Appendix 4.1
Calculation on Emission Factors

Fleet Average Emission Factor (E.F.)of the Year 2021 (gm/km)

Vehicle Type	D.D	S.D	NFB	HGV	LGV	PLB	MC	PV	PC	T
PM	0.69	0.69	0.50	0.53	0.11	0.12	0.03	0.16	0.03	0.01
No_x	6.80	6.80	5.54	3.84	1.23	1.54	0.37	1.53	0.71	0.73
CO	7.38	7.38	6.27	6.45	2.25	0.92	23.99	0.91	1.87	1.47

Traffic Composition in Year 2021 (provided by Traffic Consultants)

Section	BUS	COACH	HGV	LGV	PLB	MC	PV	PC	T	Flow (veh/hr)
3946	84	32	1406	474	97	45	0	1672	136	3946
2631	56	22	937	316	65	30	0	1114	91	2631
1315	28	11	469	158	32	15	0	557	45	1315

Vehicle Composite Emission Factor (gm/km)

SECTION 3946 (Traffic flow / hours)

Pollutant	BUS	COACH	HGV	LGV	PLB	MC	PV	PC	T	Total gm/km	Total gm/mi
PM	0.0146	0.0041	0.1889	0.0132	0.0029	0.0003	-	0.0127	0.0003	0.2371	0.3816
NOx	0.1442	0.0453	1.3684	0.1476	0.0378	0.0043	-	0.3008	0.0252	2.0737	3.3372
CO	0.1565	0.0513	2.2985	0.2700	0.0226	0.2762	-	0.7922	0.0508	3.9182	6.3056
NO2											0.667

SECTION 2631 (Traffic flow / hours)

Pollutant	BUS	COACH	HGV	LGV	PLB	MC	PV	PC	T	Total gm/km	Total gm/mi
PM	0.0146	0.0041	0.1889	0.0132	0.0029	0.0003	-	0.0127	0.0003	0.2371	0.3816
NOx	0.1442	0.0453	1.3684	0.1476	0.0378	0.0043	-	0.3008	0.0252	2.0737	3.3372
CO	0.1565	0.0513	2.2985	0.2700	0.0226	0.2762	-	0.7922	0.0508	3.9182	6.3056
NO2											0.667

SECTION 1315 (Traffic flow / hours)

Pollutant	BUS	COACH	HGV	LGV	PLB	MC	PV	PC	T	Total gm/km	Total gm/mi
PM	0.0146	0.0041	0.1889	0.0132	0.0029	0.0003	-	0.0127	0.0003	0.2371	0.3816
NOx	0.1442	0.0453	1.3684	0.1476	0.0378	0.0043	-	0.3008	0.0252	2.0737	3.3372
CO	0.1565	0.0513	2.2985	0.2700	0.0226	0.2762	-	0.7922	0.0508	3.9182	6.3056
NO2											0.667

Note:	NFB	Non-franchised Bus	PLB	Public Light Bus	PC	Private Car
	HGV	Heavy Goods Vehicle	MC	Motor Cycle	T	Taxi
	LGV	Light Goods Vehicle	PV	Passenger Van	LB	Light Bus

Note: Since the percentage of heavy is same for each roads, the emission factor, per vehicle / km is same.
The traffic flow is shown on Figure 3.3a and Figure 3.3b.

Fleet Average Emission Factor (E.F.)of the Year 2021 (g/min/vehicle)

Vehicle Type	D.D	S.D	NFB	HGV	LGV	PLB	MC	PV	PC	T
PM	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0.00	0.00	0.00
No_x	2.00	2.00	2.00	2.00	0.50	0.50	0.20	0.20	0.20	0.20

Traffic Composition in Year 2021 (provided by Traffic Consultants)

Section	BUS	COACH	HGV	LGV	PLB	MC	PV	PC	T	Flow (veh/hr)
1	2.12%	0.82%	35.64%	12.00%	2.45%	1.15%	0.00%	42.36%	3.45%	1

Vehicle Composite Emission Factor (gm/km)

SECTION 1

Pollutant	BUS	COACH	HGV	LGV	PLB	MC	PV	PC	T	Average (g/min-veh)
PM	0.0009	0.0004	0.0150	0.0052	0.0011	-	-	-	-	0.0225
NOx	0.0424	0.0164	0.7127	0.0600	0.0123	0.0023	-	0.0847	0.0069	0.9377
NO2										

Note :	NFB	Non-franchised Bus	PLB	Public Light Bus	PC	Private Car
	HGV	Heavy Goods Vehicle	MC	Motor Cycle	T	Taxi
	LGV	Light Goods Vehicle	PV	Passenger Van	LB	Light Bus

Note : Using same emssion rate of R10 EIA Report

Tunnel Portal and Ventilation Building Emissions

	RSP		NOx	
	SB	NB	SB	NB
Total Length of Tunnel (m)	4010	4010	4010	4010
Length of Tunnel in Section 1 (m)	2673	2673	2673	2673
Length of Tunnel in Section 2 (m)	1337	1337	1337	1337
Width of Tunnel (m)	14.2	14.2	14.2	14.2
Height of Tunnel (m)	6	6	6	6
Peak Hourly Traffic Flow (veh/hr)	5310	4380	5310	4380
Average Emission Rate (g/km/veh)	0.1294	0.198	1.402	1.844
Total Emission Rate in Section 1 (g/s) (1)	0.5102	0.644	5.5283	5.9977
Flow Rate at Ventilation Building (m^2/s) (2)	400	400	400	400
Flow Rate at Tunnel Portal (m^2/s) (2)	850	850	850	850
Emission Rate through Ventialtion Building (g/s) (3)	0.1633	0.2061	1.7691	1.9193
Remaining Emission Rates in Section 1 (g/s) (4)	0.347	0.4379	3.7593	4.0784
Total Emission in Section 2 (g/s) (5)	0.2551	0.322	2.7642	2.9989
Total Emission Rates through Tunnel Portal (g/s) (6)	0.6021	0.7599	6.5234	7.0773
Conversion of NOx to NO2 (%)	-	-	20	20
Emission Rate of NO2 through Ventilation (7)	-	-	0.3538	0.3839
Emission Rate of NO2 through Portal (g/s) (7)	-	-	1.3047	1.4155

Note :
1 - Total Emission Rate in Section 1 = Average Emission Rate x Peak Traffic Flow x Length of Tunnel in section 1/1000/3600
2 - Flowratesa are provided by Engineer
3 - Emission Rate of Pollutants through Ventialtion Building
= Total emission rates before Ventilation Building x Flow Rate at Ventilation Building x / (Flowrate at Ventilation Building +Flowrate at Tunnel at Tunnel Portals)
4 - Emission Rate of Pollutants in Section 1
= Total emission rates before Ventilation Building x Flow Rate at Tunnel Portal x / (Flowrate at Ventilation Building +Flowrate at Tunnel at Tunnel Portals)
5 - Emission Rate of Pollutants in Section 2
= Average Emission Rate x Peak Traffic Rate x Length of Tunnel in section 2/1000/3600
6 - Total Emission Rate through Tunnel Portal = Remaining emission rate in section 1 + Remaining emission rate in section 2
7 - Emission Rate of NO_2 = Emission Rate x 20%

Emission Factor Calculation - Route 10 Toll Plaza

Emission Rate (Toll Plaza)	NOx		
North Bound	South Bound		
3349	4654	hourly flow	
55.81667	77.56667	minute flow	
0.93028	1.29278	second flow	
0.93770	0.93770	average emission	(g/min/veh)
0.01563	0.01563	average emission	(g/sec/veh)
0.01454	0.02020	total emission	(g/sec)
0.0000145387	0.0000202040	average m2 emission	
Emission Rate (Toll Plaza)	RSP		
North Bound	South Bound		
3349	4654	hourly flow	
55.81667	77.56667	minute flow	
0.93028	1.29278	second flow	
0.02250	0.02250	average emission	(g/min/veh)
0.00038	0.00038	average emission	(g/sec/veh)
0.00035	0.00048	total emission	(g/sec)
0.0000003489	0.0000004848	average m2 emission	

Yuen Long Road - both widening section and slip roads
Existing Road and R10 - Exising Roads (including Castle Peak Road, Tuen Mun Road and Route 10)
Deep Bay Link - Deep Bay Link and its slip roads
NWNT - roads networks serve NWNT development
Tolll Plaza of R10
Note : Since ozone limiting method is used, the total concentration cannot be summed up by all roads networks.

	ASR	NO2 (1hr) Contribution after using Ozone Limiting Methodl: Yuen Long Road	Existing Road and R10	Deep Bay Link	NWNT	Toll Plaza and Portal of R10	Total (1hr)	NO2 (24hr) Contribution after using Ozone Limiting Methodl: Yuen Long Road	Existing Road and R10	Deep Bay Link	NWNT	Toll Plaza and Portal of R10	Total (24hr)	PM (24hr) Contribution: Yuen Long Road	Existing Road and R10	Deep Bay Link	NWNT	Toll Plaza and Portal of R10	Total (24hr)
	2	46	14	12	1	1	186	18	6	5	1	1	109	21	5	4	0	0	86
	3	83	12	12	1	2	222	33	5	5	1	1	123	29	4	4	0	0	93
	4	87	12	11	1	3	226	35	5	4	0	1	124	30	4	3	0	0	93
	6	50	10	14	1	30	216	20	4	6	1	12	121	16	2	4	0	3	82
	7	90	14	19	2	27	263	36	6	8	1	11	139	30	2	6	0	4	100
	8	73	17	29	2	23	256	29	7	11	1	9	137	26	1	10	1	2	96
	10	54	24	23	2	25	240	22	10	9	1	10	130	17	1	7	1	2	85
	11	65	9	48	4	4	242	26	4	19	2	2	131	22	1	17	1	0	97
ASR-A	13	23	5	12	33	1	185	9	2	5	13	0	108	7	1	4	12	0	80
	14	96	5	19	11	0	243	39	2	8	5	0	131	32	1	6	4	0	99
	15	32	5	11	5	0	166	13	2	4	2	0	100	10	2	3	2	0	72
	17	83	5	6	8	0	215	33	2	2	3	0	120	29	2	2	3	0	91
	18	142	8	4	4	0	270	57	3	2	2	0	142	49	3	1	1	0	110
	19	107	10	3	2	0	233	43	4	1	1	0	127	35	3	1	0	0	95
	20	128	9	3	2	1	254	51	3	1	1	0	136	44	3	1	0	0	103
	21	94	7	2	1	0	215	37	3	1	0	0	120	31	2	0	0	0	89
	22	86	6	2	1	0	207	34	2	1	0	0	117	29	2	0	0	0	88
	23	62	5	2	1	1	182	25	2	1	0	0	107	20	2	0	0	0	78
	24	107	4	2	1	0	224	43	1	1	0	0	124	36	1	0	0	0	93
	25	84	3	1	1	0	201	33	1	1	0	0	115	28	1	0	0	0	86
	28	66	3	1	0	0	182	27	1	1	0	0	107	22	1	0	0	0	79
	32	74	2	1	0	0	189	29	1	0	0	0	110	25	1	0	0	0	81
	33	57	2	1	0	0	173	23	1	0	0	0	103	20	0	0	0	0	76
ASR-B	34	95	2	1	0	0	211	38	1	0	0	0	118	31	0	0	0	0	88
	A1	94	8	14	1	1	230	37	3	6	1	0	126	32	3	4	0	0	95
	F3	55	4	1	1	0	173	22	2	1	0	0	103	17	1	0	0	0	75
	G3	34	3	1	0	0	150	13	1	0	0	0	94	10	1	0	0	0	68
	H1	36	2	1	0	0	151	14	1	0	0	0	95	11	1	0	0	0	68
	H3	28	2	0	0	0	142	11	1	0	0	0	91	9	0	0	0	0	66
	SR15(96)	41	5	22	11	2	193	17	2	9	4	1	111	13	1	7	4	0	81
	J1	51	44	8	1	2	218	21	18	3	0	1	121	18	16	2	0	0	93
	J2	63	31	9	1	1	215	25	12	3	0	0	120	21	11	3	0	0	91
	K2	51	16	10	1	1	190	21	6	4	0	0	110	17	5	3	0	0	81
	K3	34	8	11	1	6	171	14	3	4	0	2	103	10	2	3	0	0	73
	M1	19	8	28	2	1	169	7	3	11	1	0	102	6	2	9	1	0	74
	M2	18	8	22	2	3	165	7	3	9	1	1	100	5	3	7	0	0	72
	N1	32	12	24	2	27	208	13	5	10	1	11	117	11	4	8	0	3	82
	N3	34	7	17	6	3	178	13	3	7	2	1	105	10	2	5	2	0	76
	N5	30	6	16	10	1	175	12	2	6	4	1	104	9	2	5	3	0	76
ASR-C	O1	42	5	14	14	0	187	17	2	6	5	0	109	13	1	4	5	0	80
	O2	37	5	9	11	2	176	15	2	4	4	1	105	12	2	3	4	0	76
	P1	48	6	6	11	1	184	19	2	2	4	1	108	16	2	2	4	0	79
	P2	69	8	4	6	1	200	27	3	2	2	0	114	22	3	1	2	0	84
	Q1/R1	75	6	2	1	0	195	30	2	1	0	0	112	25	2	0	0	0	84
	Q2	114	6	2	1	0	235	46	3	1	0	0	128	39	2	0	0	0	98
	Q7	51	6	3	2	1	174	20	2	1	1	0	104	16	2	1	1	0	75
	R2	96	5	2	1	1	215	38	2	1	0	0	120	32	1	0	0	0	90
	S1	43	2	1	0	0	158	17	1	0	0	0	97	14	0	0	0	0	70
	S3	58	2	1	0	0	173	23	1	0	0	0	103	18	0	0	0	0	75
	SR71(97)	100	12	3	3	1	231	40	5	1	1	0	127	33	4	1	1	0	94
	(39)1	35	28	11	1	1	187	14	11	4	0	0	109	11	10	3	0	0	81
	(40)2	79	10	13	1	1	215	32	4	5	1	0	120	28	3	4	0	0	91
	(42)4	21	12	46	2	5	198	9	5	18	1	2	113	7	4	16	1	0	83
	(43)5	25	4	39	3	4	187	10	1	16	1	1	109	7	1	14	1	0	79
	(44)6	33	9	25	4	3	185	13	4	10	2	1	108	10	3	8	1	0	78
	(45)7	39	7	19	6	2	185	16	3	8	2	1	108	12	2	6	2	0	78
	(5)14	83	12	3	2	0	211	33	5	1	1	0	119	26	4	1	0	0	88
	(5)15	124	7	2	1	0	246	50	3	1	0	0	133	41	2	0	0	0	100
	(5)18	37	10	2	0	0	160	15	4	1	0	0	98	11	3	0	0	0	71
ASR-D	(61)23	64	3	1	0	0	180	26	1	1	0	0	106	21	1	0	0	0	78
	(63)25	69	2	1	0	0	185	28	1	0	0	0	108	23	1	0	0	0	80
	(65)27	61	2	1	0	0	176	24	1	0	0	0	105	20	1	0	0	0	77
	(68)30	27	2	0	0	0	141	11	1	0	0	0	90	9	0	0	0	0	65
	(70)32	56	2	1	0	0	171	22	1	0	0	0	103	18	0	0	0	0	74
	(71)33	68	2	1	0	0	183	27	1	0	0	0	107	22	0	0	0	0	78
	(74)36	46	6	2	1	0	166	18	2	1	0	0	101	15	2	0	0	0	73
	(75)37	104	8	2	1	1	229	42	3	1	1	0	126	35	3	1	0	0	95
	(76)38	50	17	20	2	26	226	20	7	8	1	10	125	16	5	7	0	3	88
	(77)39	78	10	4	4	1	209	31	4	2	2	0	118	26	3	1	1	0	87
	(78)40	75	2	1	0	1	191	30	1	0	0	0	111	25	0	0	0	0	82
	(79)41	69	3	1	0	1	186	28	1	1	0	0	109	23	1	0	0	0	80
	(80)42	109	2	1	0	0	224	44	1	0	0	0	124	36	0	0	0	0	93
	(81)43	58	5	32	11	3	221	23	2	13	5	1	123	19	1	11	4	0	91
	(82)44	58	5	37	6	3	221	23	2	15	2	1	122	19	2	13	2	0	91
	(83)45	49	4	40	2	6	213	20	1	16	1	3	119	17	1	13	1	0	88
	(84)46	74	8	15	1	3	213	30	3	6	1	1	119	26	2	5	0	0	89
	(85)47	74	11	18	2	17	233	29	4	7	1	7	127	25	3	6	0	5	98
ASR-E	(86)48	69	13	17	2	31	243	28	5	7	1	12	131	23	4	5	0	5	95
	(87)49	108	5	2	1	1	228	43	2	1	0	0	125	37	2	0	0	0	95
	(88)50	123	4	2	1	0	241	49	2	1	0	0	131	42	1	0	0	0	100
	(89)51	112	5	2	1	0	232	45	2	1	0	0	127	38	1	0	0	0	96
	(90)52	129	9	2	1	1	254	52	3	1	1	0	136	43	3	0	0	0	103
	(91)53	75	7	5	7	1	205	30	3	2	3	0	116	25	2	1	2	0	86
	(92)54	57	8	83	5	4	269	23	3	33	2	2	142	19	2	29	1	0	108
	(93)55	60	5	12	11	2	202	24	2	5	4	1	115	20	1	3	4	0	85

no2

ASR	YLH Main A	YLH Main B	YLH Slip	YLH Slip A	other + R10 (New)	DBL A	DBL B	NWNT -	Model Total	covert ug	NO2 Caline 4 and ISC Predicton	NOx Prediction	0.075*NOx	46/48 x 03	NO2 Prediction OLM	ISC - Toll	ISC – Portal	Total ISC	Total 1hr (OLM)	Total 24hr (OLM)	Background use
2	60.5	4.6		0	20	11.6	5.3	1.8	103.8	195	195	976	73	54.6	184.9	1.39		1.39	**186.2**	**108.7**	**57**
3	84.1	4.6	29.3	0	16.6	11.9	5.5	1.8	153.8	289	289	1447	109	54.6	220.1	1.55		1.55	**221.7**	**122.9**	**57**
4	92.6	4.5	25.3	0.5	17.2	10.6	5	1.7	157.4	296	296	1481	111	54.6	222.7	2.99		2.99	**225.7**	**124.5**	**57**
6	58.1	4.7	7.5	0.5	13.9	12.5	7.2	2	106.4	200	200	1001	75	54.6	186.7	6.65	23.0	29.60	**216.3**	**120.7**	**57**
7	117.2	4.9	5	0.6	19.7	17	9.8	2.3	176.5	332	332	1660	125	54.6	236.1	6.19	20.6	26.82	**263.0**	**139.4**	**57**
8	93.6	5.1	3.9	0.6	24.8	26.3	14.2	2.7	171.2	322	322	1610	121	54.6	232.4	3.27	20.2	23.46	**255.9**	**136.5**	**57**
10	69.4	5.5	0.8	0.7	34.5	20.7	11.2	3.3	146.1	275	275	1374	103	54.6	214.7	5.71	19.4	25.09	**239.8**	**130.1**	**57**
11	83.9	6.5	1.2	0.8	12.7	24.5	44.2	5.8	179.6	338	338	1689	127	54.6	238.3	4.13		4.13	**242.5**	**131.2**	**57**
13	22.9	7.8	1.3	0.9	6.8	11.1	6.1	46.5	103.4	195	195	973	73	54.6	184.6	0.60		0.60	**185.2**	**108.3**	**57**
14	124.8	8.9	1.8	1.1	6.4	13.8	12.9	16.3	186	350	350	1750	131	54.6	242.8	0.39		0.39	**243.2**	**131.5**	**57**
15	30.2	11.5	2.4	1.3	7.6	8.9	6.7	7.3	75.9	143	143	714	54	54.6	165.2	0.38		0.38	**165.6**	**100.4**	**57**
17	93.9	18.1	4.1	1.9	7.6	5.4	3.4	11.5	145.9	274	274	1372	103	54.6	214.6	0.45		0.45	**215.0**	**120.2**	**57**
18	78.3	107.4	13.2	2.8	11.6	3.6	2	5.6	224.5	422	422	2112	158	54.6	270.0	0.41		0.41	**270.4**	**142.4**	**57**
19	22.3	112.5	10	6.6	14.5	2.3	1.3	2.2	171.7	323	323	1615	121	54.6	232.8	0.40		0.40	**233.2**	**127.5**	**57**
20	24.6	137.6	13.4	6.4	12.3	2.4	1.3	2.4	200.4	377	377	1885	141	54.6	253.0	0.62		0.62	**253.6**	**135.6**	**57**
21	11.3	101.7	3.4	16.3	9.8	1.7	0.9	1.3	146.4	275	275	1377	103	54.6	214.9	0.06		0.06	**215.0**	**120.2**	**57**
22	12.3	84.2	4	21.4	8.7	1.9	1	1.4	134.9	254	254	1269	95	54.6	206.8	0.07		0.07	**206.9**	**116.9**	**57**
23	8	43.1	1.8	34.4	7.7	1.5	0.8	1	98.3	185	185	925	69	54.6	181.0	0.67		0.67	**181.6**	**106.9**	**57**
24	7.2	125.7	1.5	16.6	5.2	1.5	0.8	0.9	159.4	300	300	1499	112	54.6	224.1	0.11		0.11	**224.2**	**123.9**	**57**
25	6.5	99.2	1.3	11.4	4.9	1.4	0.7	0.8	126.2	237	237	1187	89	54.6	200.7	0.34		0.34	**201.0**	**114.6**	**57**
28	5.1	83.7	0.8	4.4	3.8	1.2	0.6	0.7	100.3	189	189	943	71	54.6	182.4	0.06		0.06	**182.4**	**107.2**	**57**
32	4.3	95.8	1.8	2.5	3.1	1	0.5	0.5	109.5	206	206	1030	77	54.6	188.9	0.40		0.40	**189.3**	**109.9**	**57**
33	3.7	69.2	5.3	3	2.7	0.9	0.5	0.5	85.8	161	161	807	61	54.6	172.2	0.48		0.48	**172.6**	**103.3**	**57**
34	3.7	129.1	0.5	1.8	2.6	0.9	0.5	0.5	139.6	263	263	1313	98	54.6	210.1	0.45		0.45	**210.6**	**118.4**	**57**
A1	111	4.7	16.6	0.5	11.4	13.3	6.7	2	166.2	313	313	1563	117	54.6	228.9	1.00		1.00	**229.9**	**126.2**	**57**
F3	7	54.7	1.4	15.2	5.6	1.4	0.7	0.9	86.9	163	163	817	61	54.6	172.9	0.05		0.05	**173.0**	**103.4**	**57**
G3	5.1	36.9	0.8	4.7	4	1.1	0.6	0.6	53.8	101	101	506	38	54.6	149.6	0.25		0.25	**149.8**	**94.1**	**57**
H1	4.1	42	2.3	2.4	3.1	1	0	0.5	55.4	104	104	521	39	54.6	150.7	0.15		0.15	**150.9**	**94.5**	**57**
H3	3.4	28	5.4	3.5	2.6	0	0	0.4	43.3	81	81	407	31	54.6	142.2	0.25		0.25	**142.4**	**91.2**	**57**
SR15(96)	47.5	8.7	1.6	1	6.7	17.4	13.1	15.9	111.9	211	211	1053	79	54.6	190.6	2.12		2.12	**192.7**	**111.3**	**57**
J1	60.1	4.1	8.5	0	62.5	7.7	3.4	1.3	147.6	278	278	1388	104	54.6	215.8	2.37		2.37	**218.1**	**121.5**	**57**
J2	73	4.2	11.7	0	43.5	8.5	3.8	1.4	146.1	275	275	1374	103	54.6	214.7	0.51		0.51	**215.2**	**120.3**	**57**
K2	54.2	4.4	13.7	0.5	22.5	9.6	4.5	1.6	111	209	209	1044	78	54.6	189.9	0.51		0.51	**190.4**	**110.4**	**57**
K3	36.7	4.4	7.2	0.5	10.9	9.9	5.3	1.7	76.6	144	144	721	54	54.6	165.7	5.51		5.51	**171.2**	**102.7**	**57**
M1	15.9	5.3	5.2	0	11	27.7	12.4	2.8	80.3	151	151	755	57	54.6	168.3	0.85		0.85	**169.1**	**101.9**	**57**
M2	14.3	5.2	5.2	0.5	11.4	21.9	9.4	2.5	70.4	132	132	662	50	54.6	161.3	3.42		3.42	**164.7**	**100.1**	**57**
N1	34.1	5.1	5.2	0.6	17.5	21.6	12.1	2.6	98.8	186	186	929	70	54.6	181.3	5.19	21.3	26.51	**207.8**	**117.3**	**57**
N3	38.6	6.9	1.2	0.8	9.7	15.6	8.2	8.5	89.5	168	168	842	63	54.6	174.8	3.19		3.19	**178.0**	**105.4**	**57**
N5	34.5	7.4	1.2	0	8.1	14.7	7.7	13.9	87.5	165	165	823	62	54.6	173.4	1.44		1.44	**174.8**	**104.1**	**57**
O1	47	9.9	2.1	1.2	6.9	11.2	9.3	19.4	107	201	201	1006	75	54.6	187.1	0.39		0.39	**187.5**	**109.2**	**57**
O2	35.8	12.8	2.8	1.5	7.4	7.5	5.4	15.2	88.4	166	166	832	62	54.6	174.0	1.93		1.93	**175.9**	**104.6**	**57**
P1	38.5	22.9	4.7	1.9	8.8	5.1	3.2	15.5	100.6	189	189	946	71	54.6	182.6	1.45		1.45	**184.0**	**107.8**	**57**
P2	37.1	49.7	8.1	2.4	11.4	4	2.3	8	123	231	231	1157	87	54.6	198.4	1.19		1.19	**199.6**	**114.0**	**57**
Q1/R1	11.3	59.7	3.4	32	8.1	1.8	0.9	1.3	118.5	223	223	1115	84	54.6	195.2	0.15		0.15	**195.4**	**112.4**	**57**
Q2	12.8	126.5	4.3	18.2	9.2	1.9	1	1.5	175.4	330	330	1650	124	54.6	235.4	0.08		0.08	**235.4**	**128.4**	**57**
Q7	28.6	22	16	5	8.3	2.8	1.6	2.9	87.2	164	164	820	62	54.6	173.1	1.08		1.08	**174.2**	**103.9**	**57**
R2	9	80.1	2.2	44.2	6.6	1.6	0.8	1.1	145.6	274	274	1370	103	54.6	214.3	0.63		0.63	**215.0**	**120.2**	**57**
S1	3.9	54.5	0	1.9	2.7	1	0.5	0.5	65	122	122	611	46	54.6	157.5	0.41		0.41	**157.9**	**97.4**	**57**
S3	3.4	65	7.3	6.3	2.4	0.8	0.4	0.4	86	162	162	809	61	54.6	172.3	0.24		0.24	**172.5**	**103.2**	**57**
SR71(97)	41.7	80.4	16.9	3.4	17.5	3	1.7	3.8	168.4	317	317	1584	119	54.6	230.4	0.55		0.55	**231.0**	**126.6**	**57**
(39)1	31.8	4.5	13.2	0	39.5	10.6	4.6	1.6	105.8	199	199	995	75	54.6	186.3	0.88		0.88	**187.1**	**109.1**	**57**
(40)2	80.5	4.7	26	0.5	13.9	12.5	6	1.9	146	275	275	1373	103	54.6	214.6	0.78		0.78	**215.4**	**120.4**	**57**
(42)4	20.4	5.4	4	0.6	17	47.3	18.1	3.1	115.9	218	218	1090	82	54.6	193.4	4.66		4.66	**198.0**	**113.4**	**57**
(43)5	27.1	6	2.1	0.7	5.2	34.4	20.9	4.6	101	190	190	950	71	54.6	182.9	3.63		3.63	**186.5**	**108.8**	**57**
(44)6	37.7	6.3	1.6	0.7	13.3	22.4	13	5.7	100.7	189	189	947	71	54.6	182.7	2.50		2.50	**185.2**	**108.3**	**57**
(45)7	46.3	6.9	1.2	0.8	10.1	18.1	8.8	7.8	100	188	188	941	71	54.6	182.2	2.42		2.42	**184.6**	**108.0**	**57**
(5)14	25.4	76.8	10.1	5.3	17.2	2.5	1.3	2.5	141.1	265	265	1327	100	54.6	211.2	0.11		0.11	**211.3**	**118.7**	**57**
(5)15	12.8	143.1	4.3	15.8	10.4	1.9	1	1.5	190.8	359	359	1795	135	54.6	246.2	0.14		0.14	**246.4**	**132.7**	**57**
(5)18	9.5	26.9	2.5	13.5	13.8	1.6	0.8		68.6	129	129	645	48	54.6	160.0	0.10		0.10	**160.1**	**98.2**	**57**
(61)23	5.1	80.4	0.8	4.4	3.8	1.2	0.6	0.6	96.9	182	182	911	68	54.6	180.0	0.09		0.09	**180.1**	**106.2**	**57**
(63)25	4.7	89	1.1	3.5	3.5	1.1	0.6	0.6	104.1	196	196	979	73	54.6	185.1	0.04		0.04	**185.1**	**108.2**	**57**
(65)27	4.2	77.1	2.2	2.4	3.1	1	0.5	0.5	91	171	171	856	64	54.6	175.8	0.25		0.25	**176.1**	**104.6**	**57**
(68)30	3.5	25.9	5.1	3.4	2.6	0	0	0.4	40.9	77	77	385	29	54.6	140.5	0.25		0.25	**140.7**	**90.5**	**57**
(70)32	3.2	62.4	5.5	8.6	2.3	0.8	0.4	0.4	83.6	157	157	786	59	54.6	170.6	0.32		0.32	**170.9**	**102.6**	**57**
(71)33	3.5	77.5	10.1	5.6	2.4	0.9	0.4	0.4	100.8	190	190	948	71	54.6	182.7	0.29		0.29	**183.0**	**107.4**	**57**
(74)36	13.4	31.8	4.8	14.9	7.9	2	1.1	1.6	77.5	146	146	729	55	54.6	166.3	0.10		0.10	**166.4**	**100.8**	**57**
(75)37	19.5	111.5	8.6	8.5	11.3	2.2	1.2	2	164.8	310	310	1550	116	54.6	227.9	0.89		0.89	**228.8**	**125.7**	**57**
(76)38	64.6	4.9	0.6	0.6	23.9	18.7	10.1	2.4	125.8	237	237	1183	89	54.6	200.4	7.14	18.8	25.92	**226.3**	**124.7**	**57**
(77)39	35	61	11.9	2.6	13.6	3.7	2.1	6	135.9	256	256	1278	96	54.6	207.5	1.17		1.17	**208.7**	**117.7**	**57**
(78)40	3.9	100.3	0.5	2	2.8	1	0.5	0.5	111.5	210	210	1049	79	54.6	190.3	0.51		0.51	**190.8**	**110.5**	**57**
(79)41	5.7	84.5	1	6.6	4.3	1.2	0.6	0.7	104.6	197	197	984	74	54.6	185.4	0.51		0.51	**185.9**	**108.6**	**57**
(80)42	3.5	129.5	20	1.6	2.5	0.9	0.4	0.4	158.8	299	299	1494	112	54.6	223.7	0.41		0.41	**224.1**	**123.8**	**57**
(81)43	72.3	8.1	1.5	1	6.5	28.5	17.4	16.1	151.4	285	285	1424	107	54.6	218.4	2.88		2.88	**221.3**	**122.7**	**57**
(82)44	72.3	7.5	1.4	1	7.6	18.8	33.1	8.1	149.8	282	282	1409	106	54.6	217.3	3.21		3.21	**220.5**	**122.4**	**57**
(83)45	61.4	5.5	2.1	0.7	5	29.8	26.3	3.4	134.2	252	252	1262	95	54.6	206.3	6.37		6.37	**212.7**	**119.3**	**57**
(84)46	86.9	4.8	13	0.5	11.3	13.9	7.1	2.1	139.6	263	263	1313	98	54.6	210.1	2.62		2.62	**212.7**	**119.3**	**57**
(85)47	92	4.9	7.1	0.5	15.3	16.1	9	2.3	147.2	277	277	1385	104	54.6	215.5	4.86	12.4	17.23	**232.7**	**127.3**	**57**
(86)48	87.5	4.8	5.5	0.5	17.8	15.1	8.9	2.2	142.3	268	268	1339	100	54.6	212.0	6.22	24.3	30.50	**242.5**	**131.2**	**57**
(87)49	8.6	101.5	2.1	40.8	7.1	1.5	0.8	1	163.4	307	307	1537	115	54.6	226.9	0.70		0.70	**227.6**	**125.2**	**57**
(88)50	8	127.2	1.8	36.9	6.3	1.5	0.8	1	183.5	345	345	1726	129	54.6	241.1	0.26		0.26	**241.3**	**130.7**	**57**
(89)51	8.7	118.6	2.1	30	6.4	1.6	0.8	1.1	169.3	319	319	1593	119	54.6	231.1	0.49		0.49	**231.6**	**126.8**	**57**
(90)52	16.2	150.2	6.4	10.3	12.1	2.1	1.1	1.8	200.2	377	377	1883	141	54.6	252.9	0.75		0.75	**253.6**	**135.6**	**57**
(91)53	62.1	35.9	6.2	2.3	9.4	4.3	2.5	9.3	132	248	248	1242	93	54.6	204.7	0.56		0.56	**205.3**	**116.3**	**57**
(92)54	72.6	6.8	1.1	0.9	10.8	24	94.2	6.8	217.2	409	409	2043	153	54.6	264.9	4.16		4.16	**269.0**	**141.8**	**57**
(93)55	71.7	10.3	2.2	1.3	6.6	9.5	7.5	15.3	124.4	234	234	1170	88	54.6	199.4	2.48		2.48	**201.9**	**114.9**	**57**

pm10

ASR	YLH Main A	YLH Main B	YLH Slip	YLH Slip A	other + R10	DBL A	DBL B	Toll (ISC) (24hr)	Portal ISC24	NWNT -	Model Total	**Total 1hr**	**Total 24hr**	**Background use**
2	37.1	1.8	13.6	0	11.7	6.2	2.7	0.021		0.8	73.92131	**130**	**86**	**56**
3	52.7	1.8	18.8	0	9.6	6.5	2.8	0.024		0.8	93.02376	**149**	**93**	**56**
4	55.9	1.7	16.4	0.2	10.1	5.7	2.5	0.045		0.7	93.24521	**149**	**93**	**56**
6	32.9	1.8	4.1	0.2	4.7	7	3.8	0.100	2.7	0.9	58.20007	**114**	**82**	**56**
7	70	2	2.6	0.2	3.8	9.7	5.5	0.125	4.1	1.1	99.12504	**155**	**100**	**56**
8	59.5	2.1	2	0.2	3.4	15.2	8.6	0.095	1.8	1.3	94.1951	**150**	**96**	**56**
10	39.6	2.4	0.3	0.3	2.2	11.8	6.6	0.142	2.0	1.7	67.04186	**123**	**85**	**56**
11	50.8	2.9	0.5	0.3	2.3	14	27.8	0.146		3.2	101.9457	**158**	**97**	**56**
13	12.9	3.5	0.6	0.4	3.1	6.1	3.3	0.041		29.9	59.84053	**116**	**80**	**56**
14	74	4.3	0.8	0.5	3.3	7.3	7	0.009		10.1	107.3093	**163**	**99**	**56**
15	16.3	5.7	1.2	0.6	4	4.5	3.5	0.006		4.4	40.20634	**96**	**72**	**56**
17	59.5	9.7	2.2	0.9	4.1	2.5	1.6	0.005		6.6	87.10453	**143**	**91**	**56**
18	49.1	63.4	8.1	1.3	6.6	1.6	0.9	0.004		2.9	133.9041	**190**	**110**	**56**
19	11	67.2	5.7	3.4	8.4	0.9	0.5	0.003		1	98.10338	**154**	**95**	**56**
20	12.3	85.6	7.8	3.2	7.1	1	0.5	0.005		1.1	118.6048	**175**	**103**	**56**
21	5.1	60	1.6	9.8	5.4	0.7	0.4	0.001		0.5	83.50063	**140**	**89**	**56**
22	5.6	52.9	2	13	4.8	0.7	0.4	0.001		0.6	80.0007	**136**	**88**	**56**
23	3.4	24.2	0.8	21.4	4.1	0.5	0.3	0.008		0.4	55.10765	**111**	**78**	**56**
24	3.1	76	0.7	9.6	2.6	0.5	0.3	0.001		0.4	93.20076	**149**	**93**	**56**
25	2.7	61.2	0.5	6.3	2.5	0.5	0.3	0.002		0.3	74.30198	**130**	**86**	**56**
28	2.1	50.4	0.4	2.2	1.8	0.4	0.2	0.000		0.2	57.70049	**114**	**79**	**56**
32	1.7	57.5	0.9	1.2	1.4	0.4	0.2	0.002		0.2	63.50219	**120**	**81**	**56**
33	1.4	43	3.1	1.7	1.2	0.3	0.2	0.003		0.2	51.10258	**107**	**76**	**56**
34	1.4	76.2	0.2	0.8	1.1	0.3	0.2	0.002		0.2	80.40243	**136**	**88**	**56**
A1	68	1.9	9.7	0.2	6.4	7.4	3.5	0.026		0.9	98.02559	**154**	**95**	**56**
F3	3	31	0.6	8.9	2.9	0.5	0.3	0.001		0.3	47.5006	**104**	**75**	**56**
G3	2	21.4	0.4	2.4	1.9	0.4	0.2	0.001		0.2	28.90149	**85**	**68**	**56**
H1	1.6	24.3	1.2	1.1	1.4	0.3	0	0.001		0.2	30.10092	**86**	**68**	**56**
H3	1.2	16.9	3.2	2.1	1.1	0	0	0.001		0.1	24.60139	**81**	**66**	**56**
SR15	26.7	4.1	0.7	0.4	3.4	9.6	7.7	0.022		9.9	62.52235	**119**	**81**	**56**
J1	38	1.5	4.8	0	41	3.9	1.7	0.039		0.5	91.43869	**147**	**93**	**56**
J2	44.5	1.6	6.9	0	28.1	4.4	1.9	0.012		0.6	88.01157	**144**	**91**	**56**
K2	31.1	1.7	8.8	0.2	13.5	5.1	2.2	0.014		0.7	63.31359	**119**	**81**	**56**
K3	20	1.7	4.2	0.2	6.2	5.3	2.7	0.090		0.7	41.08957	**97**	**73**	**56**
M1	9.3	2.1	2.8	0	5.7	16.4	6.9	0.024		1.3	44.52407	**101**	**74**	**56**
M2	8.3	2	2.9	0.2	6.4	12.6	5.1	0.068		1.1	38.66797	**95**	**72**	**56**
N1	21.3	2.1	2.8	0.2	9.4	13	6.7	0.106	2.4	1.2	59.20599	**115**	**82**	**56**
N3	21.7	3.1	0.6	0.3	5.1	9.1	4.6	0.038		4.8	49.33839	**105**	**76**	**56**
N5	19.9	3.3	0.5	0	4.2	8.5	4.4	0.064		8.4	49.26365	**105**	**76**	**56**
O1	26.2	4.8	1	0.5	3.6	5.8	4.9	0.008		12.3	59.10772	**115**	**80**	**56**
O2	21.9	6.4	1.4	0.6	3.9	3.7	2.7	0.019		9.5	50.1194	**106**	**76**	**56**
P1	23.4	12.2	2.5	0.9	4.8	2.4	1.5	0.015		9.8	57.51456	**114**	**79**	**56**
P2	22.5	27.4	4.7	1.1	6.5	1.8	1.1	0.012		4.4	69.5119	**126**	**84**	**56**
Q1/R1	5.1	36.9	1.6	20	4.4	0.7	0.4	0.002		0.6	69.70192	**126**	**84**	**56**
Q2	5.9	78.9	2.1	10.8	5.1	0.7	0.4	0.001		0.6	104.5007	**161**	**98**	**56**
Q7	15.2	13.2	9.6	2.5	4.7	1.2	0.7	0.008		1.4	48.50782	**105**	**75**	**56**
R2	3.9	47.4	1	28	3.5	0.6	0.3	0.007		0.4	85.1074	**141**	**90**	**56**
S1	1.5	31.4	0	0.9	1.2	0.3	0.2	0.002		0.2	35.70224	**92**	**70**	**56**
S3	1.2	36.4	4.6	3.8	1	0.3	0.1	0.001		0.1	47.50131	**104**	**75**	**56**
SR71	23.3	46.8	10.3	1.6	10.3	1.3	0.7	0.005		1.9	96.20548	**152**	**94**	**56**
(39)1	18.3	1.7	8.1	0	24.9	5.6	2.3	0.014		0.7	61.61422	**118**	**81**	**56**
(40)2	51.1	1.8	16.5	0.2	7.9	6.9	3.1	0.017		0.9	88.41733	**144**	**91**	**56**
(42)4	11.9	2.2	2.1	0.2	9.2	28.6	10.2	0.114		1.5	66.01355	**122**	**83**	**56**
(43)5	14.4	2.5	1	0.3	2.7	21.5	12.8	0.065		2.3	57.56461	**114**	**79**	**56**
(44)6	20.7	2.8	0.8	0.3	7.2	13.7	7.5	0.051		3	56.05084	**112**	**78**	**56**
(45)7	26.2	3	0.6	0.3	5.3	10.7	5.3	0.037		4.3	55.73726	**112**	**78**	**56**
(5)14	12.9	44.7	5.9	2.6	10.2	1	0.6	0.001		1.2	79.10099	**135**	**88**	**56**
(5)15	5.9	85	2.1	9.3	5.8	0.7	0.4	0.001		0.6	109.8013	**166**	**100**	**56**
(5)18	4.1	15.1	1.2	7.9	7.9	0.6	0.3	0.001		0.4	37.50096	**94**	**71**	**56**
(61)23	2	48.6	0.4	2.2	1.8	0.4	0.2	0.001		0.2	55.80056	**112**	**78**	**56**
(63)25	1.8	53.7	0.6	1.7	1.6	0.4	0.2	0.000		0.2	60.20037	**116**	**80**	**56**
(65)27	1.6	46.5	1.1	1.1	1.4	0.3	0.2	0.001		0.2	52.40143	**108**	**77**	**56**
(68)30	1.3	15.7	3	2	1.1	0	0	0.001		0.1	23.20143	**79**	**65**	**56**
(70)32	1.1	35.6	3.1	5.1	0.9	0.2	0.1	0.002		0.1	46.20173	**102**	**74**	**56**
(71)33	1.3	43.9	6.3	3.2	1	0.3	0.1	0.002		0.1	56.20159	**112**	**78**	**56**
(74)36	6.3	19	2.4	8.7	4.3	0.8	0.4	0.001		0.7	42.60082	**99**	**73**	**56**
(75)37	9.5	69.2	4.7	4.5	6.4	0.9	0.5	0.006		0.9	96.60644	**153**	**95**	**56**
(76)38	36.7	2	0.2	0.2	13.3	10.5	5.8	0.148	2.5	1.1	72.44821	**128**	**88**	**56**
(77)39	21.1	34.8	7.1	1.2	7.8	1.6	0.9	0.012		3.2	77.71176	**134**	**87**	**56**
(78)40	1.5	59.5	0.2	0.9	1.2	0.3	0.2	0.003		0.2	64.00275	**120**	**82**	**56**
(79)41	2.3	51.3	0.4	3.4	2.1	0.4	0.2	0.003		0.3	60.40284	**116**	**80**	**56**
(80)42	1.3	76.1	12.2	0.7	1.1	0.3	0.1	0.002		0.1	91.90219	**148**	**93**	**56**
(81)43	41.8	3.8	0.7	0.4	3.2	16.6	10.5	0.030		9.5	86.52981	**143**	**91**	**56**
(82)44	42.9	3.5	0.6	0.4	3.9	10.7	21.3	0.033		4.5	87.83334	**144**	**91**	**56**
(83)45	38.7	2.3	1	0.3	2.5	17.6	16.1	0.113		1.7	80.31335	**136**	**88**	**56**
(84)46	54.2	1.9	7.5	0.2	5.9	7.8	3.8	0.053		0.9	82.25284	**138**	**89**	**56**
(85)47	57.3	2	3.9	0.2	8.2	9.2	4.9	0.098	5.1	1.1	91.99801	**148**	**98**	**56**
(86)48	51.4	1.9	3	0.2	9.6	8.6	4.9	0.125	4.4	1	85.12533	**141**	**95**	**56**
(87)49	3.7	60.4	1	26.2	3.8	0.6	0.3	0.008		0.4	96.4081	**152**	**95**	**56**
(88)50	3.5	76.5	0.8	23.4	3.3	0.6	0.3	0.003		0.4	108.8033	**165**	**100**	**56**
(89)51	3.8	71.1	1	18.7	3.4	0.6	0.3	0.006		0.4	99.30588	**155**	**96**	**56**
(90)52	7.7	91.2	3.4	5.6	6.9	0.8	0.4	0.006		0.8	116.8055	**173**	**103**	**56**
(91)53	38.4	19.8	3.5	1.1	5.2	1.9	1.2	0.006		5	76.10562	**132**	**86**	**56**
(92)54	43.5	3.1	0.5	0.3	5.6	13.7	59.9	0.143		3.7	130.4428	**186**	**108**	**56**
(93)55	43.6	5.1	1.1	0.6	3.4	4.8	3.9	0.025		9.1	71.62487	**128**	**85**	**56**