.0%	5.0%	5.7%	5.0%	5.0%	5.0%	5.0%	5.0%	
							15	252	1.2280	0.1485	0.0645	0.0593	9.665E-03	1.168E-03	5.075E-04	4.666E-04	9.665E-03	1.168E-03	5.075E-04	4.666E-04	5.1%	5.8%	5.0%	5.0%	5.1%	5.8%	5.0%	5.0%	5.1%	5.8%	5.0%	5.0%
							16	262	1.2153	0.1458	0.0632	0.0582	9.962E-03	1.195E-03	5.183E-04	4.770E-04	9.962E-03	1.195E-03	5.183E-04	4.770E-04	5.2%	5.9%	5.2%	5.2%	5.2%	5.9%	5.2%	5.2%	5.2%	5.2%	5.2%	
							17	290	1.2576	0.1445	0.0656	0.0604	1.141E-02	1.310E-03	5.951E-04	5.478E-04	1.141E-02	1.310E-03	5.951E-04	5.478E-04	6.0%	6.5%	5.9%	5.9%	6.0%	6.5%	5.9%	5.9%	6.0%	6.5%	5.9%	5.9%
							18	331	1.2547	0.1368	0.0652	0.0600	1.298E-02	1.415E-03	6.204E-04	5.729E-04	1.298E-02	1.415E-03	6.204E-04	5.729E-04	6.8%	7.0%	6.7%	6.7%	6.8%	7.0%	6.7%	6.7%	6.8%	7.0%	6.7%	6.7%
							19	347	1.1553	0.1179	0.0603	0.0555	1.253E-02	1.279E-03	6.542E-04	6.017E-04	1.253E-02	1.279E-03	6.542E-04	6.017E-04	6.6%	6.3%	6.5%	6.5%	6.6%	6.3%	6.5%	6.5%	6.6%	6.3%	6.5%	6.5%
							20	293	1.1617	0.1154	0.0614	0.0565	1.065E-02	1.057E-03	5.623E-04	5.176E-04	1.065E-02	1.057E-03	5.623E-04	5.176E-04	5.6%	5.2%	5.6%	5.6%	5.6%	5.2%	5.6%	5.6%	5.6%	5.2%	5.6%	5.6%
							21	240	1.1892	0.1149	0.0625	0.0575	8.900E-03	8.597E-04	4.680E-04	4.302E-04	8.900E-03	8.597E-04	4.680E-04	4.302E-04	4.7%	4.2%	4.7%	4.7%	4.7%	4.2%	4.7%	4.7%	4.4%	4.4%	4.4%	
							22	229	1.1719	0.1135	0.0611	0.0562	8.391E-03	8.126E-04	4.376E-04	4.027E-04	8.391E-03	8.126E-04	4.376E-04	4.027E-04	4.4%	4.0%	4.4%	4.4%	4.4%	4.0%	4.4%	4.4%	4.4%	4.0%	4.4%	4.4%
							23	209	1.2150	0.1072	0.0642	0.0591	7.919E-03	6.987E-04	4.183E-04	3.849E-04	7.919E-03	6.987E-04	4.183E-04	3.849E-04	4.1%	3.4%	4.2%	4.2%	4.1%	3.4%	4.2%	4.2%	4.1%	3.4%	4.2%	4.2%
							24	158	1.1765	0.1062	0.0628	0.0578	5.808E-03	5.243E-04	3.102E-04	2.852E-04	5.808E-03	5.243E-04	3.102E-04	2.852E-04	3.0%	2.6%	3.1%	3.1%	3.0%	2.6%	3.1%	3.1%	3.0%	2.6%	3.1%	3.1%
													Daily	-	-	-	-	1.910E-01	2.027E-02	1.006E-02	9.251E-03	1.910E-01	2.027E-02	1.006E-02	9.251E-03	1.592E-02	1.689E-03	8.380E-04	7.709E-04	7.958E-03	8.446E-04	4.190E-04
H	Underpass H (From Yuen Long Highway to Hung Tin Road)	100%	143	Portal : H1-H16	9239	16	1	239	0.3602	0.0645	0.0145	0.0133	2.120E-03	3.798E-04	8.547E-05	7.849E-05	2.120E-03	3.798E-04	8.547E-05	7.849E-05	0.8%	0.6%	0.8%	0.8%	0.8%	0.6%	0.8%	0.8%				
							2	163	0.3744	0.0697	0.0156	0.0143	1.506E-03	2.802E-04	6.261E-05	5.750E-05	1.506E-03	2.802E-04	6.261E-05	5.750E-05	0.6%	0.5%	0.6%	0.6%	0.6%	0.5%	0.6%	0.6%	0.5%	0.6%	0.6%	
							3	117	0.3879	0.0746	0.0166	0.0153	1.121E-03	2.155E-04	4.790E-05	4.426E-05	1.121E-03	2.155E-04	4.790E-05	4.426E-05	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%
							4	93	0.4006	0.0792	0.0177	0.0162	9.231E-04	1.826E-04	4.071E-05	3.737E-05	9.231E-04	1.826E-04	4.071E-05	3.737E-05	0.3%	0.3%	0.4%	0.4%	0.3%	0.3%	0.4%	0.4%	0.3%	0.3%	0.4%	0.4%
							5	96	0.4203	0.0854	0.0189	0.0174	9.909E-04	2.014E-04	4.460E-05	4.095E-05	9.909E-04	2.014E-04	4.460E-05	4.095E-05	0.4%	0.3%	0.4%	0.4%	0.4%	0.3%	0.4%	0.4%	0.3%	0.4%	0.4%	
							6	141	0.4483	0.0936	0.0204	0.0188	1.564E-03	3.265E-04	7.112E-05	6.564E-05	1.564E-03	3.265E-04	7.112E-05	6.564E-05	0.6%	0.5%	0.6%	0.6%	0.6%	0.5%	0.6%	0.6%	0.5%	0.6%	0.6%	
							7	372	0.5298	0.1150	0.0236	0.0217	4.858E-03	1.055E-03	2.166E-04	1.994E-04	4.858E-03	1.055E-03	2.166E-04	1.994E-04	1.8%	1.7%	1.9%	1.9%	1.8%	1.7%	1.9%	1.9%	1.8%	1.7%	1.9%	1.9%
							8	887	0.6758	0.1535	0.0288	0.0266	1.479E-02	3.359E-03	6.308E-04	5.812E-04	1.479E-02	3.359E-03	6.308E-04	5.812E-04	5.5%	5.5%	5.6%	5.6%	5.5%	5.5%	5.6%	5.6%	5.5%	5.5%	5.6%	5.6%
							9	987	0.6385	0.1474	0.0279	0.0257	1.555E-02	3.590E-03	6.799E-04	6.254E-04	1.555E-02	3.590E-03	6.799E-04	6.254E-04	5.8%	5.9%	6.0%	6.0%	5.8%	5.9%	6.0%	6.0%	5.8%	5.9%	6.0%	6.0%
							10	894	0.7817	0.1844	0.0336	0.0309	1.724E-02	4.066E-03	7.417E-04	6.825E-04	1.724E-02	4.066E-03	7.417E-04	6.825E-04	6.4%	6.7%	6.6%	6.6%	6.4%	6.7%	6.6%	6.6%	6.4%	6.7%	6.6%	6.6%
							11	832	0.8381	0.2017	0.0368	0.0339	1.721E-02	4.142E-03	7.552E-04	6.954E-04	1.721E-02	4.142E-03	7.552E-04	6.954E-04	6.4%	6.8%	6.7%	6.7%	6.4%	6.8%	6.7%	6.7%	6.4%	6.8%	6.7%	6.7%
							12	794	0.7737	0.1836	0.0341	0.0314	1.516E-02	3.598E-03	6.681E-04	6.154E-04	1.516E-02	3.598E-03	6.681E-04	6.154E-04	5.6%	5.9%	5.9%	5.9%	5.6%	5.9%	5.9%	5.9%	5.6%	5.9%	5.9%	
							13	907	0.8097	0.1973	0.0360	0.0331	1.812E-02	4.414E-03	8.053E-04	7.410E-04	1.812E-02	4.414E-03	8.053E-04	7.410E-04	6.7%	7.3%	7.1%	7.1%	6.7%	7.3%	7.1%	7.1%	6.7%	7.3%	7.1%	
							14	937	0.8381	0.2002	0.0358	0.0330	1.938E-02	4.629E-03	8.288E-04	7.630E-04	1.938E-02	4.629E-03	8.288E-04	7.630E-04	7.2%	7.6%	7.3%	7.3%	7.2%	7.6%	7.3%	7.3%	7.2%	7.6%	7.3%	
							15	996	0.919																							

Appendix 3.7 Emission Inventory for Portal Emissions
Interim Phase (Year 2030)

Portal Emission (Volume Source)																Total	Total	Total	Total
Description	Height (m)	Width (m)	Viaduct Height (m)	Portal ID	Daily Emission Factor (QS) (g/s) ^[1]				FSP	HS	SY	SZ	Total NO	Total NO ₂	Total RSP	Total FSP			
					X	Y	NO	NO ₂									RSP		
Enclosure A	6	16.2	0	A1	819693.1	833392.7	1.793E-01	2.485E-02	8.892E-03	8.187E-03	3.00	7.53	2.79						
	"	"	"	A2	819697.1	833408.2	1.793E-01	2.485E-02	8.892E-03	8.187E-03	3.00	7.53	2.79						
	"	"	"	A3	819701.0	833423.7	1.793E-01	2.485E-02	8.892E-03	8.187E-03	3.00	7.53	2.79						
	"	"	"	A4	819705.0	833439.2	8.966E-02	1.242E-02	4.446E-03	4.093E-03	3.00	7.53	2.79						
	"	"	"	A5	819708.9	833454.7	8.966E-02	1.242E-02	4.446E-03	4.093E-03	3.00	7.53	2.79						
	"	"	"	A6	819712.9	833470.2	8.966E-02	1.242E-02	4.446E-03	4.093E-03	3.00	7.53	2.79	8.070E-01	1.118E-01	4.002E-02	3.684E-02		
Enclosure B	6	10.3	0	B1	819676.5	833286.7	2.930E-02	4.755E-03	1.367E-03	1.259E-03	3.00	4.79	2.79						
	"	"	"	B2	819674.1	833277.9	2.930E-02	4.755E-03	1.367E-03	1.259E-03	3.00	4.79	2.79						
	"	"	"	B3	819671.6	833269.2	2.930E-02	4.755E-03	1.367E-03	1.259E-03	3.00	4.79	2.79						
	"	"	"	B4	819669.2	833260.4	2.930E-02	4.755E-03	1.367E-03	1.259E-03	3.00	4.79	2.79						
	"	"	"	B5	819666.8	833251.7	2.930E-02	4.755E-03	1.367E-03	1.259E-03	3.00	4.79	2.79						
	"	"	"	B6	819664.3	833242.9	1.465E-02	2.378E-03	6.835E-04	6.296E-04	3.00	4.79	2.79						
	"	"	"	B7	819661.9	833234.1	1.465E-02	2.378E-03	6.835E-04	6.296E-04	3.00	4.79	2.79						
	"	"	"	B8	819659.5	833225.4	1.465E-02	2.378E-03	6.835E-04	6.296E-04	3.00	4.79	2.79						
	"	"	"	B9	819657.0	833216.6	1.465E-02	2.378E-03	6.835E-04	6.296E-04	3.00	4.79	2.79						
	"	"	"	B10	819654.6	833207.9	1.465E-02	2.378E-03	6.835E-04	6.296E-04	3.00	4.79	2.79	2.198E-01	3.566E-02	1.025E-02	9.444E-03		
Enclosure C	6	6	0	C1	819679.3	833288.4	1.692E-02	2.149E-03	8.454E-04	7.780E-04	3.00	2.79	2.79						
	"	"	"	C2	819677.7	833282.4	1.692E-02	2.149E-03	8.454E-04	7.780E-04	3.00	2.79	2.79						
	"	"	"	C3	819676.2	833276.3	1.692E-02	2.149E-03	8.454E-04	7.780E-04	3.00	2.79	2.79						
	"	"	"	C4	819674.6	833270.3	1.692E-02	2.149E-03	8.454E-04	7.780E-04	3.00	2.79	2.79						
	"	"	"	C5	819673.1	833264.2	1.692E-02	2.149E-03	8.454E-04	7.780E-04	3.00	2.79	2.79						
	"	"	"	C6	819671.5	833258.2	1.692E-02	2.149E-03	8.454E-04	7.780E-04	3.00	2.79	2.79						
	"	"	"	C7	819669.9	833252.1	1.692E-02	2.149E-03	8.454E-04	7.780E-04	3.00	2.79	2.79						
	"	"	"	C8	819668.4	833246.0	1.692E-02	2.149E-03	8.454E-04	7.780E-04	3.00	2.79	2.79						
	"	"	"	C9	819666.8	833240.0	8.461E-03	1.075E-03	4.227E-04	3.890E-04	3.00	2.79	2.79						
	"	"	"	C10	819665.2	833233.9	8.461E-03	1.075E-03	4.227E-04	3.890E-04	3.00	2.79	2.79						
	"	"	"	C11	819663.7	833227.9	8.461E-03	1.075E-03	4.227E-04	3.890E-04	3.00	2.79	2.79						
	"	"	"	C12	819662.1	833221.8	8.461E-03	1.075E-03	4.227E-04	3.890E-04	3.00	2.79	2.79						
	"	"	"	C13	819660.6	833215.8	8.461E-03	1.075E-03	4.227E-04	3.890E-04	3.00	2.79	2.79						
	"	"	"	C14	819659.0	833209.7	8.461E-03	1.075E-03	4.227E-04	3.890E-04	3.00	2.79	2.79						
	"	"	"	C15	819657.4	833203.7	8.461E-03	1.075E-03	4.227E-04	3.890E-04	3.00	2.79	2.79						
	"	"	"	C16	819655.9	833197.6	8.461E-03	1.075E-03	4.227E-04	3.890E-04	3.00	2.79	2.79	2.031E-01	2.579E-02	1.014E-02	9.336E-03		
Enclosure D	6	6.4	4	D1	819519.0	832991.1	7.803E-03	1.463E-03	3.277E-04	3.016E-04	7.00	2.98	2.79						
	"	"	"	D2	819513.3	832994.2	7.803E-03	1.463E-03	3.277E-04	3.016E-04	7.00	2.98	2.79						
	"	"	"	D3	819507.7	832997.3	7.803E-03	1.463E-03	3.277E-04	3.016E-04	7.00	2.98	2.79						
	"	"	"	D4	819502.1	833000.4	7.803E-03	1.463E-03	3.277E-04	3.016E-04	7.00	2.98	2.79						
	"	"	"	D5	819496.5	833003.7	7.803E-03	1.463E-03	3.277E-04	3.016E-04	7.00	2.98	2.79						
	"	"	"	D6	819490.9	833006.9	7.803E-03	1.463E-03	3.277E-04	3.016E-04	7.00	2.98	2.79						
	"	"	"	D7	819485.4	833010.2	7.803E-03	1.463E-03	3.277E-04	3.016E-04	7.00	2.98	2.79						
	"	"	"	D8	819480.2	833014.0	3.901E-03	7.315E-04	1.638E-04	1.508E-04	7.00	2.98	2.79						
	"	"	"	D9	819474.9	833017.7	3.901E-03	7.315E-04	1.638E-04	1.508E-04	7.00	2.98	2.79						
	"	"	"	D10	819469.9	833021.8	3.901E-03	7.315E-04	1.638E-04	1.508E-04	7.00	2.98	2.79						
	"	"	"	D11	819465.4	833026.4	3.901E-03	7.315E-04	1.638E-04	1.508E-04	7.00	2.98	2.79						
	"	"	"	D12	819461.0	833031.0	3.901E-03	7.315E-04	1.638E-04	1.508E-04	7.00	2.98	2.79						
	"	"	"	D13	819457.2	833036.2	3.901E-03	7.315E-04	1.638E-04	1.508E-04	7.00	2.98	2.79						
	"	"	"	D14	819453.5	833041.5	3.901E-03	7.315E-04	1.638E-04	1.508E-04	7.00	2.98	2.79	8.193E-02	1.536E-02	3.441E-03	3.167E-03		
Enclosure E	6	10	0	E1	819538.6	832996.9	4.957E-02	5.209E-03	2.575E-03	2.370E-03	3.00	4.65	2.79						
	"	"	"	E2	819530.8	833003.1	4.957E-02	5.209E-03	2.575E-03	2.370E-03	3.00	4.65	2.79						
	"	"	"	E3	819523.0	833009.4	4.957E-02	5.209E-03	2.575E-03	2.370E-03	3.00	4.65	2.79						
	"	"	"	E4	819515.2	833015.6	4.957E-02	5.209E-03	2.575E-03	2.370E-03	3.00	4.65	2.79						
	"	"	"	E5	819507.3	833021.9	4.957E-02	5.209E-03	2.575E-03	2.370E-03	3.00	4.65	2.79						
	"	"	"	E6	819499.5	833028.1	2.479E-02	2.604E-03	1.288E-03	1.185E-03	3.00	4.65	2.79						
	"	"	"	E7	819491.7	833034.4	2.479E-02	2.604E-03	1.288E-03	1.185E-03	3.00	4.65	2.79						
	"	"	"	E8	819483.9	833040.6	2.479E-02	2.604E-03	1.288E-03	1.185E-03	3.00	4.65	2.79						
	"	"	"	E9	819476.1	833046.9	2.479E-02	2.604E-03	1.288E-03	1.185E-03	3.00	4.65	2.79						
	"	"	"	E10	819469.3	833053.1	2.479E-02	2.604E-03	1.288E-03	1.185E-03	3.00	4.65	2.79	3.718E-01	3.906E-02	1.932E-02	1.778E-02		
Enclosure F	6	6.2	0	F1	819577.6	832811.0	4.510E-02	6.801E-03	2.118E-03	1.950E-03	3.00	2.88	2.79						
	"	"	"	F2	819572.3	832803.5	4.510E-02	6.801E-03	2.118E-03	1.950E-03	3.00	2.88	2.79						
	"	"	"	F3	819567.0	832796.1	4.510E-02	6.801E-03	2.118E-03	1.950E-03	3.00	2.88	2.79						
	"	"	"	F4	819561.7	832788.6	4.510E-02	6.801E-03	2.118E-03	1.950E-03	3.00	2.88	2.79						
	"	"	"	F5	819556.5	832781.1	4.510E-02	6.801E-03	2.118E-03	1.950E-03	3.00	2.88	2.79						
	"	"	"	F6	819551.2	832773.7	2.255E-02	3.400E-03	1.059E-03	9.752E-04	3.00	2.88	2.79						
	"	"	"	F7	819545.9	832766.2	2.255E-02	3.400E-03	1.059E-03	9.752E-04	3.00	2.88	2.79						
	"	"	"	F8	819540.6	832758.8	2.255E-02	3.400E-03	1.059E-03	9.752E-04	3.00	2.88	2.79						
	"	"	"	F9	819535.4	832751.3	2.255E-02	3.400E-03	1.059E-03	9.752E-04	3.00	2.88	2.79						
	"	"	"	F10	819530.1	832743.9	2.255E-02	3.400E-03	1.059E-03	9.752E-04	3.00	2.88	2.79	3.382E-01	5.100E-02	1.588E-02	1.463E-02		
	"	"	"	F11	819524.8	832736.4	2.255E-02	3.400E-03	1.059E-03	9.752E-04	3.00	2.88	2.79						
Enclosure G	6	5.9	0	G1	819586.8	832812.9	1.592E-02	1.689E-03	8.380E-04	7.709E-04	3.00	2.74	2.79						
	"	"	"	G2	819585.1	832807.2	1.592E-02	1.689E-03	8.380E-04	7.709E-04	3.00	2.74	2.79						
	"	"	"	G3	819583.3	832801.6	1.592E-02	1.689E-03	8.380E-04	7.709E-04	3.00	2.74	2.79						
	"	"	"	G4															

Appendix 3.7 Emission Inventory for Portal Emissions
Interim Phase (Year 2030)

Hourly Profile for Portals

Hour	Enclosure A				Enclosure B				Enclosure C			
	NO	NO _x	RSP	FSP	NO	NO _x	RSP	FSP	NO	NO _x	RSP	FSP
Hour 1	1.1%	0.8%	1.1%	1.1%	1.4%	1.1%	1.4%	1.4%	2.0%	1.3%	2.2%	2.2%
Hour 2	0.7%	0.6%	0.8%	0.8%	0.9%	0.7%	0.9%	0.9%	1.3%	0.9%	1.4%	1.4%
Hour 3	0.5%	0.4%	0.6%	0.6%	0.7%	0.6%	0.7%	0.7%	0.9%	0.6%	1.0%	1.0%
Hour 4	0.4%	0.3%	0.4%	0.4%	0.6%	0.5%	0.6%	0.6%	0.7%	0.5%	0.8%	0.8%
Hour 5	0.4%	0.4%	0.5%	0.5%	0.6%	0.5%	0.6%	0.6%	0.8%	0.6%	0.8%	0.8%
Hour 6	0.7%	0.6%	0.7%	0.7%	0.9%	0.8%	0.9%	0.9%	1.1%	0.9%	1.2%	1.2%
Hour 7	1.9%	1.7%	2.0%	1.9%	2.6%	2.6%	2.7%	2.7%	3.4%	2.8%	3.6%	3.6%
Hour 8	5.1%	5.0%	5.1%	5.1%	7.5%	7.9%	7.4%	7.4%	9.9%	8.7%	9.8%	9.8%
Hour 9	4.9%	5.0%	5.0%	5.0%	7.5%	8.2%	7.6%	7.6%	9.9%	9.0%	9.7%	9.7%
Hour 10	4.9%	5.3%	4.9%	4.9%	7.5%	8.5%	7.4%	7.4%	9.2%	8.9%	9.0%	9.0%
Hour 11	4.6%	5.3%	4.7%	4.7%	7.2%	8.5%	7.2%	7.2%	8.5%	8.7%	8.4%	8.4%
Hour 12	4.2%	4.7%	4.3%	4.3%	6.6%	7.7%	6.6%	6.6%	7.6%	7.6%	7.5%	7.5%
Hour 13	6.4%	7.4%	6.4%	6.4%	5.0%	5.5%	5.2%	5.2%	4.1%	5.4%	4.1%	4.1%
Hour 14	6.4%	7.4%	6.3%	6.3%	5.1%	5.4%	5.1%	5.1%	4.2%	5.4%	4.1%	4.1%
Hour 15	6.9%	8.1%	6.8%	6.8%	5.5%	6.1%	5.6%	5.6%	4.6%	6.1%	4.5%	4.5%
Hour 16	6.9%	8.0%	6.7%	6.7%	5.6%	6.0%	5.6%	5.6%	4.5%	6.0%	4.4%	4.4%
Hour 17	7.6%	8.4%	7.4%	7.4%	6.1%	6.4%	6.1%	6.1%	4.9%	6.0%	4.8%	4.8%
Hour 18	8.2%	8.4%	8.0%	8.0%	6.5%	6.3%	6.4%	6.4%	5.2%	5.9%	5.1%	5.1%
Hour 19	7.2%	6.5%	7.2%	7.2%	5.7%	4.9%	5.8%	5.8%	4.4%	4.3%	4.4%	4.4%
Hour 20	5.6%	4.7%	4.7%	4.7%	4.4%	3.6%	4.6%	4.6%	3.4%	3.1%	3.5%	3.5%
Hour 21	4.5%	3.4%	4.5%	4.5%	3.5%	2.6%	3.5%	3.5%	2.7%	2.3%	2.8%	2.8%
Hour 22	4.1%	3.0%	4.1%	4.1%	3.3%	2.3%	3.1%	3.1%	2.5%	2.0%	2.5%	2.5%
Hour 23	4.0%	2.5%	3.9%	3.9%	3.0%	1.8%	2.8%	2.8%	2.4%	1.7%	2.4%	2.4%
Hour 24	2.9%	2.0%	2.9%	2.9%	2.3%	1.5%	2.2%	2.2%	1.8%	1.3%	1.8%	1.8%

Hour	Enclosure D				Enclosure E				Enclosure F			
	NO	NO _x	RSP	FSP	NO	NO _x	RSP	FSP	NO	NO _x	RSP	FSP
Hour 1	1.1%	0.7%	0.9%	0.9%	1.7%	1.4%	1.7%	1.7%	1.3%	0.9%	1.3%	1.3%
Hour 2	0.7%	0.5%	0.6%	0.6%	1.1%	1.0%	1.1%	1.1%	0.8%	0.6%	0.9%	0.9%
Hour 3	0.5%	0.4%	0.5%	0.5%	0.8%	0.7%	0.8%	0.8%	0.6%	0.5%	0.6%	0.6%
Hour 4	0.4%	0.4%	0.4%	0.4%	0.6%	0.6%	0.6%	0.6%	0.5%	0.4%	0.5%	0.5%
Hour 5	0.5%	0.4%	0.4%	0.4%	0.6%	0.6%	0.7%	0.7%	0.5%	0.4%	0.5%	0.5%
Hour 6	0.7%	0.6%	0.6%	0.7%	1.0%	0.9%	1.0%	1.0%	0.8%	0.7%	0.8%	0.8%
Hour 7	1.9%	1.7%	1.8%	1.8%	2.7%	2.7%	2.7%	2.7%	2.3%	2.2%	2.3%	2.3%
Hour 8	5.0%	4.9%	4.9%	4.9%	7.5%	7.8%	7.2%	7.2%	6.4%	6.5%	6.4%	6.4%
Hour 9	4.8%	4.8%	5.0%	5.0%	7.0%	7.3%	6.8%	6.8%	6.4%	6.7%	6.4%	6.4%
Hour 10	4.4%	4.4%	4.4%	4.4%	6.5%	7.1%	6.3%	6.3%	6.2%	6.7%	6.1%	6.1%
Hour 11	4.1%	4.2%	4.2%	4.2%	5.9%	6.6%	5.8%	5.8%	5.8%	6.6%	5.8%	5.8%
Hour 12	3.8%	3.8%	3.9%	3.9%	5.5%	6.2%	5.3%	5.3%	5.3%	6.0%	5.3%	5.3%
Hour 13	6.8%	7.8%	7.4%	7.4%	4.9%	5.4%	5.0%	5.0%	5.7%	6.4%	5.8%	5.8%
Hour 14	7.0%	7.8%	7.3%	7.3%	4.9%	5.3%	4.9%	4.9%	5.7%	6.4%	5.7%	5.7%
Hour 15	7.7%	8.7%	8.0%	8.0%	5.0%	5.5%	5.0%	5.0%	6.2%	7.2%	6.2%	6.2%
Hour 16	7.7%	8.6%	8.0%	8.0%	5.0%	5.5%	5.0%	5.0%	6.2%	7.1%	6.2%	6.2%
Hour 17	8.3%	9.1%	8.5%	8.5%	6.1%	5.9%	5.8%	5.8%	6.9%	7.5%	6.8%	6.8%
Hour 18	8.2%	8.7%	8.3%	8.3%	6.6%	6.5%	6.6%	6.6%	7.4%	7.5%	7.3%	7.3%
Hour 19	7.1%	6.8%	7.2%	7.2%	6.4%	5.7%	6.4%	6.4%	6.5%	5.9%	6.6%	6.6%
Hour 20	5.2%	5.0%	5.4%	5.4%	5.3%	4.5%	5.4%	5.4%	5.0%	4.2%	5.2%	5.2%
Hour 21	4.2%	3.6%	3.9%	3.9%	4.4%	3.7%	4.5%	4.5%	3.9%	3.0%	4.0%	4.0%
Hour 22	3.9%	3.0%	3.3%	3.3%	4.2%	3.5%	4.2%	4.2%	3.6%	2.6%	3.5%	3.5%
Hour 23	3.5%	2.3%	2.7%	2.7%	3.9%	3.0%	4.0%	4.0%	3.4%	2.2%	3.3%	3.3%
Hour 24	2.6%	1.9%	2.1%	2.1%	2.9%	2.3%	3.0%	3.0%	2.5%	1.7%	2.5%	2.5%

Hour	Enclosure G				Underpass H			
	NO	NO _x	RSP	FSP	NO	NO ₂	RSP	FSP
Hour 1	1.7%	1.5%	1.8%	1.8%	0.8%	0.8%	0.8%	0.8%
Hour 2	1.2%	1.0%	1.2%	1.2%	0.6%	0.5%	0.6%	0.6%
Hour 3	0.8%	0.7%	0.9%	0.9%	0.4%	0.4%	0.4%	0.4%
Hour 4	0.7%	0.6%	0.7%	0.7%	0.3%	0.3%	0.4%	0.4%
Hour 5	0.7%	0.6%	0.7%	0.7%	0.4%	0.3%	0.4%	0.4%
Hour 6	1.0%	0.9%	1.0%	1.0%	0.6%	0.5%	0.6%	0.6%
Hour 7	2.7%	2.6%	2.8%	2.8%	1.8%	1.7%	1.9%	1.9%
Hour 8	7.1%	6.9%	7.0%	7.0%	5.5%	5.5%	5.6%	5.6%
Hour 9	6.3%	6.1%	6.4%	6.4%	5.8%	5.9%	6.0%	6.0%
Hour 10	5.9%	5.9%	5.9%	5.9%	6.4%	6.7%	6.6%	6.6%
Hour 11	5.3%	5.4%	5.4%	5.4%	6.4%	6.8%	6.7%	6.7%
Hour 12	5.0%	5.2%	5.0%	5.0%	5.6%	5.9%	5.9%	5.9%
Hour 13	5.1%	5.8%	5.1%	5.1%	6.7%	7.3%	7.1%	7.1%
Hour 14	5.0%	5.7%	5.0%	5.0%	7.2%	7.6%	7.3%	7.3%
Hour 15	5.1%	5.8%	5.0%	5.0%	8.4%	8.9%	8.3%	8.3%
Hour 16	5.2%	5.9%	5.2%	5.2%	8.2%	8.6%	8.1%	8.1%
Hour 17	6.0%	6.5%	5.9%	5.9%	8.3%	8.5%	8.0%	8.0%
Hour 18	6.8%	7.0%	6.7%	6.7%	8.2%	8.1%	7.7%	7.7%
Hour 19	6.6%	6.3%	6.5%	6.5%	5.9%	5.5%	5.7%	5.7%
Hour 20	5.6%	5.2%	5.6%	5.6%	3.7%	3.3%	3.8%	3.8%
Hour 21	4.7%	4.2%	4.7%	4.7%	2.7%	2.2%	2.6%	2.6%
Hour 22	4.4%	4.0%	4.4%	4.4%	2.5%	2.0%	2.3%	2.3%
Hour 23	4.1%	3.4%	4.2%	4.2%	2.1%	1.5%	1.8%	1.8%
Hour 24	3.0%	2.6%	3.1%	3.1%	1.6%	1.2%	1.5%	1.5%

Appendix 3.7 Emission Inventory for Portal Emissions
Operation Phase (Year 2033)

Source Name	Description	Percentage for Portal	Length (m)	Portal ID	Road Link ID	No. of Portal Sources	Hour	Q (veh/hr)	Total Emission Factor				Total Emission Rate				Emission Rate (from Portal Sources)				Daily Emission Rate / Diurnal Profile (from 1st 50m for Each Portal Source)				Daily Emission Rate / Diurnal Profile (from 2nd 50m for Each Portal Source)								
									NO (g/mile-veh)	NO ₂ (g/mile-veh)	RSP (g/mile-veh)	FSP (g/mile-veh)	NO (g/s)	NO ₂ (g/s)	RSP (g/s)	FSP (g/s)	NO (g/s)	NO ₂ (g/s)	RSP (g/s)	FSP (g/s)	NO (g/s) / %	NO ₂ (g/s) / %	RSP (g/s) / %	FSP (g/s) / %	NO (g/s) / %	NO ₂ (g/s) / %	RSP (g/s) / %	FSP (g/s) / %					
									NO	NO ₂	RSP	FSP	NO	NO ₂	RSP	FSP	NO	NO ₂	RSP	FSP	NO	NO ₂	RSP	FSP	NO	NO ₂	RSP	FSP					
A	Enclosure A (From Yuen Long Highway (WB) To Long Tin Road)	100%	148	Portal : A1-A6	9235	6	1	622	0.3934	0.0503	0.0194	0.0178	6.256E-03	8.001E-04	3.078E-04	2.830E-04	6.256E-03	8.001E-04	3.078E-04	2.830E-04	1.1%	0.8%	1.1%	1.1%	1.1%	0.8%	1.1%	1.1%					
							2	421	0.3840	0.0509	0.0194	0.0178	4.134E-03	5.480E-04	2.084E-04	1.915E-04	4.134E-03	5.480E-04	2.084E-04	1.915E-04	0.7%	0.5%	0.8%	0.8%	0.7%	0.5%	0.8%	0.8%	0.7%	0.5%	0.8%	0.8%	
							3	300	0.3891	0.0539	0.0198	0.0182	2.983E-03	4.129E-04	1.521E-04	1.398E-04	2.983E-03	4.129E-04	1.521E-04	1.398E-04	0.5%	0.4%	0.6%	0.5%	0.5%	0.4%	0.6%	0.5%	0.4%	0.6%	0.5%	0.5%	0.5%
							4	237	0.3870	0.0554	0.0200	0.0185	2.344E-03	3.357E-04	1.214E-04	1.121E-04	2.344E-03	3.357E-04	1.214E-04	1.121E-04	0.4%	0.3%	0.4%	0.4%	0.4%	0.3%	0.4%	0.4%	0.4%	0.3%	0.4%	0.4%	0.4%
							5	240	0.3920	0.0584	0.0205	0.0189	2.408E-03	3.585E-04	1.261E-04	1.164E-04	2.408E-03	3.585E-04	1.261E-04	1.164E-04	0.4%	0.3%	0.5%	0.4%	0.4%	0.3%	0.5%	0.4%	0.4%	0.5%	0.4%	0.4%	
							6	353	0.4049	0.0630	0.0213	0.0196	3.647E-03	5.673E-04	1.920E-04	1.765E-04	3.647E-03	5.673E-04	1.920E-04	1.765E-04	0.6%	0.6%	0.7%	0.7%	0.6%	0.6%	0.7%	0.7%	0.6%	0.6%	0.7%	0.7%	0.6%
							7	918	0.4463	0.0735	0.0229	0.0211	1.047E-02	1.723E-03	5.375E-04	4.944E-04	1.047E-02	1.723E-03	5.375E-04	4.944E-04	1.8%	1.7%	1.9%	1.9%	1.8%	1.7%	1.9%	1.9%	1.8%	1.7%	1.9%	1.9%	1.8%
							8	2171	0.5233	0.0924	0.0256	0.0236	2.903E-02	5.124E-03	1.421E-03	1.308E-03	2.903E-02	5.124E-03	1.421E-03	1.308E-03	5.0%	5.1%	5.2%	5.1%	5.0%	5.1%	5.2%	5.1%	5.0%	5.1%	5.2%	5.1%	5.0%
							9	2396	0.4725	0.0858	0.0234	0.0216	2.892E-02	5.254E-03	1.432E-03	1.320E-03	2.892E-02	5.254E-03	1.432E-03	1.320E-03	5.0%	5.2%	5.2%	5.2%	5.0%	5.2%	5.2%	5.2%	5.0%	5.2%	5.2%	5.2%	5.0%
							10	2075	0.5270	0.0995	0.0254	0.0234	2.793E-02	5.275E-03	1.346E-03	1.239E-03	2.793E-02	5.275E-03	1.346E-03	1.239E-03	4.8%	5.2%	4.9%	4.9%	4.8%	5.2%	4.9%	4.9%	4.8%	5.2%	4.9%	4.9%	4.8%
							11	1882	0.5586	0.1108	0.0268	0.0247	2.685E-02	5.326E-03	1.287E-03	1.185E-03	2.685E-02	5.326E-03	1.287E-03	1.185E-03	4.6%	5.3%	4.7%	4.7%	4.6%	5.3%	4.7%	4.7%	4.6%	5.3%	4.7%	4.7%	4.6%
							12	1814	0.5183	0.1002	0.0250	0.0230	2.402E-02	4.645E-03	1.160E-03	1.067E-03	2.402E-02	4.645E-03	1.160E-03	1.067E-03	4.1%	4.6%	4.2%	4.2%	4.1%	4.6%	4.2%	4.2%	4.1%	4.6%	4.2%	4.2%	4.1%
							13	2644	0.5245	0.1044	0.0252	0.0232	3.542E-02	7.050E-03	1.700E-03	1.567E-03	3.542E-02	7.050E-03	1.700E-03	1.567E-03	6.1%	7.0%	6.2%	6.2%	6.1%	7.0%	6.2%	6.2%	6.1%	7.0%	6.2%	6.2%	6.1%
							14	2707	0.5238	0.1009	0.0241	0.0223	3.621E-02	6.979E-03	1.670E-03	1.539E-03	3.621E-02	6.979E-03	1.670E-03	1.539E-03	6.2%	6.9%	6.1%	6.1%	6.2%	6.9%	6.1%	6.1%	6.2%	6.9%	6.1%	6.1%	6.2%
							15	2819	0.5491	0.1090	0.0250	0.0230	3.954E-02	7.852E-03	1.800E-03	1.652E-03	3.954E-02	7.852E-03	1.800E-03	1.652E-03	6.8%	7.8%	6.5%	6.5%	6.8%	7.8%	6.5%	6.5%	6.8%	7.8%	6.5%	6.5%	6.8%
							16	2972	0.5250	0.1022	0.0239	0.0220	3.986E-02	7.762E-03	1.814E-03	1.671E-03	3.986E-02	7.762E-03	1.814E-03	1.671E-03	6.8%	7.7%	6.6%	6.6%	6.8%	7.7%	6.6%	6.6%	6.8%	7.7%	6.6%	6.6%	6.8%
							17	3187	0.5513	0.1039	0.0250	0.0231	4.488E-02	8.458E-03	2.039E-03	1.879E-03	4.488E-02	8.458E-03	2.039E-03	1.879E-03	7.7%	8.4%	7.4%	7.4%	7.7%	8.4%	7.4%	7.4%	7.7%	8.4%	7.4%	7.4%	7.7%
							18	3637	0.5259	0.0923	0.0240	0.0221	4.885E-02	8.573E-03	2.053E-03	1.879E-03	4.885E-02	8.573E-03	2.053E-03	1.879E-03	8.4%	8.5%	8.1%	8.1%	8.4%	8.5%	8.1%	8.1%	8.4%	8.5%	8.1%	8.1%	8.4%
							19	3957	0.4323	0.0681	0.0206	0.0190	4.370E-02	6.882E-03	2.086E-03	1.926E-03	4.370E-02	6.882E-03	2.086E-03	1.926E-03	7.5%	6.8%	7.6%	7.6%	7.5%	6.8%	7.6%	7.6%	7.5%	6.8%	7.6%	7.6%	7.5%
							20	3224	0.4056	0.0614	0.0204	0.0188	3.341E-02	5.059E-03	1.676E-03	1.547E-03	3.341E-02	5.059E-03	1.676E-03	1.547E-03	5.7%	5.0%	6.1%	6.1%	5.7%	5.0%	6.1%	6.1%	5.7%	5.0%	6.1%	6.1%	5.7%
							21	2531	0.4067	0.0557	0.0197	0.0182	2.630E-02	3.599E-03	1.274E-03	1.174E-03	2.630E-02	3.599E-03	1.274E-03	1.174E-03	4.5%	3.6%	4.6%	4.6%	4.5%	3.6%	4.6%	4.6%	4.5%	3.6%	4.6%	4.6%	4.5%
							22	2312	0.4200	0.0536	0.0194	0.0178	2.481E-02	3.166E-03	1.144E-03	1.054E-03	2.481E-02	3.166E-03	1.144E-03	1.054E-03	4.3%	3.2%	4.1%	4.1%	4.3%	3.2%	4.1%	4.1%	4.3%	3.2%	4.1%	4.1%	4.3%
							23	2270	0.4068	0.0464	0.0184	0.0170	2.359E-02	2.690E-03	1.069E-03	9.845E-04	2.359E-02	2.690E-03	1.069E-03	9.845E-04	4.0%	2.7%	3.9%	3.9%	4.0%	2.7%	3.9%	3.9%	4.0%	2.7%	3.9%	3.9%	4.0%
							24	1706	0.3965	0.0473	0.0183	0.0169	1.728E-02	2.060E-03	7.980E-04	7.128E-04	1.728E-02	2.060E-03	7.980E-04	7.128E-04	3.0%	2.1%	2.9%	2.9%	3.0%	2.1%	2.9%	2.9%	3.0%	2.1%	2.9%	2.9%	3.0%
Daily	-	-	-	-	-	-	-	-	-	5.829E-01	1.005E-01	2.759E-02	2.542E-02	5.829E-01	1.005E-01	2.759E-02	2.542E-02	1.295E-01	2.232E-02	6.131E-03	5.649E-03	6.476E-02	1.117E-02	3.065E-03	2.824E-03								
B	Enclosure B (From Long Tin Road to TYST Interchange)	100%	83	Portal : B1-B10	9161	10	1	554	0.3032	0.0429	0.0132	0.0122	2.406E-03	3.402E-04	1.050E-04	9.652E-05	2.406E-03	3.402E-04	1.050E-04	9.652E-05	1.3%	1.0%	1.3%	1.3%	1.3%	1.0%	1.3%	1.3%					
							2	375	0.2978	0.0440	0.0134	0.0123	1.600E-03	2.364E-04	7.220E-05	6.635E-05	1.600E-03	2.364E-04	7.220E-05	6.635E-05	0.9%	0.7%	0.9%	0.9%	0.9%	0.7%	0.9%	0.9%	0.9%	0.7%	0.9%		
							3	267	0.2984	0.0461	0.0138	0.0127	1.142E-03	1.763E-04	5.272E-05	4.877E-05	1.142E-03	1.763E-04	5.272E-05	4.877E-05	0.6%	0.5%	0.7%	0.7%	0.6%	0.5%	0.7%	0.7%	0.6%	0.5%	0.7%	0.7%	
							4	211	0.2987	0.0481	0.0142	0.0130	9.036E-04	1.455E-04	4.297E-05	3.946E-05	9.036E-04	1.455E-04	4.297E-05	3.946E-05	0.5%	0.4%	0.5%	0.5%	0.5%	0.4%	0.5%	0.5%	0.4%	0.5%	0.5%	0.4%	
							5	214	0.3114	0.0527	0.0149	0.0138	9.551E-04	1.616E-04	4.575E-05	4.229E-05	9.551E-04	1.616E-04	4.575E-05	4.229E-05	0.5%	0.5%	0.6%	0.6%	0.5%	0.5%	0.6%	0.6%	0.5%	0.5%	0.6%	0.6%	
							6	314	0.3249	0.0577	0.0157	0.0145	1.462E-03	2.594E-04	7.080E-05	6.508E-05	1.462E-03	2.594E-04	7.080E-05	6.508E-05	0.8%	0.7%	0.9%	0.9%	0.8%	0.7%	0.9%	0.9%	0.8%	0.7%	0.9%	0.9%	
							7	818	0.3825	0.0733	0.0178	0.0164	4.481E-03	8.587E-04	2.088E-04	1.920E-04	4.481E-03	8.587E-04	2.088E-04	1.920E-04	2.5%	2.5%	2.7%	2.6%	2.5%	2.5%	2.7%	2.6%	2.5%	2.5%	2.7%	2.6%	
							8	1934	0.4943	0.1034	0.0214	0.0196	1.370E-02	2.865E-03	5.920E-04	5.441E-04	1.370E-02	2.865E-03	5.920E-04	5.441E-04	7.7%	8.2%	7.5%	7.5%	7.7%	8.2%	7.5%	7.5%	7.7%	8.2%	7.5%	7.5%	
							9	2148	0.4522	0.0973	0.0199	0.0183	1.392E-02	2.994E-03	6.129E-04	5.635E-04	1.392E-02	2.994E-03	6.129E-04	5.635E-04	7.8%	8.6%	7.8%	7.8%	7.8%	8.6%	7.8%	7.8%	7.8%	8.6%	7.8%	7.8%	
							10	1852	0.5177	0.1145	0.0218	0.0200	1.374E-02	3.038E-03	5.789E-04	5.320E-04	1.374E-02	3.038E-03	5.789E-04	5.320E-04	7.7%	8.7%	7.4%	7.3%	7.7%	8.7%	7.4%	7.3%	7.7%	8.7%	7.4%	7.3%	
							11	1678	0.5406	0.1243	0.0229	0.0211	1.300E-02	2.987E-03	5.499E-04	5.064E-04	1.300E-02	2.987E-03	5.499E-04	5.064E-04	7.3%	8.6%	7.0%	7.0%	7.3%	8.6%	7.0%	7.0%	7.3%	8.6%	7.0%	7.0%	
							12	1622	0.4972	0.1112	0.0213	0.0196	1.155E-02	2.583E-03	4.940E-04	4.554E-04	1.155E-02	2.583E-03	4.940E-04	4.554E-04	6.5%	7.4%	6.3%	6.3%	6.5%	7.4%	6.3%	6.3%	6.5%	7.4%	6.3%	6.3%	
							13	1410	0.4266	0.0915	0.0198	0.0182	8.620E-03	1.849E-03	3.999E-04	3.688E-04	8.620E-03	1.849E-03	3.999E-04														

Appendix 3.7 Emission Inventory for Portal Emissions
 Operation Phase (Year 2033)

Source Name	Description	Percentage for Portal	Length (m)	Portal ID	Road Link ID	No. of Portal Sources	Hour	Q (veh/hr)	Total Emission Factor				Total Emission Rate				Emission Rate (from Portal Sources)				Daily Emission Rate / Diurnal Profile (from 1st 50m for Each Portal Source)				Daily Emission Rate / Diurnal Profile (from 2nd 50m for Each Portal Source)										
									NO (g/mile-veh)	NO ₂ (g/mile-veh)	RSP (g/mile-veh)	FSP (g/mile-veh)	NO (g/s)	NO ₂ (g/s)	RSP (g/s)	FSP (g/s)	NO (g/s)	NO ₂ (g/s)	RSP (g/s)	FSP (g/s)	NO (g/s) / %	NO ₂ (g/s) / %	RSP (g/s) / %	FSP (g/s) / %	NO (g/s) / %	NO ₂ (g/s) / %	RSP (g/s) / %	FSP (g/s) / %							
G	Enclosure G (From Yuen Long Highway (WB) to Long Hon Road)	100%	181	Portal : G1-G16	9164	16	1	83	0.8366	0.1157	0.0498	0.0458	2.161E-03	2.989E-04	1.286E-04	1.184E-04	2.161E-03	2.989E-04	1.286E-04	1.184E-04	1.6%	1.4%	1.7%	1.7%	1.6%	1.4%	1.7%	1.7%							
							H	Underpass H (From Yuen Long Highway to Hung Tin Road)	100%	143	Portal : H1-H16	9239	16	1	286	0.2654	0.0497	0.0103	0.0095	1.877E-03	3.516E-04	7.290E-05	6.710E-05	1.877E-03	3.516E-04	7.290E-05	6.710E-05	0.6%	0.4%	0.7%	0.7%	0.6%	0.4%	0.7%	0.7%

Appendix 3.7 Emission Inventory for Portal Emissions
Operation Phase (Year 2033)

Description	Height (m)	Width (m)	Viaduct Height (m)	Portal ID	Daily Emission Factor (QS) (g/s) ^[1]						Total NO	Total NO ₂	Total RSP	Total FSP
					X	Y	NO	NO ₂	RSP	FSP				
Enclosure A	6	16.2	0	A1	819693.1	833392.7	1.295E-01	2.233E-02	6.131E-03	5.649E-03	3.00	7.53	2.79	
	"	"	"	A2	819697.1	833408.2	1.295E-01	2.233E-02	6.131E-03	5.649E-03	3.00	7.53	2.79	
	"	"	"	A3	819701.0	833423.7	1.295E-01	2.233E-02	6.131E-03	5.649E-03	3.00	7.53	2.79	
	"	"	"	A4	819705.0	833439.2	6.476E-02	1.117E-02	3.065E-03	2.824E-03	3.00	7.53	2.79	
	"	"	"	A5	819708.9	833454.7	6.476E-02	1.117E-02	3.065E-03	2.824E-03	3.00	7.53	2.79	
	"	"	"	A6	819712.9	833470.2	6.476E-02	1.117E-02	3.065E-03	2.824E-03	3.00	7.53	2.79	5.829E-01 1.005E-01 2.759E-02 2.542E-02
Enclosure B	6	10.3	0	B1	819676.5	833286.7	2.387E-02	4.648E-03	1.049E-03	9.665E-04	3.00	4.79	2.79	
	"	"	"	B2	819674.1	833277.9	2.387E-02	4.648E-03	1.049E-03	9.665E-04	3.00	4.79	2.79	
	"	"	"	B3	819671.6	833269.2	2.387E-02	4.648E-03	1.049E-03	9.665E-04	3.00	4.79	2.79	
	"	"	"	B4	819669.2	833260.4	2.387E-02	4.648E-03	1.049E-03	9.665E-04	3.00	4.79	2.79	
	"	"	"	B5	819666.8	833251.7	2.387E-02	4.648E-03	1.049E-03	9.665E-04	3.00	4.79	2.79	
	"	"	"	B6	819664.3	833242.9	1.193E-02	2.324E-03	5.247E-04	4.833E-04	3.00	4.79	2.79	
	"	"	"	B7	819661.9	833234.1	1.193E-02	2.324E-03	5.247E-04	4.833E-04	3.00	4.79	2.79	
	"	"	"	B8	819659.5	833225.4	1.193E-02	2.324E-03	5.247E-04	4.833E-04	3.00	4.79	2.79	
	"	"	"	B9	819657.0	833216.6	1.193E-02	2.324E-03	5.247E-04	4.833E-04	3.00	4.79	2.79	
	"	"	"	B10	819654.6	833207.9	1.193E-02	2.324E-03	5.247E-04	4.833E-04	3.00	4.79	2.79	1.790E-01 3.486E-02 7.870E-03 7.249E-03
Enclosure C	6	6	0	C1	819679.3	833288.4	1.614E-02	2.994E-03	6.713E-04	6.184E-04	3.00	2.79	2.79	
	"	"	"	C2	819677.7	833282.4	1.614E-02	2.994E-03	6.713E-04	6.184E-04	3.00	2.79	2.79	
	"	"	"	C3	819676.2	833276.3	1.614E-02	2.994E-03	6.713E-04	6.184E-04	3.00	2.79	2.79	
	"	"	"	C4	819674.6	833270.3	1.614E-02	2.994E-03	6.713E-04	6.184E-04	3.00	2.79	2.79	
	"	"	"	C5	819673.1	833264.2	1.614E-02	2.994E-03	6.713E-04	6.184E-04	3.00	2.79	2.79	
	"	"	"	C6	819671.5	833258.2	1.614E-02	2.994E-03	6.713E-04	6.184E-04	3.00	2.79	2.79	
	"	"	"	C7	819669.9	833252.1	1.614E-02	2.994E-03	6.713E-04	6.184E-04	3.00	2.79	2.79	
	"	"	"	C8	819668.4	833246.0	1.614E-02	2.994E-03	6.713E-04	6.184E-04	3.00	2.79	2.79	
	"	"	"	C9	819666.8	833240.0	8.072E-03	1.497E-03	3.356E-04	3.092E-04	3.00	2.79	2.79	
	"	"	"	C10	819665.2	833233.9	8.072E-03	1.497E-03	3.356E-04	3.092E-04	3.00	2.79	2.79	
	"	"	"	C11	819663.7	833227.9	8.072E-03	1.497E-03	3.356E-04	3.092E-04	3.00	2.79	2.79	
	"	"	"	C12	819662.1	833221.8	8.072E-03	1.497E-03	3.356E-04	3.092E-04	3.00	2.79	2.79	
	"	"	"	C13	819660.6	833215.8	8.072E-03	1.497E-03	3.356E-04	3.092E-04	3.00	2.79	2.79	
	"	"	"	C14	819659.0	833209.7	8.072E-03	1.497E-03	3.356E-04	3.092E-04	3.00	2.79	2.79	
	"	"	"	C15	819657.4	833203.7	8.072E-03	1.497E-03	3.356E-04	3.092E-04	3.00	2.79	2.79	
	"	"	"	C16	819655.9	833197.6	8.072E-03	1.497E-03	3.356E-04	3.092E-04	3.00	2.79	2.79	1.937E-01 3.593E-02 8.055E-03 7.420E-03
Enclosure D	6	6.4	4	D1	819519.0	832991.1	5.001E-03	9.594E-04	2.155E-04	1.987E-04	7.00	2.98	2.79	
	"	"	"	D2	819513.3	832994.2	5.001E-03	9.594E-04	2.155E-04	1.987E-04	7.00	2.98	2.79	
	"	"	"	D3	819507.7	832997.3	5.001E-03	9.594E-04	2.155E-04	1.987E-04	7.00	2.98	2.79	
	"	"	"	D4	819502.1	833000.4	5.001E-03	9.594E-04	2.155E-04	1.987E-04	7.00	2.98	2.79	
	"	"	"	D5	819496.5	833003.7	5.001E-03	9.594E-04	2.155E-04	1.987E-04	7.00	2.98	2.79	
	"	"	"	D6	819490.9	833006.9	5.001E-03	9.594E-04	2.155E-04	1.987E-04	7.00	2.98	2.79	
	"	"	"	D7	819485.4	833010.2	5.001E-03	9.594E-04	2.155E-04	1.987E-04	7.00	2.98	2.79	
	"	"	"	D8	819480.2	833014.0	2.501E-03	4.797E-04	1.078E-04	9.933E-05	7.00	2.98	2.79	
	"	"	"	D9	819474.9	833017.7	2.501E-03	4.797E-04	1.078E-04	9.933E-05	7.00	2.98	2.79	
	"	"	"	D10	819469.9	833021.8	2.501E-03	4.797E-04	1.078E-04	9.933E-05	7.00	2.98	2.79	
	"	"	"	D11	819465.4	833026.4	2.501E-03	4.797E-04	1.078E-04	9.933E-05	7.00	2.98	2.79	
	"	"	"	D12	819461.0	833031.0	2.501E-03	4.797E-04	1.078E-04	9.933E-05	7.00	2.98	2.79	
	"	"	"	D13	819457.2	833036.2	2.501E-03	4.797E-04	1.078E-04	9.933E-05	7.00	2.98	2.79	
	"	"	"	D14	819453.5	833041.5	2.501E-03	4.797E-04	1.078E-04	9.933E-05	7.00	2.98	2.79	5.251E-02 1.007E-02 2.263E-03 2.086E-03
Enclosure E	6	10	0	E1	819538.6	832996.9	4.606E-02	7.102E-03	2.368E-03	2.180E-03	3.00	4.65	2.79	
	"	"	"	E2	819530.8	833003.1	4.606E-02	7.102E-03	2.368E-03	2.180E-03	3.00	4.65	2.79	
	"	"	"	E3	819523.0	833009.4	4.606E-02	7.102E-03	2.368E-03	2.180E-03	3.00	4.65	2.79	
	"	"	"	E4	819515.2	833015.6	4.606E-02	7.102E-03	2.368E-03	2.180E-03	3.00	4.65	2.79	
	"	"	"	E5	819507.3	833021.9	4.606E-02	7.102E-03	2.368E-03	2.180E-03	3.00	4.65	2.79	
	"	"	"	E6	819499.5	833028.1	2.303E-02	3.551E-03	1.184E-03	1.090E-03	3.00	4.65	2.79	
	"	"	"	E7	819491.7	833034.4	2.303E-02	3.551E-03	1.184E-03	1.090E-03	3.00	4.65	2.79	
	"	"	"	E8	819483.9	833040.6	2.303E-02	3.551E-03	1.184E-03	1.090E-03	3.00	4.65	2.79	
	"	"	"	E9	819476.1	833046.9	2.303E-02	3.551E-03	1.184E-03	1.090E-03	3.00	4.65	2.79	
	"	"	"	E10	819468.3	833053.1	2.303E-02	3.551E-03	1.184E-03	1.090E-03	3.00	4.65	2.79	3.454E-01 5.327E-02 1.776E-02 1.635E-02
Enclosure F	6	6.2	0	F1	819577.6	832811.0	5.739E-02	1.170E-02	2.264E-03	2.088E-03	3.00	2.88	2.79	
	"	"	"	F2	819572.3	832803.5	5.739E-02	1.170E-02	2.264E-03	2.088E-03	3.00	2.88	2.79	
	"	"	"	F3	819567.0	832796.1	5.739E-02	1.170E-02	2.264E-03	2.088E-03	3.00	2.88	2.79	
	"	"	"	F4	819561.7	832788.6	5.739E-02	1.170E-02	2.264E-03	2.088E-03	3.00	2.88	2.79	
	"	"	"	F5	819556.5	832781.1	5.739E-02	1.170E-02	2.264E-03	2.088E-03	3.00	2.88	2.79	
	"	"	"	F6	819551.2	832773.7	2.870E-02	5.848E-03	1.132E-03	1.044E-03	3.00	2.88	2.79	
	"	"	"	F7	819545.9	832766.2	2.870E-02	5.848E-03	1.132E-03	1.044E-03	3.00	2.88	2.79	
	"	"	"	F8	819540.6	832758.8	2.870E-02	5.848E-03	1.132E-03	1.044E-03	3.00	2.88	2.79	
	"	"	"	F9	819535.4	832751.3	2.870E-02	5.848E-03	1.132E-03	1.044E-03	3.00	2.88	2.79	
	"	"	"	F10	819530.1	832743.9	2.870E-02	5.848E-03	1.132E-03	1.044E-03	3.00	2.88	2.79	4.305E-01 8.772E-02 1.698E-02 1.566E-02
Enclosure G	6	5.9	0	G1	819586.8	832812.9	1.138E-02	1.744E-03	6.325E-04	5.820E-04	3.00	2.74	2.79	
	"	"	"	G2	819585.1	832807.2	1.138E-02	1.744E-03	6.325E-04	5.820E-04	3.00	2.74	2.79	
	"	"	"	G3	819583.3	832801.6	1.138E-02	1.744E-03	6.325E-04	5.820E-04	3.00	2.74	2.79	
	"	"	"	G4	819581.6	832796.0	1.138E-02	1.744E-03	6.325E-04	5.820E-04	3.00	2.74	2.79	
	"	"	"	G5	819579.9	832790.4	1.138E-02	1.744E-03	6.325E-04	5.820E-04	3.00	2.74	2.79	
	"	"	"	G6	819578.2	832784.7	1.138E-02	1.744E-03	6.325E-04	5.820E-04	3.00	2.74	2.79	
	"	"	"	G7	819576.4	832779.1	1.138E-02	1.744E-03	6.325E-04	5.820E-04	3.00	2.74	2.79	
	"	"	"	G8	819574.7	832773.5	1.138E-02	1.744E-03	6.325E-04	5.820E-04	3.00	2.74	2.79	
	"	"	"	G9	819573.0	832767.9	5.688E-03	8.718E-04	3.162E-04	2.910E-04	3.00	2.74	2.79	
	"	"	"	G10	819571.3	832762.2								

Appendix 3.7 Emission Inventory for Portal Emissions
Operation Phase (Year 2033)

Hourly Profile for Portals

Hour	Enclosure A				Enclosure B				Enclosure C			
	NO	NO _x	RSP	FSP	NO	NO _x	RSP	FSP	NO	NO _x	RSP	FSP
Hour 1	1.1%	0.8%	1.1%	1.1%	1.3%	1.0%	1.3%	1.3%	1.7%	1.1%	2.0%	2.0%
Hour 2	0.7%	0.5%	0.8%	0.8%	0.9%	0.7%	0.9%	0.9%	1.1%	0.7%	1.3%	1.3%
Hour 3	0.5%	0.4%	0.6%	0.5%	0.6%	0.5%	0.7%	0.7%	0.7%	0.5%	0.9%	0.9%
Hour 4	0.4%	0.3%	0.4%	0.4%	0.5%	0.4%	0.5%	0.5%	0.6%	0.4%	0.7%	0.7%
Hour 5	0.4%	0.3%	0.5%	0.5%	0.5%	0.5%	0.6%	0.6%	0.6%	0.4%	0.8%	0.8%
Hour 6	0.6%	0.8%	0.7%	0.7%	0.8%	0.7%	0.9%	0.9%	0.9%	0.7%	1.2%	1.2%
Hour 7	1.8%	1.7%	1.9%	1.9%	2.5%	2.5%	2.7%	2.6%	2.9%	2.4%	3.4%	3.4%
Hour 8	5.0%	5.1%	5.2%	5.1%	7.7%	8.2%	7.5%	7.5%	14.2%	14.5%	12.9%	12.9%
Hour 9	5.0%	5.2%	5.2%	5.2%	7.8%	8.6%	7.8%	7.8%	19.2%	21.9%	15.6%	15.6%
Hour 10	4.8%	5.2%	4.9%	4.9%	7.7%	8.7%	7.4%	7.3%	12.3%	13.0%	11.1%	11.1%
Hour 11	4.6%	5.3%	4.7%	4.7%	7.3%	8.6%	7.0%	7.0%	9.5%	10.0%	9.1%	9.1%
Hour 12	4.1%	4.6%	4.2%	4.2%	6.5%	7.4%	6.3%	6.3%	7.7%	7.8%	7.7%	7.7%
Hour 13	6.1%	7.0%	6.2%	6.2%	4.8%	5.3%	5.1%	5.1%	2.6%	2.8%	3.0%	3.0%
Hour 14	6.2%	6.8%	6.1%	6.1%	5.0%	5.2%	5.0%	5.0%	2.6%	2.8%	3.0%	3.0%
Hour 15	6.8%	7.8%	6.5%	6.5%	5.4%	5.9%	5.4%	5.4%	2.9%	3.2%	3.2%	3.2%
Hour 16	6.8%	7.7%	6.6%	6.6%	5.5%	5.8%	5.4%	5.5%	2.9%	3.1%	3.2%	3.2%
Hour 17	7.7%	8.4%	7.4%	7.4%	6.1%	6.4%	6.1%	6.1%	3.1%	3.2%	3.5%	3.5%
Hour 18	8.4%	8.5%	8.1%	8.1%	6.6%	6.4%	6.5%	6.6%	3.4%	3.2%	3.8%	3.8%
Hour 19	7.5%	8.8%	7.6%	7.6%	6.0%	5.3%	6.3%	6.3%	2.9%	2.4%	3.4%	3.4%
Hour 20	5.7%	5.0%	6.1%	6.1%	4.4%	4.8%	4.9%	4.9%	1.7%	2.7%	2.7%	2.7%
Hour 21	4.5%	3.6%	4.6%	4.6%	3.5%	2.7%	3.6%	3.7%	1.7%	1.3%	2.1%	2.1%
Hour 22	4.3%	3.2%	4.1%	4.1%	3.3%	2.2%	3.2%	3.2%	1.6%	1.2%	2.0%	2.0%
Hour 23	4.0%	2.7%	3.9%	3.9%	3.1%	1.9%	2.9%	2.9%	1.6%	1.0%	1.9%	1.9%
Hour 24	3.0%	2.1%	2.9%	2.9%	2.3%	1.5%	2.2%	2.2%	1.1%	0.8%	1.4%	1.4%

Hour	Enclosure D				Enclosure E				Enclosure F			
	NO	NO _x	RSP	FSP	NO	NO _x	RSP	FSP	NO	NO _x	RSP	FSP
Hour 1	0.8%	0.6%	0.7%	0.7%	1.7%	1.3%	1.7%	1.7%	1.0%	0.7%	1.1%	1.1%
Hour 2	0.5%	0.4%	0.5%	0.5%	1.1%	0.9%	1.1%	1.1%	0.7%	0.5%	0.7%	0.7%
Hour 3	0.4%	0.3%	0.4%	0.4%	0.8%	0.6%	0.8%	0.8%	0.5%	0.3%	0.5%	0.5%
Hour 4	0.3%	0.3%	0.3%	0.3%	0.6%	0.5%	0.6%	0.6%	0.4%	0.3%	0.4%	0.4%
Hour 5	0.3%	0.3%	0.3%	0.3%	0.6%	0.5%	0.6%	0.6%	0.4%	0.3%	0.5%	0.5%
Hour 6	0.5%	0.5%	0.5%	0.5%	0.9%	0.8%	1.0%	1.0%	0.6%	0.5%	0.7%	0.7%
Hour 7	1.3%	1.3%	1.6%	1.4%	2.7%	2.6%	2.8%	2.8%	1.9%	1.7%	2.1%	2.1%
Hour 8	3.4%	3.8%	3.7%	3.7%	8.3%	8.6%	7.9%	7.9%	7.7%	8.3%	7.4%	7.4%
Hour 9	3.2%	3.4%	3.6%	3.7%	8.0%	8.4%	7.6%	7.7%	9.6%	11.1%	8.9%	8.9%
Hour 10	3.0%	3.3%	3.3%	3.3%	6.8%	7.1%	6.5%	6.5%	7.1%	7.9%	6.6%	6.6%
Hour 11	2.8%	3.2%	3.1%	3.1%	6.1%	6.5%	5.8%	5.8%	6.2%	7.0%	5.9%	5.9%
Hour 12	2.7%	2.9%	2.9%	2.9%	5.6%	5.8%	5.4%	5.4%	5.4%	6.0%	5.3%	5.3%
Hour 13	7.0%	8.3%	7.5%	7.4%	4.7%	5.2%	4.9%	4.9%	4.6%	5.0%	4.9%	4.9%
Hour 14	7.3%	8.1%	7.2%	7.2%	4.7%	5.1%	4.7%	4.7%	4.8%	4.9%	4.8%	4.8%
Hour 15	7.7%	8.7%	7.7%	7.7%	4.9%	5.5%	4.9%	4.9%	5.3%	5.5%	5.2%	5.2%
Hour 16	8.1%	9.0%	8.0%	8.0%	5.0%	5.5%	5.0%	5.0%	5.3%	5.5%	5.3%	5.3%
Hour 17	8.7%	9.6%	8.7%	8.6%	6.1%	5.8%	6.1%	5.8%	6.4%	6.6%	6.3%	6.3%
Hour 18	9.2%	9.6%	9.2%	9.2%	6.6%	6.6%	6.5%	6.5%	8.5%	8.7%	8.1%	8.1%
Hour 19	8.2%	7.8%	8.6%	8.7%	6.2%	5.8%	6.3%	6.3%	8.6%	8.3%	8.7%	8.7%
Hour 20	6.3%	5.9%	6.9%	6.9%	5.0%	4.5%	5.3%	5.3%	4.3%	3.7%	5.1%	5.1%
Hour 21	5.2%	4.3%	5.0%	5.0%	4.0%	3.5%	4.3%	4.3%	3.2%	2.4%	3.6%	3.6%
Hour 22	4.9%	3.5%	4.2%	4.2%	3.8%	3.2%	4.0%	4.0%	2.9%	1.9%	3.0%	3.0%
Hour 23	4.6%	2.8%	3.5%	3.5%	3.6%	2.9%	3.8%	3.8%	2.7%	1.6%	2.8%	2.8%
Hour 24	3.4%	2.2%	2.7%	2.7%	2.6%	2.2%	2.8%	2.8%	2.0%	1.2%	2.1%	2.1%

Hour	Enclosure G				Underpass H			
	NO	NO _x	RSP	FSP	NO	NO ₂	RSP	FSP
Hour 1	1.6%	1.4%	1.7%	1.7%	0.6%	0.4%	0.7%	0.7%
Hour 2	1.1%	1.0%	1.2%	1.2%	0.4%	0.3%	0.5%	0.5%
Hour 3	0.8%	0.7%	0.8%	0.8%	0.3%	0.2%	0.4%	0.4%
Hour 4	0.6%	0.6%	0.7%	0.7%	0.2%	0.2%	0.3%	0.3%
Hour 5	0.6%	0.6%	0.7%	0.7%	0.3%	0.2%	0.3%	0.4%
Hour 6	0.9%	0.9%	1.0%	1.0%	0.4%	0.4%	0.6%	0.6%
Hour 7	2.5%	2.5%	2.7%	2.7%	1.4%	1.3%	1.7%	1.7%
Hour 8	6.6%	6.6%	6.7%	6.7%	4.8%	4.9%	5.2%	5.2%
Hour 9	6.0%	6.1%	6.2%	6.2%	5.4%	5.5%	5.7%	5.7%
Hour 10	5.6%	5.8%	5.7%	5.7%	6.0%	6.3%	6.1%	6.1%
Hour 11	5.2%	5.5%	5.3%	5.3%	5.9%	6.3%	6.1%	6.1%
Hour 12	4.9%	5.2%	5.0%	5.0%	5.1%	5.4%	5.4%	5.4%
Hour 13	5.3%	5.8%	5.3%	5.3%	6.0%	6.5%	6.4%	6.4%
Hour 14	5.2%	5.6%	5.1%	5.1%	6.3%	6.6%	6.4%	6.4%
Hour 15	5.3%	5.7%	5.1%	5.1%	8.3%	8.9%	7.8%	7.7%
Hour 16	5.4%	5.8%	5.2%	5.2%	8.6%	9.1%	7.9%	7.9%
Hour 17	6.3%	6.6%	6.1%	6.1%	9.6%	10.1%	8.6%	8.6%
Hour 18	7.0%	7.0%	6.8%	6.8%	11.4%	11.8%	9.8%	9.8%
Hour 19	6.9%	6.6%	6.8%	6.8%	7.4%	6.9%	7.5%	7.5%
Hour 20	5.7%	5.4%	5.8%	5.8%	3.5%	3.1%	4.2%	4.2%
Hour 21	4.8%	4.4%	4.7%	4.8%	2.4%	1.8%	2.8%	2.8%
Hour 22	4.5%	4.0%	4.4%	4.4%	2.2%	1.5%	2.3%	2.3%
Hour 23	4.3%	3.5%	4.1%	4.1%	2.0%	1.2%	1.9%	1.9%
Hour 24	3.1%	2.6%	3.1%	3.0%	1.5%	0.9%	1.5%	1.5%