

APPENDIX 21

Warrington ATC A, Mill Road

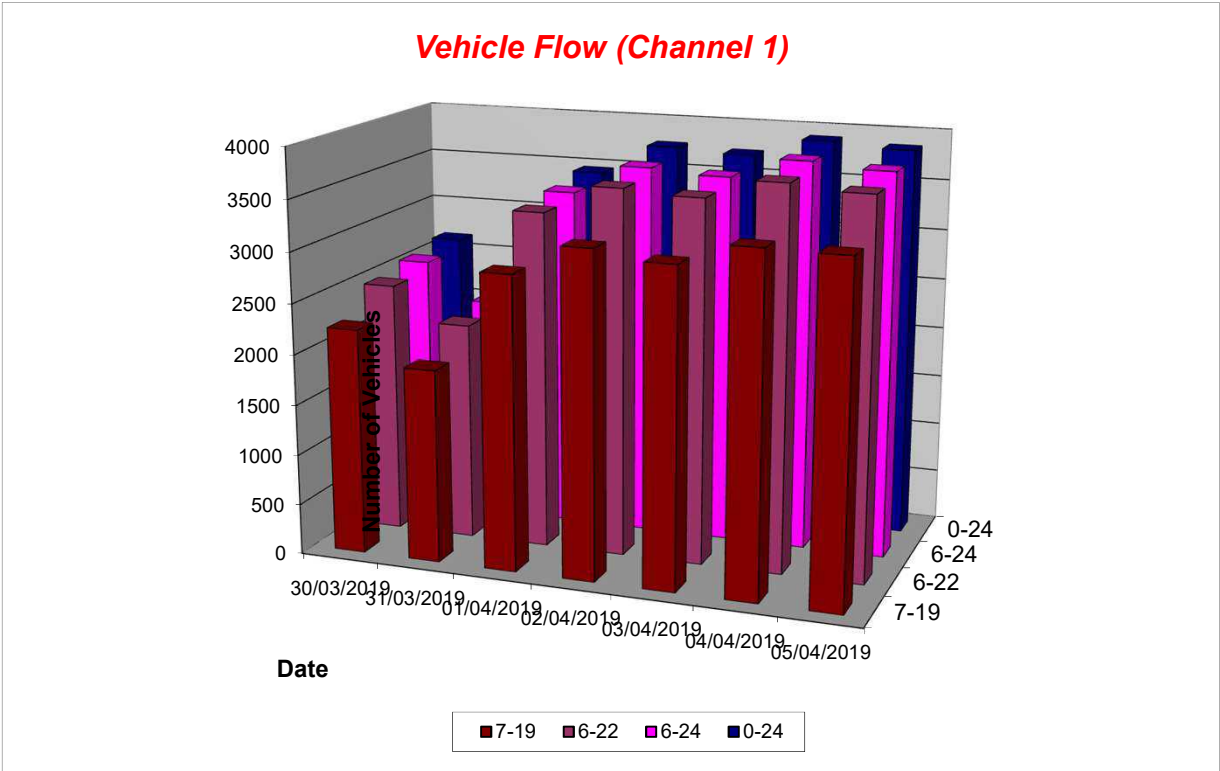
Produced by Road Data Services Ltd.

Channel 1 - Northbound

Vehicle Flow

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday	5 Day Ave	7 Day Ave
1	25	17	6	5	4	4	6	5	10
2	8	6	6	4	2	4	2	4	5
3	7	0	0	0	3	1	3	1	2
4	6	7	2	4	10	3	4	5	5
5	8	5	14	10	9	8	13	11	10
6	25	18	44	59	61	50	49	53	44
7	30	23	112	123	120	116	112	117	91
8	72	35	255	274	301	308	260	280	215
9	106	62	332	406	368	351	297	351	275
10	176	131	152	177	171	179	178	171	166
11	244	155	140	136	144	155	147	144	160
12	243	193	156	145	167	157	193	164	179
13	223	216	193	183	146	142	185	170	184
14	236	248	170	187	176	198	207	188	203
15	227	238	233	257	204	203	305	240	238
16	191	185	215	272	294	277	362	284	257
17	180	194	394	467	435	472	478	449	374
18	192	128	449	465	455	582	447	480	388
19	145	125	209	230	250	293	247	246	214
20	100	99	147	128	150	142	145	142	130
21	67	78	96	101	116	116	76	101	93
22	61	48	77	62	74	68	67	70	65
23	44	36	48	58	49	56	52	53	49
24	34	13	8	8	15	18	23	14	17
7-19	2235	1910	2898	3199	3111	3317	3306	3166	2854
6-22	2493	2158	3330	3613	3571	3759	3706	3596	3233
6-24	2571	2207	3386	3679	3635	3833	3781	3663	3299
0-24	2650	2260	3458	3761	3724	3903	3858	3741	3373



Warrington ATC A, Mill Road

Produced by Road Data Services Ltd.

Channel 1 - Northbound

Average Speed

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	41.7	38.3	36.2	43.4	45.1	46.0	40.9
2	40.0	34.1	43.8	41.7	52.8	42.2	40.6
3	35.6	-	-	-	36.6	43.0	37.4
4	38.8	42.4	43.4	40.6	44.8	38.1	38.3
5	40.6	36.9	40.1	37.4	40.9	40.7	41.4
6	40.0	36.6	43.2	41.5	42.0	41.8	40.4
7	42.1	40.4	41.1	40.9	41.1	42.8	41.3
8	41.2	41.6	40.6	39.2	39.8	40.8	40.0
9	39.4	40.1	39.7	37.8	38.5	38.9	39.4
10	39.9	40.5	39.4	38.6	38.1	39.0	38.6
11	38.4	39.5	37.7	37.3	37.2	37.8	38.7
12	39.7	39.7	36.8	37.8	38.6	38.3	38.0
13	38.9	39.3	38.7	38.7	38.4	38.9	39.3
14	39.3	39.9	39.5	38.1	38.9	37.6	40.2
15	39.7	38.4	39.1	38.4	38.7	37.7	39.9
16	38.7	39.7	39.4	37.7	39.3	38.4	39.3
17	38.6	40.6	39.6	38.7	39.7	38.2	39.3
18	40.0	41.4	39.8	39.0	39.2	38.3	39.5
19	40.1	41.2	39.8	39.5	39.3	39.0	40.0
20	38.4	39.1	39.9	39.4	40.3	39.5	39.2
21	40.3	40.8	40.2	40.0	39.5	38.9	38.9
22	39.0	36.8	40.0	39.6	38.3	40.0	38.5
23	39.6	41.1	40.0	40.3	40.4	38.7	41.5
24	37.2	36.5	43.4	41.4	40.1	38.9	36.1

10-12	39.0	39.6	37.2	37.6	37.9	38.1	38.3
14-16	39.2	39.0	39.2	38.0	39.1	38.1	39.6
0-24	39.4	39.8	39.6	38.7	39.2	38.9	39.5

Average	39.2
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Channel 1 - Northbound

85th Percentile

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	49.9	44.8	41.4	48.7	52.1	50.6	49.7
2	51.0	40.0	52.1	44.2	57.8	48.0	42.0
3	36.9	-	-	-	38.8	-	41.0
4	41.7	53.1	45.4	45.0	53.1	41.0	45.0
5	46.3	41.8	49.1	41.7	42.9	47.7	45.7
6	45.6	43.2	49.8	49.2	47.5	48.3	48.3
7	47.1	44.3	46.9	45.8	45.9	47.5	46.6
8	47.3	47.2	45.9	43.1	45.1	46.6	44.9
9	44.3	47.0	44.7	42.5	43.2	44.1	45.2
10	45.0	45.6	45.4	43.4	43.5	43.6	43.8
11	44.7	44.6	43.6	42.7	41.8	42.2	45.0
12	45.6	45.8	42.7	43.0	44.0	43.5	42.9
13	44.7	44.9	44.0	43.4	44.8	44.6	44.5
14	44.3	44.9	45.4	43.4	44.7	43.6	46.3
15	44.2	44.5	43.7	43.9	44.0	42.7	46.3
16	43.8	45.1	44.8	42.7	44.8	43.2	44.8
17	43.9	46.2	44.4	42.9	45.0	42.8	44.1
18	45.1	46.4	44.8	44.0	44.2	42.8	43.7
19	46.5	46.0	45.9	45.8	44.9	43.7	46.0
20	45.4	44.1	45.8	44.3	46.9	46.0	44.6
21	45.7	46.8	46.7	46.6	46.1	44.6	43.8
22	45.4	42.1	48.8	45.6	43.2	45.4	44.8
23	47.0	46.6	46.4	47.1	48.0	42.7	50.1
24	42.1	41.1	46.9	47.0	44.1	43.6	39.4

10-12	45.0	45.1	43.1	42.8	43.4	43.2	43.9
14-16	44.0	44.8	43.9	43.5	44.2	42.9	45.5
0-24	44.9	45.4	45.2	43.8	44.7	43.9	44.9

85th %ile	44.6
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Warrington ATC A, Mill Road

Produced by Road Data Services Ltd.

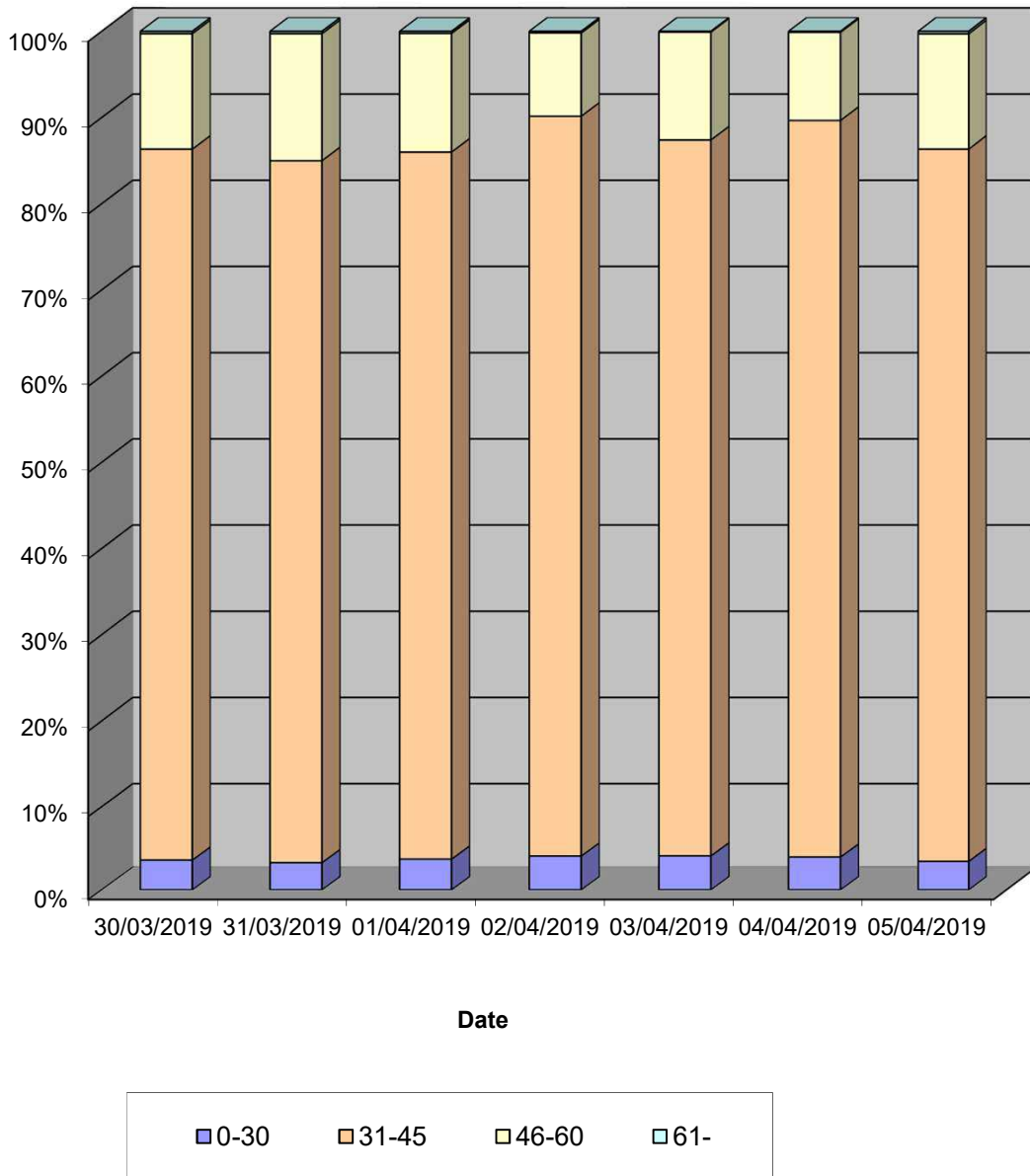
Channel 1 - Northbound

Speed Summary

Week 1

Speed (MPH)	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
0-30	95	74	128	153	152	154	132
31-45	2193	1847	2846	3238	3103	3346	3199
46-60	355	333	476	363	466	399	516
61-	7	6	8	7	3	4	11
TOTAL	2650	2260	3458	3761	3724	3903	3858

Speed Summary (MPH)

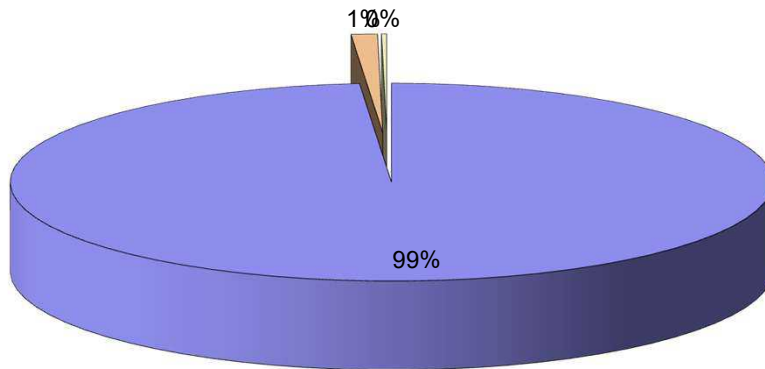


Warrington ATC A, Mill Road

Produced by Road Data Services Ltd.

Channel 1 - Northbound		Vehicle Class			Week 1
Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13	
30/03/2019					
7-19	2205	27	3	2235	
6-22	2461	29	3	2493	
6-24	2537	31	3	2571	
0-24	2616	31	3	2650	
31/03/2019					
7-19	1894	12	4	1910	
6-22	2142	12	4	2158	
6-24	2191	12	4	2207	
0-24	2244	12	4	2260	
01/04/2019					
7-19	2836	51	11	2898	
6-22	3268	51	11	3330	
6-24	3324	51	11	3386	
0-24	3396	51	11	3458	
02/04/2019					
7-19	3148	39	12	3199	
6-22	3559	41	13	3613	
6-24	3625	41	13	3679	
0-24	3705	42	14	3761	
03/04/2019					
7-19	3068	38	5	3111	
6-22	3526	39	6	3571	
6-24	3590	39	6	3635	
0-24	3678	40	6	3724	
04/04/2019					
7-19	3264	43	10	3317	
6-22	3706	43	10	3759	
6-24	3780	43	10	3833	
0-24	3849	44	10	3903	
05/04/2019					
7-19	3262	41	3	3306	
6-22	3660	43	3	3706	
6-24	3734	43	4	3781	
0-24	3811	43	4	3858	
Average					
7-19	2811	36	7	2854	
6-22	3189	37	7	3233	
6-24	3254	37	7	3299	
0-24	3328	38	7	3373	

Total Vehicle Class Distribution



Warrington ATC A, Mill Road

Produced by Road Data Services Ltd.

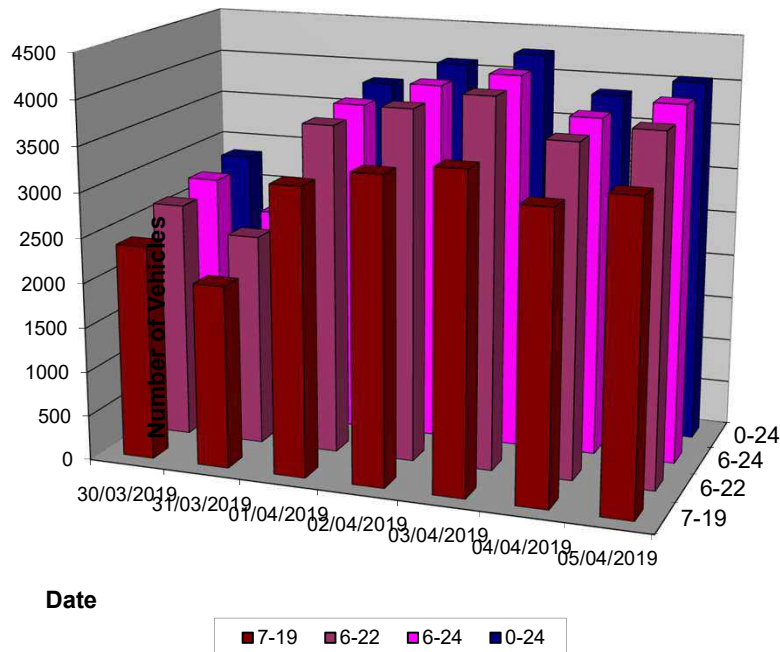
Channel 2 - Southbound

Vehicle Flow

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday	5 Day Ave	7 Day Ave
1	30	26	6	8	7	6	9	7	13
2	13	12	5	4	3	5	8	5	7
3	6	0	3	6	4	8	1	4	4
4	10	10	4	3	2	0	2	2	4
5	11	12	8	10	20	10	13	12	12
6	21	17	63	65	51	58	47	57	46
7	33	13	172	200	196	184	183	187	140
8	66	28	432	404	455	438	398	425	317
9	98	52	477	574	554	490	404	500	378
10	167	92	262	346	375	240	243	293	246
11	216	153	149	174	193	156	171	169	173
12	259	204	154	164	166	159	297	188	200
13	263	252	174	183	169	165	216	181	203
14	254	263	142	190	189	182	241	189	209
15	237	246	207	187	196	198	250	208	217
16	214	233	258	243	273	231	305	262	251
17	235	210	378	338	309	348	322	339	306
18	232	169	346	368	401	362	312	358	313
19	155	140	221	221	234	228	222	225	203
20	110	141	129	149	183	152	130	149	142
21	64	111	100	99	126	84	87	99	96
22	48	61	73	71	81	66	77	74	68
23	51	48	45	76	54	43	70	58	55
24	54	18	20	22	18	41	42	29	31
7-19	2396	2042	3200	3392	3514	3197	3381	3337	3017
6-22	2651	2368	3674	3911	4100	3683	3858	3845	3464
6-24	2756	2434	3739	4009	4172	3767	3970	3931	3550
0-24	2847	2511	3828	4105	4259	3854	4050	4019	3636

Vehicle Flow (Channel 2)



Warrington ATC A, Mill Road

Produced by Road Data Services Ltd.

Channel 2 - Southbound

Average Speed

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	39.9	39.7	31.1	41.7	41.9	43.6	41.1
2	40.8	41.9	45.2	52.3	49.6	39.9	41.1
3	40.5	-	38.4	34.6	38.3	43.5	30.6
4	40.3	39.2	32.0	37.2	36.4	-	32.5
5	42.4	42.2	42.4	39.0	38.8	45.1	39.3
6	46.1	40.3	42.1	41.0	43.0	40.1	41.7
7	43.4	44.4	40.8	40.7	41.5	43.1	41.9
8	41.2	40.0	39.5	39.6	40.0	40.3	39.7
9	41.8	40.3	38.6	38.7	38.9	39.8	39.3
10	41.5	38.8	39.7	38.2	40.3	41.1	39.5
11	38.8	39.9	39.1	39.0	38.7	39.3	38.2
12	39.0	40.3	40.0	37.9	39.0	38.7	39.8
13	39.4	39.9	38.4	39.1	38.9	38.8	39.7
14	40.5	39.1	39.9	39.3	38.6	38.6	39.1
15	40.1	39.6	38.4	40.0	39.2	37.4	39.1
16	39.9	39.8	39.5	39.2	38.5	37.7	40.1
17	40.4	40.4	39.6	40.2	39.4	39.0	41.0
18	40.5	39.2	40.7	40.3	40.1	38.4	41.5
19	40.6	41.0	40.9	41.1	39.9	40.4	40.1
20	38.9	40.3	40.2	40.8	40.3	38.2	39.7
21	40.6	39.7	40.6	39.3	39.4	39.2	39.7
22	41.7	39.2	40.1	40.4	39.7	37.8	41.0
23	40.2	41.1	41.3	40.7	39.4	38.3	39.1
24	37.8	39.9	41.6	41.8	38.9	41.0	38.2

10-12	38.9	40.1	39.6	38.4	38.8	39.0	39.2
14-16	40.0	39.7	39.0	39.5	38.8	37.6	39.6
0-24	40.1	39.9	39.7	39.6	39.6	39.4	39.9

Average	39.7
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Channel 2 - Southbound

85th Percentile

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	44.7	47.6	36.4	44.2	47.4	48.9	51.3
2	48.9	52.3	54.0	59.9	57.6	42.0	50.3
3	44.1	-	39.3	40.1	41.2	53.5	-
4	49.7	46.6	42.6	38.1	37.8	-	36.8
5	46.5	49.2	50.1	46.4	43.4	52.4	47.4
6	56.2	46.2	48.2	49.6	49.9	45.4	46.0
7	52.8	46.9	45.9	45.7	46.9	49.8	49.3
8	48.7	45.9	44.1	43.8	45.0	44.7	44.4
9	47.5	46.5	43.4	43.1	43.8	44.7	44.5
10	48.2	44.6	45.1	42.7	44.8	46.1	44.2
11	45.2	45.7	44.7	43.7	45.2	44.3	44.0
12	44.7	45.4	45.4	43.9	43.9	45.0	44.9
13	44.6	44.8	43.3	45.1	44.0	44.6	45.0
14	45.3	44.7	44.4	44.8	44.4	43.4	44.5
15	45.0	44.8	44.3	44.4	43.8	43.0	44.6
16	46.2	44.7	44.5	44.5	44.0	43.8	44.9
17	45.5	45.6	44.8	45.5	44.8	44.2	46.5
18	45.5	47.7	45.2	45.0	44.6	43.1	47.7
19	46.2	46.5	46.1	45.9	44.8	45.0	45.3
20	44.1	45.7	46.1	46.6	45.5	45.2	46.4
21	46.9	45.6	46.6	44.4	44.8	43.8	45.8
22	48.2	47.5	45.8	46.8	45.9	42.1	45.4
23	47.5	48.8	47.4	47.7	45.5	44.1	46.6
24	42.2	47.2	44.9	47.3	45.7	49.9	43.7

10-12	44.9	45.6	44.9	43.9	44.4	44.5	44.6
14-16	45.4	44.8	44.3	44.5	43.8	43.3	44.8
0-24	45.7	45.6	44.8	44.7	44.8	44.7	45.3

85th %ile	45.0
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Warrington ATC A, Mill Road

Produced by Road Data Services Ltd.

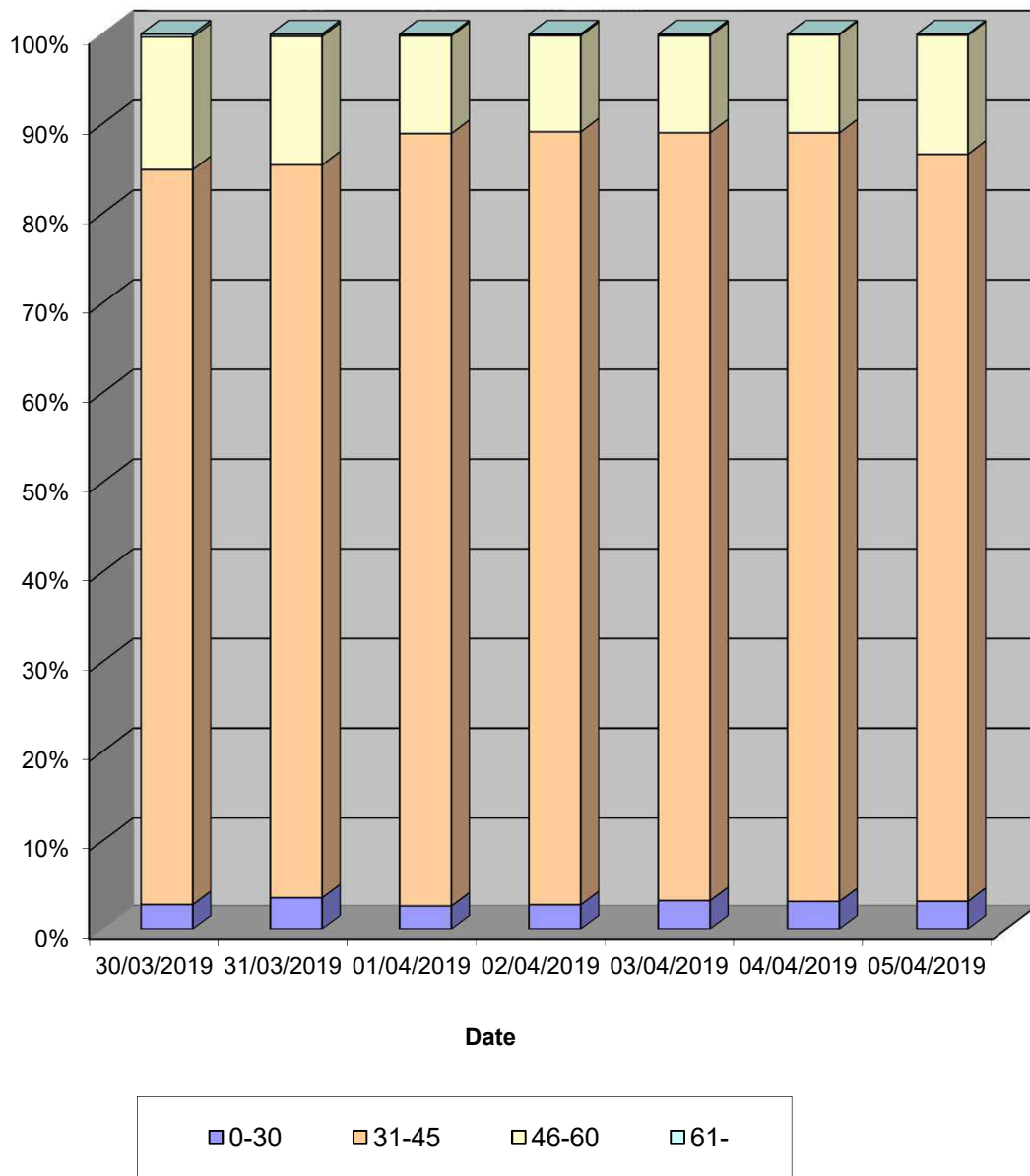
Channel 2 - Southbound

Speed Summary

Week 1

Speed (MPH)	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
0-30	79	89	100	113	137	120	127
31-45	2338	2056	3304	3545	3654	3310	3381
46-60	421	360	417	440	460	421	537
61-	9	6	7	7	8	3	5
TOTAL	2847	2511	3828	4105	4259	3854	4050

Speed Summary (MPH)



Warrington ATC A, Mill Road

Produced by Road Data Services Ltd.

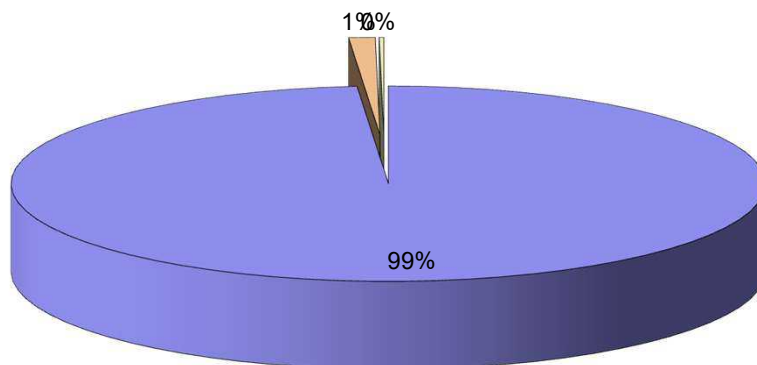
Channel 2 - Southbound

Vehicle Class

Week 1

Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
30/03/2019				
7-19	2368	28	0	2396
6-22	2616	35	0	2651
6-24	2719	37	0	2756
0-24	2810	37	0	2847
31/03/2019				
7-19	2028	8	6	2042
6-22	2353	9	6	2368
6-24	2419	9	6	2434
0-24	2496	9	6	2511
01/04/2019				
7-19	3153	37	10	3200
6-22	3624	40	10	3674
6-24	3689	40	10	3739
0-24	3778	40	10	3828
02/04/2019				
7-19	3338	49	5	3392
6-22	3854	52	5	3911
6-24	3952	52	5	4009
0-24	4047	53	5	4105
03/04/2019				
7-19	3464	43	7	3514
6-22	4048	45	7	4100
6-24	4120	45	7	4172
0-24	4207	45	7	4259
04/04/2019				
7-19	3135	52	10	3197
6-22	3618	55	10	3683
6-24	3702	55	10	3767
0-24	3789	55	10	3854
05/04/2019				
7-19	3326	44	11	3381
6-22	3798	48	12	3858
6-24	3910	48	12	3970
0-24	3989	48	13	4050
Average				
7-19	2973	37	7	3017
6-22	3416	41	7	3464
6-24	3502	41	7	3550
0-24	3588	41	7	3636

Total Vehicle Class Distribution



Warrington ATC B, Mill Lane

Produced by Road Data Services Ltd.

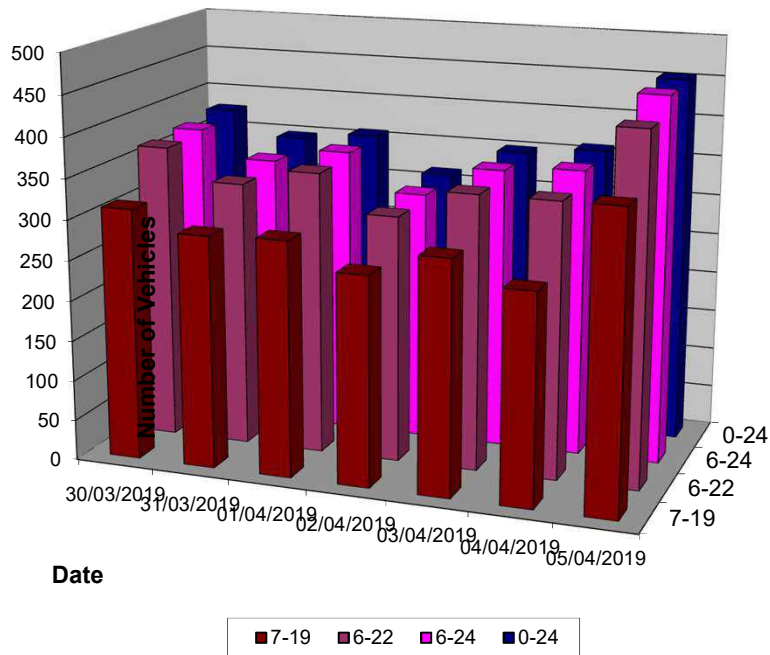
Channel 1 - Westbound

Vehicle Flow

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday	5 Day Ave	7 Day Ave
1	3	5	1	3	0	2	0	1	2
2	3	4	0	0	0	1	1	0	1
3	0	0	0	0	0	0	0	0	0
4	0	0	1	0	0	0	0	0	0
5	0	1	0	1	1	1	1	1	1
6	1	0	0	0	1	0	0	0	0
7	0	0	1	2	1	1	1	1	1
8	1	0	12	8	10	5	5	8	6
9	3	1	12	13	13	9	8	11	8
10	11	6	10	12	11	11	14	12	11
11	18	9	15	6	9	10	16	11	12
12	24	14	12	19	16	14	23	17	17
13	39	34	26	28	18	18	31	24	28
14	29	33	20	18	20	25	24	21	24
15	38	35	32	22	17	28	33	26	29
16	30	44	22	19	24	25	27	23	27
17	36	36	32	41	41	37	67	44	41
18	53	50	56	43	55	32	66	50	51
19	30	26	42	30	54	45	50	44	40
20	27	22	26	29	30	32	31	30	28
21	20	11	22	11	12	27	20	18	18
22	8	8	10	4	9	21	15	12	11
23	2	7	4	3	5	7	15	7	6
24	2	2	2	2	3	8	6	4	4
7-19	312	288	291	259	288	259	364	292	294
6-22	367	329	350	305	340	340	431	353	352
6-24	371	338	356	310	348	355	452	364	361
0-24	378	348	358	314	350	359	454	367	366

Vehicle Flow (Channel 1)



Warrington ATC B, Mill Lane

Produced by Road Data Services Ltd.

Channel 1 - Westbound

Average Speed

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	15.9	16.7	12.5	20.2	-	17.9	-
2	20.5	22.1	-	-	-	7.0	28.3
3	-	-	-	-	-	-	-
4	-	-	19.9	-	-	-	-
5	-	16.0	-	22.9	17.1	26.5	22.0
6	17.0	-	-	-	13.7	-	-
7	-	-	20.6	21.8	17.6	29.4	9.1
8	19.8	-	21.6	21.1	23.5	24.9	18.3
9	16.3	14.9	18.5	20.1	19.6	19.6	21.9
10	20.0	21.0	18.4	15.1	20.9	18.4	18.4
11	20.8	18.6	20.0	14.9	16.6	19.4	20.1
12	17.6	19.5	17.8	16.4	17.7	19.6	21.8
13	19.7	19.8	19.2	18.2	19.4	18.9	18.9
14	19.5	18.0	20.5	17.7	19.7	20.7	18.9
15	18.4	17.7	18.8	20.2	18.1	18.3	16.3
16	17.7	18.1	19.9	17.8	17.8	20.4	18.2
17	19.0	20.4	19.4	18.7	20.7	20.5	18.7
18	17.7	18.3	19.2	19.3	18.8	23.2	18.9
19	18.7	18.1	19.2	18.4	19.3	21.9	18.7
20	21.6	19.1	20.1	18.9	17.6	23.5	19.8
21	19.0	18.9	19.2	21.9	21.4	21.1	18.1
22	18.1	18.5	19.0	21.0	21.8	22.8	18.7
23	17.9	20.1	24.7	23.2	16.4	19.7	19.6
24	16.8	21.3	22.0	19.3	22.6	22.2	17.0

10-12	18.9	19.1	19.0	16.0	17.3	19.5	21.1
14-16	18.1	17.9	19.3	19.1	17.9	19.3	17.1
0-24	18.9	18.8	19.4	18.7	19.3	21.0	18.8

Average	19.3
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Channel 1 - Westbound

85th Percentile

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	23.6	21.3	-	21.3	-	18.9	-
2	23.8	24.1	-	-	-	-	-
3	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-
7	-	-	-	22.5	-	-	-
8	-	-	25.5	23.6	27.0	28.8	24.3
9	18.9	-	21.1	24.0	23.7	25.2	28.4
10	24.9	24.9	21.0	17.5	22.4	20.9	24.3
11	24.5	27.4	24.5	16.6	20.1	22.7	24.3
12	22.4	21.5	22.6	19.8	21.1	24.3	25.9
13	24.7	24.1	23.5	21.9	23.3	24.6	24.8
14	23.4	22.7	24.8	20.5	21.9	26.7	21.7
15	21.6	21.0	23.3	24.0	22.6	23.8	19.9
16	22.5	21.7	24.2	21.0	21.4	22.3	23.3
17	23.1	24.1	23.7	22.7	24.6	23.9	22.0
18	22.0	22.2	23.1	23.3	22.5	27.4	22.7
19	22.8	21.5	23.1	22.7	23.9	26.4	22.2
20	26.4	22.0	24.4	21.7	21.3	30.2	21.9
21	22.6	22.6	23.5	26.9	25.9	28.0	22.1
22	23.0	22.3	23.1	24.3	25.3	25.5	23.3
23	19.0	22.0	27.1	28.0	22.6	24.2	22.4
24	16.8	23.5	23.1	20.0	25.6	26.9	19.4

10-12	24.3	23.5	23.9	19.4	20.9	23.6	25.7
14-16	21.7	21.3	23.4	23.6	22.6	23.5	21.3
0-24	23.3	22.9	23.5	22.8	23.3	26.8	23.3

85th %ile	23.7
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Warrington ATC B, Mill Lane

Produced by Road Data Services Ltd.

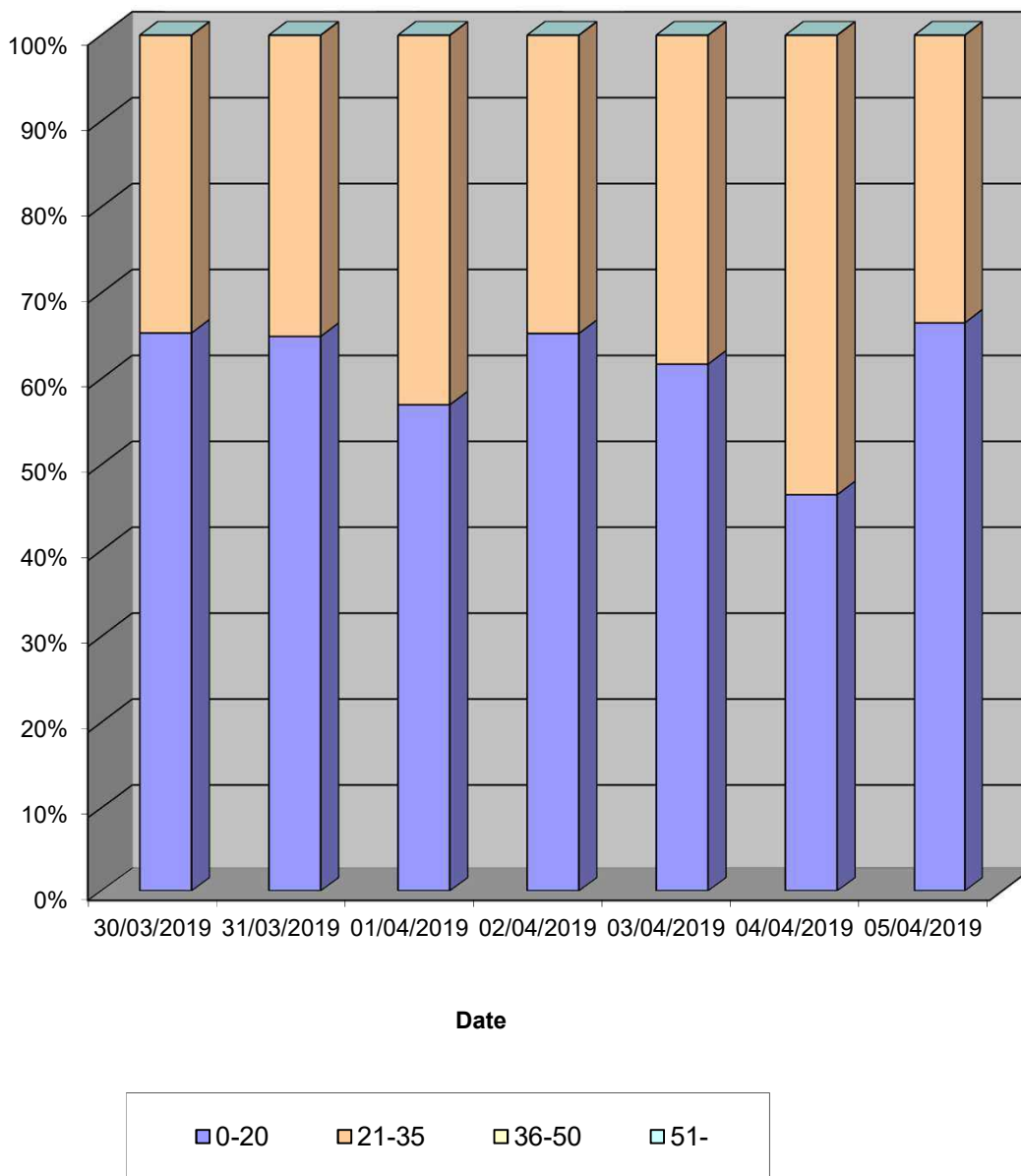
Channel 1 - Westbound

Speed Summary

Week 1

Speed (MPH)	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
0-20	247	226	204	205	216	167	302
21-35	131	122	154	109	134	192	152
36-50	0	0	0	0	0	0	0
51-	0	0	0	0	0	0	0
TOTAL	378	348	358	314	350	359	454

Speed Summary (MPH)

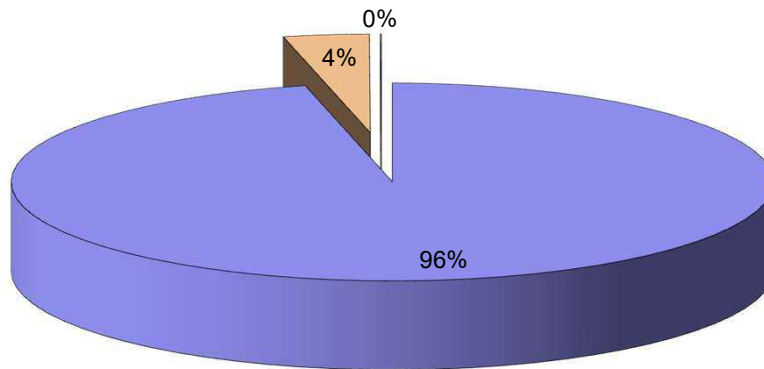


Warrington ATC B, Mill Lane

Produced by Road Data Services Ltd.

Channel 1 - Westbound		Vehicle Class			Week 1
Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13	
30/03/2019					
7-19	306	6	0	312	
6-22	357	10	0	367	
6-24	361	10	0	371	
0-24	368	10	0	378	
31/03/2019					
7-19	284	4	0	288	
6-22	325	4	0	329	
6-24	334	4	0	338	
0-24	344	4	0	348	
01/04/2019					
7-19	278	13	0	291	
6-22	337	13	0	350	
6-24	343	13	0	356	
0-24	345	13	0	358	
02/04/2019					
7-19	252	7	0	259	
6-22	298	7	0	305	
6-24	303	7	0	310	
0-24	307	7	0	314	
03/04/2019					
7-19	279	9	0	288	
6-22	331	9	0	340	
6-24	339	9	0	348	
0-24	341	9	0	350	
04/04/2019					
7-19	227	32	0	259	
6-22	304	36	0	340	
6-24	318	37	0	355	
0-24	322	37	0	359	
05/04/2019					
7-19	350	13	1	364	
6-22	417	13	1	431	
6-24	438	13	1	452	
0-24	440	13	1	454	
Average					
7-19	282	12	0	294	
6-22	338	13	0	352	
6-24	348	13	0	361	
0-24	352	13	0	366	

Total Vehicle Class Distribution



Warrington ATC B, Mill Lane

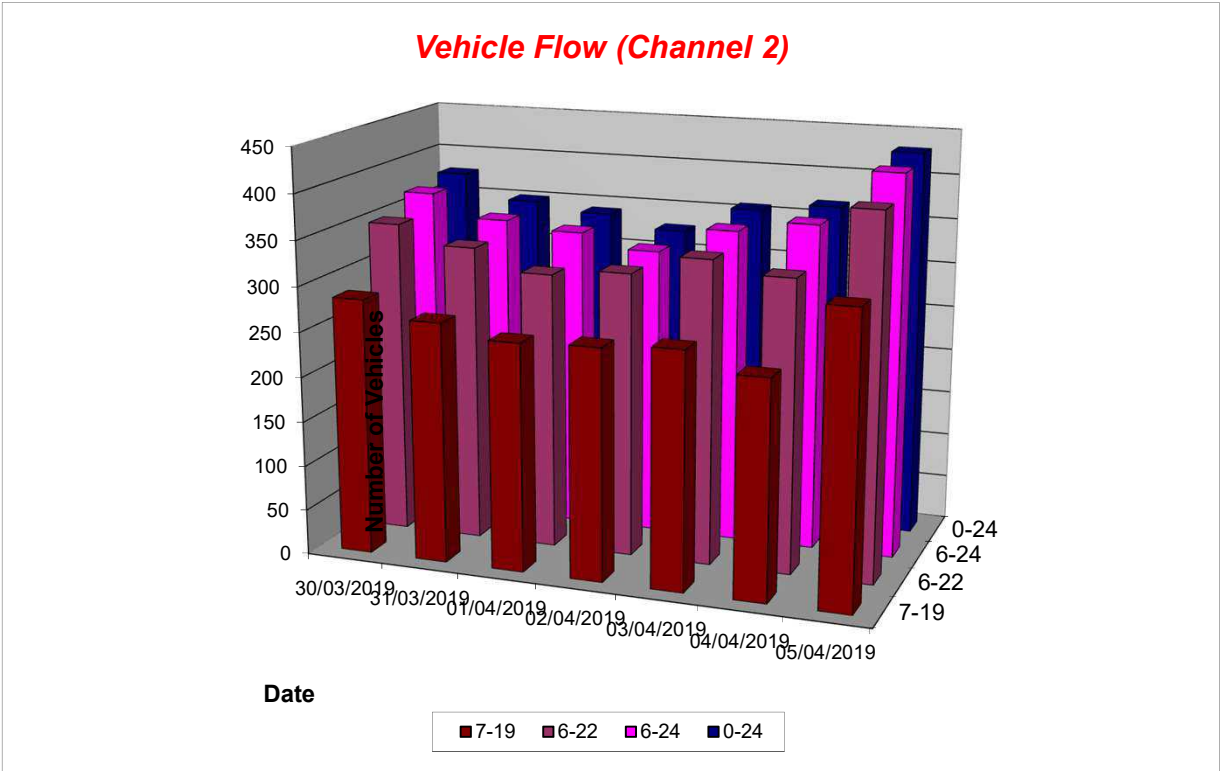
Produced by Road Data Services Ltd.

Channel 2 - Eastbound

Vehicle Flow

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday	5 Day Ave	7 Day Ave
1	6	2	1	3	0	1	3	2	2
2	1	3	0	0	0	0	0	0	1
3	0	0	0	0	2	0	0	0	0
4	0	0	2	0	0	0	0	0	0
5	0	1	0	2	2	1	2	1	1
6	1	0	2	1	3	1	2	2	1
7	3	1	5	8	6	8	5	6	5
8	5	1	21	26	27	19	21	23	17
9	15	2	31	32	27	28	23	28	23
10	15	11	16	13	18	12	11	14	14
11	24	28	10	9	7	15	21	12	16
12	17	10	15	17	16	17	13	16	15
13	16	18	18	26	14	9	19	17	17
14	20	34	23	18	23	16	28	22	23
15	27	28	17	21	21	30	25	23	24
16	27	38	14	16	18	17	25	18	22
17	48	23	31	22	27	23	35	28	30
18	41	41	22	26	31	28	31	28	31
19	30	33	35	30	33	27	69	39	37
20	27	23	29	24	34	27	31	29	28
21	21	25	13	13	19	26	21	18	20
22	14	14	7	14	16	22	23	16	16
23	9	13	25	5	5	8	11	11	11
24	10	1	4	1	8	31	12	11	10
7-19	285	267	253	256	262	241	321	267	269
6-22	350	330	307	315	337	324	401	337	338
6-24	369	344	336	321	350	363	424	359	358
0-24	377	350	341	327	357	366	431	364	364



Warrington ATC B, Mill Lane

Produced by Road Data Services Ltd.

Channel 2 - Eastbound

Average Speed

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	15.3	17.4	15.5	20.7	-	22.7	24.5
2	23.2	25.4	-	-	-	-	-
3	-	-	-	-	25.1	-	-
4	-	-	16.8	-	-	-	-
5	-	18.6	-	21.4	25.7	29.7	24.8
6	18.3	-	19.5	20.2	19.6	24.2	26.4
7	21.8	12.2	20.9	22.7	23.7	24.5	20.2
8	16.2	8.5	21.1	20.3	20.5	20.9	23.9
9	18.6	20.0	20.8	20.1	21.4	23.5	21.2
10	22.1	18.6	20.1	18.2	18.3	20.4	20.2
11	18.8	19.3	19.9	17.0	20.3	17.9	20.6
12	20.4	17.9	19.1	18.8	19.0	21.3	23.8
13	20.8	21.9	19.9	21.9	22.3	21.4	19.0
14	19.6	17.7	17.8	18.0	18.8	21.9	19.4
15	18.9	17.1	18.0	18.7	20.9	20.0	18.4
16	17.5	18.3	19.6	18.8	19.3	19.5	16.2
17	20.1	20.2	18.6	18.9	18.2	19.5	16.6
18	19.7	18.6	19.0	20.8	19.5	21.0	18.3
19	18.9	17.9	20.0	20.0	19.8	20.5	18.9
20	19.1	20.2	18.9	18.7	19.3	22.5	18.8
21	19.6	18.4	17.3	17.6	20.5	21.6	17.3
22	20.2	18.7	18.5	19.3	21.6	21.0	17.7
23	18.7	18.2	20.6	17.9	18.8	16.7	17.8
24	20.0	28.1	20.3	21.3	20.0	22.5	19.9

10-12	19.5	18.9	19.5	18.2	19.4	19.7	21.9
14-16	18.2	17.8	18.7	18.7	20.2	19.8	17.3
0-24	19.4	18.7	19.4	19.5	20.0	21.1	19.1

Average	19.6
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Channel 2 - Eastbound

85th Percentile

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	19.7	17.8	-	24.4	-	-	27.0
2	-	26.3	-	-	-	-	-
3	-	-	-	-	25.7	-	-
4	-	-	19.3	-	-	-	-
5	-	-	-	23.2	27.7	-	25.7
6	-	-	20.3	-	20.1	-	28.5
7	24.1	-	23.6	27.2	31.8	28.0	24.7
8	18.7	-	24.7	23.7	25.1	25.2	27.7
9	26.4	20.8	26.4	25.6	25.8	28.9	26.7
10	25.1	24.6	24.8	21.6	24.0	24.1	25.0
11	23.4	24.6	26.4	20.7	25.2	23.9	25.4
12	24.4	23.2	24.3	22.6	23.3	26.8	28.3
13	25.0	24.7	23.1	26.3	25.1	25.9	22.8
14	24.5	20.7	21.4	21.6	21.7	25.5	25.8
15	24.5	20.7	22.8	23.9	24.1	25.4	23.6
16	23.2	22.3	25.2	23.2	22.5	24.2	20.2
17	24.2	24.6	24.3	24.5	22.8	24.8	19.5
18	23.8	22.5	24.9	23.8	25.1	25.3	22.1
19	21.6	22.1	25.9	24.1	24.5	26.7	24.1
20	22.7	24.3	24.7	23.4	25.0	26.0	22.6
21	23.2	21.4	23.8	19.3	25.6	25.3	20.5
22	23.5	22.4	25.0	22.1	25.9	25.5	20.3
23	21.2	22.6	24.7	21.4	23.5	19.6	20.4
24	22.8	-	25.1	-	26.0	26.2	22.7

10-12	24.3	25.0	25.2	22.3	24.0	25.8	28.0
14-16	24.2	21.7	24.0	23.8	24.0	24.7	22.1
0-24	24.2	23.6	24.9	24.0	25.0	25.9	24.3

85th %ile	24.6
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Warrington ATC B, Mill Lane

Produced by Road Data Services Ltd.

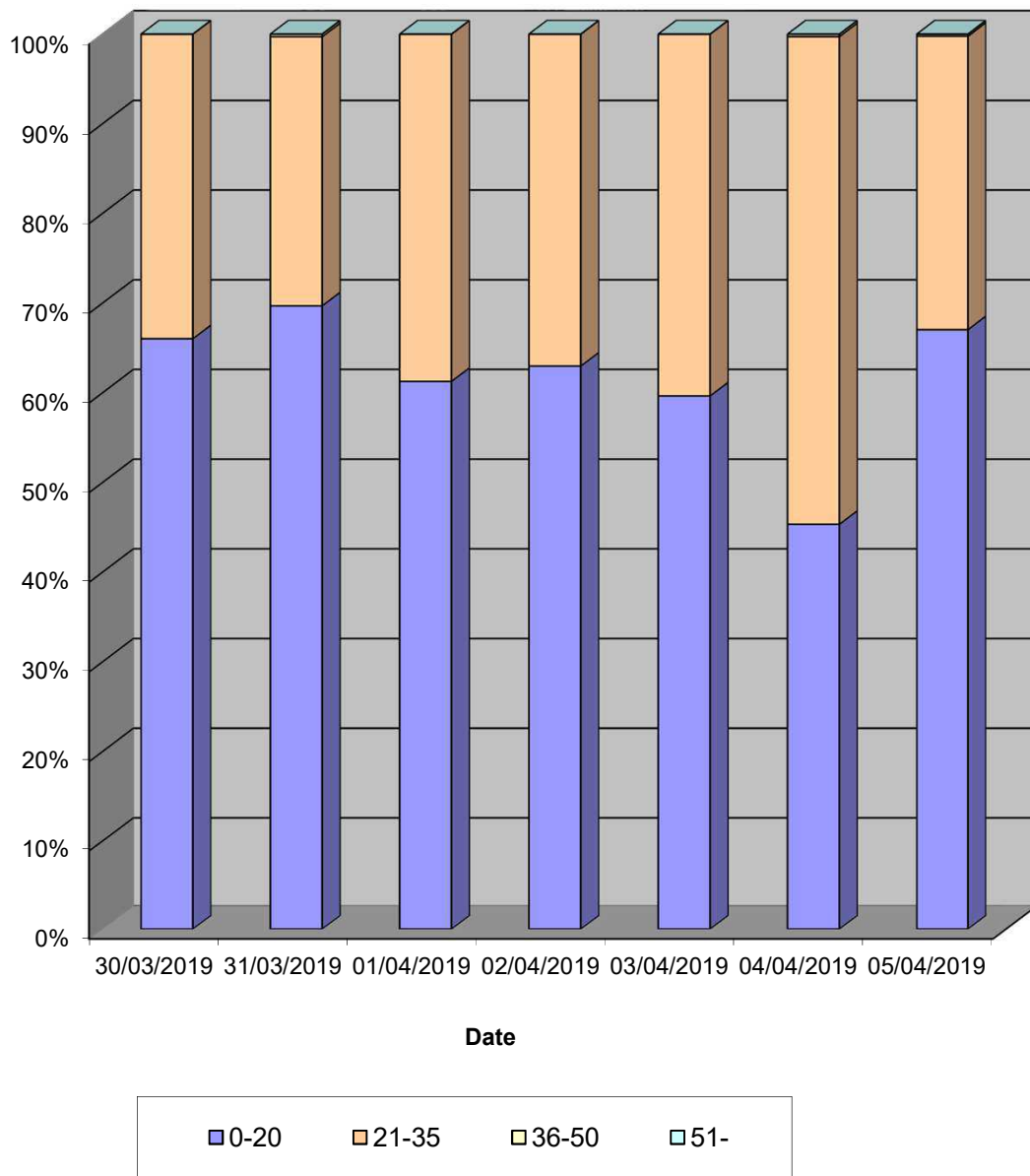
Channel 2 - Eastbound

Speed Summary

Week 1

Speed (MPH)	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
0-20	249	244	209	206	213	166	289
21-35	128	105	132	121	144	199	141
36-50	0	1	0	0	0	1	1
51-	0	0	0	0	0	0	0
TOTAL	377	350	341	327	357	366	431

Speed Summary (MPH)



Warrington ATC B, Mill Lane

Produced by Road Data Services Ltd.

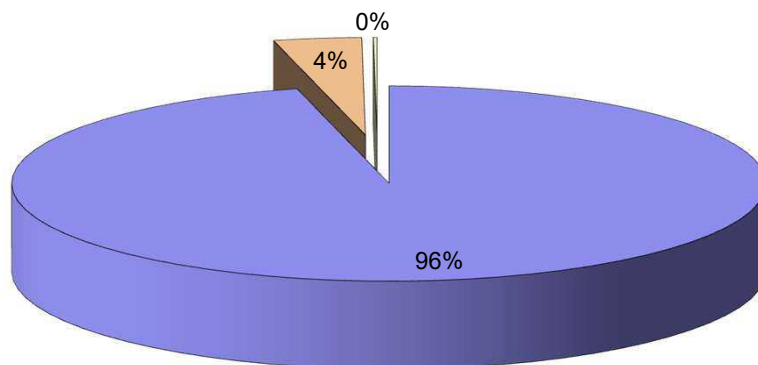
Channel 2 - Eastbound

Vehicle Class

Week 1

Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
30/03/2019				
7-19	281	4	0	285
6-22	344	6	0	350
6-24	363	6	0	369
0-24	371	6	0	377
31/03/2019				
7-19	259	8	0	267
6-22	322	8	0	330
6-24	336	8	0	344
0-24	342	8	0	350
01/04/2019				
7-19	243	10	0	253
6-22	297	10	0	307
6-24	325	10	1	336
0-24	330	10	1	341
02/04/2019				
7-19	249	7	0	256
6-22	308	7	0	315
6-24	314	7	0	321
0-24	320	7	0	327
03/04/2019				
7-19	252	9	1	262
6-22	326	10	1	337
6-24	339	10	1	350
0-24	346	10	1	357
04/04/2019				
7-19	211	30	0	241
6-22	287	37	0	324
6-24	325	38	0	363
0-24	327	39	0	366
05/04/2019				
7-19	304	15	2	321
6-22	384	15	2	401
6-24	407	15	2	424
0-24	413	16	2	431
Average				
7-19	257	12	0	269
6-22	324	13	0	338
6-24	344	13	1	358
0-24	350	14	1	364

Total Vehicle Class Distribution



Warrington ATC C, Poplars Avenue

Produced by Road Data Services Ltd.

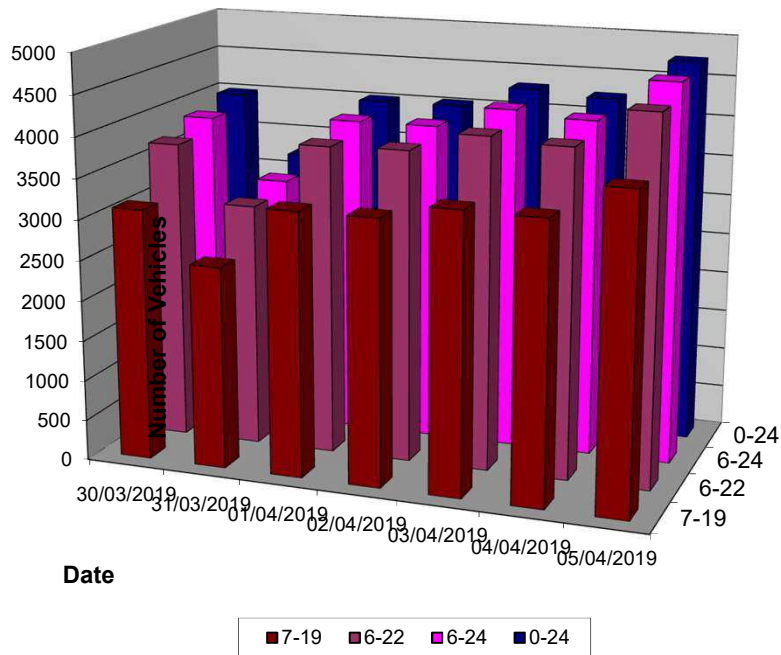
Channel 1 - Northbound

Vehicle Flow

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday	5 Day Ave	7 Day Ave
1	34	44	16	16	12	23	19	17	23
2	21	25	7	2	13	4	4	6	11
3	14	0	2	5	2	6	5	4	5
4	16	20	8	8	9	6	3	7	10
5	12	21	4	5	9	7	5	6	9
6	35	22	37	40	34	42	37	38	35
7	40	20	63	64	65	76	72	68	57
8	54	43	171	171	172	167	159	168	134
9	118	49	276	285	274	279	279	279	223
10	216	112	206	228	259	231	246	234	214
11	266	167	179	194	198	201	215	197	203
12	303	284	230	214	231	244	265	237	253
13	321	302	235	217	244	266	279	248	266
14	304	307	237	239	232	224	309	248	265
15	317	257	291	282	312	263	340	298	295
16	310	256	351	363	376	328	418	367	343
17	304	251	362	356	381	390	454	389	357
18	344	249	418	401	425	459	490	439	398
19	255	221	301	310	334	374	381	340	311
20	229	211	227	238	269	257	259	250	241
21	196	188	156	181	177	167	184	173	178
22	133	96	122	106	140	106	149	125	122
23	83	69	100	78	93	83	118	94	89
24	69	36	23	28	40	39	58	38	42
7-19	3112	2498	3257	3260	3438	3426	3835	3443	3261
6-22	3710	3013	3825	3849	4089	4032	4499	4059	3860
6-24	3862	3118	3948	3955	4222	4154	4675	4191	3991
0-24	3994	3250	4022	4031	4301	4242	4748	4269	4084

Vehicle Flow (Channel 1)



Warrington ATC C, Poplars Avenue

Produced by Road Data Services Ltd.

Channel 1 - Northbound

Average Speed

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	26.5	25.6	24.6	27.9	25.3	25.7	25.3
2	26.6	26.6	24.6	28.6	27.4	25.3	27.6
3	26.7	-	25.3	26.9	26.0	27.7	27.9
4	25.0	27.3	28.9	26.0	27.8	29.5	25.9
5	25.9	26.2	27.6	23.8	29.1	24.1	27.4
6	27.6	26.7	25.7	25.1	26.6	25.6	26.6
7	26.7	27.1	23.7	23.8	25.5	23.5	26.4
8	24.2	26.2	21.7	23.3	22.6	23.0	23.9
9	23.4	26.7	22.1	22.2	22.4	22.1	22.4
10	22.3	24.8	22.2	22.2	21.7	22.7	22.2
11	22.2	23.8	22.4	23.4	22.8	21.8	22.1
12	21.0	22.9	22.1	22.7	21.8	20.7	22.1
13	21.2	23.7	22.9	22.3	22.3	22.3	23.1
14	22.0	22.9	22.1	22.9	22.4	22.7	22.9
15	21.4	23.1	22.3	22.4	21.4	22.2	22.1
16	21.7	23.2	22.4	21.7	20.8	21.4	22.7
17	22.6	23.3	23.2	22.7	22.4	21.8	21.7
18	22.9	23.2	22.1	21.6	21.4	21.1	20.9
19	22.8	23.4	21.9	21.3	22.5	21.7	20.6
20	22.7	22.9	23.1	22.5	22.7	22.3	22.2
21	23.9	23.4	22.7	24.0	23.3	23.1	23.6
22	24.7	23.9	23.6	24.6	23.5	24.1	24.6
23	24.7	26.1	25.8	23.8	24.0	25.1	23.5
24	25.6	24.8	24.3	26.7	26.7	25.2	24.2

10-12	21.6	23.3	22.2	23.0	22.3	21.2	22.1
14-16	21.6	23.2	22.4	22.0	21.1	21.8	22.4
0-24	22.6	23.6	22.6	22.6	22.3	22.2	22.4

Average	22.6
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Channel 1 - Northbound

85th Percentile

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	32.2	29.9	27.2	30.8	29.3	28.8	26.7
2	32.0	31.1	28.4	28.9	32.6	26.8	31.6
3	29.9	-	25.9	28.3	26.5	32.7	30.9
4	29.6	32.0	34.3	29.5	31.2	31.7	29.5
5	29.3	30.7	29.8	27.5	32.7	27.8	31.3
6	31.2	31.4	31.2	28.6	32.5	29.6	31.4
7	30.8	30.7	28.0	27.4	29.2	28.4	31.6
8	27.6	30.1	26.1	27.6	27.7	26.7	28.6
9	27.1	30.9	26.2	25.7	25.8	26.2	26.1
10	26.8	28.7	27.0	26.2	25.7	27.8	27.0
11	26.7	27.7	27.2	27.4	27.0	26.0	26.9
12	25.5	26.9	26.6	26.9	26.1	25.9	25.7
13	25.9	27.7	27.2	26.3	26.6	26.2	27.7
14	26.3	27.3	26.6	27.4	26.5	27.0	26.9
15	25.6	27.3	26.6	26.6	25.7	26.2	26.3
16	26.1	27.0	26.5	25.5	25.1	25.8	26.7
17	26.4	26.9	27.1	26.5	26.2	26.3	26.7
18	27.4	27.2	26.0	25.6	25.6	25.5	26.1
19	27.1	27.6	26.3	26.0	26.2	25.5	25.0
20	27.3	26.9	27.3	26.8	27.4	26.5	26.4
21	27.9	27.9	26.4	28.2	27.6	27.6	28.2
22	28.7	28.5	27.7	28.4	27.2	27.7	28.9
23	28.7	29.5	28.7	28.5	27.7	29.2	27.7
24	28.7	27.4	29.0	31.5	31.2	28.7	28.2

10-12	26.1	27.3	27.0	27.0	26.8	25.9	26.2
14-16	25.8	27.1	26.6	26.0	25.3	26.2	26.6
0-24	27.2	27.7	27.0	26.8	26.6	26.5	27.0

85th %ile	27.0
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Warrington ATC C, Poplars Avenue

Produced by Road Data Services Ltd.

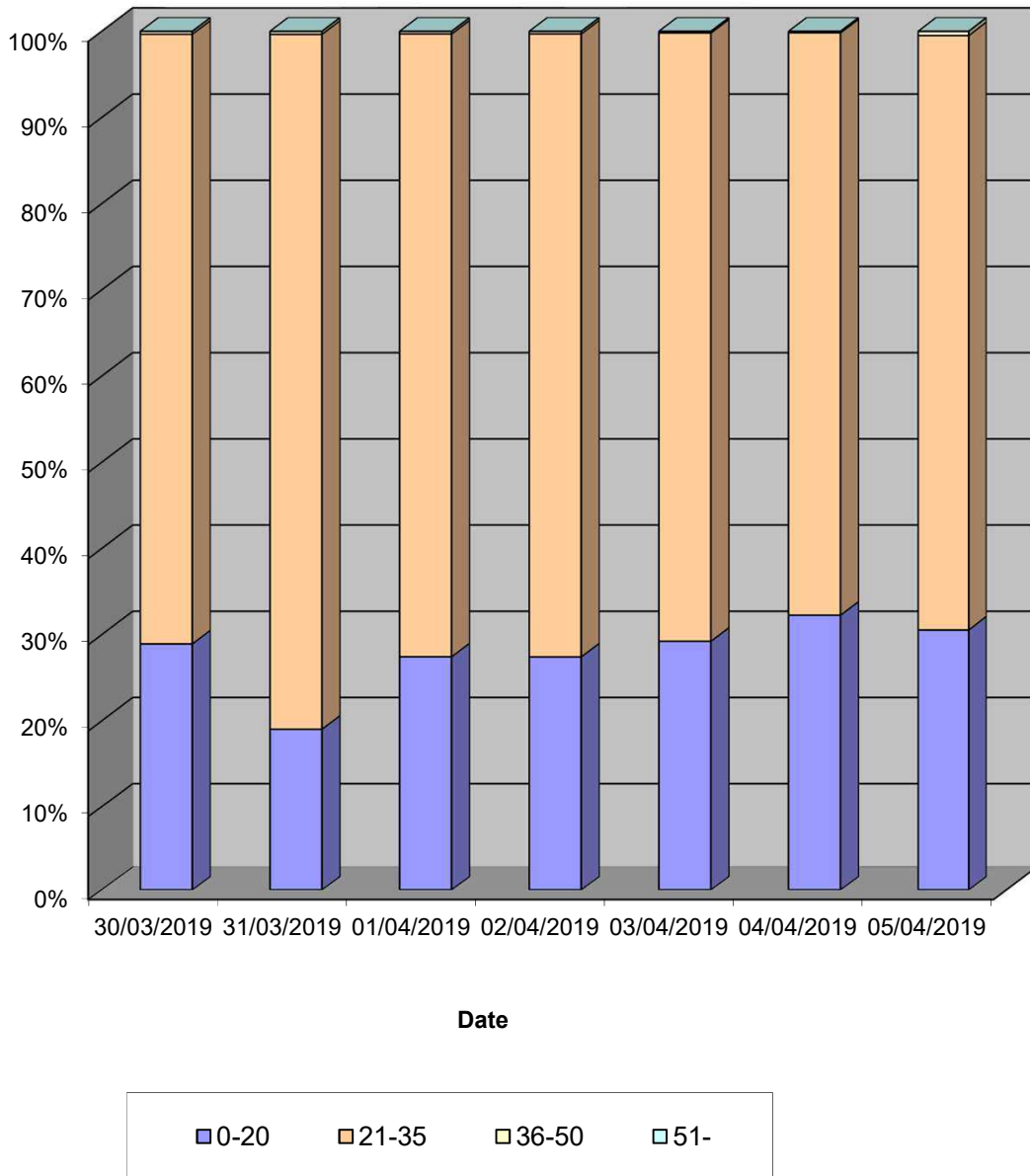
Channel 1 - Northbound

Speed Summary

Week 1

Speed (MPH)	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
0-20	1156	619	1104	1106	1258	1369	1451
21-35	2825	2620	2906	2913	3035	2866	3274
36-50	13	11	12	12	8	7	23
51-	0	0	0	0	0	0	0
TOTAL	3994	3250	4022	4031	4301	4242	4748

Speed Summary (MPH)

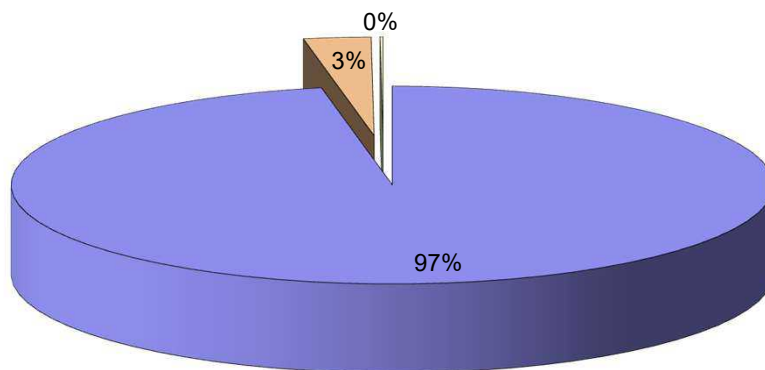


Warrington ATC C, Poplars Avenue

Produced by Road Data Services Ltd.

Channel 1 - Northbound		Vehicle Class			Week 1
Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13	
30/03/2019					
7-19	3023	82	7	3112	
6-22	3609	94	7	3710	
6-24	3759	96	7	3862	
0-24	3891	96	7	3994	
31/03/2019					
7-19	2460	34	4	2498	
6-22	2971	37	5	3013	
6-24	3076	37	5	3118	
0-24	3207	38	5	3250	
01/04/2019					
7-19	3144	110	3	3257	
6-22	3700	121	4	3825	
6-24	3821	123	4	3948	
0-24	3893	125	4	4022	
02/04/2019					
7-19	3131	120	9	3260	
6-22	3708	131	10	3849	
6-24	3813	132	10	3955	
0-24	3886	135	10	4031	
03/04/2019					
7-19	3319	116	3	3438	
6-22	3958	128	3	4089	
6-24	4089	130	3	4222	
0-24	4164	134	3	4301	
04/04/2019					
7-19	3307	119	0	3426	
6-22	3897	134	1	4032	
6-24	4017	136	1	4154	
0-24	4101	140	1	4242	
05/04/2019					
7-19	3700	129	6	3835	
6-22	4352	141	6	4499	
6-24	4525	144	6	4675	
0-24	4595	147	6	4748	
Average					
7-19	3155	101	5	3261	
6-22	3742	112	5	3860	
6-24	3871	114	5	3991	
0-24	3962	116	5	4084	

Total Vehicle Class Distribution



Warrington ATC C, Poplars Avenue

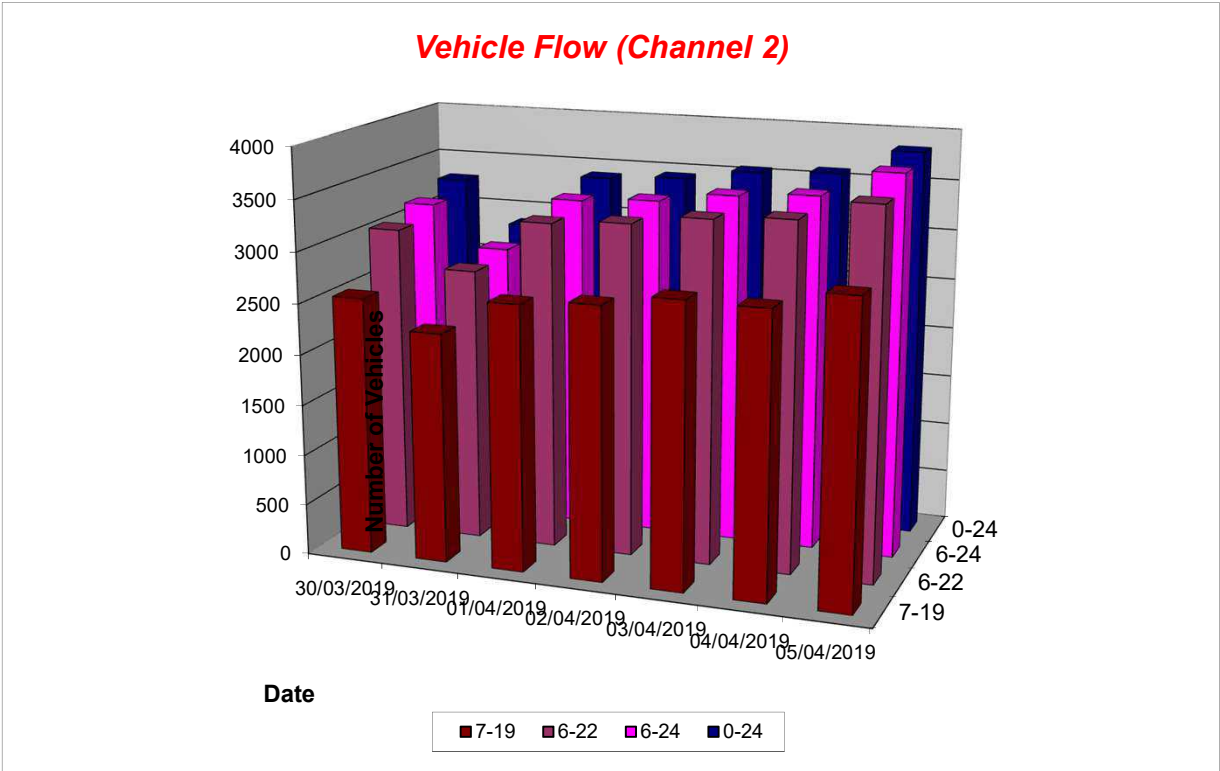
Produced by Road Data Services Ltd.

Channel 2 - Southbound

Vehicle Flow

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday	5 Day Ave	7 Day Ave
1	31	23	13	8	9	10	7	9	14
2	15	17	6	4	10	5	2	5	8
3	11	0	3	4	3	2	2	3	4
4	10	9	5	5	3	4	5	4	6
5	18	22	14	14	14	10	13	13	15
6	36	24	50	54	58	52	45	52	46
7	66	28	202	222	213	209	214	212	165
8	81	48	298	274	301	311	301	297	231
9	149	54	211	218	211	227	218	217	184
10	201	112	194	193	202	211	185	197	185
11	238	199	184	181	198	191	188	188	197
12	241	221	189	186	194	184	219	194	205
13	254	285	175	170	193	205	237	196	217
14	258	300	174	193	211	188	230	199	222
15	244	257	240	249	239	238	255	244	246
16	234	175	239	278	249	265	299	266	248
17	193	225	284	296	302	298	333	303	276
18	241	210	242	235	277	245	246	249	242
19	209	180	187	201	212	212	243	211	206
20	207	186	188	174	163	180	199	181	185
21	133	140	132	122	117	160	145	135	136
22	105	81	88	85	92	98	104	93	93
23	69	41	56	51	50	60	100	63	61
24	43	19	25	26	30	21	51	31	31
7-19	2543	2266	2617	2674	2789	2775	2954	2762	2660
6-22	3054	2701	3227	3277	3374	3422	3616	3383	3239
6-24	3166	2761	3308	3354	3454	3503	3767	3477	3330
0-24	3287	2856	3399	3443	3551	3586	3841	3564	3423



Warrington ATC C, Poplars Avenue

Produced by Road Data Services Ltd.

Channel 2 - Southbound

Average Speed

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	25.2	26.0	26.5	29.4	27.3	26.2	27.0
2	24.4	27.9	30.5	25.1	30.5	25.5	29.8
3	28.7	-	19.3	26.6	24.1	27.1	26.4
4	26.7	25.2	29.6	26.5	29.5	30.4	25.0
5	26.4	24.7	28.3	28.7	25.9	27.2	27.7
6	26.1	26.1	26.0	25.5	26.4	27.2	25.5
7	24.8	27.3	25.7	25.1	26.3	25.6	26.6
8	25.0	27.5	23.5	24.7	25.0	24.0	24.6
9	25.3	26.1	24.0	24.4	23.9	23.8	24.5
10	23.7	25.3	24.5	24.3	22.9	24.2	23.5
11	23.4	24.8	24.2	23.5	23.3	23.1	22.1
12	22.7	24.3	24.1	24.2	24.4	22.4	24.8
13	22.9	25.1	23.4	24.1	23.2	24.3	25.2
14	22.4	24.8	23.3	24.2	24.4	23.8	24.2
15	23.7	25.5	23.4	23.9	24.7	23.4	23.3
16	23.2	24.7	24.5	22.8	23.7	23.5	24.7
17	23.7	24.8	24.6	23.4	24.4	23.2	23.4
18	24.3	25.0	22.1	23.1	22.3	21.5	22.0
19	24.1	25.1	23.4	21.8	24.2	21.7	21.4
20	23.6	24.2	23.9	23.3	24.8	23.6	23.5
21	24.2	24.9	23.6	24.4	24.3	23.9	23.6
22	25.1	25.8	24.0	24.5	25.4	25.2	25.2
23	26.0	25.3	24.8	24.9	26.9	25.0	24.0
24	25.2	26.6	24.7	24.8	26.2	25.5	26.0

10-12	23.0	24.5	24.1	23.8	23.8	22.7	23.5
14-16	23.5	25.2	23.9	23.3	24.2	23.4	24.0
0-24	23.8	25.0	24.0	23.9	24.3	23.6	24.0

Average	24.1
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Channel 2 - Southbound

85th Percentile

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	28.9	30.1	30.1	35.5	32.3	33.4	32.3
2	29.1	31.9	35.0	30.3	33.7	33.1	30.4
3	32.4	-	22.9	29.1	26.5	28.1	27.2
4	29.8	31.7	33.5	29.3	32.2	33.7	27.4
5	29.1	27.9	31.0	31.5	29.4	29.2	30.1
6	30.8	31.3	30.7	29.8	30.2	30.5	29.8
7	29.3	30.2	29.8	29.1	30.0	30.0	30.2
8	29.3	32.5	28.2	29.1	29.3	28.6	29.0
9	29.1	30.0	28.6	28.7	28.8	28.6	29.2
10	28.3	29.2	29.1	28.6	28.2	28.6	27.6
11	28.4	29.5	28.2	27.8	28.3	27.8	27.7
12	27.3	28.5	28.6	29.0	28.5	27.9	28.9
13	27.6	29.2	28.3	28.6	27.2	28.6	29.4
14	27.7	29.0	27.8	28.9	28.9	28.1	28.9
15	28.4	29.6	28.5	28.5	28.9	27.1	27.2
16	28.3	29.9	29.0	28.0	28.4	26.8	28.6
17	28.3	28.7	28.8	28.0	28.6	27.7	28.3
18	29.0	29.1	26.9	27.5	27.8	25.8	26.0
19	29.0	29.3	27.8	25.5	28.9	25.6	26.3
20	28.6	29.0	28.8	28.3	29.5	28.0	28.6
21	28.5	29.3	27.8	28.5	29.2	28.0	29.1
22	30.0	29.7	28.8	29.5	29.9	29.5	29.3
23	30.5	29.7	29.5	28.6	30.0	29.5	28.6
24	29.1	30.3	28.3	29.4	32.8	28.4	30.9

10-12	27.9	29.0	28.3	28.5	28.5	27.8	28.5
14-16	28.3	29.7	28.7	28.3	28.8	27.0	28.2
0-24	28.7	29.5	28.6	28.6	29.0	28.3	28.7

85th %ile	28.8
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Warrington ATC C, Poplars Avenue

Produced by Road Data Services Ltd.

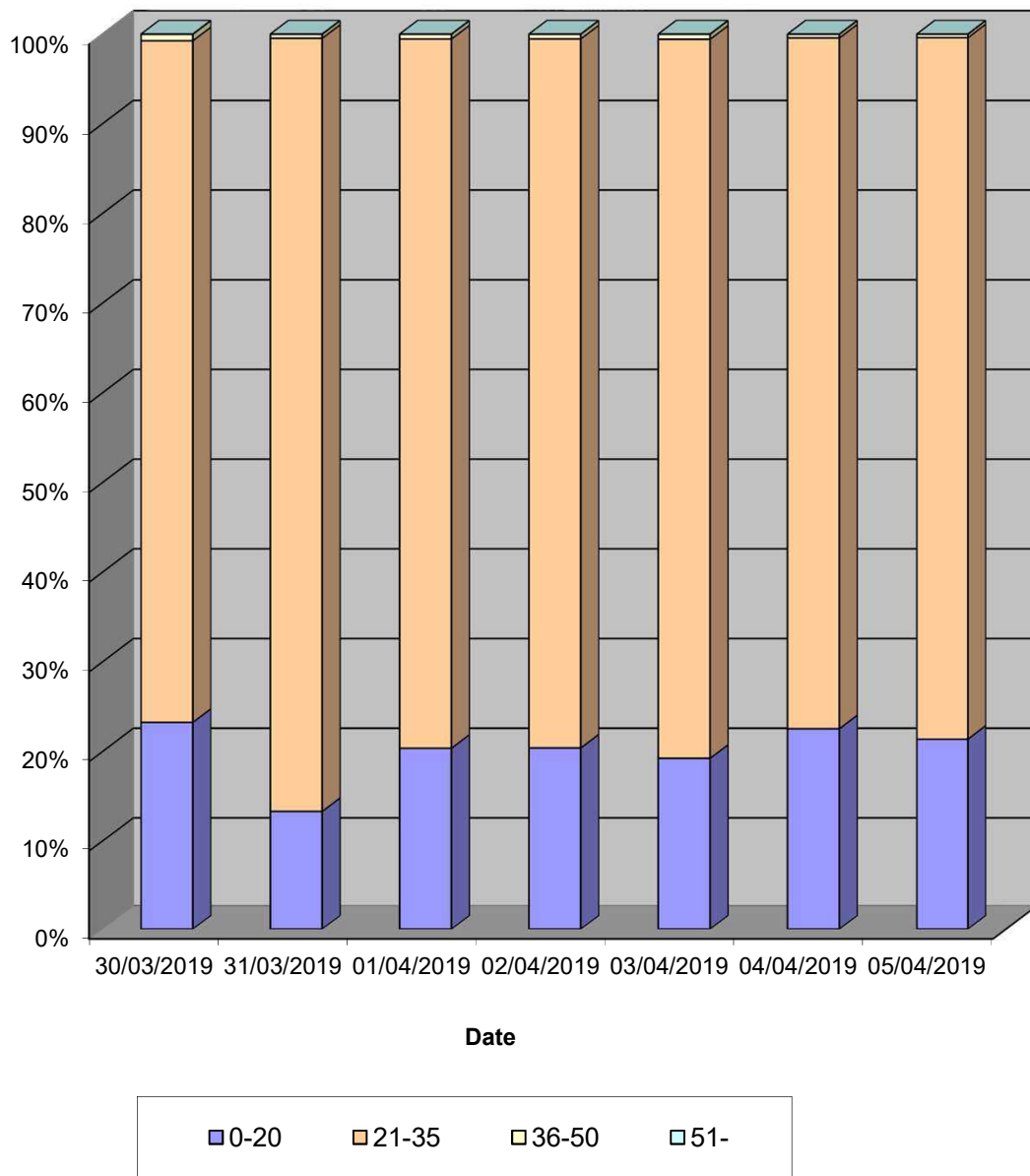
Channel 2 - Southbound

Speed Summary

Week 1

Speed (MPH)	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
0-20	765	381	693	703	684	809	822
21-35	2498	2462	2688	2722	2847	2762	3004
36-50	24	13	18	18	20	15	15
51-	0	0	0	0	0	0	0
TOTAL	3287	2856	3399	3443	3551	3586	3841

Speed Summary (MPH)



Warrington ATC C, Poplars Avenue

Produced by Road Data Services Ltd.

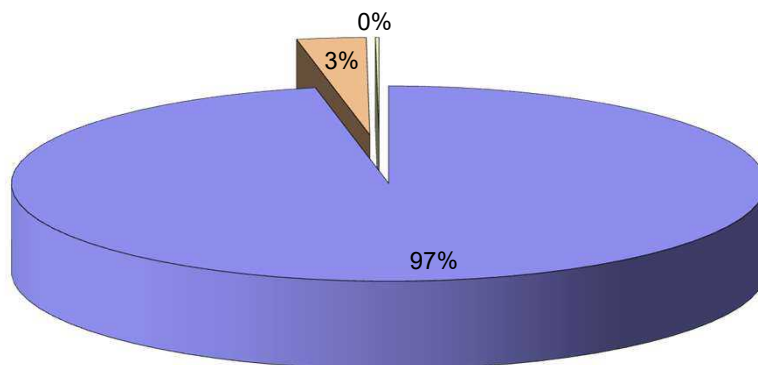
Channel 2 - Southbound

Vehicle Class

Week 1

Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
30/03/2019				
7-19	2479	59	5	2543
6-22	2986	63	5	3054
6-24	3098	63	5	3166
0-24	3215	67	5	3287
31/03/2019				
7-19	2231	33	2	2266
6-22	2665	34	2	2701
6-24	2725	34	2	2761
0-24	2820	34	2	2856
01/04/2019				
7-19	2508	104	5	2617
6-22	3104	116	7	3227
6-24	3185	116	7	3308
0-24	3274	118	7	3399
02/04/2019				
7-19	2560	112	2	2674
6-22	3150	125	2	3277
6-24	3227	125	2	3354
0-24	3313	128	2	3443
03/04/2019				
7-19	2674	109	6	2789
6-22	3250	118	6	3374
6-24	3330	118	6	3454
0-24	3426	119	6	3551
04/04/2019				
7-19	2668	105	2	2775
6-22	3301	119	2	3422
6-24	3381	119	3	3503
0-24	3461	122	3	3586
05/04/2019				
7-19	2834	110	10	2954
6-22	3486	118	12	3616
6-24	3636	119	12	3767
0-24	3708	121	12	3841
Average				
7-19	2565	90	5	2660
6-22	3135	99	5	3239
6-24	3226	99	5	3330
0-24	3317	101	5	3423

Total Vehicle Class Distribution



Warrington ATC D, Poplars Avenue

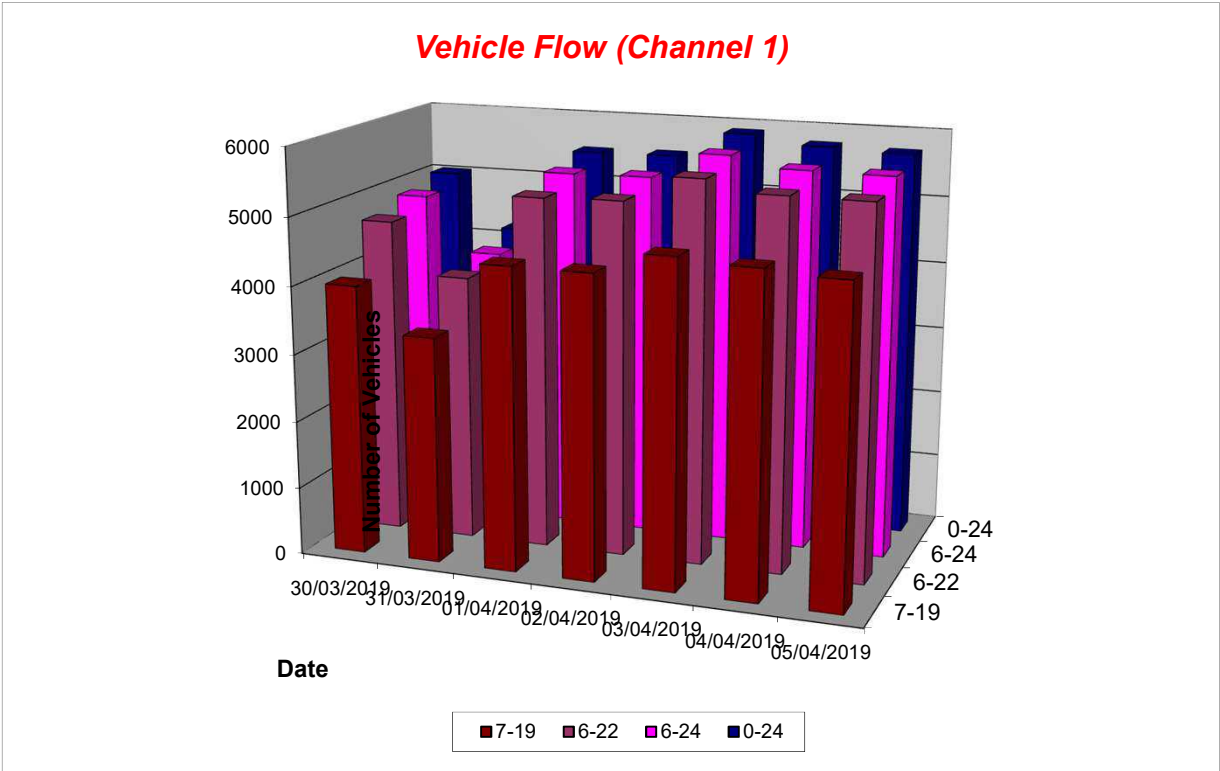
Produced by Road Data Services Ltd.

Channel 1 - Northbound

Vehicle Flow

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday	5 Day Ave	7 Day Ave
1	36	51	21	20	14	26	18	20	27
2	23	32	7	2	4	9	6	6	12
3	20	0	2	5	2	5	10	5	6
4	16	19	9	10	16	8	4	9	12
5	22	16	13	17	18	20	18	17	18
6	40	32	79	74	73	86	64	75	64
7	74	32	97	98	127	137	128	117	99
8	106	60	259	258	323	280	261	276	221
9	192	84	403	381	423	385	397	398	324
10	278	197	275	317	340	307	334	315	293
11	354	267	260	272	274	298	306	282	290
12	361	337	285	283	295	323	308	299	313
13	422	408	305	281	320	322	313	308	339
14	393	388	348	312	320	343	315	328	346
15	401	388	408	360	383	380	377	382	385
16	361	314	452	452	494	470	439	461	426
17	409	305	517	538	518	549	554	535	484
18	381	321	562	593	639	657	585	607	534
19	336	269	388	409	444	390	449	416	384
20	280	234	285	306	334	262	319	301	289
21	213	213	203	224	215	204	218	213	213
22	139	131	158	154	175	154	152	159	152
23	97	76	116	101	105	95	99	103	98
24	75	43	39	39	39	59	50	45	49
7-19	3994	3338	4462	4456	4773	4704	4638	4607	4338
6-22	4700	3948	5205	5238	5624	5461	5455	5397	5090
6-24	4872	4067	5360	5378	5768	5615	5604	5545	5238
0-24	5029	4217	5491	5506	5895	5769	5724	5677	5376



Warrington ATC D, Poplars Avenue

Produced by Road Data Services Ltd.

Channel 1 - Northbound

Average Speed

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	24.9	23.4	26.0	25.4	25.2	24.1	24.5
2	25.6	26.0	28.1	30.5	25.7	27.7	26.9
3	25.0	-	32.2	22.3	24.9	25.1	24.3
4	23.9	24.4	25.0	25.3	26.8	25.9	24.1
5	22.4	25.4	24.4	22.1	24.9	25.8	25.8
6	23.4	24.9	23.1	23.5	24.2	23.8	24.2
7	25.6	24.4	23.7	22.6	22.6	24.1	23.9
8	24.9	24.7	21.5	21.7	21.5	22.4	22.1
9	24.0	23.4	22.0	22.1	20.9	21.9	21.8
10	22.1	24.1	22.7	23.0	21.8	22.7	21.9
11	22.1	24.7	22.4	22.3	21.8	22.2	21.7
12	21.9	23.6	21.0	22.9	22.2	22.4	21.4
13	21.9	22.9	23.1	22.8	21.9	21.9	22.7
14	22.1	23.0	21.8	21.8	21.7	21.6	22.7
15	22.1	22.3	22.1	22.1	21.5	22.3	21.2
16	22.5	22.9	22.3	21.3	21.1	21.1	21.8
17	22.7	23.0	21.9	21.4	22.4	21.3	21.7
18	22.4	23.0	21.6	21.8	20.8	21.8	21.6
19	22.6	23.5	22.5	21.1	21.9	22.3	21.8
20	22.8	22.9	23.2	22.4	22.9	22.0	22.8
21	23.2	23.5	23.7	22.9	23.3	22.7	23.3
22	23.9	24.7	23.8	23.8	24.0	24.4	23.6
23	24.6	24.0	24.2	23.9	23.8	24.0	24.4
24	24.3	24.4	23.7	23.2	25.7	23.9	24.2

10-12	22.0	24.1	21.7	22.6	22.0	22.3	21.6
14-16	22.3	22.5	22.2	21.6	21.2	21.6	21.5
0-24	22.7	23.4	22.4	22.1	21.9	22.2	22.2

Average	22.4
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Channel 1 - Northbound

85th Percentile

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	29.8	27.5	28.8	29.9	29.6	28.1	28.5
2	29.4	30.7	31.8	31.6	29.7	30.9	29.1
3	28.9	-	36.7	26.6	26.8	27.2	27.6
4	27.2	27.3	29.0	28.4	29.6	29.3	29.0
5	27.3	28.9	27.5	27.7	31.2	32.8	27.5
6	27.8	27.5	28.6	29.0	27.7	28.4	29.5
7	29.4	27.5	27.1	27.4	27.4	28.4	27.8
8	29.4	28.4	26.4	25.3	25.0	26.7	26.1
9	27.5	27.8	25.4	26.1	24.6	25.5	25.6
10	25.7	28.0	27.2	27.0	25.2	26.7	26.0
11	25.8	28.6	26.6	25.7	25.2	26.1	25.8
12	25.1	27.1	25.6	27.5	26.5	26.9	25.8
13	26.5	26.4	27.1	26.8	25.8	26.3	26.7
14	25.9	26.7	25.7	25.9	25.4	25.3	27.2
15	26.2	25.9	26.3	25.8	25.5	25.9	25.4
16	26.5	27.0	25.6	25.1	25.0	25.2	25.5
17	26.7	26.3	25.6	25.3	26.1	25.2	25.5
18	26.6	26.8	25.4	25.7	25.1	25.3	25.6
19	26.1	26.7	26.4	25.5	26.3	25.8	25.7
20	26.5	26.7	27.2	25.9	26.6	26.1	26.6
21	27.3	27.5	27.7	27.3	27.4	26.9	27.2
22	28.3	28.5	28.5	27.8	28.5	28.2	28.1
23	28.7	29.1	28.4	28.4	28.8	27.9	28.5
24	28.6	27.6	27.1	26.9	28.8	28.4	27.3

10-12	25.4	27.8	26.1	26.4	25.6	26.6	25.8
14-16	26.3	26.3	25.9	25.4	25.1	25.7	25.5
0-24	26.8	27.2	26.5	26.2	25.8	26.3	26.3

85th %ile	26.5
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Warrington ATC D, Poplars Avenue

Produced by Road Data Services Ltd.

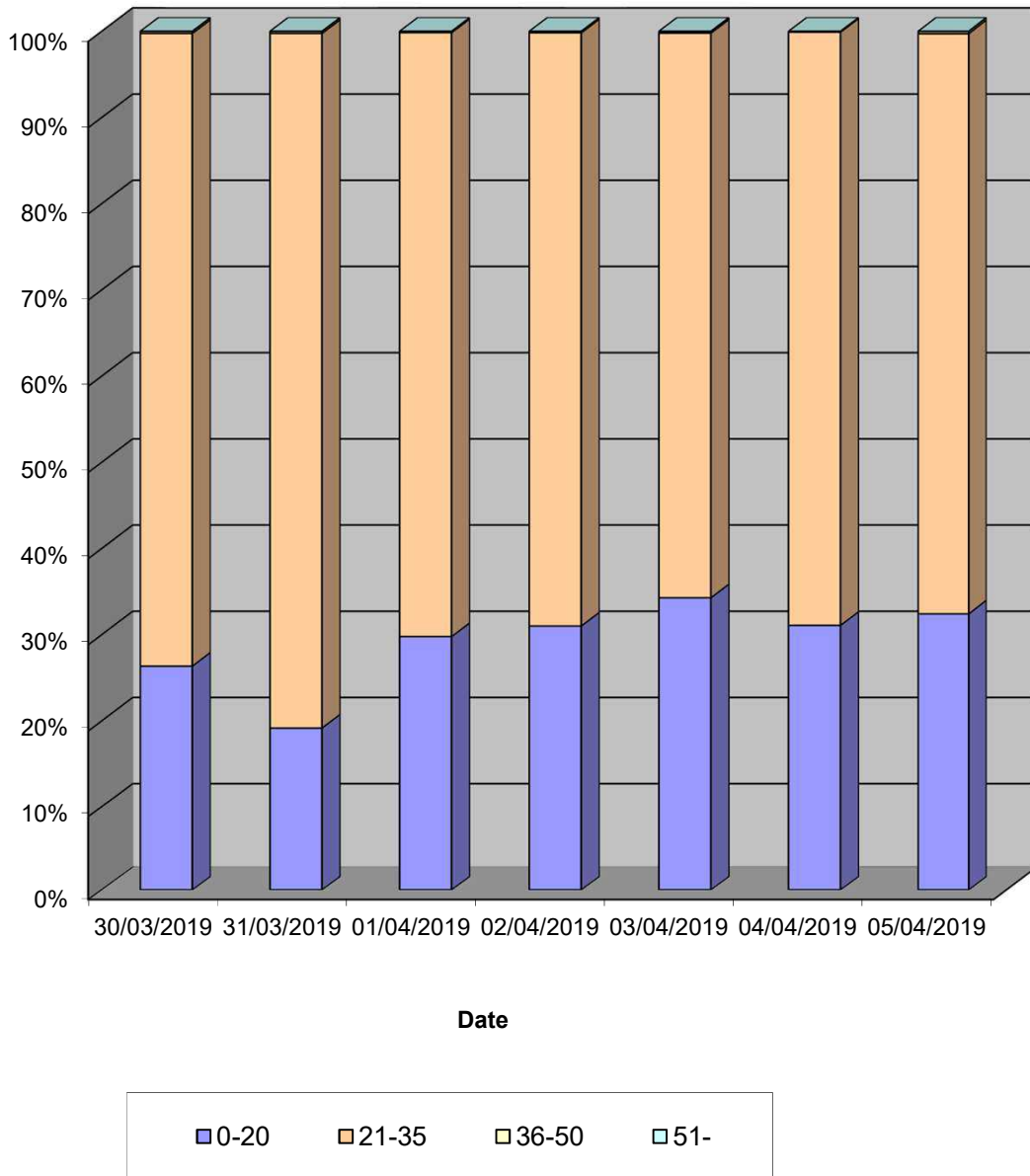
Channel 1 - Northbound

Speed Summary

Week 1

Speed (MPH)	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
0-20	1326	809	1636	1708	2022	1794	1856
21-35	3691	3398	3847	3789	3861	3970	3853
36-50	12	10	8	9	12	5	15
51-	0	0	0	0	0	0	0
TOTAL	5029	4217	5491	5506	5895	5769	5724

Speed Summary (MPH)



Warrington ATC D, Poplars Avenue

Produced by Road Data Services Ltd.

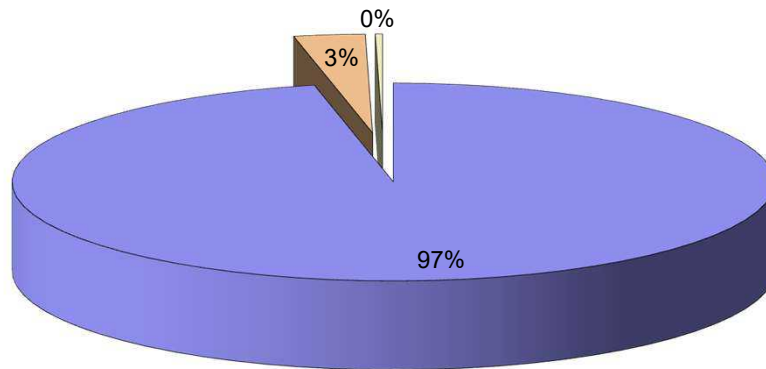
Channel 1 - Northbound

Vehicle Class

Week 1

Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
30/03/2019				
7-19	3858	126	10	3994
6-22	4548	140	12	4700
6-24	4716	144	12	4872
0-24	4870	147	12	5029
31/03/2019				
7-19	3279	49	10	3338
6-22	3885	52	11	3948
6-24	4004	52	11	4067
0-24	4152	54	11	4217
01/04/2019				
7-19	4272	174	16	4462
6-22	4995	193	17	5205
6-24	5144	198	18	5360
0-24	5272	201	18	5491
02/04/2019				
7-19	4284	162	10	4456
6-22	5048	179	11	5238
6-24	5185	182	11	5378
0-24	5309	186	11	5506
03/04/2019				
7-19	4605	146	22	4773
6-22	5437	163	24	5624
6-24	5578	166	24	5768
0-24	5702	169	24	5895
04/04/2019				
7-19	4523	160	21	4704
6-22	5267	172	22	5461
6-24	5419	174	22	5615
0-24	5570	177	22	5769
05/04/2019				
7-19	4445	179	14	4638
6-22	5241	198	16	5455
6-24	5386	201	17	5604
0-24	5505	202	17	5724
Average				
7-19	4181	142	15	4338
6-22	4917	157	16	5090
6-24	5062	160	16	5238
0-24	5197	162	16	5376

Total Vehicle Class Distribution



Warrington ATC D, Poplars Avenue

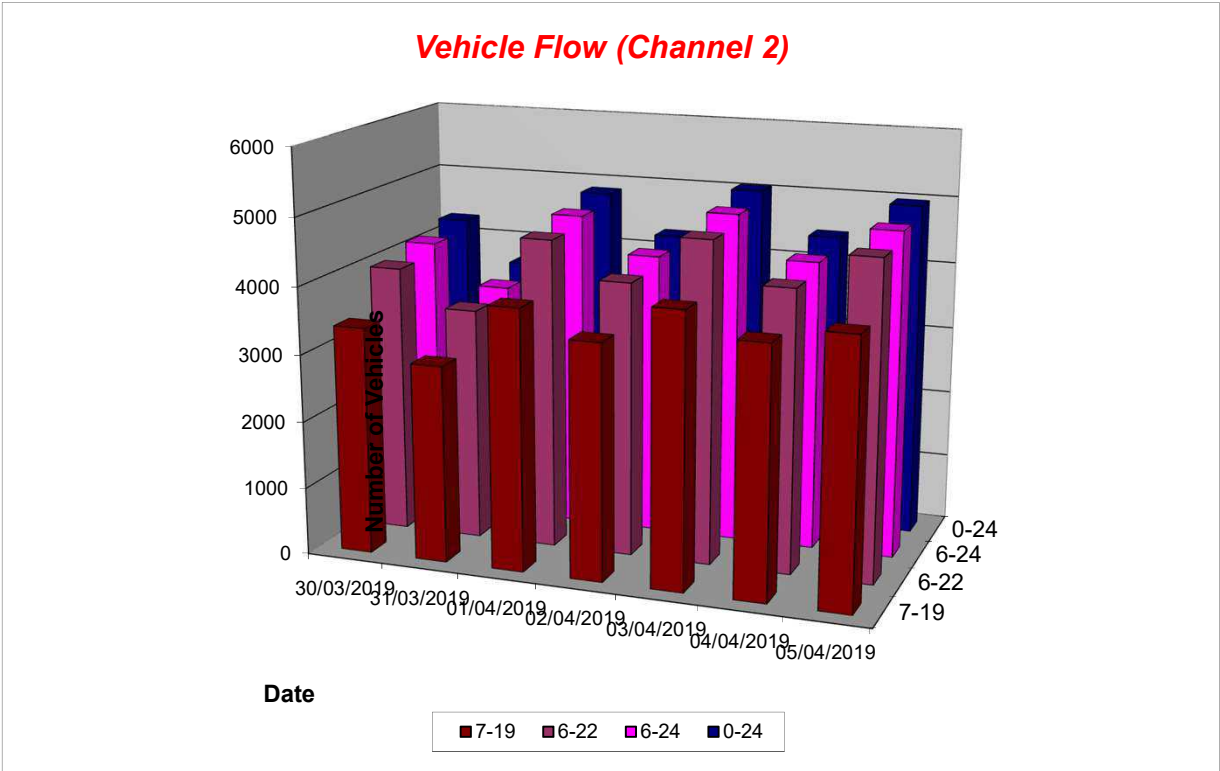
Produced by Road Data Services Ltd.

Channel 2 - Southbound

Vehicle Flow

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday	5 Day Ave	7 Day Ave
1	36	44	15	15	18	22	26	19	25
2	17	18	10	5	8	8	9	8	11
3	15	0	6	9	10	10	7	8	8
4	14	15	11	12	10	7	14	11	12
5	22	23	20	12	20	13	24	18	19
6	40	21	68	14	68	70	62	56	49
7	62	22	159	26	174	161	159	136	109
8	93	52	431	209	412	432	399	377	290
9	164	75	506	538	526	538	491	520	405
10	243	150	261	278	282	268	233	264	245
11	274	207	240	194	246	233	237	230	233
12	317	298	243	168	246	253	259	234	255
13	316	329	257	204	252	282	286	256	275
14	343	358	255	275	289	313	259	278	299
15	352	347	302	290	339	307	355	319	327
16	306	294	369	343	363	324	370	354	338
17	304	295	345	333	378	346	363	353	338
18	370	291	343	359	387	323	352	353	346
19	300	231	322	297	328	76	311	267	266
20	253	240	250	262	228	92	281	223	229
21	183	162	195	172	190	139	214	182	179
22	120	110	123	120	134	91	129	119	118
23	89	58	93	105	92	74	88	90	86
24	57	31	37	33	48	45	48	42	43
7-19	3382	2927	3874	3488	4048	3695	3915	3804	3618
6-22	4000	3461	4601	4068	4774	4178	4698	4464	4254
6-24	4146	3550	4731	4206	4914	4297	4834	4596	4383
0-24	4290	3671	4861	4273	5048	4427	4976	4717	4507



Warrington ATC D, Poplars Avenue

Produced by Road Data Services Ltd.

Channel 2 - Southbound

Average Speed

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	24.9	24.3	26.0	23.4	25.8	26.7	24.9
2	24.6	24.4	25.1	29.6	25.7	25.7	24.8
3	25.8	-	25.6	23.8	23.6	25.4	26.0
4	22.7	23.2	23.9	25.3	24.2	25.1	25.2
5	24.1	24.3	23.7	27.6	24.3	22.6	25.5
6	23.2	25.1	24.2	30.0	24.2	25.1	24.2
7	24.0	25.9	24.9	29.2	24.8	24.7	25.6
8	25.0	25.3	24.0	24.8	23.8	23.8	24.5
9	24.6	25.6	23.1	22.8	22.6	22.9	23.2
10	24.2	25.2	24.2	24.1	23.1	23.8	23.4
11	23.5	24.6	22.2	23.8	22.8	22.7	23.7
12	23.2	24.4	24.1	24.8	23.4	22.8	24.1
13	23.5	23.5	23.9	24.1	23.2	22.3	23.8
14	22.6	23.6	23.4	23.9	23.4	21.9	24.1
15	23.7	23.6	23.3	24.3	23.5	24.4	23.0
16	24.3	24.0	23.8	23.4	22.7	23.4	23.3
17	23.4	23.6	22.6	23.1	23.8	23.1	22.9
18	23.7	23.8	23.3	23.9	22.5	23.5	23.2
19	23.7	24.0	23.0	23.5	23.4	24.0	23.3
20	23.5	24.0	23.6	24.2	24.0	26.6	23.7
21	24.1	24.2	23.3	23.9	23.6	26.9	23.7
22	23.9	24.4	24.2	24.5	24.5	26.9	24.2
23	24.0	24.8	24.7	24.0	23.6	25.5	25.4
24	24.5	24.2	23.4	24.8	24.4	24.6	25.0

10-12	23.4	24.5	23.2	24.2	23.1	22.8	23.9
14-16	24.0	23.8	23.6	23.8	23.1	23.9	23.1
0-24	23.7	24.0	23.5	23.9	23.4	23.6	23.7

Average	23.7
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Channel 2 - Southbound

85th Percentile

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	29.5	27.7	28.7	26.1	29.5	29.8	29.5
2	26.5	29.3	28.3	32.5	29.3	27.9	28.4
3	31.3	-	28.6	27.9	24.8	28.0	28.1
4	27.9	27.4	28.2	32.9	28.5	29.0	30.7
5	27.5	27.7	25.7	34.1	27.2	27.2	29.7
6	29.0	29.4	28.2	35.3	29.3	29.3	28.0
7	27.5	29.8	29.2	34.0	29.1	28.5	29.1
8	29.8	30.3	28.1	29.7	27.8	28.0	28.6
9	29.4	29.2	26.7	26.5	26.4	27.1	27.4
10	28.7	28.5	28.2	28.4	27.0	28.4	28.0
11	27.6	29.0	26.4	28.4	26.4	26.5	28.3
12	27.6	28.2	27.7	29.8	27.1	27.5	28.2
13	27.6	26.4	28.4	28.7	27.4	27.0	28.5
14	27.1	26.7	27.3	28.8	27.5	25.6	28.9
15	27.8	27.6	27.2	28.5	27.6	28.5	27.0
16	28.3	28.3	27.8	27.7	25.8	27.8	27.1
17	27.8	27.9	26.5	27.7	27.9	27.4	27.7
18	28.2	27.7	27.0	27.9	25.8	27.9	27.1
19	28.0	28.4	27.7	27.2	26.8	28.9	26.7
20	27.8	27.9	27.2	27.5	28.0	31.0	27.5
21	28.7	28.0	26.2	27.8	27.4	31.5	28.2
22	28.9	28.8	27.8	28.5	28.5	31.0	28.0
23	27.6	28.9	28.4	28.5	26.5	29.5	29.6
24	29.3	29.6	28.1	28.1	29.2	28.0	30.2

10-12	27.6	28.5	27.6	28.9	27.0	27.2	28.3
14-16	28.1	27.9	27.6	28.2	27.0	28.2	27.1
0-24	28.1	28.2	27.7	28.3	27.4	28.2	28.1

85th %ile	28.0
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Warrington ATC D, Poplars Avenue

Produced by Road Data Services Ltd.

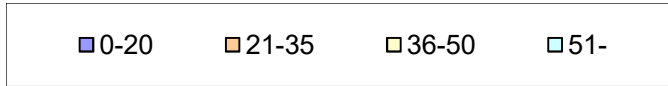
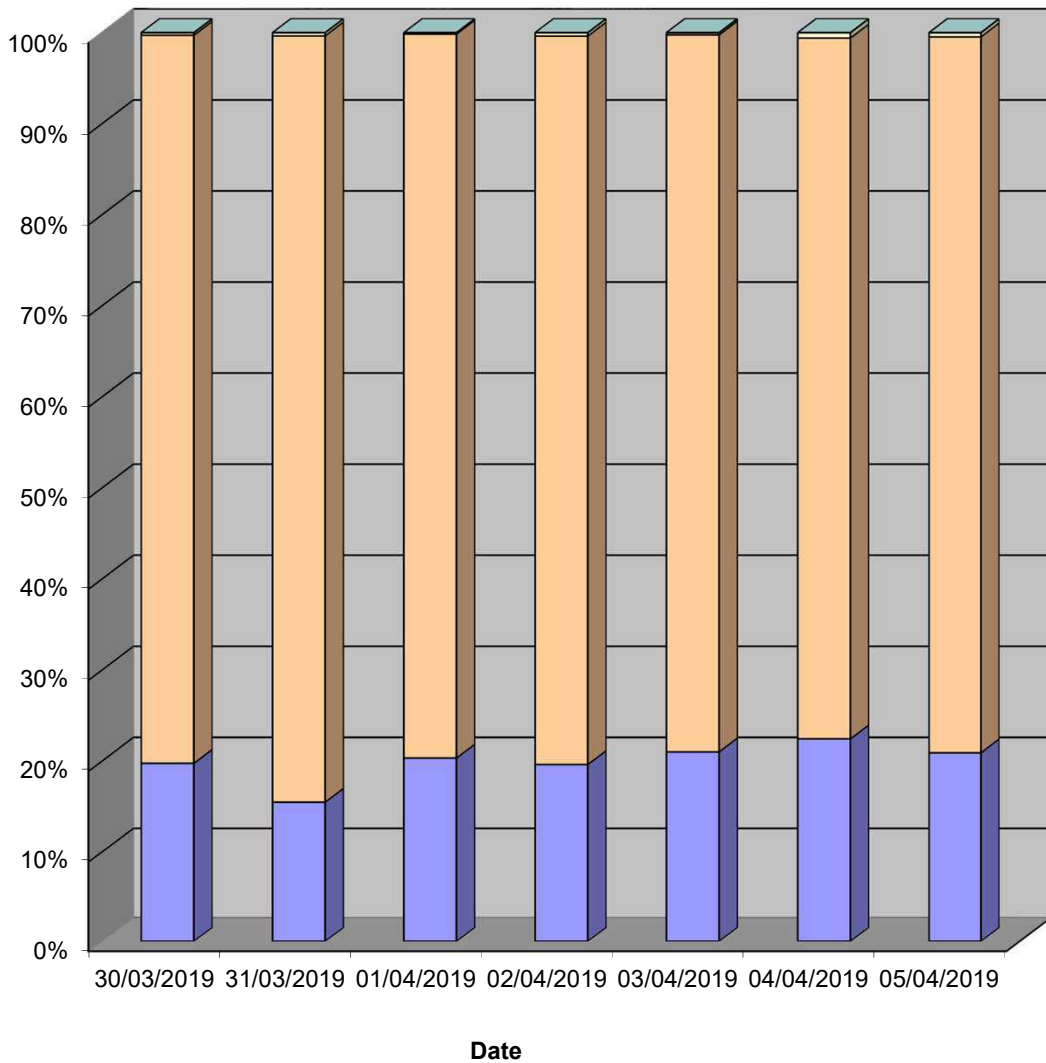
Channel 2 - Southbound

Speed Summary

Week 1

Speed (MPH)	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
0-20	848	569	989	839	1061	994	1041
21-35	3430	3089	3865	3418	3975	3407	3912
36-50	12	13	7	16	12	26	23
51-	0	0	0	0	0	0	0
TOTAL	4290	3671	4861	4273	5048	4427	4976

Speed Summary (MPH)



Warrington ATC D, Poplars Avenue

Produced by Road Data Services Ltd.

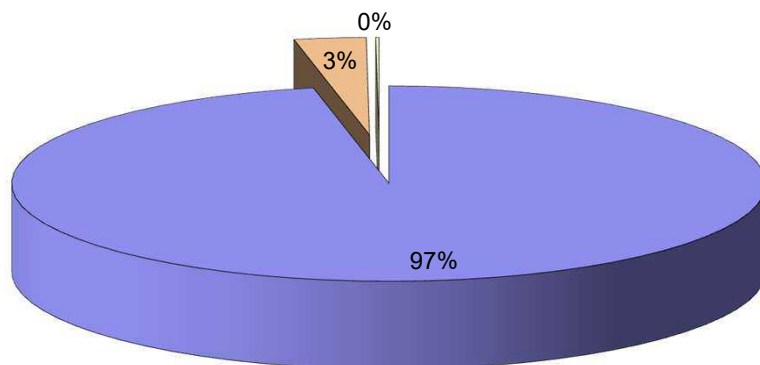
Channel 2 - Southbound

Vehicle Class

Week 1

Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
30/03/2019				
7-19	3274	104	4	3382
6-22	3883	113	4	4000
6-24	4028	114	4	4146
0-24	4168	118	4	4290
31/03/2019				
7-19	2882	41	4	2927
6-22	3412	44	5	3461
6-24	3501	44	5	3550
0-24	3622	44	5	3671
01/04/2019				
7-19	3729	138	7	3874
6-22	4443	151	7	4601
6-24	4571	153	7	4731
0-24	4699	155	7	4861
02/04/2019				
7-19	3342	144	2	3488
6-22	3910	154	4	4068
6-24	4047	155	4	4206
0-24	4110	159	4	4273
03/04/2019				
7-19	3893	149	6	4048
6-22	4606	162	6	4774
6-24	4745	163	6	4914
0-24	4875	166	7	5048
04/04/2019				
7-19	3558	131	6	3695
6-22	4010	161	7	4178
6-24	4127	163	7	4297
0-24	4253	167	7	4427
05/04/2019				
7-19	3767	142	6	3915
6-22	4531	156	11	4698
6-24	4666	157	11	4834
0-24	4805	160	11	4976
Average				
7-19	3492	121	5	3618
6-22	4114	134	6	4254
6-24	4241	136	6	4383
0-24	4362	138	6	4507

Total Vehicle Class Distribution



Warrington ATC E, Grasmere Avenue

Produced by Road Data Services Ltd.

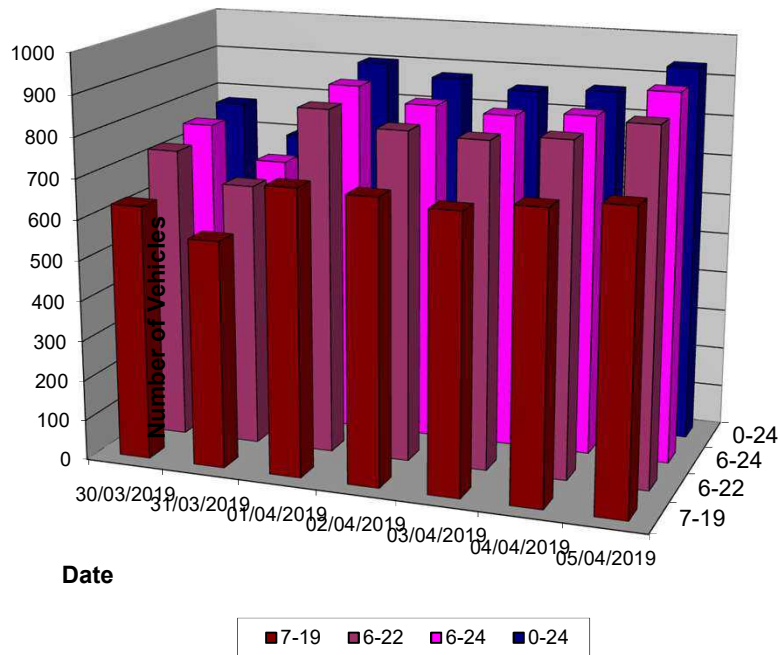
Channel 1 - Westbound

Vehicle Flow

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday	5 Day Ave	7 Day Ave
1	4	9	1	5	2	2	1	2	3
2	2	7	0	5	1	0	1	1	2
3	0	0	2	0	1	2	1	1	1
4	2	4	2	1	0	1	0	1	1
5	4	4	2	5	6	5	4	4	4
6	8	3	17	17	15	14	18	16	13
7	6	4	21	19	21	19	14	19	15
8	25	24	54	38	39	44	42	43	38
9	27	16	60	62	72	59	49	60	49
10	50	27	46	50	47	55	55	51	47
11	58	32	28	38	40	41	45	38	40
12	46	53	55	45	38	49	41	46	47
13	70	63	48	43	64	62	63	56	59
14	62	78	51	60	54	58	60	57	60
15	71	68	56	54	59	60	57	57	61
16	54	57	53	64	54	65	72	62	60
17	60	46	95	77	70	68	83	79	71
18	59	44	91	97	86	86	87	89	79
19	49	55	70	73	62	62	75	68	64
20	36	37	61	43	43	41	57	49	45
21	33	28	29	29	37	28	47	34	33
22	20	21	37	25	22	26	24	27	25
23	16	13	16	15	10	15	28	17	16
24	12	7	7	10	12	4	12	9	9
7-19	631	563	707	701	685	709	729	706	675
6-22	726	653	855	817	808	823	871	835	793
6-24	754	673	878	842	830	842	911	861	819
0-24	774	700	902	875	855	866	936	887	844

Vehicle Flow (Channel 1)



Warrington ATC E, Grasmere Avenue

Produced by Road Data Services Ltd.

Channel 1 - Westbound

Average Speed

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	20.3	18.5	20.4	20.0	21.2	22.4	15.5
2	22.2	17.7	-	14.9	24.3	-	16.2
3	-	-	18.5	-	18.8	22.2	17.6
4	18.4	14.8	18.2	15.1	-	19.6	-
5	16.3	20.1	17.7	15.4	17.4	18.4	18.4
6	19.0	20.8	17.3	15.5	17.2	17.1	18.0
7	16.1	16.0	17.7	17.6	17.8	18.7	18.8
8	15.8	17.2	16.6	16.4	16.0	18.0	16.6
9	16.4	18.3	16.8	17.9	16.8	18.2	17.0
10	15.9	15.1	17.2	17.1	16.9	17.0	15.3
11	16.3	16.1	16.5	16.4	15.5	17.6	16.9
12	17.8	18.6	16.9	15.8	16.8	17.0	15.8
13	15.7	17.8	18.0	16.9	15.8	15.3	17.5
14	16.8	17.7	17.4	16.6	15.6	14.0	16.0
15	17.2	17.6	17.2	16.8	16.9	15.7	16.9
16	17.5	17.0	17.9	16.8	18.5	17.5	18.2
17	17.5	17.0	17.0	17.2	17.8	17.1	17.0
18	18.5	17.5	17.9	18.0	17.5	17.8	17.7
19	16.6	17.7	16.5	17.3	17.0	17.0	17.9
20	17.4	17.5	17.1	17.8	17.0	17.4	18.0
21	17.1	17.4	18.2	16.9	17.5	15.8	18.0
22	18.4	19.0	16.0	17.3	17.1	18.2	17.8
23	16.9	18.2	17.8	17.6	17.8	18.0	18.0
24	18.8	17.3	15.6	16.8	17.8	15.9	18.0

10-12	17.0	17.6	16.8	16.1	16.1	17.3	16.4
14-16	17.3	17.3	17.5	16.8	17.7	16.6	17.6
0-24	17.0	17.5	17.2	17.1	17.0	17.0	17.2

Average	17.1
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Channel 1 - Westbound

85th Percentile

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	22.3	19.6	-	22.4	26.4	27.7	-
2	24.0	21.0	-	18.9	-	-	-
3	-	-	19.6	-	-	25.0	-
4	18.8	17.9	19.6	-	-	-	-
5	21.3	21.6	19.0	17.8	19.3	20.4	19.4
6	20.5	21.2	21.7	19.7	21.3	20.8	20.5
7	19.0	18.0	20.0	20.8	20.1	22.9	22.9
8	20.3	20.7	20.7	19.7	20.0	22.5	20.8
9	19.9	22.1	19.9	21.2	20.3	22.5	20.0
10	19.7	18.7	20.8	20.5	20.4	19.8	19.5
11	19.7	21.1	20.7	20.4	19.7	21.7	20.0
12	20.6	23.0	19.6	19.1	21.4	20.2	19.7
13	19.7	21.0	21.9	20.8	19.5	19.6	22.5
14	19.3	20.4	21.1	20.6	19.6	18.6	20.2
15	20.4	20.0	20.5	20.8	20.7	19.3	21.9
16	20.8	20.5	22.0	19.8	20.1	20.4	21.2
17	20.6	20.5	20.4	20.2	20.9	21.2	21.0
18	20.9	19.7	21.8	21.8	20.7	21.3	21.5
19	20.1	20.8	19.7	21.0	20.2	20.6	20.7
20	21.3	20.7	20.2	21.6	20.7	20.4	21.2
21	20.8	21.4	20.8	20.4	20.7	19.0	21.4
22	21.7	23.0	20.3	19.5	20.3	21.3	20.7
23	18.9	21.3	21.8	20.4	19.8	20.2	20.6
24	21.6	19.9	19.2	20.8	23.2	16.6	20.7

10-12	19.9	22.2	19.9	19.7	19.9	21.3	20.0
14-16	20.4	20.5	21.0	20.0	20.5	20.3	21.4
0-24	20.4	20.7	20.7	20.7	20.5	20.8	20.8

85th %ile	20.7
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Warrington ATC E, Grasmere Avenue

Produced by Road Data Services Ltd.

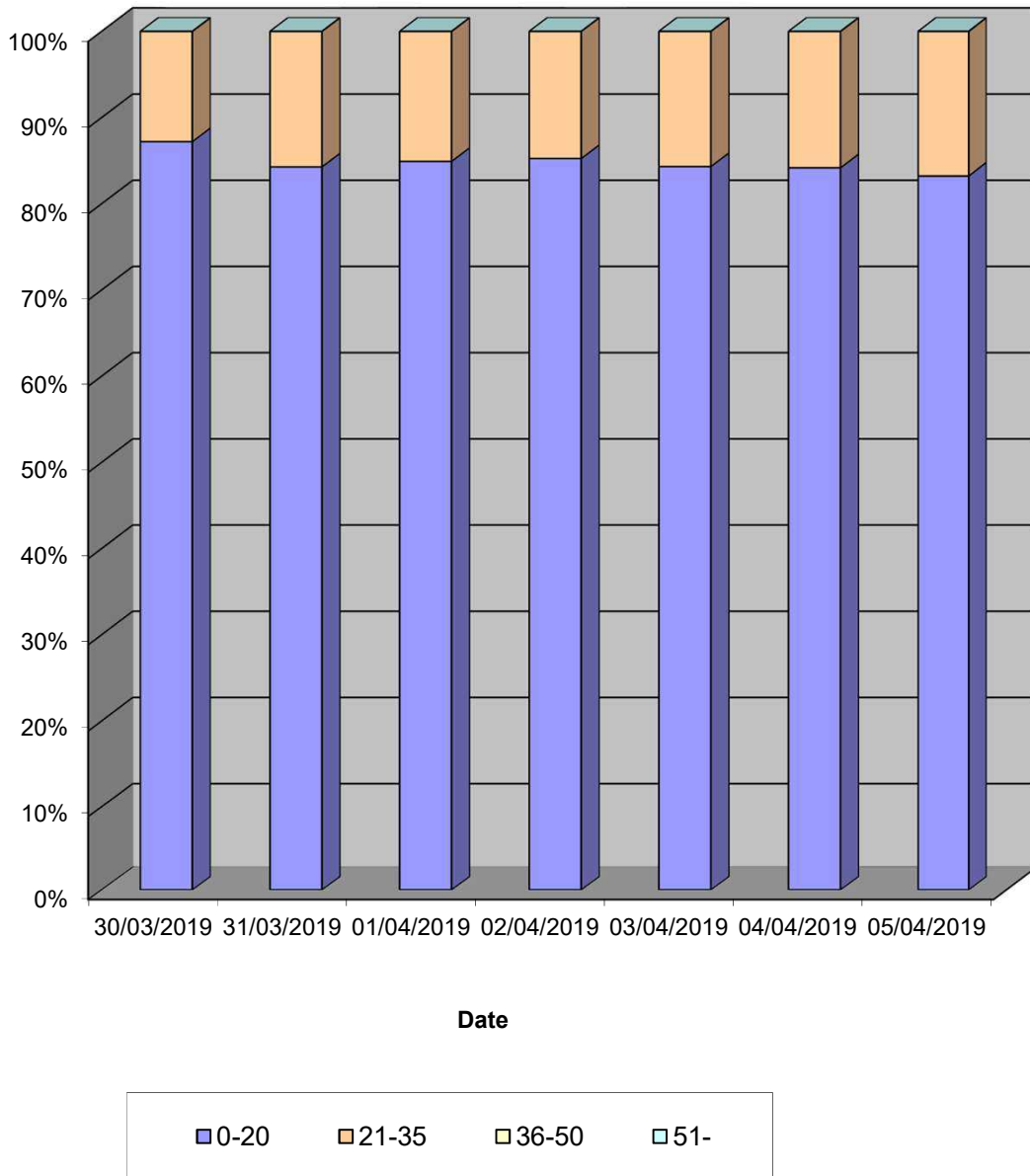
Channel 1 - Westbound

Speed Summary

Week 1

Speed (MPH)	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
0-20	675	590	766	746	721	729	779
21-35	99	110	136	129	134	137	157
36-50	0	0	0	0	0	0	0
51-	0	0	0	0	0	0	0
TOTAL	774	700	902	875	855	866	936

Speed Summary (MPH)

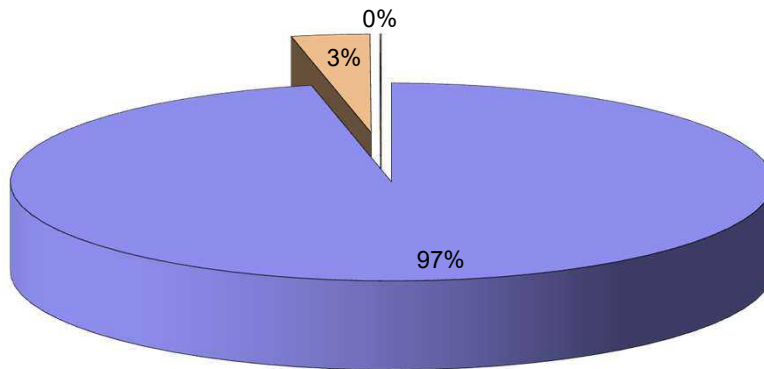


Warrington ATC E, Grasmere Avenue

Produced by Road Data Services Ltd.

Channel 1 - Westbound		Vehicle Class			Week 1
Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13	
30/03/2019					
7-19	626	5	0	631	
6-22	720	6	0	726	
6-24	747	7	0	754	
0-24	767	7	0	774	
31/03/2019					
7-19	553	10	0	563	
6-22	643	10	0	653	
6-24	663	10	0	673	
0-24	689	11	0	700	
01/04/2019					
7-19	677	30	0	707	
6-22	823	32	0	855	
6-24	845	33	0	878	
0-24	867	35	0	902	
02/04/2019					
7-19	671	30	0	701	
6-22	785	32	0	817	
6-24	810	32	0	842	
0-24	841	34	0	875	
03/04/2019					
7-19	656	28	1	685	
6-22	776	31	1	808	
6-24	798	31	1	830	
0-24	822	32	1	855	
04/04/2019					
7-19	671	37	1	709	
6-22	782	40	1	823	
6-24	801	40	1	842	
0-24	825	40	1	866	
05/04/2019					
7-19	694	34	1	729	
6-22	835	35	1	871	
6-24	874	36	1	911	
0-24	898	37	1	936	
Average					
7-19	650	25	0	675	
6-22	766	27	0	793	
6-24	791	27	0	819	
0-24	816	28	0	844	

Total Vehicle Class Distribution



Warrington ATC E, Grasmere Avenue

Produced by Road Data Services Ltd.

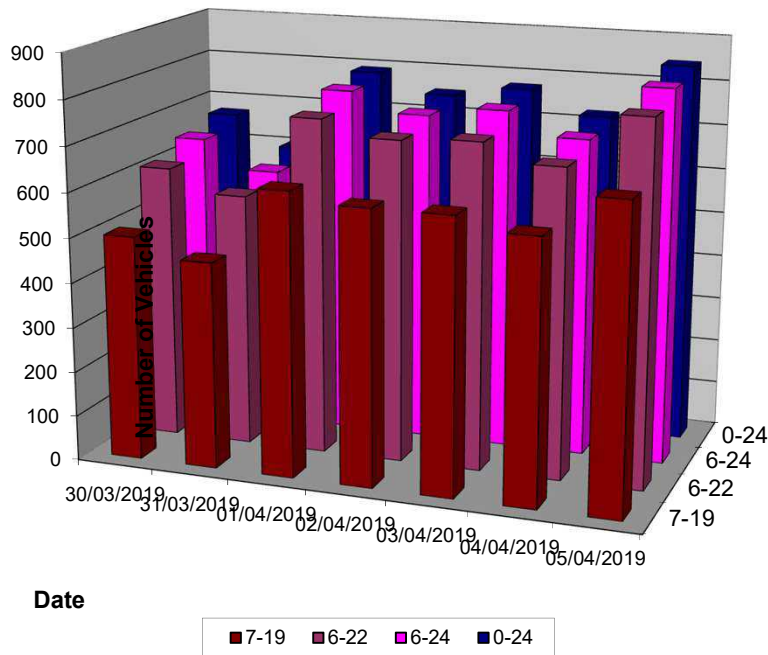
Channel 2 - Eastbound

Vehicle Flow

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday	5 Day Ave	7 Day Ave
1	5	8	1	2	4	2	3	2	4
2	5	2	1	1	2	1	0	1	2
3	3	0	0	0	0	2	0	0	1
4	2	6	3	1	0	1	1	1	2
5	3	1	2	4	2	3	2	3	2
6	7	3	6	6	8	7	12	8	7
7	11	6	15	15	17	18	11	15	13
8	12	10	46	40	38	48	43	43	34
9	21	11	57	59	68	55	60	60	47
10	37	17	50	46	38	48	44	45	40
11	44	34	30	35	43	44	38	38	38
12	48	39	44	44	32	41	45	41	42
13	34	57	40	40	45	38	59	44	45
14	55	54	54	43	55	51	58	52	53
15	59	53	54	49	51	34	70	52	53
16	46	48	58	65	58	49	56	57	54
17	50	45	76	56	65	62	56	63	59
18	54	47	62	63	55	53	81	63	59
19	41	45	59	68	60	57	59	61	56
20	51	44	50	34	45	42	53	45	46
21	30	31	28	27	33	27	37	30	30
22	21	24	26	31	21	17	30	25	24
23	21	13	16	13	21	19	20	18	18
24	11	5	14	8	13	4	8	9	9
7-19	501	460	630	608	608	580	669	619	579
6-22	614	565	749	715	724	684	800	734	693
6-24	646	583	779	736	758	707	828	762	720
0-24	671	603	792	750	774	723	846	777	737

Vehicle Flow (Channel 2)



Warrington ATC E, Grasmere Avenue

Produced by Road Data Services Ltd.

Channel 2 - Eastbound

Average Speed

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	16.8	16.9	15.7	11.6	16.0	20.3	19.0
2	18.0	20.7	19.9	12.9	15.4	6.6	-
3	14.0	-	-	-	-	15.8	-
4	14.5	16.5	14.9	22.7	-	24.8	24.2
5	20.1	20.5	21.5	16.6	16.7	17.8	19.6
6	18.6	18.4	18.6	19.5	19.5	17.8	17.0
7	18.1	17.3	18.5	16.4	18.6	18.1	17.4
8	20.7	18.7	17.5	17.8	17.8	18.3	17.1
9	17.6	16.7	18.2	18.1	18.6	18.3	18.2
10	17.6	18.4	17.3	17.2	16.4	18.2	15.7
11	15.6	17.0	16.1	16.6	16.1	18.0	17.0
12	18.2	17.7	17.9	17.8	16.8	17.5	17.4
13	17.2	17.9	16.8	17.6	16.2	16.9	17.2
14	17.2	19.3	17.6	17.0	15.9	18.7	17.1
15	18.9	17.6	17.2	17.5	18.4	18.3	18.4
16	18.6	17.6	17.8	17.0	18.2	18.6	18.3
17	17.6	17.5	17.1	17.9	17.5	16.9	18.1
18	19.2	18.8	17.4	18.7	17.3	18.3	17.7
19	17.4	18.0	16.8	17.8	17.8	17.1	17.9
20	17.9	18.2	16.6	18.4	18.7	18.3	18.3
21	18.3	17.9	16.8	17.5	18.1	18.4	18.5
22	16.8	17.6	16.8	17.2	15.4	15.6	18.1
23	17.6	19.6	16.4	18.0	18.6	16.8	16.0
24	18.4	18.4	18.7	16.4	16.8	16.2	17.7

10-12	17.0	17.4	17.2	17.3	16.4	17.7	17.2
14-16	18.8	17.6	17.5	17.2	18.3	18.5	18.4
0-24	17.9	18.0	17.3	17.6	17.5	17.8	17.7

Average	17.7
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Channel 2 - Eastbound

85th Percentile

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	20.8	19.1	-	13.1	18.2	20.6	21.1
2	20.4	22.5	-	-	15.9	-	-
3	19.2	-	-	-	-	16.7	-
4	20.5	20.7	19.3	-	-	-	-
5	23.7	-	23.0	19.2	16.8	18.9	19.9
6	21.9	23.6	21.8	21.3	20.6	20.3	21.1
7	21.8	21.0	22.1	20.1	21.0	21.3	22.6
8	23.0	20.3	21.7	22.2	22.2	22.1	21.1
9	20.6	22.2	21.6	22.2	22.3	22.6	21.3
10	21.7	23.4	20.7	21.8	20.5	22.4	20.1
11	19.3	20.8	20.4	19.9	20.4	21.2	21.1
12	21.3	20.6	21.8	20.7	20.8	20.7	22.6
13	20.8	22.8	20.4	20.1	20.2	20.5	20.5
14	20.9	21.8	21.1	22.3	20.2	22.9	20.8
15	22.4	22.3	20.4	21.3	21.8	22.5	21.5
16	22.6	21.1	22.5	20.5	21.8	21.7	21.9
17	20.3	21.3	20.9	20.3	20.9	20.1	21.3
18	21.7	23.0	20.7	22.4	21.2	21.5	22.2
19	20.5	21.1	20.9	21.6	21.1	20.2	21.5
20	21.9	20.7	21.4	21.1	21.9	22.0	21.9
21	21.1	22.7	22.2	21.4	22.0	20.6	21.9
22	20.5	20.6	20.8	20.1	20.8	19.4	20.8
23	20.8	22.4	20.9	22.8	23.3	20.0	19.3
24	23.7	21.3	24.0	18.7	21.2	19.8	21.4

10-12	20.7	20.7	21.1	20.6	20.6	20.9	21.6
14-16	22.5	21.6	21.9	21.3	21.9	22.1	21.8
0-24	21.3	21.9	21.3	21.5	21.1	21.4	21.5

85th %ile	21.4
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Warrington ATC E, Grasmere Avenue

Produced by Road Data Services Ltd.

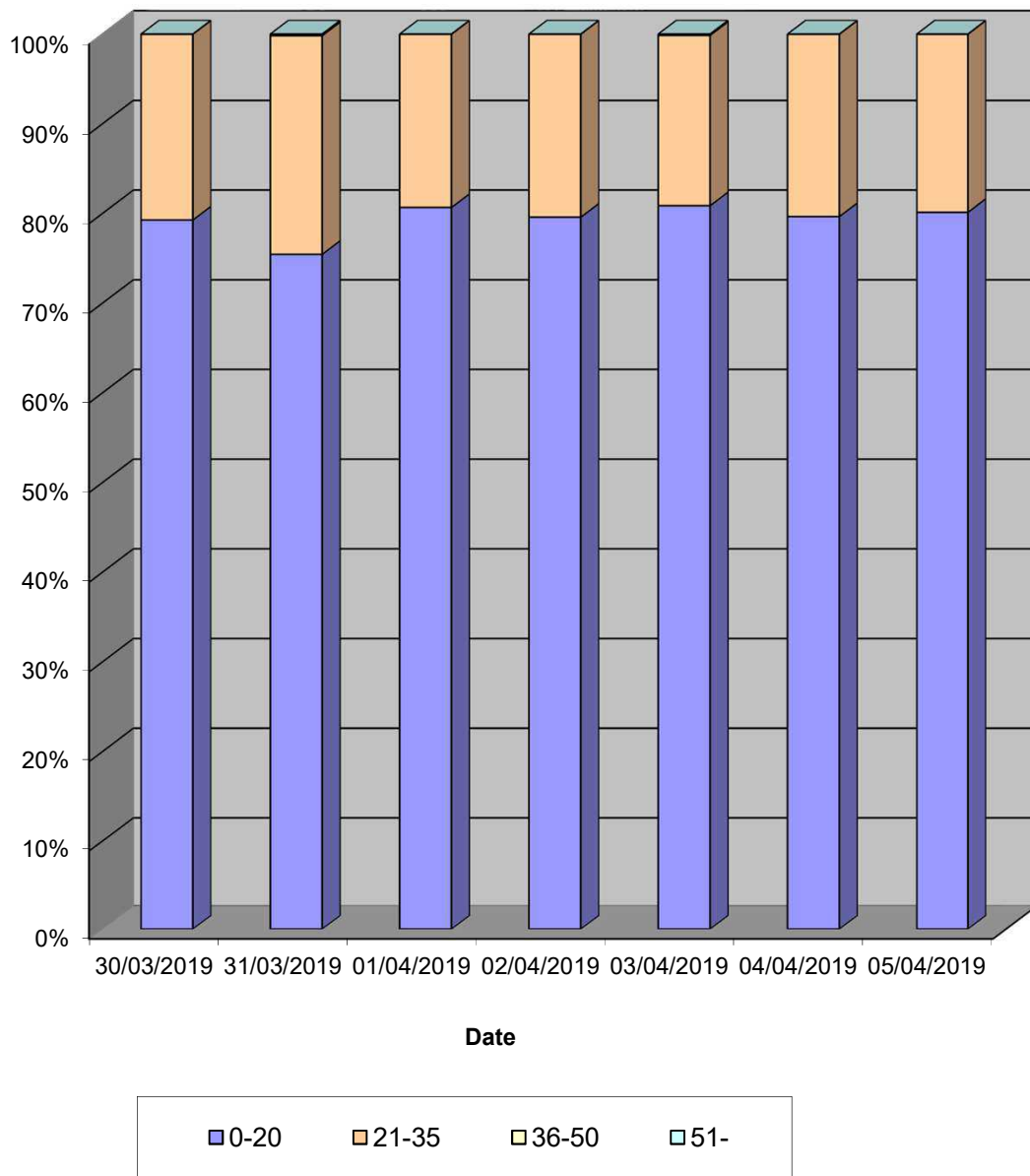
Channel 2 - Eastbound

Speed Summary

Week 1

Speed (MPH)	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
0-20	532	455	639	597	626	576	678
21-35	139	147	153	153	147	147	168
36-50	0	1	0	0	1	0	0
51-	0	0	0	0	0	0	0
TOTAL	671	603	792	750	774	723	846

Speed Summary (MPH)

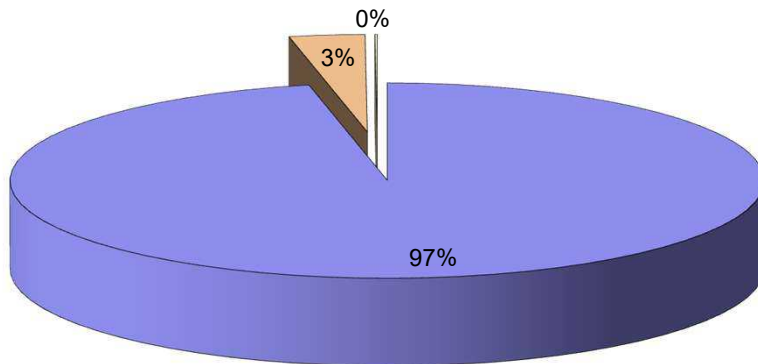


Warrington ATC E, Grasmere Avenue

Produced by Road Data Services Ltd.

Channel 2 - Eastbound		Vehicle Class			Week 1
Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13	
30/03/2019					
7-19	492	8	1	501	
6-22	603	10	1	614	
6-24	634	11	1	646	
0-24	659	11	1	671	
31/03/2019					
7-19	451	9	0	460	
6-22	555	10	0	565	
6-24	572	11	0	583	
0-24	592	11	0	603	
01/04/2019					
7-19	601	29	0	630	
6-22	718	31	0	749	
6-24	746	33	0	779	
0-24	758	34	0	792	
02/04/2019					
7-19	584	23	1	608	
6-22	689	25	1	715	
6-24	709	26	1	736	
0-24	722	27	1	750	
03/04/2019					
7-19	581	27	0	608	
6-22	694	30	0	724	
6-24	728	30	0	758	
0-24	743	31	0	774	
04/04/2019					
7-19	549	30	1	580	
6-22	652	31	1	684	
6-24	675	31	1	707	
0-24	691	31	1	723	
05/04/2019					
7-19	648	20	1	669	
6-22	777	22	1	800	
6-24	804	22	2	828	
0-24	822	22	2	846	
Average					
7-19	558	21	1	579	
6-22	670	23	1	693	
6-24	695	23	1	720	
0-24	712	24	1	737	

Total Vehicle Class Distribution



Warrington ATC F, Poplars Avenue

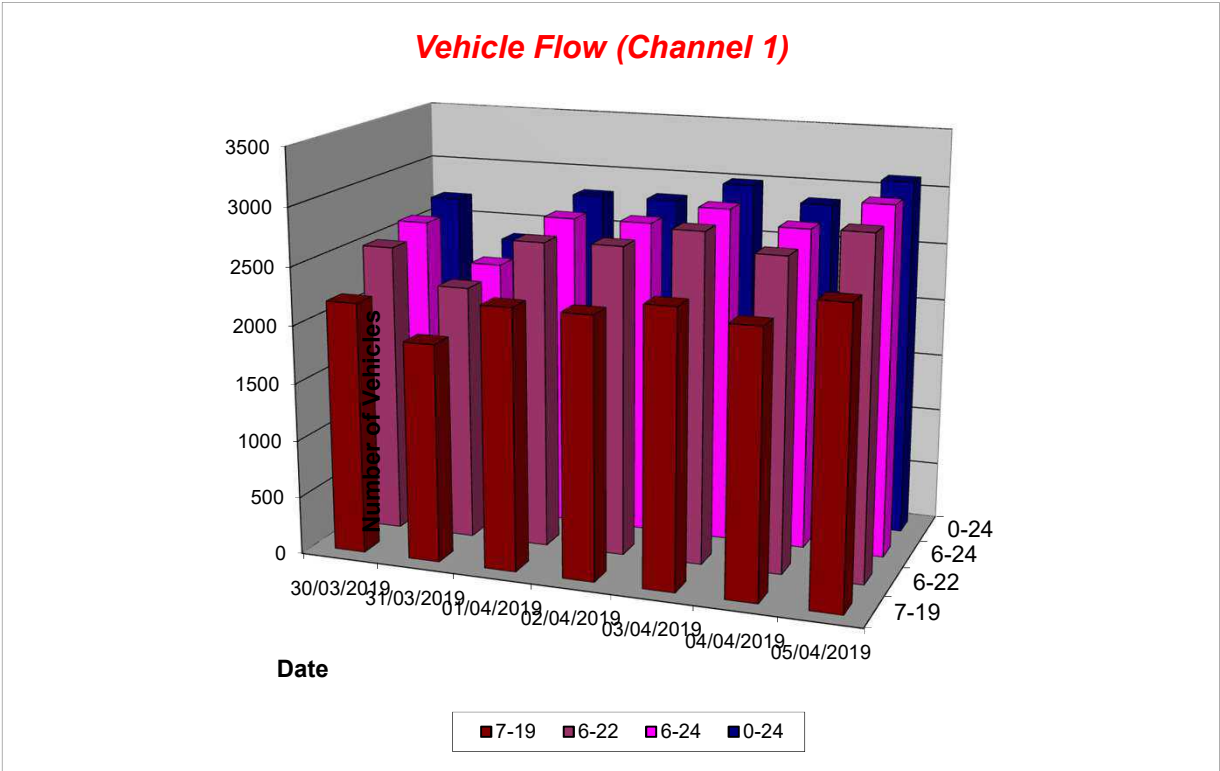
Produced by Road Data Services Ltd.

Channel 1 - Westbound

Vehicle Flow

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday	5 Day Ave	7 Day Ave
1	20	24	12	14	14	12	12	13	15
2	14	15	5	2	4	4	5	4	7
3	8	0	1	4	2	3	2	2	3
4	9	8	7	6	5	3	3	5	6
5	11	18	7	14	16	13	11	12	13
6	30	17	42	35	43	44	37	40	35
7	32	24	58	62	76	73	78	69	58
8	67	45	143	140	129	126	130	134	111
9	115	57	183	187	174	146	163	171	146
10	162	110	136	142	178	146	172	155	149
11	180	147	134	142	135	174	170	151	155
12	207	207	143	144	156	175	172	158	172
13	214	248	170	143	156	147	172	158	179
14	232	228	179	168	185	162	239	187	199
15	233	220	186	155	195	169	189	179	192
16	194	189	222	242	246	213	282	241	227
17	208	151	300	275	276	277	291	284	254
18	195	164	276	301	331	325	284	303	268
19	178	127	190	221	224	226	266	225	205
20	129	128	160	160	172	149	146	157	149
21	100	102	101	115	124	116	98	111	108
22	73	70	80	82	95	77	85	84	80
23	48	37	52	49	36	55	61	51	48
24	41	22	24	15	22	32	38	26	28
7-19	2185	1893	2262	2260	2385	2286	2530	2345	2257
6-22	2519	2217	2661	2679	2852	2701	2937	2766	2652
6-24	2608	2276	2737	2743	2910	2788	3036	2843	2728
0-24	2700	2358	2811	2818	2994	2867	3106	2919	2808



Warrington ATC F, Poplars Avenue

Produced by Road Data Services Ltd.

Channel 1 - Westbound

Average Speed

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	28.4	26.6	28.5	30.0	27.7	27.6	28.1
2	26.9	28.5	30.5	23.6	26.7	23.8	25.8
3	29.4	-	27.4	27.8	30.5	24.9	25.5
4	22.6	30.5	31.9	31.2	28.1	26.3	26.9
5	27.8	30.0	28.7	26.1	29.8	25.7	28.3
6	28.1	28.4	27.2	29.1	28.6	29.4	26.7
7	31.2	28.7	29.1	27.9	28.9	28.8	29.8
8	30.0	27.9	28.0	28.2	28.3	28.9	28.7
9	29.2	29.3	27.5	27.7	26.9	27.9	28.4
10	27.8	28.6	28.1	27.2	26.9	27.5	26.6
11	27.4	28.6	27.1	27.2	26.1	27.8	26.7
12	28.3	29.2	27.4	27.0	27.0	27.6	28.4
13	27.7	28.7	27.6	27.5	27.1	27.4	28.3
14	27.7	27.9	27.4	27.2	27.0	27.0	28.3
15	27.8	28.5	27.1	28.3	26.8	27.0	27.2
16	28.4	28.7	26.7	26.9	26.3	27.1	28.2
17	27.9	29.2	28.2	27.7	27.9	26.6	28.9
18	28.0	28.8	28.1	27.4	27.6	27.9	28.5
19	28.2	28.3	27.8	28.9	28.4	27.5	26.7
20	27.5	28.8	28.7	28.0	27.7	28.3	27.2
21	27.2	28.8	27.4	27.2	28.2	28.3	27.9
22	27.1	27.4	28.1	28.5	28.2	28.0	27.7
23	27.7	28.7	29.1	29.1	28.5	27.0	28.4
24	28.8	28.1	26.4	26.8	25.1	27.5	27.3

10-12	27.9	29.0	27.3	27.1	26.6	27.7	27.6
14-16	28.1	28.6	26.9	27.4	26.5	27.1	27.8
0-24	28.0	28.6	27.7	27.7	27.4	27.6	27.9

Average	27.8
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Channel 1 - Westbound

85th Percentile

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	31.3	31.0	32.4	33.5	33.0	30.2	30.6
2	32.4	32.1	32.6	28.0	29.3	24.7	28.4
3	31.7	-	-	32.8	32.7	26.3	27.2
4	28.2	33.6	35.2	33.6	30.9	28.7	29.3
5	32.4	33.2	31.7	32.0	31.6	32.4	32.5
6	32.0	32.8	33.2	33.9	34.4	34.7	32.0
7	35.5	32.3	33.4	32.2	32.8	33.7	34.7
8	34.4	33.4	32.9	32.0	32.0	33.1	33.1
9	33.5	35.2	31.9	31.3	32.3	32.3	33.1
10	31.8	32.7	32.4	31.6	30.6	31.3	30.0
11	31.7	32.7	31.2	31.1	30.0	32.5	30.7
12	32.6	33.3	30.9	30.9	31.4	31.0	32.8
13	31.1	33.0	31.5	31.0	32.1	30.6	32.1
14	31.7	31.8	31.3	30.9	30.5	31.4	32.4
15	31.7	32.6	30.7	32.1	30.4	31.0	31.0
16	32.3	33.5	30.3	30.7	30.6	31.2	32.6
17	31.8	33.3	31.9	31.3	32.6	30.9	32.9
18	32.5	32.4	32.5	31.2	31.3	31.4	32.5
19	32.3	31.7	31.8	32.7	32.5	31.9	30.5
20	31.0	32.5	32.3	32.5	31.2	32.3	30.7
21	31.9	33.3	31.6	31.1	32.7	33.3	32.0
22	31.2	30.6	32.1	32.4	33.1	32.0	31.6
23	30.9	32.4	33.6	33.4	31.6	31.5	32.3
24	35.1	33.1	29.4	32.2	29.6	32.0	30.9

10-12	32.3	32.9	31.0	30.9	30.3	31.8	31.7
14-16	31.8	32.9	30.5	31.6	30.5	31.2	31.8
0-24	32.2	32.7	31.9	31.7	31.7	31.9	31.9

85th %ile	32.0
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Warrington ATC F, Poplars Avenue

Produced by Road Data Services Ltd.

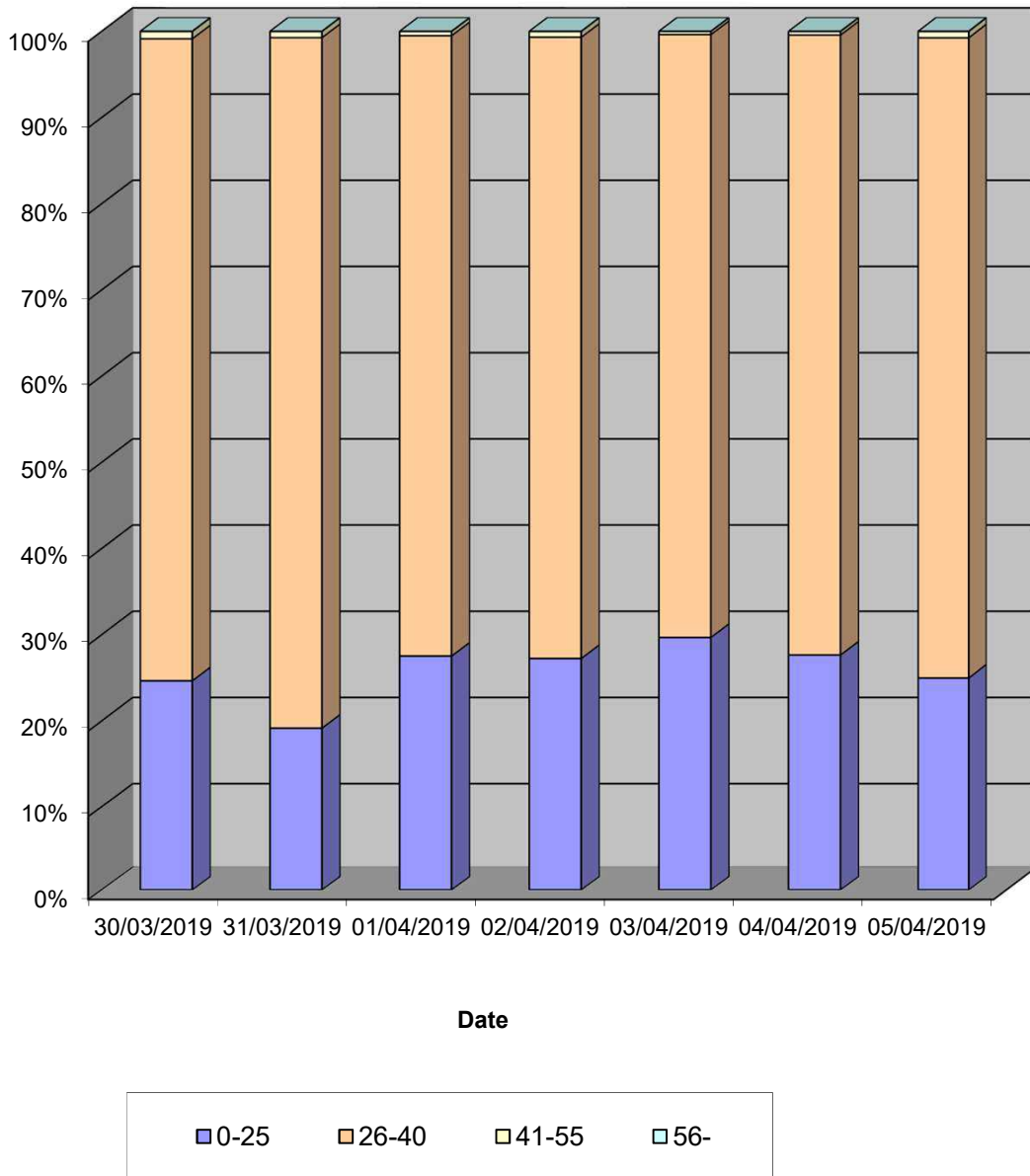
Channel 1 - Westbound

Speed Summary

Week 1

Speed (MPH)	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
0-25	666	452	774	768	889	793	776
26-40	2011	1889	2023	2031	2094	2062	2307
41-55	23	17	14	19	11	12	23
56-	0	0	0	0	0	0	0
TOTAL	2700	2358	2811	2818	2994	2867	3106

Speed Summary (MPH)

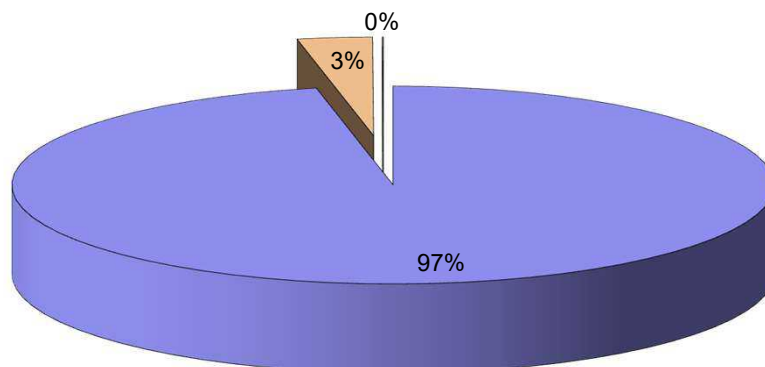


Warrington ATC F, Poplars Avenue

Produced by Road Data Services Ltd.

Channel 1 - Westbound		Vehicle Class			Week 1
Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13	
30/03/2019					
7-19	2115	66	4	2185	
6-22	2444	71	4	2519	
6-24	2532	72	4	2608	
0-24	2624	72	4	2700	
31/03/2019					
7-19	1860	33	0	1893	
6-22	2183	34	0	2217	
6-24	2242	34	0	2276	
0-24	2324	34	0	2358	
01/04/2019					
7-19	2163	99	0	2262	
6-22	2552	109	0	2661	
6-24	2627	110	0	2737	
0-24	2699	112	0	2811	
02/04/2019					
7-19	2169	91	0	2260	
6-22	2581	98	0	2679	
6-24	2644	99	0	2743	
0-24	2718	100	0	2818	
03/04/2019					
7-19	2290	92	3	2385	
6-22	2751	98	3	2852	
6-24	2807	100	3	2910	
0-24	2888	103	3	2994	
04/04/2019					
7-19	2190	95	1	2286	
6-22	2598	102	1	2701	
6-24	2682	105	1	2788	
0-24	2758	108	1	2867	
05/04/2019					
7-19	2444	86	0	2530	
6-22	2843	94	0	2937	
6-24	2941	95	0	3036	
0-24	3009	96	1	3106	
Average					
7-19	2176	80	1	2257	
6-22	2565	87	1	2652	
6-24	2639	88	1	2728	
0-24	2717	89	1	2808	

Total Vehicle Class Distribution



Warrington ATC F, Poplars Avenue

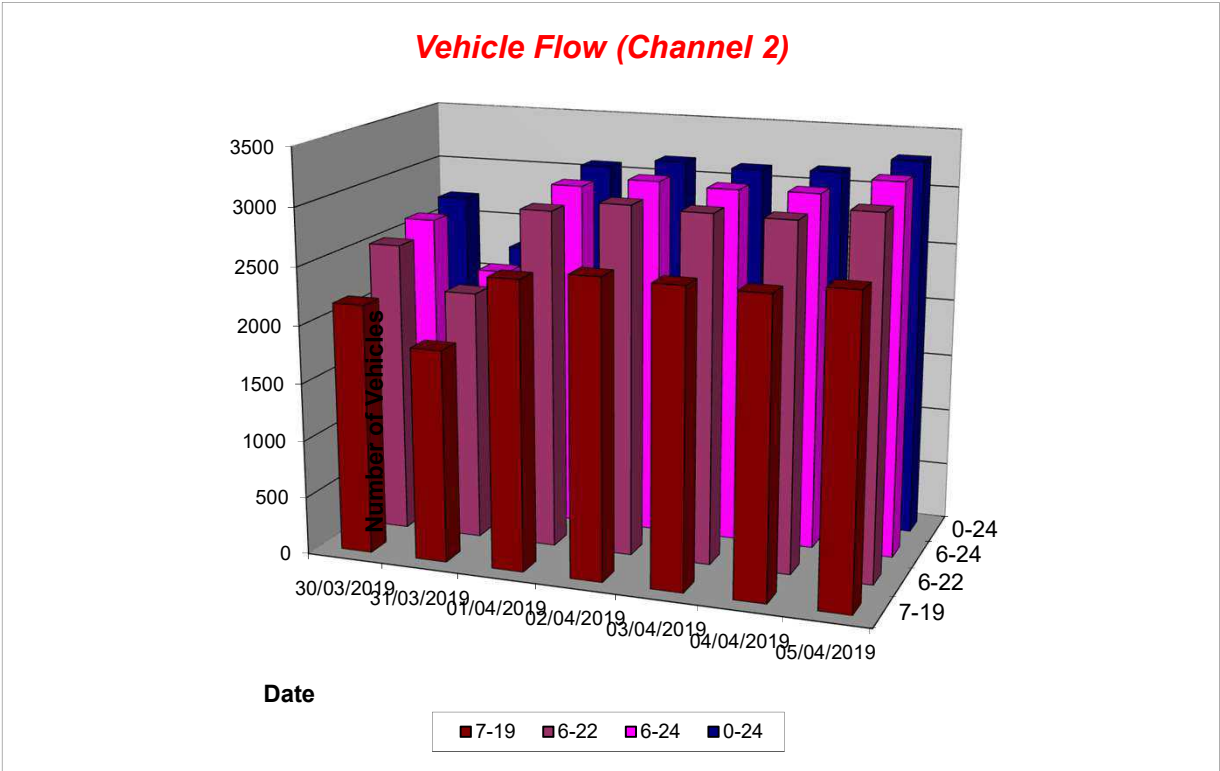
Produced by Road Data Services Ltd.

Channel 2 - Eastbound

Vehicle Flow

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday	5 Day Ave	7 Day Ave
1	17	20	8	7	11	17	16	12	14
2	13	16	7	4	4	4	4	5	7
3	9	0	4	8	3	4	3	4	4
4	10	12	7	6	7	5	6	6	8
5	7	11	4	3	3	4	11	5	6
6	19	10	27	27	27	30	18	26	23
7	33	21	90	105	95	97	75	92	74
8	54	28	274	257	253	284	237	261	198
9	82	49	326	334	348	329	315	330	255
10	153	101	172	176	172	176	152	170	157
11	179	135	130	159	137	117	144	137	143
12	197	183	162	159	158	172	168	164	171
13	197	209	161	177	169	173	225	181	187
14	236	252	159	168	180	164	190	172	193
15	226	201	205	216	213	215	218	213	213
16	218	206	247	231	217	223	236	231	225
17	215	162	216	227	265	238	251	239	225
18	222	171	222	268	233	235	260	244	230
19	189	146	222	199	210	220	235	217	203
20	139	134	137	161	148	145	176	153	149
21	122	102	132	107	114	127	123	121	118
22	75	70	73	79	88	76	94	82	79
23	60	30	63	60	48	72	90	67	60
24	34	15	29	20	27	22	37	27	26
7-19	2168	1843	2496	2571	2555	2546	2631	2560	2401
6-22	2537	2170	2928	3023	3000	2991	3099	3008	2821
6-24	2631	2215	3020	3103	3075	3085	3226	3102	2908
0-24	2706	2284	3077	3158	3130	3149	3284	3160	2970



Warrington ATC F, Poplars Avenue

Produced by Road Data Services Ltd.

Channel 2 - Eastbound

Average Speed

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	30.1	27.8	29.1	25.4	27.0	28.3	25.5
2	26.2	29.5	27.9	31.6	29.7	30.1	29.6
3	27.6	-	29.7	31.7	28.7	25.7	23.3
4	27.3	28.7	28.7	28.1	30.6	25.4	31.5
5	28.7	28.5	28.5	27.9	29.4	27.7	32.4
6	27.9	27.0	29.1	28.8	28.0	28.3	31.0
7	30.2	27.0	28.7	29.0	30.2	29.8	30.2
8	30.1	29.8	28.3	28.2	28.3	28.9	29.1
9	29.4	30.0	27.4	26.9	26.8	27.9	27.4
10	28.3	28.6	28.0	27.6	27.1	28.3	27.0
11	28.3	28.4	26.8	27.6	27.5	27.6	27.3
12	28.4	28.5	27.9	26.4	27.6	27.0	28.5
13	28.5	28.2	27.1	27.1	26.8	27.6	27.3
14	27.9	28.1	27.7	27.1	26.7	27.5	28.1
15	28.6	28.7	26.6	27.1	27.1	26.7	27.9
16	28.7	29.0	27.2	26.8	26.9	26.2	27.4
17	28.5	29.0	26.8	27.0	28.1	26.5	28.0
18	28.4	28.7	27.8	27.1	27.2	27.1	27.5
19	27.9	29.3	27.9	28.7	27.3	26.7	27.6
20	28.0	28.1	27.2	27.9	28.0	27.6	27.1
21	28.4	28.2	26.4	27.3	27.6	26.9	28.3
22	27.1	28.8	28.8	28.3	27.9	27.2	27.7
23	28.3	29.0	28.9	27.5	29.3	28.0	27.8
24	28.7	24.3	26.4	27.9	27.6	26.8	28.8

10-12	28.3	28.5	27.4	27.0	27.5	27.3	28.0
14-16	28.7	28.8	26.9	26.9	27.0	26.4	27.6
0-24	28.4	28.6	27.5	27.4	27.5	27.4	27.8

Average	27.8
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Channel 2 - Eastbound

85th Percentile

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	32.7	33.9	31.4	32.8	31.7	33.3	30.1
2	31.5	33.2	34.2	33.1	34.0	31.0	31.3
3	31.5	-	30.6	33.5	29.2	31.9	27.6
4	29.9	32.8	30.8	31.3	38.6	31.5	35.6
5	33.8	34.8	30.6	28.9	32.7	32.9	36.1
6	33.0	32.5	33.9	34.3	32.8	33.1	35.2
7	35.0	30.3	33.9	33.9	34.3	34.8	34.7
8	35.5	34.1	32.3	32.2	32.7	33.2	33.8
9	35.2	33.8	31.1	30.7	30.3	32.3	31.5
10	32.9	32.7	32.8	32.7	30.4	33.3	32.2
11	32.9	33.2	30.9	32.0	30.7	30.5	30.7
12	33.4	33.3	32.6	30.6	32.2	31.7	33.2
13	33.4	32.0	31.5	31.0	30.0	31.8	30.8
14	32.7	31.7	31.1	31.2	30.6	31.0	32.1
15	32.2	33.0	30.7	31.6	30.9	30.4	31.4
16	32.9	34.0	31.9	31.5	30.6	30.2	31.1
17	33.1	33.6	31.4	30.9	32.1	30.6	32.6
18	32.9	32.8	32.0	30.9	31.9	30.9	30.9
19	31.6	34.0	32.5	33.1	31.7	30.7	30.9
20	31.0	32.7	30.7	32.0	32.9	31.0	31.0
21	33.1	33.1	30.1	30.8	32.0	30.9	33.6
22	30.2	32.1	32.3	33.8	31.7	30.9	31.0
23	32.7	33.2	32.6	33.2	33.8	34.0	31.2
24	32.3	29.9	31.7	30.8	33.5	30.8	31.0

10-12	33.2	33.2	32.3	31.5	31.1	31.4	32.6
14-16	32.6	33.5	31.1	31.6	30.8	30.3	31.4
0-24	33.0	33.1	31.9	31.8	31.5	31.7	32.1

85th %ile	32.2
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Warrington ATC F, Poplars Avenue

Produced by Road Data Services Ltd.

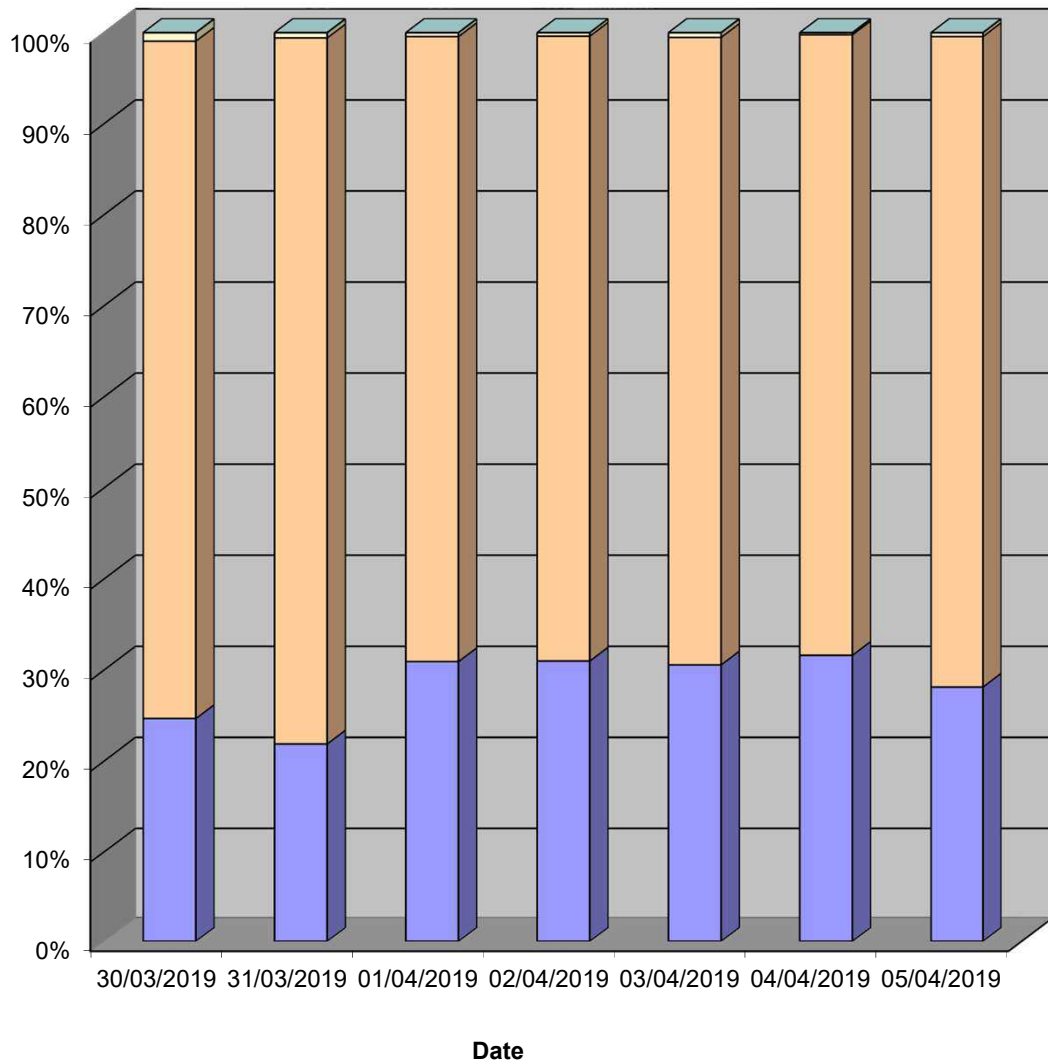
Channel 2 - Eastbound

Speed Summary

Week 1

Speed (MPH)	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
0-25	668	500	952	979	957	996	924
26-40	2013	1771	2112	2167	2157	2146	2346
41-55	25	13	13	12	16	7	14
56-	0	0	0	0	0	0	0
TOTAL	2706	2284	3077	3158	3130	3149	3284

Speed Summary (MPH)

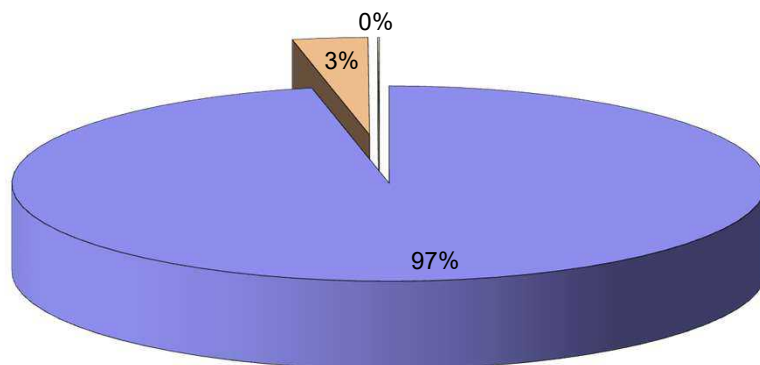


Warrington ATC F, Poplars Avenue

Produced by Road Data Services Ltd.

Channel 2 - Eastbound		Vehicle Class			Week 1
Classes	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13	
Day / Time					
30/03/2019					
7-19	2083	84	1	2168	
6-22	2445	90	2	2537	
6-24	2537	92	2	2631	
0-24	2612	92	2	2706	
31/03/2019					
7-19	1813	27	3	1843	
6-22	2136	31	3	2170	
6-24	2181	31	3	2215	
0-24	2250	31	3	2284	
01/04/2019					
7-19	2388	107	1	2496	
6-22	2814	113	1	2928	
6-24	2905	114	1	3020	
0-24	2962	114	1	3077	
02/04/2019					
7-19	2470	101	0	2571	
6-22	2914	109	0	3023	
6-24	2994	109	0	3103	
0-24	3049	109	0	3158	
03/04/2019					
7-19	2447	108	0	2555	
6-22	2887	113	0	3000	
6-24	2962	113	0	3075	
0-24	3017	113	0	3130	
04/04/2019					
7-19	2449	95	2	2546	
6-22	2888	101	2	2991	
6-24	2982	101	2	3085	
0-24	3045	102	2	3149	
05/04/2019					
7-19	2524	103	4	2631	
6-22	2984	109	6	3099	
6-24	3111	109	6	3226	
0-24	3169	109	6	3284	
Average					
7-19	2311	89	2	2401	
6-22	2724	95	2	2821	
6-24	2810	96	2	2908	
0-24	2872	96	2	2970	

Total Vehicle Class Distribution



Warrington ATC G, Poplars Avenue

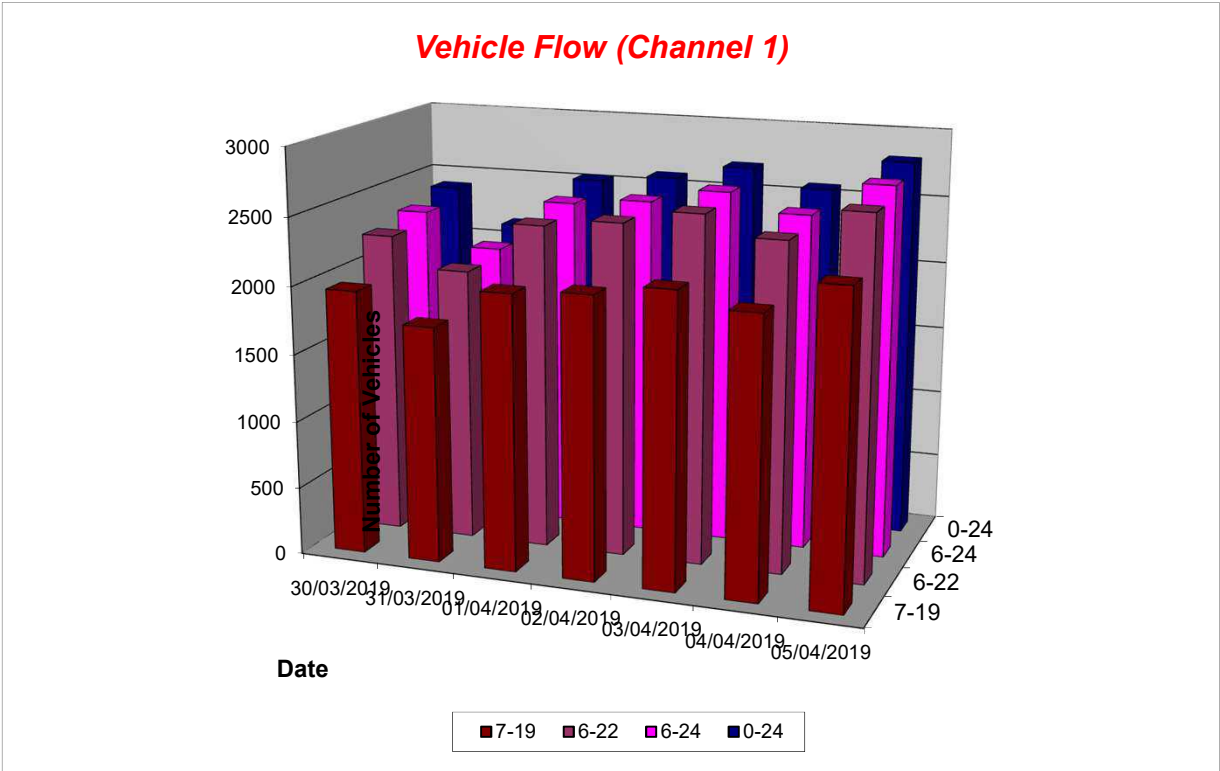
Produced by Road Data Services Ltd.

Channel 1 - Westbound

Vehicle Flow

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday	5 Day Ave	7 Day Ave
1	19	19	9	14	11	8	8	10	13
2	13	8	4	1	3	3	5	3	5
3	7	0	1	4	0	2	1	2	2
4	6	7	8	6	5	3	2	5	5
5	11	16	6	14	15	16	11	12	13
6	30	18	45	38	44	48	40	43	38
7	32	25	68	71	79	78	92	78	64
8	70	43	143	142	140	122	132	136	113
9	116	60	176	169	153	139	142	156	136
10	145	109	140	136	163	131	173	149	142
11	167	145	126	132	132	159	147	139	144
12	179	196	133	134	140	161	154	144	157
13	190	223	146	133	151	145	158	147	164
14	209	208	159	168	166	149	228	174	184
15	205	208	159	146	172	149	178	161	174
16	176	156	190	206	212	179	243	206	195
17	183	140	251	255	239	241	248	247	222
18	155	135	238	255	284	265	242	257	225
19	164	123	176	201	208	209	237	206	188
20	109	103	136	140	144	124	120	133	125
21	85	87	97	101	98	104	85	97	94
22	59	62	64	73	86	68	76	73	70
23	41	32	41	33	31	42	50	39	39
24	31	18	16	14	19	24	33	21	22
7-19	1959	1746	2037	2077	2160	2049	2282	2121	2044
6-22	2244	2023	2402	2462	2567	2423	2655	2502	2397
6-24	2316	2073	2459	2509	2617	2489	2738	2562	2457
0-24	2402	2141	2532	2586	2695	2569	2805	2637	2533



Warrington ATC G, Poplars Avenue

Produced by Road Data Services Ltd.

Channel 1 - Westbound

Average Speed

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	22.0	25.7	26.3	24.1	21.8	24.8	27.6
2	25.6	23.2	28.0	15.8	21.9	21.6	18.7
3	21.6	-	28.2	29.6	-	21.3	20.6
4	21.6	21.7	23.5	27.0	25.5	22.0	30.1
5	25.9	25.1	26.4	21.6	27.1	24.2	26.0
6	24.5	24.1	24.4	24.7	23.7	24.2	22.5
7	25.8	24.3	24.5	23.9	25.6	24.9	25.5
8	25.8	24.3	23.3	23.5	24.0	24.6	24.9
9	24.5	24.6	24.7	23.5	23.8	23.6	24.9
10	23.4	24.5	23.8	22.3	23.1	23.8	23.1
11	23.0	24.3	23.6	23.4	22.3	23.2	23.0
12	24.3	25.3	23.4	23.5	23.6	23.4	24.1
13	24.0	25.0	23.8	23.1	23.0	24.1	23.9
14	23.7	24.6	23.2	23.5	22.3	22.6	24.0
15	23.7	24.3	23.7	23.8	22.8	23.6	23.8
16	25.1	24.5	23.1	23.8	23.2	22.9	24.0
17	24.9	24.9	24.0	24.0	24.4	23.1	25.1
18	24.7	24.6	23.2	23.7	23.8	24.7	25.0
19	24.0	24.8	24.2	24.6	23.8	23.7	22.9
20	24.0	24.4	24.0	24.0	24.2	23.8	23.6
21	24.8	24.9	24.3	24.7	23.9	24.1	24.1
22	23.9	24.3	24.9	24.7	24.4	25.0	23.9
23	23.5	25.9	25.1	25.8	23.8	24.6	25.2
24	25.0	23.4	24.2	24.2	24.2	25.7	23.8

10-12	23.7	24.8	23.5	23.5	23.0	23.3	23.6
14-16	24.3	24.4	23.4	23.8	23.0	23.2	23.9
0-24	24.2	24.7	23.8	23.8	23.6	23.8	24.1

Average	24.0
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Channel 1 - Westbound

85th Percentile

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	26.7	28.9	31.1	27.4	25.6	29.2	36.4
2	30.0	26.3	29.9	-	25.3	24.1	27.9
3	26.5	-	-	32.2	-	22.0	-
4	26.3	28.9	29.5	29.2	28.1	23.3	31.4
5	30.7	30.8	29.5	27.7	30.7	29.9	28.8
6	30.9	29.1	28.8	28.6	28.4	29.5	28.1
7	30.6	27.4	28.9	28.3	29.2	30.2	29.1
8	29.9	28.1	28.5	28.1	28.8	29.1	28.6
9	28.8	29.1	29.3	27.0	28.2	28.6	28.9
10	28.1	28.3	28.8	27.0	27.3	29.1	27.5
11	28.0	28.6	28.3	28.1	26.3	27.6	28.5
12	29.3	29.3	27.7	27.9	27.6	28.1	27.9
13	28.0	29.4	28.3	27.6	26.9	28.6	28.6
14	28.3	28.3	27.6	28.2	26.6	26.8	28.2
15	27.9	28.2	27.7	28.2	27.1	27.3	28.2
16	28.7	28.6	28.0	28.3	27.9	27.3	28.9
17	28.6	28.6	28.4	27.9	27.8	27.5	28.5
18	29.4	28.9	28.1	27.8	27.9	28.5	29.0
19	28.3	28.8	28.7	28.6	28.4	28.2	27.0
20	27.8	28.6	28.4	28.5	28.7	27.6	27.7
21	29.0	28.8	28.5	28.7	27.4	28.8	28.6
22	28.2	27.9	29.2	29.7	27.5	28.1	27.8
23	27.4	30.1	29.3	32.0	27.3	31.6	29.4
24	29.1	27.9	28.0	28.2	27.2	28.8	27.5

10-12	28.5	29.2	28.1	27.9	27.2	27.6	28.2
14-16	28.6	28.3	27.9	28.2	27.6	27.3	28.6
0-24	28.5	28.8	28.5	28.1	27.9	28.3	28.4

85th %ile	28.4
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Warrington ATC G, Poplars Avenue

Produced by Road Data Services Ltd.

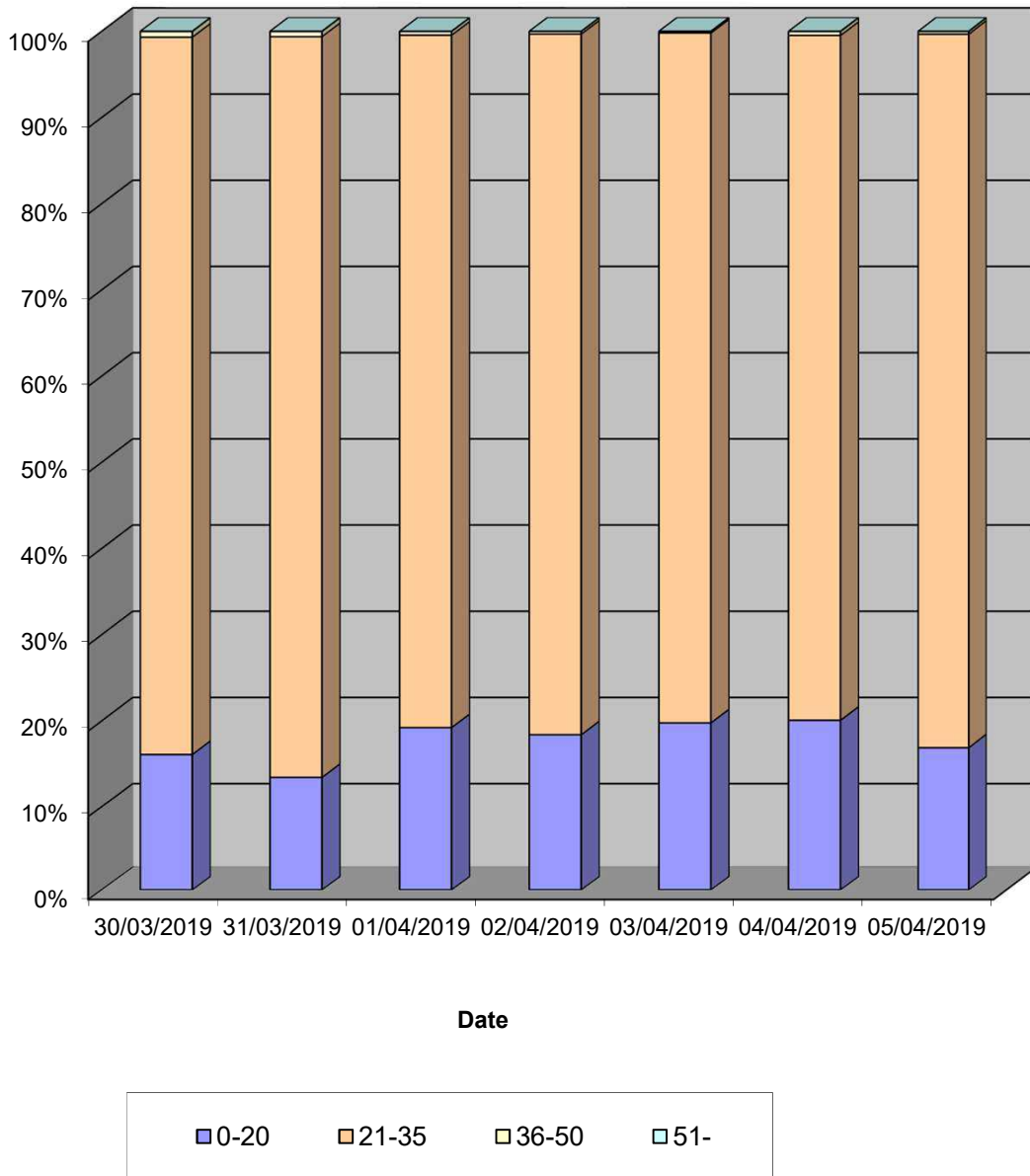
Channel 1 - Westbound

Speed Summary

Week 1

Speed (MPH)	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
0-20	387	288	487	476	533	516	474
21-35	1999	1840	2034	2102	2157	2041	2322
36-50	16	13	11	8	5	12	9
51-	0	0	0	0	0	0	0
TOTAL	2402	2141	2532	2586	2695	2569	2805

Speed Summary (MPH)

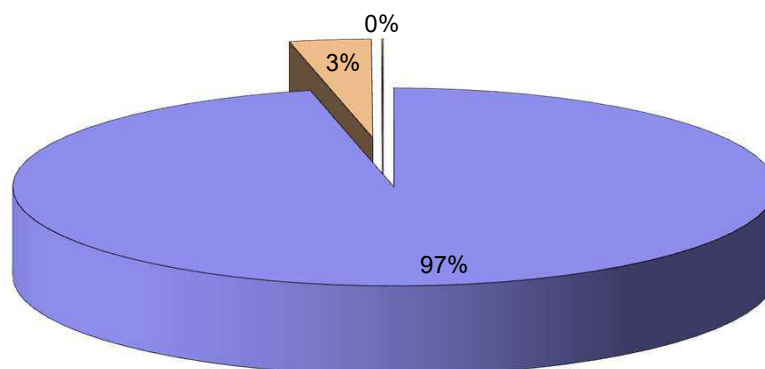


Warrington ATC G, Poplars Avenue

Produced by Road Data Services Ltd.

Channel 1 - Westbound		Vehicle Class			Week 1
Classes	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13	
Day / Time					
30/03/2019					
7-19	1892	65	2	1959	
6-22	2172	70	2	2244	
6-24	2242	71	3	2316	
0-24	2328	71	3	2402	
31/03/2019					
7-19	1715	31	0	1746	
6-22	1991	32	0	2023	
6-24	2041	32	0	2073	
0-24	2109	32	0	2141	
01/04/2019					
7-19	1936	99	2	2037	
6-22	2291	109	2	2402	
6-24	2347	110	2	2459	
0-24	2417	113	2	2532	
02/04/2019					
7-19	1984	92	1	2077	
6-22	2361	99	2	2462	
6-24	2406	101	2	2509	
0-24	2481	103	2	2586	
03/04/2019					
7-19	2065	94	1	2160	
6-22	2465	101	1	2567	
6-24	2513	103	1	2617	
0-24	2588	106	1	2695	
04/04/2019					
7-19	1970	79	0	2049	
6-22	2335	87	1	2423	
6-24	2400	88	1	2489	
0-24	2480	88	1	2569	
05/04/2019					
7-19	2191	90	1	2282	
6-22	2557	97	1	2655	
6-24	2639	98	1	2738	
0-24	2703	101	1	2805	
Average					
7-19	1965	79	1	2044	
6-22	2310	85	1	2397	
6-24	2370	86	1	2457	
0-24	2444	88	1	2533	

Total Vehicle Class Distribution



Warrington ATC G, Poplars Avenue

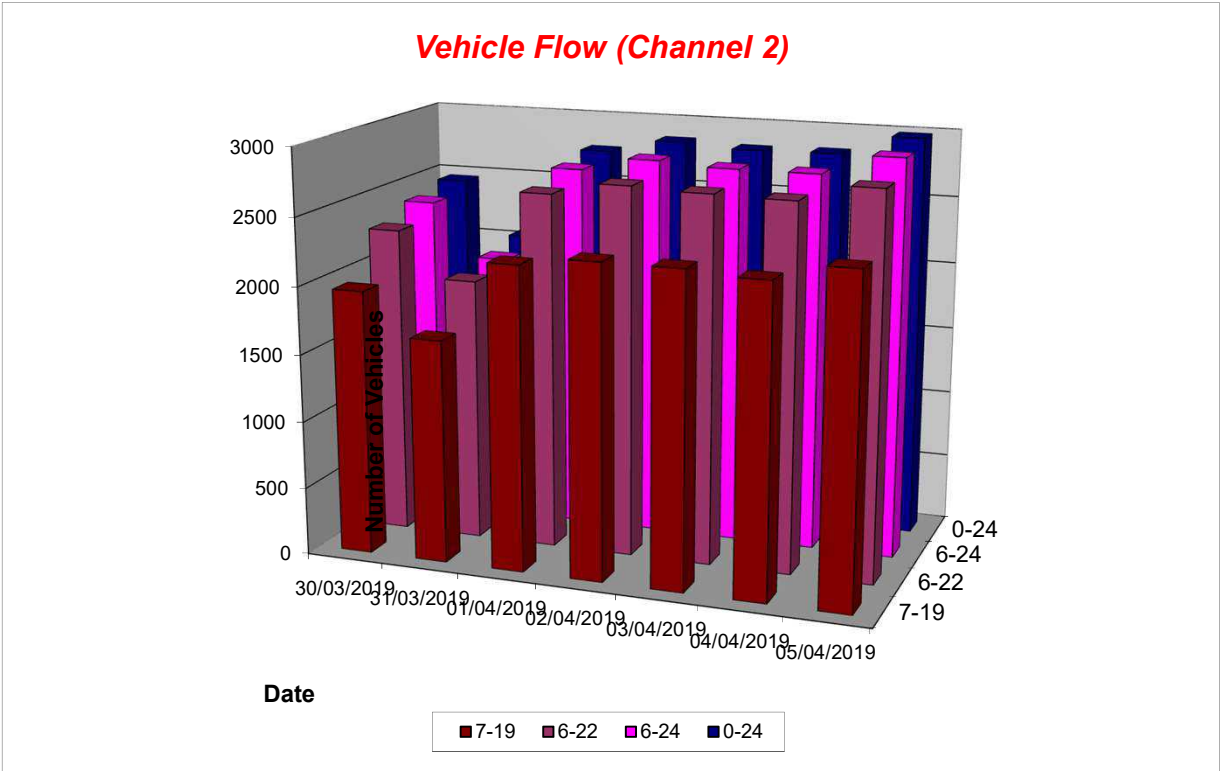
Produced by Road Data Services Ltd.

Channel 2 - Eastbound

Vehicle Flow

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday	5 Day Ave	7 Day Ave
1	18	19	9	7	11	16	13	11	13
2	14	10	6	3	5	5	3	4	7
3	7	0	4	7	2	7	3	5	4
4	6	9	4	5	5	3	3	4	5
5	6	11	3	3	6	4	12	6	6
6	17	9	19	19	15	17	15	17	16
7	29	19	74	81	85	88	55	77	62
8	49	24	240	226	219	237	220	228	174
9	69	42	270	286	292	276	265	278	214
10	125	78	146	152	162	155	128	149	135
11	168	116	108	146	124	112	138	126	130
12	183	155	148	129	147	153	143	144	151
13	173	196	152	173	152	160	213	170	174
14	210	227	149	155	154	146	194	160	176
15	196	177	192	201	193	206	192	197	194
16	196	190	211	210	203	198	210	206	203
17	209	162	206	202	245	222	241	223	212
18	202	160	216	255	219	208	230	226	213
19	179	123	203	171	195	199	220	198	184
20	122	124	116	153	134	141	169	143	137
21	108	94	128	109	103	125	114	116	112
22	68	63	73	78	80	71	87	78	74
23	62	33	56	63	54	67	76	63	59
24	42	12	24	23	23	20	38	26	26
7-19	1959	1650	2241	2306	2305	2272	2394	2304	2161
6-22	2286	1950	2632	2727	2707	2697	2819	2716	2545
6-24	2390	1995	2712	2813	2784	2784	2933	2805	2630
0-24	2458	2053	2757	2857	2828	2836	2982	2852	2682



Warrington ATC G, Poplars Avenue

Produced by Road Data Services Ltd.

Channel 2 - Eastbound

Average Speed

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	23.5	22.5	26.5	23.2	24.5	27.4	21.9
2	22.6	24.4	25.6	26.0	25.4	22.1	26.0
3	24.0	-	25.0	26.0	23.5	24.7	20.5
4	22.8	25.6	24.3	26.6	26.7	22.0	29.4
5	24.3	24.5	26.6	25.7	24.2	25.5	28.0
6	22.9	22.6	21.9	25.2	23.8	24.8	27.2
7	25.3	25.3	25.1	25.2	25.5	25.7	24.4
8	24.7	24.7	23.8	24.0	23.8	25.1	24.5
9	23.5	24.2	23.9	23.2	23.5	24.1	24.0
10	23.1	23.7	23.5	23.3	22.6	23.7	22.7
11	22.7	23.5	23.7	23.1	23.4	22.6	23.0
12	23.7	24.0	23.5	22.6	22.5	22.8	24.3
13	23.9	23.3	23.5	23.6	21.6	22.9	23.3
14	22.9	23.9	22.9	23.4	21.8	22.6	23.7
15	23.9	22.8	22.7	24.0	24.1	23.1	23.4
16	24.9	23.6	23.5	22.5	23.0	23.0	24.2
17	24.2	23.0	22.7	22.7	23.3	22.9	23.4
18	23.9	23.0	22.2	22.3	22.7	23.8	22.8
19	23.5	24.7	23.7	24.5	24.0	22.7	23.8
20	22.8	23.6	23.2	24.1	23.4	24.0	24.2
21	24.6	24.3	23.5	23.2	23.3	23.4	25.2
22	24.0	23.9	24.6	24.5	23.5	24.2	24.7
23	23.8	25.3	23.6	23.4	23.8	24.6	24.6
24	24.5	20.7	24.2	22.6	24.4	23.5	24.3

10-12	23.2	23.7	23.6	22.9	22.9	22.7	23.6
14-16	24.4	23.2	23.1	23.2	23.6	23.1	23.8
0-24	23.7	23.6	23.4	23.4	23.3	23.6	23.8

Average	23.5
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Channel 2 - Eastbound

85th Percentile

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	28.9	28.9	30.7	27.1	27.8	31.7	27.5
2	27.0	29.2	28.3	29.5	28.2	26.3	27.3
3	28.4	-	26.9	28.0	24.1	27.2	24.7
4	25.3	29.0	29.7	29.5	29.3	24.1	33.2
5	27.7	29.2	28.4	27.0	25.8	28.0	34.5
6	27.9	32.0	27.0	30.9	26.5	28.9	35.4
7	28.6	29.0	29.9	30.7	30.0	29.3	28.8
8	28.5	28.8	28.7	27.9	28.2	29.1	29.2
9	28.0	28.3	27.7	27.4	27.4	28.4	28.7
10	27.4	28.0	27.2	26.8	27.5	28.7	25.9
11	26.9	28.4	27.6	27.4	27.5	26.0	27.4
12	27.9	29.2	27.6	27.3	26.1	26.7	29.0
13	27.5	27.7	28.6	28.0	25.2	26.7	27.6
14	25.7	27.9	27.5	27.8	27.2	26.9	27.9
15	28.0	27.5	27.2	28.6	28.1	27.4	27.6
16	28.9	28.3	27.8	27.2	27.3	26.0	28.3
17	28.9	28.2	27.8	27.5	28.4	27.0	28.6
18	28.4	28.0	27.5	27.1	28.5	28.6	27.5
19	27.9	29.8	28.7	28.6	28.6	27.4	28.4
20	27.4	27.5	26.7	28.5	28.0	29.2	28.8
21	29.4	29.3	27.3	28.3	27.7	28.0	29.8
22	27.9	28.3	29.5	29.3	29.2	28.7	29.2
23	28.8	29.3	28.3	28.1	28.3	29.3	29.1
24	28.5	25.7	28.4	28.2	30.0	27.8	28.3

10-12	27.3	28.7	27.6	27.3	27.1	26.3	28.8
14-16	28.7	27.9	27.6	28.1	27.7	27.0	27.9
0-24	28.1	28.4	28.2	28.1	27.9	28.2	28.5

85th %ile	28.2
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Warrington ATC G, Poplars Avenue

Produced by Road Data Services Ltd.

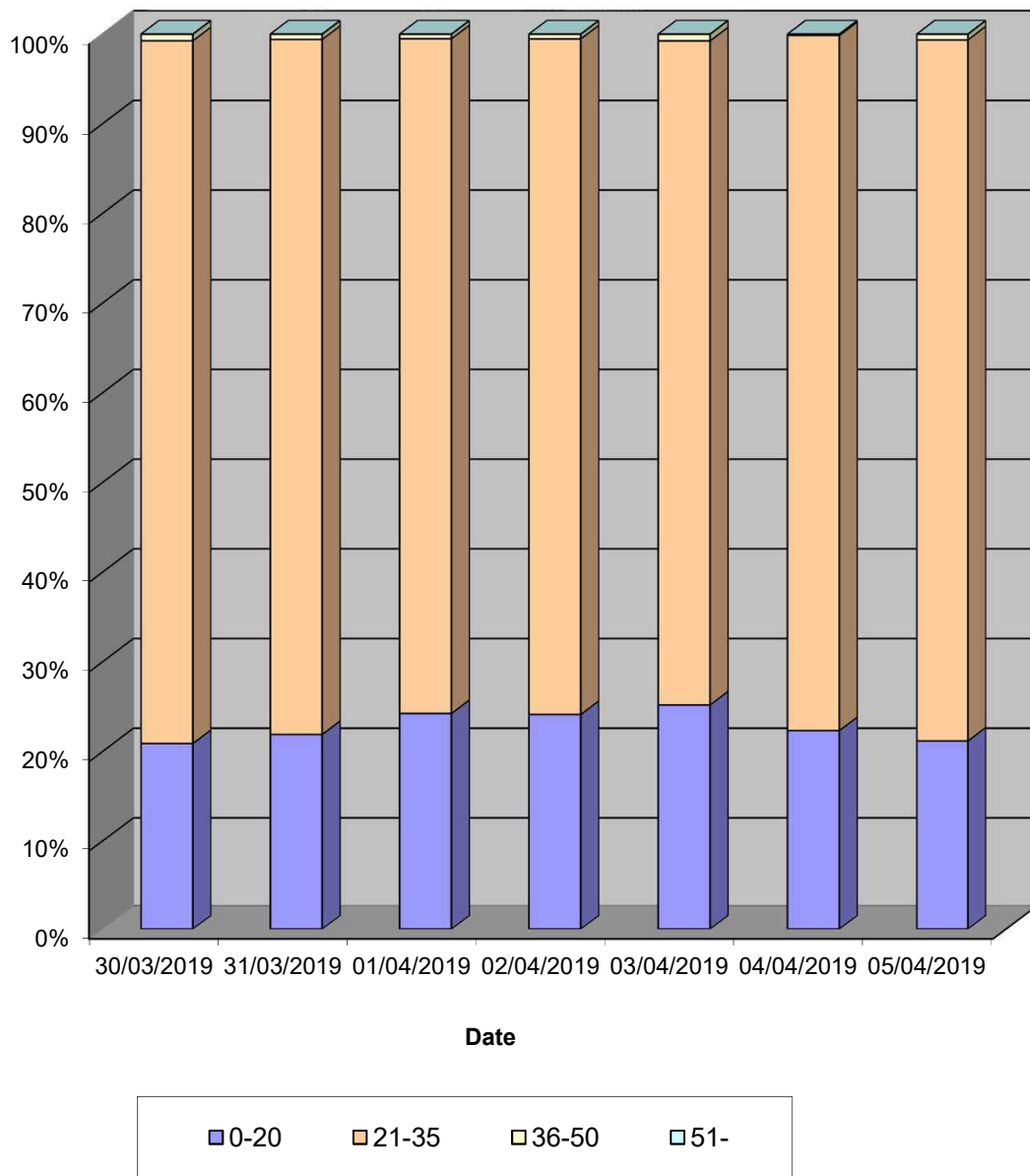
Channel 2 - Eastbound

Speed Summary

Week 1

Speed (MPH)	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
0-20	514	450	669	690	713	634	632
21-35	1926	1591	2074	2152	2094	2198	2331
36-50	18	12	14	15	21	4	19
51-	0	0	0	0	0	0	0
TOTAL	2458	2053	2757	2857	2828	2836	2982

Speed Summary (MPH)

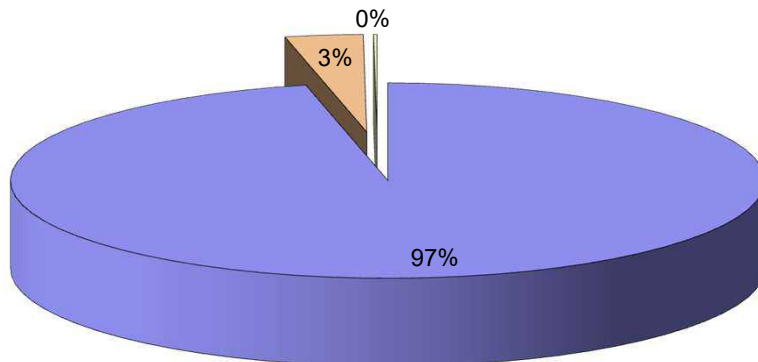


Warrington ATC G, Poplars Avenue

Produced by Road Data Services Ltd.

Channel 2 - Eastbound		Vehicle Class			Week 1
Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13	
30/03/2019					
7-19	1875	78	6	1959	
6-22	2196	82	8	2286	
6-24	2300	82	8	2390	
0-24	2368	82	8	2458	
31/03/2019					
7-19	1622	27	1	1650	
6-22	1919	30	1	1950	
6-24	1964	30	1	1995	
0-24	2022	30	1	2053	
01/04/2019					
7-19	2141	95	5	2241	
6-22	2525	102	5	2632	
6-24	2604	103	5	2712	
0-24	2649	103	5	2757	
02/04/2019					
7-19	2202	99	5	2306	
6-22	2617	105	5	2727	
6-24	2703	105	5	2813	
0-24	2747	105	5	2857	
03/04/2019					
7-19	2203	99	3	2305	
6-22	2600	104	3	2707	
6-24	2677	104	3	2784	
0-24	2721	104	3	2828	
04/04/2019					
7-19	2180	90	2	2272	
6-22	2603	92	2	2697	
6-24	2690	92	2	2784	
0-24	2742	92	2	2836	
05/04/2019					
7-19	2284	106	4	2394	
6-22	2706	109	4	2819	
6-24	2820	109	4	2933	
0-24	2868	110	4	2982	
Average					
7-19	2072	85	4	2161	
6-22	2452	89	4	2545	
6-24	2537	89	4	2630	
0-24	2588	89	4	2682	

Total Vehicle Class Distribution



Warrington ATC H, Poplars Avenue

Produced by Road Data Services Ltd.

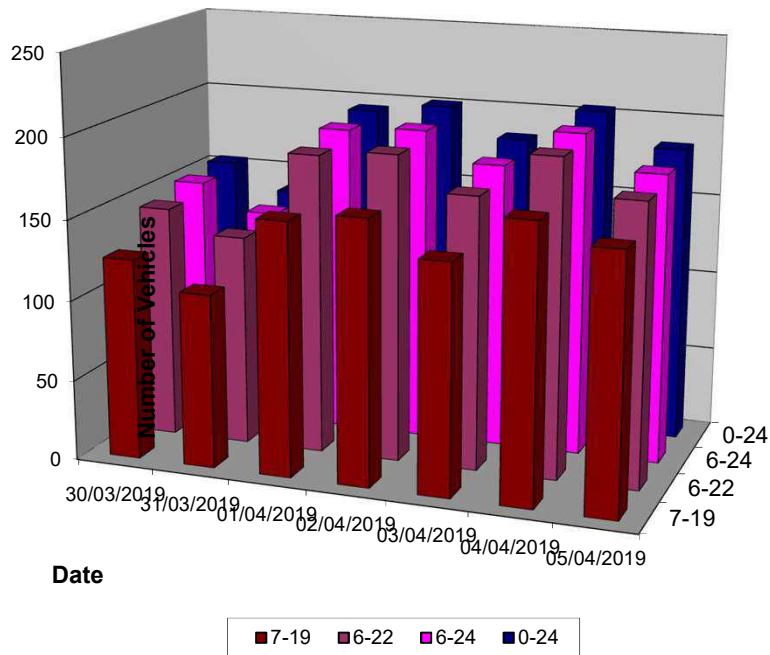
Channel 1 - Westbound

Vehicle Flow

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday	5 Day Ave	7 Day Ave
1	0	2	0	4	2	2	1	2	2
2	0	0	1	0	1	0	1	1	0
3	0	0	0	0	0	0	1	0	0
4	1	0	0	0	0	0	0	0	0
5	2	0	1	0	0	0	0	0	0
6	0	1	1	2	3	2	2	2	2
7	3	1	8	5	7	4	5	6	5
8	2	1	8	7	7	8	10	8	6
9	12	5	19	23	24	34	18	24	19
10	9	10	15	8	13	13	14	13	12
11	7	5	17	13	7	8	8	11	9
12	19	7	12	15	8	18	11	13	13
13	17	19	16	15	14	14	13	14	15
14	16	22	11	19	8	12	7	11	14
15	21	6	15	14	12	16	14	14	14
16	6	9	6	7	15	12	15	11	10
17	6	8	13	11	10	9	17	12	11
18	5	10	19	18	16	15	19	17	15
19	5	6	6	13	8	11	12	10	9
20	6	8	7	13	11	10	4	9	8
21	4	11	9	5	4	4	3	5	6
22	7	3	5	4	5	8	4	5	5
23	4	3	4	2	7	2	5	4	4
24	2	1	2	3	1	2	0	2	2
7-19	125	108	157	163	142	170	158	158	146
6-22	145	131	186	190	169	196	174	183	170
6-24	151	135	192	195	177	200	179	189	176
0-24	154	138	195	201	183	204	184	193	180

Vehicle Flow (Channel 1)



Warrington ATC H, Poplars Avenue

Produced by Road Data Services Ltd.

Channel 1 - Westbound

Average Speed

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	-	20.3	-	16.5	20.6	11.1	10.8
2	-	-	16.9	-	14.9	-	16.6
3	-	-	-	-	-	-	15.2
4	21.5	-	-	-	-	-	-
5	21.8	-	18.3	-	-	-	-
6	-	16.1	17.7	15.8	18.0	12.7	22.0
7	17.7	18.2	20.7	21.1	23.9	18.4	24.4
8	20.0	25.5	20.4	16.0	19.1	17.8	17.0
9	20.1	17.8	20.1	20.2	19.7	19.5	19.2
10	17.9	17.4	17.8	17.4	13.4	16.7	21.9
11	16.6	19.5	15.6	14.6	17.4	15.4	14.8
12	15.0	17.0	19.7	16.8	19.6	18.8	19.3
13	20.3	18.9	17.9	15.5	17.2	18.7	20.5
14	17.9	20.7	17.4	15.5	15.1	16.1	17.4
15	18.2	18.7	19.9	19.0	14.7	17.3	18.5
16	19.0	18.1	18.4	23.0	20.4	20.2	18.7
17	23.2	23.1	19.4	18.2	19.6	17.1	22.1
18	14.7	12.7	19.3	17.5	17.3	20.8	19.7
19	16.2	18.5	20.3	18.9	18.0	17.1	14.4
20	22.6	16.6	17.1	17.5	16.5	15.9	16.4
21	17.2	19.5	15.1	17.8	15.5	21.6	18.3
22	16.7	19.8	18.1	19.7	15.9	14.1	18.5
23	20.0	15.5	17.4	25.7	18.9	16.1	20.6
24	20.3	27.1	18.3	16.4	15.2	5.3	-

10-12	15.5	18.0	17.3	15.8	18.5	17.8	17.4
14-16	18.4	18.4	19.5	20.4	17.9	18.5	18.6
0-24	18.3	18.6	18.5	17.8	17.9	17.8	19.1

Average	18.3
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Channel 1 - Westbound

85th Percentile

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	-	21.7	-	19.0	23.0	12.4	-
2	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-
5	23.0	-	-	-	-	-	-
6	-	-	-	17.5	21.8	15.4	23.9
7	19.0	-	25.3	24.8	27.0	20.9	25.6
8	23.4	-	24.2	21.2	23.4	21.2	22.5
9	24.5	20.3	26.5	24.7	23.1	24.5	23.6
10	25.3	22.6	22.6	22.7	18.3	22.8	27.7
11	22.5	26.2	19.5	20.1	21.3	22.2	20.5
12	22.5	22.0	23.0	23.0	24.8	25.9	23.3
13	30.0	23.6	22.4	20.2	22.3	25.0	23.5
14	24.8	26.1	23.8	21.4	21.8	21.9	21.7
15	23.8	23.7	23.5	21.7	17.5	25.5	24.4
16	24.2	21.3	22.5	27.8	29.1	25.7	25.5
17	29.0	26.9	23.8	22.0	23.5	20.5	25.7
18	17.2	18.5	26.1	24.3	21.9	28.1	26.4
19	18.4	23.8	28.2	23.5	21.8	24.7	20.7
20	25.7	22.4	20.3	20.7	20.4	21.6	19.7
21	21.2	22.8	23.2	22.5	21.7	26.2	23.7
22	20.7	23.1	25.3	23.4	22.3	17.3	21.1
23	25.2	17.1	19.0	30.4	24.0	17.0	26.5
24	20.5	-	19.3	17.4	-	5.4	-

10-12	22.6	24.7	21.8	22.7	23.4	25.2	23.1
14-16	24.1	22.9	23.1	26.1	23.2	26.0	25.4
0-24	24.6	24.1	23.6	23.4	23.4	24.0	24.6

85th %ile	23.9
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Warrington ATC H, Poplars Avenue

Produced by Road Data Services Ltd.

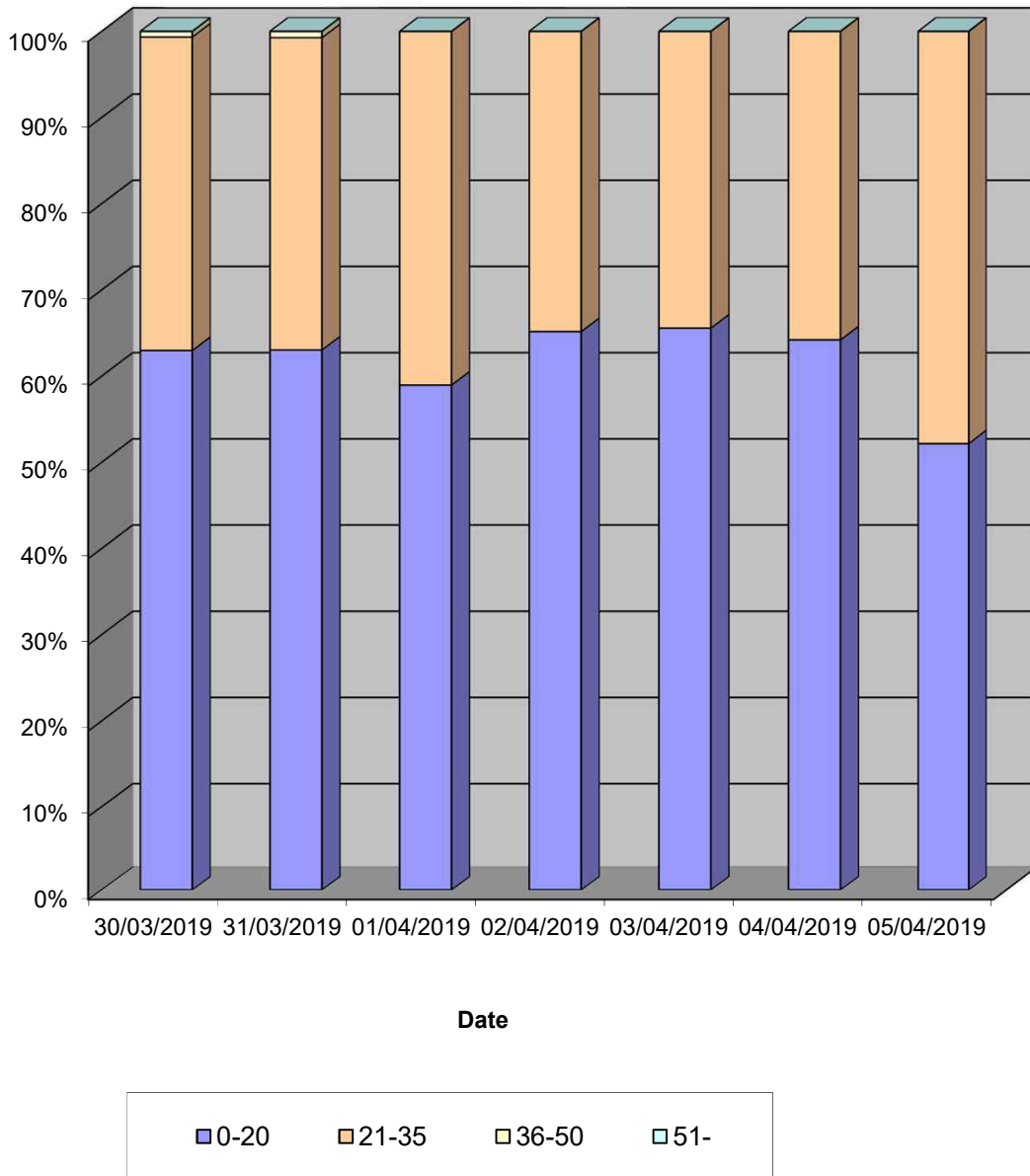
Channel 1 - Westbound

Speed Summary

Week 1

Speed (MPH)	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
0-20	97	87	115	131	120	131	96
21-35	56	50	80	70	63	73	88
36-50	1	1	0	0	0	0	0
51-	0	0	0	0	0	0	0
TOTAL	154	138	195	201	183	204	184

Speed Summary (MPH)

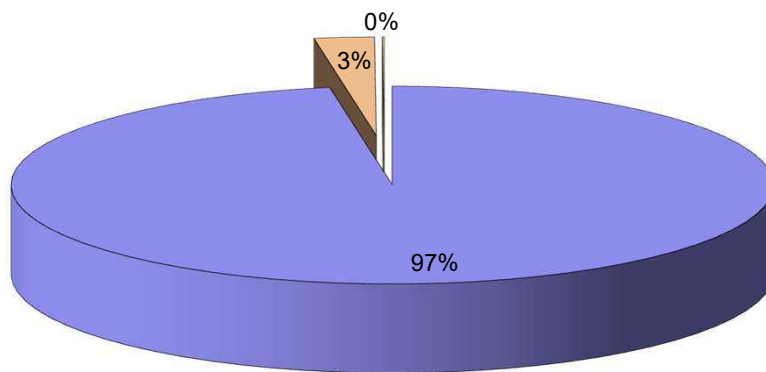


Warrington ATC H, Poplars Avenu

Produced by Road Data Services Ltd.

Channel 1 - Westbound		Vehicle Class			Week 1
Classes	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13	
Day / Time					
30/03/2019					
7-19	123	1	1	125	
6-22	143	1	1	145	
6-24	149	1	1	151	
0-24	152	1	1	154	
31/03/2019					
7-19	108	0	0	108	
6-22	131	0	0	131	
6-24	135	0	0	135	
0-24	138	0	0	138	
01/04/2019					
7-19	150	7	0	157	
6-22	178	8	0	186	
6-24	184	8	0	192	
0-24	187	8	0	195	
02/04/2019					
7-19	158	5	0	163	
6-22	184	6	0	190	
6-24	189	6	0	195	
0-24	195	6	0	201	
03/04/2019					
7-19	136	6	0	142	
6-22	162	7	0	169	
6-24	170	7	0	177	
0-24	176	7	0	183	
04/04/2019					
7-19	167	3	0	170	
6-22	192	4	0	196	
6-24	196	4	0	200	
0-24	200	4	0	204	
05/04/2019					
7-19	152	6	0	158	
6-22	168	6	0	174	
6-24	173	6	0	179	
0-24	178	6	0	184	
Average					
7-19	142	4	0	146	
6-22	165	5	0	170	
6-24	171	5	0	176	
0-24	175	5	0	180	

Total Vehicle Class Distribution



Warrington ATC H, Poplars Avenue

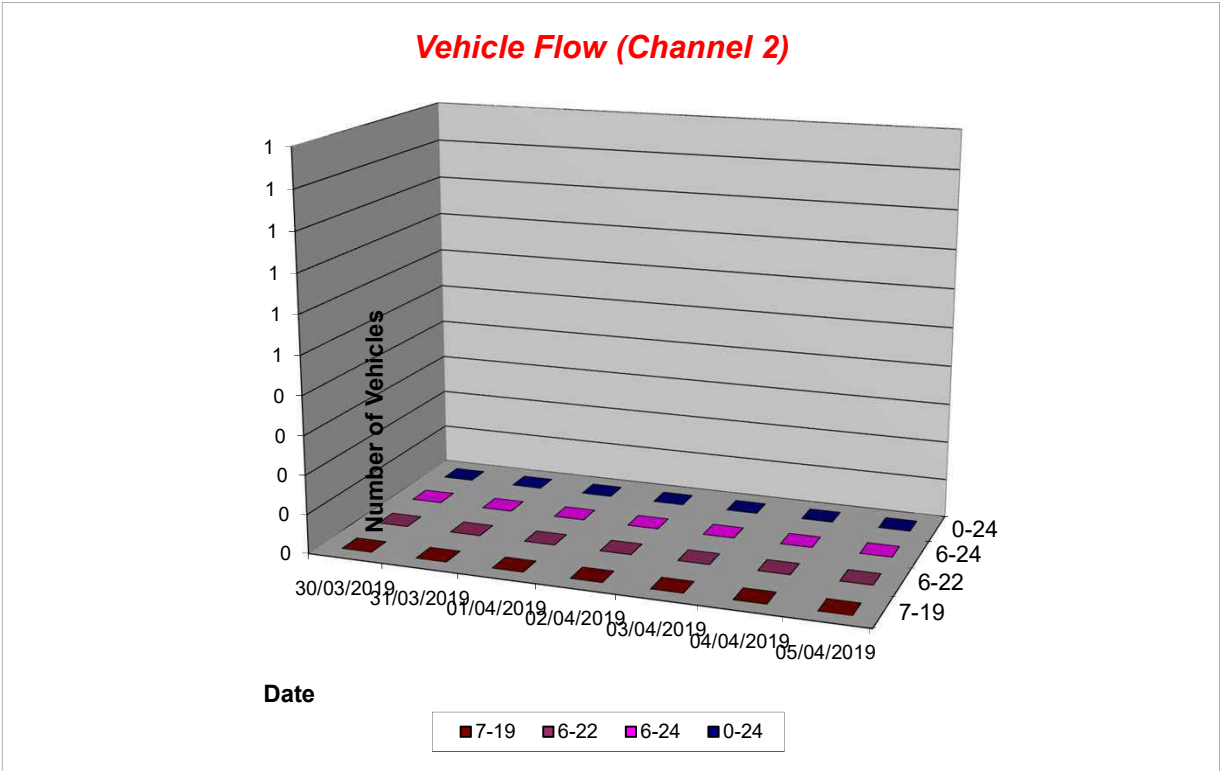
Produced by Road Data Services Ltd.

Channel 2 - Eastbound

Vehicle Flow

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday	5 Day Ave	7 Day Ave
1	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0
7-19	0	0	0	0	0	0	0	0	0
6-22	0	0	0	0	0	0	0	0	0
6-24	0	0	0	0	0	0	0	0	0
0-24	0	0	0	0	0	0	0	0	0



Warrington ATC H, Poplars Avenu

Produced by Road Data Services Ltd.

Channel 2 - Eastbound

Average Speed

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-

10-12	-	-	-	-	-	-	-
14-16	-	-	-	-	-	-	-
0-24	-	-	-	-	-	-	-

Average	-
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Channel 2 - Eastbound

85th Percentile

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-

10-12	-	-	-	-	-	-	-
14-16	-	-	-	-	-	-	-
0-24	-	-	-	-	-	-	-

85th %ile	-
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Warrington ATC H, Poplars Avenue

Produced by Road Data Services Ltd.

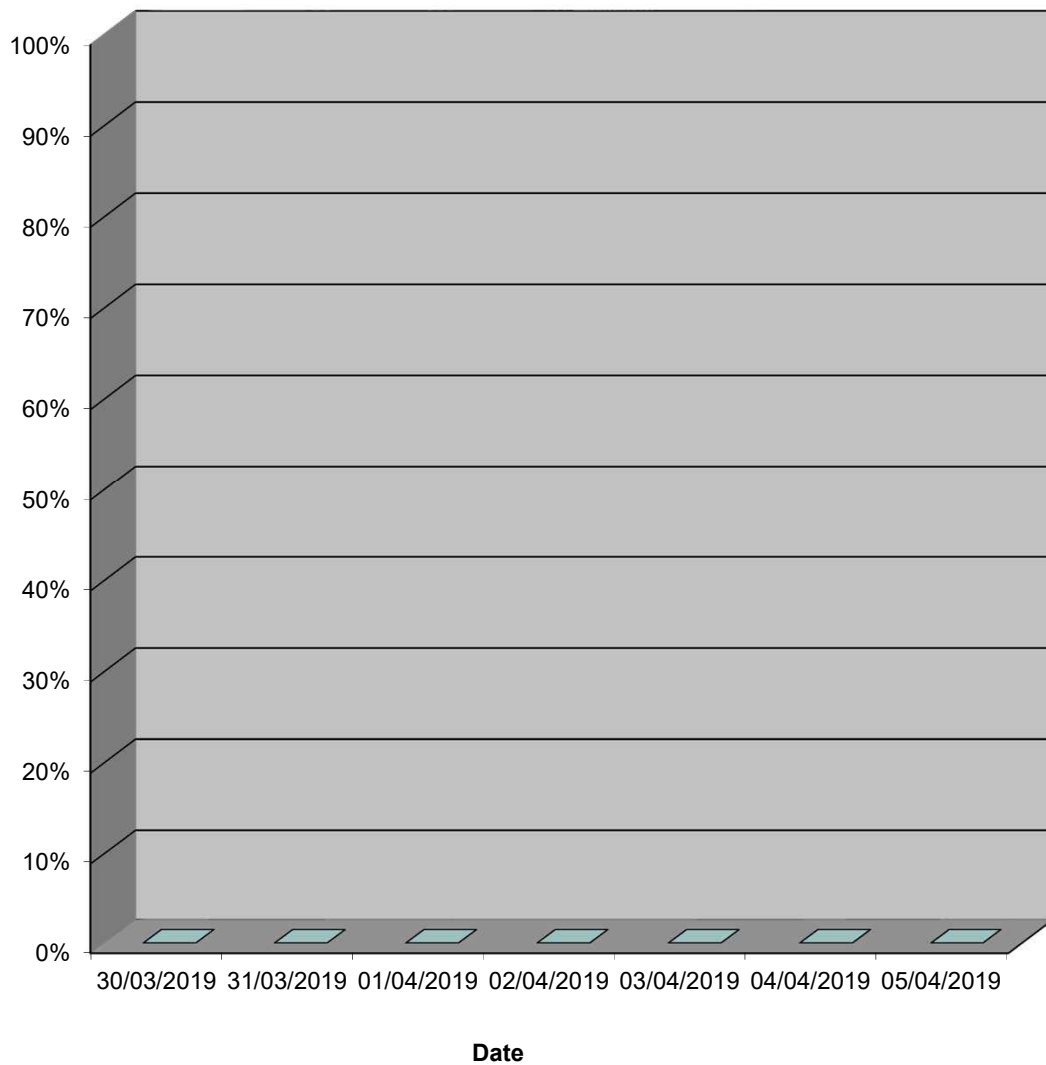
Channel 2 - Eastbound

Speed Summary

Week 1

Speed (MPH)	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
0-20	0	0	0	0	0	0	0
21-35	0	0	0	0	0	0	0
36-50	0	0	0	0	0	0	0
51-	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0

Speed Summary (MPH)



Warrington ATC H, Poplars Avenu

Produced by Road Data Services Ltd.

Channel 2 - Eastbound		Vehicle Class			Week 1
Classes	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13	
30/03/2019					
7-19	0	0	0	0	0
6-22	0	0	0	0	0
6-24	0	0	0	0	0
0-24	0	0	0	0	0
31/03/2019					
7-19	0	0	0	0	0
6-22	0	0	0	0	0
6-24	0	0	0	0	0
0-24	0	0	0	0	0
01/04/2019					
7-19	0	0	0	0	0
6-22	0	0	0	0	0
6-24	0	0	0	0	0
0-24	0	0	0	0	0
02/04/2019					
7-19	0	0	0	0	0
6-22	0	0	0	0	0
6-24	0	0	0	0	0
0-24	0	0	0	0	0
03/04/2019					
7-19	0	0	0	0	0
6-22	0	0	0	0	0
6-24	0	0	0	0	0
0-24	0	0	0	0	0
04/04/2019					
7-19	0	0	0	0	0
6-22	0	0	0	0	0
6-24	0	0	0	0	0
0-24	0	0	0	0	0
05/04/2019					
7-19	0	0	0	0	0
6-22	0	0	0	0	0
6-24	0	0	0	0	0
0-24	0	0	0	0	0
Average					
7-19	0	0	0	0	0
6-22	0	0	0	0	0
6-24	0	0	0	0	0
0-24	0	0	0	0	0

Total Vehicle Class Distribution

0%



Warrington ATC I, Bich Avenue

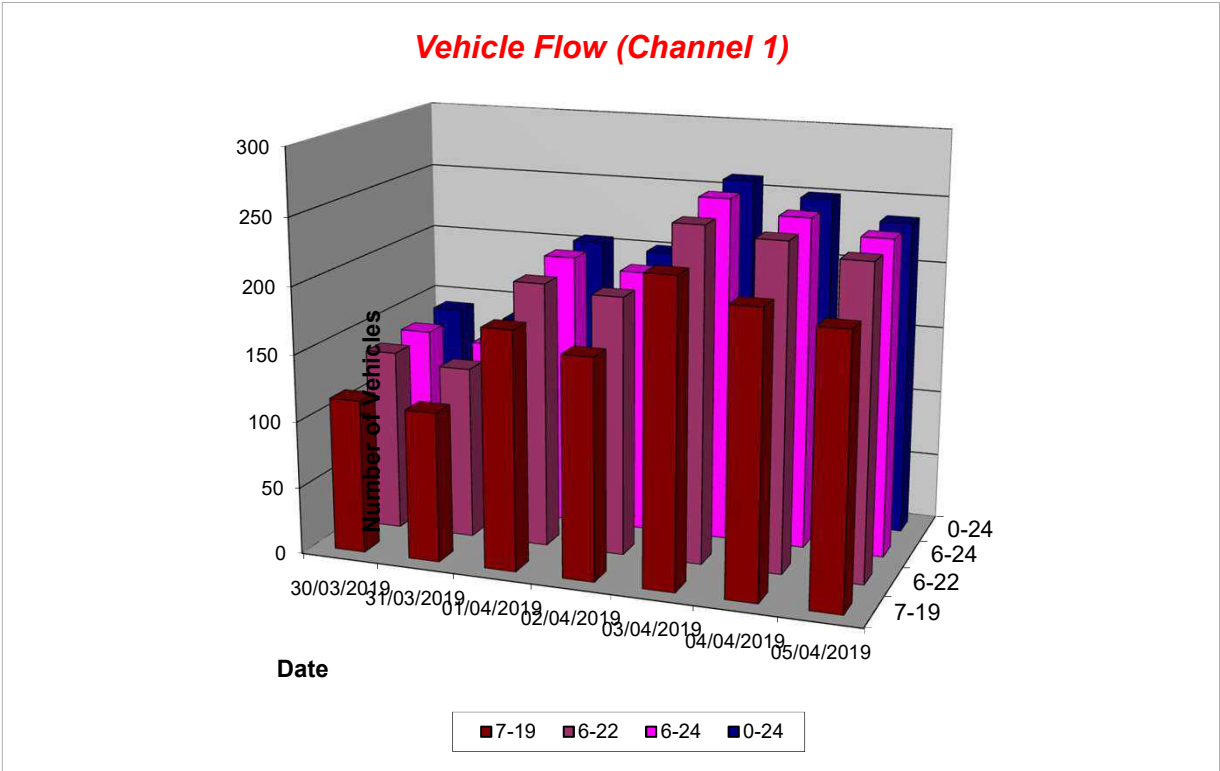
Produced by Road Data Services Ltd.

Channel 1 - Westbound

Vehicle Flow

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday	5 Day Ave	7 Day Ave
1	2	3	0	1	0	0	0	0	1
2	0	1	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	1	1	0	0	0
5	0	1	0	1	2	0	0	1	1
6	2	0	0	1	0	2	0	1	1
7	1	0	1	1	3	4	3	2	2
8	1	2	4	2	3	4	2	3	3
9	2	3	19	24	21	32	20	23	17
10	5	3	18	15	26	21	19	20	15
11	9	8	9	14	15	20	14	14	13
12	11	9	16	8	16	19	23	16	15
13	16	17	19	27	20	13	20	20	19
14	13	20	24	12	16	18	15	17	17
15	11	13	11	9	25	14	21	16	15
16	7	8	14	12	30	18	17	18	15
17	16	11	14	14	21	18	15	16	16
18	14	11	16	16	19	18	23	18	17
19	10	7	14	11	14	14	10	13	11
20	7	6	8	12	7	15	11	11	9
21	6	4	6	11	7	6	11	8	7
22	7	7	5	5	6	8	8	6	7
23	1	2	4	2	7	0	2	3	3
24	1	2	3	3	1	5	2	3	2
7-19	115	112	178	164	226	209	199	195	172
6-22	136	129	198	193	249	242	232	223	197
6-24	138	133	205	198	257	247	236	229	202
0-24	142	138	205	201	260	250	236	230	205



Warrington ATC I, Bich Avenue

Produced by Road Data Services Ltd.

Channel 1 - Westbound

Average Speed

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	16.2	14.6	-	10.8	-	-	-
2	-	16.0	-	-	-	-	-
3	-	-	-	-	-	-	-
4	-	-	-	-	5.7	15.6	-
5	-	12.2	-	14.1	17.0	-	-
6	12.8	-	-	12.9	-	15.2	-
7	12.9	-	19.8	11.9	8.6	12.1	15.2
8	9.3	16.2	12.3	10.6	17.0	13.1	14.4
9	9.5	10.4	13.9	14.9	13.6	14.2	12.7
10	15.7	15.2	14.4	15.0	14.0	13.9	13.5
11	11.0	14.4	14.7	15.1	13.9	12.9	14.8
12	12.2	14.2	11.6	16.1	14.1	11.7	14.5
13	13.3	15.4	14.6	14.1	15.0	13.3	13.5
14	14.4	14.1	14.8	13.6	14.7	13.9	14.0
15	14.3	13.3	14.2	13.9	14.2	14.3	14.2
16	13.0	14.6	13.9	13.5	14.5	13.0	14.9
17	14.1	13.1	14.0	13.2	13.5	12.6	14.0
18	15.0	14.7	15.0	13.6	12.7	13.5	15.1
19	13.1	14.4	12.9	13.6	13.4	13.5	15.3
20	13.3	12.9	15.1	12.3	13.2	14.0	13.3
21	17.8	9.3	13.6	13.3	14.7	13.1	13.4
22	13.5	11.6	14.5	13.8	11.5	12.4	16.0
23	7.4	14.9	11.3	15.9	15.0	-	7.2
24	17.7	12.6	15.1	11.5	12.8	12.3	11.8

10-12	11.7	14.3	12.7	15.5	14.0	12.3	14.6
14-16	13.8	13.8	14.0	13.7	14.3	13.6	14.5
0-24	13.7	13.9	14.0	14.0	13.9	13.4	14.1

Average	13.8
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Channel 1 - Westbound

85th Percentile

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	17.3	15.4	-	-	-	-	-
2	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-
5	-	-	-	-	18.4	-	-
6	13.6	-	-	-	-	15.2	-
7	-	-	-	-	10.3	15.4	17.5
8	-	18.7	15.4	12.8	18.4	14.6	16.8
9	12.5	13.2	18.0	17.6	17.0	17.2	15.4
10	18.5	16.9	16.2	17.6	16.7	17.5	16.5
11	12.6	17.8	17.3	18.9	18.6	17.4	18.1
12	14.9	15.4	15.4	17.3	17.3	14.0	17.2
13	16.6	18.8	17.4	17.6	18.6	14.6	15.9
14	17.2	16.8	18.6	18.2	18.0	16.5	17.0
15	15.7	17.6	17.7	16.0	17.7	17.6	16.7
16	14.0	17.4	15.9	16.1	17.9	17.4	19.5
17	17.8	15.3	15.9	15.2	17.2	15.2	17.4
18	18.0	17.8	18.1	16.5	16.0	16.4	18.3
19	16.8	18.3	16.4	17.6	15.3	14.8	17.1
20	16.9	15.6	16.6	16.1	15.9	17.2	16.3
21	19.0	12.9	14.9	17.1	18.6	16.7	15.3
22	15.1	15.5	18.0	15.3	16.1	18.1	19.8
23	-	15.0	13.9	18.2	16.2	-	9.3
24	-	12.8	17.0	14.5	-	14.9	14.3

10-12	14.9	17.4	17.0	18.3	17.8	16.6	17.4
14-16	15.6	17.5	17.6	16.1	18.0	17.6	18.1
0-24	17.7	17.8	17.8	17.3	17.6	16.7	17.6

85th %ile	17.5
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Warrington ATC I, Bich Avenue

Produced by Road Data Services Ltd.

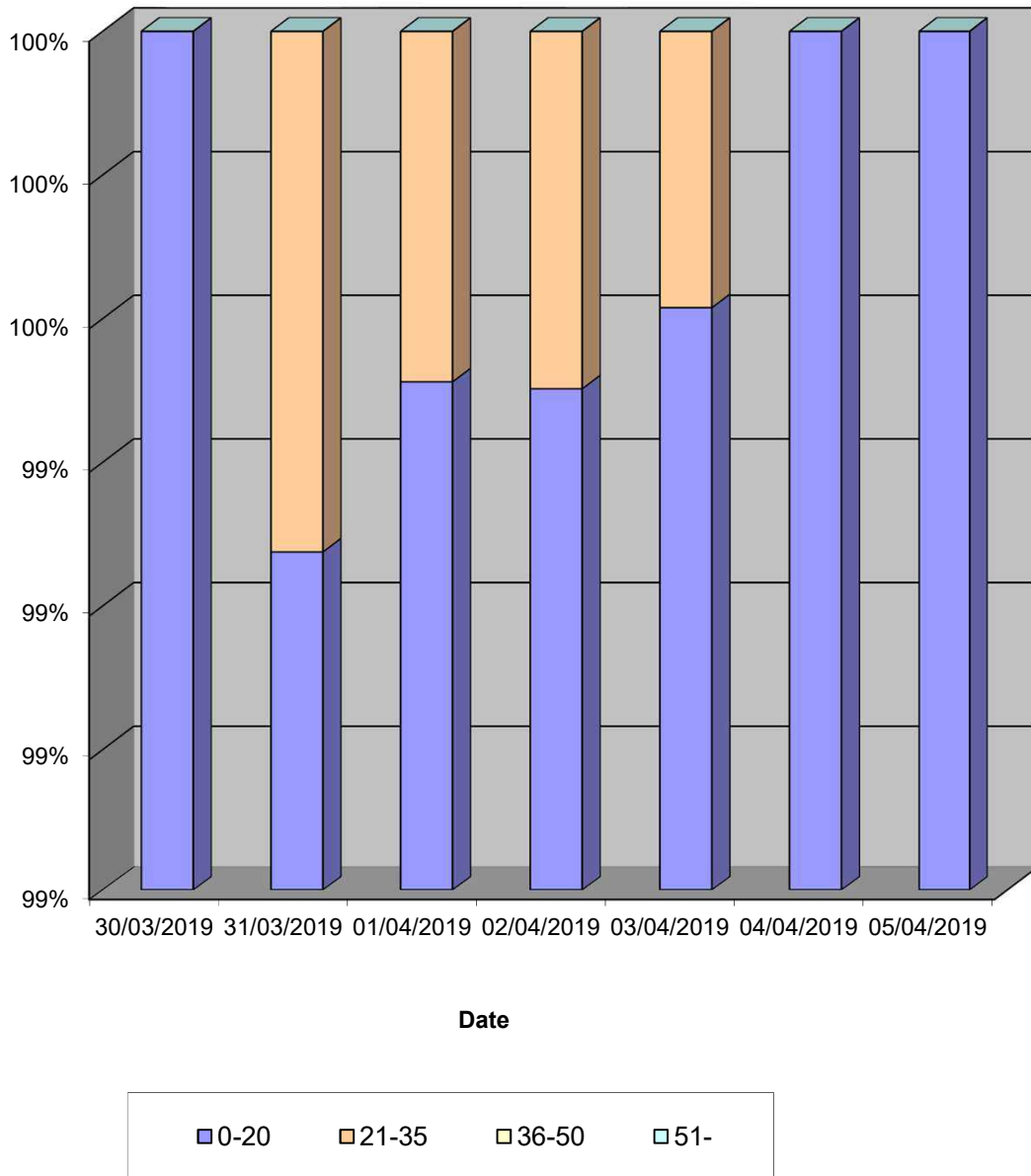
Channel 1 - Westbound

Speed Summary

Week 1

Speed (MPH)	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
0-20	142	137	204	200	259	250	236
21-35	0	1	1	1	1	0	0
36-50	0	0	0	0	0	0	0
51-	0	0	0	0	0	0	0
TOTAL	142	138	205	201	260	250	236

Speed Summary (MPH)

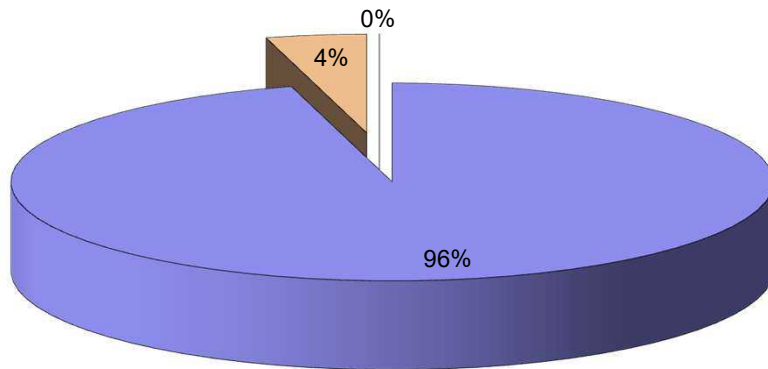


Warrington ATC I, Bich Avenue

Produced by Road Data Services Ltd.

Channel 1 - Westbound		Vehicle Class			Week 1
Classes	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13	
Day / Time					
30/03/2019					
7-19	115	0	0	115	
6-22	136	0	0	136	
6-24	138	0	0	138	
0-24	142	0	0	142	
31/03/2019					
7-19	112	0	0	112	
6-22	129	0	0	129	
6-24	133	0	0	133	
0-24	138	0	0	138	
01/04/2019					
7-19	176	2	0	178	
6-22	196	2	0	198	
6-24	203	2	0	205	
0-24	203	2	0	205	
02/04/2019					
7-19	153	11	0	164	
6-22	182	11	0	193	
6-24	186	12	0	198	
0-24	188	13	0	201	
03/04/2019					
7-19	211	15	0	226	
6-22	233	16	0	249	
6-24	240	17	0	257	
0-24	242	18	0	260	
04/04/2019					
7-19	193	16	0	209	
6-22	225	17	0	242	
6-24	229	18	0	247	
0-24	231	19	0	250	
05/04/2019					
7-19	191	8	0	199	
6-22	223	9	0	232	
6-24	227	9	0	236	
0-24	227	9	0	236	
Average					
7-19	164	7	0	172	
6-22	189	8	0	197	
6-24	194	8	0	202	
0-24	196	9	0	205	

Total Vehicle Class Distribution



Warrington ATC I, Bich Avenue

Produced by Road Data Services Ltd.

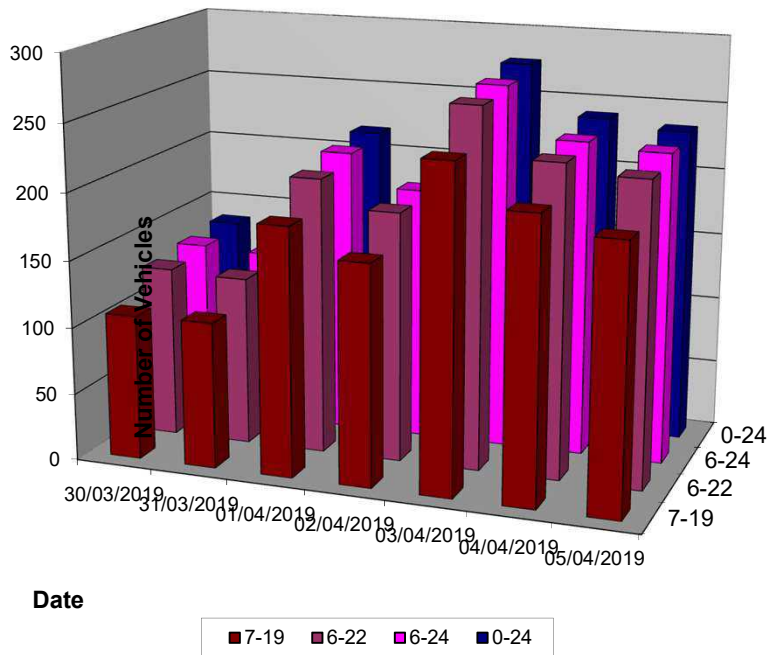
Channel 2 - Eastbound

Vehicle Flow

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday	5 Day Ave	7 Day Ave
1	2	2	1	0	0	0	1	0	1
2	0	1	0	0	0	0	0	0	0
3	0	0	0	1	0	0	0	0	0
4	0	1	0	0	3	2	0	1	1
5	0	1	0	0	2	0	0	0	0
6	2	0	3	5	1	4	3	3	3
7	2	0	7	5	9	5	4	6	5
8	2	1	9	11	17	8	8	11	8
9	11	2	11	9	16	15	13	13	11
10	6	5	19	17	30	25	19	22	17
11	10	15	18	16	13	16	18	16	15
12	9	20	19	8	19	23	20	18	17
13	10	13	14	16	18	24	17	18	16
14	17	8	13	15	23	16	18	17	16
15	8	13	13	18	23	21	21	19	17
16	12	10	24	9	19	16	13	16	15
17	5	6	14	13	27	11	15	16	13
18	7	7	19	20	26	25	21	22	18
19	11	9	12	12	9	9	13	11	11
20	5	7	7	6	9	9	12	9	8
21	8	6	3	3	6	2	5	4	5
22	5	4	4	8	3	6	7	6	5
23	2	2	5	2	3	1	2	3	2
24	2	2	2	1	1	2	4	2	2
7-19	108	109	185	164	240	209	196	199	173
6-22	128	126	206	186	267	231	224	223	195
6-24	132	130	213	189	271	234	230	227	200
0-24	136	135	217	195	277	240	234	233	205

Vehicle Flow (Channel 2)



Warrington ATC I, Bich Avenue

Produced by Road Data Services Ltd.

Channel 2 - Eastbound

Average Speed

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	15.6	16.9	18.2	-	-	-	19.6
2	-	17.7	-	-	-	-	-
3	-	-	-	12.4	-	-	-
4	-	10.9	-	-	12.0	9.1	-
5	-	12.8	-	-	12.8	-	-
6	17.4	-	15.6	13.7	15.2	14.3	14.0
7	16.1	-	14.3	13.2	13.4	13.5	17.1
8	15.9	15.7	15.2	13.6	13.8	13.5	12.5
9	15.5	14.7	15.0	16.0	14.8	13.9	14.6
10	13.2	13.7	15.0	15.5	13.6	14.1	13.2
11	13.8	15.1	13.5	14.7	10.9	13.6	14.6
12	14.5	13.9	13.4	14.0	13.4	13.0	15.2
13	15.7	14.1	13.9	16.5	14.4	14.0	13.6
14	15.9	12.2	14.1	15.1	14.1	14.8	14.3
15	14.0	12.4	14.9	15.4	13.6	15.0	14.8
16	15.6	15.5	15.0	15.1	15.0	14.5	15.8
17	16.5	16.4	13.4	16.7	14.3	16.3	15.7
18	13.9	14.2	14.7	14.4	14.6	13.4	14.7
19	15.1	14.5	12.9	15.2	14.9	14.2	15.0
20	14.7	13.6	13.9	15.9	14.4	15.8	15.2
21	16.9	13.8	14.1	14.5	11.5	15.4	12.2
22	13.2	18.3	13.5	13.5	15.4	12.8	10.6
23	17.2	18.5	15.8	17.8	15.5	13.0	10.3
24	17.6	13.5	17.1	9.6	12.7	17.3	16.3

10-12	14.1	14.4	13.5	14.5	12.4	13.2	14.9
14-16	14.9	13.8	15.0	15.3	14.3	14.8	15.2
0-24	15.2	14.3	14.3	15.0	13.9	14.1	14.5

Average	14.4
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Channel 2 - Eastbound

85th Percentile

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	17.0	18.4	-	-	-	-	-
2	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-
4	-	-	-	-	16.4	10.0	-
5	-	-	-	-	13.5	-	-
6	19.7	-	16.8	17.0	-	17.9	15.4
7	17.9	-	17.0	14.9	15.8	17.1	20.2
8	18.3	-	17.0	16.9	15.6	18.4	14.3
9	18.7	17.1	17.9	20.0	17.5	15.5	18.1
10	15.5	16.8	15.9	19.0	16.0	18.6	16.3
11	18.4	16.7	16.7	19.0	15.6	14.8	17.5
12	17.8	18.2	15.5	17.0	16.6	14.7	19.0
13	17.7	19.0	17.4	19.8	18.8	17.0	16.2
14	18.8	14.7	17.7	19.0	17.1	18.9	16.8
15	18.5	15.0	18.5	18.2	17.0	18.8	19.1
16	18.7	18.9	18.5	18.9	19.2	16.7	18.7
17	18.8	19.8	18.8	19.0	17.8	18.7	18.4
18	17.3	16.9	17.5	16.7	16.9	16.3	17.5
19	18.8	16.2	14.8	17.5	17.0	15.3	17.3
20	15.8	15.1	18.0	19.3	16.0	19.2	18.7
21	18.9	16.1	16.0	15.3	15.1	16.6	15.4
22	18.4	19.7	15.3	17.5	18.8	15.1	14.1
23	18.5	18.6	20.0	18.2	15.9	-	11.4
24	18.3	14.0	18.5	-	-	18.6	18.8

10-12	18.2	18.2	15.7	18.4	16.3	14.9	18.1
14-16	18.6	17.9	18.9	18.3	18.1	17.7	19.1
0-24	18.8	18.4	17.6	18.8	17.3	18.2	18.1

85th %ile	18.2
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Warrington ATC I, Bich Avenue

Produced by Road Data Services Ltd.

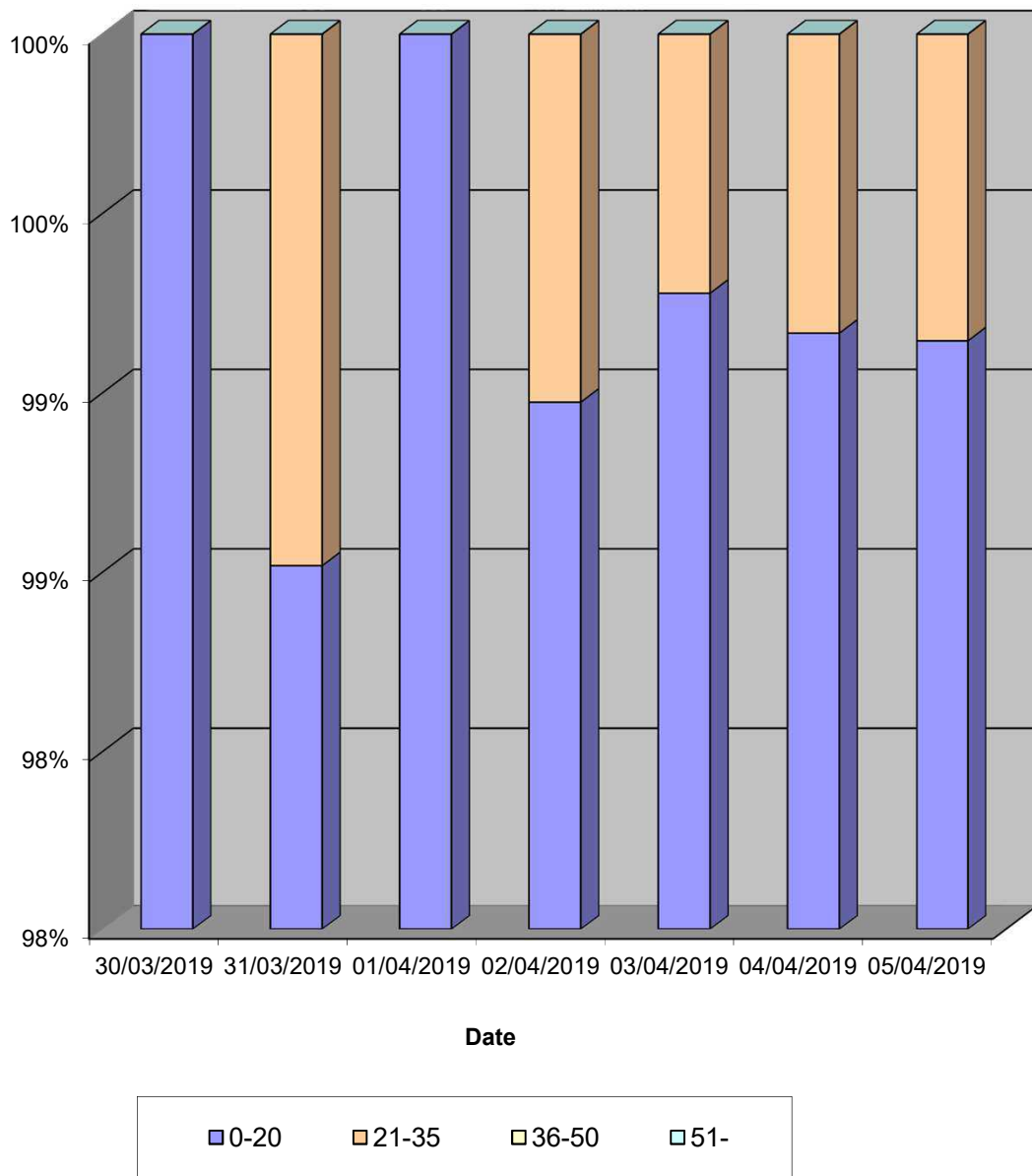
Channel 2 - Eastbound

Speed Summary

Week 1

Speed (MPH)	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
0-20	136	133	217	193	275	238	232
21-35	0	2	0	2	2	2	2
36-50	0	0	0	0	0	0	0
51-	0	0	0	0	0	0	0
TOTAL	136	135	217	195	277	240	234

Speed Summary (MPH)

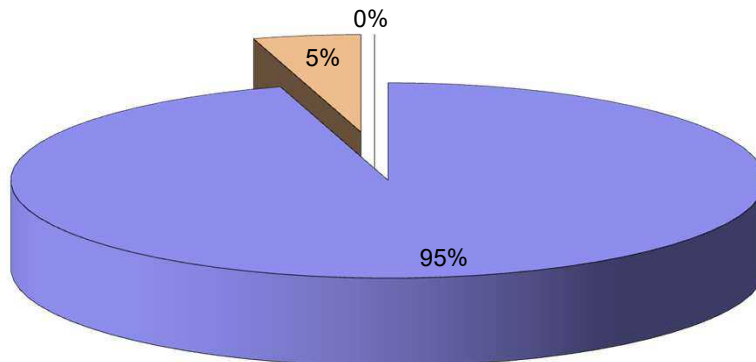


Warrington ATC I, Bich Avenue

Produced by Road Data Services Ltd.

Channel 2 - Eastbound		Vehicle Class			Week 1
Classes	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13	
Day / Time					
30/03/2019					
7-19	108	0	0	108	
6-22	128	0	0	128	
6-24	132	0	0	132	
0-24	136	0	0	136	
31/03/2019					
7-19	109	0	0	109	
6-22	126	0	0	126	
6-24	130	0	0	130	
0-24	135	0	0	135	
01/04/2019					
7-19	179	6	0	185	
6-22	199	7	0	206	
6-24	205	8	0	213	
0-24	209	8	0	217	
02/04/2019					
7-19	154	10	0	164	
6-22	176	10	0	186	
6-24	178	11	0	189	
0-24	183	12	0	195	
03/04/2019					
7-19	226	14	0	240	
6-22	251	16	0	267	
6-24	255	16	0	271	
0-24	260	17	0	277	
04/04/2019					
7-19	193	16	0	209	
6-22	213	18	0	231	
6-24	215	19	0	234	
0-24	220	20	0	240	
05/04/2019					
7-19	188	8	0	196	
6-22	215	9	0	224	
6-24	221	9	0	230	
0-24	225	9	0	234	
Average					
7-19	165	8	0	173	
6-22	187	9	0	195	
6-24	191	9	0	200	
0-24	195	9	0	205	

Total Vehicle Class Distribution



Warrington ATC J, Hawleys Lane

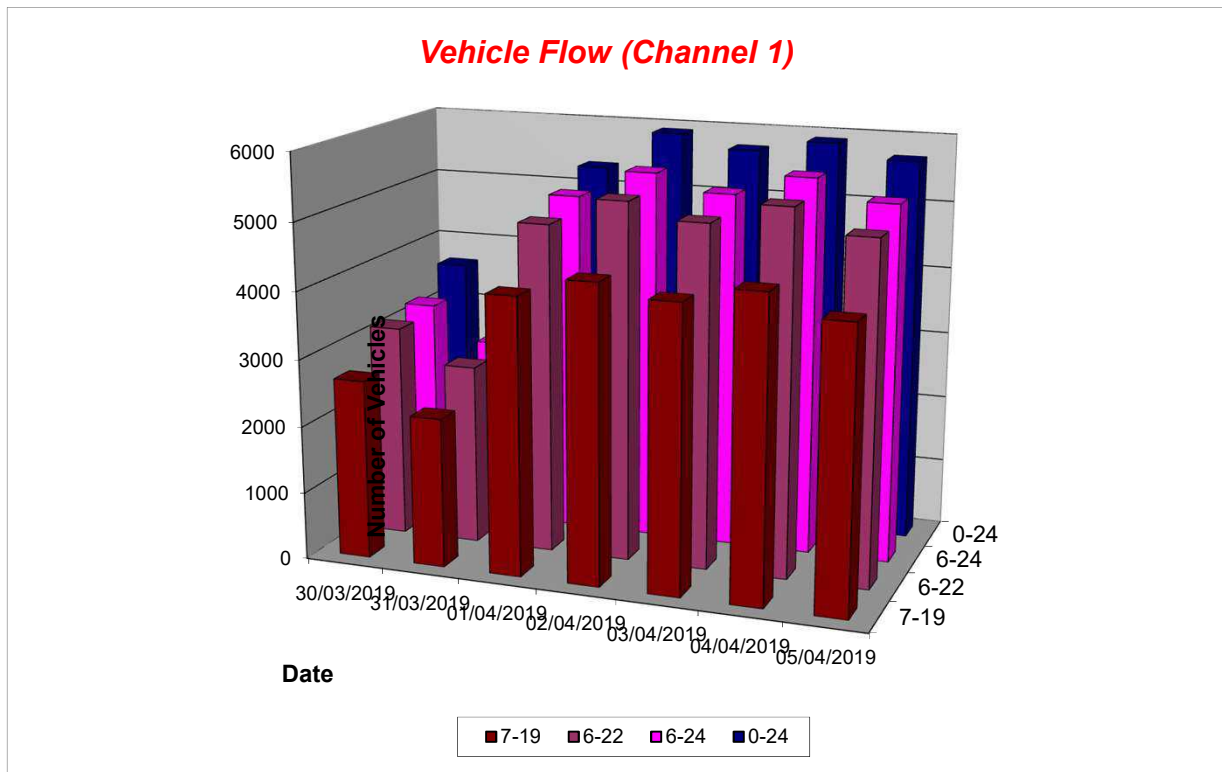
Produced by Road Data Services Ltd.

Channel 1 - Westbound

Vehicle Flow

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday	5 Day Ave	7 Day Ave
1	89	30	26	57	77	56	64	56	57
2	76	21	20	39	52	32	47	38	41
3	33	0	16	46	69	34	59	45	37
4	66	17	23	44	56	29	54	41	41
5	50	21	30	60	39	42	42	43	41
6	75	33	126	156	160	125	147	143	117
7	91	66	229	245	255	197	206	226	184
8	133	72	327	323	328	318	341	327	263
9	208	94	373	407	413	385	381	392	323
10	223	122	397	365	404	411	363	388	326
11	206	201	291	325	323	327	303	314	282
12	258	245	268	310	311	351	286	305	290
13	268	252	272	302	328	331	317	310	296
14	241	280	315	337	317	274	350	319	302
15	252	213	277	356	321	355	250	312	289
16	233	224	387	410	215	430	284	345	312
17	222	168	454	477	458	467	480	467	389
18	203	169	422	422	423	442	431	428	359
19	221	182	328	365	378	364	358	359	314
20	176	159	229	287	238	325	276	271	241
21	127	136	182	239	211	247	232	222	196
22	103	95	145	137	151	156	177	153	138
23	67	50	89	102	83	106	129	102	89
24	22	28	113	106	117	98	120	111	86
7-19	2668	2222	4111	4399	4219	4455	4144	4266	3745
6-22	3165	2678	4896	5307	5074	5380	5035	5138	4505
6-24	3254	2756	5098	5515	5274	5584	5284	5351	4681
0-24	3643	2878	5339	5917	5727	5902	5697	5716	5015



Warrington ATC J, Hawleys Lane

Produced by Road Data Services Ltd.

Channel 1 - Westbound

Average Speed

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	28.0	30.0	22.1	24.3	22.6	23.7	23.2
2	26.1	28.3	27.0	23.1	23.7	26.5	25.3
3	28.8	-	16.8	25.4	27.8	25.3	27.2
4	25.3	29.1	28.3	26.3	29.5	23.8	24.9
5	26.3	26.7	25.7	26.2	29.6	27.7	27.5
6	29.5	26.9	26.8	28.1	26.4	27.5	26.4
7	28.9	28.8	26.0	26.1	26.4	27.1	26.8
8	27.6	28.4	25.2	24.8	25.4	26.4	25.4
9	26.4	28.2	23.7	22.5	22.0	21.9	20.8
10	26.2	28.4	24.3	23.9	22.2	21.4	23.6
11	25.1	25.6	22.1	24.4	23.7	23.2	22.8
12	24.1	25.4	21.9	22.5	22.8	22.6	23.2
13	24.7	25.6	19.5	21.4	21.4	22.6	18.7
14	24.7	25.9	20.4	19.7	23.3	17.7	19.6
15	24.9	24.8	18.9	19.5	17.5	17.7	17.4
16	25.3	25.5	21.1	16.7	12.2	17.1	12.3
17	25.4	27.4	20.4	19.5	19.3	16.6	13.9
18	26.4	27.5	20.7	20.0	18.4	19.2	16.6
19	27.1	26.2	24.1	25.9	23.7	24.8	22.3
20	27.1	26.6	26.8	26.1	26.6	24.8	25.6
21	28.0	27.4	26.3	26.0	25.5	26.6	27.4
22	28.1	27.3	26.9	24.8	26.5	25.2	26.8
23	27.1	26.5	26.9	27.1	27.2	25.0	26.7
24	29.0	25.0	24.1	23.1	23.1	24.0	26.3

10-12	24.5	25.5	22.0	23.5	23.2	22.9	23.0
14-16	25.1	25.2	20.2	18.0	15.3	17.4	14.6
0-24	26.1	26.5	22.9	22.7	22.5	22.0	21.4

Average	23.0
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Channel 1 - Westbound

85th Percentile

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	31.9	34.3	31.4	28.6	26.8	29.2	27.9
2	30.2	31.3	32.6	27.3	28.1	33.9	28.6
3	32.4	-	20.2	29.3	31.3	28.9	29.7
4	29.8	31.5	30.1	31.9	33.6	28.6	29.5
5	32.7	29.7	31.2	29.0	35.9	34.1	35.7
6	34.0	31.2	32.6	32.4	28.9	31.7	31.6
7	33.7	34.1	32.0	30.0	29.7	32.3	32.2
8	31.9	32.2	29.2	29.0	29.5	30.2	29.5
9	29.9	30.8	27.7	27.0	26.1	27.8	27.0
10	29.6	32.1	28.4	27.8	27.2	26.8	28.2
11	29.0	29.2	26.8	28.8	27.7	28.3	28.0
12	28.1	29.8	26.4	27.4	27.4	27.9	27.4
13	28.7	29.1	25.9	26.9	27.4	27.4	25.4
14	29.1	29.7	26.2	26.2	28.6	25.3	26.9
15	29.1	29.4	26.4	26.0	23.8	25.4	25.7
16	28.7	30.1	26.6	23.3	18.9	24.8	19.0
17	29.8	31.2	26.7	26.7	25.4	24.0	19.8
18	29.7	31.6	26.7	27.6	26.2	25.5	23.2
19	31.4	31.0	28.3	30.0	28.2	28.8	28.5
20	31.8	31.2	29.9	29.8	31.2	28.6	29.8
21	31.6	31.9	29.8	29.0	29.4	29.5	31.1
22	33.6	32.8	30.8	29.7	29.9	30.1	30.3
23	31.1	33.3	31.3	31.4	31.7	30.5	31.0
24	33.1	30.3	28.1	27.7	26.9	27.3	32.9

10-12	28.6	29.6	26.6	28.3	27.6	28.1	27.7
14-16	28.9	29.7	26.5	24.8	22.7	25.0	22.3
0-24	30.6	30.9	28.3	28.4	28.3	28.1	28.4

85th %ile	28.8
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Warrington ATC J, Hawleys Lane

Produced by Road Data Services Ltd.

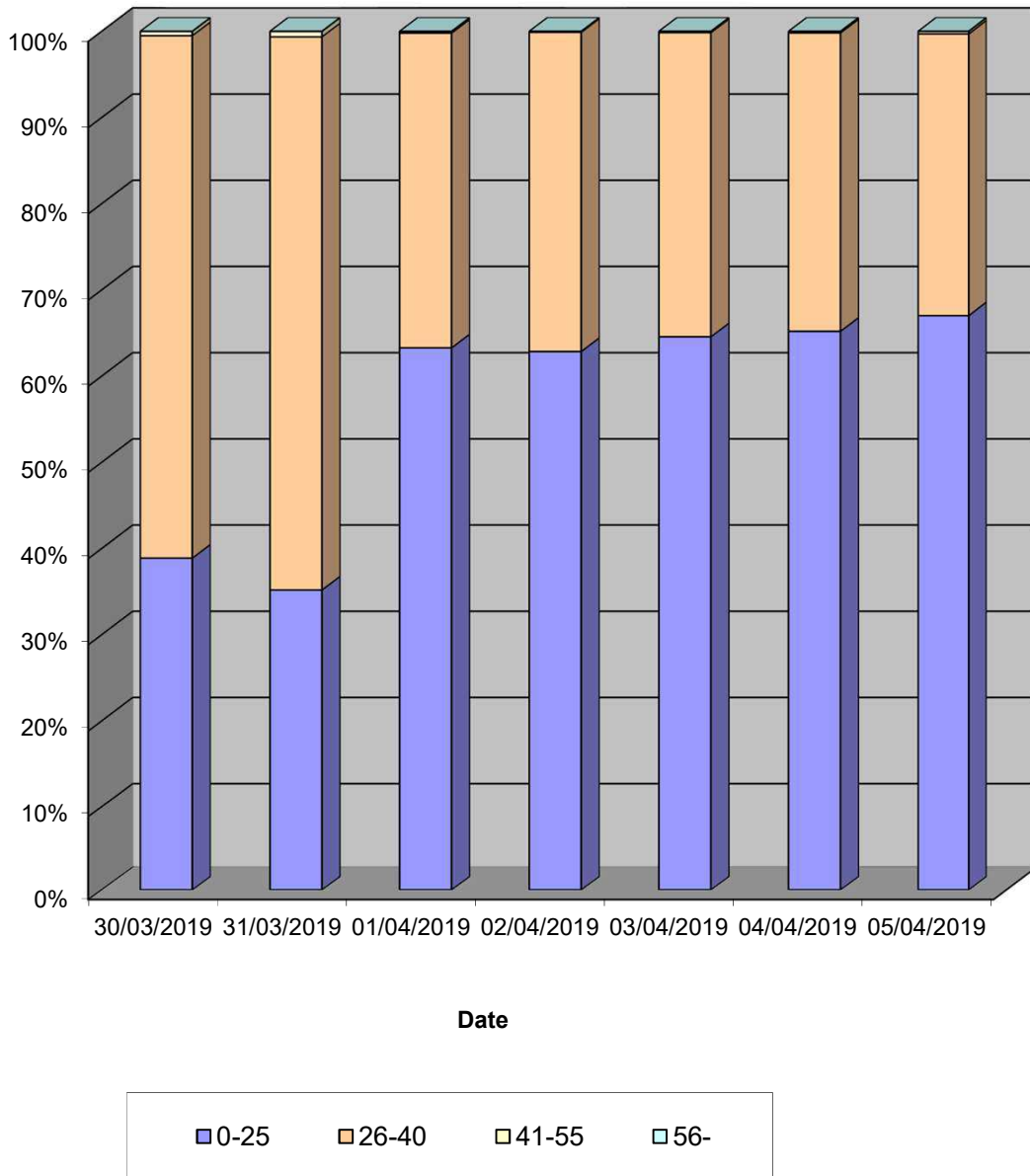
Channel 1 - Westbound

Speed Summary

Week 1

Speed (MPH)	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
0-25	1417	1013	3379	3720	3698	3849	3818
26-40	2208	1847	1950	2191	2021	2043	1862
41-55	18	18	10	6	8	10	17
56-	0	0	0	0	0	0	0
TOTAL	3643	2878	5339	5917	5727	5902	5697

Speed Summary (MPH)

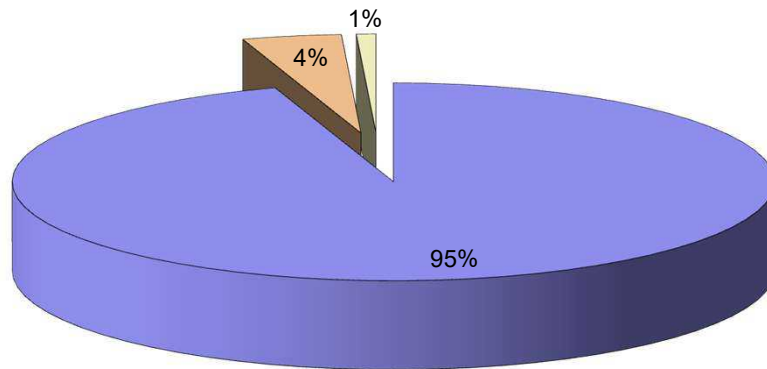


Warrington ATC J, Hawleys Lane

Produced by Road Data Services Ltd.

Channel 1 - Westbound		Vehicle Class			Week 1
Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13	
30/03/2019					
7-19	2585	72	11	2668	
6-22	3071	82	12	3165	
6-24	3159	83	12	3254	
0-24	3541	88	14	3643	
31/03/2019					
7-19	2178	35	9	2222	
6-22	2622	45	11	2678	
6-24	2696	49	11	2756	
0-24	2818	49	11	2878	
01/04/2019					
7-19	3914	177	20	4111	
6-22	4671	200	25	4896	
6-24	4858	205	35	5098	
0-24	5089	213	37	5339	
02/04/2019					
7-19	4176	201	22	4399	
6-22	5045	232	30	5307	
6-24	5238	240	37	5515	
0-24	5611	255	51	5917	
03/04/2019					
7-19	3974	193	52	4219	
6-22	4778	232	64	5074	
6-24	4969	238	67	5274	
0-24	5397	258	72	5727	
04/04/2019					
7-19	4216	210	29	4455	
6-22	5093	254	33	5380	
6-24	5287	261	36	5584	
0-24	5560	292	50	5902	
05/04/2019					
7-19	3841	271	32	4144	
6-22	4695	295	45	5035	
6-24	4939	299	46	5284	
0-24	5322	321	54	5697	
Average					
7-19	3555	166	25	3745	
6-22	4282	191	31	4505	
6-24	4449	196	35	4681	
0-24	4763	211	41	5015	

Total Vehicle Class Distribution



Warrington ATC J, Hawleys Lane

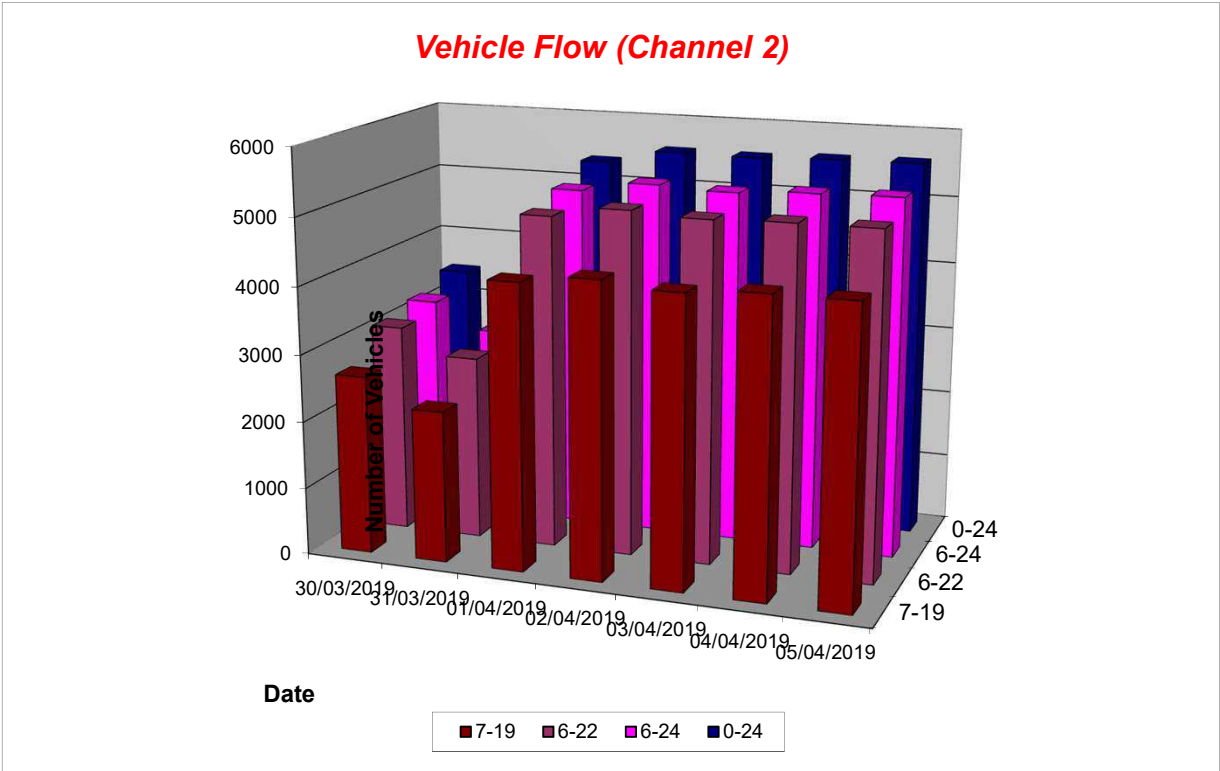
Produced by Road Data Services Ltd.

Channel 2 - Eastbound

Vehicle Flow

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday	5 Day Ave	7 Day Ave
1	55	41	22	40	41	39	41	37	40
2	31	29	20	28	38	24	27	27	28
3	27	0	18	19	26	20	26	22	19
4	25	18	13	28	14	29	27	22	22
5	20	15	38	26	35	30	30	32	28
6	64	37	126	146	164	152	135	145	118
7	69	40	134	171	195	173	191	173	139
8	98	52	303	307	317	312	316	311	244
9	129	46	363	351	365	350	375	361	283
10	172	120	329	312	336	331	338	329	277
11	201	185	251	279	278	288	266	272	250
12	255	235	224	264	286	287	281	268	262
13	279	252	323	359	305	363	358	342	320
14	240	226	275	289	321	322	338	309	287
15	303	232	314	311	314	317	339	319	304
16	244	230	315	360	307	318	344	329	303
17	257	222	503	527	454	496	410	478	410
18	248	256	594	557	548	516	540	551	466
19	231	198	443	450	448	458	456	451	383
20	163	191	250	252	257	233	217	242	223
21	135	135	164	185	164	175	170	172	161
22	82	117	160	134	159	147	152	150	136
23	65	71	83	101	101	127	132	109	97
24	65	49	86	61	71	74	85	75	70
7-19	2657	2254	4237	4366	4279	4358	4361	4320	3787
6-22	3106	2737	4945	5108	5054	5086	5091	5057	4447
6-24	3236	2857	5114	5270	5226	5287	5308	5241	4614
0-24	3458	2997	5351	5557	5544	5581	5594	5525	4869



Warrington ATC J, Hawleys Lane

Produced by Road Data Services Ltd.

Channel 2 - Eastbound

Average Speed

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	28.0	28.9	28.2	24.6	25.5	27.2	27.3
2	25.8	27.5	27.0	24.4	24.0	25.0	24.9
3	28.2	-	28.4	24.8	25.4	26.3	26.0
4	28.4	27.7	27.4	26.9	27.9	26.8	28.5
5	26.4	25.2	27.7	27.3	28.0	26.5	28.0
6	27.1	26.5	27.0	25.5	26.3	27.1	26.5
7	26.3	27.9	26.4	25.0	25.2	26.8	26.3
8	26.9	27.7	25.6	25.5	25.2	26.4	26.6
9	26.5	28.1	24.5	23.9	24.7	24.8	24.0
10	26.3	27.2	24.4	23.3	24.5	24.6	23.1
11	25.8	26.5	24.3	24.0	24.4	24.8	23.7
12	26.1	27.0	23.7	23.5	23.4	24.0	24.5
13	26.0	26.6	24.1	21.8	24.2	24.5	24.2
14	25.7	26.1	24.4	23.5	23.9	23.7	24.9
15	26.2	26.3	24.1	23.3	23.9	23.8	23.9
16	25.6	26.5	25.2	23.2	22.1	23.1	22.5
17	26.3	26.4	25.3	24.7	25.2	24.1	24.1
18	25.9	27.0	25.2	25.4	25.2	25.1	25.0
19	26.8	27.5	25.5	26.1	25.5	26.5	25.8
20	27.8	27.3	26.2	25.4	26.1	26.5	26.3
21	27.4	27.6	26.9	26.4	26.0	25.2	26.9
22	28.4	26.6	25.9	25.5	26.8	26.7	26.0
23	27.5	26.8	25.0	26.6	26.5	25.3	25.0
24	28.8	26.2	24.1	25.0	27.4	25.4	26.0

10-12	25.9	26.8	24.0	23.7	23.9	24.4	24.1
14-16	25.9	26.4	24.7	23.2	23.0	23.5	23.2
0-24	26.5	26.8	25.1	24.5	24.9	25.0	24.8

Average	25.2
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Channel 2 - Eastbound

85th Percentile

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	32.7	34.4	34.8	28.2	30.3	30.3	33.0
2	31.3	32.8	34.7	29.4	29.7	28.5	31.2
3	32.6	-	33.1	29.0	29.3	29.6	30.3
4	34.4	32.6	31.2	31.0	33.6	33.4	33.2
5	31.6	30.7	32.0	31.6	33.2	31.1	31.2
6	31.9	29.6	30.9	30.4	30.5	32.0	31.1
7	32.0	35.0	30.9	30.5	30.2	31.8	30.2
8	32.3	32.9	30.4	29.8	29.7	30.4	30.2
9	31.7	31.7	28.9	28.4	28.9	28.9	28.9
10	30.8	31.7	29.2	27.8	29.0	29.3	28.0
11	29.4	30.3	28.6	28.9	29.0	29.7	28.6
12	29.7	30.5	28.0	27.3	28.3	28.6	29.2
13	29.6	30.2	29.1	27.1	29.1	28.8	28.8
14	30.6	30.1	29.1	28.8	28.1	28.1	28.9
15	30.7	30.0	29.0	28.7	28.4	28.8	28.1
16	29.9	30.0	29.9	27.7	26.5	28.7	27.0
17	30.2	30.5	29.5	29.3	29.6	28.7	29.3
18	30.5	31.2	29.7	30.0	29.6	29.3	29.4
19	30.7	31.5	29.8	30.3	29.6	30.0	30.0
20	33.0	31.4	29.8	30.0	29.8	30.4	30.4
21	32.1	32.5	31.0	30.3	30.0	30.0	31.3
22	32.5	31.5	30.6	29.4	30.7	31.5	31.4
23	33.0	32.0	31.1	31.7	31.0	30.3	30.7
24	32.0	29.7	29.1	31.7	30.4	30.4	29.8

10-12	29.6	30.4	28.6	28.2	28.6	29.2	28.9
14-16	30.4	30.0	29.4	28.2	27.6	28.8	27.5
0-24	30.8	30.9	29.7	29.4	29.5	29.6	29.6

85th %ile	29.8
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Warrington ATC J, Hawleys Lane

Produced by Road Data Services Ltd.

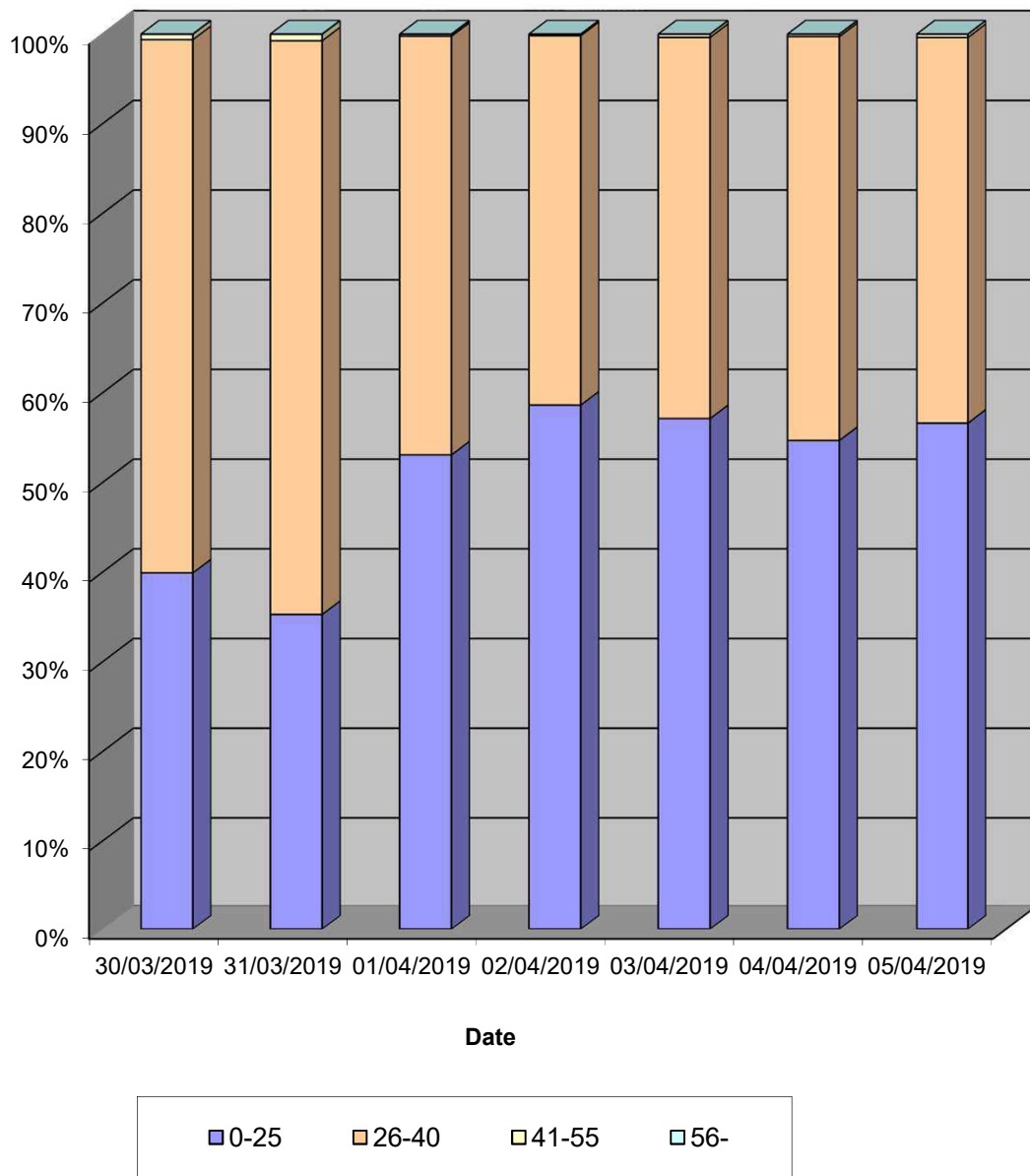
Channel 2 - Eastbound

Speed Summary

Week 1

Speed (MPH)	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
0-25	1381	1058	2841	3259	3168	3053	3168
26-40	2056	1917	2498	2289	2356	2513	2405
41-55	21	22	12	9	20	15	21
56-	0	0	0	0	0	0	0
TOTAL	3458	2997	5351	5557	5544	5581	5594

Speed Summary (MPH)

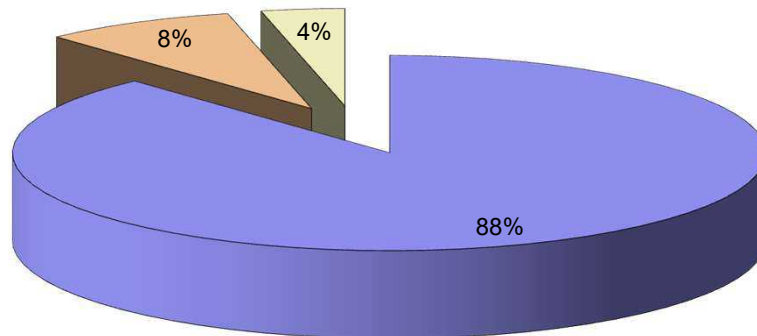


Warrington ATC J, Hawleys Lane

Produced by Road Data Services Ltd.

Channel 2 - Eastbound		Vehicle Class			Week 1
Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13	
30/03/2019					
7-19	2475	148	34	2657	
6-22	2900	166	40	3106	
6-24	3028	168	40	3236	
0-24	3198	190	70	3458	
31/03/2019					
7-19	2165	65	24	2254	
6-22	2634	75	28	2737	
6-24	2750	76	31	2857	
0-24	2882	81	34	2997	
01/04/2019					
7-19	3665	444	128	4237	
6-22	4280	496	169	4945	
6-24	4406	510	198	5114	
0-24	4621	520	210	5351	
02/04/2019					
7-19	3785	430	151	4366	
6-22	4430	477	201	5108	
6-24	4546	490	234	5270	
0-24	4761	521	275	5557	
03/04/2019					
7-19	3736	434	109	4279	
6-22	4412	491	151	5054	
6-24	4542	507	177	5226	
0-24	4787	528	229	5544	
04/04/2019					
7-19	3893	384	81	4358	
6-22	4526	431	129	5086	
6-24	4688	446	153	5287	
0-24	4929	472	180	5581	
05/04/2019					
7-19	3843	403	115	4361	
6-22	4468	461	162	5091	
6-24	4642	479	187	5308	
0-24	4869	504	221	5594	
Average					
7-19	3366	330	92	3787	
6-22	3950	371	126	4447	
6-24	4086	382	146	4614	
0-24	4292	402	174	4869	

Total Vehicle Class Distribution



Warrington ATC K, A50

Produced by Road Data Services Ltd.

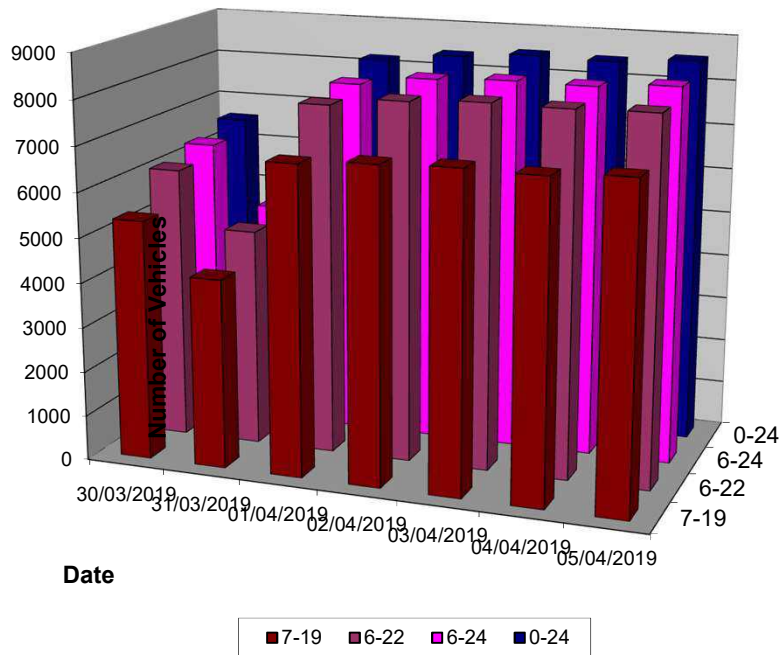
Channel 1 - Westbound

Vehicle Flow

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday	5 Day Ave	7 Day Ave
1	84	82	40	28	26	20	35	30	45
2	37	40	14	16	22	19	19	18	24
3	24	0	12	6	11	9	11	10	10
4	23	32	10	7	25	10	19	14	18
5	21	23	37	25	30	26	22	28	26
6	70	61	141	152	165	168	153	156	130
7	105	74	195	214	259	242	231	228	189
8	209	91	571	596	609	632	562	594	467
9	285	133	708	678	765	742	667	712	568
10	474	269	584	591	643	614	623	611	543
11	495	405	455	493	425	448	476	459	457
12	566	482	402	492	448	482	523	469	485
13	532	553	514	481	536	481	553	513	521
14	551	494	482	463	487	491	504	485	496
15	483	462	486	468	476	488	520	488	483
16	500	399	584	626	543	590	647	598	556
17	447	283	743	731	747	740	719	736	630
18	432	324	707	723	703	669	684	697	606
19	378	327	635	643	661	642	645	645	562
20	269	251	328	357	325	350	322	336	315
21	206	165	223	225	241	236	214	228	216
22	163	138	170	193	190	195	185	187	176
23	117	97	109	121	113	125	152	124	119
24	111	58	46	60	53	45	89	59	66
7-19	5352	4222	6871	6985	7043	7019	7123	7008	6374
6-22	6095	4850	7787	7974	8058	8042	8075	7987	7269
6-24	6323	5005	7942	8155	8224	8212	8316	8170	7454
0-24	6582	5243	8196	8389	8503	8464	8575	8425	7707

Vehicle Flow (Channel 1)



Warrington ATC K, A50

Produced by Road Data Services Ltd.

Channel 1 - Westbound

Average Speed

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	28.0	28.4	30.8	29.9	30.2	31.8	28.7
2	28.4	29.9	32.5	30.7	33.3	35.3	26.9
3	28.6	-	31.6	35.5	32.5	28.4	32.7
4	31.8	30.9	29.0	28.7	31.7	31.2	30.2
5	28.8	27.8	27.0	29.2	28.4	29.8	31.1
6	30.0	29.5	30.0	29.0	28.7	30.1	29.7
7	28.3	31.0	28.5	28.7	28.5	27.6	28.9
8	28.6	28.6	25.5	25.2	24.4	25.8	26.3
9	27.6	29.2	21.6	20.1	23.2	22.1	24.1
10	26.8	28.2	24.8	24.6	22.1	24.7	23.5
11	26.2	27.0	25.8	25.5	25.9	25.9	25.7
12	25.8	27.1	25.5	25.6	26.1	25.2	25.9
13	24.7	26.4	25.3	25.9	25.7	25.3	25.9
14	26.0	26.7	25.5	25.5	25.3	24.9	25.9
15	26.0	26.3	25.1	24.7	25.0	24.7	25.2
16	26.6	26.7	25.8	24.7	22.2	24.8	20.8
17	26.9	27.8	21.6	23.9	24.7	24.0	13.2
18	27.1	28.0	24.3	23.7	19.5	14.2	18.8
19	26.3	28.1	26.3	27.1	24.2	22.7	25.7
20	27.0	27.9	26.7	27.0	27.3	27.2	26.9
21	27.7	27.8	27.0	27.2	27.3	27.1	27.8
22	27.7	28.4	28.3	28.0	28.0	27.3	28.0
23	27.8	28.7	28.8	29.0	29.4	28.6	27.2
24	27.9	28.1	29.9	29.9	29.7	29.4	27.6

10-12	26.0	27.1	25.7	25.6	26.0	25.6	25.8
14-16	26.3	26.5	25.5	24.7	23.5	24.8	22.8
0-24	26.7	27.5	25.1	25.2	24.6	24.2	23.9

Average	25.1
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Channel 1 - Westbound

85th Percentile

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	31.9	33.0	34.5	34.2	33.6	37.8	31.7
2	32.3	36.2	37.2	33.8	39.8	38.4	32.2
3	32.3	-	37.4	38.7	36.3	38.0	38.3
4	36.9	35.1	32.8	31.9	36.6	36.2	34.6
5	35.1	33.6	32.5	33.2	33.7	35.7	37.3
6	34.5	34.2	35.1	33.3	32.8	33.9	33.8
7	32.7	36.9	31.9	32.8	32.3	31.2	33.3
8	32.9	33.9	29.3	28.8	29.5	29.6	29.7
9	31.3	33.1	26.6	25.9	27.3	27.3	28.1
10	29.7	32.0	28.7	28.5	27.2	28.7	28.0
11	29.2	29.8	29.0	28.8	28.8	28.9	29.0
12	28.9	30.1	28.7	28.8	29.2	28.9	28.9
13	28.9	29.2	28.6	28.8	29.2	28.8	28.8
14	28.8	29.8	28.9	28.7	28.5	28.4	29.2
15	29.1	29.4	28.5	28.5	28.7	28.5	28.7
16	29.9	29.3	29.0	28.4	27.0	28.4	26.2
17	30.2	31.5	27.1	28.0	28.7	27.8	19.5
18	30.1	31.4	28.4	28.3	26.4	25.5	26.3
19	29.7	31.8	29.4	30.2	29.0	28.3	29.1
20	30.4	30.8	30.3	30.6	30.2	30.6	30.3
21	31.7	31.8	29.9	30.8	30.6	29.8	30.9
22	32.5	32.6	32.4	31.3	32.5	31.5	31.2
23	33.1	32.3	33.3	32.3	34.2	32.3	31.2
24	31.5	31.9	33.1	35.8	35.1	32.4	30.8

10-12	29.0	30.0	29.0	28.8	29.0	28.9	28.9
14-16	29.5	29.4	28.7	28.5	28.0	28.4	27.8
0-24	30.2	30.9	29.2	29.2	29.1	29.0	29.0

85th %ile	29.4
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Warrington ATC K, A50

Produced by Road Data Services Ltd.

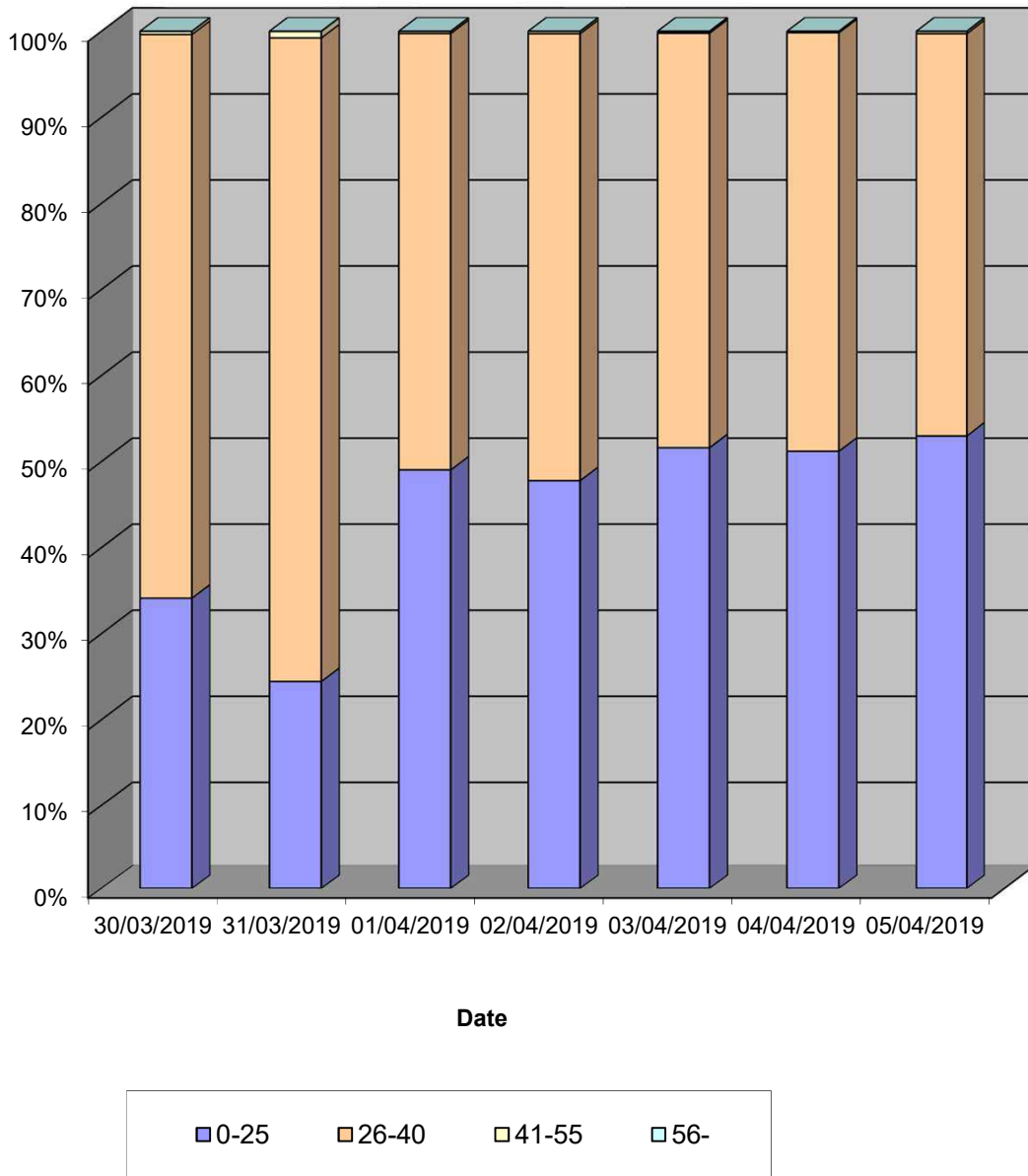
Channel 1 - Westbound

Speed Summary

Week 1

Speed (MPH)	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
0-25	2247	1282	4019	4009	4389	4334	4543
26-40	4311	3921	4156	4357	4096	4116	4008
41-55	24	40	21	23	18	14	24
56-	0	0	0	0	0	0	0
TOTAL	6582	5243	8196	8389	8503	8464	8575

Speed Summary (MPH)



Warrington ATC K, A50

Produced by Road Data Services Ltd.

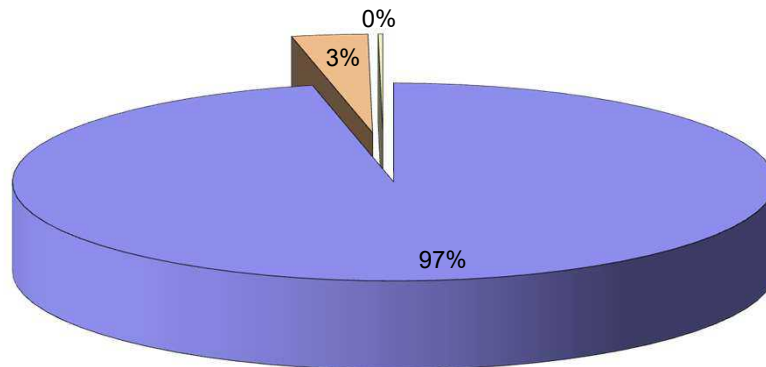
Channel 1 - Westbound

Vehicle Class

Week 1

Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
30/03/2019				
7-19	5198	145	9	5352
6-22	5930	155	10	6095
6-24	6156	156	11	6323
0-24	6412	159	11	6582
31/03/2019				
7-19	4143	70	9	4222
6-22	4762	77	11	4850
6-24	4912	82	11	5005
0-24	5144	88	11	5243
01/04/2019				
7-19	6512	344	15	6871
6-22	7399	370	18	7787
6-24	7552	372	18	7942
0-24	7805	373	18	8196
02/04/2019				
7-19	6670	298	17	6985
6-22	7643	313	18	7974
6-24	7822	315	18	8155
0-24	8052	319	18	8389
03/04/2019				
7-19	6790	236	17	7043
6-22	7792	248	18	8058
6-24	7957	249	18	8224
0-24	8227	257	19	8503
04/04/2019				
7-19	6814	193	12	7019
6-22	7818	211	13	8042
6-24	7987	212	13	8212
0-24	8230	220	14	8464
05/04/2019				
7-19	6812	300	11	7123
6-22	7749	313	13	8075
6-24	7986	317	13	8316
0-24	8238	322	15	8575
Average				
7-19	6134	227	13	6374
6-22	7013	241	14	7269
6-24	7196	243	15	7454
0-24	7444	248	15	7707

Total Vehicle Class Distribution



Warrington ATC K, A50

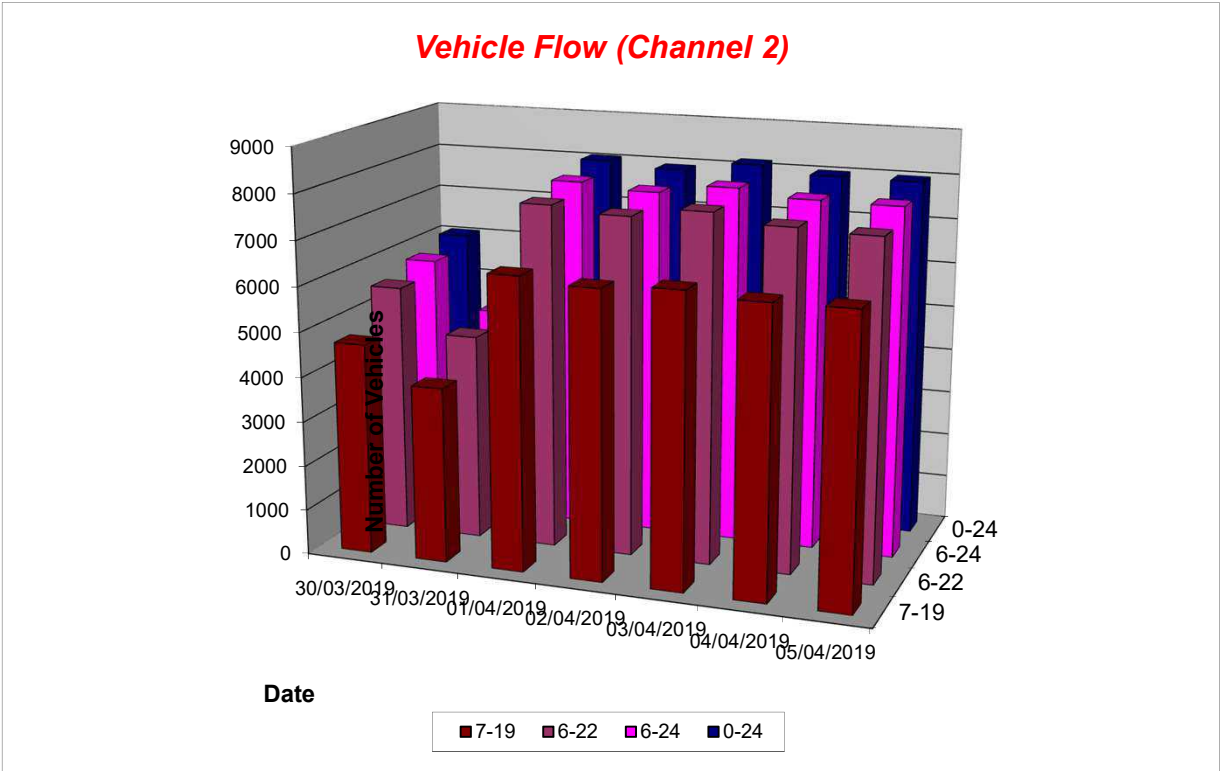
Produced by Road Data Services Ltd.

Channel 2 - Eastbound

Vehicle Flow

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday	5 Day Ave	7 Day Ave
1	84	68	35	40	37	31	42	37	48
2	43	34	16	14	16	14	17	15	22
3	22	0	11	13	9	10	11	11	11
4	23	28	11	8	10	18	15	12	16
5	26	22	29	33	30	32	26	30	28
6	56	38	93	92	112	107	106	102	86
7	88	58	252	259	285	259	231	257	205
8	117	65	892	817	845	880	809	849	632
9	205	100	611	620	602	563	575	594	468
10	354	164	494	487	523	543	540	517	444
11	402	315	334	346	350	344	360	347	350
12	453	446	404	385	429	407	411	407	419
13	495	446	422	433	439	424	483	440	449
14	491	439	417	450	441	438	418	433	442
15	459	438	450	465	520	522	523	496	482
16	420	470	477	470	450	470	441	462	457
17	435	367	694	618	634	658	558	632	566
18	435	330	703	663	654	567	633	644	569
19	438	320	594	616	587	547	628	594	533
20	361	272	404	403	391	376	356	386	366
21	236	232	316	304	355	323	298	319	295
22	174	136	197	198	237	220	216	214	197
23	141	89	125	139	131	165	191	150	140
24	105	71	73	67	71	86	102	80	82
7-19	4704	3900	6492	6370	6474	6363	6379	6416	5812
6-22	5563	4598	7661	7534	7742	7541	7480	7592	6874
6-24	5809	4758	7859	7740	7944	7792	7773	7822	7096
0-24	6063	4948	8054	7940	8158	8004	7990	8029	7308



Warrington ATC K, A50

Produced by Road Data Services Ltd.

Channel 2 - Eastbound

Average Speed

Week 1

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	29.5	27.8	32.4	28.5	30.2	29.9	29.3
2	29.8	29.8	30.6	37.2	31.8	29.6	28.2
3	33.8	-	32.2	30.5	31.0	31.5	32.1
4	30.7	30.2	33.3	28.8	31.6	32.6	33.4
5	29.5	30.6	31.3	31.5	31.0	32.4	30.6
6	30.7	30.1	30.9	29.6	30.5	30.1	30.7
7	32.0	32.1	29.9	29.1	30.1	29.8	29.9
8	29.9	30.3	26.9	26.5	27.5	27.1	27.1
9	28.6	30.3	25.2	24.8	24.4	24.6	26.4
10	27.4	28.7	26.8	27.2	26.0	27.1	25.8
11	27.7	28.3	26.7	26.9	26.7	26.6	27.0
12	26.2	28.0	26.8	26.8	26.2	26.0	26.7
13	26.7	27.4	26.7	27.1	26.1	25.0	26.1
14	27.4	27.7	26.4	27.4	25.8	25.8	27.5
15	27.9	27.5	25.7	26.0	26.4	24.8	26.8
16	27.7	27.6	26.2	26.5	24.7	26.0	25.5
17	26.8	28.4	26.5	26.4	26.8	25.7	25.2
18	26.8	28.9	26.8	27.6	26.0	25.4	26.9
19	26.8	28.4	26.9	27.5	27.0	25.8	26.9
20	27.8	28.7	27.7	27.3	27.9	27.0	26.8
21	27.9	28.0	27.6	27.7	27.5	27.5	27.7
22	28.7	29.2	28.2	28.3	27.8	28.1	28.1
23	28.5	29.8	29.0	28.4	28.9	28.5	27.9
24	29.1	28.6	29.2	29.9	30.0	28.3	28.0

10-12	26.9	28.1	26.7	26.8	26.4	26.3	26.9
14-16	27.8	27.5	26.0	26.2	25.6	25.4	26.2
0-24	27.6	28.3	26.9	27.0	26.7	26.4	26.9

Average	27.0
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Channel 2 - Eastbound

85th Percentile

Hr Ending	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
1	34.1	32.6	41.4	32.5	36.4	34.9	34.4
2	36.4	34.7	37.2	42.7	37.8	31.7	31.4
3	42.1	-	45.5	35.8	36.9	36.3	38.4
4	35.9	34.5	36.9	34.8	37.5	39.6	37.9
5	36.2	35.1	36.4	40.4	37.8	38.4	36.8
6	36.5	33.9	36.0	34.9	36.5	34.9	37.6
7	37.5	38.1	33.6	33.5	34.8	33.4	34.3
8	34.1	36.6	30.9	30.6	31.3	31.1	30.9
9	32.9	34.6	29.2	29.3	29.0	29.0	30.3
10	32.0	34.0	30.4	30.5	29.8	30.6	29.8
11	30.9	32.8	30.0	30.8	30.2	30.7	30.6
12	30.1	31.2	30.0	30.3	29.9	29.5	30.4
13	30.2	30.8	30.3	30.3	29.8	29.5	29.8
14	31.3	30.8	30.2	31.1	29.9	29.8	30.8
15	31.2	31.0	29.9	29.9	30.0	29.0	30.4
16	31.0	30.8	29.7	29.9	29.0	29.5	29.9
17	30.5	32.1	29.9	30.1	30.2	29.5	29.6
18	30.5	33.3	30.5	30.8	29.6	29.8	30.4
19	30.4	31.6	30.1	30.7	30.7	30.3	30.3
20	31.0	32.6	31.4	30.7	31.1	30.4	30.0
21	31.1	31.7	31.0	31.1	30.6	30.8	30.9
22	32.8	33.8	32.0	31.9	31.6	31.5	32.0
23	31.6	35.4	33.7	31.6	33.4	32.0	31.8
24	33.2	33.9	34.0	33.8	34.3	32.3	33.1

10-12	30.5	31.6	30.0	30.5	30.0	29.9	30.5
14-16	31.1	30.9	29.8	29.9	29.8	29.3	30.2
0-24	31.4	32.3	30.6	30.8	30.5	30.4	30.7

85th %ile	30.8
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Warrington ATC K, A50

Produced by Road Data Services Ltd.

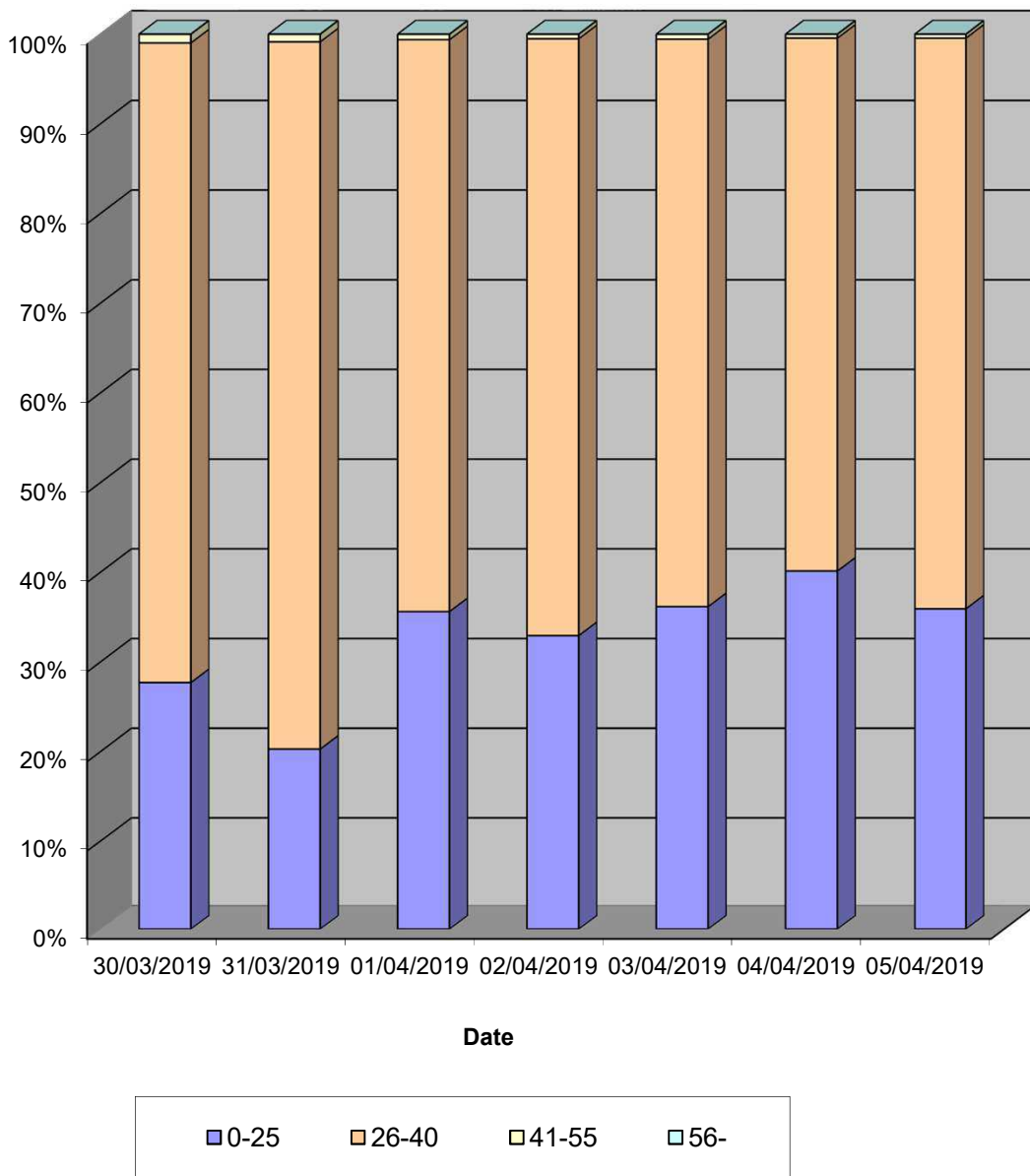
Channel 2 - Eastbound

Speed Summary

Week 1

Speed (MPH)	30/03/2019 Saturday	31/03/2019 Sunday	01/04/2019 Monday	02/04/2019 Tuesday	03/04/2019 Wednesday	04/04/2019 Thursday	05/04/2019 Friday
0-25	1680	1004	2869	2616	2951	3213	2871
26-40	4324	3902	5136	5284	5162	4756	5084
41-55	59	42	49	40	45	35	35
56-	0	0	0	0	0	0	0
TOTAL	6063	4948	8054	7940	8158	8004	7990

Speed Summary (MPH)



Warrington ATC K, A50

Produced by Road Data Services Ltd.

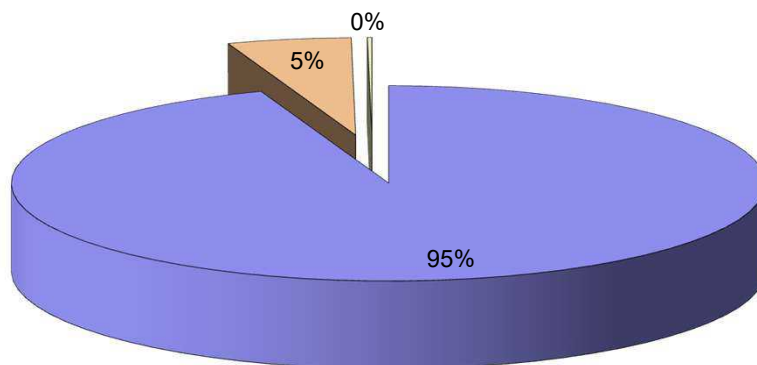
Channel 2 - Eastbound

Vehicle Class

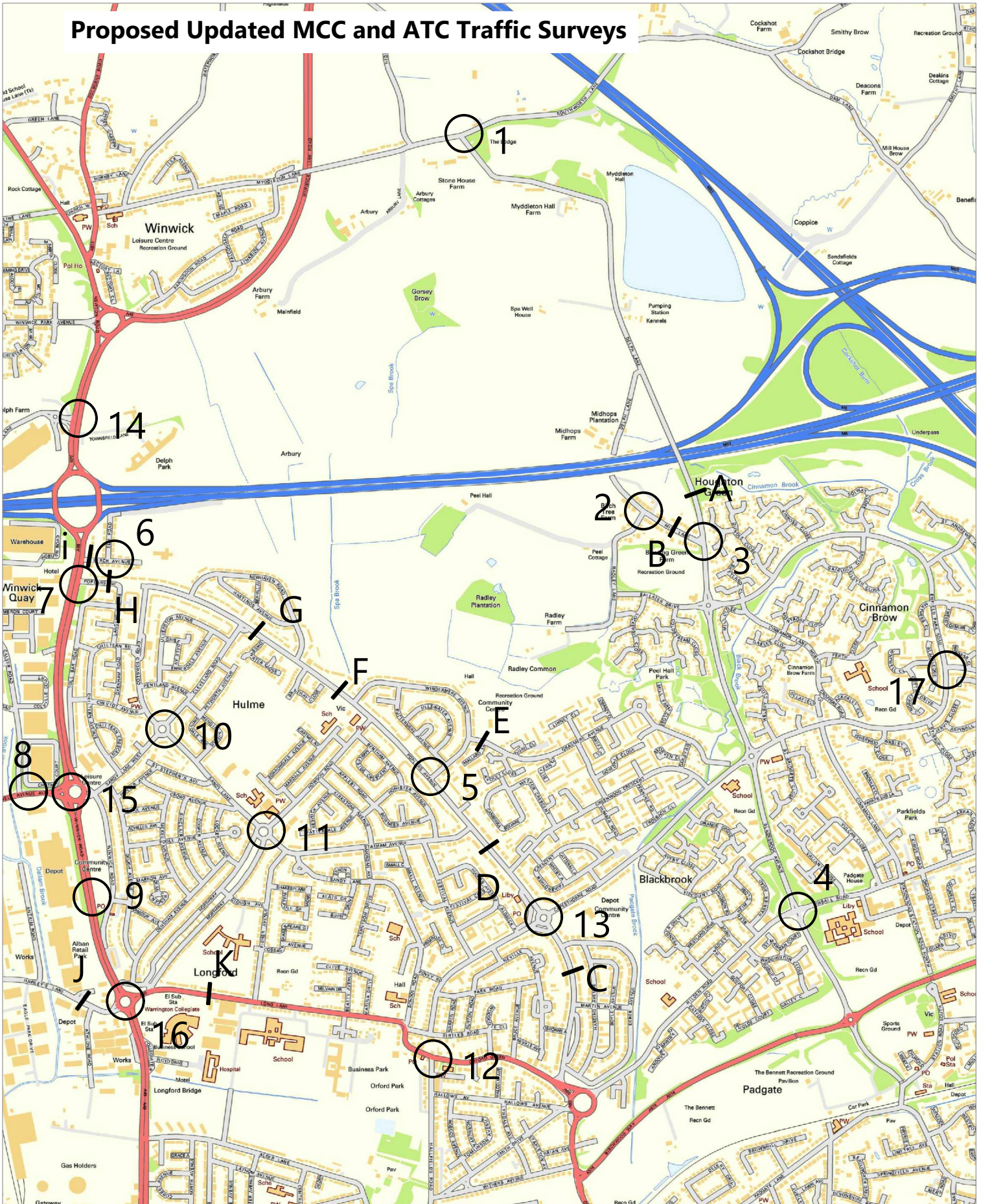
Week 1

Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
30/03/2019				
7-19	4547	151	6	4704
6-22	5386	171	6	5563
6-24	5628	175	6	5809
0-24	5866	190	7	6063
31/03/2019				
7-19	3803	92	5	3900
6-22	4491	102	5	4598
6-24	4649	103	6	4758
0-24	4830	112	6	4948
01/04/2019				
7-19	6034	445	13	6492
6-22	7159	488	14	7661
6-24	7353	492	14	7859
0-24	7539	500	15	8054
02/04/2019				
7-19	5936	419	15	6370
6-22	7054	463	17	7534
6-24	7259	464	17	7740
0-24	7441	480	19	7940
03/04/2019				
7-19	6015	442	17	6474
6-22	7233	491	18	7742
6-24	7431	495	18	7944
0-24	7633	507	18	8158
04/04/2019				
7-19	5974	378	11	6363
6-22	7098	432	11	7541
6-24	7343	436	13	7792
0-24	7541	450	13	8004
05/04/2019				
7-19	5948	413	18	6379
6-22	7004	456	20	7480
6-24	7293	459	21	7773
0-24	7495	474	21	7990
Average				
7-19	5465	334	12	5812
6-22	6489	372	13	6874
6-24	6708	375	14	7096
0-24	6906	388	14	7308

Total Vehicle Class Distribution



Proposed Updated MCC and ATC Traffic Surveys



Peel Hall, Warrington

2019 Peak Period MCC
2019 Week-Long ATC



1-17 (to include for queues)
A-K

Warrington - Queue Survey, Wednesday 3rd April 2019

Produced by Road Data Services Ltd

			Delph Lane	Myddleton Lane
Time			Lane 1	Lane 1
			Vehicles	
7:00	-	7:05	2	1
7:05	-	7:10	2	1
7:10	-	7:15	2	2
7:15	-	7:20	3	3
7:20	-	7:25	3	2
7:25	-	7:30	2	2
7:30	-	7:35	4	3
7:35	-	7:40	4	3
7:40	-	7:45	6	3
7:45	-	7:50	7	4
7:50	-	7:55	4	4
7:55	-	8:00	10	4
8:00	-	8:05	9	4
8:05	-	8:10	8	3
8:10	-	8:15	4	3
8:15	-	8:20	8	3
8:20	-	8:25	7	5
8:25	-	8:30	3	3
8:30	-	8:35	9	3
8:35	-	8:40	12	4
8:40	-	8:45	11	3
8:45	-	8:50	9	4
8:50	-	8:55	6	3
8:55	-	9:00	4	5
9:00	-	9:05	2	3
9:05	-	9:10	7	2
9:10	-	9:15	4	3
9:15	-	9:20	5	3
9:20	-	9:25	3	2
9:25	-	9:30	1	1
9:30	-	9:35	5	2
9:35	-	9:40	1	1
9:40	-	9:45	2	2
9:45	-	9:50	3	0
9:50	-	9:55	2	0
9:55	-	10:00	3	2

16:00	-	16:05	3	5
16:05	-	16:10	4	3
16:10	-	16:15	12	2
16:15	-	16:20	3	3
16:20	-	16:25	6	6
16:25	-	16:30	10	6
16:30	-	16:35	6	4
16:35	-	16:40	8	6
16:40	-	16:45	7	5
16:45	-	16:50	5	3

16:50	-	16:55	7	3
16:55	-	17:00	10	5
17:00	-	17:05	6	4
17:05	-	17:10	16	4
17:10	-	17:15	25	3
17:15	-	17:20	8	3
17:20	-	17:25	7	4
17:25	-	17:30	6	3
17:30	-	17:35	18	4
17:35	-	17:40	10	3
17:40	-	17:45	6	2
17:45	-	17:50	6	2
17:50	-	17:55	4	2
17:55	-	18:00	7	3
18:00	-	18:05	2	1
18:05	-	18:10	3	1
18:10	-	18:15	2	1
18:15	-	18:20	4	1
18:20	-	18:25	2	2
18:25	-	18:30	4	1
18:30	-	18:35	2	1
18:35	-	18:40	1	1
18:40	-	18:45	4	3
18:45	-	18:50	1	1
18:50	-	18:55	3	1
18:55	-	19:00	1	2

Queues are maximum vehicle length every 5 minutes

Warrington - Queue Survey, Wednesday 3rd April 2019

Produced by Road Data Services Ltd

			Radley Lane	Mill Lane (West)
Time			Lane 1	Lane 1
			Vehicles	
7:00	-	7:05	0	0
7:05	-	7:10	0	0
7:10	-	7:15	0	0
7:15	-	7:20	0	0
7:20	-	7:25	0	0
7:25	-	7:30	0	0
7:30	-	7:35	0	0
7:35	-	7:40	1	0
7:40	-	7:45	0	0
7:45	-	7:50	0	0
7:50	-	7:55	0	0
7:55	-	8:00	0	0
8:00	-	8:05	0	0
8:05	-	8:10	0	0
8:10	-	8:15	0	0
8:15	-	8:20	0	0
8:20	-	8:25	0	0
8:25	-	8:30	0	0
8:30	-	8:35	0	0
8:35	-	8:40	1	0
8:40	-	8:45	0	0
8:45	-	8:50	0	0
8:50	-	8:55	0	0
8:55	-	9:00	0	0
9:00	-	9:05	0	0
9:05	-	9:10	0	0
9:10	-	9:15	0	0
9:15	-	9:20	0	0
9:20	-	9:25	0	0
9:25	-	9:30	0	0
9:30	-	9:35	0	0
9:35	-	9:40	0	0
9:40	-	9:45	0	0
9:45	-	9:50	1	0
9:50	-	9:55	0	0
9:55	-	10:00	0	0

16:00	-	16:05	0	0
16:05	-	16:10	0	0
16:10	-	16:15	0	0
16:15	-	16:20	0	0
16:20	-	16:25	0	0
16:25	-	16:30	0	0
16:30	-	16:35	0	0
16:35	-	16:40	0	0
16:40	-	16:45	0	0
16:45	-	16:50	0	0

16:50	-	16:55	0	0
16:55	-	17:00	0	0
17:00	-	17:05	0	0
17:05	-	17:10	0	0
17:10	-	17:15	0	0
17:15	-	17:20	0	0
17:20	-	17:25	1	0
17:25	-	17:30	0	0
17:30	-	17:35	0	0
17:35	-	17:40	0	0
17:40	-	17:45	0	0
17:45	-	17:50	0	0
17:50	-	17:55	0	0
17:55	-	18:00	0	0
18:00	-	18:05	0	0
18:05	-	18:10	0	0
18:10	-	18:15	0	0
18:15	-	18:20	0	0
18:20	-	18:25	0	0
18:25	-	18:30	0	0
18:30	-	18:35	0	0
18:35	-	18:40	0	0
18:40	-	18:45	0	0
18:45	-	18:50	0	0
18:50	-	18:55	0	0
18:55	-	19:00	0	0

Queues are maximum vehicle length every 5 minutes

Warrington - Queue Survey, Wednesday 3rd April 2019

Produced by Road Data Services Ltd

		Mill Lane (North)	Mill Lane (West)			
Time			Lane 1	Left Turn	Right Turn	Westbound
	Vehicles					
7:00 - 7:05		0	1	0	0	
7:05 - 7:10		0	0	1	0	
7:10 - 7:15		0	0	1	0	
7:15 - 7:20		0	0	0	0	
7:20 - 7:25		0	1	0	0	
7:25 - 7:30		0	1	1	0	
7:30 - 7:35		0	0	0	0	
7:35 - 7:40		0	0	1	0	
7:40 - 7:45		0	0	1	0	
7:45 - 7:50		0	0	1	0	
7:50 - 7:55		0	0	1	0	
7:55 - 8:00		0	1	1	0	
8:00 - 8:05		0	0	1	0	
8:05 - 8:10		0	1	1	0	
8:10 - 8:15		0	0	1	0	
8:15 - 8:20		0	1	1	0	
8:20 - 8:25		0	0	1	0	
8:25 - 8:30		0	1	1	0	
8:30 - 8:35		0	0	0	0	
8:35 - 8:40		0	0	0	0	
8:40 - 8:45		0	0	2	0	
8:45 - 8:50		0	0	1	0	
8:50 - 8:55		0	0	0	0	
8:55 - 9:00		0	1	1	0	
9:00 - 9:05		0	0	1	0	
9:05 - 9:10		0	0	1	0	
9:10 - 9:15		0	0	1	0	
9:15 - 9:20		0	0	1	0	
9:20 - 9:25		0	0	0	0	
9:25 - 9:30		0	0	1	0	
9:30 - 9:35		0	0	0	0	
9:35 - 9:40		0	0	0	0	
9:40 - 9:45		0	1	0	0	
9:45 - 9:50		0	0	1	0	
9:50 - 9:55		0	0	2	0	
9:55 - 10:00		0	0	1	0	

16:00 - 16:05		0	0	1	0
16:05 - 16:10		0	0	1	1
16:10 - 16:15		0	0	2	0
16:15 - 16:20		0	0	1	0
16:20 - 16:25		0	0	0	0
16:25 - 16:30		0	0	0	0
16:30 - 16:35		0	1	1	0
16:35 - 16:40		0	0	0	0
16:40 - 16:45		0	0	0	0
16:45 - 16:50		0	0	1	0
16:50 - 16:55		0	0	0	0
16:55 - 17:00		0	1	1	0

17:00	-	17:05	0	1	1	0
17:05	-	17:10	0	0	1	0
17:10	-	17:15	0	1	1	0
17:15	-	17:20	3	0	1	0
17:20	-	17:25	1	0	1	0
17:25	-	17:30	0	0	1	0
17:30	-	17:35	1	0	0	0
17:35	-	17:40	0	0	1	0
17:40	-	17:45	0	0	2	0
17:45	-	17:50	0	0	1	0
17:50	-	17:55	1	0	0	0
17:55	-	18:00	0	1	1	0
18:00	-	18:05	0	0	1	0
18:05	-	18:10	0	0	1	0
18:10	-	18:15	0	0	1	0
18:15	-	18:20	0	0	1	0
18:20	-	18:25	2	0	0	0
18:25	-	18:30	0	0	1	0
18:30	-	18:35	0	0	1	0
18:35	-	18:40	0	0	1	0
18:40	-	18:45	0	0	1	0
18:45	-	18:50	0	0	1	0
18:50	-	18:55	0	0	0	0
18:55	-	19:00	0	0	1	0

Queues are maximum vehicle length every 5 minutes

Warrington - Queue Survey, Wednesday 3rd April 2019

Produced by Road Data Services Ltd

Time	Blackbrook Avenue (North)		Insall Road		Blackbrook Avenue (South)		Hilden Road	
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
	Vehicles							
7:00 - 7:05	4	1	2	1	2	2	2	1
7:05 - 7:10	4	2	1	1	4	1	4	2
7:10 - 7:15	2	2	2	1	2	1	2	1
7:15 - 7:20	4	2	1	1	6	1	6	1
7:20 - 7:25	9	3	6	1	3	2	3	2
7:25 - 7:30	3	0	3	1	1	1	4	1
7:30 - 7:35	4	3	2	4	2	2	3	1
7:35 - 7:40	4	3	4	0	3	2	6	3
7:40 - 7:45	5	2	5	1	6	1	5	1
7:45 - 7:50	5	2	2	1	5	1	4	1
7:50 - 7:55	7	1	4	0	2	3	5	1
7:55 - 8:00	9	3	6	2	7	3	7	1
8:00 - 8:05	6	2	3	1	3	2	5	1
8:05 - 8:10	7	3	4	1	6	6	5	1
8:10 - 8:15	9	5	7	2	10	4	8	2
8:15 - 8:20	8	3	10	1	8	6	8	1
8:20 - 8:25	11	3	9	3	6	3	7	2
8:25 - 8:30	11	2	13	1	6	3	6	2
8:30 - 8:35	13	1	12	3	7	4	6	1
8:35 - 8:40	12	3	14	1	7	3	11	5
8:40 - 8:45	14	3	6	0	7	8	5	4
8:45 - 8:50	6	1	4	2	12	2	5	4
8:50 - 8:55	8	2	2	1	4	2	5	1
8:55 - 9:00	13	2	9	3	6	3	6	1
9:00 - 9:05	9	4	5	1	8	3	8	1
9:05 - 9:10	8	1	5	1	10	1	5	1
9:10 - 9:15	14	1	2	1	3	2	4	2
9:15 - 9:20	5	1	3	2	3	1	5	1
9:20 - 9:25	3	2	5	1	4	1	1	0
9:25 - 9:30	2	2	2	1	3	2	5	1
9:30 - 9:35	2	1	1	2	2	1	2	0
9:35 - 9:40	5	1	4	1	6	2	5	1
9:40 - 9:45	3	2	3	2	3	2	2	0
9:45 - 9:50	5	5	3	0	2	1	2	1
9:50 - 9:55	4	3	5	1	3	1	4	1
9:55 - 10:00	6	0	6	1	4	2	1	1
16:00 - 16:05	10	1	5	3	1	2	8	3
16:05 - 16:10	3	3	6	2	4	1	4	1
16:10 - 16:15	6	1	7	2	2	1	5	1
16:15 - 16:20	5	2	5	0	5	2	4	1
16:20 - 16:25	5	3	5	2	6	5	5	1
16:25 - 16:30	6	1	7	2	7	2	8	1
16:30 - 16:35	5	1	4	2	16	3	7	1
16:35 - 16:40	6	2	5	1	7	2	8	2
16:40 - 16:45	7	3	5	1	6	2	7	2
16:45 - 16:50	7	2	2	1	14	1	6	1
16:50 - 16:55	6	3	6	1	7	4	5	1
16:55 - 17:00	7	5	9	0	9	2	5	2
17:00 - 17:05	5	2	3	2	8	1	4	1
17:05 - 17:10	6	1	6	1	7	2	5	2
17:10 - 17:15	11	2	6	1	13	4	10	1
17:15 - 17:20	6	1	5	4	9	3	6	1
17:20 - 17:25	3	6	3	1	8	2	9	1
17:25 - 17:30	13	2	7	1	4	2	4	1
17:30 - 17:35	10	2	7	1	6	2	10	0
17:35 - 17:40	9	2	7	5	9	2	8	2
17:40 - 17:45	9	1	6	2	9	1	5	2
17:45 - 17:50	11	1	9	1	11	2	5	2
17:50 - 17:55	5	1	6	0	8	2	6	2
17:55 - 18:00	5	2	2	0	5	3	7	2
18:00 - 18:05	5	4	5	2	10	1	4	1
18:05 - 18:10	3	3	3	1	3	3	4	0
18:10 - 18:15	6	1	3	1	3	1	5	1
18:15 - 18:20	5	1	2	1	5	2	5	1
18:20 - 18:25	5	2	2	2	5	2	3	0
18:25 - 18:30	9	2	2	2	5	3	13	0
18:30 - 18:35	6	1	3	0	3	1	3	1
18:35 - 18:40	3	1	3	1	3	1	3	1
18:40 - 18:45	2	1	2	0	4	3	7	1
18:45 - 18:50	7	2	2	0	5	1	2	1
18:50 - 18:55	4	1	4	2	6	2	4	2
18:55 - 19:00	2	1	2	0	3	2	6	1

Queues are maximum vehicle length every 5 minutes

Warrington - Queue Survey, Wednesday 3rd April 2019

Produced by Road Data Services Ltd

			Windermere Avenue	Poplars Ave (South)
Time			Lane 1	Lane 1
			Vehicles	
7:00	-	7:05	1	0
7:05	-	7:10	0	0
7:10	-	7:15	0	0
7:15	-	7:20	1	0
7:20	-	7:25	0	0
7:25	-	7:30	1	0
7:30	-	7:35	2	1
7:35	-	7:40	1	0
7:40	-	7:45	1	0
7:45	-	7:50	3	3
7:50	-	7:55	1	4
7:55	-	8:00	1	1
8:00	-	8:05	1	1
8:05	-	8:10	1	1
8:10	-	8:15	1	0
8:15	-	8:20	2	2
8:20	-	8:25	1	1
8:25	-	8:30	1	0
8:30	-	8:35	2	0
8:35	-	8:40	2	1
8:40	-	8:45	2	0
8:45	-	8:50	2	0
8:50	-	8:55	1	1
8:55	-	9:00	1	1
9:00	-	9:05	1	4
9:05	-	9:10	1	0
9:10	-	9:15	1	1
9:15	-	9:20	0	1
9:20	-	9:25	1	0
9:25	-	9:30	0	1
9:30	-	9:35	1	0
9:35	-	9:40	0	1
9:40	-	9:45	0	0
9:45	-	9:50	2	0
9:50	-	9:55	2	0
9:55	-	10:00	1	0

16:00	-	16:05	1	1
16:05	-	16:10	11	0
16:10	-	16:15	1	0
16:15	-	16:20	1	1
16:20	-	16:25	4	1
16:25	-	16:30	1	4
16:30	-	16:35	3	0
16:35	-	16:40	2	1
16:40	-	16:45	3	0
16:45	-	16:50	2	0

16:50	-	16:55	2	0
16:55	-	17:00	1	2
17:00	-	17:05	1	0
17:05	-	17:10	2	3
17:10	-	17:15	1	3
17:15	-	17:20	1	0
17:20	-	17:25	2	0
17:25	-	17:30	1	0
17:30	-	17:35	1	0
17:35	-	17:40	1	2
17:40	-	17:45	1	2
17:45	-	17:50	2	1
17:50	-	17:55	0	3
17:55	-	18:00	1	0
18:00	-	18:05	1	2
18:05	-	18:10	1	2
18:10	-	18:15	1	2
18:15	-	18:20	2	0
18:20	-	18:25	1	1
18:25	-	18:30	1	0
18:30	-	18:35	2	0
18:35	-	18:40	1	1
18:40	-	18:45	1	0
18:45	-	18:50	1	1
18:50	-	18:55	2	0
18:55	-	19:00	1	0

Queues are maximum vehicle length every 5 minutes

Warrington - Queue Survey, Wednesday 3rd April 2019

Produced by Road Data Services Ltd

			Elm Road	Birch Ave (East)
Time			Lane 1	Lane 1
			Vehicles	
7:00	-	7:05	0	0
7:05	-	7:10	1	0
7:10	-	7:15	0	0
7:15	-	7:20	0	0
7:20	-	7:25	0	0
7:25	-	7:30	0	0
7:30	-	7:35	0	0
7:35	-	7:40	0	0
7:40	-	7:45	0	0
7:45	-	7:50	0	0
7:50	-	7:55	1	0
7:55	-	8:00	0	0
8:00	-	8:05	0	0
8:05	-	8:10	1	0
8:10	-	8:15	0	0
8:15	-	8:20	1	0
8:20	-	8:25	1	0
8:25	-	8:30	0	0
8:30	-	8:35	0	0
8:35	-	8:40	0	0
8:40	-	8:45	0	0
8:45	-	8:50	0	0
8:50	-	8:55	0	0
8:55	-	9:00	0	0
9:00	-	9:05	1	0
9:05	-	9:10	0	0
9:10	-	9:15	0	0
9:15	-	9:20	1	0
9:20	-	9:25	0	0
9:25	-	9:30	0	0
9:30	-	9:35	0	0
9:35	-	9:40	0	0
9:40	-	9:45	0	0
9:45	-	9:50	0	0
9:50	-	9:55	0	0
9:55	-	10:00	0	0

16:00	-	16:05	0	0
16:05	-	16:10	0	0
16:10	-	16:15	0	0
16:15	-	16:20	1	0
16:20	-	16:25	0	0
16:25	-	16:30	0	0
16:30	-	16:35	0	0
16:35	-	16:40	0	0
16:40	-	16:45	0	0
16:45	-	16:50	0	0

16:50	-	16:55	0	0
16:55	-	17:00	0	0
17:00	-	17:05	0	0
17:05	-	17:10	0	0
17:10	-	17:15	0	0
17:15	-	17:20	0	0
17:20	-	17:25	0	0
17:25	-	17:30	0	0
17:30	-	17:35	0	0
17:35	-	17:40	0	0
17:40	-	17:45	0	0
17:45	-	17:50	0	0
17:50	-	17:55	0	0
17:55	-	18:00	0	0
18:00	-	18:05	0	0
18:05	-	18:10	1	0
18:10	-	18:15	0	0
18:15	-	18:20	0	0
18:20	-	18:25	0	0
18:25	-	18:30	0	0
18:30	-	18:35	0	0
18:35	-	18:40	0	0
18:40	-	18:45	0	0
18:45	-	18:50	1	0
18:50	-	18:55	0	0
18:55	-	19:00	0	0

Queues are maximum vehicle length every 5 minutes

Warrington - Queue Survey, Wednesday 3rd April 2019

Produced by Road Data Services Ltd

		Poplars Avenue
Time		Lane 1
		Vehicles
7:00	- 7:05	0
7:05	- 7:10	0
7:10	- 7:15	1
7:15	- 7:20	0
7:20	- 7:25	1
7:25	- 7:30	1
7:30	- 7:35	0
7:35	- 7:40	0
7:40	- 7:45	0
7:45	- 7:50	0
7:50	- 7:55	0
7:55	- 8:00	0
8:00	- 8:05	2
8:05	- 8:10	2
8:10	- 8:15	1
8:15	- 8:20	2
8:20	- 8:25	1
8:25	- 8:30	0
8:30	- 8:35	1
8:35	- 8:40	1
8:40	- 8:45	1
8:45	- 8:50	1
8:50	- 8:55	1
8:55	- 9:00	0
9:00	- 9:05	0
9:05	- 9:10	0
9:10	- 9:15	2
9:15	- 9:20	1
9:20	- 9:25	0
9:25	- 9:30	0
9:30	- 9:35	1
9:35	- 9:40	2
9:40	- 9:45	1
9:45	- 9:50	0
9:50	- 9:55	0
9:55	- 10:00	0

16:00	- 16:05	0
16:05	- 16:10	1
16:10	- 16:15	1
16:15	- 16:20	1
16:20	- 16:25	0
16:25	- 16:30	1
16:30	- 16:35	0
16:35	- 16:40	0
16:40	- 16:45	1
16:45	- 16:50	0
16:50	- 16:55	0
16:55	- 17:00	0
17:00	- 17:05	1
17:05	- 17:10	1

17:10	-	17:15	0
17:15	-	17:20	1
17:20	-	17:25	1
17:25	-	17:30	1
17:30	-	17:35	1
17:35	-	17:40	0
17:40	-	17:45	2
17:45	-	17:50	0
17:50	-	17:55	2
17:55	-	18:00	0
18:00	-	18:05	0
18:05	-	18:10	0
18:10	-	18:15	0
18:15	-	18:20	0
18:20	-	18:25	1
18:25	-	18:30	1
18:30	-	18:35	1
18:35	-	18:40	0
18:40	-	18:45	0
18:45	-	18:50	0
18:50	-	18:55	1
18:55	-	19:00	0

Queues are maximum vehicle length every 5 minutes

Warrington - Queue Survey, Wednesday 3rd April 2019

Produced by Road Data Services Ltd

		Calver Road	A574 (East)	A574 (West)	
Time	Lane 1		Lane 1	Lane 1	Lane 2
	Vehicles				
7:00 - 7:05		9	3	8	3
7:05 - 7:10		9	4	7	4
7:10 - 7:15		7	4	9	3
7:15 - 7:20		12	4	12	3
7:20 - 7:25		10	9	18	2
7:25 - 7:30		18	4	16	2
7:30 - 7:35		10	6	12	4
7:35 - 7:40		15	9	16	5
7:40 - 7:45		17	10	23	2
7:45 - 7:50		9	9	11	3
7:50 - 7:55		30	9	16	4
7:55 - 8:00		35	6	18	4
8:00 - 8:05		40	6	12	4
8:05 - 8:10		8	5	9	3
8:10 - 8:15		16	6	10	3
8:15 - 8:20		9	9	16	4
8:20 - 8:25		38	5	20	3
8:25 - 8:30		35	8	25	4
8:30 - 8:35		6	3	8	3
8:35 - 8:40		16	4	10	3
8:40 - 8:45		37	8	22	5
8:45 - 8:50		39	7	30	5
8:50 - 8:55		41	8	18	5
8:55 - 9:00		12	5	15	2
9:00 - 9:05		12	6	18	5
9:05 - 9:10		14	10	16	2
9:10 - 9:15		18	3	8	5
9:15 - 9:20		6	5	8	4
9:20 - 9:25		6	3	7	4
9:25 - 9:30		7	3	7	2
9:30 - 9:35		6	3	7	5
9:35 - 9:40		7	4	15	2
9:40 - 9:45		5	2	8	2
9:45 - 9:50		10	7	9	6
9:50 - 9:55		5	3	5	3
9:55 - 10:00		7	5	10	4

16:00 - 16:05		11	16	12	3
16:05 - 16:10		12	16	15	3
16:10 - 16:15		22	16	14	3
16:15 - 16:20		16	7	11	3
16:20 - 16:25		7	14	12	3
16:25 - 16:30		6	10	14	1
16:30 - 16:35		8	11	10	4
16:35 - 16:40		12	6	28	5
16:40 - 16:45		12	13	26	6
16:45 - 16:50		8	9	22	4
16:50 - 16:55		11	9	10	5
16:55 - 17:00		8	8	10	4

17:00	-	17:05	18	13	15	4
17:05	-	17:10	15	6	22	4
17:10	-	17:15	25	8	27	4
17:15	-	17:20	16	15	30	3
17:20	-	17:25	12	9	28	5
17:25	-	17:30	10	15	27	3
17:30	-	17:35	17	5	16	3
17:35	-	17:40	16	8	6	3
17:40	-	17:45	8	4	15	4
17:45	-	17:50	14	7	22	4
17:50	-	17:55	8	8	15	3
17:55	-	18:00	6	7	5	2
18:00	-	18:05	6	4	8	1
18:05	-	18:10	10	15	12	2
18:10	-	18:15	9	7	8	4
18:15	-	18:20	9	9	10	4
18:20	-	18:25	8	4	7	4
18:25	-	18:30	6	6	5	4
18:30	-	18:35	6	5	6	3
18:35	-	18:40	6	7	9	2
18:40	-	18:45	7	7	8	3
18:45	-	18:50	4	2	5	2
18:50	-	18:55	5	6	3	2
18:55	-	19:00	11	3	6	3

Queues are maximum vehicle length every 5 minutes

Warrington - Queue Survey, Wednesday 3rd April 2019

Produced by Road Data Services Ltd

Queue to Site 16
Queue to Site 15

Time	A49 (North)			A49 (South)		Junction Nine Retail Park		
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 1	Lane 1	Lane 2	Lane 3
	Vehicles							
7:00 - 7:05	0	0	3	5	7	0	0	0
7:05 - 7:10	0	0	1	3	3	1	0	0
7:10 - 7:15	0	0	0	5	14	2	0	0
7:15 - 7:20	0	0	2	4	4	3	0	0
7:20 - 7:25	0	0	2	7	8	3	0	0
7:25 - 7:30	5	7	2	8	5	1	0	0
7:30 - 7:35	0	0	1	12	4	3	0	0
7:35 - 7:40	0	0	2	7	5	1	0	0
7:40 - 7:45	0	0	2	5	5	2	0	0
7:45 - 7:50	0	0	2	11	7	0	0	0
7:50 - 7:55	0	0	3	3	1	3	0	0
7:55 - 8:00	1	4	0	6	4	2	2	0
8:00 - 8:05	38	41	1	12	10	1	2	0
8:05 - 8:10	3	1	3	7	4	1	0	1
8:10 - 8:15	0	0	2	3	5	2	0	0
8:15 - 8:20	15	17	5	12	9	3	1	0
8:20 - 8:25	8	2	2	6	4	4	1	1
8:25 - 8:30	4	12	7	10	8	6	1	0
8:30 - 8:35	4	5	4	13	10	2	1	1
8:35 - 8:40	0	0	3	6	6	2	0	0
8:40 - 8:45	0	0	3	10	5	3	0	0
8:45 - 8:50	7	6	5	16	10	2	1	1
8:50 - 8:55	16	13	4	15	4	3	1	1
8:55 - 9:00	17	16	3	18	9	2	1	2
9:00 - 9:05	8	8	3	13	3	3	2	0
9:05 - 9:10	31	12	4	10	5	2	0	1
9:10 - 9:15	50	50	4	14	5	3	2	2
9:15 - 9:20	50	50	7	18	10	4	1	2
9:20 - 9:25	50	50	6	13	7	5	2	0
9:25 - 9:30	18	23	3	9	6	4	1	1
9:30 - 9:35	10	12	4	7	5	6	1	0
9:35 - 9:40	6	8	5	15	4	4	1	1
9:40 - 9:45	5	10	6	5	1	3	2	1
9:45 - 9:50	8	19	4	7	4	4	1	0
9:50 - 9:55	4	7	7	12	7	2	5	0
9:55 - 10:00	8	10	6	19	4	3	4	1
16:00 - 16:05	12	5	6	53	53	9	4	2
16:05 - 16:10	14	11	12	45	40	17	4	2
16:10 - 16:15	1	6	11	53	32	17	5	2
16:15 - 16:20	9	4	5	53	33	14	2	3
16:20 - 16:25	7	15	7	53	29	5	2	1
16:25 - 16:30	10	8	7	53	37	8	6	3
16:30 - 16:35	8	4	11	18	24	11	5	1
16:35 - 16:40	7	5	8	21	22	11	5	2
16:40 - 16:45	13	8	7	53	35	6	5	3
16:45 - 16:50	11	3	9	53	41	8	3	0
16:50 - 16:55	8	4	7	53	53	10	3	2
16:55 - 17:00	11	3	9	42	29	4	4	5
17:00 - 17:05	8	10	4	38	18	15	4	2
17:05 - 17:10	8	5	5	45	35	12	4	2
17:10 - 17:15	7	8	8	53	53	6	6	2
17:15 - 17:20	6	7	5	47	41	9	5	1
17:20 - 17:25	4	6	10	42	37	10	1	1
17:25 - 17:30	7	2	9	23	5	17	2	1
17:30 - 17:35	10	4	5	20	16	8	6	1
17:35 - 17:40	9	8	3	16	14	9	4	2
17:40 - 17:45	8	5	9	30	25	10	4	4
17:45 - 17:50	11	5	5	42	36	5	2	2
17:50 - 17:55	9	5	10	25	18	6	3	2
17:55 - 18:00	6	5	10	17	13	5	2	2
18:00 - 18:05	3	7	8	22	20	11	2	2
18:05 - 18:10	4	2	8	24	18	6	4	2
18:10 - 18:15	7	9	4	22	19	7	4	1
18:15 - 18:20	8	5	9	16	17	7	3	1
18:20 - 18:25	11	3	10	20	15	6	3	1
18:25 - 18:30	6	2	7	15	10	4	5	3
18:30 - 18:35	3	6	9	11	7	4	3	1
18:35 - 18:40	5	2	10	20	12	6	2	2
18:40 - 18:45	6	5	4	17	8	5	4	3
18:45 - 18:50	7	4	4	13	13	4	2	1
18:50 - 18:55	3	9	7	10	6	6	4	2
18:55 - 19:00	7	3	6	13	5	4	3	1

Queues are maximum vehicle length every 5 minutes

Warrington - Queue Survey, Saturday 30th March 2019

Produced by Road Data Services Ltd

Time	A49 (North)			A49 (South)		Junction Nine Retail Park		
	Lane 1	Lane 2	Lane 3	Lane 1	Lane 1	Lane 1	Lane 2	Lane 3
	Vehicles							
10:00 - 10:05	11	12	11	14	6	6	1	2
10:05 - 10:10	10	10	7	14	9	5	2	3
10:10 - 10:15	8	14	15	12	5	5	4	4
10:15 - 10:20	14	8	15	14	12	6	3	5
10:20 - 10:25	10	6	13	10	11	5	3	2
10:25 - 10:30	10	10	15	11	6	5	5	1
10:30 - 10:35	3	8	8	16	3	5	4	3
10:35 - 10:40	19	6	8	19	11	8	4	2
10:40 - 10:45	7	7	10	20	15	4	3	3
10:45 - 10:50	8	5	13	17	10	5	1	4
10:50 - 10:55	6	7	9	13	4	4	3	2
10:55 - 11:00	9	6	8	8	4	7	1	2
11:00 - 11:05	11	10	12	16	10	6	3	1
11:05 - 11:10	5	4	13	14	4	7	4	2
11:10 - 11:15	8	9	18	22	19	9	2	2
11:15 - 11:20	13	6	9	23	16	5	4	3
11:20 - 11:25	12	7	14	15	12	9	5	1
11:25 - 11:30	9	9	10	20	8	10	3	3
11:30 - 11:35	13	11	9	19	10	10	3	2
11:35 - 11:40	12	8	14	24	14	9	3	3
11:40 - 11:45	9	9	22	15	14	6	4	4
11:45 - 11:50	9	9	15	26	16	7	4	1
11:50 - 11:55	14	5	16	15	17	3	2	2
11:55 - 12:00	9	1	25	26	18	6	5	1
12:00 - 12:05	11	9	10	15	14	7	4	2
12:05 - 12:10	10	8	13	17	18	6	2	3
12:10 - 12:15	12	9	14	18	14	8	2	2
12:15 - 12:20	12	10	20	17	18	14	4	3
12:20 - 12:25	12	7	29	23	20	5	5	3
12:25 - 12:30	9	6	17	26	18	10	4	2
12:30 - 12:35	10	8	10	22	14	15	3	1
12:35 - 12:40	12	8	13	2	2	11	2	3
12:40 - 12:45	5	10	16	14	8	7	3	2
12:45 - 12:50	12	6	1	16	12	6	3	0
12:50 - 12:55	10	8	20	16	6	7	4	2
12:55 - 13:00	9	6	16	16	6	7	1	0
13:00 - 13:05	10	9	14	13	17	12	3	0
13:05 - 13:10	9	6	13	19	7	9	3	2
13:10 - 13:15	9	7	16	22	19	13	3	2
13:15 - 13:20	9	8	15	19	15	18	4	3
13:20 - 13:25	6	5	10	11	8	5	5	2
13:25 - 13:30	12	8	29	22	18	6	2	3
13:30 - 13:35	13	4	23	19	15	16	5	3
13:35 - 13:40	16	5	14	13	10	8	3	2
13:40 - 13:45	11	7	16	19	17	12	2	2
13:45 - 13:50	11	9	22	22	11	15	4	2
13:50 - 13:55	3	6	16	20	9	11	3	1
13:55 - 14:00	3	5	21	17	9	6	3	1
14:00 - 14:05	7	9	12	16	12	5	4	1
14:05 - 14:10	13	7	12	13	9	16	3	1
14:10 - 14:15	8	7	11	17	11	10	2	1
14:15 - 14:20	7	9	31	16	14	14	2	1
14:20 - 14:25	8	3	15	17	12	6	4	2
14:25 - 14:30	2	20	18	17	9	10	1	0
14:30 - 14:35	11	9	10	18	11	6	3	4
14:35 - 14:40	5	4	18	14	4	18	4	2
14:40 - 14:45	8	6	20	11	8	21	3	3
14:45 - 14:50	10	9	22	11	9	15	3	1
14:50 - 14:55	7	5	19	11	4	4	3	2
14:55 - 15:00	8	7	11	13	6	14	2	1
15:00 - 15:05	14	8	16	10	12	6	3	2
15:05 - 15:10	6	3	21	15	4	9	3	2
15:10 - 15:15	7	4	24	17	7	15	4	2
15:15 - 15:20	11	8	20	11	12	12	4	4
15:20 - 15:25	8	5	23	12	7	10	1	2
15:25 - 15:30	20	10	16	18	12	6	2	0
15:30 - 15:35	7	5	19	20	10	8	5	2
15:35 - 15:40	12	5	30	18	10	14	3	2
15:40 - 15:45	7	5	7	10	4	7	4	2
15:45 - 15:50	7	5	7	16	8	6	4	2
15:50 - 15:55	6	3	16	14	8	6	3	2
15:55 - 16:00	6	5	17	17	8	14	3	2

Queues are maximum vehicle length every 5 minutes

Warrington - Queue Survey, Wednesday 3rd April 2019

Produced by Road Data Services Ltd

		Cotswold Road	Cleveland Road	Sandy Lane	Sandy Lane West
		Lane 1	Lane 1	Lane 1	Lane 1
Time		Vehicles			
7:00	- 7:05	1	0	1	1
7:05	- 7:10	1	1	0	0
7:10	- 7:15	0	0	0	0
7:15	- 7:20	0	1	1	1
7:20	- 7:25	2	1	0	2
7:25	- 7:30	2	1	2	0
7:30	- 7:35	0	0	0	0
7:35	- 7:40	2	1	0	1
7:40	- 7:45	0	0	2	2
7:45	- 7:50	0	1	1	4
7:50	- 7:55	1	2	1	4
7:55	- 8:00	1	2	0	0
8:00	- 8:05	3	1	1	8
8:05	- 8:10	1	1	2	2
8:10	- 8:15	2	1	1	0
8:15	- 8:20	1	1	2	5
8:20	- 8:25	2	2	1	2
8:25	- 8:30	3	1	3	2
8:30	- 8:35	1	1	1	1
8:35	- 8:40	0	2	1	4
8:40	- 8:45	0	1	2	2
8:45	- 8:50	2	1	2	4
8:50	- 8:55	0	1	0	3
8:55	- 9:00	0	0	0	3
9:00	- 9:05	1	2	0	1
9:05	- 9:10	1	3	1	8
9:10	- 9:15	0	1	1	2
9:15	- 9:20	1	2	1	3
9:20	- 9:25	1	1	0	2
9:25	- 9:30	0	0	1	0
9:30	- 9:35	0	0	1	1
9:35	- 9:40	1	1	0	0
9:40	- 9:45	0	0	1	0
9:45	- 9:50	1	1	1	0
9:50	- 9:55	0	5	1	2
9:55	- 10:00	2	1	1	2

16:00	- 16:05	3	2	2	2
16:05	- 16:10	2	1	3	3
16:10	- 16:15	1	1	1	4
16:15	- 16:20	1	1	2	0
16:20	- 16:25	0	1	0	1
16:25	- 16:30	3	0	3	3
16:30	- 16:35	2	3	2	2
16:35	- 16:40	1	0	1	2
16:40	- 16:45	2	4	1	1
16:45	- 16:50	0	2	1	1
16:50	- 16:55	2	1	3	3
16:55	- 17:00	1	1	1	3

17:00	-	17:05	2	2	2	3
17:05	-	17:10	1	2	2	4
17:10	-	17:15	1	0	0	2
17:15	-	17:20	0	7	1	4
17:20	-	17:25	1	1	5	2
17:25	-	17:30	1	2	1	1
17:30	-	17:35	3	1	1	0
17:35	-	17:40	2	1	3	1
17:40	-	17:45	1	2	3	0
17:45	-	17:50	1	2	0	2
17:50	-	17:55	3	1	1	2
17:55	-	18:00	1	1	2	2
18:00	-	18:05	0	2	0	4
18:05	-	18:10	1	1	4	4
18:10	-	18:15	1	1	2	0
18:15	-	18:20	1	1	0	1
18:20	-	18:25	1	1	1	0
18:25	-	18:30	1	0	1	0
18:30	-	18:35	2	0	3	0
18:35	-	18:40	1	2	2	2
18:40	-	18:45	1	4	0	2
18:45	-	18:50	1	1	1	0
18:50	-	18:55	2	1	1	1
18:55	-	19:00	1	2	1	0

Queues are maximum vehicle length every 5 minutes

Warrington - Queue Survey, Wednesday 3rd April 2019

Produced by Road Data Services Ltd

		Sandy Lane (North)	Howson Road	Sandy Lane (South)	Northway
		Lane 1	Lane 1	Lane 1	Lane 1
Time		Vehicles			
7:00	- 7:05	0	0	1	0
7:05	- 7:10	1	1	0	0
7:10	- 7:15	1	0	0	0
7:15	- 7:20	4	1	1	0
7:20	- 7:25	1	1	0	0
7:25	- 7:30	0	1	1	0
7:30	- 7:35	2	1	0	0
7:35	- 7:40	3	1	1	2
7:40	- 7:45	0	1	3	0
7:45	- 7:50	0	2	1	0
7:50	- 7:55	1	1	1	1
7:55	- 8:00	0	0	1	1
8:00	- 8:05	1	3	1	2
8:05	- 8:10	4	2	2	2
8:10	- 8:15	0	2	0	1
8:15	- 8:20	3	1	2	1
8:20	- 8:25	1	2	4	1
8:25	- 8:30	2	2	3	4
8:30	- 8:35	2	2	3	1
8:35	- 8:40	0	1	2	3
8:40	- 8:45	1	2	1	2
8:45	- 8:50	4	5	4	1
8:50	- 8:55	0	3	3	0
8:55	- 9:00	1	1	1	2
9:00	- 9:05	2	1	3	1
9:05	- 9:10	1	3	2	3
9:10	- 9:15	3	0	0	0
9:15	- 9:20	2	2	3	1
9:20	- 9:25	1	3	2	0
9:25	- 9:30	0	0	0	1
9:30	- 9:35	1	1	1	0
9:35	- 9:40	1	1	2	2
9:40	- 9:45	2	0	2	0
9:45	- 9:50	1	0	1	2
9:50	- 9:55	2	1	1	2
9:55	- 10:00	1	0	2	0

16:00	- 16:05	6	1	2	5
16:05	- 16:10	3	1	0	2
16:10	- 16:15	6	1	0	0
16:15	- 16:20	3	2	3	3
16:20	- 16:25	4	1	1	4
16:25	- 16:30	1	1	1	0
16:30	- 16:35	3	1	4	1
16:35	- 16:40	2	1	2	2
16:40	- 16:45	3	1	5	2
16:45	- 16:50	1	0	1	3
16:50	- 16:55	1	2	0	7
16:55	- 17:00	1	1	1	0

17:00	-	17:05	6	2	3	8
17:05	-	17:10	1	1	1	0
17:10	-	17:15	1	1	2	1
17:15	-	17:20	2	0	2	3
17:20	-	17:25	0	1	2	0
17:25	-	17:30	0	0	2	2
17:30	-	17:35	1	0	1	2
17:35	-	17:40	2	1	1	3
17:40	-	17:45	3	1	6	2
17:45	-	17:50	0	1	0	0
17:50	-	17:55	4	2	2	2
17:55	-	18:00	1	1	1	2
18:00	-	18:05	1	2	1	1
18:05	-	18:10	2	2	0	0
18:10	-	18:15	0	3	3	3
18:15	-	18:20	3	1	2	1
18:20	-	18:25	0	1	0	0
18:25	-	18:30	1	1	3	2
18:30	-	18:35	3	1	0	2
18:35	-	18:40	0	1	1	1
18:40	-	18:45	0	0	0	2
18:45	-	18:50	3	1	0	2
18:50	-	18:55	2	2	5	0
18:55	-	19:00	0	0	2	2

Queues are maximum vehicle length every 5 minutes

Warrington - Queue Survey, Wednesday 3rd April 2019

Produced by Road Data Services Ltd

		A50 (East)	Hallfields Road	A50 (West)
Time		Lane 1	Lane 1	Lane 1
		Vehicles		
7:00	- 7:05	3	1	5
7:05	- 7:10	3	1	7
7:10	- 7:15	4	3	6
7:15	- 7:20	5	4	6
7:20	- 7:25	6	2	7
7:25	- 7:30	5	4	7
7:30	- 7:35	4	6	7
7:35	- 7:40	16	7	13
7:40	- 7:45	7	4	6
7:45	- 7:50	8	5	9
7:50	- 7:55	17	12	7
7:55	- 8:00	7	7	7
8:00	- 8:05	17	10	10
8:05	- 8:10	13	12	12
8:10	- 8:15	18	8	14
8:15	- 8:20	17	6	13
8:20	- 8:25	10	4	15
8:25	- 8:30	18	10	14
8:30	- 8:35	14	7	14
8:35	- 8:40	16	11	13
8:40	- 8:45	10	10	17
8:45	- 8:50	21	10	15
8:50	- 8:55	22	13	21
8:55	- 9:00	25	13	18
9:00	- 9:05	31	18	12
9:05	- 9:10	24	5	14
9:10	- 9:15	21	19	15
9:15	- 9:20	25	7	13
9:20	- 9:25	19	8	21
9:25	- 9:30	10	6	12
9:30	- 9:35	11	4	11
9:35	- 9:40	9	5	7
9:40	- 9:45	8	4	5
9:45	- 9:50	6	4	7
9:50	- 9:55	4	5	6
9:55	- 10:00	5	3	7

16:00	- 16:05	7	15	14
16:05	- 16:10	7	17	13
16:10	- 16:15	11	18	17
16:15	- 16:20	14	21	16
16:20	- 16:25	8	19	15
16:25	- 16:30	14	18	18
16:30	- 16:35	12	20	21
16:35	- 16:40	7	17	14
16:40	- 16:45	8	21	18
16:45	- 16:50	19	19	13
16:50	- 16:55	12	23	19

16:55	-	17:00	13	24	16
17:00	-	17:05	15	23	12
17:05	-	17:10	16	22	21
17:10	-	17:15	18	19	21
17:15	-	17:20	21	25	19
17:20	-	17:25	21	26	15
17:25	-	17:30	19	28	12
17:30	-	17:35	16	21	15
17:35	-	17:40	14	20	19
17:40	-	17:45	22	22	22
17:45	-	17:50	18	19	15
17:50	-	17:55	17	18	15
17:55	-	18:00	10	19	8
18:00	-	18:05	11	17	14
18:05	-	18:10	17	16	13
18:10	-	18:15	20	15	15
18:15	-	18:20	15	16	10
18:20	-	18:25	16	10	13
18:25	-	18:30	12	13	16
18:30	-	18:35	8	6	14
18:35	-	18:40	7	9	13
18:40	-	18:45	5	10	6
18:45	-	18:50	5	6	6
18:50	-	18:55	5	5	7
18:55	-	19:00	6	8	5

Queues are maximum vehicle length every 5 minutes

Warrington - Queue Survey, Wednesday 3rd April 2019

Produced by Road Data Services Ltd

		Poplars Ave (North)	Capesthorpe Rd (East)	Poplars Ave (South)	Capesthorpe Rd (West)
		Lane 1	Lane 1	Lane 1	Lane 1
Time		Vehicles			
7:00	- 7:05	0	0	0	0
7:05	- 7:10	0	0	0	0
7:10	- 7:15	0	0	0	0
7:15	- 7:20	0	1	0	1
7:20	- 7:25	2	1	0	0
7:25	- 7:30	1	2	0	0
7:30	- 7:35	5	1	0	1
7:35	- 7:40	2	2	1	1
7:40	- 7:45	0	1	2	2
7:45	- 7:50	0	0	2	0
7:50	- 7:55	0	2	1	1
7:55	- 8:00	3	3	1	1
8:00	- 8:05	0	2	1	1
8:05	- 8:10	3	4	2	0
8:10	- 8:15	7	2	2	2
8:15	- 8:20	0	3	1	0
8:20	- 8:25	6	1	3	1
8:25	- 8:30	5	6	3	1
8:30	- 8:35	3	3	0	3
8:35	- 8:40	7	3	5	1
8:40	- 8:45	1	3	1	2
8:45	- 8:50	2	4	1	1
8:50	- 8:55	1	1	3	2
8:55	- 9:00	1	5	7	5
9:00	- 9:05	0	5	4	1
9:05	- 9:10	0	3	2	1
9:10	- 9:15	2	4	1	1
9:15	- 9:20	3	2	4	1
9:20	- 9:25	1	3	1	1
9:25	- 9:30	0	1	0	0
9:30	- 9:35	0	1	2	0
9:35	- 9:40	1	1	0	1
9:40	- 9:45	2	1	2	1
9:45	- 9:50	3	3	1	1
9:50	- 9:55	0	1	3	0
9:55	- 10:00	0	1	2	0

16:00	- 16:05	1	0	1	1
16:05	- 16:10	3	5	3	2
16:10	- 16:15	4	5	5	2
16:15	- 16:20	4	2	1	1
16:20	- 16:25	3	3	6	1
16:25	- 16:30	0	3	1	5
16:30	- 16:35	1	3	2	4
16:35	- 16:40	3	2	9	2
16:40	- 16:45	1	2	2	2
16:45	- 16:50	2	3	3	3
16:50	- 16:55	3	1	2	2
16:55	- 17:00	1	2	1	2

17:00	-	17:05	3	1	2	2
17:05	-	17:10	2	3	8	2
17:10	-	17:15	2	5	7	1
17:15	-	17:20	1	5	6	2
17:20	-	17:25	2	4	2	3
17:25	-	17:30	1	3	3	1
17:30	-	17:35	0	3	2	2
17:35	-	17:40	0	1	0	0
17:40	-	17:45	2	4	6	2
17:45	-	17:50	1	6	5	4
17:50	-	17:55	2	1	5	2
17:55	-	18:00	1	1	2	1
18:00	-	18:05	1	1	3	3
18:05	-	18:10	1	2	2	1
18:10	-	18:15	2	4	2	1
18:15	-	18:20	2	1	2	1
18:20	-	18:25	4	2	3	1
18:25	-	18:30	1	1	3	2
18:30	-	18:35	2	1	3	1
18:35	-	18:40	1	1	1	2
18:40	-	18:45	4	2	1	1
18:45	-	18:50	2	2	4	2
18:50	-	18:55	2	1	2	0
18:55	-	19:00	1	1	3	3

Queues are maximum vehicle length every 5 minutes

Warrington - Queue Survey, Wednesday 3rd April 2019

Produced by Road Data Services Ltd

		A49 (North)			A49 (South)			Delph Lane		
Time		Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3
		Vehicles								
7:00 - 7:05		5	9	2	0	14	12	3	3	0
7:05 - 7:10		8	15	2	0	17	10	3	5	2
7:10 - 7:15		15	22	2	0	15	16	2	13	2
7:15 - 7:20		18	33	3	0	10	18	3	11	5
7:20 - 7:25		20	35	3	0	17	15	3	9	1
7:25 - 7:30		16	34	2	0	8	12	3	4	2
7:30 - 7:35		12	20	3	1	20	22	3	5	2
7:35 - 7:40		8	7	5	0	18	19	6	9	2
7:40 - 7:45		20	30	3	0	13	15	4	10	5
7:45 - 7:50		25	33	1	0	17	23	4	9	3
7:50 - 7:55		27	33	2	1	16	13	4	5	2
7:55 - 8:00		28	35	3	0	17	15	3	8	3
8:00 - 8:05		23	36	3	2	10	17	4	8	3
8:05 - 8:10		28	37	1	2	13	8	5	7	3
8:10 - 8:15		31	39	1	3	14	8	4	13	3
8:15 - 8:20		32	39	3	1	13	17	6	14	3
8:20 - 8:25		37	41	2	1	19	20	3	7	2
8:25 - 8:30		34	38	1	2	12	25	4	7	3
8:30 - 8:35		30	37	1	1	19	25	2	7	3
8:35 - 8:40		28	35	1	1	7	12	4	4	3
8:40 - 8:45		27	33	0	0	10	9	2	6	3
8:45 - 8:50		25	28	4	0	13	10	1	7	2
8:50 - 8:55		18	29	4	4	15	6	2	3	1
8:55 - 9:00		14	25	3	2	13	17	2	4	1
9:00 - 9:05		7	16	4	2	16	10	4	4	1
9:05 - 9:10		12	18	4	1	12	5	2	4	2
9:10 - 9:15		9	18	6	0	12	9	1	6	2
9:15 - 9:20		6	10	4	0	16	12	3	2	2
9:20 - 9:25		5	8	4	2	22	13	2	3	1
9:25 - 9:30		7	12	2	1	15	7	2	2	1
9:30 - 9:35		7	17	2	0	12	9	2	4	1
9:35 - 9:40		12	24	3	3	11	7	2	4	3
9:40 - 9:45		5	7	4	1	11	7	1	3	2
9:45 - 9:50		15	17	4	1	14	3	2	6	4
9:50 - 9:55		11	9	2	3	12	6	1	5	3
9:55 - 10:00		5	5	4	1	14	12	1	1	1
16:00 - 16:05		14	12	3	2	19	18	4	5	3
16:05 - 16:10		6	5	5	2	16	12	4	5	4
16:10 - 16:15		14	10	4	1	23	17	5	5	4
16:15 - 16:20		12	9	5	0	26	20	5	2	4
16:20 - 16:25		5	5	4	0	21	17	3	2	3
16:25 - 16:30		5	9	2	2	17	18	5	6	4
16:30 - 16:35		9	15	2	1	20	18	5	3	2
16:35 - 16:40		12	18	6	1	20	18	7	4	2
16:40 - 16:45		20	27	4	0	27	25	8	8	2
16:45 - 16:50		24	28	5	4	18	17	5	6	1
16:50 - 16:55		22	28	7	4	18	15	6	4	3
16:55 - 17:00		6	6	2	1	25	18	3	5	3
17:00 - 17:05		8	8	3	2	28	13	7	8	6
17:05 - 17:10		5	5	4	1	24	15	7	5	4
17:10 - 17:15		6	5	5	1	25	12	4	5	3
17:15 - 17:20		10	8	4	1	13	15	4	2	2
17:20 - 17:25		5	8	6	2	24	26	5	3	3
17:25 - 17:30		4	6	3	4	21	23	4	5	2
17:30 - 17:35		5	10	6	0	15	14	8	6	1
17:35 - 17:40		10	14	4	1	19	18	11	7	2
17:40 - 17:45		12	15	4	1	12	10	3	1	1
17:45 - 17:50		14	17	1	1	15	13	5	4	3
17:50 - 17:55		8	9	5	1	15	13	4	3	2
17:55 - 18:00		5	7	4	0	22	17	5	2	3
18:00 - 18:05		8	2	1	1	15	14	3	3	2
18:05 - 18:10		3	4	2	2	14	13	7	3	4
18:10 - 18:15		4	6	4	2	16	15	3	4	3
18:15 - 18:20		8	6	2	2	20	17	4	2	3
18:20 - 18:25		4	2	4	1	17	10	6	5	2
18:25 - 18:30		4	5	5	0	14	12	5	1	3
18:30 - 18:35		6	4	6	2	10	5	3	3	1
18:35 - 18:40		0	5	2	2	9	6	5	4	1
18:40 - 18:45		2	3	4	1	13	10	4	2	4
18:45 - 18:50		6	6	7	1	8	8	6	3	1
18:50 - 18:55		4	5	5	0	8	8	3	1	2
18:55 - 19:00		6	3	2	1	19	12	3	5	2

Queues are maximum vehicle length every 5 minutes

Warrington - Queue Survey, Wednesday 3rd April 2019

Produced by Road Data Services Ltd

Queue when lane is single lane before flare *

Queue to Site 8
Queue to Site 9
Slow Moving Traffic Leaving Slump Closes

Time	A49 (North)				Sandy Lane West			A49 (South)				Cromwell Avenue			
	Lane 1	Lane 2	Lane 3	Lane 4	Lane 1	Lane 2	Single Lane *	Lane 1	Lane 2	Lane 3	Lane 4	Lane 1	Lane 2	Lane 3	Lane 4
7:50 - 7:55	2	6	3	4	5	5	3	3	8	5	2	3	6	6	8
7:55 - 7:59	2	9	7	3	3	5	0	2	7	5	1	3	4	6	6
7:59 - 7:15	2	8	6	3	5	5	1	11	6	2	3	2	5	2	6
7:15 - 7:20	2	9	8	4	3	5	1	5	9	6	2	4	7	7	10
7:20 - 7:25	3	10	7	4	5	5	2	3	8	7	3	4	6	7	10
7:25 - 7:30	2	10	6	3	5	5	5	2	6	8	4	5	3	8	10
7:30 - 7:35	2	12	12	2	5	5	11	3	13	8	3	4	5	9	11
7:35 - 7:40	3	14	8	4	5	5	9	7	16	13	2	5	6	15	11
7:40 - 7:45	1	9	15	5	5	5	15	8	9	12	5	4	4	15	5
7:45 - 7:50	3	25	12	6	5	5	31	4	12	7	5	4	4	15	10
7:50 - 7:55	3	22	14	4	5	5	31	9	9	9	2	4	4	20	12
7:55 - 8:00	3	25	10	6	5	5	40	4	12	6	2	5	3	20	20
8:00 - 8:05	3	28	15	5	5	5	41	7	13	9	3	3	4	20	9
8:05 - 8:10	6	25	14	5	5	5	48	4	15	9	3	3	2	20	10
8:10 - 8:15	4	26	12	5	5	5	50	6	12	8	4	4	2	14	10
8:15 - 8:20	3	22	11	4	5	5	45	3	10	7	4	5	2	20	20
8:20 - 8:25	3	31	15	4	5	5	39	6	9	8	2	4	3	20	10
8:25 - 8:30	2	33	18	4	5	5	31	6	13	10	4	3	6	20	11
8:30 - 8:35	2	28	36	5	5	5	34	5	7	7	2	4	2	15	11
8:35 - 8:40	3	48	52	3	5	5	28	6	12	7	2	5	3	20	10
8:40 - 8:45	2	69	49	4	5	5	20	6	16	7	3	5	2	20	20
8:45 - 8:50	4	70	69	5	5	5	22	6	7	7	3	6	2	20	10
8:50 - 8:55	2	92	91	3	5	5	15	10	12	6	3	4	2	15	20
8:55 - 9:00	4	106	106	7	5	5	11	6	11	9	3	3	3	17	15
9:00 - 9:05	5	106	106	5	5	5	10	5	12	6	3	2	3	20	20
9:05 - 9:10	3	106	106	5	5	5	4	9	9	5	1	4	5	20	20
9:10 - 9:15	2	85	98	5	3	5	11	5	6	6	4	3	3	20	20
9:15 - 9:20	3	59	79	3	4	5	13	5	15	6	5	4	1	9	6
9:20 - 9:25	2	41	56	5	4	5	10	4	7	5	3	3	3	3	6
9:25 - 9:30	1	37	47	6	5	5	2	5	5	2	5	1	3	7	7
9:30 - 9:35	1	24	30	4	5	5	5	3	10	5	2	3	3	5	5
9:35 - 9:40	3	12	15	3	3	2	2	6	10	6	2	5	2	5	5
9:40 - 9:45	3	12	5	3	2	5	6	4	10	9	3	4	6	6	5
9:45 - 9:50	2	8	5	8	3	5	1	8	12	6	3	5	5	9	12
9:50 - 9:55	4	8	4	6	2	3	2	4	12	6	3	3	2	8	6
9:55 - 10:00	1	8	4	6	5	5	2	4	12	6	3	3	1	8	6
10:00 - 10:05	3	7	4	8	5	5	48	7	50	50	5	5	4	8	4
10:05 - 10:10	3	11	3	7	5	5	45	8	50	50	4	4	5	10	5
10:10 - 10:15	4	8	5	5	5	5	38	8	50	50	3	5	3	20	7
10:15 - 10:20	3	7	10	5	5	5	30	4	45	50	3	6	3	15	14
10:20 - 10:25	3	8	3	7	5	5	11	6	46	50	5	9	5	18	12
10:25 - 10:30	4	12	5	5	5	5	8	4	50	50	3	6	2	9	6
10:30 - 10:35	4	8	4	4	5	5	11	8	35	50	4	7	5	10	7
10:35 - 10:40	4	7	5	7	5	5	7	7	44	48	5	6	4	12	6
10:40 - 10:45	4	5	9	4	5	5	5	5	55	55	6	7	5	18	9
10:45 - 10:50	2	6	5	13	5	5	9	8	50	50	3	7	5	15	9
10:50 - 10:55	4	8	5	11	5	5	6	6	50	50	3	6	5	12	7
10:55 - 17:00	3	8	4	5	5	5	11	8	50	42	3	5	2	10	4
17:00 - 17:05	1	8	3	7	5	5	10	10	36	33	4	8	2	7	9
17:05 - 17:10	1	6	5	4	5	5	11	6	50	50	5	4	4	10	8
17:10 - 17:15	3	7	6	4	5	5	16	7	24	50	5	4	3	20	5
17:15 - 17:20	4	8	7	2	5	5	20	7	50	50	3	6	5	11	6
17:20 - 17:25	1	10	7	5	5	5	15	7	55	55	3	5	4	11	6
17:25 - 17:30	4	12	7	8	5	5	6	6	16	48	4	5	3	9	4
17:30 - 17:35	3	5	5	9	5	5	4	6	50	44	4	4	3	9	6
17:35 - 17:40	3	7	6	11	5	5	5	6	39	18	4	6	3	12	5
17:40 - 17:45	2	6	10	5	5	5	25	11	41	50	5	5	3	10	4
17:45 - 17:50	4	10	8	22	5	5	31	8	44	47	4	6	3	11	3
17:50 - 17:55	2	12	5	21	5	5	28	10	47	15	4	7	3	7	6
17:55 - 18:00	5	7	6	17	5	5	43	7	46	37	3	5	2	7	4
18:00 - 18:05	2	8	4	30	5	5	39	6	56	48	3	4	2	9	4
18:05 - 18:10	3	12	6	29	3	5	15	8	48	50	3	5	5	10	5
18:10 - 18:15	3	15	7	19	5	5	5	7	50	45	4	5	4	6	5
18:15 - 18:20	3	16	8	24	3	5	5	8	50	50	5	3	3	11	6
18:20 - 18:25	2	6	8	8	3	5	14	11	50	21	2	5	2	9	6
18:25 - 18:30	1	8	9	7	5	5	10	8	11	10	2	7	3	6	4
18:30 - 18:35	3	17	12	7	4	5	7	6	8	7	2	6	3	5	7
18:35 - 18:40	2	6	9	6	5	5	5	5	13	6	1	6	2	6	5
18:40 - 18:45	3	14	6	7	5	5	0	5	8	6	3	4	4	6	5
18:45 - 18:50	1	8	6	8	3	5	1	7	6	4	5	3	6	8	8
18:50 - 18:55	2	9	6	12	5	5	7	7	7	6	4	7	1	6	5
18:55 - 19:00	2	5	6	4	5	5	2	3	10	6	3	5	3	6	3

Queues are maximum vehicle length every 5 minutes

Warrington - Queue Survey, Wednesday 3rd April 2019

Queue to Site 9

Produced by Road Data Services Ltd

Time	A49 (North)				A50			A49 (South)				Hawleys Lane		
	Lane 1	Lane 2	Lane 3	Lane 4	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 4	Lane 1	Lane 2	Lane 3
7:00 - 7:05	0	14	16	10	5	9	7	0	12	6	4	2	1	8
7:05 - 7:10	4	24	20	11	7	9	7	1	9	7	9	2	2	5
7:10 - 7:15	3	13	16	14	9	8	8	0	14	5	6	3	2	6
7:15 - 7:20	0	16	47	11	7	7	8	0	10	7	6	3	2	6
7:20 - 7:25	1	12	8	7	7	8	5	0	10	7	4	11	3	6
7:25 - 7:30	0	29	46	9	11	9	7	3	15	8	9	5	1	11
7:30 - 7:35	3	32	53	14	14	16	12	0	10	8	9	6	5	15
7:35 - 7:40	1	43	39	17	9	9	8	1	18	9	8	6	2	7
7:40 - 7:45	1	30	53	8	10	15	11	0	16	11	7	5	1	9
7:45 - 7:50	0	38	53	9	9	25	10	0	25	16	12	6	2	7
7:50 - 7:55	0	53	53	11	9	27	12	0	22	15	11	10	4	8
7:55 - 8:00	0	53	53	9	12	25	10	1	16	12	8	7	3	8
8:00 - 8:05	3	53	53	8	7	9	6	0	20	15	16	1	0	11
8:05 - 8:10	0	53	53	13	7	18	14	0	14	12	14	5	1	5
8:10 - 8:15	0	53	53	9	8	22	16	0	14	9	15	5	3	7
8:15 - 8:20	0	53	51	11	7	22	15	1	16	12	3	2	0	10
8:20 - 8:25	1	41	42	10	11	30	12	0	12	9	14	7	1	22
8:25 - 8:30	1	55	46	8	8	19	10	0	10	12	5	2	2	20
8:30 - 8:35	0	21	17	11	6	14	9	0	8	7	7	4	2	16
8:35 - 8:40	1	26	23	9	8	12	10	2	15	5	15	2	2	15
8:40 - 8:45	0	51	53	7	8	14	9	3	20	10	7	8	0	18
8:45 - 8:50	0	47	43	7	10	10	4	1	16	6	15	4	1	14
8:50 - 8:55	0	53	53	13	8	23	8	2	10	2	10	5	1	12
8:55 - 9:00	0	53	53	14	10	25	9	0	20	12	10	1	0	19
9:00 - 9:05	1	53	53	10	8	30	10	2	16	12	12	1	0	22
9:05 - 9:10	0	53	53	12	10	32	10	0	8	4	18	2	1	23
9:10 - 9:15	0	53	53	11	6	39	10	1	12	8	10	2	2	22
9:15 - 9:20	0	53	53	10	6	35	8	1	12	7	10	3	3	15
9:20 - 9:25	0	53	53	8	4	20	11	1	15	4	9	3	0	10
9:25 - 9:30	0	53	53	9	11	15	9	0	15	6	8	2	1	13
9:30 - 9:35	1	43	42	13	12	12	8	0	14	7	11	2	0	9
9:35 - 9:40	2	18	17	11	9	12	4	0	16	5	10	0	0	11
9:40 - 9:45	5	42	24	8	8	15	4	0	18	8	8	2	1	13
9:45 - 9:50	2	43	26	9	9	9	6	0	16	7	5	7	0	10
9:50 - 9:55	1	16	19	7	6	8	4	2	18	9	8	7	1	8
9:55 - 10:00	1	22	26	6	5	5	3	0	14	7	9	4	2	12
16:00 - 16:05	1	43	24	15	10	14	11	1	33	28	8	10	3	23
16:05 - 16:10	0	53	46	8	7	11	8	0	32	25	9	8	3	25
16:10 - 16:15	0	53	53	9	6	9	8	1	34	18	4	2	1	23
16:15 - 16:20	0	33	18	9	7	12	6	0	37	30	4	16	2	18
16:20 - 16:25	0	22	19	12	6	9	10	0	38	32	9	18	3	13
16:25 - 16:30	0	15	13	7	16	11	11	0	37	31	6	3	3	16
16:30 - 16:35	1	18	13	11	7	18	11	0	29	23	9	5	4	21
16:35 - 16:40	0	13	10	12	6	28	10	1	29	25	7	14	4	23
16:40 - 16:45	3	16	11	10	8	25	12	2	28	23	8	15	5	25
16:45 - 16:50	3	20	17	13	10	20	10	0	35	23	6	8	3	18
16:50 - 16:55	0	18	14	14	3	18	9	0	34	28	6	11	3	20
16:55 - 17:00	0	21	16	10	4	28	12	2	30	21	7	9	5	18
17:00 - 17:05	0	14	9	9	5	25	9	0	28	20	5	3	1	26
17:05 - 17:10	0	15	16	13	6	25	8	0	37	28	7	8	4	32
17:10 - 17:15	0	18	14	10	5	22	8	0	43	37	5	5	3	13
17:15 - 17:20	0	17	11	13	9	25	9	0	37	33	3	2	1	26
17:20 - 17:25	0	14	10	18	3	35	10	0	32	25	5	7	4	34
17:25 - 17:30	0	14	8	7	3	34	9	2	28	15	6	2	2	31
17:30 - 17:35	0	10	7	11	9	44	12	0	27	18	12	9	3	22
17:35 - 17:40	0	14	11	13	7	46	8	1	43	31	10	3	3	20
17:40 - 17:45	1	11	8	8	12	50	14	0	45	38	7	9	4	11
17:45 - 17:50	0	17	13	12	9	42	15	0	40	35	12	7	3	8
17:50 - 17:55	0	17	13	14	12	46	9	0	49	41	5	5	3	10
17:55 - 18:00	2	19	17	16	7	37	10	1	40	35	7	10	3	12
18:00 - 18:05	2	12	8	16	7	41	8	0	31	24	8	4	2	9
18:05 - 18:10	2	13	9	11	9	39	18	2	34	26	7	10	1	13
18:10 - 18:15	1	16	9	14	7	40	10	1	24	14	8	10	2	11
18:15 - 18:20	1	12	9	12	10	45	12	0	30	22	9	4	4	12
18:20 - 18:25	2	19	15	11	14	33	11	1	32	22	14	3	2	6
18:25 - 18:30	2	35	20	15	7	12	8	0	16	8	14	4	1	10
18:30 - 18:35	0	9	7	11	9	10	3	0	25	15	6	5	1	13
18:35 - 18:40	0	10	8	11	10	8	6	0	18	10	5	8	3	19
18:40 - 18:45	1	10	8	11	6	8	3	0	20	10	10	7	2	21
18:45 - 18:50	2	16	11	8	10	10	5	0	18	12	4	5	3	18
18:50 - 18:55	0	11	9	9	7	18	4	0	15	10	8	5	2	14
18:55 - 19:00	0	15	9	9	6	9	3	0	18	14	6	4	1	15

Queues are maximum vehicle length every 5 minutes

Warrington - Queue Survey, Wednesday 3rd April 2019

Produced by Road Data Services Ltd

			Crab Lane	Enfield Park Road (South)
Time			Lane 1	Lane 1
			Vehicles	
7:00	-	7:05	2	1
7:05	-	7:10	0	0
7:10	-	7:15	2	2
7:15	-	7:20	1	2
7:20	-	7:25	1	5
7:25	-	7:30	1	4
7:30	-	7:35	1	2
7:35	-	7:40	2	9
7:40	-	7:45	3	4
7:45	-	7:50	1	3
7:50	-	7:55	1	2
7:55	-	8:00	1	4
8:00	-	8:05	1	6
8:05	-	8:10	1	5
8:10	-	8:15	2	4
8:15	-	8:20	3	3
8:20	-	8:25	1	6
8:25	-	8:30	1	5
8:30	-	8:35	0	15
8:35	-	8:40	3	8
8:40	-	8:45	5	16
8:45	-	8:50	1	7
8:50	-	8:55	2	4
8:55	-	9:00	2	6
9:00	-	9:05	1	5
9:05	-	9:10	1	4
9:10	-	9:15	2	4
9:15	-	9:20	1	1
9:20	-	9:25	2	2
9:25	-	9:30	1	2
9:30	-	9:35	3	2
9:35	-	9:40	1	2
9:40	-	9:45	1	2
9:45	-	9:50	1	3
9:50	-	9:55	1	0
9:55	-	10:00	1	2

16:00	-	16:05	3	2
16:05	-	16:10	10	1
16:10	-	16:15	10	0
16:15	-	16:20	3	1
16:20	-	16:25	6	1
16:25	-	16:30	4	1
16:30	-	16:35	5	0
16:35	-	16:40	7	3
16:40	-	16:45	4	0
16:45	-	16:50	9	2

16:50	-	16:55	3	3
16:55	-	17:00	4	2
17:00	-	17:05	6	1
17:05	-	17:10	6	0
17:10	-	17:15	8	0
17:15	-	17:20	6	2
17:20	-	17:25	5	2
17:25	-	17:30	6	1
17:30	-	17:35	5	1
17:35	-	17:40	6	2
17:40	-	17:45	6	2
17:45	-	17:50	5	1
17:50	-	17:55	5	1
17:55	-	18:00	2	0
18:00	-	18:05	3	0
18:05	-	18:10	3	0
18:10	-	18:15	3	0
18:15	-	18:20	4	0
18:20	-	18:25	2	0
18:25	-	18:30	1	0
18:30	-	18:35	5	2
18:35	-	18:40	2	0
18:40	-	18:45	3	3
18:45	-	18:50	2	0
18:50	-	18:55	2	0
18:55	-	19:00	1	1

Queues are maximum vehicle length every 5 minutes

Warrington - Manual Traffic Survey, Wednesday 17th July 2019

Produced by Road Data Services Ltd.

Junction: (1) Golborne Road / Myddleton Lane

Approach: Golborne Road (North)

TIME	Left to Myddleton Lane								Ahead to Golborne Road (South)							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	1	34	2	0	0	0	37	0	1	61	20	1	0	0	83
0715 - 0730	1	0	37	7	1	0	0	46	0	1	98	10	0	0	0	109
0730 - 0745	0	1	44	2	1	0	0	48	1	0	72	11	2	0	0	86
0745 - 0800	1	0	41	4	1	0	0	47	0	1	83	12	1	0	0	97
Hourly Total	2	2	156	15	3	0	0	178	1	3	314	53	4	0	0	375
0800 - 0815	0	2	45	2	0	0	0	49	0	0	91	5	0	0	0	96
0815 - 0830	0	0	24	2	0	0	0	26	0	1	77	7	1	0	0	86
0830 - 0845	1	1	37	3	0	0	0	42	0	0	80	6	0	0	0	86
0845 - 0900	0	1	29	3	0	0	0	33	1	0	53	6	1	0	0	61
Hourly Total	1	4	135	10	0	0	0	150	1	1	301	24	2	0	0	329
0900 - 0915	1	1	11	1	0	0	0	14	0	0	45	5	3	0	0	53
0915 - 0930	1	0	14	2	0	0	0	17	1	0	38	6	2	1	0	48
0930 - 0945	0	0	6	1	0	0	0	7	0	0	30	2	1	1	0	34
0945 - 1000	0	0	7	0	0	0	0	7	0	0	32	3	1	0	0	36
Hourly Total	2	1	38	4	0	0	0	45	1	0	145	16	7	2	0	171
Session Total	5	7	329	29	3	0	0	373	3	4	760	93	13	2	0	875
1600 - 1615	0	0	16	2	0	0	0	18	0	0	26	6	1	0	0	33
1615 - 1630	0	0	15	1	0	0	0	16	0	1	33	5	2	0	0	41
1630 - 1645	0	0	13	7	0	0	0	20	0	1	34	8	0	0	0	43
1645 - 1700	0	0	16	0	0	1	0	17	0	0	23	3	1	0	0	27
Hourly Total	0	0	60	10	0	1	0	71	0	2	116	22	4	0	0	144
1700 - 1715	0	1	22	1	0	0	0	24	1	2	41	2	1	0	0	47
1715 - 1730	1	0	23	3	0	0	0	27	1	1	51	1	0	0	0	54
1730 - 1745	0	0	28	1	0	1	0	30	1	0	54	3	0	0	0	58
1745 - 1800	0	0	16	3	0	0	0	19	0	0	35	4	0	0	0	39
Hourly Total	1	1	89	8	0	1	0	100	3	3	181	10	1	0	0	198
1800 - 1815	0	0	12	1	1	0	0	14	0	0	49	0	0	1	0	50
1815 - 1830	0	0	8	1	0	0	0	9	0	0	32	0	1	0	0	33
1830 - 1845	0	0	9	0	0	0	0	9	0	0	24	2	0	0	0	26
1845 - 1900	0	0	6	2	0	0	0	8	1	0	25	3	0	1	0	30
Hourly Total	0	0	35	4	1	0	0	40	1	0	130	5	1	2	0	139
Session Total	1	1	184	22	1	2	0	211	4	5	427	37	6	2	0	481

Warrington - Manual Traffic Survey, Wednesday 17th July 2019

Produced by Road Data Services Ltd.

Junction: (1) Golborne Road / Myddleton Lane

Approach: Myddleton Lane

TIME	Left to Golborne Road (South)								Right to Golborne Road (North)							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	42	6	0	0	1	49	2	0	6	0	0	0	0	8
0715 - 0730	0	1	49	5	2	0	0	57	0	0	9	5	0	0	0	14
0730 - 0745	0	0	43	5	2	0	0	50	0	0	18	2	1	0	0	21
0745 - 0800	0	0	45	6	0	0	1	52	0	0	18	0	0	0	0	18
Hourly Total	0	1	179	22	4	0	2	208	2	0	51	7	1	0	0	61
0800 - 0815	2	0	69	9	0	1	0	81	0	0	20	4	0	0	0	24
0815 - 0830	1	0	50	7	0	0	2	60	0	0	17	1	1	0	0	19
0830 - 0845	0	0	42	6	1	0	0	49	0	0	14	1	1	0	0	16
0845 - 0900	0	0	75	11	4	0	0	90	0	0	18	2	0	0	0	20
Hourly Total	3	0	236	33	5	1	2	280	0	0	69	8	2	0	0	79
0900 - 0915	0	0	67	1	1	0	1	70	0	0	18	1	0	0	0	19
0915 - 0930	0	0	54	7	1	0	1	63	0	1	11	1	0	0	0	13
0930 - 0945	0	1	53	8	1	0	0	63	0	0	8	0	0	0	0	8
0945 - 1000	0	0	45	6	1	0	1	53	1	0	12	0	0	0	0	13
Hourly Total	0	1	219	22	4	0	3	249	1	1	49	2	0	0	0	53
Session Total	3	2	634	77	13	1	7	737	3	1	169	17	3	0	0	193
1600 - 1615	1	0	74	10	4	1	1	91	1	1	28	3	0	0	0	33
1615 - 1630	0	1	74	6	0	0	0	81	1	0	31	6	0	0	0	38
1630 - 1645	0	1	79	10	2	0	0	92	1	0	32	0	0	0	0	33
1645 - 1700	0	0	75	7	0	0	1	83	2	2	38	5	0	0	0	47
Hourly Total	1	2	302	33	6	1	2	347	5	3	129	14	0	0	0	151
1700 - 1715	0	0	88	8	0	0	0	96	0	0	43	2	0	0	0	45
1715 - 1730	1	0	63	6	0	0	1	71	0	1	13	0	0	0	0	14
1730 - 1745	1	1	48	4	0	1	0	55	0	0	24	1	0	0	0	25
1745 - 1800	0	1	71	6	0	0	0	78	0	2	33	6	0	0	0	41
Hourly Total	2	2	270	24	0	1	1	300	0	3	113	9	0	0	0	125
1800 - 1815	0	1	70	3	0	0	1	75	0	0	24	3	1	0	0	28
1815 - 1830	0	0	69	8	0	0	0	77	1	0	35	5	0	0	0	41
1830 - 1845	0	2	53	2	0	0	1	58	0	1	22	1	0	0	0	24
1845 - 1900	0	0	47	4	0	0	0	51	1	0	12	0	0	0	0	13
Hourly Total	0	3	239	17	0	0	2	261	2	1	93	9	1	0	0	106
Session Total	3	7	811	74	6	2	5	908	7	7	335	32	1	0	0	382

Warrington - Manual Traffic Survey, Wednesday 17th July 2019

Produced by Road Data Services Ltd.

Junction: (1) Golborne Road / Myddleton Lane

Approach: Golborne Road (South)

TIME	Ahead to Golborne Road (North)								Right to Myddleton Lane							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	26	9	0	0	0	35	0	1	107	12	0	0	1	121
0715 - 0730	0	0	26	6	0	0	0	32	1	1	122	14	2	0	1	141
0730 - 0745	0	0	25	2	0	0	0	27	0	2	130	15	1	0	0	148
0745 - 0800	0	0	27	4	1	0	0	32	0	0	134	11	1	0	2	148
Hourly Total	0	0	104	21	1	0	0	126	1	4	493	52	4	0	4	558
0800 - 0815	1	0	35	5	1	0	0	42	0	1	105	6	3	0	0	115
0815 - 0830	0	0	27	9	0	0	0	36	0	1	127	9	0	1	0	138
0830 - 0845	0	0	23	3	2	1	0	29	1	0	112	13	2	2	1	131
0845 - 0900	0	0	34	6	2	0	0	42	0	1	72	15	0	0	0	88
Hourly Total	1	0	119	23	5	1	0	149	1	3	416	43	5	3	1	472
0900 - 0915	0	0	23	3	0	0	0	26	0	1	64	9	1	0	1	76
0915 - 0930	0	0	22	3	2	0	0	27	0	2	49	7	2	0	1	61
0930 - 0945	0	1	16	6	0	0	0	23	0	0	55	5	0	1	0	61
0945 - 1000	1	0	22	2	0	0	0	25	0	0	46	7	2	1	0	56
Hourly Total	1	1	83	14	2	0	0	101	0	3	214	28	5	2	2	254
Session Total	2	1	306	58	8	1	0	376	2	10	1123	123	14	5	7	1284
1600 - 1615	1	0	77	25	3	0	0	106	0	0	75	4	2	0	1	82
1615 - 1630	0	1	92	12	2	0	0	107	1	0	78	11	0	0	0	90
1630 - 1645	0	0	77	15	0	0	0	92	2	1	79	11	0	0	0	93
1645 - 1700	0	1	77	10	0	0	0	88	0	0	95	9	0	0	1	105
Hourly Total	1	2	323	62	5	0	0	393	3	1	327	35	2	0	2	370
1700 - 1715	0	1	57	7	1	0	0	66	0	1	95	6	0	0	0	102
1715 - 1730	1	0	58	5	0	0	0	64	0	0	85	3	0	0	1	89
1730 - 1745	0	0	64	6	0	0	0	70	0	1	93	11	0	0	0	105
1745 - 1800	0	1	61	9	1	0	0	72	0	3	90	9	1	0	0	103
Hourly Total	1	2	240	27	2	0	0	272	0	5	363	29	1	0	1	399
1800 - 1815	0	0	73	7	1	0	0	81	1	1	77	4	1	0	1	85
1815 - 1830	0	0	75	4	0	0	0	79	0	0	82	5	0	0	0	87
1830 - 1845	1	1	53	8	0	0	0	63	0	1	65	5	0	0	0	71
1845 - 1900	0	0	41	0	0	0	0	41	0	0	50	5	0	0	1	56
Hourly Total	1	1	242	19	1	0	0	264	1	2	274	19	1	0	2	299
Session Total	3	5	805	108	8	0	0	929	4	8	964	83	4	0	5	1068

Warrington - Manual Traffic Survey, Wednesday 17th July 2019

Produced by Road Data Services Ltd.

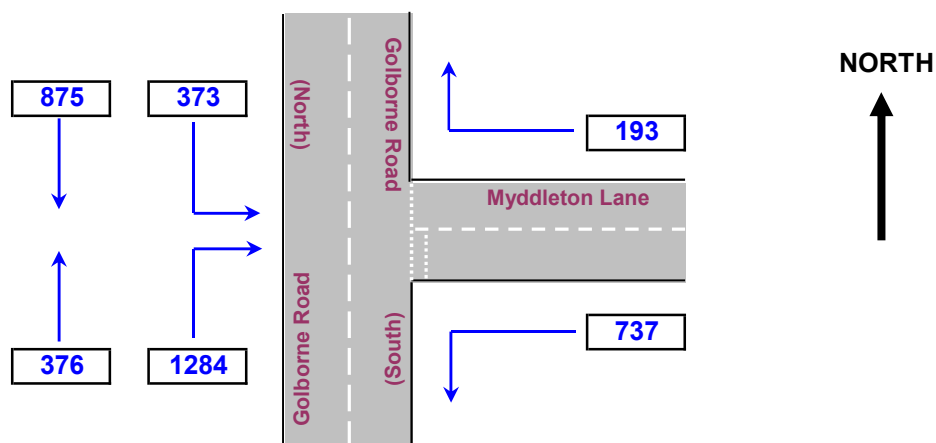
Junction: (1) Golborne Road / Myddleton Lane

Vehicle Class:

Start Time:

End Time:

Peak Hour



Note: The above diagram represents the Junction surveyed, although may not be the exact layout of the actual location.

Important This spreadsheet & Interactive Vehicle Flow Diagram was produced based on specific Note: parameters. Consequently, alteration to the spreadsheet format or it's properties may result in malfunction.

Warrington - Manual Traffic Survey, Wednesday 17th July 2019

Produced by Road Data Services Ltd.

Junction: (2) Myddleton Lane / Delph Lane

Approach: Myddleton Lane (East)

TIME	Left to Delph Lane								Ahead to Myddleton Lane (West)							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	6	1	0	0	0	7	2	0	31	0	0	0	1	34
0715 - 0730	0	0	4	0	0	0	0	4	0	0	41	3	1	0	0	45
0730 - 0745	0	1	20	0	0	0	0	21	0	0	53	1	1	0	0	55
0745 - 0800	0	1	16	1	0	0	0	18	0	0	46	3	1	0	1	51
Hourly Total	0	2	46	2	0	0	0	50	2	0	171	7	3	0	2	185
0800 - 0815	0	0	19	4	1	0	0	24	0	0	36	2	0	0	0	38
0815 - 0830	0	0	21	0	0	0	0	21	0	0	37	3	1	0	1	42
0830 - 0845	0	0	11	1	0	0	0	12	0	0	40	5	1	0	0	46
0845 - 0900	0	0	24	0	0	0	0	24	0	0	54	4	0	0	0	58
Hourly Total	0	0	75	5	1	0	0	81	0	0	167	14	2	0	1	184
0900 - 0915	0	0	14	1	0	0	0	15	0	0	51	1	0	0	1	53
0915 - 0930	0	0	8	0	0	0	0	8	0	0	33	4	0	0	0	37
0930 - 0945	0	0	4	1	0	0	0	5	0	1	38	5	0	0	0	44
0945 - 1000	0	0	6	1	0	0	0	7	0	0	20	4	0	0	1	25
Hourly Total	0	0	32	3	0	0	0	35	0	1	142	14	0	0	2	159
Session Total	0	2	153	10	1	0	0	166	2	1	480	35	5	0	5	528
1600 - 1615	1	0	13	3	0	0	0	17	1	2	77	5	2	0	1	88
1615 - 1630	0	0	8	3	0	0	0	11	2	0	82	3	0	0	0	87
1630 - 1645	0	0	8	1	0	0	0	9	2	1	100	8	0	0	1	112
1645 - 1700	0	0	17	1	0	1	0	19	2	0	128	1	0	0	1	132
Hourly Total	1	0	46	8	0	1	0	56	7	3	387	17	2	0	3	419
1700 - 1715	0	0	18	1	0	0	0	19	1	0	120	5	1	0	0	127
1715 - 1730	0	0	12	2	0	1	0	15	1	0	101	3	0	0	1	106
1730 - 1745	0	0	15	0	0	1	0	16	1	1	74	5	0	0	0	81
1745 - 1800	0	0	9	0	0	1	0	10	0	1	53	7	0	0	0	61
Hourly Total	0	0	54	3	0	3	0	60	3	2	348	20	1	0	1	375
1800 - 1815	0	0	11	2	0	0	0	13	0	1	52	11	1	0	1	66
1815 - 1830	0	0	10	1	0	0	0	11	1	0	49	2	0	0	0	52
1830 - 1845	0	0	2	1	1	0	0	4	0	1	34	1	1	0	1	38
1845 - 1900	0	0	4	1	0	0	0	5	1	0	36	3	0	0	0	40
Hourly Total	0	0	27	5	1	0	0	33	2	2	171	17	2	0	2	196
Session Total	1	0	127	16	1	4	0	149	12	7	906	54	5	0	6	990

Warrington - Manual Traffic Survey, Wednesday 17th July 2019

Produced by Road Data Services Ltd.

Junction: (2) Myddleton Lane / Delph Lane

Approach: Delph Lane

TIME	Left to Myddleton Lane (West)								Right to Myddleton Lane (East)							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	34	12	0	0	0	46	0	0	3	1	0	0	0	4
0715 - 0730	0	1	41	6	1	0	0	49	0	0	4	2	0	0	0	6
0730 - 0745	0	0	48	10	0	0	0	58	0	0	15	2	0	0	0	17
0745 - 0800	0	0	53	6	0	0	0	59	0	0	23	1	0	0	1	25
Hourly Total	0	1	176	34	1	0	0	212	0	0	45	6	0	0	1	52
0800 - 0815	0	0	59	9	1	0	0	69	0	0	21	5	0	0	0	26
0815 - 0830	0	0	66	6	0	0	0	72	0	0	25	4	1	0	0	30
0830 - 0845	0	0	52	3	2	0	0	57	0	0	20	4	0	0	0	24
0845 - 0900	0	0	45	9	3	0	0	57	0	0	22	2	0	0	0	24
Hourly Total	0	0	222	27	6	0	0	255	0	0	88	15	1	0	0	104
0900 - 0915	0	1	37	8	2	0	0	48	1	0	5	1	0	0	0	7
0915 - 0930	0	0	34	6	2	0	0	42	0	0	0	3	0	0	0	3
0930 - 0945	0	1	32	2	0	0	0	35	0	0	6	1	0	0	0	7
0945 - 1000	1	0	36	1	1	0	0	39	1	0	4	1	0	0	0	6
Hourly Total	1	2	139	17	5	0	0	164	2	0	15	6	0	0	0	23
Session Total	1	3	537	78	12	0	0	631	2	0	148	27	1	0	1	179
1600 - 1615	1	1	64	8	1	0	0	75	0	0	5	1	0	0	0	6
1615 - 1630	0	0	72	12	2	0	0	86	0	0	20	0	0	0	0	20
1630 - 1645	0	0	81	13	2	0	0	96	0	0	7	2	0	0	0	9
1645 - 1700	0	1	98	13	0	0	0	112	0	1	7	2	0	0	0	10
Hourly Total	1	2	315	46	5	0	0	369	0	1	39	5	0	0	0	45
1700 - 1715	0	0	108	5	1	0	0	114	0	0	5	1	0	0	0	6
1715 - 1730	0	2	104	10	0	0	0	116	0	0	10	2	0	0	0	12
1730 - 1745	0	1	91	6	0	0	0	98	0	0	19	0	0	1	0	20
1745 - 1800	0	0	68	10	0	0	0	78	0	1	19	0	0	1	0	21
Hourly Total	0	3	371	31	1	0	0	406	0	1	53	3	0	2	0	59
1800 - 1815	0	0	66	6	1	0	0	73	0	0	3	0	0	0	0	3
1815 - 1830	0	0	54	7	1	0	0	62	0	0	10	0	0	1	0	11
1830 - 1845	0	2	59	2	0	0	0	63	0	0	9	1	0	1	0	11
1845 - 1900	0	0	36	2	1	0	0	39	0	0	5	1	0	0	0	6
Hourly Total	0	2	215	17	3	0	0	237	0	0	27	2	0	2	0	31
Session Total	1	7	901	94	9	0	0	1012	0	2	119	10	0	4	0	135

Warrington - Manual Traffic Survey, Wednesday 17th July 2019

Produced by Road Data Services Ltd.

Junction: (2) Myddleton Lane / Delph Lane

Approach: Myddleton Lane (West)

TIME	Ahead to Myddleton Lane (East)								Right to Delph Lane							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	1	108	11	0	0	0	120	0	1	61	11	0	0	0	73
0715 - 0730	2	0	111	12	0	0	2	127	0	0	96	15	3	1	0	115
0730 - 0745	0	2	136	9	0	0	0	147	0	1	79	12	2	0	0	94
0745 - 0800	2	0	124	7	2	0	2	137	0	0	91	13	0	0	0	104
Hourly Total	4	3	479	39	2	0	4	531	0	2	327	51	5	1	0	386
0800 - 0815	0	0	107	8	1	0	0	116	0	4	89	8	2	0	0	103
0815 - 0830	0	2	96	8	1	0	0	107	0	0	94	8	3	0	0	105
0830 - 0845	3	0	106	5	0	0	1	115	0	0	91	9	0	1	0	101
0845 - 0900	0	0	82	7	1	1	0	91	0	1	69	7	1	0	0	78
Hourly Total	3	2	391	28	3	1	1	429	0	5	343	32	6	1	0	387
0900 - 0915	3	2	51	6	0	0	0	62	0	1	50	11	2	0	0	64
0915 - 0930	0	2	34	4	1	0	1	42	0	0	44	6	1	0	0	51
0930 - 0945	0	0	49	2	1	0	0	52	0	0	43	5	1	0	0	49
0945 - 1000	0	0	28	4	1	0	0	33	0	0	29	4	0	1	0	34
Hourly Total	3	4	162	16	3	0	1	189	0	1	166	26	4	1	0	198
Session Total	10	9	1032	83	8	1	6	1149	0	8	836	109	15	3	0	971
1600 - 1615	0	0	36	3	1	0	1	41	0	0	44	4	1	0	0	49
1615 - 1630	1	0	55	2	0	1	0	59	0	0	64	12	0	0	0	76
1630 - 1645	1	1	62	8	0	1	0	73	0	0	49	9	0	0	0	58
1645 - 1700	1	0	63	2	0	0	1	67	0	0	63	11	0	0	0	74
Hourly Total	3	1	216	15	1	2	2	240	0	0	220	36	1	0	0	257
1700 - 1715	0	0	46	4	0	0	0	50	0	2	80	9	1	0	0	92
1715 - 1730	0	0	51	4	0	0	1	56	1	0	87	6	0	1	0	95
1730 - 1745	0	0	61	4	0	0	0	65	0	0	89	8	1	1	0	99
1745 - 1800	0	0	55	5	1	0	0	61	0	2	56	10	0	0	0	68
Hourly Total	0	0	213	17	1	0	1	232	1	4	312	33	2	2	0	354
1800 - 1815	1	1	44	3	0	0	1	50	0	0	45	6	1	1	0	53
1815 - 1830	0	0	52	2	0	0	0	54	0	0	56	9	0	0	0	65
1830 - 1845	0	0	43	2	0	0	0	45	0	0	35	5	0	0	0	40
1845 - 1900	0	0	36	0	0	0	0	36	0	0	37	6	0	0	0	43
Hourly Total	1	1	175	7	0	0	1	185	0	0	173	26	1	1	0	201
Session Total	4	2	604	39	2	2	4	657	1	4	705	95	4	3	0	812

Warrington - Manual Traffic Survey, Wednesday 17th July 2019

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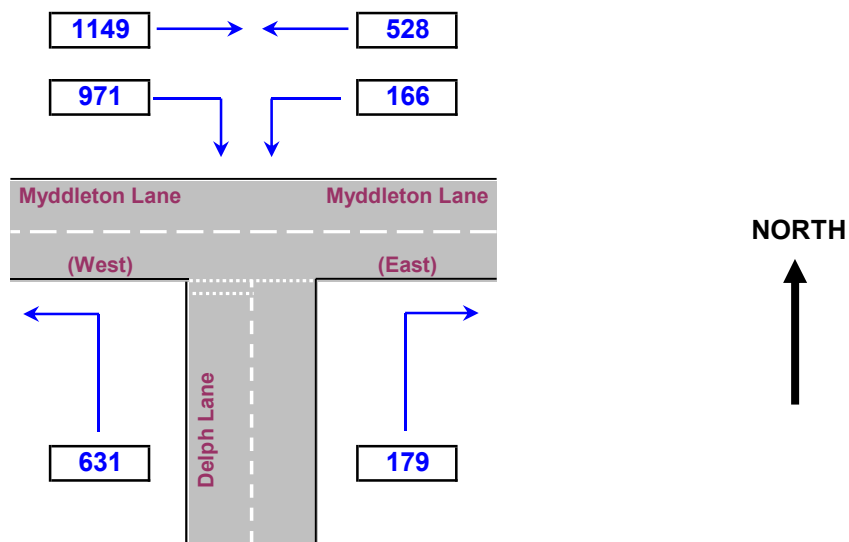
Junction: (2) Myddleton Lane / Delph Lane

Vehicle Class:

Start Time:

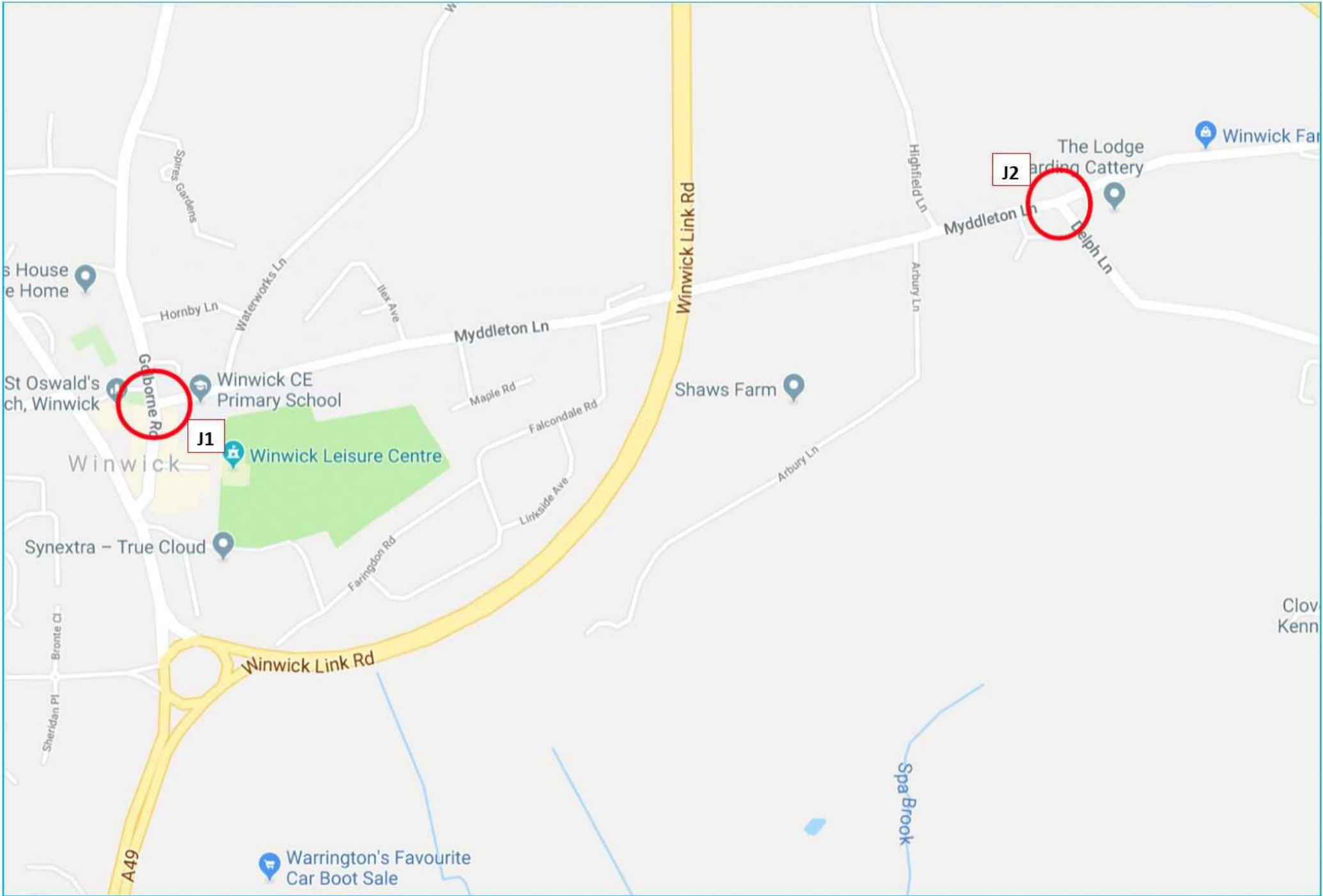
End Time:

Peak Hour

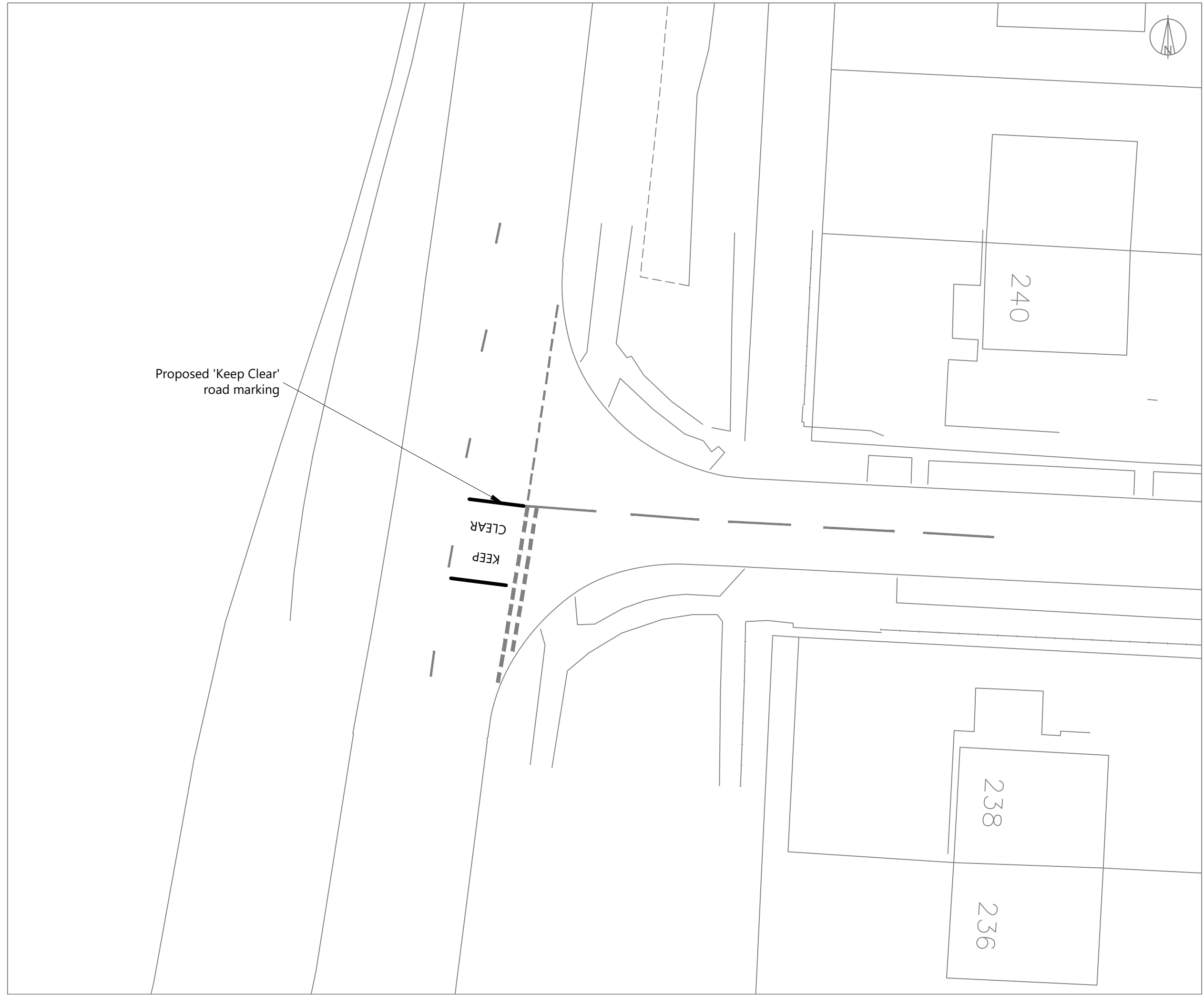


Note: The above diagram represents the Junction surveyed, although may not be the exact layout of the actual location.

Important This spreadsheet & Interactive Vehicle Flow Diagram was produced based on specific Note: parameters. Consequently, alteration to the spreadsheet format or it's properties may result in malfunction.



APPENDIX 22



Proposed 'Keep Clear'
road marking



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ISSUE	REASON FOR REVISION	DATE

PROJECT:
**PEEL HALL,
WARRINGTON**

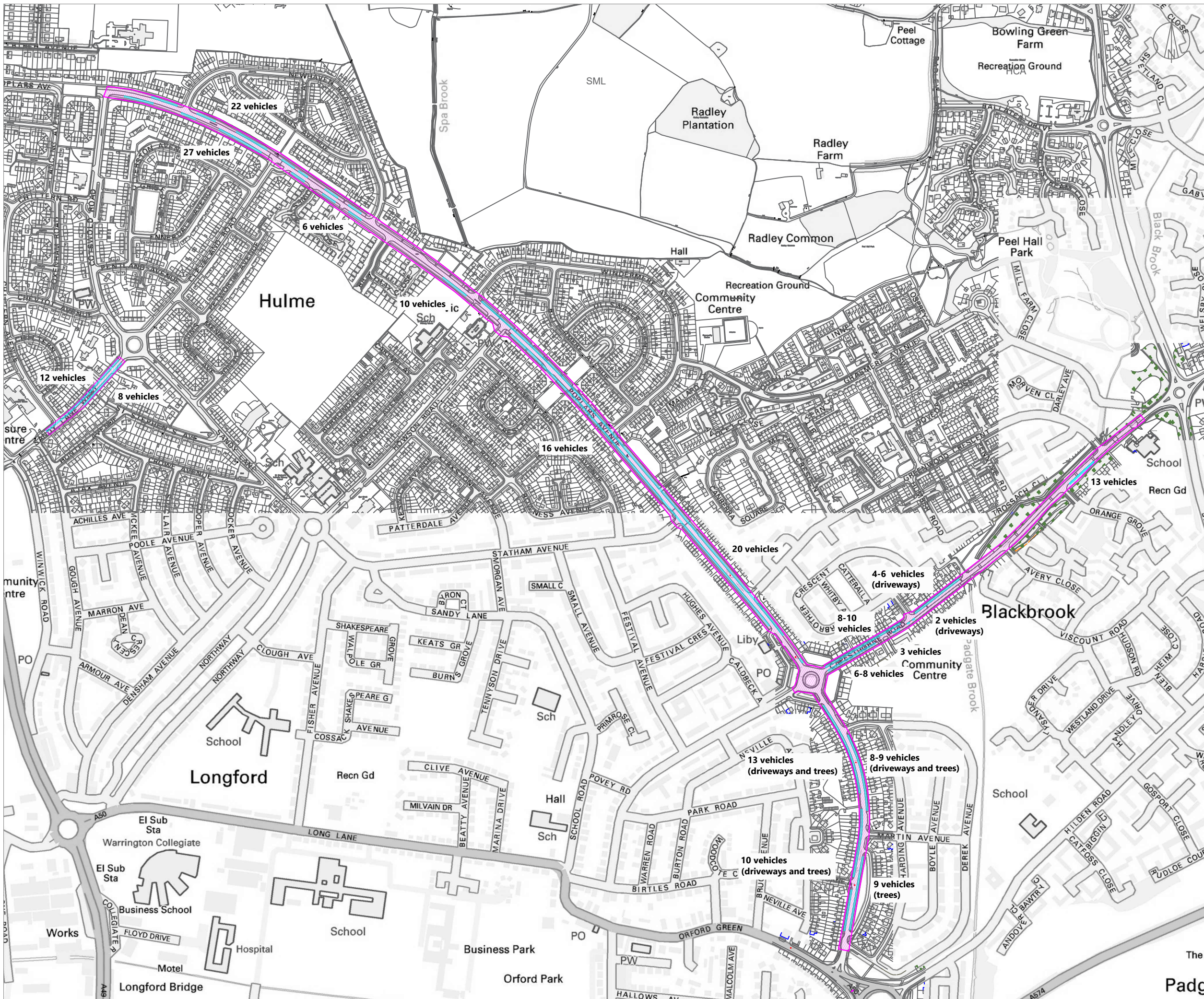
CLIENT:
**SATNAM MILLENNIUM
LTD**

PROJECT REFERENCE:	DRAWING NUMBER:	SCALE:
1107	79	1:250 @ A3

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www.highgatetransportation.co.uk
First Floor, 43-45 Park Street
Bristol BS8 1ES
07973 375 937 / 07595 892 217
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TITLE:
**PEEL HALL POTENTIAL MITIGATION - A49 /
BIRCH AVENUE**

DATE:	DRAWN BY:	CHECKED:
22/12/17	BL	FB



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Key

Study area to be considered for off-carriageway formalised parking

Potential locations for verge parking

Indicative only - based on on-site observations

ISSUE	REASON FOR REVISION	DATE

PROJECT: PEEL HALL, WARRINGTON		
CLIENT: SATNAM MILLENNIUM LTD		
PROJECT REFERENCE: 1901	DRAWING NUMBER: 06	SCALE: Not to Scale

HighgateTransportation

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 First Floor, 43-45 Park Street
 Bristol BS1 5NL
 07973 375 937 / 07595 892 217
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TITLE: POTENTIAL AREAS TO BE CONSIDERED FOR VERGE/FOOTWAY PARKING		
DATE: 29/01/20	DRAWN BY: FB	CHECKED: DT



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Proposed 20mph restriction to tie into existing 20mph restrictions where present.

Key
 Potential 20mph speed restriction extension

ISSUE	REASON FOR REVISION	DATE

PROJECT:
**PEEL HALL,
 WARRINGTON**

CLIENT:
**SATNAM MILLENNIUM
 LTD**

PROJECT REFERENCE:	DRAWING NUMBER:	SCALE:
1901	07	Not to Scale

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TITLE:
**AREA FOR POTENTIAL 20MPH
 SPEED RESTRICTION EXTENSION**

DATE:	DRAWN BY:	CHECKED:
20/01/20	FB	DT



NOTES:
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 North arrow indicative.

PRELIMINARY

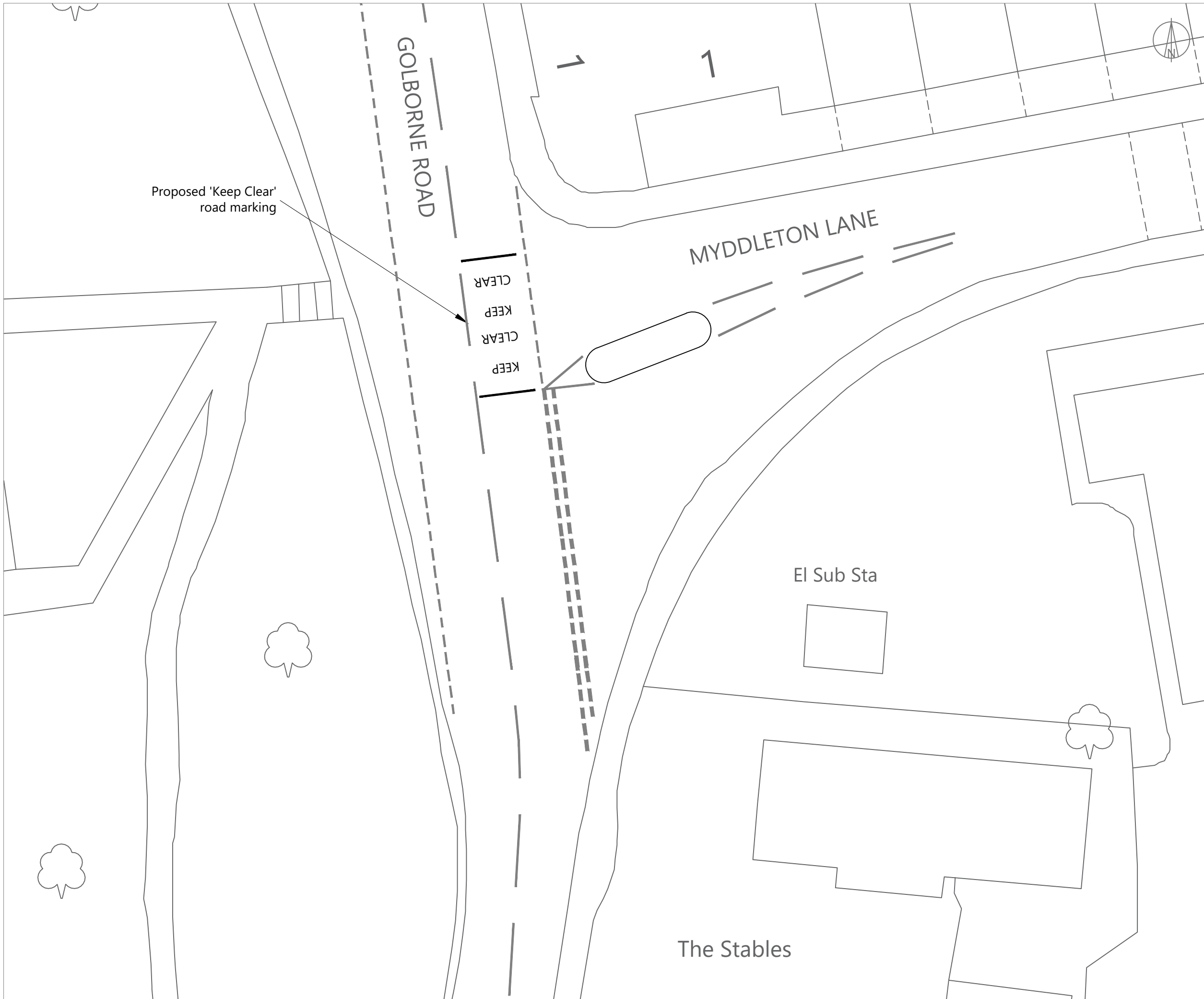
ISSUE	REASON FOR REVISION	DATE

PROJECT:	PEEL HALL WARRINGTON	
CLIENT:	SATNAM MILLENNIUM LTD	
PROJECT REFERENCE:	DRAWING NUMBER:	SCALE:
1901	08	1:500 @ A3

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TITLE: PROPOSED A49 / GOLBOURNE ROAD JUNCTION IMPROVEMENTS		
DATE: 04/03/20	DRAWN BY: BGS	CHECKED: FB



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 Road markings and splitter island shown indicatively only

ISSUE	REASON FOR REVISION	DATE

PROJECT:
**PEEL HALL,
 WARRINGTON**

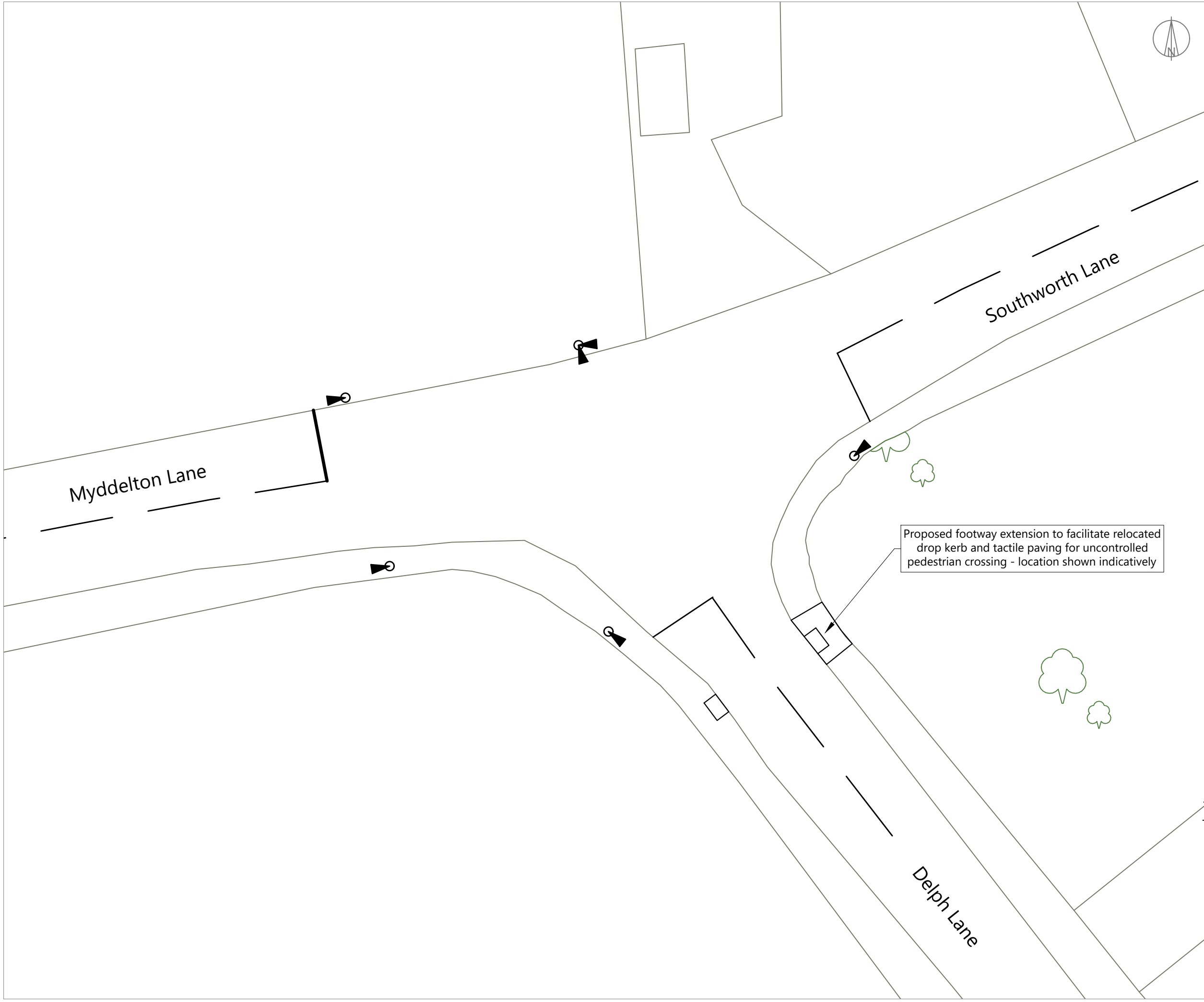
CLIENT:
**SATNAM MILLENNIUM
 LTD**

PROJECT REFERENCE:	DRAWING NUMBER:	SCALE:
1901	10	1:200 @ A3

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TITLE:
**POTENTIAL KEEP CLEAR MARKINGS
 GOLBOURNE RD/MYDDLETON LN**

DATE:	DRAWN BY:	CHECKED:
02/03/20	FB	DT



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PRELIMINARY

ISSUE	REASON FOR REVISION	DATE

PROJECT:
**PEEL HALL,
 WARRINGTON**

CLIENT:
**SATNAM MILLENNIUM
 LTD**

PROJECT REFERENCE:	DRAWING NUMBER:	SCALE:
1901	11	1:200 @ A3

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TITLE:
**POTENTIAL SIGNAL JUNCTION
 MYDDLETON LANE/DELPH LANE**

DATE:	DRAWN BY:	CHECKED:
17/03/20	FB	DT

APPENDIX 23

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: 1901 110320 Golborne Myddleton ASA FLAT.j9

Path: C:\Users\Brad\Highgate Transportation\HTp - Documents\1900 - Projects\1901 - Peel Hall\Modelling\Off-Site Junctions\CJ\Option A\Golborne Myddleton\Flat

Report generation date: 11/03/2020 14:06:37

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2022 Do Minimum								
Stream B-C	1.2	13.89	0.55	B	2.3	28.69	0.71	D
Stream B-A	0.4	26.76	0.29	D	3.2	57.11	0.78	F
Stream C-AB	53.4	286.47	1.06	F	11.7	55.94	0.92	F
2022 Do Something								
Stream B-C	1.2	14.22	0.56	B	2.3	29.36	0.71	D
Stream B-A	0.4	27.32	0.30	D	3.3	58.48	0.79	F
Stream C-AB	54.4	291.50	1.06	F	12.1	57.83	0.92	F
2022 Do Something (FULL)								
Stream B-C	2.0	19.41	0.67	C	3.6	47.27	0.81	E
Stream B-A	0.6	35.50	0.37	E	4.7	82.13	0.85	F
Stream C-AB	65.5	348.04	1.09	F	18.7	89.09	0.96	F
2027 Do Minimum								
Stream B-C	1.4	15.43	0.58	C	3.1	39.27	0.77	E
Stream B-A	0.5	33.25	0.35	D	4.2	71.20	0.83	F
Stream C-AB	70.3	371.27	1.10	F	11.2	52.81	0.91	F
2027 Do Something								
Stream B-C	1.7	18.15	0.64	C	6.2	80.23	0.90	F
Stream B-A	0.6	39.11	0.41	E	6.2	103.22	0.90	F
Stream C-AB	77.2	407.24	1.11	F	12.6	58.96	0.92	F
2032 Do Minimum								
Stream B-C	1.5	16.72	0.61	C	12.1	148.32	0.98	F
Stream B-A	0.6	38.83	0.41	E	10.1	162.88	0.96	F
Stream C-AB	82.2	432.17	1.12	F	17.8	83.15	0.96	F
2032 Do Something (FULL)								
Stream B-C	2.4	24.56	0.72	C	22.0	258.15	1.06	F
Stream B-A	1.1	62.17	0.55	F	17.6	270.29	1.05	F
Stream C-AB	102.3	535.64	1.15	F	30.0	137.40	1.00	F

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

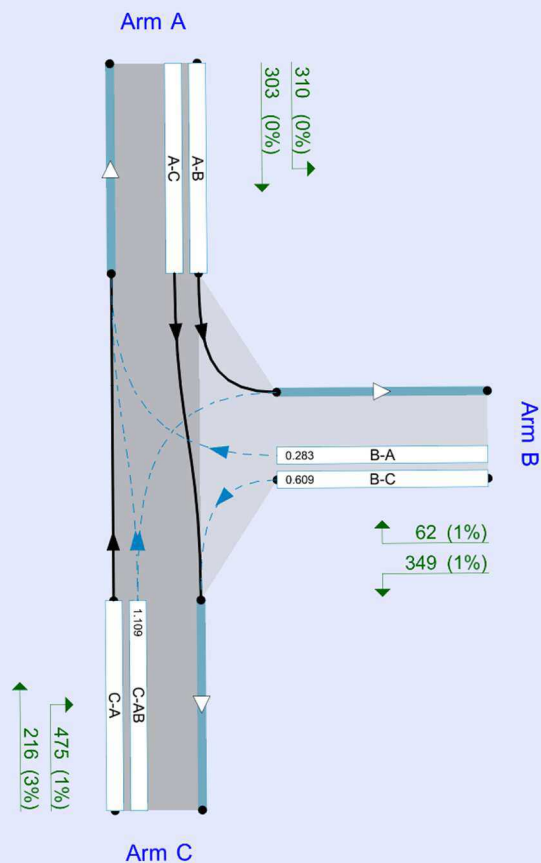
File summary

File Description

Title	
Location	
Site number	
Date	24/01/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin



Flows show original traffic demand (Veh/hr).
Streams (downstream end) show RFC (l)

The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D1	2022 Do Minimum	AM	FLAT	08:00	09:00	60	15
D2	2022 Do Minimum	PM	FLAT	17:00	18:00	60	15
D3	2022 Do Something	AM	FLAT	08:00	09:00	60	15
D4	2022 Do Something	PM	FLAT	17:00	18:00	60	15
D5	2022 Do Something (FULL)	AM	FLAT	08:00	09:00	60	15
D6	2022 Do Something (FULL)	PM	FLAT	17:00	18:00	60	15
D7	2027 Do Minimum	AM	FLAT	08:00	09:00	60	15
D8	2027 Do Minimum	PM	FLAT	17:00	18:00	60	15
D9	2027 Do Something	AM	FLAT	08:00	09:00	60	15
D10	2027 Do Something	PM	FLAT	17:00	18:00	60	15
D11	2032 Do Minimum	AM	FLAT	08:00	09:00	60	15
D12	2032 Do Minimum	PM	FLAT	17:00	18:00	60	15
D13	2032 Do Something (FULL)	AM	FLAT	08:00	09:00	60	15
D14	2032 Do Something (FULL)	PM	FLAT	17:00	18:00	60	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2022 Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		123.80	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Golborne Road (N)		Major
B	Myddleton Lane		Minor
C	Golborne Road (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.80			100.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	9.95	6.10	4.36	3.45	✓	2.00	80	26

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	552	0.097	0.245	0.154	0.350
B-C	740	0.110	0.277	-	-
C-B	632	0.236	0.236	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D1	2022 Do Minimum	AM	FLAT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	573	100.000
B		✓	368	100.000
C		✓	670	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	268	305
	B	54	0	314
	C	206	464	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	1	0	1
	C	4	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.55	13.89	1.2	?	B
B-A	0.29	26.76	0.4	~1	D
C-AB	1.06	286.47	53.4	?	F
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	314	585	0.537	310	1.1	12.880	B
B-A	54	236	0.229	53	0.3	19.527	C
C-AB	670	630	1.063	593	19.1	70.500	F
C-A	0			0			
A-B	268			268			
A-C	305			305			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	314	580	0.542	314	1.2	13.523	B
B-A	54	214	0.252	54	0.3	22.428	C
C-AB	670	630	1.063	621	31.4	159.506	F
C-A	0			0			
A-B	268			268			
A-C	305			305			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	314	576	0.545	314	1.2	13.701	B
B-A	54	201	0.269	54	0.4	24.500	C
C-AB	670	630	1.063	625	42.6	224.696	F
C-A	0			0			
A-B	268			268			
A-C	305			305			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	314	573	0.548	314	1.2	13.887	B
B-A	54	188	0.287	54	0.4	26.759	D
C-AB	670	630	1.063	627	53.4	286.471	F
C-A	0			0			
A-B	268			268			
A-C	305			305			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.12	?	?	?	?			N/A	N/A
B-A	0.29	~1	~1	~1	~1			N/A	N/A
C-AB	19.15	?	?	?	?			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.16	?	?	?	?			N/A	N/A
B-A	0.33	~1	~1	~1	~1			N/A	N/A
C-AB	31.38	?	?	?	?			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.18	?	?	?	?			N/A	N/A
B-A	0.36	~1	~1	~1	~1			N/A	N/A
C-AB	42.63	?	?	?	?			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.19	?	?	?	?			N/A	N/A
B-A	0.39	~1	~1	~1	~1			N/A	N/A
C-AB	53.44	?	?	?	?			N/A	N/A

2022 Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		39.01	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D2	2022 Do Minimum	PM	FLAT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	313	100.000
B		✓	518	100.000
C		✓	718	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	172	141
	B	216	0	302
	C	306	412	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
	A	0	0
B	0	0	1
C	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.71	28.69	2.3	?	D
B-A	0.78	57.11	3.2	?	F
C-AB	0.92	55.94	11.7	?	F
C-A					
A-B					
A-C					

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	302	473	0.638	295	1.7	19.578	C
B-A	216	294	0.734	207	2.4	37.889	E
C-AB	689	761	0.905	657	8.1	30.839	D
C-A	29			29			
A-B	172			172			
A-C	141			141			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	302	439	0.688	300	2.1	25.605	D
B-A	216	281	0.768	214	2.9	51.147	F
C-AB	704	770	0.915	697	10.0	47.838	E
C-A	14			14			
A-B	172			172			
A-C	141			141			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	302	430	0.702	301	2.2	27.619	D
B-A	216	278	0.776	215	3.1	55.060	F
C-AB	708	773	0.916	704	11.0	53.005	F
C-A	10			10			
A-B	172			172			
A-C	141			141			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	302	426	0.709	302	2.3	28.693	D
B-A	216	277	0.781	215	3.2	57.111	F
C-AB	710	774	0.917	707	11.7	55.940	F
C-A	8			8			
A-B	172			172			
A-C	141			141			

Queue Variation Results for each time segment

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.66	?	?	?	?			N/A	N/A
B-A	2.36	?	?	?	?			N/A	N/A
C-AB	8.07	?	?	?	?			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.06	?	?	?	?			N/A	N/A
B-A	2.86	?	?	?	?			N/A	N/A
C-AB	9.99	?	?	?	?			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.22	?	?	?	?			N/A	N/A
B-A	3.09	?	?	?	?			N/A	N/A
C-AB	11.00	?	?	?	?			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.31	?	?	?	?			N/A	N/A
B-A	3.24	?	?	?	?			N/A	N/A
C-AB	11.65	?	?	?	?			N/A	N/A

2022 Do Something, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		125.69	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D3	2022 Do Something	AM	FLAT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	573	100.000
B		✓	374	100.000
C		✓	671	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	270	303
	B	55	0	319
	C	206	465	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	1	0	1
	C	4	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.56	14.22	1.2	?	B
B-A	0.30	27.32	0.4	~1	D
C-AB	1.06	291.50	54.4	?	F
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	319	584	0.546	314	1.2	13.125	B
B-A	55	235	0.234	54	0.3	19.740	C
C-AB	671	630	1.065	594	19.4	71.117	F
C-A	0			0			
A-B	270			270			
A-C	303			303			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	319	579	0.551	319	1.2	13.817	B
B-A	55	213	0.258	55	0.3	22.753	C
C-AB	671	630	1.065	621	31.8	161.499	F
C-A	0			0			
A-B	270			270			
A-C	303			303			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	319	576	0.554	319	1.2	14.012	B
B-A	55	199	0.276	55	0.4	24.927	C
C-AB	671	630	1.065	625	43.4	228.160	F
C-A	0			0			
A-B	270			270			
A-C	303			303			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	319	572	0.558	319	1.2	14.219	B
B-A	55	186	0.295	55	0.4	27.321	D
C-AB	671	630	1.065	627	54.4	291.502	F
C-A	0			0			
A-B	270			270			
A-C	303			303			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.16	?	?	?	?			N/A	N/A
B-A	0.30	~1	~1	~1	~1			N/A	N/A
C-AB	19.36	?	?	?	?			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.20	?	?	?	?			N/A	N/A
B-A	0.34	~1	~1	~1	~1			N/A	N/A
C-AB	31.84	?	?	?	?			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.22	?	?	?	?			N/A	N/A
B-A	0.37	~1	~1	~1	~1			N/A	N/A
C-AB	43.35	?	?	?	?			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.24	?	?	?	?			N/A	N/A
B-A	0.41	~1	~1	~1	~1			N/A	N/A
C-AB	54.44	?	?	?	?			N/A	N/A

2022 Do Something, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		40.27	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D4	2022 Do Something	PM	FLAT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	314	100.000
B		✓	517	100.000
C		✓	720	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	173	141
	B	217	0	300
	C	307	413	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	1
	C	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.71	29.36	2.3	?	D
B-A	0.79	58.48	3.3	?	F
C-AB	0.92	57.83	12.1	?	F
C-A					
A-B					
A-C					

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	300	471	0.638	293	1.7	19.664	C
B-A	217	294	0.738	207	2.4	38.265	E
C-AB	692	762	0.908	659	8.2	31.275	D
C-A	28			28			
A-B	173			173			
A-C	141			141			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	300	435	0.690	298	2.1	25.940	D
B-A	217	281	0.773	215	2.9	52.008	F
C-AB	708	771	0.918	700	10.3	49.020	E
C-A	12			12			
A-B	173			173			
A-C	141			141			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	300	426	0.704	299	2.2	28.141	D
B-A	217	278	0.781	216	3.2	56.215	F
C-AB	711	774	0.920	707	11.3	54.600	F
C-A	9			9			
A-B	173			173			
A-C	141			141			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	300	421	0.712	300	2.3	29.355	D
B-A	217	276	0.786	216	3.3	58.481	F
C-AB	713	775	0.921	711	12.1	57.830	F
C-A	7			7			
A-B	173			173			
A-C	141			141			

Queue Variation Results for each time segment

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.66	?	?	?	?			N/A	N/A
B-A	2.39	?	?	?	?			N/A	N/A
C-AB	8.24	?	?	?	?			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.07	?	?	?	?			N/A	N/A
B-A	2.92	?	?	?	?			N/A	N/A
C-AB	10.26	?	?	?	?			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.24	?	?	?	?			N/A	N/A
B-A	3.17	?	?	?	?			N/A	N/A
C-AB	11.35	?	?	?	?			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.35	?	?	?	?			N/A	N/A
B-A	3.32	?	?	?	?			N/A	N/A
C-AB	12.05	?	?	?	?			N/A	N/A

2022 Do Something (FULL), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		146.06	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D5	2022 Do Something (FULL)	AM	FLAT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	584	100.000
B		✓	435	100.000
C		✓	680	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	287	297
	B	60	0	375
	C	207	473	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	1	0	1
	C	4	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.67	19.41	2.0	?	C
B-A	0.37	35.50	0.6	~1	E
C-AB	1.09	348.04	65.5	?	F
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	375	579	0.648	368	1.7	16.564	C
B-A	60	217	0.277	59	0.4	22.578	C
C-AB	680	626	1.087	593	21.7	78.042	F
C-A	0			0			
A-B	287			287			
A-C	297			297			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	375	572	0.656	375	1.8	18.189	C
B-A	60	192	0.313	60	0.4	27.194	D
C-AB	680	626	1.087	619	36.9	183.862	F
C-A	0			0			
A-B	287			287			
A-C	297			297			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	375	566	0.662	375	1.9	18.748	C
B-A	60	176	0.341	60	0.5	30.921	D
C-AB	680	626	1.087	622	51.4	267.144	F
C-A	0			0			
A-B	287			287			
A-C	297			297			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	375	559	0.670	375	2.0	19.415	C
B-A	60	161	0.373	60	0.6	35.500	E
C-AB	680	626	1.087	623	65.5	348.038	F
C-A	0			0			
A-B	287			287			
A-C	297			297			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.74	?	?	?	?			N/A	N/A
B-A	0.37	~1	~1	~1	~1			N/A	N/A
C-AB	21.71	?	?	?	?			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.84	?	?	?	?			N/A	N/A
B-A	0.44	~1	~1	~1	~1			N/A	N/A
C-AB	36.94	?	?	?	?			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.90	?	?	?	?			N/A	N/A
B-A	0.50	~1	~1	~1	~1			N/A	N/A
C-AB	51.39	?	?	?	?			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.97	?	?	?	?			N/A	N/A
B-A	0.57	~1	~1	~1	~1			N/A	N/A
C-AB	65.53	?	?	?	?			N/A	N/A

2022 Do Something (FULL), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		61.91	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D6	2022 Do Something (FULL)	PM	FLAT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	327	100.000
B		✓	515	100.000
C		✓	746	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	182	145
	B	221	0	294
	C	318	428	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
	A	0	0
B	0	0	1
C	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.81	47.27	3.6	?	E
B-A	0.85	82.13	4.7	?	F
C-AB	0.96	89.09	18.7	?	F
C-A					
A-B					
A-C					

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	294	448	0.656	287	1.8	21.466	C
B-A	221	286	0.773	210	2.8	42.731	E
C-AB	731	768	0.951	687	10.9	38.128	E
C-A	15			15			
A-B	182			182			
A-C	145			145			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	294	398	0.739	291	2.5	32.615	D
B-A	221	269	0.821	218	3.6	63.844	F
C-AB	746	776	0.961	731	14.8	68.188	F
C-A	0			0			
A-B	182			182			
A-C	145			145			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	294	378	0.778	292	3.1	40.227	E
B-A	221	263	0.840	219	4.2	74.249	F
C-AB	746	777	0.960	737	17.1	80.856	F
C-A	0			0			
A-B	182			182			
A-C	145			145			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	294	365	0.807	292	3.6	47.273	E
B-A	221	259	0.853	219	4.7	82.125	F
C-AB	746	777	0.960	739	18.7	89.088	F
C-A	0			0			
A-B	182			182			
A-C	145			145			

Queue Variation Results for each time segment

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.78	?	?	?	?			N/A	N/A
B-A	2.76	?	?	?	?			N/A	N/A
C-AB	10.92	?	?	?	?			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.54	?	?	?	?			N/A	N/A
B-A	3.63	?	?	?	?			N/A	N/A
C-AB	14.76	?	?	?	?			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	3.08	?	?	?	?			N/A	N/A
B-A	4.20	?	?	?	?			N/A	N/A
C-AB	17.05	?	?	?	?			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	3.60	?	?	?	?			N/A	N/A
B-A	4.66	?	?	?	?			N/A	N/A
C-AB	18.68	?	?	?	?			N/A	N/A

2027 Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		157.51	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D7	2027 Do Minimum	AM	FLAT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	604	100.000
B		✓	383	100.000
C		✓	686	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	301	303
	B	59	0	324
	C	215	471	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	1	0	1
	C	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.58	15.43	1.4	?	C
B-A	0.35	33.25	0.5	~1	D
C-AB	1.10	371.27	70.3	?	F
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	324	577	0.562	319	1.2	13.718	B
B-A	59	228	0.259	58	0.3	21.013	C
C-AB	686	626	1.096	595	22.8	80.776	F
C-A	0			0			
A-B	301			301			
A-C	303			303			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	324	570	0.569	324	1.3	14.613	B
B-A	59	202	0.292	59	0.4	25.110	D
C-AB	686	626	1.096	620	39.2	193.013	F
C-A	0			0			
A-B	301			301			
A-C	303			303			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	324	564	0.575	324	1.3	14.981	B
B-A	59	184	0.321	59	0.5	28.711	D
C-AB	686	626	1.096	623	54.9	283.177	F
C-A	0			0			
A-B	301			301			
A-C	303			303			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	324	557	0.582	324	1.4	15.434	C
B-A	59	167	0.354	59	0.5	33.250	D
C-AB	686	626	1.096	624	70.3	371.273	F
C-A	0			0			
A-B	301			301			
A-C	303			303			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.24	?	?	?	?			N/A	N/A
B-A	0.34	~1	~1	~1	~1			N/A	N/A
C-AB	22.76	?	?	?	?			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.29	?	?	?	?			N/A	N/A
B-A	0.40	~1	~1	~1	~1			N/A	N/A
C-AB	39.19	?	?	?	?			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.32	?	?	?	?			N/A	N/A
B-A	0.46	~1	~1	~1	~1			N/A	N/A
C-AB	54.89	?	?	?	?			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.36	?	?	?	?			N/A	N/A
B-A	0.52	~1	~1	~1	~1			N/A	N/A
C-AB	70.30	?	?	?	?			N/A	N/A

2027 Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		41.30	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D8	2027 Do Minimum	PM	FLAT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	329	100.000
B		✓	524	100.000
C		✓	725	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	181	148
	B	227	0	297
	C	322	403	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	1
	C	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.77	39.27	3.1	?	E
B-A	0.83	71.20	4.2	?	F
C-AB	0.91	52.81	11.2	?	F
C-A					
A-B					
A-C					

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	297	447	0.665	290	1.8	21.995	C
B-A	227	293	0.776	216	2.8	42.307	E
C-AB	692	770	0.899	661	7.9	29.807	D
C-A	33			33			
A-B	181			181			
A-C	148			148			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	297	404	0.735	294	2.5	31.839	D
B-A	227	279	0.813	224	3.5	60.708	F
C-AB	708	779	0.909	701	9.7	45.648	E
C-A	17			17			
A-B	181			181			
A-C	148			148			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	297	392	0.757	296	2.8	36.385	E
B-A	227	276	0.824	225	3.9	67.334	F
C-AB	712	782	0.911	708	10.6	50.258	F
C-A	13			13			
A-B	181			181			
A-C	148			148			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	297	386	0.770	296	3.1	39.271	E
B-A	227	274	0.829	226	4.2	71.198	F
C-AB	714	783	0.912	711	11.2	52.810	F
C-A	11			11			
A-B	181			181			
A-C	148			148			

Queue Variation Results for each time segment

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.84	?	?	?	?			N/A	N/A
B-A	2.81	?	?	?	?			N/A	N/A
C-AB	7.89	?	?	?	?			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.50	?	?	?	?			N/A	N/A
B-A	3.55	?	?	?	?			N/A	N/A
C-AB	9.69	?	?	?	?			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.83	?	?	?	?			N/A	N/A
B-A	3.94	?	?	?	?			N/A	N/A
C-AB	10.62	?	?	?	?			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	3.06	?	?	?	?			N/A	N/A
B-A	4.19	?	?	?	?			N/A	N/A
C-AB	11.20	?	?	?	?			N/A	N/A

2027 Do Something, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		170.38	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D9	2027 Do Something	AM	FLAT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	613	100.000
B		✓	411	100.000
C		✓	691	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	310	303
	B	62	0	349
	C	216	475	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	1	0	1
	C	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.64	18.15	1.7	?	C
B-A	0.41	39.11	0.6	~1	E
C-AB	1.11	407.24	77.2	?	F
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	349	573	0.609	343	1.5	15.307	C
B-A	62	219	0.283	60	0.4	22.510	C
C-AB	691	623	1.109	594	24.2	85.189	F
C-A	0			0			
A-B	310			310			
A-C	303			303			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	349	564	0.619	349	1.6	16.666	C
B-A	62	191	0.324	62	0.5	27.638	D
C-AB	691	623	1.109	618	42.4	207.246	F
C-A	0			0			
A-B	310			310			
A-C	303			303			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	349	556	0.627	349	1.6	17.295	C
B-A	62	172	0.360	62	0.5	32.506	D
C-AB	691	623	1.109	621	59.9	308.047	F
C-A	0			0			
A-B	310			310			
A-C	303			303			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	349	546	0.639	349	1.7	18.155	C
B-A	62	153	0.405	62	0.6	39.108	E
C-AB	691	623	1.109	622	77.2	407.237	F
C-A	0			0			
A-B	310			310			
A-C	303			303			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.49	?	?	?	?			N/A	N/A
B-A	0.38	~1	~1	~1	~1			N/A	N/A
C-AB	24.24	?	?	?	?			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.57	?	?	?	?			N/A	N/A
B-A	0.46	~1	~1	~1	~1			N/A	N/A
C-AB	42.41	?	?	?	?			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.63	?	?	?	?			N/A	N/A
B-A	0.54	~1	~1	~1	~1			N/A	N/A
C-AB	59.93	?	?	?	?			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.71	?	?	?	?			N/A	N/A
B-A	0.64	~1	~1	~1	~1			N/A	N/A
C-AB	77.22	?	?	?	?			N/A	N/A

2027 Do Something, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		56.32	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D10	2027 Do Something	PM	FLAT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	342	100.000
B		✓	535	100.000
C		✓	736	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	186	156
	B	233	0	302
	C	334	402	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
	A	0	0
B	0	0	1
C	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.90	80.23	6.2	?	F
B-A	0.90	103.22	6.2	?	F
C-AB	0.92	58.96	12.6	?	F
C-A					
A-B					
A-C					

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	302	424	0.712	293	2.2	25.945	D
B-A	233	285	0.816	220	3.3	48.076	E
C-AB	706	776	0.909	672	8.5	31.067	D
C-A	30			30			
A-B	186			186			
A-C	156			156			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	302	370	0.817	296	3.6	45.533	E
B-A	233	270	0.864	228	4.5	75.892	F
C-AB	724	786	0.921	715	10.7	49.368	E
C-A	12			12			
A-B	186			186			
A-C	156			156			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	302	349	0.866	297	4.8	62.133	F
B-A	233	264	0.883	230	5.4	90.731	F
C-AB	728	789	0.922	723	11.9	55.397	F
C-A	8			8			
A-B	186			186			
A-C	156			156			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	302	334	0.904	296	6.2	80.229	F
B-A	233	260	0.898	230	6.2	103.225	F
C-AB	730	791	0.924	727	12.6	58.962	F
C-A	6			6			
A-B	186			186			
A-C	156			156			

Queue Variation Results for each time segment

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.23	?	?	?	?			N/A	N/A
B-A	3.34	?	?	?	?			N/A	N/A
C-AB	8.48	?	?	?	?			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	3.63	?	?	?	?			N/A	N/A
B-A	4.55	?	?	?	?			N/A	N/A
C-AB	10.67	?	?	?	?			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	4.85	?	?	?	?			N/A	N/A
B-A	5.40	?	?	?	?			N/A	N/A
C-AB	11.86	?	?	?	?			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	6.24	?	?	?	?			N/A	N/A
B-A	6.16	?	?	?	?			N/A	N/A
C-AB	12.65	?	?	?	?			N/A	N/A

2032 Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		180.00	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D11	2032 Do Minimum	AM	FLAT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	638	100.000
B		✓	394	100.000
C		✓	696	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	360	278
	B	63	0	331
	C	225	471	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	1	0	1
	C	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.61	16.72	1.5	?	C
B-A	0.41	38.83	0.6	~1	E
C-AB	1.12	432.17	82.2	?	F
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	331	574	0.577	326	1.3	14.235	B
B-A	63	225	0.280	61	0.4	21.843	C
C-AB	696	623	1.118	595	25.4	88.166	F
C-A	0			0			
A-B	360			360			
A-C	278			278			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	331	565	0.586	331	1.4	15.347	C
B-A	63	196	0.321	63	0.5	26.861	D
C-AB	696	623	1.118	618	44.8	217.176	F
C-A	0			0			
A-B	360			360			
A-C	278			278			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	331	557	0.595	331	1.4	15.916	C
B-A	63	175	0.360	63	0.5	31.858	D
C-AB	696	623	1.118	621	63.6	325.357	F
C-A	0			0			
A-B	360			360			
A-C	278			278			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	331	545	0.607	331	1.5	16.724	C
B-A	63	155	0.407	63	0.6	38.835	E
C-AB	696	623	1.118	622	82.2	432.170	F
C-A	0			0			
A-B	360			360			
A-C	278			278			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.31	?	?	?	?			N/A	N/A
B-A	0.38	~1	~1	~1	~1			N/A	N/A
C-AB	25.35	?	?	?	?			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.38	?	?	?	?			N/A	N/A
B-A	0.46	~1	~1	~1	~1			N/A	N/A
C-AB	44.76	?	?	?	?			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.43	?	?	?	?			N/A	N/A
B-A	0.54	~1	~1	~1	~1			N/A	N/A
C-AB	63.58	?	?	?	?			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.50	?	?	?	?			N/A	N/A
B-A	0.65	~1	~1	~1	~1			N/A	N/A
C-AB	82.18	?	?	?	?			N/A	N/A

2032 Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		89.13	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D12	2032 Do Minimum	PM	FLAT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	348	100.000
B		✓	549	100.000
C		✓	755	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	192	156
	B	238	0	311
	C	341	414	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	1
	C	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.98	148.32	12.1	?	F
B-A	0.96	162.88	10.1	?	F
C-AB	0.96	83.15	17.8	?	F
C-A					
A-B					
A-C					

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	311	399	0.779	299	3.0	32.955	D
B-A	238	275	0.866	221	4.2	56.805	F
C-AB	736	780	0.944	693	10.6	36.365	E
C-A	19			19			
A-B	192			192			
A-C	156			156			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	311	322	0.966	292	7.7	87.028	F
B-A	238	254	0.937	228	6.6	105.582	F
C-AB	755	790	0.955	740	14.3	64.387	F
C-A	0			0			
A-B	192			192			
A-C	156			156			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	311	322	0.967	302	10.0	123.202	F
B-A	238	249	0.957	230	8.5	137.657	F
C-AB	755	791	0.954	747	16.4	75.921	F
C-A	0			0			
A-B	192			192			
A-C	156			156			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	311	318	0.977	303	12.1	148.318	F
B-A	238	247	0.965	232	10.1	162.884	F
C-AB	755	791	0.954	749	17.8	83.149	F
C-A	0			0			
A-B	192			192			
A-C	156			156			

Queue Variation Results for each time segment

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.99	?	?	?	?			N/A	N/A
B-A	4.15	?	?	?	?			N/A	N/A
C-AB	10.58	?	?	?	?			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	7.66	?	?	?	?			N/A	N/A
B-A	6.59	?	?	?	?			N/A	N/A
C-AB	14.25	?	?	?	?			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	10.02	?	?	?	?			N/A	N/A
B-A	8.48	?	?	?	?			N/A	N/A
C-AB	16.36	?	?	?	?			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	12.09	?	?	?	?			N/A	N/A
B-A	10.07	?	?	?	?			N/A	N/A
C-AB	17.81	?	?	?	?			N/A	N/A

2032 Do Something (FULL), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		221.30	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D13	2032 Do Something (FULL)	AM	FLAT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	650	100.000
B		✓	437	100.000
C		✓	714	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	371	279
	B	67	0	370
	C	230	484	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	1	0	1
	C	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.72	24.56	2.4	?	C
B-A	0.55	62.17	1.1	?	F
C-AB	1.15	535.64	102.3	?	F
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	370	567	0.653	363	1.8	17.119	C
B-A	67	207	0.323	65	0.5	25.018	D
C-AB	714	619	1.154	595	29.8	100.918	F
C-A	0			0			
A-B	371			371			
A-C	279			279			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	370	553	0.668	369	1.9	19.443	C
B-A	67	174	0.385	66	0.6	33.248	D
C-AB	714	619	1.154	616	54.3	258.332	F
C-A	0			0			
A-B	371			371			
A-C	279			279			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	370	538	0.687	369	2.1	21.163	C
B-A	67	148	0.452	66	0.8	43.491	E
C-AB	714	619	1.154	618	78.4	397.236	F
C-A	0			0			
A-B	371			371			
A-C	279			279			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	370	513	0.721	369	2.4	24.557	C
B-A	67	122	0.548	66	1.1	62.167	F
C-AB	714	619	1.154	618	102.3	535.642	F
C-A	0			0			
A-B	371			371			
A-C	279			279			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.78	?	?	?	?			N/A	N/A
B-A	0.46	~1	~1	~1	~1			N/A	N/A
C-AB	29.78	?	?	?	?			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.93	?	?	?	?			N/A	N/A
B-A	0.59	~1	~1	~1	~1			N/A	N/A
C-AB	54.27	?	?	?	?			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.10	?	?	?	?			N/A	N/A
B-A	0.77	~1	~1	~1	~1			N/A	N/A
C-AB	78.35	?	?	?	?			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.41	?	?	?	?			N/A	N/A
B-A	1.08	?	?	?	?			N/A	N/A
C-AB	102.31	?	?	?	?			N/A	N/A

2032 Do Something (FULL), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		149.51	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D14	2032 Do Something (FULL)	PM	FLAT	17:00	18:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	362	100.000
B		✓	559	100.000
C		✓	782	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	201	161
	B	244	0	315
	C	351	431	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
A	0	0	1
B	0	0	1
C	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	1.06	258.15	22.0	?	F
B-A	1.05	270.29	17.6	?	F
C-AB	1.00	137.40	30.0	?	F
C-A					
A-B					
A-C					

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	315	358	0.881	296	4.8	48.950	E
B-A	244	261	0.936	221	5.6	71.690	F
C-AB	780	784	0.995	721	14.9	46.710	E
C-A	2			2			
A-B	201			201			
A-C	161			161			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	315	305	1.032	289	11.3	125.151	F
B-A	244	244	1.002	229	9.5	145.346	F
C-AB	782	785	0.996	757	21.3	93.515	F
C-A	0			0			
A-B	201			201			
A-C	161			161			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	315	302	1.043	294	16.6	193.757	F
B-A	244	237	1.032	228	13.5	207.553	F
C-AB	782	785	0.996	763	26.1	118.007	F
C-A	0			0			
A-B	201			201			
A-C	161			161			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	315	298	1.056	293	22.0	258.154	F
B-A	244	233	1.046	228	17.6	270.295	F
C-AB	782	785	0.996	766	30.0	137.397	F
C-A	0			0			
A-B	201			201			
A-C	161			161			

Queue Variation Results for each time segment

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	4.79	?	?	?	?			N/A	N/A
B-A	5.64	?	?	?	?			N/A	N/A
C-AB	14.94	?	?	?	?			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	11.29	?	?	?	?			N/A	N/A
B-A	9.50	?	?	?	?			N/A	N/A
C-AB	21.29	?	?	?	?			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	16.59	?	?	?	?			N/A	N/A
B-A	13.49	?	?	?	?			N/A	N/A
C-AB	26.05	?	?	?	?			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	22.00	?	?	?	?			N/A	N/A
B-A	17.56	?	?	?	?			N/A	N/A
C-AB	30.01	?	?	?	?			N/A	N/A

APPENDIX 24

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: 1901 280120 Myddleton Delph Lane ASA FLAT Updated Geo.j9

Path: C:\Users\Brad\Highgate Transportation\HTp - Documents\1900 - Projects\1901 - Peel Hall\Modelling\Off-Site Junctions\CJ\Option A\Myddleton Delph Lane\Flat

Report generation date: 05/03/2020 14:33:32

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2022 Do Minimum								
Stream B-AC	17.3	171.86	1.00	F	2.9	26.76	0.75	D
Stream C-AB	17.9	72.20	0.95	F	3.1	17.17	0.71	C
2022 Do Something								
Stream B-AC	21.0	203.31	1.02	F	3.0	27.51	0.75	D
Stream C-AB	19.5	78.95	0.96	F	3.2	17.67	0.72	C
2022 Do Something (FULL)								
Stream B-AC	74.9	644.24	1.22	F	4.0	35.41	0.81	E
Stream C-AB	36.2	145.26	1.00	F	4.4	22.78	0.78	C
2027 Do Minimum								
Stream B-AC	49.9	465.13	1.16	F	6.1	52.55	0.87	F
Stream C-AB	40.4	158.39	1.01	F	3.5	19.24	0.74	C
2027 Do Something								
Stream B-AC	80.9	744.51	1.27	F	14.8	119.13	0.97	F
Stream C-AB	49.9	192.35	1.03	F	4.2	22.67	0.77	C
2032 Do Minimum								
Stream B-AC	102.7	1119.73	1.48	F	16.5	132.60	0.98	F
Stream C-AB	93.0	343.08	1.09	F	4.7	24.63	0.79	C
2032 Do Something (FULL)								
Stream B-AC	163.6	2011.08	1.87	F	34.8	255.84	1.05	F
Stream C-AB	127.3	468.16	1.13	F	7.4	37.97	0.86	E

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

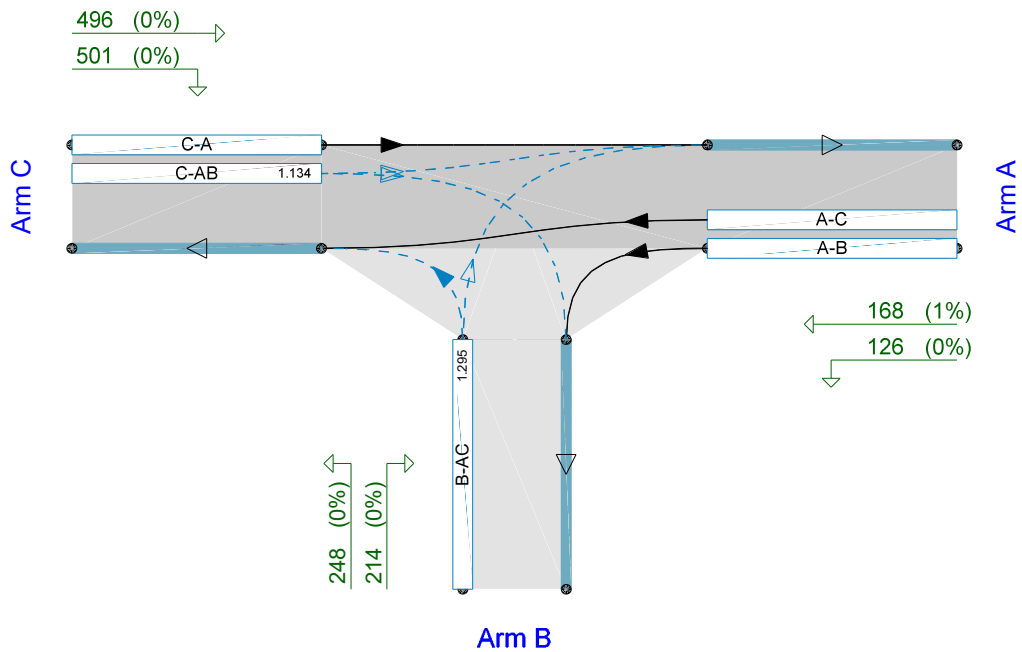
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	18/05/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin



Flows show original traffic demand (Veh/hr)
Streams (downstream end) show HFC (%)

The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D1	2022 Do Minimum	AM	FLAT	08:00	09:00	60	15
D2	2022 Do Minimum	PM	FLAT	08:00	09:00	60	15
D3	2022 Do Something	AM	FLAT	08:00	09:00	60	15
D4	2022 Do Something	PM	FLAT	08:00	09:00	60	15
D5	2022 Do Something (FULL)	AM	FLAT	08:00	09:00	60	15
D6	2022 Do Something (FULL)	PM	FLAT	08:00	09:00	60	15
D7	2027 Do Minimum	AM	FLAT	08:00	09:00	60	15
D8	2027 Do Minimum	PM	FLAT	08:00	09:00	60	15
D9	2027 Do Something	AM	FLAT	08:00	09:00	60	15
D10	2027 Do Something	PM	FLAT	08:00	09:00	60	15
D11	2032 Do Minimum	AM	FLAT	08:00	09:00	60	15
D12	2032 Do Minimum	PM	FLAT	08:00	09:00	60	15
D13	2032 Do Something (FULL)	AM	FLAT	08:00	09:00	60	15
D14	2032 Do Something (FULL)	PM	FLAT	08:00	09:00	60	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2022 Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Delph Lane/Myddleton Lane	T-Junction	Two-way		84.29	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Southworth Lane		Major
B	Delph Lane		Minor
C	Myddleton Lane		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.05			140.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.74	25	12

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	528	0.092	0.232	0.146	0.331
B-C	678	0.099	0.251	-	-
C-B	655	0.242	0.242	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D1	2022 Do Minimum	AM	FLAT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	261	100.000
B		✓	377	100.000
C		✓	854	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A	B	C
A	0	112	149
B	181	0	196
C	442	412	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
A	0	0	2
B	0	0	1
C	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	1.00	171.86	17.3	?	F
C-AB	0.95	72.20	17.9	?	F
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	377	392	0.961	347	7.6	60.194	F
C-AB	824	884	0.933	782	10.6	31.739	D
C-A	30			30			
A-B	112			112			
A-C	149			149			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	377	383	0.985	362	11.3	112.096	F
C-AB	853	898	0.950	837	14.4	56.072	F
C-A	1			1			
A-B	112			112			
A-C	149			149			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	377	379	0.994	365	14.4	144.028	F
C-AB	854	899	0.950	846	16.5	66.166	F
C-A	0			0			
A-B	112			112			
A-C	149			149			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	377	377	0.999	366	17.3	171.859	F
C-AB	854	899	0.950	848	17.9	72.204	F
C-A	0			0			
A-B	112			112			
A-C	149			149			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	7.59	?	?	?	?			N/A	N/A
C-AB	10.62	?	?	?	?			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	11.32	?	?	?	?			N/A	N/A
C-AB	14.40	?	?	?	?			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	14.44	?	?	?	?			N/A	N/A
C-AB	16.48	?	?	?	?			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	17.26	?	?	?	?			N/A	N/A
C-AB	17.86	?	?	?	?			N/A	N/A

2022 Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Delph Lane/Myddleton Lane	T-Junction	Two-way		13.38	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D2	2022 Do Minimum	PM	FLAT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	461	100.000
B		✓	395	100.000
C		✓	603	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	107	354
	B	34	0	361
	C	280	323	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	1
	B	2	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.75	26.76	2.9	?	D
C-AB	0.71	17.17	3.1	?	C
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	395	530	0.746	384	2.6	23.339	C
C-AB	521	737	0.707	509	2.9	15.421	C
C-A	82			82			
A-B	107			107			
A-C	354			354			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	395	529	0.747	394	2.8	26.501	D
C-AB	526	740	0.711	525	3.1	17.056	C
C-A	77			77			
A-B	107			107			
A-C	354			354			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	395	529	0.747	395	2.8	26.691	D
C-AB	526	740	0.711	526	3.1	17.142	C
C-A	77			77			
A-B	107			107			
A-C	354			354			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	395	529	0.747	395	2.9	26.759	D
C-AB	526	740	0.711	526	3.1	17.175	C
C-A	77			77			
A-B	107			107			
A-C	354			354			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.64	?	?	?	?			N/A	N/A
C-AB	2.91	?	?	?	?			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.79	?	?	?	?			N/A	N/A
C-AB	3.06	?	?	?	?			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.84	?	?	?	?			N/A	N/A
C-AB	3.11	?	?	?	?			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.87	?	?	?	?			N/A	N/A
C-AB	3.13	?	?	?	?			N/A	N/A

2022 Do Something, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Delph Lane/Myddleton Lane	T-Junction	Two-way		96.52	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D3	2022 Do Something	AM	FLAT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	262	100.000
B		✓	384	100.000
C		✓	858	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	112	150
	B	182	0	202
	C	442	416	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	2
	B	0	0	1
	C	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	1.02	203.31	21.0	?	F
C-AB	0.96	78.95	19.5	?	F
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	384	393	0.978	351	8.3	63.858	F
C-AB	833	883	0.943	787	11.3	33.299	D
C-A	25			25			
A-B	112			112			
A-C	150			150			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	384	382	1.004	366	13.0	124.225	F
C-AB	858	896	0.957	841	15.5	60.254	F
C-A	0			0			
A-B	112			112			
A-C	150			150			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	384	379	1.014	367	17.1	165.257	F
C-AB	858	897	0.957	849	17.8	71.784	F
C-A	0			0			
A-B	112			112			
A-C	150			150			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	384	376	1.020	368	21.0	203.313	F
C-AB	858	897	0.957	852	19.5	78.947	F
C-A	0			0			
A-B	112			112			
A-C	150			150			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	8.34	?	?	?	?			N/A	N/A
C-AB	11.30	?	?	?	?			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	12.96	?	?	?	?			N/A	N/A
C-AB	15.47	?	?	?	?			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	17.09	?	?	?	?			N/A	N/A
C-AB	17.83	?	?	?	?			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	21.03	?	?	?	?			N/A	N/A
C-AB	19.45	?	?	?	?			N/A	N/A

2022 Do Something, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Delph Lane/Myddleton Lane	T-Junction	Two-way		13.81	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D4	2022 Do Something	PM	FLAT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	464	100.000
B		✓	399	100.000
C		✓	606	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	113	351
	B	34	0	365
	C	280	326	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	1
	B	2	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.75	27.51	3.0	?	D
C-AB	0.72	17.67	3.2	?	C
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	399	530	0.753	388	2.7	23.818	C
C-AB	526	736	0.714	514	3.0	15.770	C
C-A	80			80			
A-B	113			113			
A-C	351			351			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	399	529	0.754	398	2.9	27.214	D
C-AB	531	740	0.718	531	3.2	17.539	C
C-A	75			75			
A-B	113			113			
A-C	351			351			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	399	529	0.754	399	2.9	27.429	D
C-AB	531	740	0.718	531	3.2	17.637	C
C-A	75			75			
A-B	113			113			
A-C	351			351			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	399	529	0.754	399	3.0	27.508	D
C-AB	531	740	0.718	531	3.2	17.671	C
C-A	75			75			
A-B	113			113			
A-C	351			351			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.73	?	?	?	?			N/A	N/A
C-AB	3.00	?	?	?	?			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.89	?	?	?	?			N/A	N/A
C-AB	3.16	?	?	?	?			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.94	?	?	?	?			N/A	N/A
C-AB	3.22	?	?	?	?			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.97	?	?	?	?			N/A	N/A
C-AB	3.24	?	?	?	?			N/A	N/A

2022 Do Something (FULL), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Delph Lane/Myddleton Lane	T-Junction	Two-way		261.53	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D5	2022 Do Something (FULL)	AM	FLAT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	264	100.000
B		✓	452	100.000
C		✓	886	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	109	155
	B	192	0	260
	C	442	444	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	0
	C	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	1.22	644.24	74.9	?	F
C-AB	1.00	145.26	36.2	?	F
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	452	400	1.129	380	18.1	105.894	F
C-AB	886	882	1.005	817	17.2	46.069	E
C-A	0			0			
A-B	109			109			
A-C	155			155			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	452	384	1.176	382	35.6	274.652	F
C-AB	886	882	1.005	855	24.9	95.556	F
C-A	0			0			
A-B	109			109			
A-C	155			155			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	452	377	1.199	376	54.6	450.990	F
C-AB	886	882	1.005	862	31.0	122.848	F
C-A	0			0			
A-B	109			109			
A-C	155			155			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	452	371	1.218	371	74.9	644.235	F
C-AB	886	882	1.005	865	36.2	145.257	F
C-A	0			0			
A-B	109			109			
A-C	155			155			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	18.12	?	?	?	?			N/A	N/A
C-AB	17.18	?	?	?	?			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	35.64	?	?	?	?			N/A	N/A
C-AB	24.91	?	?	?	?			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	54.60	?	?	?	?			N/A	N/A
C-AB	30.97	?	?	?	?			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	74.93	?	?	?	?			N/A	N/A
C-AB	36.15	?	?	?	?			N/A	N/A

2022 Do Something (FULL), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Delph Lane/Myddleton Lane	T-Junction	Two-way		18.25	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D6	2022 Do Something (FULL)	PM	FLAT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	478	100.000
B		✓	423	100.000
C		✓	630	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	141	337
	B	39	0	384
	C	279	351	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	1
	B	2	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.81	35.41	4.0	?	E
C-AB	0.78	22.78	4.4	?	C
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	423	525	0.806	409	3.5	28.403	D
C-AB	567	733	0.773	551	3.9	19.037	C
C-A	63			63			
A-B	141			141			
A-C	337			337			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	423	523	0.808	422	3.8	34.555	D
C-AB	574	737	0.778	572	4.2	22.388	C
C-A	56			56			
A-B	141			141			
A-C	337			337			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	423	523	0.809	423	4.0	35.171	E
C-AB	574	737	0.778	574	4.3	22.674	C
C-A	56			56			
A-B	141			141			
A-C	337			337			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	423	523	0.809	423	4.0	35.414	E
C-AB	574	738	0.779	574	4.4	22.779	C
C-A	56			56			
A-B	141			141			
A-C	337			337			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	3.53	?	?	?	?			N/A	N/A
C-AB	3.91	?	?	?	?			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	3.84	?	?	?	?			N/A	N/A
C-AB	4.22	?	?	?	?			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	3.95	?	?	?	?			N/A	N/A
C-AB	4.32	?	?	?	?			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	4.02	?	?	?	?			N/A	N/A
C-AB	4.38	?	?	?	?			N/A	N/A

2027 Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Delph Lane/Myddleton Lane	T-Junction	Two-way		208.17	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D7	2027 Do Minimum	AM	FLAT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	276	100.000
B		✓	401	100.000
C		✓	905	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	123	153
	B	193	0	208
	C	467	438	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	0
	C	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	1.16	465.13	49.9	?	F
C-AB	1.01	158.39	40.4	?	F
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	401	379	1.057	351	12.4	85.539	F
C-AB	905	894	1.012	832	18.3	47.540	E
C-A	0			0			
A-B	123			123			
A-C	153			153			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	401	362	1.108	357	23.6	204.766	F
C-AB	905	894	1.012	870	27.1	101.131	F
C-A	0			0			
A-B	123			123			
A-C	153			153			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	401	354	1.134	351	36.0	326.131	F
C-AB	905	894	1.012	877	34.2	132.180	F
C-A	0			0			
A-B	123			123			
A-C	153			153			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	401	346	1.157	345	49.9	465.126	F
C-AB	905	894	1.012	880	40.4	158.390	F
C-A	0			0			
A-B	123			123			
A-C	153			153			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	12.44	?	?	?	?			N/A	N/A
C-AB	18.33	?	?	?	?			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	23.56	?	?	?	?			N/A	N/A
C-AB	27.09	?	?	?	?			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	35.98	?	?	?	?			N/A	N/A
C-AB	34.16	?	?	?	?			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	49.87	?	?	?	?			N/A	N/A
C-AB	40.37	?	?	?	?			N/A	N/A

2027 Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Delph Lane/Myddleton Lane	T-Junction	Two-way		21.73	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D8	2027 Do Minimum	PM	FLAT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	485	100.000
B		✓	437	100.000
C		✓	606	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	131	354
	B	59	0	378
	C	273	333	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	1
	B	1	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.87	52.55	6.1	?	F
C-AB	0.74	19.24	3.5	?	C
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	437	504	0.868	418	4.9	36.310	E
C-AB	533	727	0.733	520	3.2	16.874	C
C-A	73			73			
A-B	131			131			
A-C	354			354			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	437	502	0.870	434	5.6	49.247	E
C-AB	539	731	0.737	538	3.4	19.054	C
C-A	67			67			
A-B	131			131			
A-C	354			354			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	437	502	0.871	436	5.9	51.507	F
C-AB	539	731	0.737	539	3.5	19.192	C
C-A	67			67			
A-B	131			131			
A-C	354			354			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	437	502	0.871	436	6.1	52.555	F
C-AB	539	731	0.737	539	3.5	19.241	C
C-A	67			67			
A-B	131			131			
A-C	354			354			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	4.86	?	?	?	?			N/A	N/A
C-AB	3.25	?	?	?	?			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	5.56	?	?	?	?			N/A	N/A
C-AB	3.44	?	?	?	?			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	5.88	?	?	?	?			N/A	N/A
C-AB	3.50	?	?	?	?			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	6.06	?	?	?	?			N/A	N/A
C-AB	3.54	?	?	?	?			N/A	N/A

2027 Do Something, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Delph Lane/Myddleton Lane	T-Junction	Two-way		306.47	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D9	2027 Do Something	AM	FLAT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	278	100.000
B		✓	435	100.000
C		✓	919	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	122	156
	B	200	0	235
	C	467	452	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	1.27	744.51	80.9	?	F
C-AB	1.03	192.35	49.9	?	F
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	435	382	1.137	362	18.1	110.612	F
C-AB	919	893	1.029	837	20.5	51.986	F
C-A	0			0			
A-B	122			122			
A-C	156			156			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	435	363	1.198	361	36.7	296.370	F
C-AB	919	893	1.029	875	31.6	115.438	F
C-A	0			0			
A-B	122			122			
A-C	156			156			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	435	352	1.236	351	57.6	505.384	F
C-AB	919	893	1.029	881	41.1	156.104	F
C-A	0			0			
A-B	122			122			
A-C	156			156			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	435	342	1.271	342	80.9	744.509	F
C-AB	919	893	1.029	884	49.9	192.354	F
C-A	0			0			
A-B	122			122			
A-C	156			156			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	18.13	?	?	?	?			N/A	N/A
C-AB	20.50	?	?	?	?			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	36.69	?	?	?	?			N/A	N/A
C-AB	31.60	?	?	?	?			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	57.61	?	?	?	?			N/A	N/A
C-AB	41.14	?	?	?	?			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	80.85	?	?	?	?			N/A	N/A
C-AB	49.90	?	?	?	?			N/A	N/A

2027 Do Something, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Delph Lane/Myddleton Lane	T-Junction	Two-way		43.33	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D10	2027 Do Something	PM	FLAT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	500	100.000
B		✓	472	100.000
C		✓	611	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	145	355
	B	74	0	398
	C	262	349	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	1
	B	1	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.97	119.13	14.8	?	F
C-AB	0.77	22.67	4.2	?	C
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	472	490	0.963	438	8.5	53.095	F
C-AB	550	716	0.768	535	3.8	19.091	C
C-A	61			61			
A-B	145			145			
A-C	355			355			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	472	488	0.967	460	11.4	91.347	F
C-AB	556	720	0.773	555	4.0	22.307	C
C-A	55			55			
A-B	145			145			
A-C	355			355			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	472	488	0.967	464	13.3	107.671	F
C-AB	557	721	0.773	557	4.1	22.568	C
C-A	54			54			
A-B	145			145			
A-C	355			355			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	472	488	0.968	466	14.8	119.133	F
C-AB	557	721	0.773	557	4.2	22.668	C
C-A	54			54			
A-B	145			145			
A-C	355			355			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	8.46	?	?	?	?			N/A	N/A
C-AB	3.77	?	?	?	?			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	11.39	?	?	?	?			N/A	N/A
C-AB	4.05	?	?	?	?			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	13.34	?	?	?	?			N/A	N/A
C-AB	4.14	?	?	?	?			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	14.80	?	?	?	?			N/A	N/A
C-AB	4.20	?	?	?	?			N/A	N/A

2032 Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Delph Lane/Myddleton Lane	T-Junction	Two-way		474.79	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D11	2032 Do Minimum	AM	FLAT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	293	100.000
B		✓	415	100.000
C		✓	970	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	131	162
	B	205	0	210
	C	494	476	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	1.48	1119.73	102.7	?	F
C-AB	1.09	343.08	93.0	?	F
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	415	357	1.162	339	19.0	122.377	F
C-AB	970	890	1.090	851	29.8	70.389	F
C-A	0			0			
A-B	131			131			
A-C	162			162			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	415	327	1.268	326	41.3	361.931	F
C-AB	970	890	1.090	883	51.6	175.533	F
C-A	0			0			
A-B	131			131			
A-C	162			162			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	415	304	1.365	304	69.1	696.423	F
C-AB	970	890	1.090	886	72.5	260.258	F
C-A	0			0			
A-B	131			131			
A-C	162			162			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	415	281	1.479	281	102.7	1119.732	F
C-AB	970	890	1.090	888	93.0	343.076	F
C-A	0			0			
A-B	131			131			
A-C	162			162			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	18.96	?	?	?	?			N/A	N/A
C-AB	29.82	?	?	?	?			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	41.28	?	?	?	?			N/A	N/A
C-AB	51.60	?	?	?	?			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	69.11	?	?	?	?			N/A	N/A
C-AB	72.49	?	?	?	?			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	102.72	?	?	?	?			N/A	N/A
C-AB	93.04	?	?	?	?			N/A	N/A

2032 Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Delph Lane/Myddleton Lane	T-Junction	Two-way		47.38	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D12	2032 Do Minimum	PM	FLAT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	512	100.000
B		✓	471	100.000
C		✓	629	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	140	372
	B	74	0	397
	C	277	352	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	1
	B	1	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.98	132.60	16.5	?	F
C-AB	0.79	24.63	4.7	?	C
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	471	484	0.973	435	8.9	55.508	F
C-AB	570	724	0.787	553	4.2	20.121	C
C-A	59			59			
A-B	140			140			
A-C	372			372			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	471	482	0.977	457	12.3	98.171	F
C-AB	577	729	0.792	576	4.5	24.099	C
C-A	52			52			
A-B	140			140			
A-C	372			372			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	471	482	0.978	462	14.7	117.989	F
C-AB	578	729	0.792	577	4.7	24.481	C
C-A	51			51			
A-B	140			140			
A-C	372			372			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	471	482	0.978	464	16.5	132.603	F
C-AB	578	730	0.792	578	4.7	24.628	C
C-A	51			51			
A-B	140			140			
A-C	372			372			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	8.92	?	?	?	?			N/A	N/A
C-AB	4.17	?	?	?	?			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	12.31	?	?	?	?			N/A	N/A
C-AB	4.53	?	?	?	?			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	14.68	?	?	?	?			N/A	N/A
C-AB	4.66	?	?	?	?			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	16.52	?	?	?	?			N/A	N/A
C-AB	4.73	?	?	?	?			N/A	N/A

2032 Do Something (FULL), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Delph Lane/Myddleton Lane	T-Junction	Two-way		795.52	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D13	2032 Do Something (FULL)	AM	FLAT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	294	100.000
B		✓	462	100.000
C		✓	997	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A	B	C
A	0	126	168
B	214	0	248
C	496	501	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
A	0	0	1
B	0	0	0
C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	1.87	2011.08	163.6	?	F
C-AB	1.13	468.16	127.3	?	F
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	462	357	1.295	345	29.2	174.056	F
C-AB	997	879	1.134	848	37.2	85.961	F
C-A	0			0			
A-B	126			126			
A-C	168			168			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	462	318	1.452	318	65.3	581.026	F
C-AB	997	879	1.134	875	67.7	225.254	F
C-A	0			0			
A-B	126			126			
A-C	168			168			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	462	284	1.628	284	109.9	1229.555	F
C-AB	997	879	1.134	877	97.6	347.034	F
C-A	0			0			
A-B	126			126			
A-C	168			168			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	462	247	1.870	247	163.6	2011.085	F
C-AB	997	879	1.134	878	127.3	468.160	F
C-A	0			0			
A-B	126			126			
A-C	168			168			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	29.23	?	?	?	?			N/A	N/A
C-AB	37.25	?	?	?	?			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	65.29	?	?	?	?			N/A	N/A
C-AB	67.68	?	?	?	?			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	109.88	?	?	?	?			N/A	N/A
C-AB	97.59	?	?	?	?			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	163.64	?	?	?	?			N/A	N/A
C-AB	127.32	?	?	?	?			N/A	N/A

2032 Do Something (FULL), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue percentiles cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Delph Lane/Myddleton Lane	T-Junction	Two-way		89.28	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D14	2032 Do Something (FULL)	PM	FLAT	08:00	09:00	60	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	529	100.000
B		✓	496	100.000
C		✓	657	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	159	370
	B	78	0	418
	C	277	380	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	1
	B	1	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	1.05	255.84	34.8	?	F
C-AB	0.86	37.97	7.4	?	E
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	496	478	1.038	444	13.1	71.963	F
C-AB	617	721	0.856	593	6.0	26.143	D
C-A	40			40			
A-B	159			159			
A-C	370			370			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	496	474	1.046	464	21.0	150.106	F
C-AB	628	727	0.863	624	6.8	35.499	E
C-A	29			29			
A-B	159			159			
A-C	370			370			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	496	474	1.047	468	28.1	204.958	F
C-AB	629	729	0.864	628	7.2	37.196	E
C-A	28			28			
A-B	159			159			
A-C	370			370			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	496	474	1.047	469	34.8	255.836	F
C-AB	630	729	0.864	629	7.4	37.973	E
C-A	27			27			
A-B	159			159			
A-C	370			370			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	13.07	?	?	?	?			N/A	N/A
C-AB	5.95	?	?	?	?			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	21.01	?	?	?	?			N/A	N/A
C-AB	6.84	?	?	?	?			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	28.10	?	?	?	?			N/A	N/A
C-AB	7.23	?	?	?	?			N/A	N/A

08:45 - 09:00

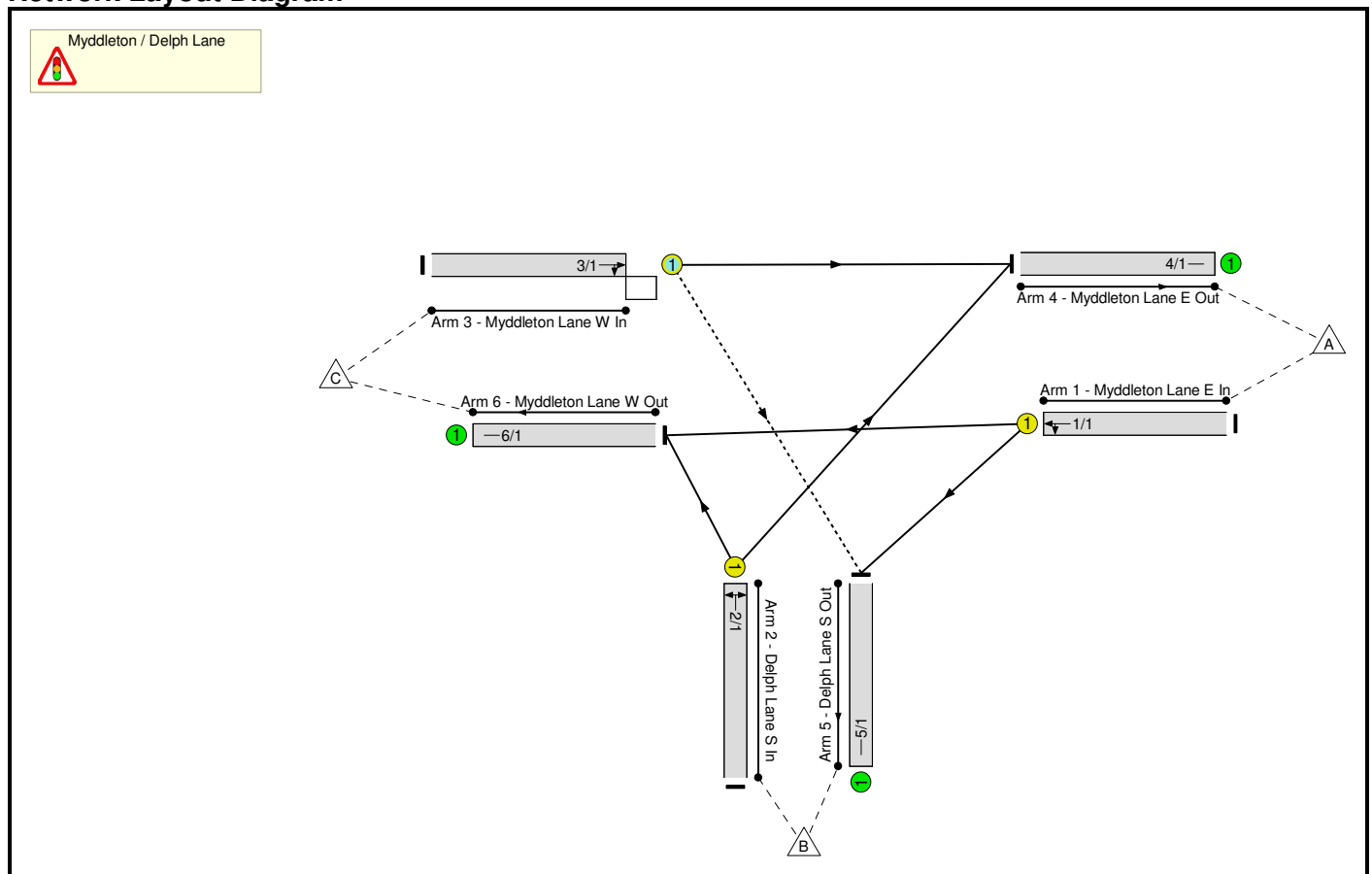
Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	34.79	?	?	?	?			N/A	N/A
C-AB	7.44	?	?	?	?			N/A	N/A

Full Input Data And Results
Full Input Data And Results

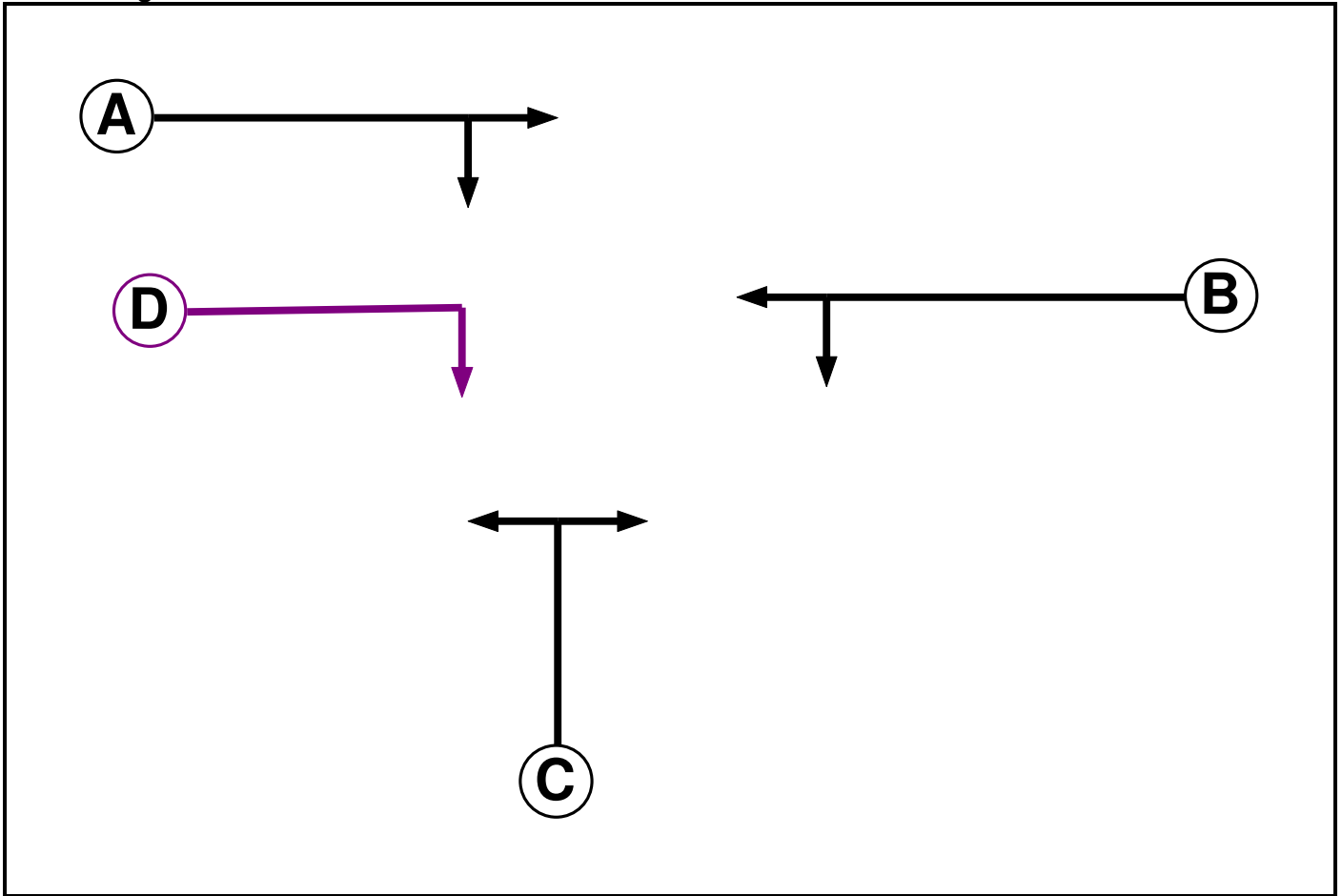
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Myddleton Delph Lane Signals Test 120s 3.0m Minor Arm.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Ind. Arrow	A	4	4

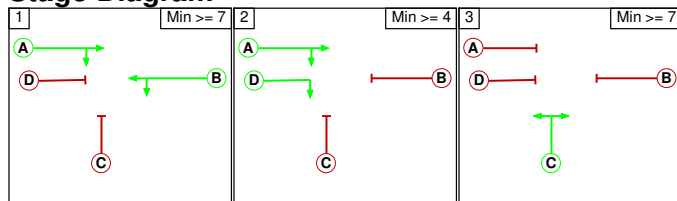
Phase Intergrens Matrix

		Starting Phase			
		A	B	C	D
Terminating Phase	A	-	5	-	
	B	-	5	5	
	C	5	6	5	
	D	-	5	5	

Phases in Stage

Stage No.	Phases in Stage
1	A B
2	A D
3	C

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

		To Stage		
		1	2	3
From Stage	1	-	5	5
	2	5	-	5
	3	6	5	-

Give-Way Lane Input Data

Junction: Myddleton / Delph Lane											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
3/1 (Myddleton Lane W In)	5/1 (Right)	1439	0	1/1	1.09	All	2.00	2.00	0.50	2	2.00

Full Input Data And Results

Lane Input Data

Junction: Myddleton / Delph Lane												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Myddleton Lane E In)	U	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Left	8.00
											Arm 6 Ahead	Inf
2/1 (Delph Lane S In)	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 4 Right	10.00
											Arm 6 Left	5.00
3/1 (Myddleton Lane W In)	O	A D	2	3	60.0	Geom	-	3.80	0.00	Y	Arm 4 Ahead	Inf
											Arm 5 Right	6.00
4/1 (Myddleton Lane E Out)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Delph Lane S Out)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Myddleton Lane W Out)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2018 No Dev AM'	08:00	09:00	01:00	
2: '2022 DM AM'	08:00	09:00	01:00	
3: '2022 DS AM'	08:00	09:00	01:00	
4: '2022 DS Full AM'	08:00	09:00	01:00	
5: '2027 DM AM'	08:00	09:00	01:00	
6: '2027 DS AM'	08:00	09:00	01:00	
7: '2032 DM AM'	08:00	09:00	01:00	
8: '2032 DS Full AM'	08:00	09:00	01:00	
9: '2018 No Dev PM'	17:00	18:00	01:00	
10: '2022 DM PM'	17:00	18:00	01:00	
11: '2022 DS PM'	17:00	18:00	01:00	
12: '2022 DS Full PM'	17:00	18:00	01:00	
13: '2027 DM PM'	17:00	18:00	01:00	
14: '2027 DS PM'	17:00	18:00	01:00	
15: '2032 DM PM'	17:00	18:00	01:00	
16: '2032 DS Full PM'	17:00	18:00	01:00	

Full Input Data And Results

Scenario 1: '2018 No Dev AM' (FG1: '2018 No Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
	A	B	C	Tot.	
Origin	A	0	93	155	248
	B	170	0	181	351
	C	417	357	0	774
	Tot.	587	450	336	1373

Traffic Lane Flows

Lane	Scenario 1: 2018 No Dev AM
Junction: Myddleton / Delph Lane	
1/1	248
2/1	351
3/1	774
4/1	587
5/1	450
6/1	336

Lane Saturation Flows

Junction: Myddleton / Delph Lane								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Myddleton Lane E In)	3.50	0.00	Y	Arm 5 Left	8.00	37.5 %	1836	1836
				Arm 6 Ahead	Inf	62.5 %		
2/1 (Delph Lane S In)	3.00	0.00	Y	Arm 4 Right	10.00	48.4 %	1560	1560
				Arm 6 Left	5.00	51.6 %		
3/1 (Myddleton Lane W In)	3.80	0.00	Y	Arm 4 Ahead	Inf	53.9 %	1789	1789
				Arm 5 Right	6.00	46.1 %		
4/1 (Myddleton Lane E Out Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Delph Lane S Out Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Myddleton Lane W Out Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '2022 DM AM' (FG2: '2022 DM AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	112	152	264
	B	182	0	197	379
	C	444	415	0	859
	Tot.	626	527	349	1502

Traffic Lane Flows

Lane	Scenario 2: 2022 DM AM
Junction: Myddleton / Delph Lane	
1/1	264
2/1	379
3/1	859
4/1	626
5/1	527
6/1	349

Lane Saturation Flows

Junction: Myddleton / Delph Lane								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Myddleton Lane E In)	3.50	0.00	Y	Arm 5 Left	8.00	42.4 %	1820	1820
				Arm 6 Ahead	Inf	57.6 %		
2/1 (Delph Lane S In)	3.00	0.00	Y	Arm 4 Right	10.00	48.0 %	1559	1559
				Arm 6 Left	5.00	52.0 %		
3/1 (Myddleton Lane W In)	3.80	0.00	Y	Arm 4 Ahead	Inf	51.7 %	1780	1780
				Arm 5 Right	6.00	48.3 %		
4/1 (Myddleton Lane E Out Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Delph Lane S Out Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Myddleton Lane W Out Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: '2022 DS AM' (FG3: '2022 DS AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	112	152	264
	B	183	0	203	386
	C	444	418	0	862
	Tot.	627	530	355	1512

Traffic Lane Flows

Lane	Scenario 3: 2022 DS AM
Junction: Myddleton / Delph Lane	
1/1	264
2/1	386
3/1	862
4/1	627
5/1	530
6/1	355

Lane Saturation Flows

Junction: Myddleton / Delph Lane								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Myddleton Lane E In)	3.50	0.00	Y	Arm 5 Left	8.00	42.4 %	1820	1820
				Arm 6 Ahead	Inf	57.6 %		
2/1 (Delph Lane S In)	3.00	0.00	Y	Arm 4 Right	10.00	47.4 %	1558	1558
				Arm 6 Left	5.00	52.6 %		
3/1 (Myddleton Lane W In)	3.80	0.00	Y	Arm 4 Ahead	Inf	51.5 %	1779	1779
				Arm 5 Right	6.00	48.5 %		
4/1 (Myddleton Lane E Out Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Delph Lane S Out Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Myddleton Lane W Out Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: '2022 DS Full AM' (FG4: '2022 DS Full AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	109	157	266
	B	193	0	261	454
	C	444	446	0	890
	Tot.	637	555	418	1610

Traffic Lane Flows

Lane	Scenario 4: 2022 DS Full AM
Junction: Myddleton / Delph Lane	
1/1	266
2/1	454
3/1	890
4/1	637
5/1	555
6/1	418

Lane Saturation Flows

Junction: Myddleton / Delph Lane								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Myddleton Lane E In)	3.50	0.00	Y	Arm 5 Left	8.00	41.0 %	1825	1825
				Arm 6 Ahead	Inf	59.0 %		
2/1 (Delph Lane S In)	3.00	0.00	Y	Arm 4 Right	10.00	42.5 %	1549	1549
				Arm 6 Left	5.00	57.5 %		
3/1 (Myddleton Lane W In)	3.80	0.00	Y	Arm 4 Ahead	Inf	49.9 %	1773	1773
				Arm 5 Right	6.00	50.1 %		
4/1 (Myddleton Lane E Out Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Delph Lane S Out Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Myddleton Lane W Out Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 5: '2027 DM AM' (FG5: '2027 DM AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	123	156	279
	B	194	0	209	403
	C	469	440	0	909
	Tot.	663	563	365	1591

Traffic Lane Flows

Lane	Scenario 5: 2027 DM AM
Junction: Myddleton / Delph Lane	
1/1	279
2/1	403
3/1	909
4/1	663
5/1	563
6/1	365

Lane Saturation Flows

Junction: Myddleton / Delph Lane								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Myddleton Lane E In)	3.50	0.00	Y	Arm 5 Left	8.00	44.1 %	1815	1815
				Arm 6 Ahead	Inf	55.9 %		
2/1 (Delph Lane S In)	3.00	0.00	Y	Arm 4 Right	10.00	48.1 %	1560	1560
				Arm 6 Left	5.00	51.9 %		
3/1 (Myddleton Lane W In)	3.80	0.00	Y	Arm 4 Ahead	Inf	51.6 %	1780	1780
				Arm 5 Right	6.00	48.4 %		
4/1 (Myddleton Lane E Out Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Delph Lane S Out Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Myddleton Lane W Out Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 6: '2027 DS AM' (FG6: '2027 DS AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	122	158	280
	B	201	0	236	437
	C	469	454	0	923
	Tot.	670	576	394	1640

Traffic Lane Flows

Lane	Scenario 6: 2027 DS AM
Junction: Myddleton / Delph Lane	
1/1	280
2/1	437
3/1	923
4/1	670
5/1	576
6/1	394

Lane Saturation Flows

Junction: Myddleton / Delph Lane								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Myddleton Lane E In)	3.50	0.00	Y	Arm 5 Left	8.00	43.6 %	1817	1817
				Arm 6 Ahead	Inf	56.4 %		
2/1 (Delph Lane S In)	3.00	0.00	Y	Arm 4 Right	10.00	46.0 %	1556	1556
				Arm 6 Left	5.00	54.0 %		
3/1 (Myddleton Lane W In)	3.80	0.00	Y	Arm 4 Ahead	Inf	50.8 %	1777	1777
				Arm 5 Right	6.00	49.2 %		
4/1 (Myddleton Lane E Out Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Delph Lane S Out Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Myddleton Lane W Out Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 7: '2032 DM AM' (FG7: '2032 DM AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	131	164	295
	B	205	0	211	416
	C	496	478	0	974
	Tot.	701	609	375	1685

Traffic Lane Flows

Lane	Scenario 7: 2032 DM AM
Junction: Myddleton / Delph Lane	
1/1	295
2/1	416
3/1	974
4/1	701
5/1	609
6/1	375

Lane Saturation Flows

Junction: Myddleton / Delph Lane								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Myddleton Lane E In)	3.50	0.00	Y	Arm 5 Left	8.00	44.4 %	1814	1814
				Arm 6 Ahead	Inf	55.6 %		
2/1 (Delph Lane S In)	3.00	0.00	Y	Arm 4 Right	10.00	49.3 %	1562	1562
				Arm 6 Left	5.00	50.7 %		
3/1 (Myddleton Lane W In)	3.80	0.00	Y	Arm 4 Ahead	Inf	50.9 %	1777	1777
				Arm 5 Right	6.00	49.1 %		
4/1 (Myddleton Lane E Out Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Delph Lane S Out Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Myddleton Lane W Out Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 8: '2032 DS Full AM' (FG8: '2032 DS Full AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
	A	B	C	Tot.	
Origin	A	0	126	170	296
	B	215	0	249	464
	C	498	503	0	1001
	Tot.	713	629	419	1761

Traffic Lane Flows

Lane	Scenario 8: 2032 DS Full AM
Junction: Myddleton / Delph Lane	
1/1	296
2/1	464
3/1	1001
4/1	713
5/1	629
6/1	419

Lane Saturation Flows

Junction: Myddleton / Delph Lane								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Myddleton Lane E In)	3.50	0.00	Y	Arm 5 Left	8.00	42.6 %	1820	1820
				Arm 6 Ahead	Inf	57.4 %		
2/1 (Delph Lane S In)	3.00	0.00	Y	Arm 4 Right	10.00	46.3 %	1556	1556
				Arm 6 Left	5.00	53.7 %		
3/1 (Myddleton Lane W In)	3.80	0.00	Y	Arm 4 Ahead	Inf	49.8 %	1772	1772
				Arm 5 Right	6.00	50.2 %		
4/1 (Myddleton Lane E Out Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Delph Lane S Out Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Myddleton Lane W Out Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 9: '2018 No Dev PM' (FG9: '2018 No Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	97	343	440
	B	33	0	356	389
	C	266	317	0	583
	Tot.	299	414	699	1412

Traffic Lane Flows

Lane	Scenario 9: 2018 No Dev PM
Junction: Myddleton / Delph Lane	
1/1	440
2/1	389
3/1	583
4/1	299
5/1	414
6/1	699

Lane Saturation Flows

Junction: Myddleton / Delph Lane								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Myddleton Lane E In)	3.50	0.00	Y	Arm 5 Left	8.00	22.0 %	1887	1887
				Arm 6 Ahead	Inf	78.0 %		
2/1 (Delph Lane S In)	3.00	0.00	Y	Arm 4 Right	10.00	8.5 %	1488	1488
				Arm 6 Left	5.00	91.5 %		
3/1 (Myddleton Lane W In)	3.80	0.00	Y	Arm 4 Ahead	Inf	45.6 %	1756	1756
				Arm 5 Right	6.00	54.4 %		
4/1 (Myddleton Lane E Out Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Delph Lane S Out Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Myddleton Lane W Out Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 10: '2022 DM PM' (FG10: '2022 DM PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	108	356	464
	B	35	0	362	397
	C	282	325	0	607
	Tot.	317	433	718	1468

Traffic Lane Flows

Lane	Scenario 10: 2022 DM PM
Junction: Myddleton / Delph Lane	
1/1	464
2/1	397
3/1	607
4/1	317
5/1	433
6/1	718

Lane Saturation Flows

Junction: Myddleton / Delph Lane								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Myddleton Lane E In)	3.50	0.00	Y	Arm 5 Left	8.00	23.3 %	1883	1883
				Arm 6 Ahead	Inf	76.7 %		
2/1 (Delph Lane S In)	3.00	0.00	Y	Arm 4 Right	10.00	8.8 %	1488	1488
				Arm 6 Left	5.00	91.2 %		
3/1 (Myddleton Lane W In)	3.80	0.00	Y	Arm 4 Ahead	Inf	46.5 %	1759	1759
				Arm 5 Right	6.00	53.5 %		
4/1 (Myddleton Lane E Out Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Delph Lane S Out Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Myddleton Lane W Out Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 11: '2022 DS PM' (FG11: '2022 DS PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	114	353	467
	B	35	0	365	400
	C	282	327	0	609
	Tot.	317	441	718	1476

Traffic Lane Flows

Lane	Scenario 11: 2022 DS PM
Junction: Myddleton / Delph Lane	
1/1	467
2/1	400
3/1	609
4/1	317
5/1	441
6/1	718

Lane Saturation Flows

Junction: Myddleton / Delph Lane								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Myddleton Lane E In)	3.50	0.00	Y	Arm 5 Left	8.00	24.4 %	1879	1879
				Arm 6 Ahead	Inf	75.6 %		
2/1 (Delph Lane S In)	3.00	0.00	Y	Arm 4 Right	10.00	8.8 %	1488	1488
				Arm 6 Left	5.00	91.3 %		
3/1 (Myddleton Lane W In)	3.80	0.00	Y	Arm 4 Ahead	Inf	46.3 %	1759	1759
				Arm 5 Right	6.00	53.7 %		
4/1 (Myddleton Lane E Out Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Delph Lane S Out Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Myddleton Lane W Out Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 12: '2022 DS Full PM' (FG12: '2022 DS Full PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	142	339	481
	B	39	0	384	423
	C	281	353	0	634
	Tot.	320	495	723	1538

Traffic Lane Flows

Lane	Scenario 12: 2022 DS Full PM
Junction: Myddleton / Delph Lane	
1/1	481
2/1	423
3/1	634
4/1	320
5/1	495
6/1	723

Lane Saturation Flows

Junction: Myddleton / Delph Lane								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Myddleton Lane E In)	3.50	0.00	Y	Arm 5 Left	8.00	29.5 %	1862	1862
				Arm 6 Ahead	Inf	70.5 %		
2/1 (Delph Lane S In)	3.00	0.00	Y	Arm 4 Right	10.00	9.2 %	1489	1489
				Arm 6 Left	5.00	90.8 %		
3/1 (Myddleton Lane W In)	3.80	0.00	Y	Arm 4 Ahead	Inf	44.3 %	1751	1751
				Arm 5 Right	6.00	55.7 %		
4/1 (Myddleton Lane E Out Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Delph Lane S Out Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Myddleton Lane W Out Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 13: '2027 DM PM' (FG13: '2027 DM PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	132	357	489
	B	60	0	379	439
	C	275	334	0	609
	Tot.	335	466	736	1537

Traffic Lane Flows

Lane	Scenario 13: 2027 DM PM
Junction: Myddleton / Delph Lane	
1/1	489
2/1	439
3/1	609
4/1	335
5/1	466
6/1	736

Lane Saturation Flows

Junction: Myddleton / Delph Lane								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Myddleton Lane E In)	3.50	0.00	Y	Arm 5 Left	8.00	27.0 %	1870	1870
				Arm 6 Ahead	Inf	73.0 %		
2/1 (Delph Lane S In)	3.00	0.00	Y	Arm 4 Right	10.00	13.7 %	1497	1497
				Arm 6 Left	5.00	86.3 %		
3/1 (Myddleton Lane W In)	3.80	0.00	Y	Arm 4 Ahead	Inf	45.2 %	1754	1754
				Arm 5 Right	6.00	54.8 %		
4/1 (Myddleton Lane E Out Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Delph Lane S Out Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Myddleton Lane W Out Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 14: '2027 DS PM' (FG14: '2027 DS PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	146	357	503
	B	75	0	399	474
	C	264	351	0	615
	Tot.	339	497	756	1592

Traffic Lane Flows

Lane	Scenario 14: 2027 DS PM
Junction: Myddleton / Delph Lane	
1/1	503
2/1	474
3/1	615
4/1	339
5/1	497
6/1	756

Lane Saturation Flows

Junction: Myddleton / Delph Lane								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Myddleton Lane E In)	3.50	0.00	Y	Arm 5 Left	8.00	29.0 %	1864	1864
				Arm 6 Ahead	Inf	71.0 %		
2/1 (Delph Lane S In)	3.00	0.00	Y	Arm 4 Right	10.00	15.8 %	1500	1500
				Arm 6 Left	5.00	84.2 %		
3/1 (Myddleton Lane W In)	3.80	0.00	Y	Arm 4 Ahead	Inf	42.9 %	1746	1746
				Arm 5 Right	6.00	57.1 %		
4/1 (Myddleton Lane E Out Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Delph Lane S Out Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Myddleton Lane W Out Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 15: '2032 DM PM' (FG15: '2032 DM PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	141	374	515
	B	75	0	397	472
	C	279	353	0	632
	Tot.	354	494	771	1619

Traffic Lane Flows

Lane	Scenario 15: 2032 DM PM
Junction: Myddleton / Delph Lane	
1/1	515
2/1	472
3/1	632
4/1	354
5/1	494
6/1	771

Lane Saturation Flows

Junction: Myddleton / Delph Lane								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Myddleton Lane E In)	3.50	0.00	Y	Arm 5 Left	8.00	27.4 %	1869	1869
				Arm 6 Ahead	Inf	72.6 %		
2/1 (Delph Lane S In)	3.00	0.00	Y	Arm 4 Right	10.00	15.9 %	1501	1501
				Arm 6 Left	5.00	84.1 %		
3/1 (Myddleton Lane W In)	3.80	0.00	Y	Arm 4 Ahead	Inf	44.1 %	1751	1751
				Arm 5 Right	6.00	55.9 %		
4/1 (Myddleton Lane E Out Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Delph Lane S Out Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Myddleton Lane W Out Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 16: '2032 DS Full PM' (FG16: '2032 DS Full PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	160	372	532
	B	79	0	419	498
	C	279	381	0	660
	Tot.	358	541	791	1690

Traffic Lane Flows

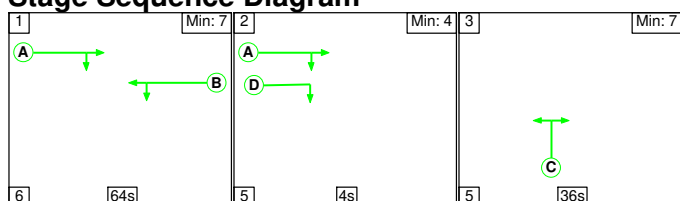
Lane	Scenario 16: 2032 DS Full PM
Junction: Myddleton / Delph Lane	
1/1	532
2/1	498
3/1	660
4/1	358
5/1	541
6/1	791

Lane Saturation Flows

Junction: Myddleton / Delph Lane								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Myddleton Lane E In)	3.50	0.00	Y	Arm 5 Left	8.00	30.1 %	1860	1860
				Arm 6 Ahead	Inf	69.9 %		
2/1 (Delph Lane S In)	3.00	0.00	Y	Arm 4 Right	10.00	15.9 %	1501	1501
				Arm 6 Left	5.00	84.1 %		
3/1 (Myddleton Lane W In)	3.80	0.00	Y	Arm 4 Ahead	Inf	42.3 %	1743	1743
				Arm 5 Right	6.00	57.7 %		
4/1 (Myddleton Lane E Out Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Delph Lane S Out Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Myddleton Lane W Out Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2018 No Dev AM' (FG1: '2018 No Dev AM', Plan 1: 'Network Control Plan 1')

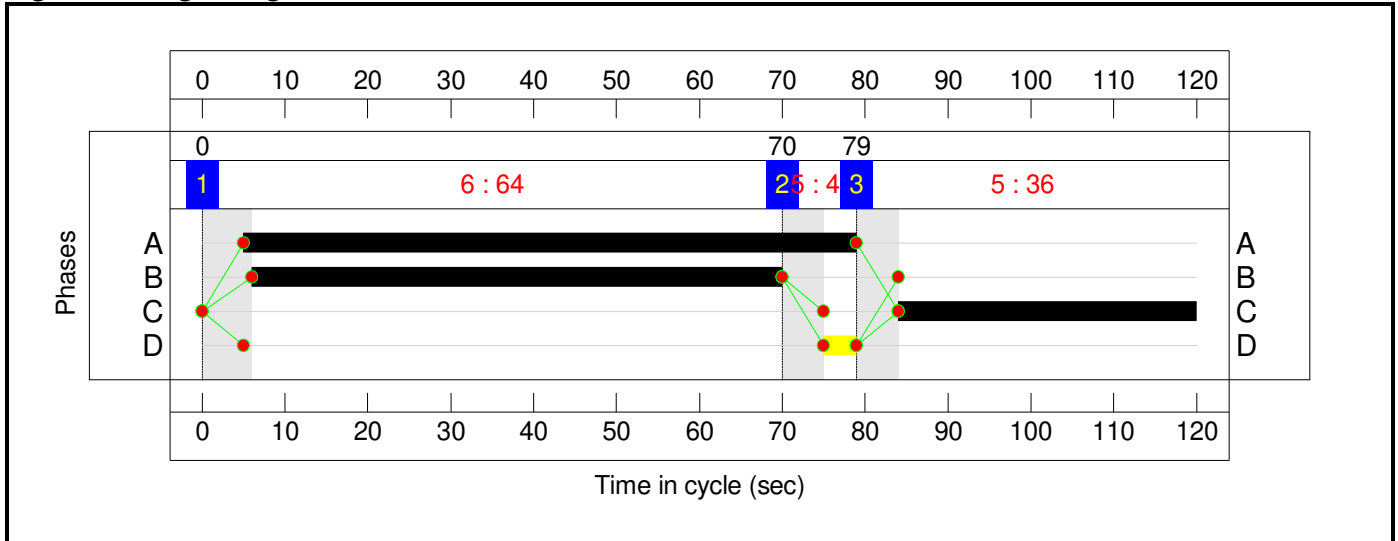
Stage Sequence Diagram



Stage Timings

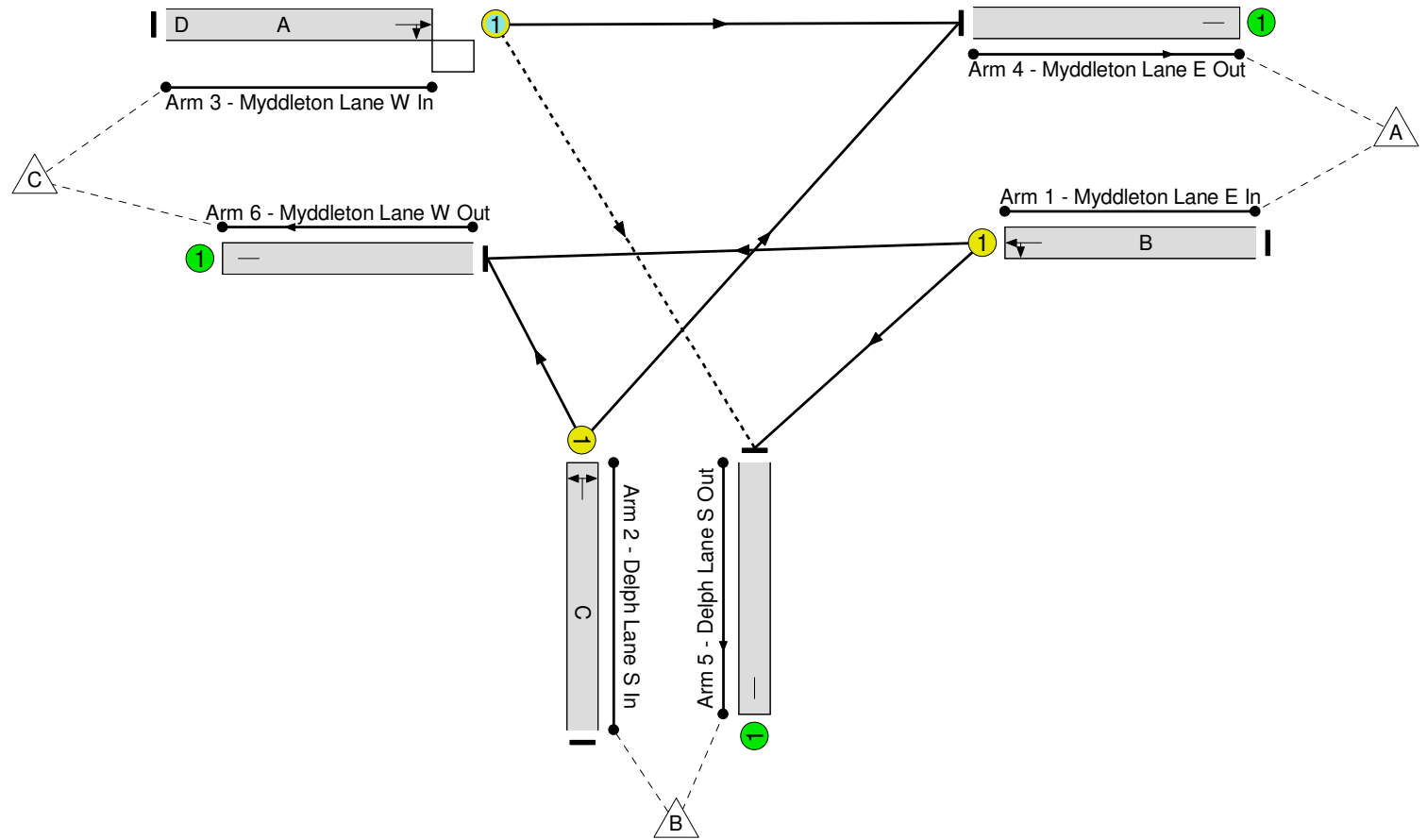

Stage	1	2	3
Duration	64	4	36
Change Point	0	70	79

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Myddleton / Delph Lane
PRC: 22.6 %
Total Traffic Delay: 11.3 pcuHr



Full Input Data And Results

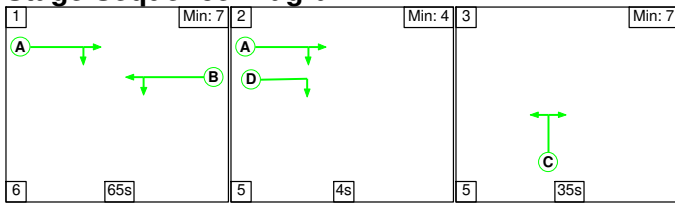
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	73.4%
Myddleton / Delph Lane	-	-	N/A	-	-		-	-	-	-	-	-	73.4%
1/1	Myddleton Lane E In Left Ahead	U	N/A	N/A	B		1	64	-	248	1836	995	24.9%
2/1	Delph Lane S In Right Left	U	N/A	N/A	C		1	36	-	351	1560	481	73.0%
3/1	Myddleton Lane W In Ahead Right	O	N/A	N/A	A	D	1	74	4	774	1789	1054	73.4%
4/1	Myddleton Lane E Out	U	N/A	N/A	-		-	-	-	587	Inf	Inf	0.0%
5/1	Delph Lane S Out	U	N/A	N/A	-		-	-	-	450	Inf	Inf	0.0%
6/1	Myddleton Lane W Out	U	N/A	N/A	-		-	-	-	336	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	330	21	6	8.3	2.9	0.2	11.3	-	-	-	-
Myddleton / Delph Lane	-	-	330	21	6	8.3	2.9	0.2	11.3	-	-	-	-
1/1	248	248	-	-	-	1.0	0.2	-	1.2	17.0	4.3	0.2	4.5
2/1	351	351	-	-	-	3.6	1.3	-	4.9	50.6	10.4	1.3	11.8
3/1	774	774	330	21	6	3.7	1.4	0.2	5.2	24.3	18.5	1.4	19.9
4/1	587	587	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	450	450	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	336	336	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		22.6	Total Delay for Signalled Lanes (pcuHr):		11.33	Cycle Time (s): 120				
			PRC Over All Lanes (%):		22.6	Total Delay Over All Lanes(pcuHr):		11.33					

Full Input Data And Results

Scenario 2: '2022 DM AM' (FG2: '2022 DM AM', Plan 1: 'Network Control Plan 1')

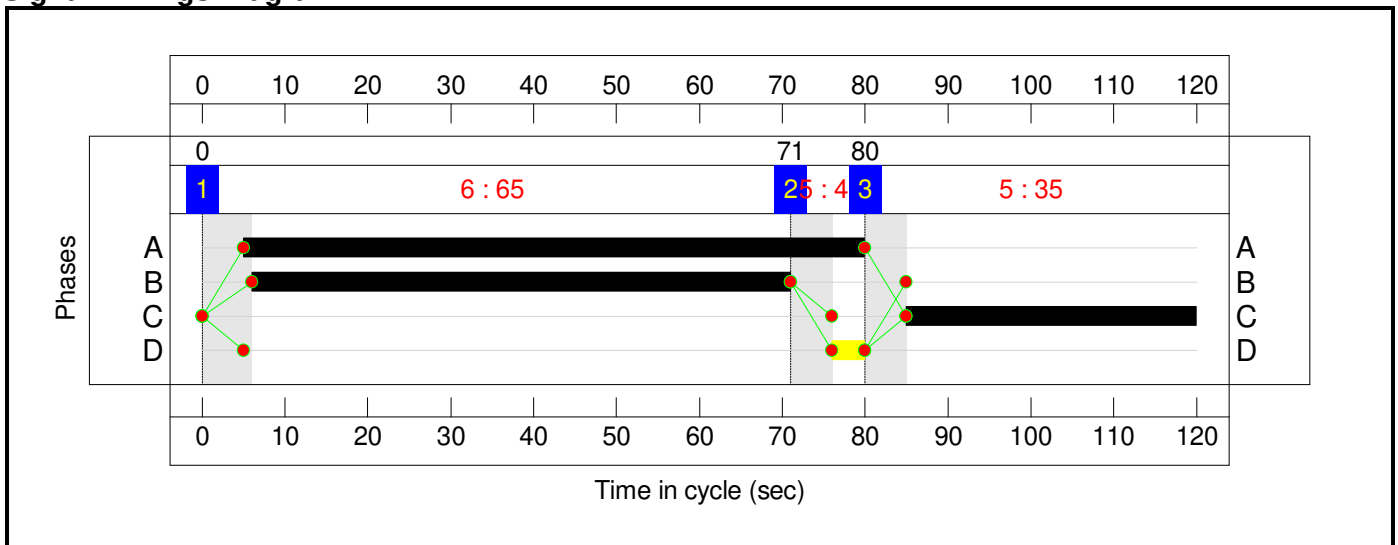
Stage Sequence Diagram



Stage Timings

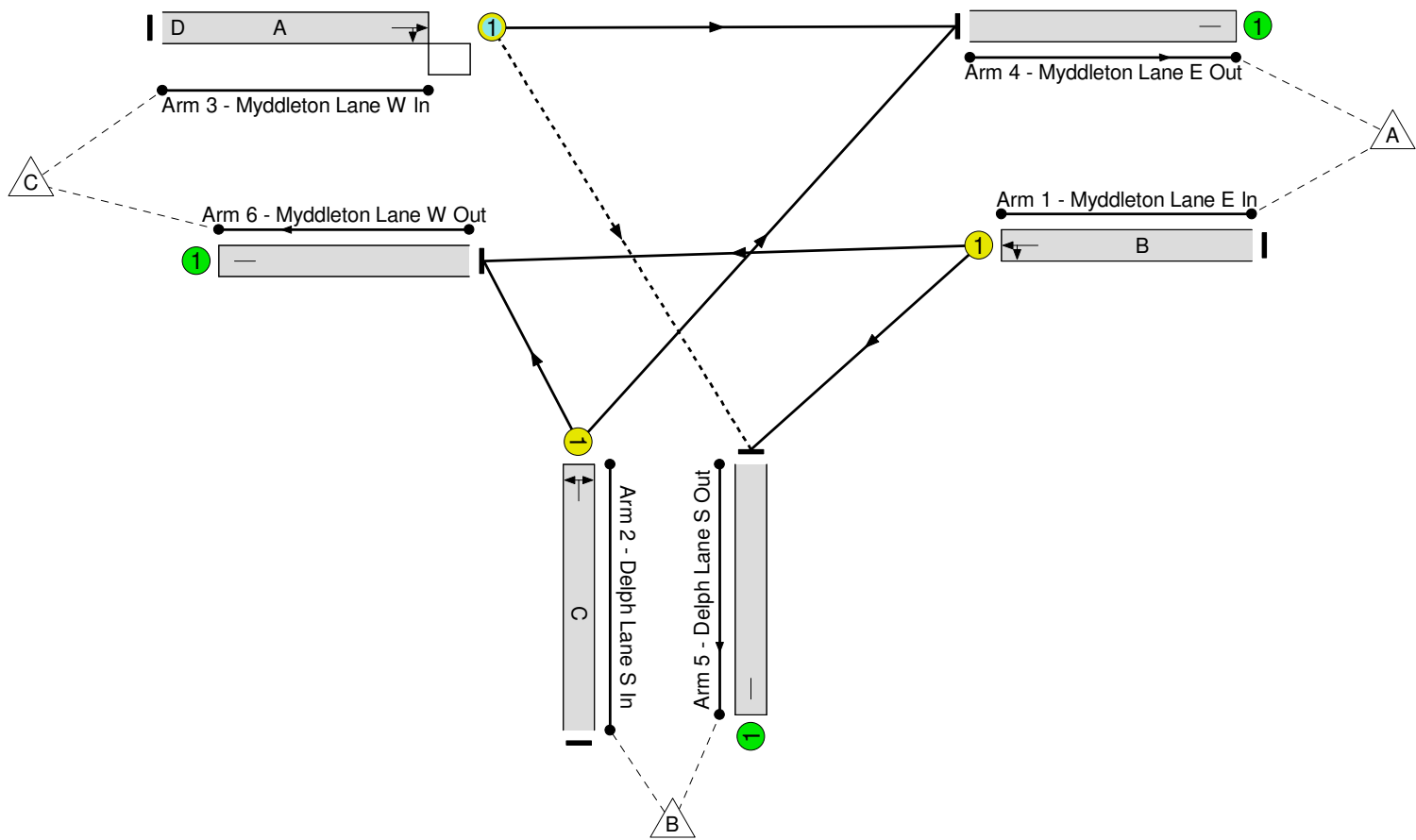

Stage	1	2	3
Duration	65	4	35
Change Point	0	71	80

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Myddleton / Delph Lane
PRC: 9.4 %
Total Traffic Delay: 14.3 pcuHr



Full Input Data And Results

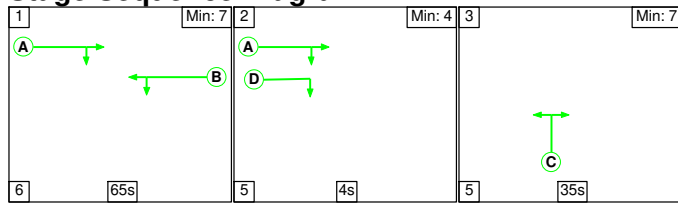
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	82.3%
Myddleton / Delph Lane	-	-	N/A	-	-		-	-	-	-	-	-	82.3%
1/1	Myddleton Lane E In Left Ahead	U	N/A	N/A	B		1	65	-	264	1820	1001	26.4%
2/1	Delph Lane S In Right Left	U	N/A	N/A	C		1	35	-	379	1559	468	81.0%
3/1	Myddleton Lane W In Ahead Right	O	N/A	N/A	A	D	1	75	4	859	1780	1044	82.3%
4/1	Myddleton Lane E Out	U	N/A	N/A	-		-	-	-	626	Inf	Inf	0.0%
5/1	Delph Lane S Out	U	N/A	N/A	-		-	-	-	527	Inf	Inf	0.0%
6/1	Myddleton Lane W Out	U	N/A	N/A	-		-	-	-	349	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	384	24	7	9.7	4.5	0.2	14.3	-	-	-	-
Myddleton / Delph Lane	-	-	384	24	7	9.7	4.5	0.2	14.3	-	-	-	-
1/1	264	264	-	-	-	1.0	0.2	-	1.2	16.7	4.6	0.2	4.8
2/1	379	379	-	-	-	4.1	2.0	-	6.1	58.2	11.6	2.0	13.6
3/1	859	859	384	24	7	4.5	2.3	0.2	7.0	29.3	22.7	2.3	24.9
4/1	626	626	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	527	527	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	349	349	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		9.4	Total Delay for Signalled Lanes (pcuHr):		14.34	Cycle Time (s): 120				
			PRC Over All Lanes (%):		9.4	Total Delay Over All Lanes(pcuHr):		14.34					

Full Input Data And Results

Scenario 3: '2022 DS AM' (FG3: '2022 DS AM', Plan 1: 'Network Control Plan 1')

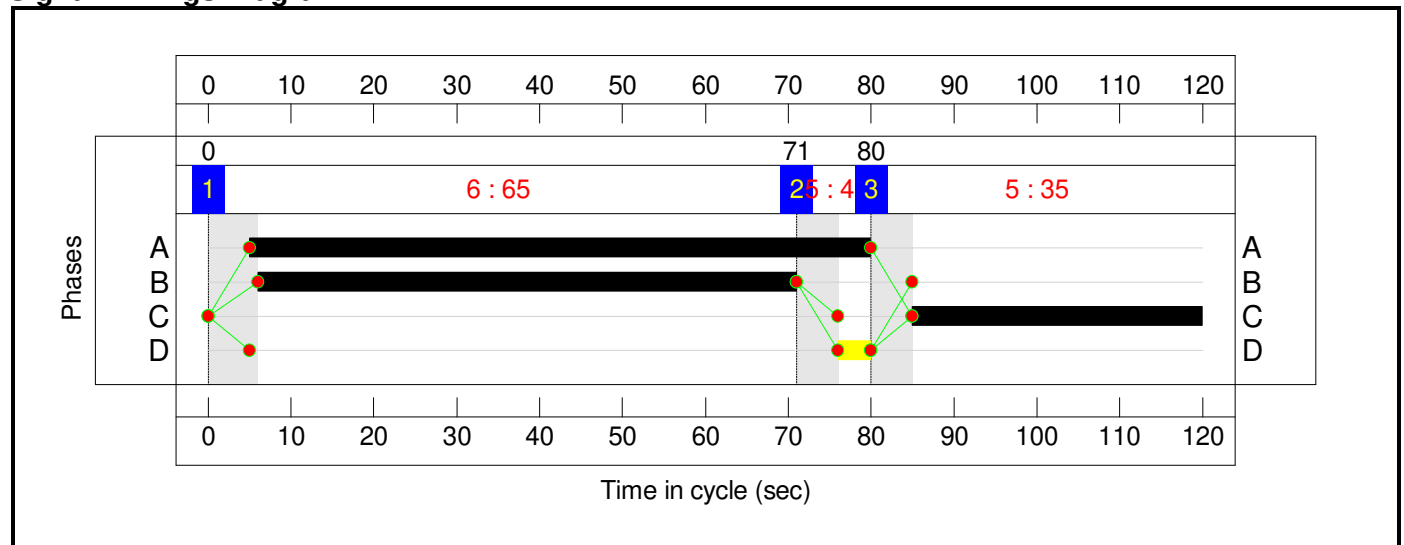
Stage Sequence Diagram



Stage Timings

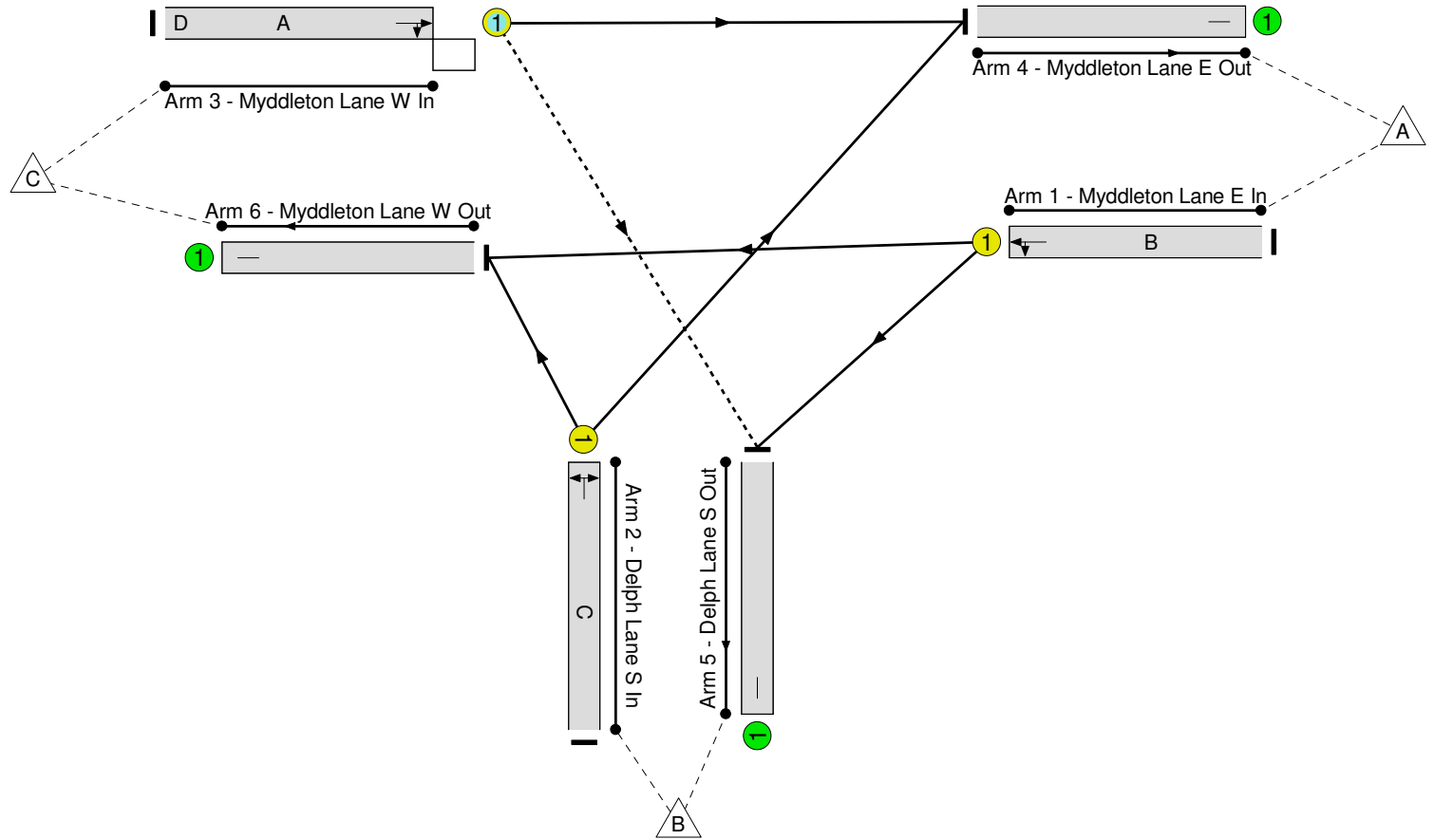

Stage	1	2	3
Duration	65	4	35
Change Point	0	71	80

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Myddleton / Delph Lane
PRC: 8.9 %
Total Traffic Delay: 14.7 pcuHr



Full Input Data And Results

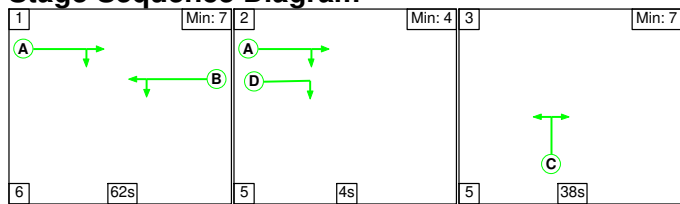
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	82.7%
Myddleton / Delph Lane	-	-	N/A	-	-		-	-	-	-	-	-	82.7%
1/1	Myddleton Lane E In Left Ahead	U	N/A	N/A	B		1	65	-	264	1820	1001	26.4%
2/1	Delph Lane S In Right Left	U	N/A	N/A	C		1	35	-	386	1558	467	82.6%
3/1	Myddleton Lane W In Ahead Right	O	N/A	N/A	A	D	1	75	4	862	1779	1043	82.7%
4/1	Myddleton Lane E Out	U	N/A	N/A	-		-	-	-	627	Inf	Inf	0.0%
5/1	Delph Lane S Out	U	N/A	N/A	-		-	-	-	530	Inf	Inf	0.0%
6/1	Myddleton Lane W Out	U	N/A	N/A	-		-	-	-	355	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	387	24	7	9.8	4.7	0.2	14.7	-	-	-	-
Myddleton / Delph Lane	-	-	387	24	7	9.8	4.7	0.2	14.7	-	-	-	-
1/1	264	264	-	-	-	1.0	0.2	-	1.2	16.7	4.6	0.2	4.8
2/1	386	386	-	-	-	4.2	2.2	-	6.4	60.0	11.9	2.2	14.1
3/1	862	862	387	24	7	4.6	2.3	0.2	7.1	29.6	23.0	2.3	25.3
4/1	627	627	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	530	530	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	355	355	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		8.9	Total Delay for Signalled Lanes (pcuHr):		14.74	Cycle Time (s): 120				
			PRC Over All Lanes (%):		8.9	Total Delay Over All Lanes(pcuHr):		14.74					

Full Input Data And Results

Scenario 4: '2022 DS Full AM' (FG4: '2022 DS Full AM', Plan 1: 'Network Control Plan 1')

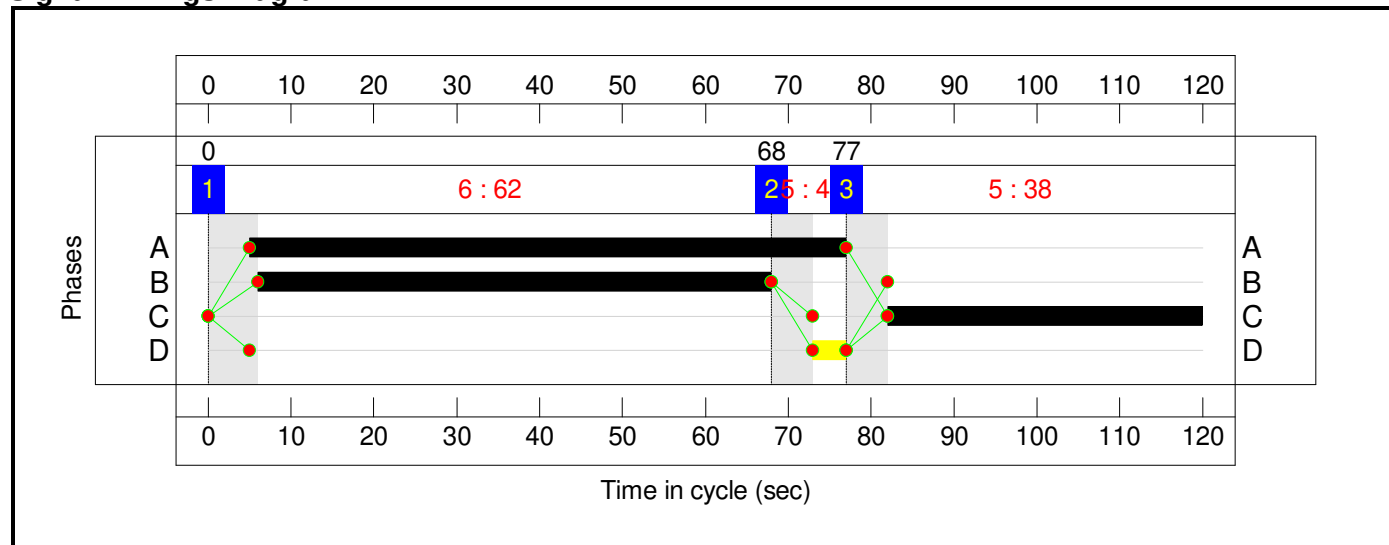
Stage Sequence Diagram



Stage Timings

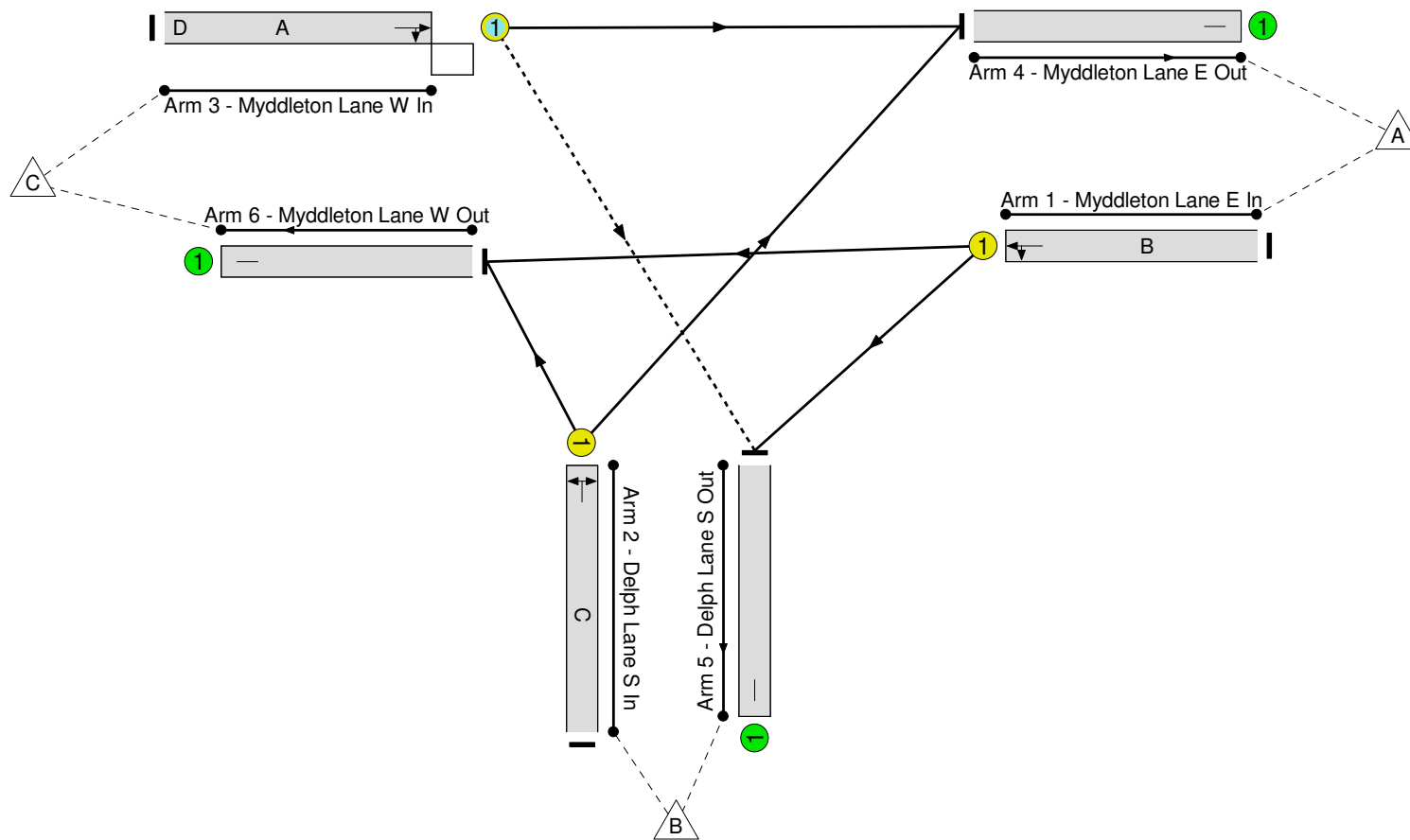
Stage	1	2	3
Duration	62	4	38
Change Point	0	68	77

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Myddleton / Delph Lane
PRC: -1.2 %
Total Traffic Delay: 20.8 pcuHr



Full Input Data And Results

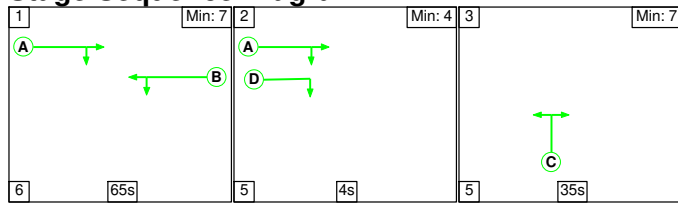
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	91.1%
Myddleton / Delph Lane	-	-	N/A	-	-		-	-	-	-	-	-	91.1%
1/1	Myddleton Lane E In Left Ahead	U	N/A	N/A	B		1	62	-	266	1825	958	27.8%
2/1	Delph Lane S In Right Left	U	N/A	N/A	C		1	38	-	454	1549	503	90.2%
3/1	Myddleton Lane W In Ahead Right	O	N/A	N/A	A	D	1	72	4	890	1773	977	91.1%
4/1	Myddleton Lane E Out	U	N/A	N/A	-		-	-	-	637	Inf	Inf	0.0%
5/1	Delph Lane S Out	U	N/A	N/A	-		-	-	-	555	Inf	Inf	0.0%
6/1	Myddleton Lane W Out	U	N/A	N/A	-		-	-	-	418	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	413	26	7	11.8	8.8	0.2	20.8	-	-	-	-
Myddleton / Delph Lane	-	-	413	26	7	11.8	8.8	0.2	20.8	-	-	-	-
1/1	266	266	-	-	-	1.2	0.2	-	1.4	18.5	4.9	0.2	5.1
2/1	454	454	-	-	-	4.9	4.0	-	8.8	70.1	14.4	4.0	18.3
3/1	890	890	413	26	7	5.8	4.6	0.2	10.6	42.9	26.7	4.6	31.3
4/1	637	637	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	555	555	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	418	418	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		-1.2	Total Delay for Signalled Lanes (pcuHr):		20.81	Cycle Time (s): 120				
			PRC Over All Lanes (%):		-1.2	Total Delay Over All Lanes(pcuHr):		20.81					

Full Input Data And Results

Scenario 5: '2027 DM AM' (FG5: '2027 DM AM', Plan 1: 'Network Control Plan 1')

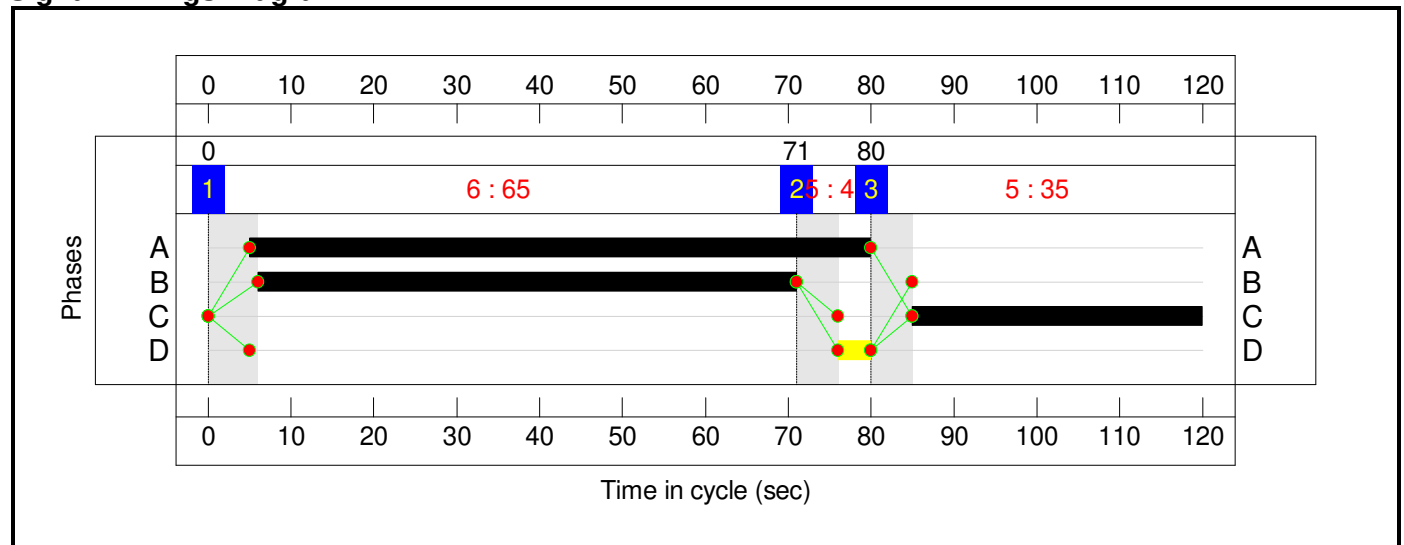
Stage Sequence Diagram



Stage Timings

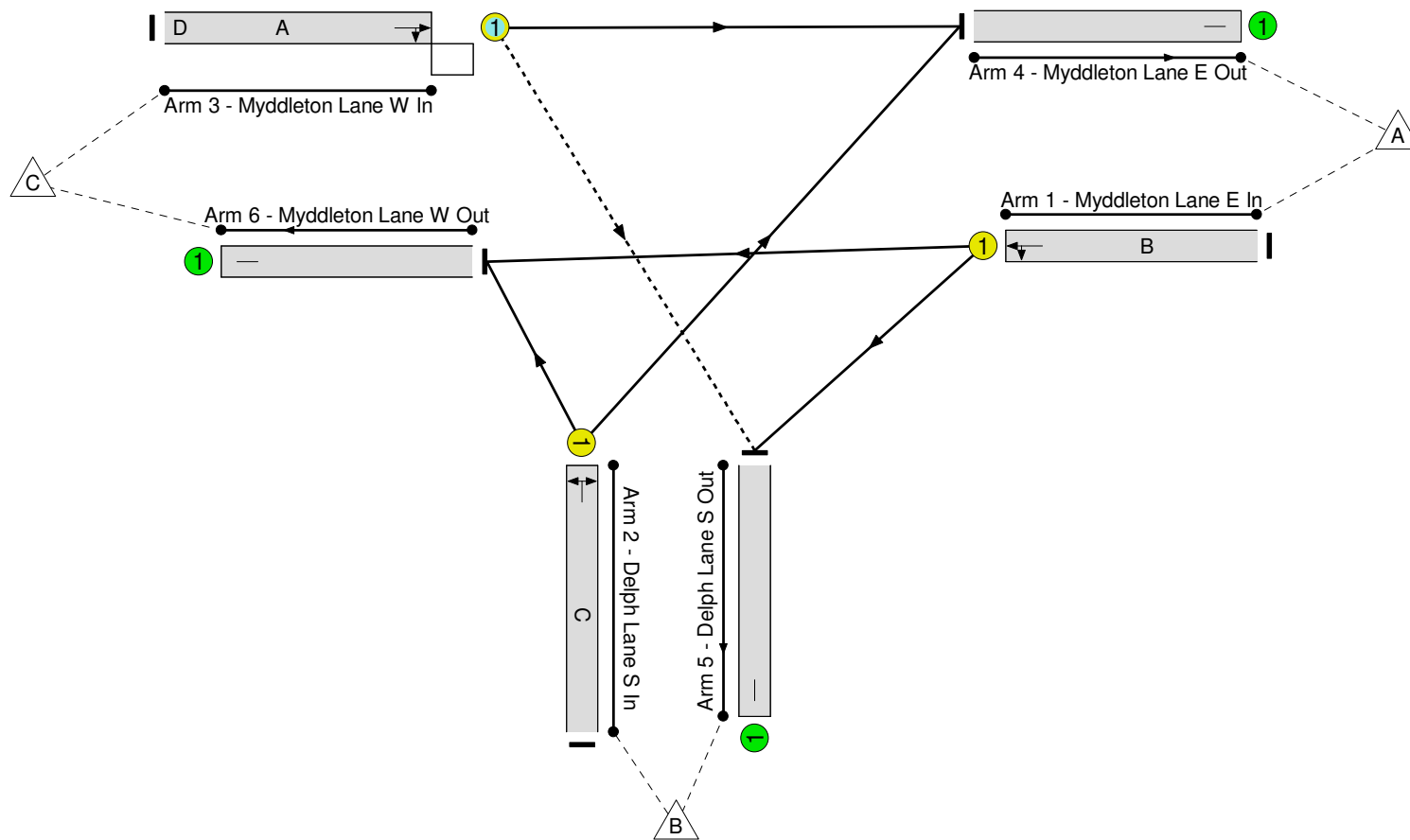

Stage	1	2	3
Duration	65	4	35
Change Point	0	71	80

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Myddleton / Delph Lane
PRC: 1.9 %
Total Traffic Delay: 17.7 pcuHr



Full Input Data And Results

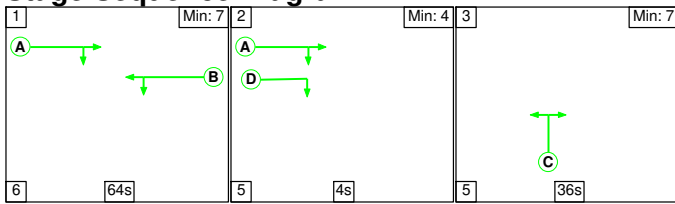
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	88.4%
Myddleton / Delph Lane	-	-	N/A	-	-		-	-	-	-	-	-	88.4%
1/1	Myddleton Lane E In Left Ahead	U	N/A	N/A	B		1	65	-	279	1815	998	27.9%
2/1	Delph Lane S In Right Left	U	N/A	N/A	C		1	35	-	403	1560	468	86.1%
3/1	Myddleton Lane W In Ahead Right	O	N/A	N/A	A	D	1	75	4	909	1780	1029	88.4%
4/1	Myddleton Lane E Out	U	N/A	N/A	-		-	-	-	663	Inf	Inf	0.0%
5/1	Delph Lane S Out	U	N/A	N/A	-		-	-	-	563	Inf	Inf	0.0%
6/1	Myddleton Lane W Out	U	N/A	N/A	-		-	-	-	365	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	407	26	7	10.8	6.6	0.2	17.7	-	-	-	-
Myddleton / Delph Lane	-	-	407	26	7	10.8	6.6	0.2	17.7	-	-	-	-
1/1	279	279	-	-	-	1.1	0.2	-	1.3	16.9	4.9	0.2	5.1
2/1	403	403	-	-	-	4.4	2.9	-	7.3	65.1	12.6	2.9	15.5
3/1	909	909	407	26	7	5.3	3.6	0.2	9.1	35.9	26.0	3.6	29.6
4/1	663	663	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	563	563	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	365	365	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		1.9	Total Delay for Signalled Lanes (pcuHr):		17.65	Cycle Time (s): 120				
			PRC Over All Lanes (%):		1.9	Total Delay Over All Lanes(pcuHr):		17.65					

Full Input Data And Results

Scenario 6: '2027 DS AM' (FG6: '2027 DS AM', Plan 1: 'Network Control Plan 1')

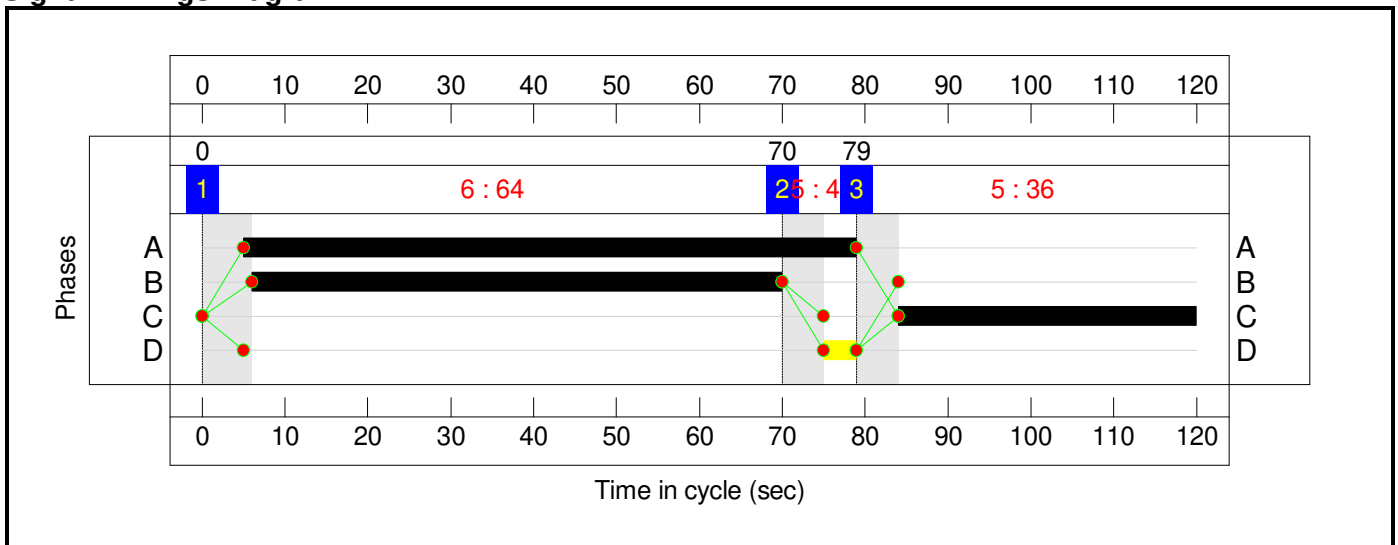
Stage Sequence Diagram



Stage Timings

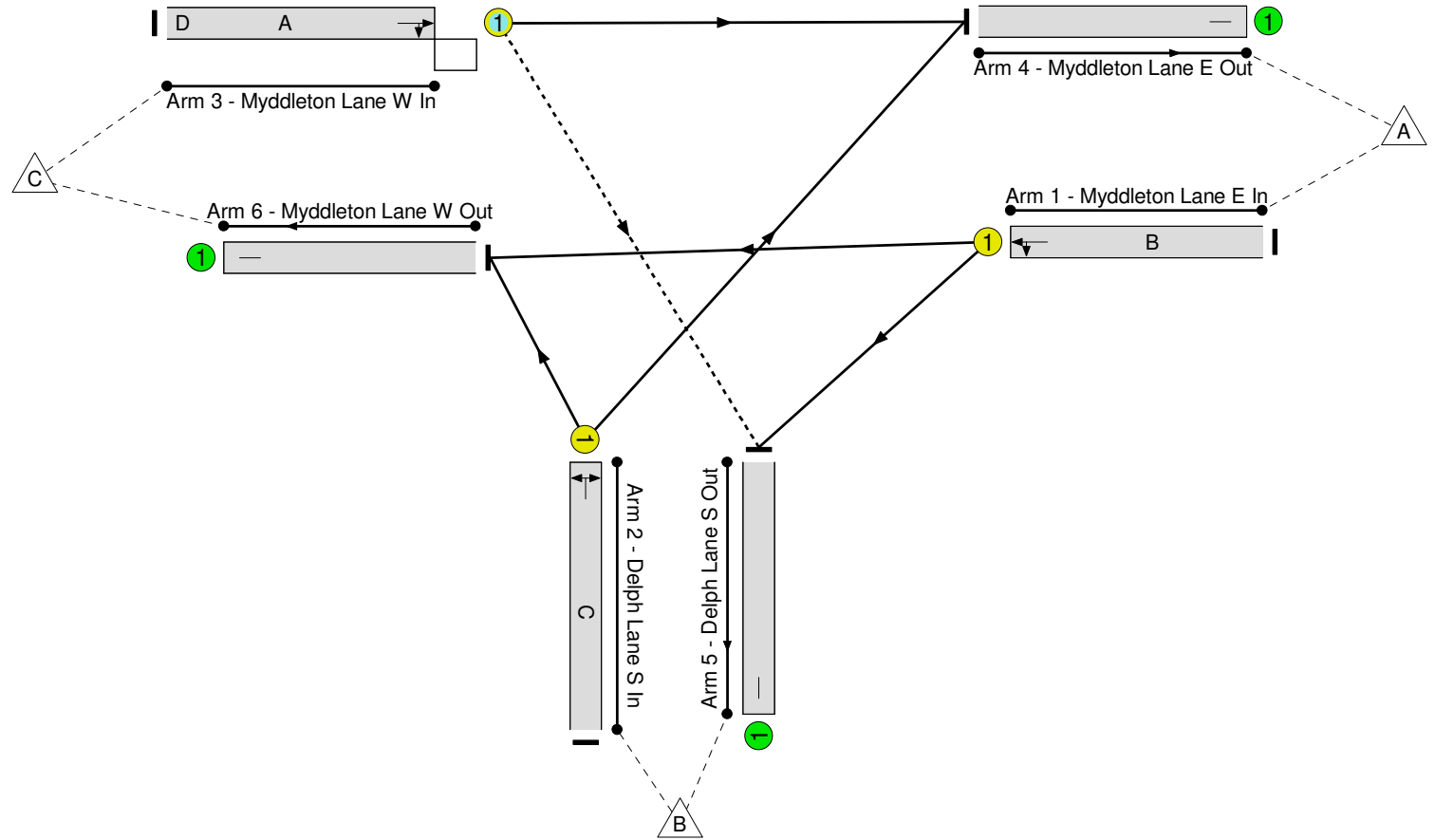

Stage	1	2	3
Duration	64	4	36
Change Point	0	70	79

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Myddleton / Delph Lane
PRC: -1.5 %
Total Traffic Delay: 21.1 pcuHr



Full Input Data And Results

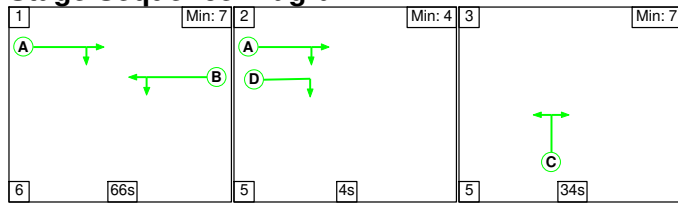
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	91.3%
Myddleton / Delph Lane	-	-	N/A	-	-		-	-	-	-	-	-	91.3%
1/1	Myddleton Lane E In Left Ahead	U	N/A	N/A	B		1	64	-	280	1817	984	28.4%
2/1	Delph Lane S In Right Left	U	N/A	N/A	C		1	36	-	437	1556	480	91.1%
3/1	Myddleton Lane W In Ahead Right	O	N/A	N/A	A	D	1	74	4	923	1777	1010	91.3%
4/1	Myddleton Lane E Out	U	N/A	N/A	-		-	-	-	670	Inf	Inf	0.0%
5/1	Delph Lane S Out	U	N/A	N/A	-		-	-	-	576	Inf	Inf	0.0%
6/1	Myddleton Lane W Out	U	N/A	N/A	-		-	-	-	394	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	420	26	8	11.7	9.2	0.2	21.1	-	-	-	-
Myddleton / Delph Lane	-	-	420	26	8	11.7	9.2	0.2	21.1	-	-	-	-
1/1	280	280	-	-	-	1.2	0.2	-	1.4	17.5	5.1	0.2	5.3
2/1	437	437	-	-	-	4.8	4.3	-	9.1	75.0	14.0	4.3	18.2
3/1	923	923	420	26	8	5.7	4.8	0.2	10.7	41.7	27.4	4.8	32.2
4/1	670	670	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	576	576	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	394	394	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		-1.5	Total Delay for Signalled Lanes (pcuHr):		21.14	Cycle Time (s): 120				
			PRC Over All Lanes (%):		-1.5	Total Delay Over All Lanes(pcuHr):		21.14					

Full Input Data And Results

Scenario 7: '2032 DM AM' (FG7: '2032 DM AM', Plan 1: 'Network Control Plan 1')

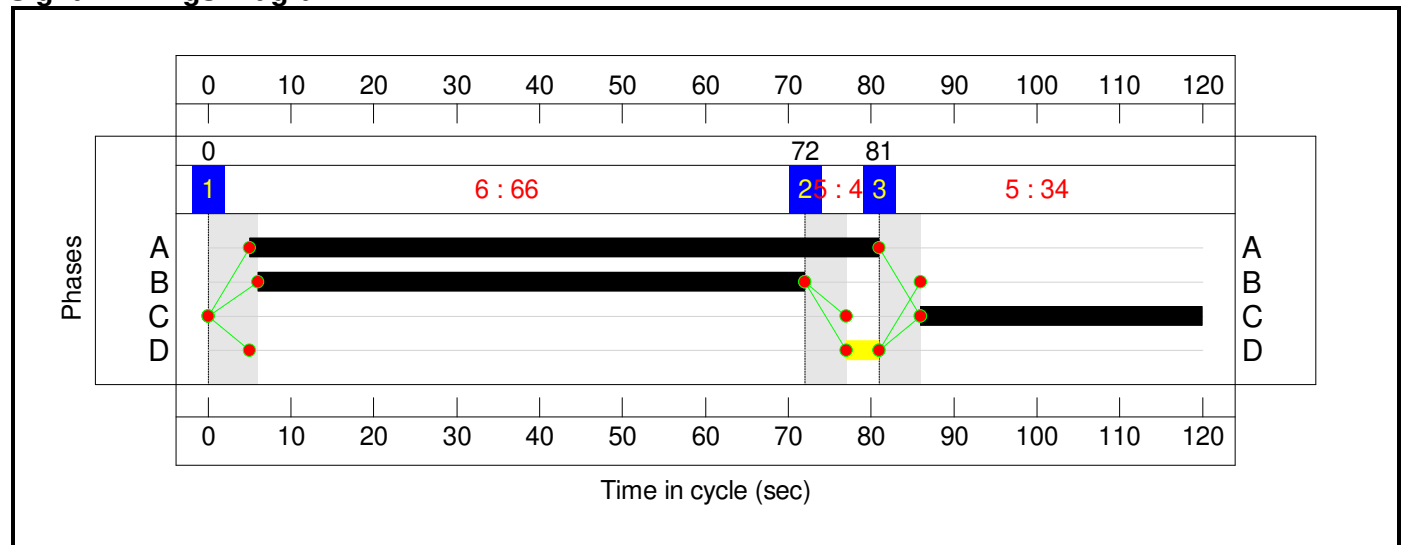
Stage Sequence Diagram



Stage Timings

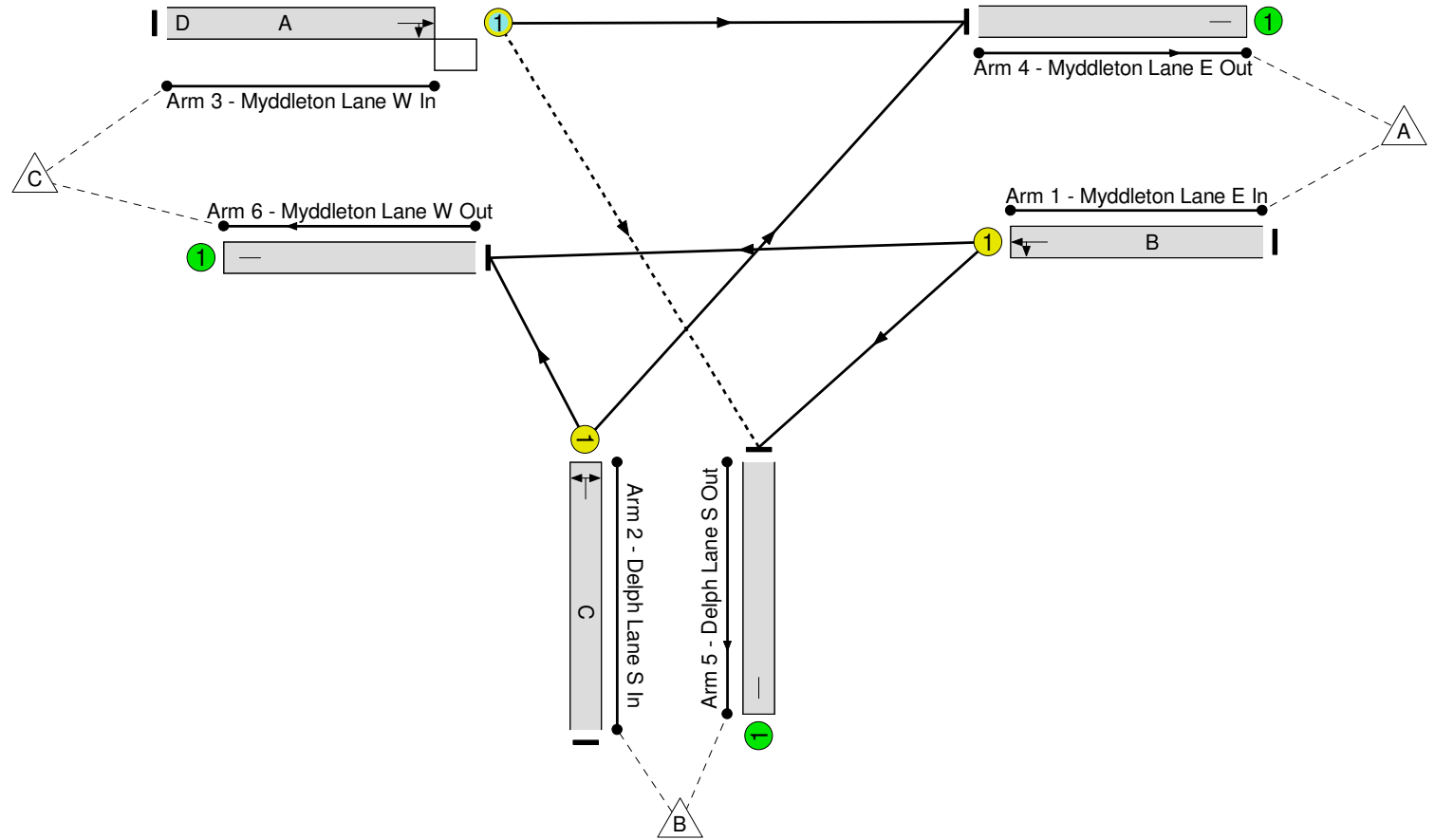

Stage	1	2	3
Duration	66	4	34
Change Point	0	72	81

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Myddleton / Delph Lane
PRC: -4.0 %
Total Traffic Delay: 22.7 pcuHr



Full Input Data And Results

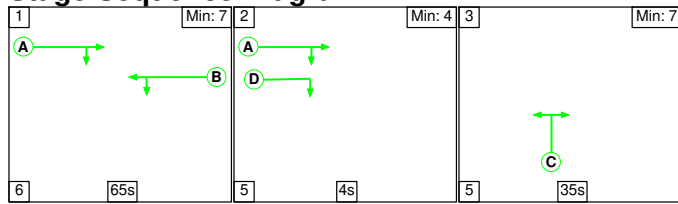
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	93.6%
Myddleton / Delph Lane	-	-	N/A	-	-		-	-	-	-	-	-	93.6%
1/1	Myddleton Lane E In Left Ahead	U	N/A	N/A	B		1	66	-	295	1814	1013	29.1%
2/1	Delph Lane S In Right Left	U	N/A	N/A	C		1	34	-	416	1562	456	91.3%
3/1	Myddleton Lane W In Ahead Right	O	N/A	N/A	A	D	1	76	4	974	1777	1040	93.6%
4/1	Myddleton Lane E Out	U	N/A	N/A	-		-	-	-	701	Inf	Inf	0.0%
5/1	Delph Lane S Out	U	N/A	N/A	-		-	-	-	609	Inf	Inf	0.0%
6/1	Myddleton Lane W Out	U	N/A	N/A	-		-	-	-	375	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	442	28	8	11.8	10.7	0.2	22.7	-	-	-	-
Myddleton / Delph Lane	-	-	442	28	8	11.8	10.7	0.2	22.7	-	-	-	-
1/1	295	295	-	-	-	1.1	0.2	-	1.4	16.5	5.2	0.2	5.4
2/1	416	416	-	-	-	4.7	4.3	-	9.1	78.4	13.3	4.3	17.6
3/1	974	974	442	28	8	5.9	6.2	0.2	12.3	45.6	29.8	6.2	35.9
4/1	701	701	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	609	609	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	375	375	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		-4.0	Total Delay for Signalled Lanes (pcuHr):		22.75	Cycle Time (s): 120				
			PRC Over All Lanes (%):		-4.0	Total Delay Over All Lanes(pcuHr):		22.75					

Full Input Data And Results

Scenario 8: '2032 DS Full AM' (FG8: '2032 DS Full AM', Plan 1: 'Network Control Plan 1')

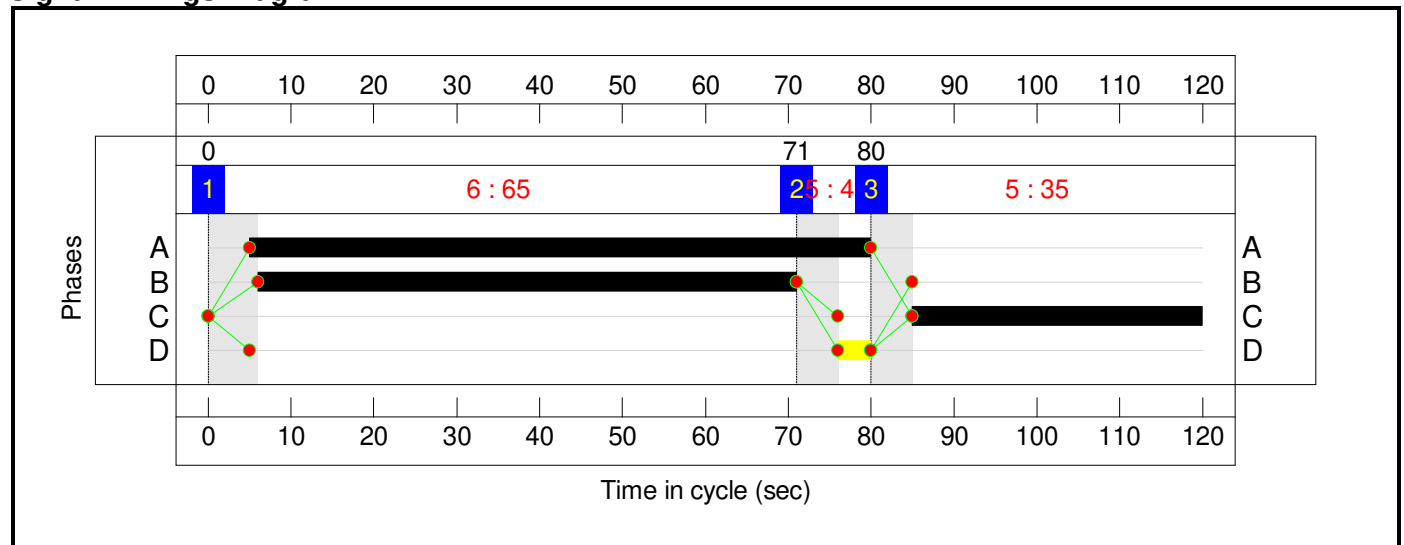
Stage Sequence Diagram



Stage Timings

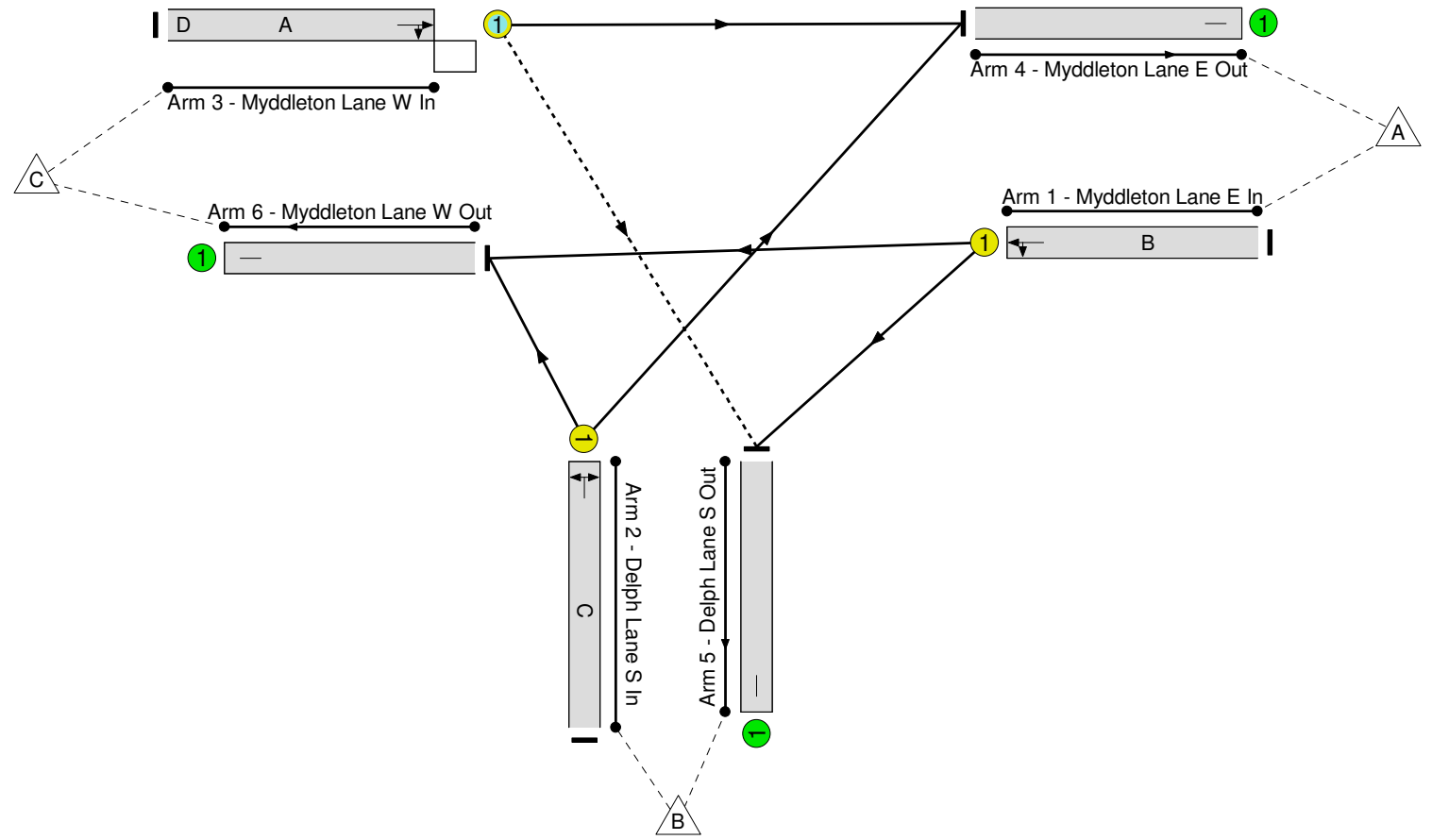
Stage	1	2	3
Duration	65	4	35
Change Point	0	71	80

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Myddleton / Delph Lane
PRC: -10.4 %
Total Traffic Delay: 35.5 pcuHr



Full Input Data And Results

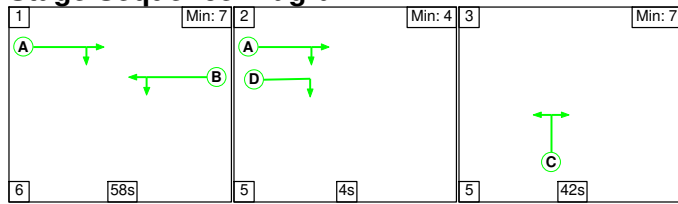
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	99.4%
Myddleton / Delph Lane	-	-	N/A	-	-		-	-	-	-	-	-	99.4%
1/1	Myddleton Lane E In Left Ahead	U	N/A	N/A	B		1	65	-	296	1820	1001	29.6%
2/1	Delph Lane S In Right Left	U	N/A	N/A	C		1	35	-	464	1556	467	99.4%
3/1	Myddleton Lane W In Ahead Right	O	N/A	N/A	A	D	1	75	4	1001	1772	1020	98.1%
4/1	Myddleton Lane E Out	U	N/A	N/A	-		-	-	-	713	Inf	Inf	0.0%
5/1	Delph Lane S Out	U	N/A	N/A	-		-	-	-	629	Inf	Inf	0.0%
6/1	Myddleton Lane W Out	U	N/A	N/A	-		-	-	-	419	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	446	49	8	13.3	22.0	0.2	35.5	-	-	-	-
Myddleton / Delph Lane	-	-	446	49	8	13.3	22.0	0.2	35.5	-	-	-	-
1/1	296	296	-	-	-	1.2	0.2	-	1.4	17.1	5.3	0.2	5.5
2/1	464	464	-	-	-	5.4	10.1	-	15.5	120.2	15.3	10.1	25.4
3/1	1001	1001	446	49	8	6.7	11.7	0.2	18.6	67.1	32.5	11.7	44.3
4/1	713	713	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	629	629	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	419	419	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%): -10.4		Total Delay for Signalled Lanes (pcuHr): 35.54		Cycle Time (s): 120						
			PRC Over All Lanes (%): -10.4		Total Delay Over All Lanes(pcuHr): 35.54								

Full Input Data And Results

Scenario 9: '2018 No Dev PM' (FG9: '2018 No Dev PM', Plan 1: 'Network Control Plan 1')

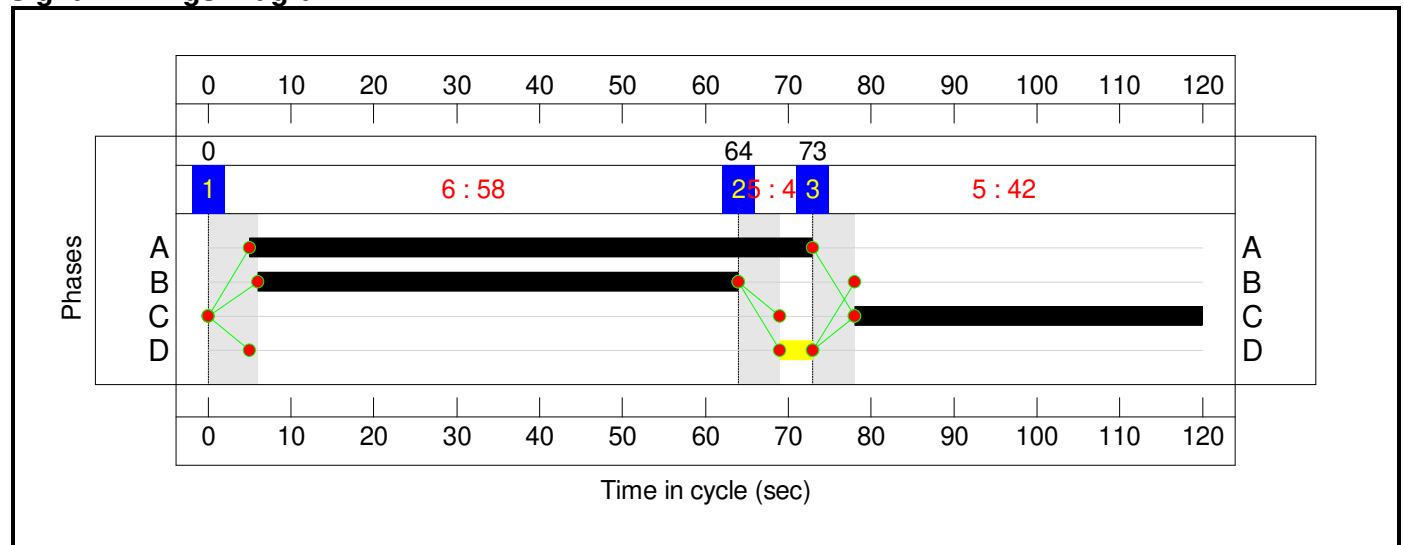
Stage Sequence Diagram



Stage Timings

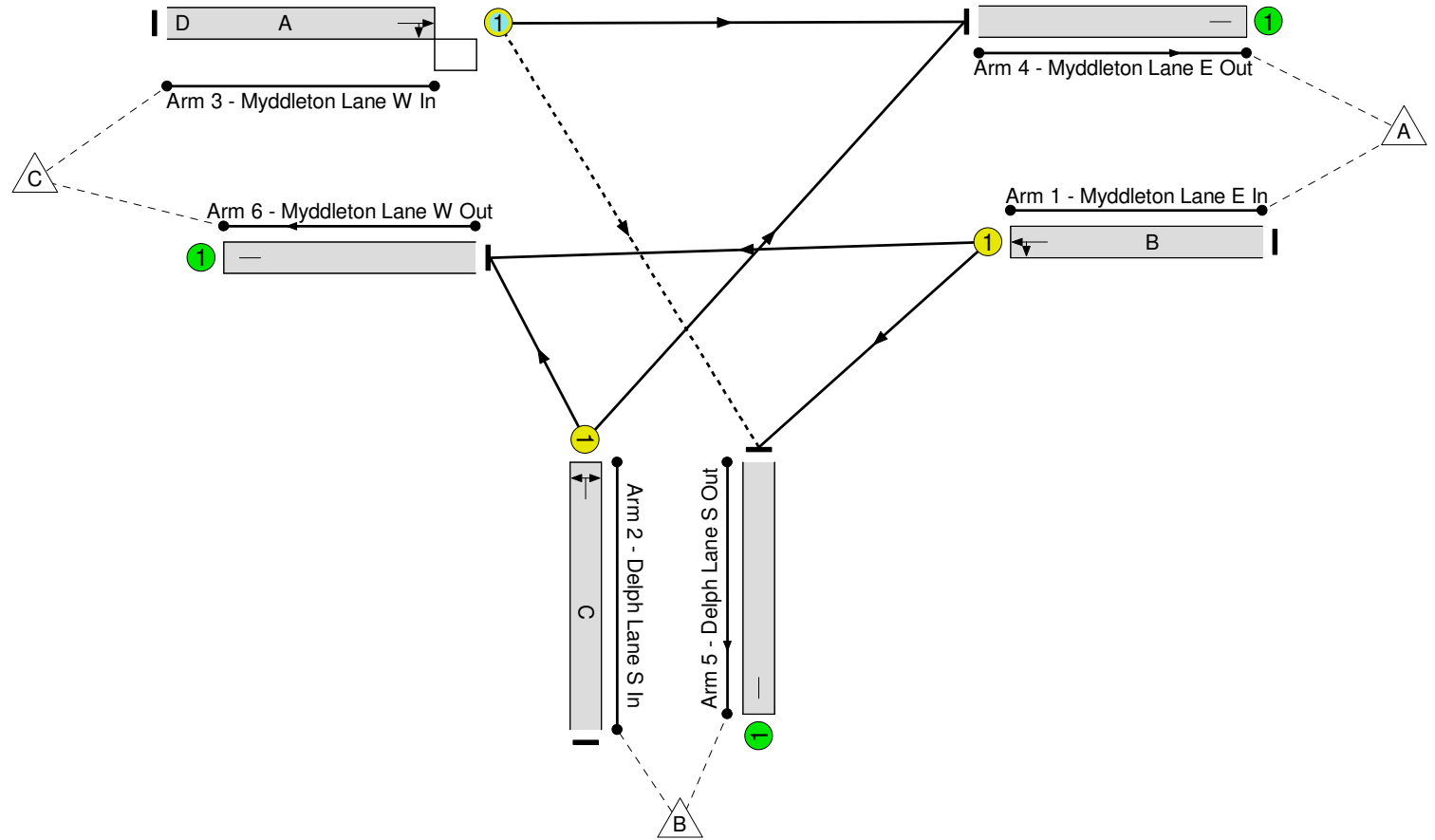

Stage	1	2	3
Duration	58	4	42
Change Point	0	64	73

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Myddleton / Delph Lane
PRC: 20.9 %
Total Traffic Delay: 13.9 pcuHr



Full Input Data And Results

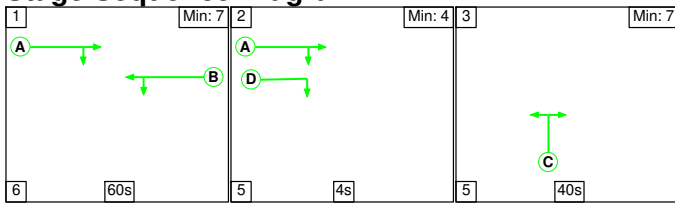
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	74.4%
Myddleton / Delph Lane	-	-	N/A	-	-		-	-	-	-	-	-	74.4%
1/1	Myddleton Lane E In Left Ahead	U	N/A	N/A	B		1	58	-	440	1887	928	47.4%
2/1	Delph Lane S In Right Left	U	N/A	N/A	C		1	42	-	389	1488	533	73.0%
3/1	Myddleton Lane W In Ahead Right	O	N/A	N/A	A	D	1	68	4	583	1756	783	74.4%
4/1	Myddleton Lane E Out	U	N/A	N/A	-		-	-	-	299	Inf	Inf	0.0%
5/1	Delph Lane S Out	U	N/A	N/A	-		-	-	-	414	Inf	Inf	0.0%
6/1	Myddleton Lane W Out	U	N/A	N/A	-		-	-	-	699	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	293	18	5	10.1	3.2	0.6	13.9	-	-	-	-
Myddleton / Delph Lane	-	-	293	18	5	10.1	3.2	0.6	13.9	-	-	-	-
1/1	440	440	-	-	-	2.5	0.5	-	2.9	23.9	9.7	0.5	10.1
2/1	389	389	-	-	-	3.6	1.3	-	4.9	45.7	11.2	1.3	12.6
3/1	583	583	293	18	5	4.0	1.4	0.6	6.0	37.1	16.0	1.4	17.5
4/1	299	299	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	414	414	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	699	699	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		20.9	Total Delay for Signalled Lanes (pcuHr):		13.87	Cycle Time (s): 120				
			PRC Over All Lanes (%):		20.9	Total Delay Over All Lanes(pcuHr):		13.87					

Full Input Data And Results

Scenario 10: '2022 DM PM' (FG10: '2022 DM PM', Plan 1: 'Network Control Plan 1')

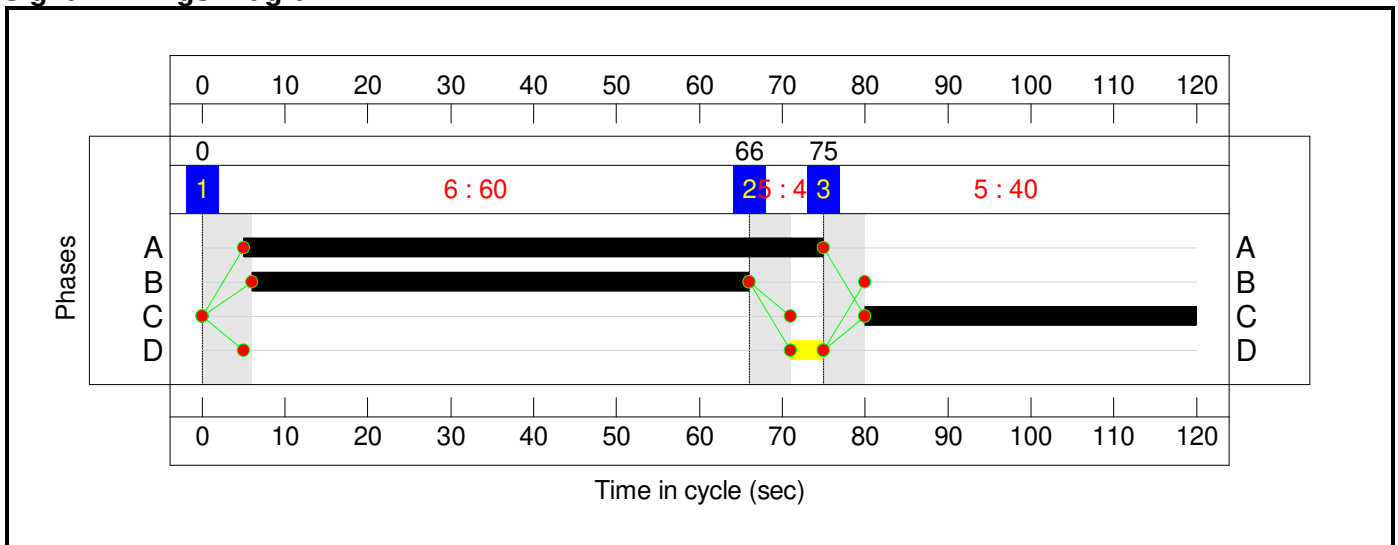
Stage Sequence Diagram



Stage Timings

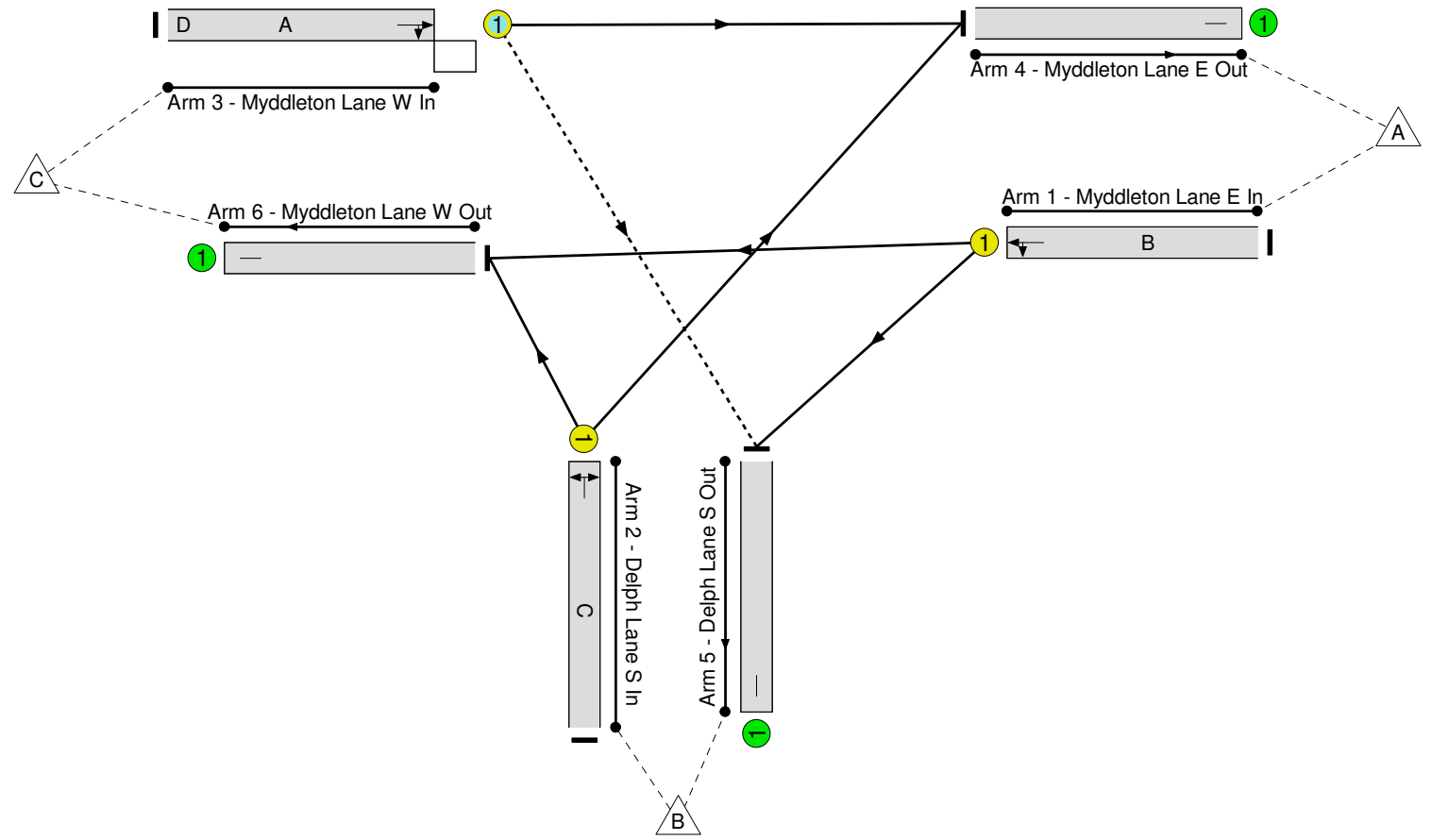
Stage	1	2	3
Duration	60	4	40
Change Point	0	66	75

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Myddleton / Delph Lane
PRC: 15.3 %
Total Traffic Delay: 14.8 pcuHr



Full Input Data And Results

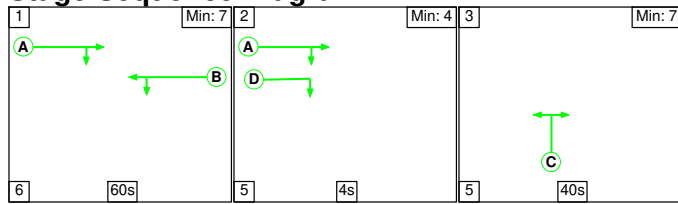
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	78.1%
Myddleton / Delph Lane	-	-	N/A	-	-		-	-	-	-	-	-	78.1%
1/1	Myddleton Lane E In Left Ahead	U	N/A	N/A	B		1	60	-	464	1883	957	48.5%
2/1	Delph Lane S In Right Left	U	N/A	N/A	C		1	40	-	397	1488	508	78.1%
3/1	Myddleton Lane W In Ahead Right	O	N/A	N/A	A	D	1	70	4	607	1759	801	75.8%
4/1	Myddleton Lane E Out	U	N/A	N/A	-		-	-	-	317	Inf	Inf	0.0%
5/1	Delph Lane S Out	U	N/A	N/A	-		-	-	-	433	Inf	Inf	0.0%
6/1	Myddleton Lane W Out	U	N/A	N/A	-		-	-	-	718	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	301	19	5	10.5	3.7	0.6	14.8	-	-	-	-
Myddleton / Delph Lane	-	-	301	19	5	10.5	3.7	0.6	14.8	-	-	-	-
1/1	464	464	-	-	-	2.5	0.5	-	3.0	22.9	10.1	0.5	10.5
2/1	397	397	-	-	-	3.9	1.7	-	5.6	51.1	11.8	1.7	13.5
3/1	607	607	301	19	5	4.1	1.5	0.6	6.2	36.9	16.7	1.5	18.2
4/1	317	317	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	433	433	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	718	718	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		15.3	Total Delay for Signalled Lanes (pcuHr):		14.81	Cycle Time (s): 120				
			PRC Over All Lanes (%):		15.3	Total Delay Over All Lanes(pcuHr):		14.81					

Full Input Data And Results

Scenario 11: '2022 DS PM' (FG11: '2022 DS PM', Plan 1: 'Network Control Plan 1')

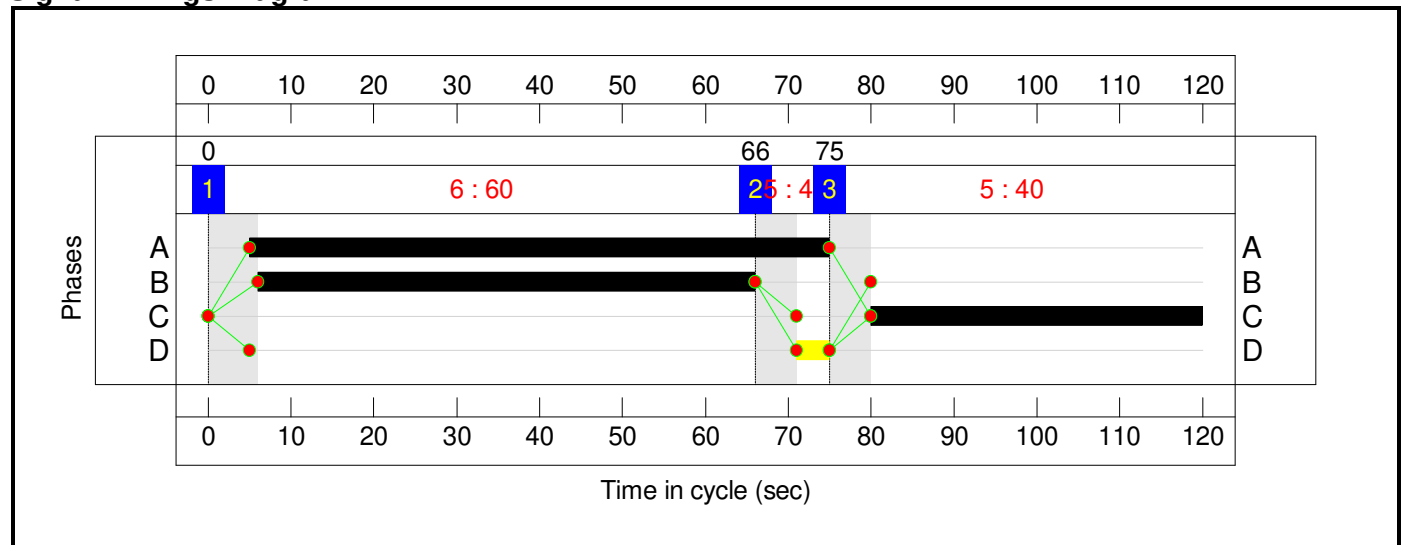
Stage Sequence Diagram



Stage Timings

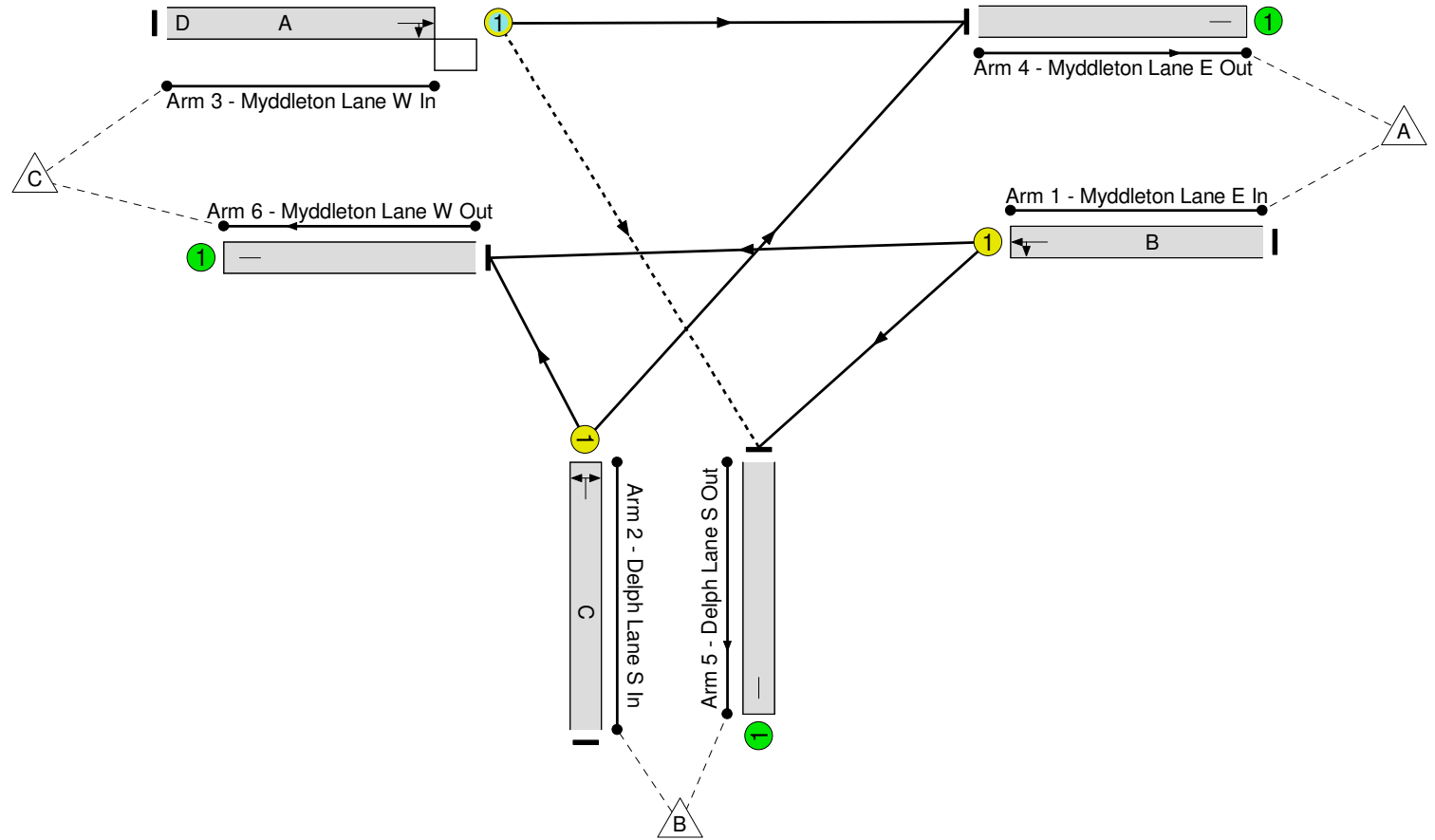

Stage	1	2	3
Duration	60	4	40
Change Point	0	66	75

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Myddleton / Delph Lane
PRC: 14.4 %
Total Traffic Delay: 15.1 pcuHr



Full Input Data And Results

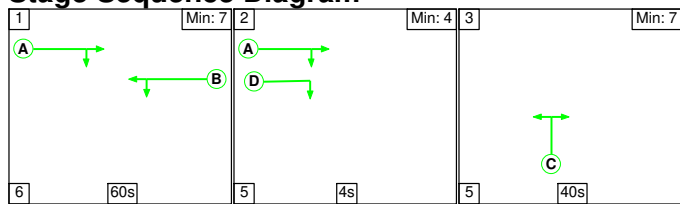
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	78.7%
Myddleton / Delph Lane	-	-	N/A	-	-		-	-	-	-	-	-	78.7%
1/1	Myddleton Lane E In Left Ahead	U	N/A	N/A	B		1	60	-	467	1879	955	48.9%
2/1	Delph Lane S In Right Left	U	N/A	N/A	C		1	40	-	400	1488	508	78.7%
3/1	Myddleton Lane W In Ahead Right	O	N/A	N/A	A	D	1	70	4	609	1759	796	76.5%
4/1	Myddleton Lane E Out	U	N/A	N/A	-		-	-	-	317	Inf	Inf	0.0%
5/1	Delph Lane S Out	U	N/A	N/A	-		-	-	-	441	Inf	Inf	0.0%
6/1	Myddleton Lane W Out	U	N/A	N/A	-		-	-	-	718	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	302	19	5	10.6	3.9	0.6	15.1	-	-	-	-
Myddleton / Delph Lane	-	-	302	19	5	10.6	3.9	0.6	15.1	-	-	-	-
1/1	467	467	-	-	-	2.5	0.5	-	3.0	23.0	10.1	0.5	10.6
2/1	400	400	-	-	-	4.0	1.8	-	5.7	51.6	12.0	1.8	13.8
3/1	609	609	302	19	5	4.1	1.6	0.6	6.3	37.5	16.9	1.6	18.5
4/1	317	317	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	441	441	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	718	718	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%): 14.4		Total Delay for Signalled Lanes (pcuHr): 15.07		Cycle Time (s): 120						
			PRC Over All Lanes (%): 14.4		Total Delay Over All Lanes(pcuHr): 15.07								

Full Input Data And Results

Scenario 12: '2022 DS Full PM' (FG12: '2022 DS Full PM', Plan 1: 'Network Control Plan 1')

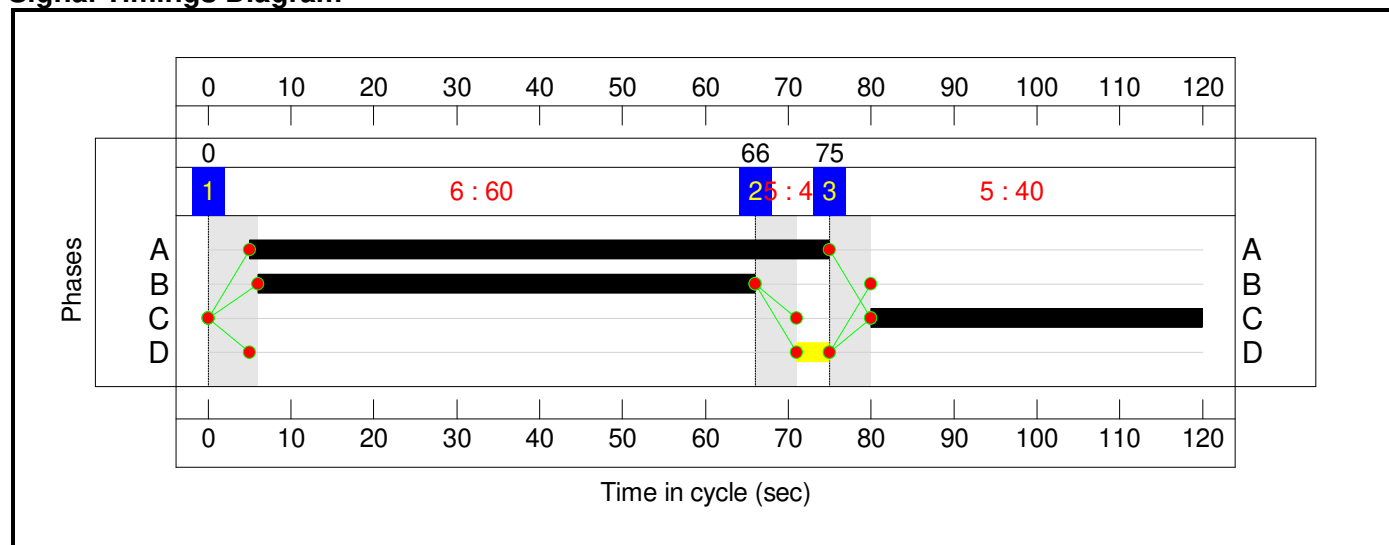
Stage Sequence Diagram



Stage Timings

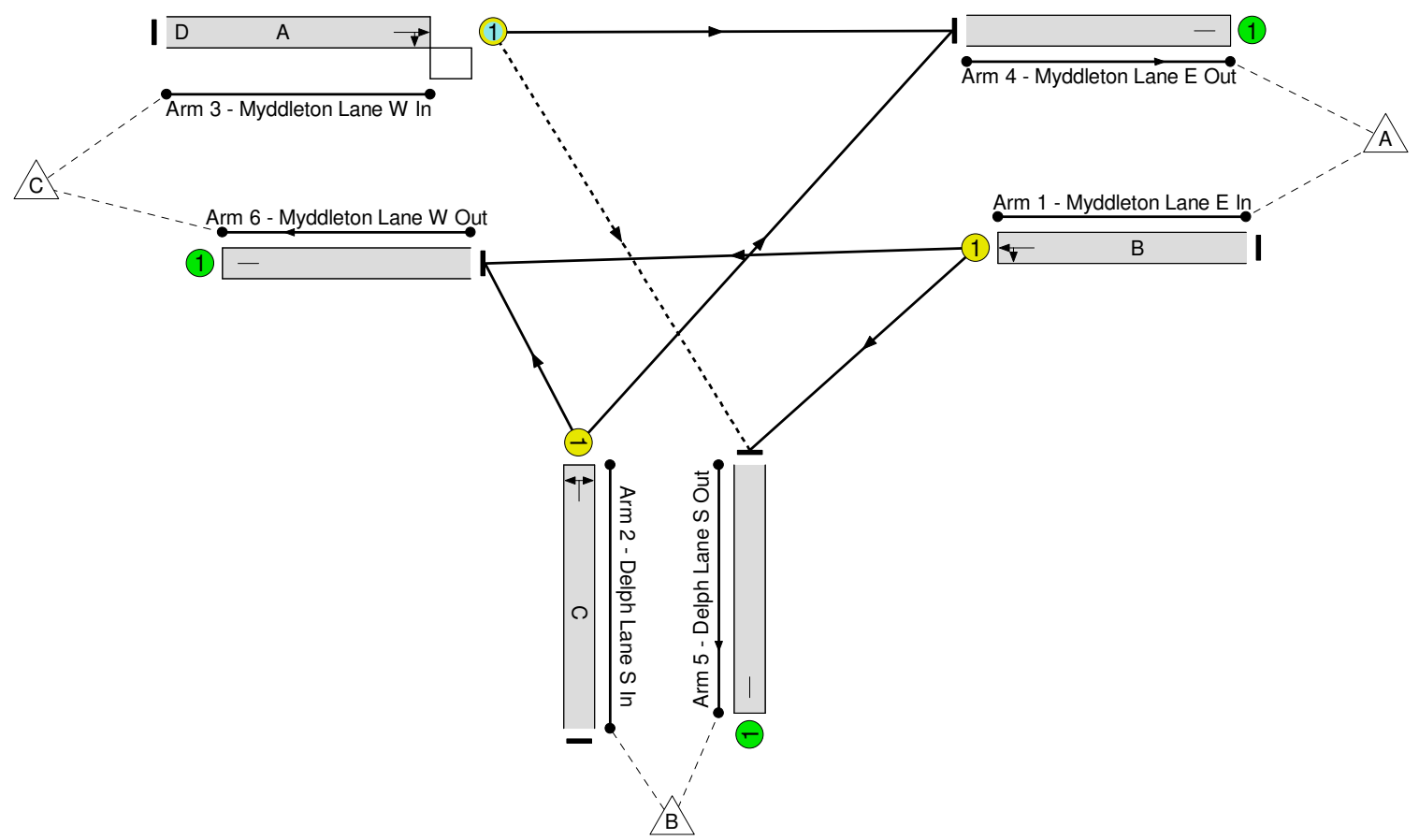
Stage	1	2	3
Duration	60	4	40
Change Point	0	66	75

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Myddleton / Delph Lane
PRC: 6.3 %
Total Traffic Delay: 17.8 pcuHr



Full Input Data And Results

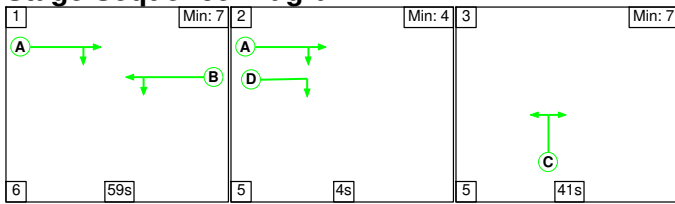
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	84.6%
Myddleton / Delph Lane	-	-	N/A	-	-		-	-	-	-	-	-	84.6%
1/1	Myddleton Lane E In Left Ahead	U	N/A	N/A	B		1	60	-	481	1862	947	50.8%
2/1	Delph Lane S In Right Left	U	N/A	N/A	C		1	40	-	423	1489	509	83.1%
3/1	Myddleton Lane W In Ahead Right	O	N/A	N/A	A	D	1	70	4	634	1751	749	84.6%
4/1	Myddleton Lane E Out	U	N/A	N/A	-		-	-	-	320	Inf	Inf	0.0%
5/1	Delph Lane S Out	U	N/A	N/A	-		-	-	-	495	Inf	Inf	0.0%
6/1	Myddleton Lane W Out	U	N/A	N/A	-		-	-	-	723	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	306	42	6	11.5	5.5	0.7	17.8	-	-	-	-
Myddleton / Delph Lane	-	-	306	42	6	11.5	5.5	0.7	17.8	-	-	-	-
1/1	481	481	-	-	-	2.6	0.5	-	3.1	23.4	10.6	0.5	11.1
2/1	423	423	-	-	-	4.3	2.3	-	6.6	56.2	12.9	2.3	15.3
3/1	634	634	306	42	6	4.7	2.6	0.7	8.0	45.6	18.8	2.6	21.5
4/1	320	320	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	495	495	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	723	723	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		6.3	Total Delay for Signalled Lanes (pcuHr):		17.78	Cycle Time (s): 120				
			PRC Over All Lanes (%):		6.3	Total Delay Over All Lanes(pcuHr):		17.78					

Full Input Data And Results

Scenario 13: '2027 DM PM' (FG13: '2027 DM PM', Plan 1: 'Network Control Plan 1')

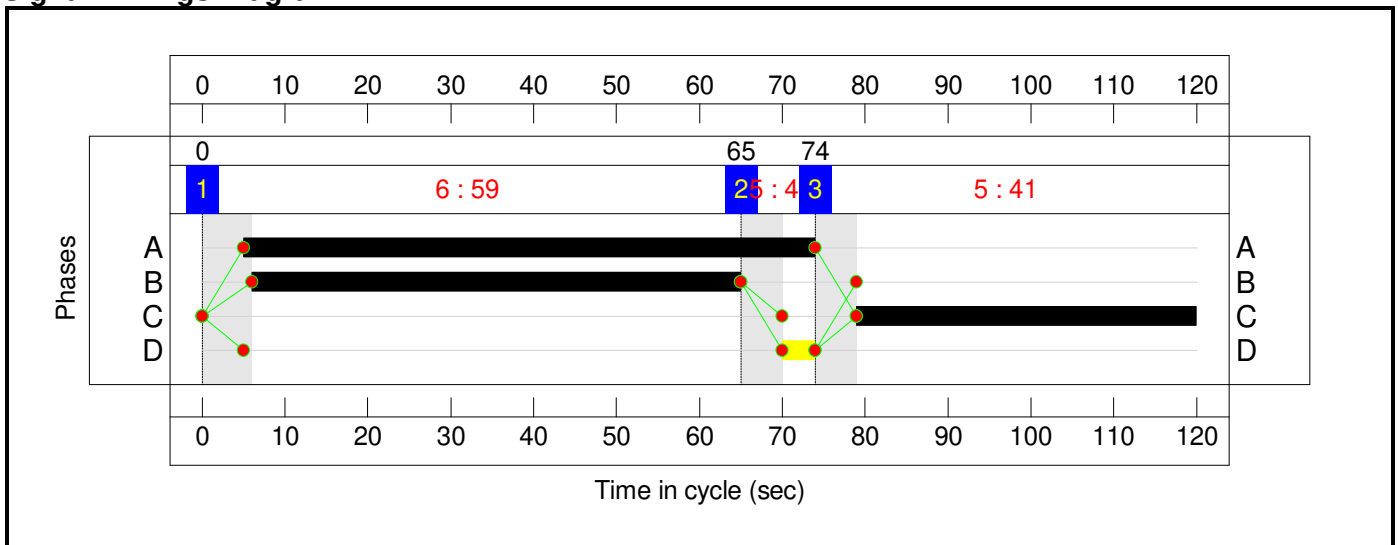
Stage Sequence Diagram



Stage Timings

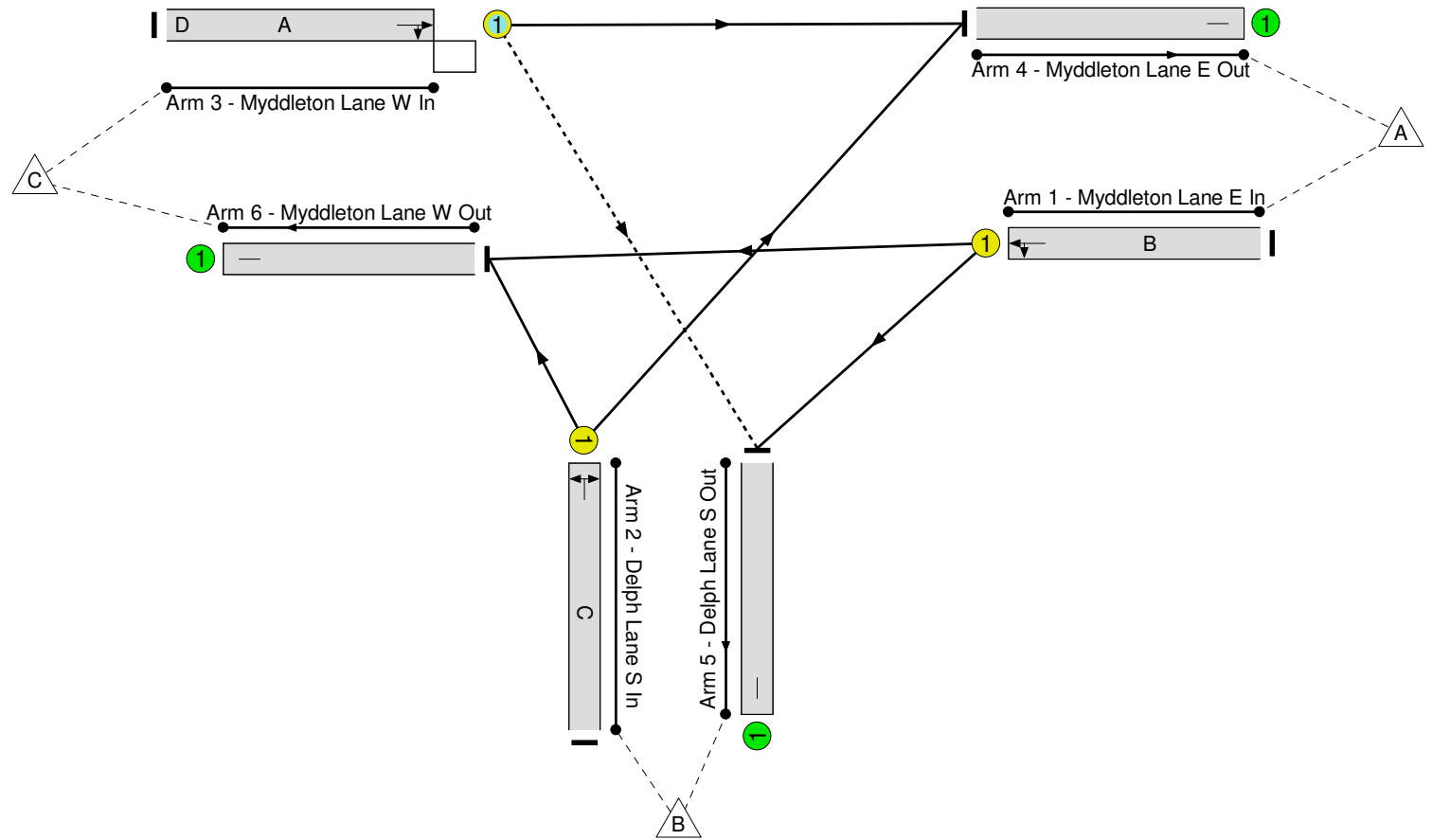
Stage	1	2	3
Duration	59	4	41
Change Point	0	65	74

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Myddleton / Delph Lane
PRC: 7.4 %
Total Traffic Delay: 17.7 pcuHr



Full Input Data And Results

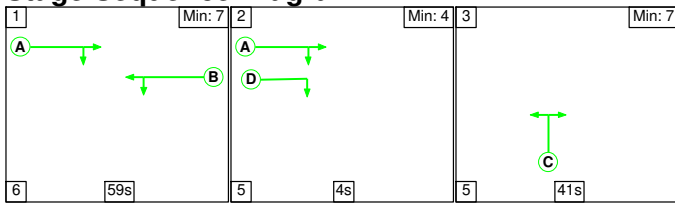
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	83.8%
Myddleton / Delph Lane	-	-	N/A	-	-		-	-	-	-	-	-	83.8%
1/1	Myddleton Lane E In Left Ahead	U	N/A	N/A	B		1	59	-	489	1870	935	52.3%
2/1	Delph Lane S In Right Left	U	N/A	N/A	C		1	41	-	439	1497	524	83.8%
3/1	Myddleton Lane W In Ahead Right	O	N/A	N/A	A	D	1	69	4	609	1754	733	83.1%
4/1	Myddleton Lane E Out	U	N/A	N/A	-		-	-	-	335	Inf	Inf	0.0%
5/1	Delph Lane S Out	U	N/A	N/A	-		-	-	-	466	Inf	Inf	0.0%
6/1	Myddleton Lane W Out	U	N/A	N/A	-		-	-	-	736	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	291	37	6	11.7	5.4	0.7	17.7	-	-	-	-
Myddleton / Delph Lane	-	-	291	37	6	11.7	5.4	0.7	17.7	-	-	-	-
1/1	489	489	-	-	-	2.8	0.5	-	3.3	24.3	11.0	0.5	11.5
2/1	439	439	-	-	-	4.4	2.4	-	6.8	55.9	13.4	2.4	15.9
3/1	609	609	291	37	6	4.5	2.4	0.7	7.6	45.1	17.9	2.4	20.3
4/1	335	335	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	466	466	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	736	736	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		7.4	Total Delay for Signalled Lanes (pcuHr):		17.75	Cycle Time (s): 120				
			PRC Over All Lanes (%):		7.4	Total Delay Over All Lanes(pcuHr):		17.75					

Full Input Data And Results

Scenario 14: '2027 DS PM' (FG14: '2027 DS PM', Plan 1: 'Network Control Plan 1')

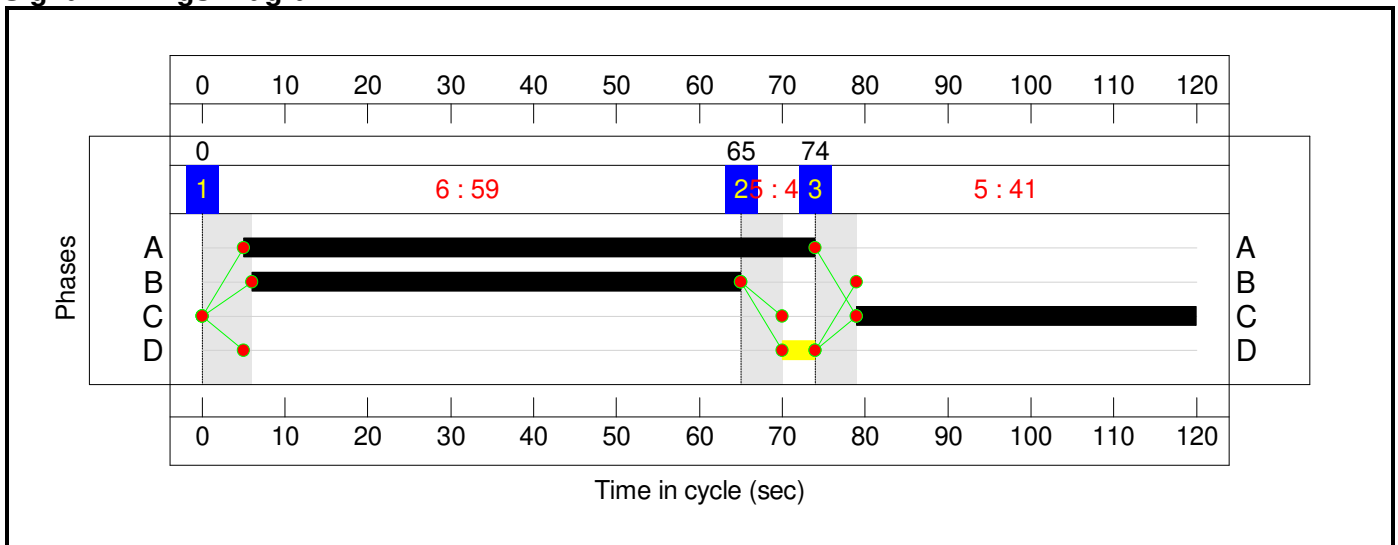
Stage Sequence Diagram



Stage Timings

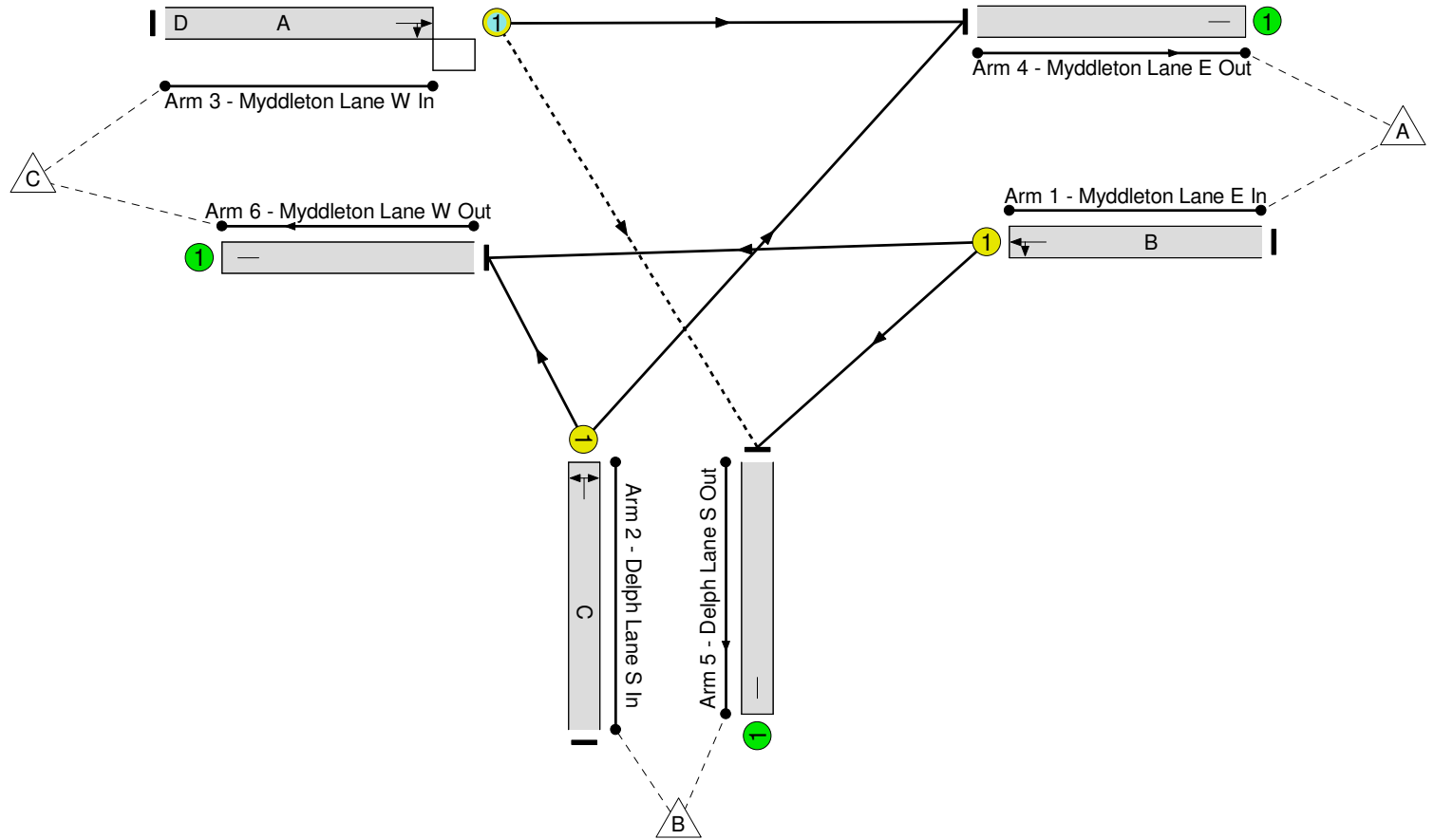

Stage	1	2	3
Duration	59	4	41
Change Point	0	65	74

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Myddleton / Delph Lane
PRC: -0.3 %
Total Traffic Delay: 21.8 pcuHr



Full Input Data And Results

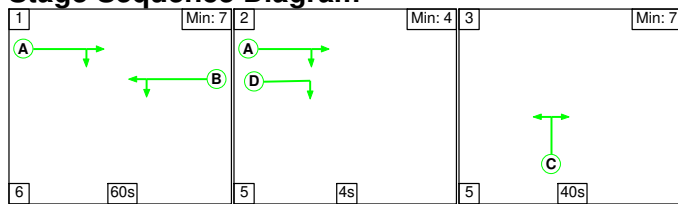
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	90.3%
Myddleton / Delph Lane	-	-	N/A	-	-		-	-	-	-	-	-	90.3%
1/1	Myddleton Lane E In Left Ahead	U	N/A	N/A	B		1	59	-	503	1864	932	54.0%
2/1	Delph Lane S In Right Left	U	N/A	N/A	C		1	41	-	474	1500	525	90.3%
3/1	Myddleton Lane W In Ahead Right	O	N/A	N/A	A	D	1	69	4	615	1746	689	89.2%
4/1	Myddleton Lane E Out	U	N/A	N/A	-		-	-	-	339	Inf	Inf	0.0%
5/1	Delph Lane S Out	U	N/A	N/A	-		-	-	-	497	Inf	Inf	0.0%
6/1	Myddleton Lane W Out	U	N/A	N/A	-		-	-	-	756	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	280	65	6	12.6	8.4	0.8	21.8	-	-	-	-
Myddleton / Delph Lane	-	-	280	65	6	12.6	8.4	0.8	21.8	-	-	-	-
1/1	503	503	-	-	-	2.9	0.6	-	3.5	24.7	11.5	0.6	12.0
2/1	474	474	-	-	-	4.9	4.0	-	8.9	67.6	15.0	4.0	19.0
3/1	615	615	280	65	6	4.9	3.8	0.8	9.4	55.2	19.0	3.8	22.7
4/1	339	339	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	497	497	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	756	756	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		-0.3	Total Delay for Signalled Lanes (pcuHr):		21.77	Cycle Time (s): 120				
			PRC Over All Lanes (%):		-0.3	Total Delay Over All Lanes(pcuHr):		21.77					

Full Input Data And Results

Scenario 15: '2032 DM PM' (FG15: '2032 DM PM', Plan 1: 'Network Control Plan 1')

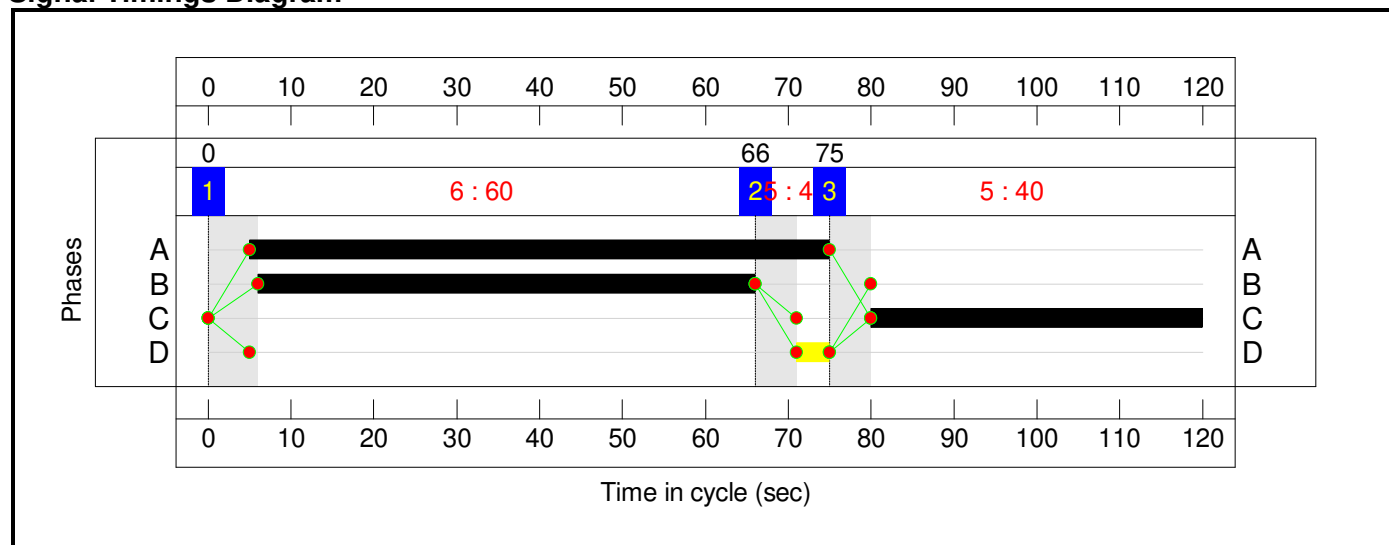
Stage Sequence Diagram



Stage Timings

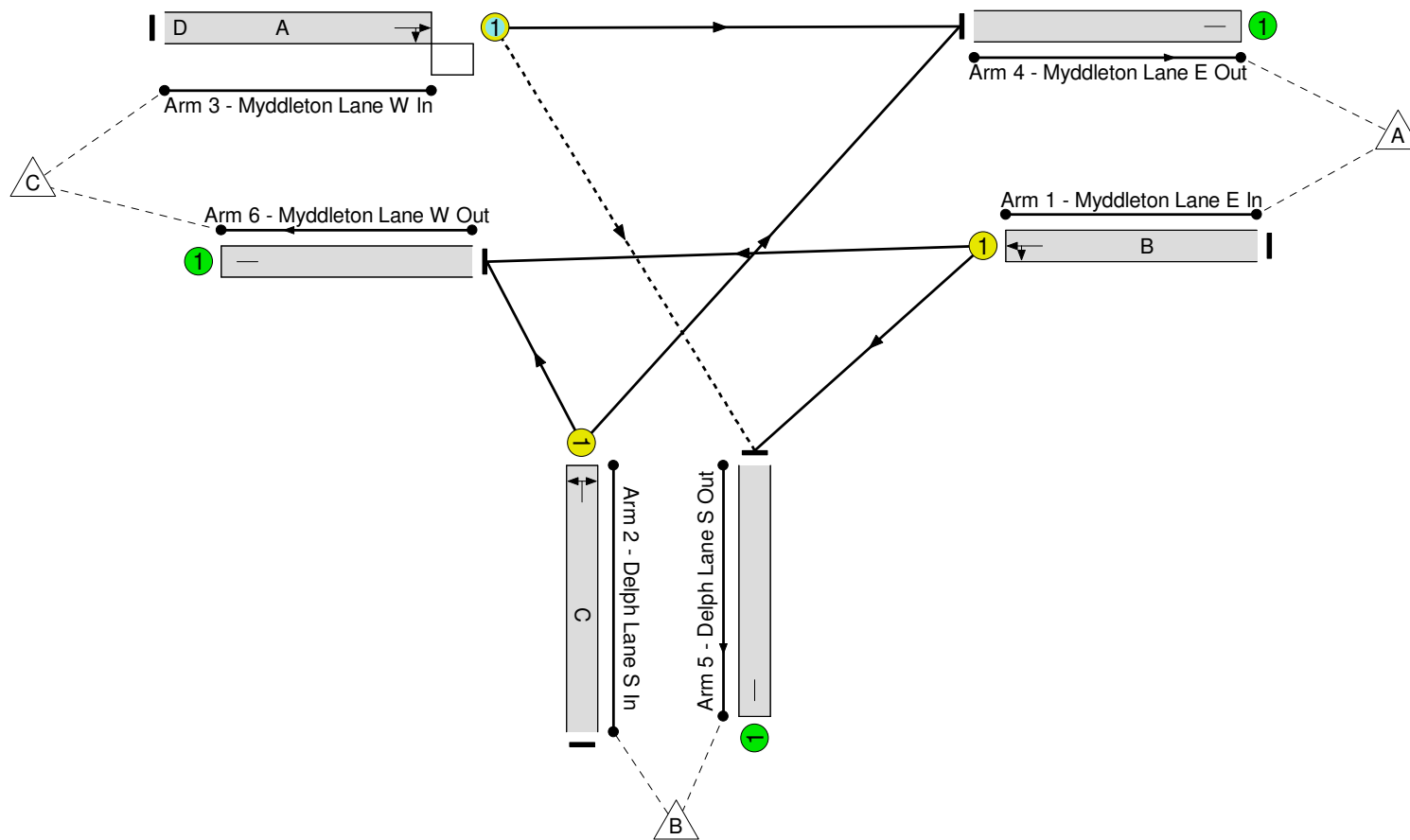
Stage	1	2	3
Duration	60	4	40
Change Point	0	66	75

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Myddleton / Delph Lane
PRC: -2.3 %
Total Traffic Delay: 22.9 pcuHr



Full Input Data And Results

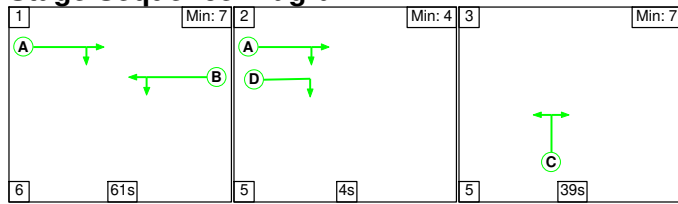
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	92.0%
Myddleton / Delph Lane	-	-	N/A	-	-		-	-	-	-	-	-	92.0%
1/1	Myddleton Lane E In Left Ahead	U	N/A	N/A	B		1	60	-	515	1869	950	54.2%
2/1	Delph Lane S In Right Left	U	N/A	N/A	C		1	40	-	472	1501	513	92.0%
3/1	Myddleton Lane W In Ahead Right	O	N/A	N/A	A	D	1	70	4	632	1751	702	90.0%
4/1	Myddleton Lane E Out	U	N/A	N/A	-		-	-	-	354	Inf	Inf	0.0%
5/1	Delph Lane S Out	U	N/A	N/A	-		-	-	-	494	Inf	Inf	0.0%
6/1	Myddleton Lane W Out	U	N/A	N/A	-		-	-	-	771	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	280	67	6	12.8	9.3	0.8	22.9	-	-	-	-
Myddleton / Delph Lane	-	-	280	67	6	12.8	9.3	0.8	22.9	-	-	-	-
1/1	515	515	-	-	-	2.9	0.6	-	3.5	24.1	11.6	0.6	12.2
2/1	472	472	-	-	-	5.0	4.7	-	9.7	73.8	15.1	4.7	19.8
3/1	632	632	280	67	6	5.0	4.1	0.8	9.8	55.9	19.7	4.1	23.7
4/1	354	354	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	494	494	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	771	771	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		-2.3	Total Delay for Signalled Lanes (pcuHr):		22.95	Cycle Time (s): 120				
			PRC Over All Lanes (%):		-2.3	Total Delay Over All Lanes(pcuHr):		22.95					

Full Input Data And Results

Scenario 16: '2032 DS Full PM' (FG16: '2032 DS Full PM', Plan 1: 'Network Control Plan 1')

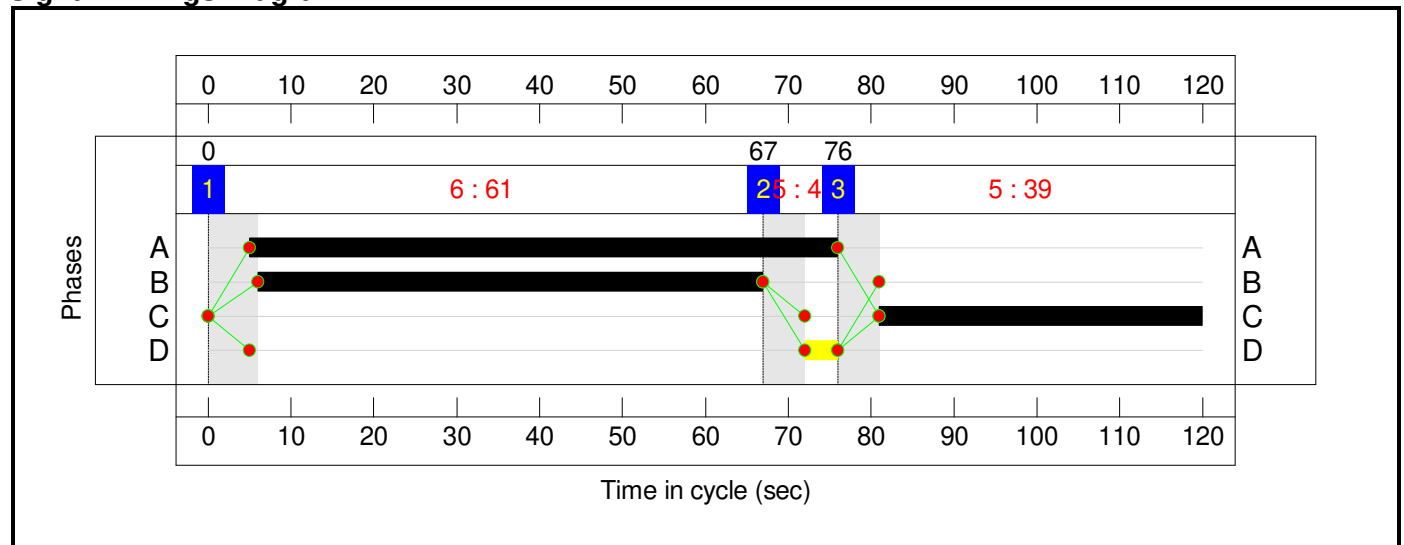
Stage Sequence Diagram



Stage Timings

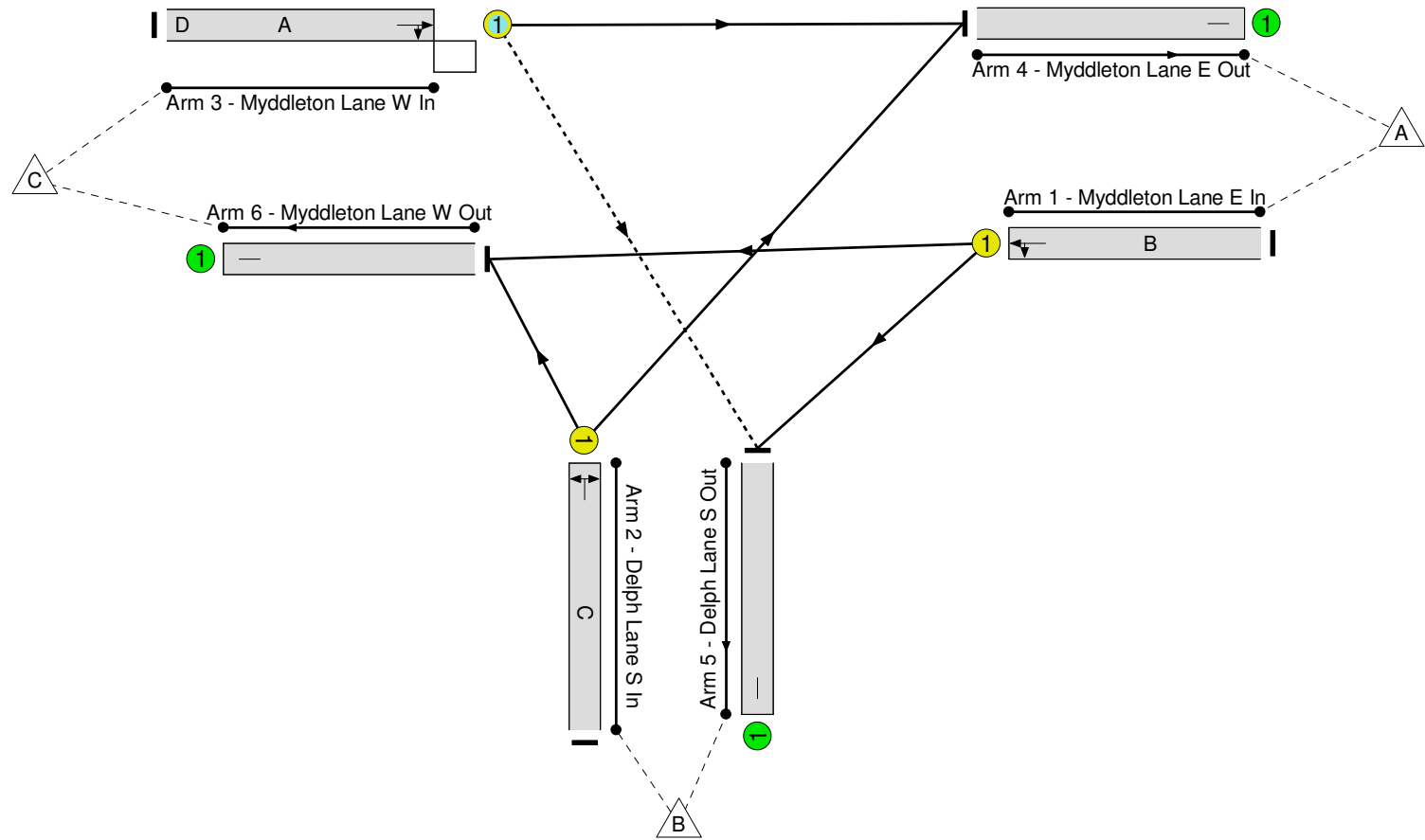

Stage	1	2	3
Duration	61	4	39
Change Point	0	67	76

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Myddleton / Delph Lane
PRC: -10.6 %
Total Traffic Delay: 35.2 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	99.5%
Myddleton / Delph Lane	-	-	N/A	-	-		-	-	-	-	-	-	99.5%
1/1	Myddleton Lane E In Left Ahead	U	N/A	N/A	B		1	61	-	532	1860	961	55.4%
2/1	Delph Lane S In Right Left	U	N/A	N/A	C		1	39	-	498	1501	500	99.5%
3/1	Myddleton Lane W In Ahead Right	O	N/A	N/A	A	D	1	71	4	660	1743	677	97.4%
4/1	Myddleton Lane E Out	U	N/A	N/A	-		-	-	-	358	Inf	Inf	0.0%
5/1	Delph Lane S Out	U	N/A	N/A	-		-	-	-	541	Inf	Inf	0.0%
6/1	Myddleton Lane W Out	U	N/A	N/A	-		-	-	-	791	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	276	98	7	14.0	20.4	0.8	35.2	-	-	-	-
Myddleton / Delph Lane	-	-	276	98	7	14.0	20.4	0.8	35.2	-	-	-	-
1/1	532	532	-	-	-	2.9	0.6	-	3.5	23.8	12.0	0.6	12.6
2/1	498	498	-	-	-	5.5	10.6	-	16.1	116.5	16.5	10.6	27.1
3/1	660	660	276	98	7	5.5	9.2	0.8	15.6	85.0	21.6	9.2	30.9
4/1	358	358	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	541	541	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	791	791	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		-10.6	Total Delay for Signalled Lanes (pcuHr):		35.22	Cycle Time (s): 120				
			PRC Over All Lanes (%):		-10.6	Total Delay Over All Lanes(pcuHr):		35.22					

APPENDIX 25

Junctions 9

ARCADY 9 - Roundabout Module PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: Peel Hall Advanced Mode Existing Arrangement 050320.j9

Path: C:\Users\Brad\Highgate Transportation\HTp - Documents\1900 - Projects\1901 - Peel Hall\Modelling\Junctions 9\A50 Hilden Road Roundabout

Report generation date: 05/03/2020 16:53:12

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
A50-Conjunction [Lane Simulation] - 2018 Validation										
1 - A50/Hilden Rd Roundabout - 1 - Hilden Rd	D1	1.4	8.32		A	D9	2.2	10.77		B
1 - A50/Hilden Rd Roundabout - 2 - Orford Rd		3.2	15.13		C		14.3	49.88		E
1 - A50/Hilden Rd Roundabout - 3 - Smith Drive		0.9	7.65		A		0.2	5.40		A
1 - A50/Hilden Rd Roundabout - 4 - A50		1.7	8.23		A		2.0	7.26		A
2 - Poplars Ave/A50 - A - A50 W		0.1	0.70		A		0.1	0.87		A
2 - Poplars Ave/A50 - B - Poplars Ave		1.7	18.41		C		2.5	25.79		D
2 - Poplars Ave/A50 - C - A50 E		0.4	2.51		A		2.6	9.89		A
A50-Conjunction [Lane Simulation] - 2022 DM										
1 - A50/Hilden Rd Roundabout - 1 - Hilden Rd	D2	1.8	8.91		A	D10	2.4	12.46		B
1 - A50/Hilden Rd Roundabout - 2 - Orford Rd		5.3	18.97		C		23.3	78.03		F
1 - A50/Hilden Rd Roundabout - 3 - Smith Drive		0.9	8.40		A		0.2	5.46		A
1 - A50/Hilden Rd Roundabout - 4 - A50		1.8	8.61		A		2.0	7.66		A
2 - Poplars Ave/A50 - A - A50 W		0.1	0.65		A		0.2	1.29		A
2 - Poplars Ave/A50 - B - Poplars Ave		4.0	31.51		D		4.3	41.33		E
2 - Poplars Ave/A50 - C - A50 E		0.5	2.60		A		2.6	9.81		A
A50-Conjunction [Lane Simulation] - 2022 DS										
1 - A50/Hilden Rd Roundabout - 1 - Hilden Rd	D3	1.7	9.45		A	D11	2.8	14.53		B
1 - A50/Hilden Rd Roundabout - 2 - Orford Rd		7.8	27.48		D		30.6	96.95		F
1 - A50/Hilden Rd Roundabout - 3 - Smith Drive		1.0	8.74		A		0.2	5.82		A
1 - A50/Hilden Rd Roundabout - 4 - A50		2.1	9.08		A		2.1	7.75		A
2 - Poplars Ave/A50 - A - A50 W		0.1	0.91		A		0.3	1.51		A
2 - Poplars Ave/A50 - B - Poplars Ave		5.8	45.06		E		4.3	44.48		E
2 - Poplars Ave/A50 - C - A50 E		0.6	2.69		A		2.8	10.26		B

A50-Conjunction [Lane Simulation] - 2022 DS Full								
1 - A50/Hilden Rd Roundabout - 1 - Hilden Rd	D4	3.7	15.18	C	D12	3.5	13.86	B
1 - A50/Hilden Rd Roundabout - 2 - Orford Rd		20.6	65.48	F		54.4	160.96	F
1 - A50/Hilden Rd Roundabout - 3 - Smith Drive		1.2	9.93	A		0.3	6.36	A
1 - A50/Hilden Rd Roundabout - 4 - A50		2.3	9.70	A		2.2	8.39	A
2 - Poplars Ave/A50 - A - A50 W		0.3	1.01	A		0.5	1.96	A
2 - Poplars Ave/A50 - B - Poplars Ave		12.7	83.68	F		7.5	67.47	F
2 - Poplars Ave/A50 - C - A50 E		0.7	2.99	A		2.6	9.94	A
A50-Conjunction [Lane Simulation] - 2027 DM								
1 - A50/Hilden Rd Roundabout - 1 - Hilden Rd	D5	1.9	10.06	B	D13	3.0	13.71	B
1 - A50/Hilden Rd Roundabout - 2 - Orford Rd		8.3	29.44	D		36.3	112.57	F
1 - A50/Hilden Rd Roundabout - 3 - Smith Drive		1.2	9.24	A		0.2	5.65	A
1 - A50/Hilden Rd Roundabout - 4 - A50		2.1	9.30	A		2.1	7.75	A
2 - Poplars Ave/A50 - A - A50 W		0.2	1.02	A		0.3	1.48	A
2 - Poplars Ave/A50 - B - Poplars Ave		8.0	60.34	F		5.2	53.75	F
2 - Poplars Ave/A50 - C - A50 E		0.8	2.95	A		2.9	9.83	A
A50-Conjunction [Lane Simulation] - 2027 DS								
1 - A50/Hilden Rd Roundabout - 1 - Hilden Rd	D6	2.6	12.71	B	D14	3.5	16.59	C
1 - A50/Hilden Rd Roundabout - 2 - Orford Rd		26.9	78.74	F		77.7	234.27	F
1 - A50/Hilden Rd Roundabout - 3 - Smith Drive		1.4	11.17	B		0.3	6.34	A
1 - A50/Hilden Rd Roundabout - 4 - A50		2.2	9.89	A		2.3	8.37	A
2 - Poplars Ave/A50 - A - A50 W		0.2	1.17	A		0.4	1.93	A
2 - Poplars Ave/A50 - B - Poplars Ave		22.0	132.23	F		12.8	101.10	F
2 - Poplars Ave/A50 - C - A50 E		0.9	3.50	A		2.9	10.80	B
A50-Conjunction [Lane Simulation] - 2032 DM								
1 - A50/Hilden Rd Roundabout - 1 - Hilden Rd	D7	2.3	11.11	B	D15	2.9	13.87	B
1 - A50/Hilden Rd Roundabout - 2 - Orford Rd		13.7	46.10	E		52.6	157.29	F
1 - A50/Hilden Rd Roundabout - 3 - Smith Drive		1.5	10.80	B		0.2	6.09	A
1 - A50/Hilden Rd Roundabout - 4 - A50		2.2	9.70	A		2.2	8.06	A
2 - Poplars Ave/A50 - A - A50 W		0.2	1.08	A		0.3	1.63	A
2 - Poplars Ave/A50 - B - Poplars Ave		15.9	100.28	F		9.1	68.68	F
2 - Poplars Ave/A50 - C - A50 E		0.7	2.97	A		2.8	9.29	A
A50-Conjunction [Lane Simulation] - 2032 DS Full								
1 - A50/Hilden Rd Roundabout - 1 - Hilden Rd	D8	3.5	15.25	C	D16	3.4	15.16	C
1 - A50/Hilden Rd Roundabout - 2 - Orford Rd		48.2	138.79	F		93.3	292.40	F
1 - A50/Hilden Rd Roundabout - 3 - Smith Drive		1.1	10.46	B		0.4	6.69	A
1 - A50/Hilden Rd Roundabout - 4 - A50		2.2	9.49	A		2.4	8.71	A
2 - Poplars Ave/A50 - A - A50 W		0.2	0.97	A		0.7	2.57	A
2 - Poplars Ave/A50 - B - Poplars Ave		25.4	147.79	F		15.8	123.33	F
2 - Poplars Ave/A50 - C - A50 E		0.8	3.07	A		2.7	9.25	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	17/10/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	1.00	100000	100000	-1	3	1	60	✓			506243264	101	9.12

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Validation	AM	ONE HOUR	08:00	09:30	15	✓
D2	2022 DM	AM	ONE HOUR	08:00	09:30	15	✓
D3	2022 DS	AM	ONE HOUR	08:00	09:30	15	✓
D4	2022 DS Full	AM	ONE HOUR	08:00	09:30	15	✓
D5	2027 DM	AM	ONE HOUR	08:00	09:30	15	✓
D6	2027 DS	AM	ONE HOUR	08:00	09:30	15	✓
D7	2032 DM	AM	ONE HOUR	08:00	09:30	15	✓
D8	2032 DS Full	AM	ONE HOUR	08:00	09:30	15	✓
D9	2018 Validation	PM	ONE HOUR	17:00	18:30	15	✓
D10	2022 DM	PM	ONE HOUR	17:00	18:30	15	✓
D11	2022 DS	PM	ONE HOUR	17:00	18:30	15	✓
D12	2022 DS Full	PM	ONE HOUR	17:00	18:30	15	✓
D13	2027 DM	PM	ONE HOUR	17:00	18:30	15	✓
D14	2027 DS	PM	ONE HOUR	17:00	18:30	15	✓
D15	2032 DM	PM	ONE HOUR	17:00	18:30	15	✓
D16	2032 DS Full	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
AV-1	A50-Conjunction	✓	✓	100.000	100.000

A50-Conjunction - 2018 Validation, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	AV-1 - A50-Conjunction [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout			1, 2, 3, 4	10.52	B
2	Poplars Ave/A50	T-Junction	Two-way			5.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Name	Description	Arm type
1 - A50/Hilden Rd Roundabout	1	Hilden Rd	Hilden Rd	
	2	Orford Rd		
	3	Smith Drive		
	4	A50		
2 - Poplars Ave/A50	A	A50 W		Major
	B	Poplars Ave		Minor
	C	A50 E		Major

Roundabout Geometry

Junction	Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	3.70	5.50	11.3	31.3	78.0	54.5	
	2 - Orford Rd	4.35	4.35	0.0	26.8	78.0	25.1	
	3 - Smith Drive	3.60	4.40	3.8	15.0	78.0	32.0	
	4 - A50	3.85	3.85	0.0	48.7	78.0	20.5	

Major Arm Geometry

Junction	Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
2 - Poplars Ave/A50	C - A50 E	11.00		✓	3.00	120.0	✓	3.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Junction	Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
2 - Poplars Ave/A50	B - Poplars Ave	One lane	5.00	120	52

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	0.415	1383
	2 - Orford Rd	0.433	1357
	3 - Smith Drive	0.399	1207
	4 - A50	0.423	1239

The slope and intercept shown above include any corrections and adjustments.

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
2 - Poplars Ave/A50	B-A	651	0.093	0.235	0.148	0.335
	B-C	788	0.095	0.239	-	-
	C-B	699	0.212	0.212	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Lane Simulation: Arm options

Junction	Arm	Lane capacity source	Traffic considering secondary lanes (%)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Evenly split	10.00
	2 - Orford Rd	Evenly split	10.00
	3 - Smith Drive	Evenly split	10.00
	4 - A50	Evenly split	10.00
2 - Poplars Ave/A50	A - A50 W		
	B - Poplars Ave		
	C - A50 E		

Lanes

Junction	Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised	
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4		Infinity		0	99999		
		Exit	1	1			Infinity					
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4		Infinity		0	99999		
		Exit	1	1			Infinity					
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4		Infinity		0	99999		
		Exit	1	1			Infinity					
	4 - A50	Entry	1	1	1, 2, 3, 4	✓	3.00		0	99999		
		Exit	1	1		✓	3.00					
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C		Infinity		0	99999		
		Exit	1	1			Infinity					
	B - Poplars Ave	Entry	1	1	A, C		Infinity		0	99999		
		Exit	1	1			Infinity					
	C - A50 E	Entry	1	1	A	✓	3.00		0	99999		
			2	1	B	✓	3.00		0	99999		
		Exit	2	1	(A, B)	✓	3.00					
			1	1		✓	3.00					

Entry Lane slope and intercept

Junction	Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	0.415	1383
	2 - Orford Rd	Entry	1	1	0.433	1357
	3 - Smith Drive	Entry	1	1	0.399	1207
	4 - A50	Entry	1	1	0.423	1239

Summary of Entry Lane allowed movements

Junction	Arm	Lane Level	Lane	Destination arm			
				Hilden Rd	Orford Rd	Smith Drive	A50
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	1	1	✓	✓	✓	✓
	2 - Orford Rd	1	1	✓	✓	✓	✓
	3 - Smith Drive	1	1	✓	✓	✓	✓
	4 - A50	1	1	✓	✓	✓	✓

Summary of Entry Lane allowed movements

Junction	Arm	Lane Level	Lane	Destination arm		
				A50 W	Poplars Ave	A50 E
2 - Poplars Ave/A50	A - A50 W	1	1		✓	✓
	B - Poplars Ave	1	1	✓		✓
	C - A50 E	1	1	✓		
			2		✓	
		2	1	✓	✓	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Validation	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A50/Hilden Rd Roundabout	4 - A50	2	C	Simple (vertical queueing)	Normal	0	100.00	
2 - Poplars Ave/A50	C - A50 E	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd		ONE HOUR	✓	527	100.000
	2 - Orford Rd		ONE HOUR	✓	782	100.000
	3 - Smith Drive		ONE HOUR	✓	345	100.000
	4 - A50	✓				
2 - Poplars Ave/A50	A - A50 W		ONE HOUR	✓	490	100.000
	B - Poplars Ave		ONE HOUR	✓	315	100.000
	C - A50 E	✓				

Origin-Destination Data

Demand (PCU/hr)

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	52	384	91
	2 - Orford Rd	208	0	80	494
	3 - Smith Drive	234	108	0	3
	4 - A50	44	579	19	0

Demand (PCU/hr)

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	164	326
	B - Poplars Ave	0	0	315
	C - A50 E	433	154	0

Vehicle Mix

Heavy Vehicle Percentages

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	2	1	1
	2 - Orford Rd	0	0	3	4
	3 - Smith Drive	1	0	0	0
	4 - A50	1	3	0	0

Heavy Vehicle Percentages

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	0	3
	B - Poplars Ave	0	0	3
	C - A50 E	3	6	0

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	8.32	1.4	A	491	736
	2 - Orford Rd	15.13	3.2	C	722	1083
	3 - Smith Drive	7.65	0.9	A	314	471
	4 - A50	8.23	1.7	A	592	888
2 - Poplars Ave/A50	A - A50 W	0.70	0.1	A	452	677
	B - Poplars Ave	18.41	1.7	C	291	436
	C - A50 E	2.51	0.4	A	544	816

Main Results for each time segment

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	412	103	536	410	402	358	0.0	0.7	4.691	A
	2 - Orford Rd	585	146	386	584	582	560	0.0	1.1	6.162	A
	3 - Smith Drive	253	63	597	252	255	373	0.0	0.4	4.837	A
	4 - A50	487	122	408	487	479	442	0.0	0.8	5.620	A
2 - Poplars Ave/A50	A - A50 W	370	92		370	371	332	0.0	0.0	0.050	A
	B - Poplars Ave	238	59		241	237	236	0.0	0.5	8.673	A
	C - A50 E	444	111		444	445	485	0.0	0.2	1.926	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	477	119	645	477	475	437	0.7	0.8	5.422	A
	2 - Orford Rd	715	179	447	716	701	676	1.1	1.6	7.983	A
	3 - Smith Drive	308	77	723	307	307	440	0.4	0.5	5.783	A
	4 - A50	591	148	492	590	571	537	0.8	1.2	6.729	A
2 - Poplars Ave/A50	A - A50 W	438	110		439	436	397	0.0	0.0	0.146	A
	B - Poplars Ave	289	72		291	281	279	0.5	0.7	10.620	B
	C - A50 E	538	135		536	525	591	0.2	0.4	2.123	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	590	148	769	592	585	537	0.8	1.4	7.786	A
	2 - Orford Rd	849	212	551	863	862	810	1.6	3.0	13.204	B
	3 - Smith Drive	374	94	877	377	383	536	0.5	0.8	7.647	A
	4 - A50	697	174	609	697	692	645	1.2	1.7	8.226	A
2 - Poplars Ave/A50	A - A50 W	535	134		535	533	474	0.0	0.1	0.613	A
	B - Poplars Ave	347	87		346	346	355	0.7	1.7	17.921	C
	C - A50 E	646	161		646	646	698	0.4	0.3	2.287	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	586	146	790	589	588	546	1.4	1.3	8.320	A
	2 - Orford Rd	874	219	552	883	863	826	3.0	3.2	15.134	C
	3 - Smith Drive	380	95	895	381	378	539	0.8	0.9	7.546	A
	4 - A50	716	179	619	716	709	657	1.7	1.5	8.219	A
2 - Poplars Ave/A50	A - A50 W	544	136		544	541	490	0.1	0.0	0.702	A
	B - Poplars Ave	350	88		353	348	350	1.7	1.6	18.410	C
	C - A50 E	656	164		657	649	715	0.3	0.4	2.514	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	476	119	642	478	475	440	1.3	0.6	5.648	A
	2 - Orford Rd	711	178	449	710	714	671	3.2	1.5	8.755	A
	3 - Smith Drive	315	79	715	317	317	442	0.9	0.4	6.224	A
	4 - A50	577	144	505	577	581	529	1.5	1.3	6.980	A
2 - Poplars Ave/A50	A - A50 W	450	113		451	442	391	0.0	0.0	0.180	A
	B - Poplars Ave	282	71		281	287	293	1.6	0.9	10.304	B
	C - A50 E	531	133		532	538	580	0.4	0.4	2.227	A

09:15 - 09:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	403	101	527	402	400	372	0.6	0.6	4.879	A
	2 - Orford Rd	598	149	375	599	592	554	1.5	1.0	6.080	A
	3 - Smith Drive	253	63	610	255	257	365	0.4	0.3	5.001	A
	4 - A50	484	121	417	482	487	448	1.3	0.8	5.871	A
2 - Poplars Ave/A50	A - A50 W	373	93		373	370	335	0.0	0.0	0.040	A
	B - Poplars Ave	238	60		239	242	238	0.9	0.5	8.332	A
	C - A50 E	450	112		448	442	487	0.4	0.3	2.010	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	412	1160	0.355	410	402	0.0	0.7	4.691	A
		Exit	1	1		358			358	357	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	585	1190	0.491	584	582	0.0	1.1	6.162	A
		Exit	1	1		560			560	549	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	253	969	0.261	252	255	0.0	0.4	4.837	A
		Exit	1	1		373			373	368	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	487	1066	0.457	487	479	0.0	0.8	5.620	A
		Exit	1	1		442			442	443	0.0	0.0	0.021	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	370			370	371	0.0	0.0	0.050	A
		Exit	1	1		332			332	331	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	238			241	237	0.0	0.5	8.673	A
		Exit	1	1		236			236	238	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	332			332	331	0.0	0.0	0.000	A
				2	B	111			112	113	0.0	0.2	7.379	A
		Exit	1	1	(A, B)	444			444	446	0.0	0.0	0.075	A
							486			485	482	0.0	0.2	0.585

08:15 - 08:30

Junction	Arm	Side	Lane level	Lane	Destinations	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	477	1115	0.428	477	475	0.7	0.8	5.422	A
		Exit	1	1		437			437	434	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	715	1163	0.615	716	701	1.1	1.6	7.983	A
		Exit	1	1		676			676	658	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	308	919	0.335	307	307	0.4	0.5	5.783	A
		Exit	1	1		440			440	436	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	591	1031	0.574	590	571	0.8	1.2	6.729	A
		Exit	1	1		537			537	526	0.0	0.0	0.005	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	438			439	436	0.0	0.0	0.146	A
		Exit	1	1		397			397	388	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	289			291	281	0.5	0.7	10.620	B
		Exit	1	1		279			279	282	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	397			397	388	0.0	0.0	0.000	A
				2	B	141			139	137	0.2	0.4	8.028	A
			2	1	(A, B)	538			538	526	0.0	0.0	0.063	A
		Exit	1	1		590			591	573	0.2	0.1	1.281	A

08:30 - 08:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	590	1064	0.555	592	585	0.8	1.4	7.786	A
		Exit	1	1		537			537	534	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	849	1118	0.759	863	862	1.6	3.0	13.204	B
		Exit	1	1		810			810	808	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	374	857	0.437	377	383	0.5	0.8	7.647	A
		Exit	1	1		536			536	534	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	697	981	0.711	697	692	1.2	1.7	8.226	A
		Exit	1	1		645			645	645	0.0	0.0	0.029	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	535			535	533	0.0	0.1	0.613	A
		Exit	1	1		474			474	477	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	347			346	346	0.7	1.7	17.921	C
		Exit	1	1		355			355	349	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	474			474	477	0.0	0.0	0.000	A
				2	B	172			172	169	0.4	0.3	8.459	A
			2	1	(A, B)	646			646	646	0.0	0.0	0.115	A
		Exit	1	1		698			698	697	0.1	0.6	2.767	A

08:45 - 09:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	586	1055	0.555	589	588	1.4	1.3	8.320	A
		Exit	1	1		546			546	534	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	874	1118	0.782	883	863	3.0	3.2	15.134	C
		Exit	1	1		826			826	816	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	380	850	0.447	381	378	0.8	0.9	7.546	A
		Exit	1	1		539			539	539	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	716	977	0.733	716	709	1.7	1.5	8.219	A
		Exit	1	1		657			657	649	0.0	0.0	0.074	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	544			544	541	0.1	0.0	0.702	A
		Exit	1	1		490			490	478	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	350			353	348	1.7	1.6	18.410	C
		Exit	1	1		350			350	351	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	490			490	478	0.0	0.0	0.000	A
				2	B	167			167	170	0.3	0.4	8.853	A
			2	1	(A, B)	656			657	649	0.0	0.0	0.230	A
		Exit	1	1		714			715	710	0.6	0.4	2.781	A

09:00 - 09:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	476	1116	0.426	478	475	1.3	0.6	5.648	A
		Exit	1	1		440			440	443	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	711	1163	0.612	710	714	3.2	1.5	8.755	A
		Exit	1	1		671			671	671	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	315	921	0.342	317	317	0.9	0.4	6.224	A
		Exit	1	1		442			442	439	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	577	1025	0.563	577	581	1.5	1.3	6.980	A
		Exit	1	1		529			529	535	0.0	0.0	0.019	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	450			451	442	0.0	0.0	0.180	A
		Exit	1	1		391			391	397	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	282			281	287	1.6	0.9	10.304	B
		Exit	1	1		293			293	289	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	391			391	397	0.0	0.0	0.000	A
				2	B	140			141	141	0.4	0.4	8.351	A
			2	1	(A, B)	531			530	538	0.0	0.0	0.094	A
		Exit	1	1		580			580	582	0.4	0.3	1.360	A

09:15 - 09:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	403	1164	0.346	402	400	0.6	0.6	4.879	A
		Exit	1	1		372			372	365	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	598	1194	0.500	599	592	1.5	1.0	6.080	A
		Exit	1	1		554			554	562	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	253	964	0.263	255	257	0.4	0.3	5.001	A
		Exit	1	1		365			365	368	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	484	1062	0.455	482	487	1.3	0.8	5.871	A
		Exit	1	1		448			448	440	0.0	0.0	0.003	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	373			373	370	0.0	0.0	0.040	A
		Exit	1	1		335			335	327	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	238			239	242	0.9	0.5	8.332	A
		Exit	1	1		238			238	242	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	335			335	327	0.0	0.0	0.000	A
				2	B	115			113	116	0.4	0.3	7.785	A
		Exit	1	1	(A, B)	450			450	442	0.0	0.0	0.037	A
						487			487	487	0.3	0.1	0.665	A

A50-Conjunction - 2022 DM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	AV-1 - A50-Conjunction [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout			1, 2, 3, 4	12.14	B
2	Poplars Ave/A50	T-Junction	Two-way			9.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022 DM	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A50/Hilden Rd Roundabout	4 - A50	2	C	Simple (vertical queueing)	Normal	0	100.00	
2 - Poplars Ave/A50	C - A50 E	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd		ONE HOUR	✓	563	100.000
	2 - Orford Rd		ONE HOUR	✓	823	100.000
	3 - Smith Drive		ONE HOUR	✓	364	100.000
	4 - A50	✓				
2 - Poplars Ave/A50	A - A50 W		ONE HOUR	✓	457	100.000
	B - Poplars Ave		ONE HOUR	✓	403	100.000
	C - A50 E	✓				

Origin-Destination Data

Demand (PCU/hr)

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	56	423	84
	2 - Orford Rd	215	0	92	516
	3 - Smith Drive	245	115	0	4
	4 - A50	46	614	20	0

Demand (PCU/hr)

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	180	277
	B - Poplars Ave	0	0	403
	C - A50 E	439	164	0

Vehicle Mix

Heavy Vehicle Percentages

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	2	1	1
	2 - Orford Rd	0	0	2	4
	3 - Smith Drive	1	0	0	0
	4 - A50	1	3	0	0

Heavy Vehicle Percentages

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	0	4
	B - Poplars Ave	0	0	2
	C - A50 E	3	6	0

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	8.91	1.8	A	517	776
	2 - Orford Rd	18.97	5.3	C	753	1129
	3 - Smith Drive	8.40	0.9	A	336	504
	4 - A50	8.61	1.8	A	624	936
2 - Poplars Ave/A50	A - A50 W	0.65	0.1	A	421	632
	B - Poplars Ave	31.51	4.0	D	370	555
	C - A50 E	2.60	0.5	A	555	832

Main Results for each time segment

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	420	105	576	420	420	377	0.0	0.6	5.064	A
	2 - Orford Rd	603	151	390	604	614	607	0.0	1.4	6.638	A
	3 - Smith Drive	275	69	598	275	276	396	0.0	0.4	5.602	A
	4 - A50	522	131	430	524	517	444	0.0	1.0	5.988	A
2 - Poplars Ave/A50	A - A50 W	348	87		348	352	325	0.0	0.0	0.057	A
	B - Poplars Ave	309	77		312	306	258	0.0	0.8	9.245	A
	C - A50 E	446	112		446	449	523	0.0	0.4	2.007	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	501	125	679	503	506	465	0.6	0.7	5.990	A
	2 - Orford Rd	747	187	470	749	742	712	1.4	1.9	8.984	A
	3 - Smith Drive	332	83	739	331	325	480	0.4	0.6	6.051	A
	4 - A50	617	154	527	617	609	543	1.0	1.1	6.729	A
2 - Poplars Ave/A50	A - A50 W	419	105		418	409	397	0.0	0.1	0.122	A
	B - Poplars Ave	367	92		364	361	313	0.8	1.4	11.649	B
	C - A50 E	545	136		545	543	616	0.4	0.3	2.209	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	625	156	822	621	620	562	0.7	1.8	8.788	A
	2 - Orford Rd	915	229	578	914	897	865	1.9	5.3	17.602	C
	3 - Smith Drive	408	102	905	407	396	587	0.6	0.9	7.908	A
	4 - A50	741	185	641	743	736	670	1.1	1.8	8.377	A
2 - Poplars Ave/A50	A - A50 W	499	125		499	502	492	0.1	0.1	0.474	A
	B - Poplars Ave	443	111		437	434	374	1.4	3.8	24.653	C
	C - A50 E	671	168		669	660	740	0.3	0.5	2.586	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	628	157	820	628	625	549	1.8	1.5	8.908	A
	2 - Orford Rd	901	225	590	907	909	858	5.3	4.7	18.966	C
	3 - Smith Drive	401	100	898	402	402	600	0.9	0.9	8.402	A
	4 - A50	735	184	632	737	745	667	1.8	1.7	8.606	A
2 - Poplars Ave/A50	A - A50 W	498	125		499	498	490	0.1	0.1	0.651	A
	B - Poplars Ave	440	110		437	446	381	3.8	4.0	31.506	D
	C - A50 E	672	168		672	670	737	0.5	0.4	2.600	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	496	124	678	497	507	442	1.5	0.9	6.548	A
	2 - Orford Rd	730	182	467	727	743	708	4.7	2.2	9.699	A
	3 - Smith Drive	329	82	721	328	332	473	0.9	0.5	6.306	A
	4 - A50	611	153	509	612	624	540	1.7	1.2	7.360	A
2 - Poplars Ave/A50	A - A50 W	416	104		417	418	395	0.1	0.0	0.251	A
	B - Poplars Ave	356	89		359	369	314	4.0	1.1	15.509	C
	C - A50 E	543	136		544	548	611	0.4	0.2	2.324	A

09:15 - 09:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	436	109	568	435	430	384	0.9	0.6	5.039	A
	2 - Orford Rd	620	155	412	621	631	591	2.2	1.2	7.098	A
	3 - Smith Drive	272	68	614	272	272	419	0.5	0.4	5.152	A
	4 - A50	518	130	435	517	512	450	1.2	0.9	5.989	A
2 - Poplars Ave/A50	A - A50 W	347	87		347	347	326	0.0	0.0	0.053	A
	B - Poplars Ave	306	76		305	301	261	1.1	0.8	8.950	A
	C - A50 E	452	113		452	461	516	0.2	0.3	2.080	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service	
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	420	1143	0.367	420	420	0.0	0.6	5.064	A	
		Exit	1	1		377			377	379	0.0	0.0	0.000	A	
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	603	1188	0.508	604	614	0.0	1.4	6.638	A	
		Exit	1	1		607			607	600	0.0	0.0	0.000	A	
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	275	968	0.284	275	276	0.0	0.4	5.602	A	
		Exit	1	1		396			396	397	0.0	0.0	0.000	A	
	4 - A50	Entry	1	1	1, 2, 3, 4	522	1057	0.494	524	517	0.0	1.0	5.988	A	
		Exit	1	1		444			444	450	0.0	0.0	0.005	A	
	2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	348			348	352	0.0	0.0	0.057	A
			Exit	1	1		325			325	327	0.0	0.0	0.000	A
B - Poplars Ave		Entry	1	1	A, C	309			312	306	0.0	0.8	9.245	A	
		Exit	1	1		258			258	257	0.0	0.0	0.000	A	
C - A50 E		Entry	1	1	A	325			325	327	0.0	0.0	0.000	A	
				2	B	121			121	122	0.0	0.3	7.315	A	
		Exit	1	1	(A, B)	446			446	451	0.0	0.0	0.048	A	
							523			523	522	0.0	0.2	0.785	A

08:15 - 08:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	501	1101	0.455	503	506	0.6	0.7	5.990	A
		Exit	1	1		465			465	454	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	747	1153	0.648	749	742	1.4	1.9	8.984	A
		Exit	1	1		712			712	702	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	332	912	0.364	331	325	0.4	0.6	6.051	A
		Exit	1	1		480			480	485	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	617	1016	0.607	617	609	1.0	1.1	6.729	A
		Exit	1	1		543			543	542	0.0	0.0	0.034	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	419			418	409	0.0	0.1	0.122	A
		Exit	1	1		397			397	395	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	367			364	361	0.8	1.4	11.649	B
		Exit	1	1		313			313	307	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	397			397	395	0.0	0.0	0.000	A
				2	B	148			148	148	0.3	0.3	7.912	A
			2	1	(A, B)	545			545	543	0.0	0.0	0.097	A
		Exit	1	1		617			616	610	0.2	0.3	1.274	A

08:30 - 08:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	625	1042	0.600	621	620	0.7	1.8	8.788	A
		Exit	1	1		562			562	546	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	915	1107	0.827	914	897	1.9	5.3	17.602	C
		Exit	1	1		865			865	853	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	408	846	0.482	407	396	0.6	0.9	7.908	A
		Exit	1	1		587			587	589	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	741	968	0.766	743	736	1.1	1.8	8.377	A
		Exit	1	1		670			670	661	0.0	0.0	0.053	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	499			499	502	0.1	0.1	0.474	A
		Exit	1	1		492			492	483	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	443			437	434	1.4	3.8	24.653	C
		Exit	1	1		374			374	373	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	492			492	483	0.0	0.0	0.000	A
				2	B	179			177	177	0.3	0.5	8.990	A
			2	1	(A, B)	671			671	661	0.0	0.0	0.217	A
		Exit	1	1		740			740	738	0.3	0.7	2.808	A

08:45 - 09:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	628	1042	0.602	628	625	1.8	1.5	8.908	A
		Exit	1	1		549			549	555	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	901	1101	0.818	907	909	5.3	4.7	18.966	C
		Exit	1	1		858			858	865	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	401	849	0.472	402	402	0.9	0.9	8.402	A
		Exit	1	1		600			600	595	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	735	971	0.757	737	745	1.8	1.7	8.606	A
		Exit	1	1		667			667	667	0.0	0.0	0.056	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	498			499	498	0.1	0.1	0.651	A
		Exit	1	1		490			490	489	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	440			437	446	3.8	4.0	31.506	D
		Exit	1	1		381			381	379	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	490			490	489	0.0	0.0	0.000	A
				2	B	182			182	181	0.5	0.4	9.097	A
			2	1	(A, B)	672			672	670	0.0	0.0	0.208	A
		Exit	1	1		737			737	746	0.7	0.7	3.147	A

09:00 - 09:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	496	1101	0.450	497	507	1.5	0.9	6.548	A
		Exit	1	1		442			442	456	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	730	1155	0.632	727	743	4.7	2.2	9.699	A
		Exit	1	1		708			708	720	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	329	919	0.357	328	332	0.9	0.5	6.306	A
		Exit	1	1		473			473	484	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	611	1024	0.597	612	624	1.7	1.2	7.360	A
		Exit	1	1		540			540	545	0.0	0.0	0.026	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	416			417	418	0.1	0.0	0.251	A
		Exit	1	1		395			395	396	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	356			359	369	4.0	1.1	15.509	C
		Exit	1	1		314			314	318	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	395			395	396	0.0	0.0	0.000	A
				2	B	148			149	151	0.4	0.2	8.228	A
			2	1	(A, B)	543			543	547	0.0	0.0	0.119	A
		Exit	1	1		610			611	623	0.7	0.2	1.713	A

09:15 - 09:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	436	1147	0.380	435	430	0.9	0.6	5.039	A
		Exit	1	1		384			384	385	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	620	1178	0.526	621	631	2.2	1.2	7.098	A
		Exit	1	1		591			591	589	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	272	962	0.283	272	272	0.5	0.4	5.152	A
		Exit	1	1		419			419	410	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	518	1055	0.491	517	512	1.2	0.9	5.989	A
		Exit	1	1		450			450	460	0.0	0.0	0.011	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	347			347	347	0.0	0.0	0.053	A
		Exit	1	1		326			326	334	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	306			305	301	1.1	0.8	8.950	A
		Exit	1	1		261			261	264	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	326			326	334	0.0	0.0	0.000	A
				2	B	126			126	127	0.2	0.3	7.474	A
		Exit	1	1	(A, B)	452			452	462	0.0	0.0	0.068	A
						517			516	511	0.2	0.2	0.744	A

A50-Conjunction - 2022 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	AV-1 - A50-Conjunction [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout			1, 2, 3, 4	15.39	C
2	Poplars Ave/A50	T-Junction	Two-way			13.77	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2022 DS	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A50/Hilden Rd Roundabout	4 - A50	2	C	Simple (vertical queueing)	Normal	0	100.00	
2 - Poplars Ave/A50	C - A50 E	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd		ONE HOUR	✓	579	100.000
	2 - Orford Rd		ONE HOUR	✓	856	100.000
	3 - Smith Drive		ONE HOUR	✓	370	100.000
	4 - A50	✓				
2 - Poplars Ave/A50	A - A50 W		ONE HOUR	✓	464	100.000
	B - Poplars Ave		ONE HOUR	✓	410	100.000
	C - A50 E	✓				

Origin-Destination Data

Demand (PCU/hr)

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	61	429	89
	2 - Orford Rd	221	0	95	540
	3 - Smith Drive	251	115	0	4
	4 - A50	47	641	20	0

Demand (PCU/hr)

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	187	277
	B - Poplars Ave	0	0	410
	C - A50 E	443	167	0

Vehicle Mix

Heavy Vehicle Percentages

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	2	2	3
	2 - Orford Rd	1	0	6	8
	3 - Smith Drive	2	1	0	0
	4 - A50	2	6	0	0

Heavy Vehicle Percentages

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	0	4
	B - Poplars Ave	0	0	2
	C - A50 E	3	6	0

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	9.45	1.7	A	532	798
	2 - Orford Rd	27.48	7.8	D	786	1179
	3 - Smith Drive	8.74	1.0	A	339	508
	4 - A50	9.08	2.1	A	646	969
2 - Poplars Ave/A50	A - A50 W	0.91	0.1	A	425	637
	B - Poplars Ave	45.06	5.8	E	375	562
	C - A50 E	2.69	0.6	A	566	850

Main Results for each time segment

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	438	110	575	437	435	391	0.0	0.7	5.214	A
	2 - Orford Rd	643	161	408	642	638	604	0.0	1.3	7.154	A
	3 - Smith Drive	280	70	638	281	275	413	0.0	0.4	5.400	A
	4 - A50	524	131	442	525	522	477	0.0	1.0	6.164	A
2 - Poplars Ave/A50	A - A50 W	345	86		345	351	342	0.0	0.0	0.095	A
	B - Poplars Ave	304	76		304	305	264	0.0	0.8	9.685	A
	C - A50 E	466	116		467	457	511	0.0	0.2	2.128	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	522	131	697	524	517	466	0.7	0.9	6.256	A
	2 - Orford Rd	758	189	488	759	761	733	1.3	2.1	10.281	B
	3 - Smith Drive	340	85	759	340	337	488	0.4	0.6	6.477	A
	4 - A50	634	159	527	636	631	571	1.0	1.1	7.140	A
2 - Poplars Ave/A50	A - A50 W	416	104		416	415	398	0.0	0.0	0.245	A
	B - Poplars Ave	369	92		370	369	320	0.8	1.3	13.404	B
	C - A50 E	550	138		551	550	618	0.2	0.4	2.275	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	638	159	851	638	635	560	0.9	1.6	8.804	A
	2 - Orford Rd	948	237	592	954	925	897	2.1	6.3	21.671	C
	3 - Smith Drive	397	99	949	398	404	598	0.6	1.0	8.551	A
	4 - A50	775	194	637	774	756	709	1.1	2.1	8.696	A
2 - Poplars Ave/A50	A - A50 W	510	128		511	509	498	0.0	0.1	0.826	A
	B - Poplars Ave	450	113		449	437	389	1.3	4.6	31.501	D
	C - A50 E	684	171		683	665	755	0.4	0.6	2.649	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	637	159	847	637	637	551	1.6	1.7	9.453	A
	2 - Orford Rd	945	236	593	939	936	890	6.3	7.8	27.476	D
	3 - Smith Drive	399	100	931	399	406	601	1.0	1.0	8.743	A
	4 - A50	768	192	630	767	775	701	2.1	2.0	9.080	A
2 - Poplars Ave/A50	A - A50 W	512	128		511	512	491	0.1	0.1	0.914	A
	B - Poplars Ave	446	111		447	448	399	4.6	5.8	45.060	E
	C - A50 E	679	170		681	675	749	0.6	0.4	2.694	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	520	130	702	519	524	471	1.7	1.0	6.914	A
	2 - Orford Rd	772	193	482	775	790	739	7.8	2.5	14.721	B
	3 - Smith Drive	336	84	772	336	335	484	1.0	0.6	6.730	A
	4 - A50	644	161	531	642	664	577	2.0	1.4	7.676	A
2 - Poplars Ave/A50	A - A50 W	426	106		426	423	403	0.1	0.0	0.417	A
	B - Poplars Ave	373	93		377	390	326	5.8	1.4	20.777	C
	C - A50 E	556	139		557	565	630	0.4	0.4	2.344	A

09:15 - 09:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	438	109	584	438	440	395	1.0	0.6	5.483	A
	2 - Orford Rd	648	162	409	649	651	613	2.5	1.3	7.901	A
	3 - Smith Drive	280	70	646	280	282	411	0.6	0.5	5.591	A
	4 - A50	531	133	447	532	540	479	1.4	0.9	6.287	A
2 - Poplars Ave/A50	A - A50 W	340	85		340	344	337	0.0	0.0	0.086	A
	B - Poplars Ave	309	77		311	317	260	1.4	0.6	9.669	A
	C - A50 E	462	116		462	466	517	0.4	0.3	2.067	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	438	1144	0.383	437	435	0.0	0.7	5.214	A
		Exit	1	1		391			391	386	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	643	1180	0.545	642	638	0.0	1.3	7.154	A
		Exit	1	1		604			604	604	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	280	952	0.294	281	275	0.0	0.4	5.400	A
		Exit	1	1		413			413	408	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	524	1052	0.498	525	522	0.0	1.0	6.164	A
		Exit	1	1		477			477	471	0.0	0.0	0.015	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	345			345	351	0.0	0.0	0.095	A
		Exit	1	1		342			342	334	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	304			304	305	0.0	0.8	9.685	A
		Exit	1	1		264			264	266	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	342			342	334	0.0	0.0	0.000	A
				2	B	124			124	123	0.0	0.2	7.730	A
		Exit	1	1	(A, B)	466			466	458	0.0	0.0	0.077	A
							510			511	512	0.0	0.1	0.929

08:15 - 08:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service	
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	522	1093	0.477	524	517	0.7	0.9	6.256	A	
		Exit	1	1		466			466	466	0.0	0.0	0.000	A	
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	758	1146	0.662	759	761	1.3	2.1	10.281	B	
		Exit	1	1		733			733	729	0.0	0.0	0.000	A	
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	340	904	0.376	340	337	0.4	0.6	6.477	A	
		Exit	1	1		488			488	482	0.0	0.0	0.000	A	
	4 - A50	Entry	1	1	1, 2, 3, 4	634	1016	0.624	636	631	1.0	1.1	7.140	A	
		Exit	1	1		571			571	570	0.0	0.0	0.026	A	
	2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	416			416	415	0.0	0.0	0.245	A
			Exit	1	1		398			398	400	0.0	0.0	0.000	A
B - Poplars Ave		Entry	1	1	A, C	369			370	369	0.8	1.3	13.404	B	
		Exit	1	1		320			320	319	0.0	0.0	0.000	A	
C - A50 E		Entry	1	1	A	398			398	400	0.0	0.0	0.000	A	
				2	B	152			153	150	0.2	0.3	8.034	A	
			2	1	(A, B)	550			550	551	0.0	0.0	0.117	A	
		Exit	1	1		618			618	615	0.1	0.3	1.760	A	

08:30 - 08:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	638	1029	0.620	638	635	0.9	1.6	8.804	A
		Exit	1	1		560			560	562	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	948	1100	0.862	954	925	2.1	6.3	21.671	C
		Exit	1	1		897			897	879	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	397	829	0.479	398	404	0.6	1.0	8.551	A
		Exit	1	1		598			598	591	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	775	969	0.800	774	756	1.1	2.1	8.696	A
		Exit	1	1		709			709	688	0.0	0.0	0.057	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	510			511	509	0.0	0.1	0.826	A
		Exit	1	1		498			498	482	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	450			449	437	1.3	4.6	31.501	D
		Exit	1	1		389			389	385	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	498			498	482	0.0	0.0	0.000	A
				2	B	186			186	183	0.3	0.5	9.031	A
			2	1	(A, B)	684			684	666	0.0	0.0	0.210	A
		Exit	1	1		756			755	741	0.3	0.8	3.466	A

08:45 - 09:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	637	1031	0.618	637	637	1.6	1.7	9.453	A
		Exit	1	1		551			551	564	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	945	1100	0.859	939	936	6.3	7.8	27.476	D
		Exit	1	1		890			890	893	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	399	835	0.478	399	406	1.0	1.0	8.743	A
		Exit	1	1		601			601	600	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	768	972	0.790	767	775	2.1	2.0	9.080	A
		Exit	1	1		701			701	696	0.0	0.0	0.074	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	512			511	512	0.1	0.1	0.914	A
		Exit	1	1		491			491	488	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	446			447	448	4.6	5.8	45.060	E
		Exit	1	1		399			399	392	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	491			491	488	0.0	0.0	0.000	A
				2	B	189			190	187	0.5	0.4	9.067	A
			2	1	(A, B)	679			679	675	0.0	0.0	0.233	A
		Exit	1	1		750			749	755	0.8	0.9	3.931	A

09:00 - 09:15

Junction	Arm	Side	Lane level	Lane	Destinations	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	520	1091	0.476	519	524	1.7	1.0	6.914	A
		Exit	1	1		471			471	474	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	772	1148	0.672	775	790	7.8	2.5	14.721	B
		Exit	1	1		739			739	762	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	336	899	0.374	336	335	1.0	0.6	6.730	A
		Exit	1	1		484			484	492	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	644	1014	0.635	642	664	2.0	1.4	7.676	A
		Exit	1	1		577			577	586	0.0	0.0	0.024	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	426			426	423	0.1	0.0	0.417	A
		Exit	1	1		403			403	410	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	373			377	390	5.8	1.4	20.777	C
		Exit	1	1		326			326	325	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	403			403	410	0.0	0.0	0.000	A
				2	B	153			153	155	0.4	0.3	8.221	A
			2	1	(A, B)	556			556	564	0.0	0.0	0.132	A
		Exit	1	1		631			630	646	0.9	0.3	2.247	A

09:15 - 09:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	438	1140	0.384	438	440	1.0	0.6	5.483	A
		Exit	1	1		395			395	394	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	648	1180	0.549	649	651	2.5	1.3	7.901	A
		Exit	1	1		613			613	623	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	280	949	0.295	280	282	0.6	0.5	5.591	A
		Exit	1	1		411			411	414	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	531	1050	0.506	532	540	1.4	0.9	6.287	A
		Exit	1	1		480			479	482	0.0	0.0	0.007	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	340			340	344	0.0	0.0	0.086	A
		Exit	1	1		337			337	339	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	309			311	317	1.4	0.6	9.669	A
		Exit	1	1		260			260	265	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	337			337	339	0.0	0.0	0.000	A
				2	B	125			126	127	0.3	0.3	7.548	A
		Exit	1	1	(A, B)	462			462	466	0.0	0.0	0.054	A
						517			517	524	0.3	0.1	1.056	A

A50-Conjunction - 2022 DS Full, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	AV-1 - A50-Conjunction [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Linked roundabouts	1 - A50/Hilden Rd Roundabout	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout			1, 2, 3, 4	30.19	D
2	Poplars Ave/A50	T-Junction	Two-way			24.39	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2022 DS Full	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A50/Hilden Rd Roundabout	4 - A50	2	C	Simple (vertical queueing)	Normal	0	100.00	
2 - Poplars Ave/A50	C - A50 E	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd		ONE HOUR	✓	702	100.000
	2 - Orford Rd		ONE HOUR	✓	937	100.000
	3 - Smith Drive		ONE HOUR	✓	371	100.000
	4 - A50	✓				
2 - Poplars Ave/A50	A - A50 W		ONE HOUR	✓	538	100.000
	B - Poplars Ave		ONE HOUR	✓	455	100.000
	C - A50 E	✓				

Origin-Destination Data

Demand (PCU/hr)

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	139	439	124
	2 - Orford Rd	282	0	91	564
	3 - Smith Drive	266	101	0	4
	4 - A50	69	659	19	1

Demand (PCU/hr)

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	266	272
	B - Poplars Ave	0	0	455
	C - A50 E	485	186	0

Vehicle Mix

Heavy Vehicle Percentages

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	1	2	2
	2 - Orford Rd	1	0	6	8
	3 - Smith Drive	2	0	0	0
	4 - A50	20	4	0	0

Heavy Vehicle Percentages

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	0	4
	B - Poplars Ave	0	0	2
	C - A50 E	3	5	0

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	15.18	3.7	C	646	969
	2 - Orford Rd	65.48	20.6	F	863	1295
	3 - Smith Drive	9.93	1.2	A	340	510
	4 - A50	9.70	2.3	A	677	1016
2 - Poplars Ave/A50	A - A50 W	1.01	0.3	A	495	743
	B - Poplars Ave	83.68	12.7	F	417	625
	C - A50 E	2.99	0.7	A	613	920

Main Results for each time segment

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	532	133	589	531	527	474	0.0	0.9	6.037	A
	2 - Orford Rd	717	179	439	718	696	681	0.0	1.7	8.191	A
	3 - Smith Drive	285	71	742	283	284	415	0.0	0.6	5.841	A
	4 - A50	566	142	495	568	556	530	0.0	1.1	6.650	A
2 - Poplars Ave/A50	A - A50 W	411	103		410	408	369	0.0	0.1	0.103	A
	B - Poplars Ave	339	85		342	340	342	0.0	0.9	10.599	B
	C - A50 E	513	128		515	498	556	0.0	0.3	2.191	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	627	157	697	629	623	564	0.9	1.3	7.617	A
	2 - Orford Rd	845	211	519	843	838	807	1.7	3.2	12.750	B
	3 - Smith Drive	332	83	866	332	329	496	0.6	0.7	6.866	A
	4 - A50	675	169	587	675	667	612	1.1	1.5	7.794	A
2 - Poplars Ave/A50	A - A50 W	488	122		488	486	427	0.1	0.0	0.290	A
	B - Poplars Ave	415	104		412	408	411	0.9	2.2	17.555	C
	C - A50 E	593	148		593	598	655	0.3	0.4	2.568	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	796	199	834	784	765	657	1.3	3.7	13.619	B
	2 - Orford Rd	1033	258	650	988	986	968	3.2	15.7	38.089	E
	3 - Smith Drive	401	100	1035	401	402	603	0.7	1.2	9.453	A
	4 - A50	797	199	692	798	780	743	1.5	2.0	9.146	A
2 - Poplars Ave/A50	A - A50 W	598	149		597	590	528	0.0	0.2	1.007	A
	B - Poplars Ave	505	126		477	467	491	2.2	10.6	52.763	F
	C - A50 E	724	181		723	712	777	0.4	0.7	2.819	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	770	193	830	773	781	677	3.7	2.9	15.184	C
	2 - Orford Rd	1040	260	640	1017	1011	963	15.7	20.6	65.480	F
	3 - Smith Drive	412	103	1055	411	410	603	1.2	1.1	9.930	A
	4 - A50	798	200	710	797	802	755	2.0	2.3	9.704	A
2 - Poplars Ave/A50	A - A50 W	589	147		587	591	534	0.2	0.3	0.963	A
	B - Poplars Ave	499	125		484	487	491	10.6	12.7	83.680	F
	C - A50 E	731	183		734	732	781	0.7	0.5	2.986	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	634	159	709	632	639	557	2.9	1.6	9.814	A
	2 - Orford Rd	841	210	527	863	918	814	20.6	3.4	32.528	D
	3 - Smith Drive	333	83	887	331	335	503	1.1	0.7	7.561	A
	4 - A50	681	170	586	681	718	632	2.3	1.5	8.516	A
2 - Poplars Ave/A50	A - A50 W	483	121		483	487	447	0.3	0.1	0.500	A
	B - Poplars Ave	409	102		429	451	409	12.7	2.2	41.589	E
	C - A50 E	613	153		614	648	667	0.5	0.3	2.608	A

09:15 - 09:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	515	129	567	516	524	462	1.6	0.9	6.208	A
	2 - Orford Rd	703	176	426	698	717	656	3.4	1.8	9.054	A
	3 - Smith Drive	280	70	727	281	283	398	0.7	0.4	5.773	A
	4 - A50	546	136	484	545	563	524	1.5	1.0	6.646	A
2 - Poplars Ave/A50	A - A50 W	402	101		402	407	368	0.1	0.0	0.073	A
	B - Poplars Ave	333	83		332	343	333	2.2	1.1	11.623	B
	C - A50 E	504	126		504	514	535	0.3	0.3	2.299	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service	
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	532	1138	0.468	531	527	0.0	0.9	6.037	A	
		Exit	1	1		474			474	465	0.0	0.0	0.000	A	
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	717	1167	0.614	718	696	0.0	1.7	8.191	A	
		Exit	1	1		681			681	669	0.0	0.0	0.000	A	
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	285	911	0.312	283	284	0.0	0.6	5.841	A	
		Exit	1	1		415			415	415	0.0	0.0	0.000	A	
	4 - A50	Entry	1	1	1, 2, 3, 4	566	1030	0.550	568	556	0.0	1.1	6.650	A	
		Exit	1	1		530			530	515	0.0	0.0	0.012	A	
	2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	411			410	408	0.0	0.1	0.103	A
			Exit	1	1		369			369	360	0.0	0.0	0.000	A
B - Poplars Ave		Entry	1	1	A, C	339			342	340	0.0	0.9	10.599	B	
		Exit	1	1		342			342	335	0.0	0.0	0.000	A	
C - A50 E		Entry	1	1	A	369			369	360	0.0	0.0	0.000	A	
				2	B	145			146	137	0.0	0.3	7.687	A	
		Exit	1	1	(A, B)	513			514	499	0.0	0.0	0.079	A	
							557			556	549	0.0	0.3	1.155	A

08:15 - 08:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	627	1093	0.574	629	623	0.9	1.3	7.617	A
		Exit	1	1		564			564	552	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	845	1132	0.746	843	838	1.7	3.2	12.750	B
		Exit	1	1		807			807	796	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	332	861	0.385	332	329	0.6	0.7	6.866	A
		Exit	1	1		496			496	492	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	675	991	0.681	675	667	1.1	1.5	7.794	A
		Exit	1	1		612			612	617	0.0	0.0	0.059	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	488			488	486	0.1	0.0	0.290	A
		Exit	1	1		427			427	437	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	415			412	408	0.9	2.2	17.555	C
		Exit	1	1		411			411	403	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	427			427	437	0.0	0.0	0.000	A
				2	B	167			166	161	0.3	0.4	8.841	A
			2	1	(A, B)	593			594	598	0.0	0.0	0.216	A
		Exit	1	1		656			655	651	0.3	0.6	2.265	A

08:30 - 08:45

Junction	Arm	Side	Lane level	Lane	Destinations	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	796	1036	0.768	784	765	1.3	3.7	13.619	B
		Exit	1	1		657			657	657	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	1033	1076	0.961	988	986	3.2	15.7	38.089	E
		Exit	1	1		968			968	949	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	401	794	0.505	401	402	0.7	1.2	9.453	A
		Exit	1	1		603			603	593	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	797	946	0.842	798	780	1.5	2.0	9.146	A
		Exit	1	1		743			743	735	0.0	0.0	0.073	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	598			597	590	0.0	0.2	1.007	A
		Exit	1	1		528			528	515	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	505			477	467	2.2	10.6	52.763	F
		Exit	1	1		491			491	489	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	528			528	515	0.0	0.0	0.000	A
				2	B	195			195	197	0.4	0.5	9.322	A
			2	1	(A, B)	724			723	713	0.0	0.1	0.261	A
		Exit	1	1		778			777	764	0.6	1.0	4.107	A

08:45 - 09:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	770	1038	0.742	773	781	3.7	2.9	15.184	C
		Exit	1	1		677			677	667	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	1040	1080	0.964	1017	1011	15.7	20.6	65.480	F
		Exit	1	1		963			963	972	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	412	786	0.523	411	410	1.2	1.1	9.930	A
		Exit	1	1		603			603	612	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	798	938	0.851	797	802	2.0	2.3	9.704	A
		Exit	1	1		755			755	754	0.0	0.0	0.122	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	589			587	591	0.2	0.3	0.963	A
		Exit	1	1		534			534	531	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	499			484	487	10.6	12.7	83.680	F
		Exit	1	1		491			491	494	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	534			534	531	0.0	0.0	0.000	A
				2	B	198			200	200	0.5	0.5	9.756	A
			2	1	(A, B)	731			732	731	0.1	0.0	0.353	A
		Exit	1	1		781			781	784	1.0	1.0	4.581	A

09:00 - 09:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	634	1088	0.583	632	639	2.9	1.6	9.814	A
		Exit	1	1		557			557	580	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	841	1128	0.745	863	918	20.6	3.4	32.528	D
		Exit	1	1		814			814	852	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	333	853	0.390	331	335	1.1	0.7	7.561	A
		Exit	1	1		503			503	509	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	681	991	0.687	681	718	2.3	1.5	8.516	A
		Exit	1	1		632			632	670	0.0	0.0	0.069	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	483			483	487	0.3	0.1	0.500	A
		Exit	1	1		447			447	467	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	409			429	451	12.7	2.2	41.589	E
		Exit	1	1		409			409	423	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	447			447	467	0.0	0.0	0.000	A
				2	B	166			167	181	0.5	0.3	8.678	A
			2	1	(A, B)	613			613	648	0.0	0.0	0.223	A
		Exit	1	1		669			667	697	1.0	0.5	3.153	A

09:15 - 09:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	515	1147	0.48	516	524	1.6	0.9	6.208	A
		Exit	1	1		462			462	470	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	703	1172	0.599	698	717	3.4	1.8	9.054	A
		Exit	1	1		656			656	676	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	280	917	0.305	281	283	0.7	0.4	5.773	A
		Exit	1	1		398			398	408	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	546	1034	0.528	545	563	1.5	1.0	6.646	A
		Exit	1	1		524			524	532	0.0	0.0	0.020	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	402			402	407	0.1	0.0	0.073	A
		Exit	1	1		368			368	372	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	333			332	343	2.2	1.1	11.623	B
		Exit	1	1		333			333	343	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	368			368	372	0.0	0.0	0.000	A
				2	B	135			136	142	0.3	0.3	8.059	A
			2	1	(A, B)	504			503	513	0.0	0.0	0.108	A
		Exit	1	1		537			535	549	0.5	0.3	1.280	A

A50-Conjunction - 2027 DM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	AV-1 - A50-Conjunction [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Linked roundabouts	1 - A50/Hilden Rd Roundabout	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout			1, 2, 3, 4	16.29	C
2	Poplars Ave/A50	T-Junction	Two-way			18.28	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2027 DM	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A50/Hilden Rd Roundabout	4 - A50	2	C	Simple (vertical queueing)	Normal	0	100.00	
2 - Poplars Ave/A50	C - A50 E	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd		ONE HOUR	✓	590	100.000
	2 - Orford Rd		ONE HOUR	✓	871	100.000
	3 - Smith Drive		ONE HOUR	✓	384	100.000
	4 - A50	✓				
2 - Poplars Ave/A50	A - A50 W		ONE HOUR	✓	476	100.000
	B - Poplars Ave		ONE HOUR	✓	439	100.000
	C - A50 E	✓				

Origin-Destination Data

Demand (PCU/hr)

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	45	431	114
	2 - Orford Rd	230	0	98	543
	3 - Smith Drive	259	121	0	4
	4 - A50	43	659	20	1

Demand (PCU/hr)

		To			
		A - A50 W	B - Poplars Ave	C - A50 E	
2 - Poplars Ave/A50	From	A - A50 W	0	191	285
		B - Poplars Ave	0	0	439
		C - A50 E	472	189	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50	
1 - A50/Hilden Rd Roundabout	From	1 - Hilden Rd	0	2	1	1
		2 - Orford Rd	0	0	2	4
		3 - Smith Drive	1	0	0	0
		4 - A50	1	3	0	0

Heavy Vehicle Percentages

		To			
		A - A50 W	B - Poplars Ave	C - A50 E	
2 - Poplars Ave/A50	From	A - A50 W	0	0	4
		B - Poplars Ave	0	0	2
		C - A50 E	3	5	0

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	10.06	1.9	B	541	812
	2 - Orford Rd	29.44	8.3	D	799	1198
	3 - Smith Drive	9.24	1.2	A	354	531
	4 - A50	9.30	2.1	A	663	995
2 - Poplars Ave/A50	A - A50 W	1.02	0.2	A	440	661
	B - Poplars Ave	60.34	8.0	F	402	603
	C - A50 E	2.95	0.8	A	607	911

Main Results for each time segment

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	438	110	613	437	437	398	0.0	0.7	5.239	A
	2 - Orford Rd	650	163	421	649	648	628	0.0	1.5	7.370	A
	3 - Smith Drive	290	72	662	289	288	408	0.0	0.4	5.766	A
	4 - A50	555	139	457	554	543	494	0.0	1.2	6.302	A
2 - Poplars Ave/A50	A - A50 W	367	92		367	363	347	0.0	0.0	0.081	A
	B - Poplars Ave	333	83		335	332	292	0.0	0.9	9.799	A
	C - A50 E	493	123		492	493	556	0.0	0.3	2.334	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	540	135	720	538	535	481	0.7	1.1	6.801	A
	2 - Orford Rd	784	196	517	786	782	741	1.5	2.1	9.970	A
	3 - Smith Drive	351	88	804	350	344	499	0.4	0.8	6.608	A
	4 - A50	647	162	553	648	645	600	1.2	1.3	7.283	A
2 - Poplars Ave/A50	A - A50 W	429	107		429	429	427	0.0	0.0	0.251	A
	B - Poplars Ave	389	97		388	389	345	0.9	1.6	14.020	B
	C - A50 E	602	151		601	598	645	0.3	0.5	2.609	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	649	162	872	647	646	581	1.1	1.7	9.240	A
	2 - Orford Rd	968	242	618	966	939	901	2.1	6.7	23.233	C
	3 - Smith Drive	418	105	982	418	423	603	0.8	1.2	8.737	A
	4 - A50	784	196	670	782	766	729	1.3	2.1	8.961	A
2 - Poplars Ave/A50	A - A50 W	533	133		531	524	524	0.0	0.2	0.781	A
	B - Poplars Ave	482	121		468	459	419	1.6	7.3	41.248	E
	C - A50 E	728	182		729	715	785	0.5	0.5	2.899	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	641	160	866	640	647	589	1.7	1.9	10.059	B
	2 - Orford Rd	963	241	612	962	945	895	6.7	8.3	29.443	D
	3 - Smith Drive	429	107	975	426	426	599	1.2	1.2	9.242	A
	4 - A50	780	195	675	780	791	726	2.1	2.1	9.300	A
2 - Poplars Ave/A50	A - A50 W	521	130		522	524	518	0.2	0.1	1.019	A
	B - Poplars Ave	475	119		469	480	416	7.3	8.0	60.344	F
	C - A50 E	727	182		725	720	780	0.5	0.8	2.947	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	530	133	718	530	532	478	1.9	1.0	6.976	A
	2 - Orford Rd	773	193	510	774	807	737	8.3	2.3	13.360	B
	3 - Smith Drive	342	86	791	343	349	493	1.2	0.7	7.192	A
	4 - A50	652	163	546	650	683	589	2.1	1.4	7.840	A
2 - Poplars Ave/A50	A - A50 W	429	107		429	434	420	0.1	0.0	0.415	A
	B - Poplars Ave	393	98		397	420	344	8.0	1.6	27.074	D
	C - A50 E	592	148		592	616	652	0.8	0.4	2.531	A

09:15 - 09:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	451	113	617	450	450	406	1.0	0.7	5.454	A
	2 - Orford Rd	656	164	432	659	655	635	2.3	1.4	7.492	A
	3 - Smith Drive	292	73	674	292	289	416	0.7	0.5	5.528	A
	4 - A50	562	140	464	559	560	502	1.4	1.0	6.324	A
2 - Poplars Ave/A50	A - A50 W	363	91		363	364	357	0.0	0.0	0.117	A
	B - Poplars Ave	340	85		339	336	286	1.6	1.0	10.829	B
	C - A50 E	501	125		501	496	559	0.4	0.4	2.228	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	438	1128	0.388	437	437	0.0	0.7	5.239	A
		Exit	1	1		398			398	395	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	650	1174	0.554	649	648	0.0	1.5	7.370	A
		Exit	1	1		628			628	620	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	290	943	0.307	289	288	0.0	0.4	5.766	A
		Exit	1	1		408			408	407	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	555	1045	0.531	554	543	0.0	1.2	6.302	A
		Exit	1	1		494			494	494	0.0	0.0	0.019	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	367			367	363	0.0	0.0	0.081	A
		Exit	1	1		347			347	351	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	333			335	332	0.0	0.9	9.799	A
		Exit	1	1		292			292	288	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	347			347	351	0.0	0.0	0.000	A
				2	B	146			145	142	0.0	0.3	7.838	A
		Exit	1	1	(A, B)	493			493	494	0.0	0.0	0.098	A
							555			556	548	0.0	0.2	0.917

08:15 - 08:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	540	1084	0.498	538	535	0.7	1.1	6.801	A
		Exit	1	1		481			481	478	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	784	1133	0.692	786	782	1.5	2.1	9.970	A
		Exit	1	1		741			741	738	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	351	886	0.396	350	344	0.4	0.8	6.608	A
		Exit	1	1		499			499	494	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	647	1005	0.644	648	645	1.2	1.3	7.283	A
		Exit	1	1		600			600	596	0.0	0.0	0.038	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	429			429	429	0.0	0.0	0.251	A
		Exit	1	1		427			427	425	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	389			388	389	0.9	1.6	14.020	B
		Exit	1	1		345			345	346	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	427			427	425	0.0	0.0	0.000	A
				2	B	175			174	173	0.3	0.4	8.604	A
			2	1	(A, B)	602			602	598	0.0	0.0	0.152	A
		Exit	1	1		646			645	645	0.2	0.3	1.731	A

08:30 - 08:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	649	1021	0.636	647	646	1.1	1.7	9.240	A
		Exit	1	1		581			581	575	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	968	1089	0.889	966	939	2.1	6.7	23.233	C
		Exit	1	1		901			901	886	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	418	815	0.513	418	423	0.8	1.2	8.737	A
		Exit	1	1		603			603	597	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	784	955	0.821	782	766	1.3	2.1	8.961	A
		Exit	1	1		729			729	715	0.0	0.0	0.090	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	533			531	524	0.0	0.2	0.781	A
		Exit	1	1		524			524	512	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	482			468	459	1.6	7.3	41.248	E
		Exit	1	1		419			419	416	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	524			524	512	0.0	0.0	0.000	A
				2	B	205			205	203	0.4	0.5	9.259	A
			2	1	(A, B)	728			728	716	0.0	0.0	0.296	A
		Exit	1	1		785			785	769	0.3	0.9	3.684	A

08:45 - 09:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	641	1023	0.626	640	647	1.7	1.9	10.059	B
		Exit	1	1		589			589	586	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	963	1092	0.882	962	945	6.7	8.3	29.443	D
		Exit	1	1		895			895	904	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	429	818	0.525	426	426	1.2	1.2	9.242	A
		Exit	1	1		599			599	598	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	780	953	0.818	780	791	2.1	2.1	9.300	A
		Exit	1	1		726			726	721	0.0	0.0	0.094	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	521			522	524	0.2	0.1	1.019	A
		Exit	1	1		518			518	515	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	475			469	480	7.3	8.0	60.344	F
		Exit	1	1		416			416	420	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	518			518	515	0.0	0.0	0.000	A
				2	B	209			207	205	0.5	0.7	9.366	A
			2	1	(A, B)	727			727	721	0.0	0.1	0.302	A
		Exit	1	1		781			780	790	0.9	0.9	4.091	A

09:00 - 09:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	530	1085	0.489	530	532	1.9	1.0	6.976	A
		Exit	1	1		478			478	490	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	773	1136	0.680	774	807	8.3	2.3	13.360	B
		Exit	1	1		737			737	772	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	342	891	0.384	343	349	1.2	0.7	7.192	A
		Exit	1	1		493			493	497	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	652	1008	0.647	650	683	2.1	1.4	7.840	A
		Exit	1	1		589			589	612	0.0	0.0	0.036	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	429			429	434	0.1	0.0	0.415	A
		Exit	1	1		420			420	438	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	393			397	420	8.0	1.6	27.074	D
		Exit	1	1		344			344	353	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	420			420	438	0.0	0.0	0.000	A
				2	B	172			172	178	0.7	0.4	8.455	A
			2	1	(A, B)	592			593	614	0.1	0.0	0.145	A
		Exit	1	1		654			652	680	0.9	0.5	2.402	A

09:15 - 09:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	451	1127	0.400	450	450	1.0	0.7	5.454	A
		Exit	1	1		406			406	401	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	656	1170	0.560	659	655	2.3	1.4	7.492	A
		Exit	1	1		635			635	637	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	292	938	0.312	292	289	0.7	0.5	5.528	A
		Exit	1	1		416			416	419	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	562	1043	0.539	559	560	1.4	1.0	6.324	A
		Exit	1	1		502			502	496	0.0	0.0	0.020	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	363			363	364	0.0	0.0	0.117	A
		Exit	1	1		357			357	356	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	340			339	336	1.6	1.0	10.829	B
		Exit	1	1		286			286	286	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	357			357	356	0.0	0.0	0.000	A
			2	1	B	144			144	140	0.4	0.3	7.716	A
			2	1	(A, B)	501			501	496	0.0	0.0	0.082	A
		Exit	1	1		560			559	556	0.5	0.1	1.043	A

A50-Conjunction - 2027 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	AV-1 - A50-Conjunction [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Linked roundabouts	1 - A50/Hilden Rd Roundabout	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout			1, 2, 3, 4	34.79	D
2	Poplars Ave/A50	T-Junction	Two-way			39.07	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2027 DS	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A50/Hilden Rd Roundabout	4 - A50	2	C	Simple (vertical queueing)	Normal	0	100.00	
2 - Poplars Ave/A50	C - A50 E	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd		ONE HOUR	✓	653	100.000
	2 - Orford Rd		ONE HOUR	✓	967	100.000
	3 - Smith Drive		ONE HOUR	✓	391	100.000
	4 - A50	✓				
2 - Poplars Ave/A50	A - A50 W		ONE HOUR	✓	511	100.000
	B - Poplars Ave		ONE HOUR	✓	486	100.000
	C - A50 E	✓				

Origin-Destination Data

Demand (PCU/hr)

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	90	420	143
	2 - Orford Rd	261	0	100	606
	3 - Smith Drive	269	117	0	5
	4 - A50	52	694	19	2

Demand (PCU/hr)

		To			
		A - A50 W	B - Poplars Ave	C - A50 E	
2 - Poplars Ave/A50	From	A - A50 W	0	251	260
		B - Poplars Ave	0	0	486
		C - A50 E	515	219	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50	
1 - A50/Hilden Rd Roundabout	From	1 - Hilden Rd	0	1	2	2
		2 - Orford Rd	1	0	5	7
		3 - Smith Drive	2	0	0	0
		4 - A50	27	4	0	0

Heavy Vehicle Percentages

		To			
		A - A50 W	B - Poplars Ave	C - A50 E	
2 - Poplars Ave/A50	From	A - A50 W	0	0	4
		B - Poplars Ave	0	0	2
		C - A50 E	3	4	0

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	12.71	2.6	B	598	896
	2 - Orford Rd	78.74	26.9	F	888	1332
	3 - Smith Drive	11.17	1.4	B	360	539
	4 - A50	9.89	2.2	A	696	1044
2 - Poplars Ave/A50	A - A50 W	1.17	0.2	A	472	709
	B - Poplars Ave	132.23	22.0	F	447	670
	C - A50 E	3.50	0.9	A	667	1001

Main Results for each time segment

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	498	124	622	499	497	442	0.0	0.9	5.975	A
	2 - Orford Rd	733	183	448	737	726	673	0.0	1.8	8.975	A
	3 - Smith Drive	297	74	767	295	296	418	0.0	0.6	6.142	A
	4 - A50	573	143	490	574	563	572	0.0	1.1	6.512	A
2 - Poplars Ave/A50	A - A50 W	387	97		387	385	391	0.0	0.0	0.099	A
	B - Poplars Ave	362	90		362	358	357	0.0	1.4	11.496	B
	C - A50 E	559	140		559	553	559	0.0	0.4	2.558	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	572	143	749	572	581	524	0.9	1.1	7.432	A
	2 - Orford Rd	862	215	511	866	861	809	1.8	3.4	14.201	B
	3 - Smith Drive	347	87	893	347	350	485	0.6	0.6	7.069	A
	4 - A50	693	173	578	695	676	662	1.1	1.5	7.916	A
2 - Poplars Ave/A50	A - A50 W	455	114		456	455	448	0.0	0.0	0.313	A
	B - Poplars Ave	446	112		444	431	420	1.4	2.7	19.477	C
	C - A50 E	642	161		643	650	676	0.4	0.4	2.890	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	733	183	871	734	721	637	1.1	2.6	12.287	B
	2 - Orford Rd	1058	265	652	1023	1005	953	3.4	17.9	44.763	E
	3 - Smith Drive	437	109	1077	439	429	598	0.6	1.3	10.505	B
	4 - A50	792	198	716	792	791	800	1.5	2.2	9.349	A
2 - Poplars Ave/A50	A - A50 W	578	144		578	569	545	0.0	0.2	0.993	A
	B - Poplars Ave	539	135		482	488	523	2.7	13.9	61.224	F
	C - A50 E	780	195		781	769	772	0.4	0.9	3.501	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	710	177	877	713	719	634	2.6	2.2	12.709	B
	2 - Orford Rd	1071	268	635	1029	1033	955	17.9	26.9	78.738	F
	3 - Smith Drive	431	108	1077	430	433	587	1.3	1.4	11.173	B
	4 - A50	808	202	701	810	807	806	2.2	2.2	9.888	A
2 - Poplars Ave/A50	A - A50 W	562	141		562	561	556	0.2	0.2	1.174	A
	B - Poplars Ave	540	135		507	506	512	13.9	22.0	132.230	F
	C - A50 E	787	197		787	793	788	0.9	0.8	3.372	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	584	146	785	586	587	527	2.2	1.3	8.318	A
	2 - Orford Rd	879	220	523	904	956	848	26.9	5.4	42.523	E
	3 - Smith Drive	344	86	938	343	349	489	1.4	0.7	8.163	A
	4 - A50	727	182	581	730	755	700	2.2	1.7	8.796	A
2 - Poplars Ave/A50	A - A50 W	465	116		466	465	475	0.2	0.1	0.623	A
	B - Poplars Ave	430	108		469	494	435	22.0	6.5	86.012	F
	C - A50 E	682	170		682	717	709	0.8	0.5	3.002	A

09:15 - 09:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	489	122	634	489	495	439	1.3	0.8	6.310	A
	2 - Orford Rd	724	181	439	720	746	684	5.4	1.9	10.620	B
	3 - Smith Drive	301	75	757	300	300	403	0.7	0.6	6.147	A
	4 - A50	581	145	491	583	601	566	1.7	1.1	7.050	A
2 - Poplars Ave/A50	A - A50 W	388	97		387	383	391	0.1	0.0	0.178	A
	B - Poplars Ave	364	91		366	385	349	6.5	1.1	18.757	C
	C - A50 E	552	138		552	565	564	0.5	0.4	2.551	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service	
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	498	1125	0.443	499	497	0.0	0.9	5.975	A	
		Exit	1	1		442			442	437	0.0	0.0	0.000	A	
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	733	1163	0.631	737	726	0.0	1.8	8.975	A	
		Exit	1	1		673			673	666	0.0	0.0	0.000	A	
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	297	901	0.329	295	296	0.0	0.6	6.142	A	
		Exit	1	1		418			418	411	0.0	0.0	0.000	A	
	4 - A50	Entry	1	1	1, 2, 3, 4	573	1031	0.556	574	563	0.0	1.1	6.512	A	
		Exit	1	1		572			572	567	0.0	0.0	0.027	A	
	2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	387			387	385	0.0	0.0	0.099	A
			Exit	1	1		391			391	388	0.0	0.0	0.000	A
B - Poplars Ave		Entry	1	1	A, C	362			362	358	0.0	1.4	11.496	B	
		Exit	1	1		357			357	354	0.0	0.0	0.000	A	
C - A50 E		Entry	1	1	A	391			391	388	0.0	0.0	0.000	A	
				2	B	168			168	165	0.0	0.3	8.208	A	
		Exit	1	1	(A, B)	559			559	554	0.0	0.0	0.123	A	
						559			559	552	0.0	0.2	1.162	A	

08:15 - 08:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	572	1072	0.534	572	581	0.9	1.1	7.432	A
		Exit	1	1		524			524	524	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	862	1135	0.759	866	861	1.8	3.4	14.201	B
		Exit	1	1		809			809	792	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	347	851	0.408	347	350	0.6	0.6	7.069	A
		Exit	1	1		485			485	484	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	693	994	0.697	695	676	1.1	1.5	7.916	A
		Exit	1	1		662			662	668	0.0	0.0	0.053	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	455			456	455	0.0	0.0	0.313	A
		Exit	1	1		448			448	458	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	446			444	431	1.4	2.7	19.477	C
		Exit	1	1		420			420	416	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	448			448	458	0.0	0.0	0.000	A
				2	B	195			195	192	0.3	0.4	9.060	A
			2	1	(A, B)	642			642	650	0.0	0.0	0.229	A
		Exit	1	1		674			676	661	0.2	0.4	2.389	A

08:30 - 08:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	733	1021	0.718	734	721	1.1	2.6	12.287	B
		Exit	1	1		637			637	626	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	1058	1075	0.985	1023	1005	3.4	17.9	44.763	E
		Exit	1	1		953			953	942	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	437	777	0.563	439	429	0.6	1.3	10.505	B
		Exit	1	1		598			598	588	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	792	936	0.847	792	791	1.5	2.2	9.349	A
		Exit	1	1		799			800	791	0.0	0.0	0.142	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	578			578	569	0.0	0.2	0.993	A
		Exit	1	1		545			545	539	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	539			482	488	2.7	13.9	61.224	F
		Exit	1	1		523			523	510	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	545			545	539	0.0	0.0	0.000	A
				2	B	236			236	230	0.4	0.7	10.208	B
			2	1	(A, B)	780			781	770	0.0	0.2	0.456	A
		Exit	1	1		773			772	774	0.4	1.0	4.207	A

08:45 - 09:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	710	1019	0.697	713	719	2.6	2.2	12.709	B
		Exit	1	1		634			634	631	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	1071	1082	0.990	1029	1033	17.9	26.9	78.738	F
		Exit	1	1		955			955	960	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	431	777	0.555	430	433	1.3	1.4	11.173	B
		Exit	1	1		587			587	589	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	808	942	0.857	810	807	2.2	2.2	9.888	A
		Exit	1	1		806			806	812	0.0	0.0	0.137	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	562			562	561	0.2	0.2	1.174	A
		Exit	1	1		556			556	558	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	540			507	506	13.9	22.0	132.230	F
		Exit	1	1		512			512	514	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	556			556	558	0.0	0.0	0.000	A
				2	B	231			231	235	0.7	0.7	9.916	A
		Exit	1	1	(A, B)	787			787	793	0.2	0.1	0.449	A
						788			788	788	1.0	1.1	4.963	A

09:00 - 09:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	584	1057	0.552	586	587	2.2	1.3	8.318	A
		Exit	1	1		527			527	545	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	879	1130	0.778	904	956	26.9	5.4	42.523	E
		Exit	1	1		848			848	869	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	344	833	0.413	343	349	1.4	0.7	8.163	A
		Exit	1	1		489			489	497	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	727	993	0.732	730	755	2.2	1.7	8.796	A
		Exit	1	1		700			700	735	0.0	0.0	0.095	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	465			466	465	0.2	0.1	0.623	A
		Exit	1	1		475			475	504	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	430			469	494	22.0	6.5	86.012	F
		Exit	1	1		435			435	439	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	475			475	504	0.0	0.0	0.000	A
				2	B	207			207	212	0.7	0.4	9.153	A
			2	1	(A, B)	682			681	715	0.1	0.1	0.317	A
		Exit	1	1		708			709	734	1.1	0.6	3.519	A

09:15 - 09:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	489	1119	0.436	489	495	1.3	0.8	6.310	A
		Exit	1	1		439			439	450	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	724	1167	0.621	720	746	5.4	1.9	10.620	B
		Exit	1	1		684			684	700	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	301	905	0.333	300	300	0.7	0.6	6.147	A
		Exit	1	1		403			403	412	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	581	1031	0.564	583	601	1.7	1.1	7.050	A
		Exit	1	1		566			566	580	0.0	0.0	0.024	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	388			387	383	0.1	0.0	0.178	A
		Exit	1	1		391			391	399	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	364			366	385	6.5	1.1	18.757	C
		Exit	1	1		349			349	353	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	391			391	399	0.0	0.0	0.000	A
				2	B	161			161	166	0.4	0.4	8.298	A
			2	1	(A, B)	552			552	565	0.1	0.0	0.140	A
		Exit	1	1		565			564	582	0.6	0.3	1.636	A

A50-Conjunction - 2032 DM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	AV-1 - A50-Conjunction [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Linked roundabouts	1 - A50/Hilden Rd Roundabout	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout			1, 2, 3, 4	22.59	C
2	Poplars Ave/A50	T-Junction	Two-way			29.92	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2032 DM	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A50/Hilden Rd Roundabout	4 - A50	2	C	Simple (vertical queueing)	Normal	0	100.00	
2 - Poplars Ave/A50	C - A50 E	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd		ONE HOUR	✓	613	100.000
	2 - Orford Rd		ONE HOUR	✓	913	100.000
	3 - Smith Drive		ONE HOUR	✓	408	100.000
	4 - A50	✓				
2 - Poplars Ave/A50	A - A50 W		ONE HOUR	✓	479	100.000
	B - Poplars Ave		ONE HOUR	✓	474	100.000
	C - A50 E	✓				

Origin-Destination Data

Demand (PCU/hr)

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	47	406	160
	2 - Orford Rd	239	0	107	567
	3 - Smith Drive	277	127	0	4
	4 - A50	36	688	20	3

Demand (PCU/hr)

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	205	274
	B - Poplars Ave	0	0	474
	C - A50 E	531	204	0

Vehicle Mix

Heavy Vehicle Percentages

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	2	1	1
	2 - Orford Rd	0	0	3	4
	3 - Smith Drive	1	0	0	0
	4 - A50	1	3	0	0

Heavy Vehicle Percentages

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	0	4
	B - Poplars Ave	0	0	2
	C - A50 E	2	5	0

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	11.11	2.3	B	563	844
	2 - Orford Rd	46.10	13.7	E	840	1260
	3 - Smith Drive	10.80	1.5	B	377	566
	4 - A50	9.70	2.2	A	686	1029
2 - Poplars Ave/A50	A - A50 W	1.08	0.2	A	439	658
	B - Poplars Ave	100.28	15.9	F	436	654
	C - A50 E	2.97	0.7	A	669	1003

Main Results for each time segment

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	462	115	635	462	463	419	0.0	0.7	5.458	A
	2 - Orford Rd	688	172	446	687	681	652	0.0	1.6	7.793	A
	3 - Smith Drive	309	77	729	309	310	403	0.0	0.5	5.937	A
	4 - A50	564	141	489	565	561	549	0.0	1.0	6.524	A
2 - Poplars Ave/A50	A - A50 W	365	91		365	364	395	0.0	0.0	0.080	A
	B - Poplars Ave	354	88		355	356	310	0.0	1.1	11.004	B
	C - A50 E	548	137		549	544	564	0.0	0.3	2.211	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	553	138	759	552	551	500	0.7	1.2	6.955	A
	2 - Orford Rd	826	207	532	827	817	779	1.6	2.6	11.753	B
	3 - Smith Drive	369	92	878	369	367	481	0.5	0.8	7.195	A
	4 - A50	678	169	582	678	666	666	1.0	1.5	7.630	A
2 - Poplars Ave/A50	A - A50 W	432	108		432	431	481	0.0	0.1	0.273	A
	B - Poplars Ave	431	108		429	422	369	1.1	2.3	17.392	C
	C - A50 E	663	166		664	654	677	0.3	0.5	2.512	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	675	169	896	671	670	604	1.2	2.3	10.750	B
	2 - Orford Rd	1009	252	645	988	969	922	2.6	11.7	31.969	D
	3 - Smith Drive	451	113	1048	451	447	585	0.8	1.4	10.173	B
	4 - A50	798	200	703	797	785	795	1.5	2.2	9.234	A
2 - Poplars Ave/A50	A - A50 W	520	130		520	526	574	0.1	0.1	0.858	A
	B - Poplars Ave	521	130		501	489	437	2.3	10.7	54.581	F
	C - A50 E	791	198		790	781	799	0.5	0.7	2.889	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	670	167	911	669	676	600	2.3	2.3	11.107	B
	2 - Orford Rd	1004	251	641	992	994	939	11.7	13.7	46.101	E
	3 - Smith Drive	449	112	1056	445	447	577	1.4	1.5	10.800	B
	4 - A50	810	202	700	811	805	800	2.2	2.2	9.701	A
2 - Poplars Ave/A50	A - A50 W	528	132		528	527	573	0.1	0.2	1.077	A
	B - Poplars Ave	524	131		511	503	446	10.7	15.9	100.282	F
	C - A50 E	796	199		794	797	813	0.7	0.7	2.967	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	556	139	784	557	560	497	2.3	1.1	7.834	A
	2 - Orford Rd	824	206	537	827	867	803	13.7	3.2	21.319	C
	3 - Smith Drive	371	93	873	371	371	491	1.5	0.8	8.012	A
	4 - A50	702	175	580	701	729	663	2.2	1.7	8.514	A
2 - Poplars Ave/A50	A - A50 W	427	107		427	434	478	0.2	0.0	0.520	A
	B - Poplars Ave	433	108		457	476	367	15.9	3.7	55.082	F
	C - A50 E	660	165		662	690	702	0.7	0.5	2.634	A

09:15 - 09:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	461	115	632	461	466	423	1.1	0.8	5.703	A
	2 - Orford Rd	689	172	444	689	697	650	3.2	1.5	8.354	A
	3 - Smith Drive	312	78	733	313	313	400	0.8	0.5	6.068	A
	4 - A50	564	141	491	564	579	556	1.7	1.0	6.709	A
2 - Poplars Ave/A50	A - A50 W	362	90		362	363	401	0.0	0.0	0.119	A
	B - Poplars Ave	354	89		357	367	307	3.7	1.1	13.618	B
	C - A50 E	553	138		554	557	563	0.5	0.3	2.230	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service	
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	462	1119	0.413	462	463	0.0	0.7	5.458	A	
		Exit	1	1		419			419	417	0.0	0.0	0.000	A	
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	688	1164	0.591	687	681	0.0	1.6	7.793	A	
		Exit	1	1		652			652	647	0.0	0.0	0.000	A	
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	309	916	0.337	309	310	0.0	0.5	5.937	A	
		Exit	1	1		403			403	404	0.0	0.0	0.000	A	
	4 - A50	Entry	1	1	1, 2, 3, 4	564	1032	0.547	565	561	0.0	1.0	6.524	A	
		Exit	1	1		549			549	547	0.0	0.0	0.023	A	
	2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	365			365	364	0.0	0.0	0.080	A
			Exit	1	1		395			395	393	0.0	0.0	0.000	A
B - Poplars Ave		Entry	1	1	A, C	354			355	356	0.0	1.1	11.004	B	
		Exit	1	1		310			310	306	0.0	0.0	0.000	A	
C - A50 E		Entry	1	1	A	395			395	393	0.0	0.0	0.000	A	
				2	B	153			155	150	0.0	0.3	7.745	A	
			2	1	(A, B)	548			548	545	0.0	0.0	0.099	A	
		Exit	1	1		564			564	564	0.0	0.2	1.057	A	

08:15 - 08:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	553	1067	0.518	552	551	0.7	1.2	6.955	A
		Exit	1	1		500			500	494	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	826	1127	0.734	827	817	1.6	2.6	11.753	B
		Exit	1	1		779			779	770	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	369	857	0.431	369	367	0.5	0.8	7.195	A
		Exit	1	1		481			481	479	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	678	993	0.683	678	666	1.0	1.5	7.630	A
		Exit	1	1		666			666	657	0.0	0.0	0.056	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	432			432	431	0.0	0.1	0.273	A
		Exit	1	1		481			481	474	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	431			429	422	1.1	2.3	17.392	C
		Exit	1	1		369			369	364	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	481			481	474	0.0	0.0	0.000	A
				2	B	183			184	180	0.3	0.4	8.574	A
			2	1	(A, B)	663			663	654	0.0	0.0	0.194	A
		Exit	1	1		677			677	668	0.2	0.4	2.039	A

08:30 - 08:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	675	1011	0.668	671	670	1.2	2.3	10.750	B
		Exit	1	1		604			604	593	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	1009	1077	0.936	988	969	2.6	11.7	31.969	D
		Exit	1	1		922			922	914	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	451	789	0.572	451	447	0.8	1.4	10.173	B
		Exit	1	1		585			585	579	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	798	941	0.848	797	785	1.5	2.2	9.234	A
		Exit	1	1		795			795	785	0.0	0.0	0.112	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	520			520	526	0.1	0.1	0.858	A
		Exit	1	1		574			574	566	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	521			501	489	2.3	10.7	54.581	F
		Exit	1	1		437			437	439	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	574			574	566	0.0	0.0	0.000	A
				2	B	216			216	215	0.4	0.6	9.467	A
			2	1	(A, B)	791			791	782	0.0	0.1	0.334	A
		Exit	1	1		800			799	788	0.4	1.0	3.960	A

08:45 - 09:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	670	1005	0.667	669	676	2.3	2.3	11.107	B
		Exit	1	1		600			600	605	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	1004	1079	0.930	992	994	11.7	13.7	46.101	E
		Exit	1	1		939			939	932	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	449	786	0.572	445	447	1.4	1.5	10.800	B
		Exit	1	1		577			577	584	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	810	943	0.859	811	805	2.2	2.2	9.701	A
		Exit	1	1		801			800	801	0.0	0.1	0.117	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	528			528	527	0.1	0.2	1.077	A
		Exit	1	1		573			573	576	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	524			511	503	10.7	15.9	100.282	F
		Exit	1	1		446			446	445	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	573			573	576	0.0	0.0	0.000	A
				2	B	222			221	221	0.6	0.6	9.646	A
			2	1	(A, B)	796			795	797	0.1	0.1	0.347	A
		Exit	1	1		813			813	806	1.0	1.0	4.531	A

09:00 - 09:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	556	1057	0.526	557	560	2.3	1.1	7.834	A
		Exit	1	1		497			497	511	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	824	1124	0.733	827	867	13.7	3.2	21.319	C
		Exit	1	1		803			803	831	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	371	859	0.432	371	371	1.5	0.8	8.012	A
		Exit	1	1		491			491	493	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	702	993	0.706	701	729	2.2	1.7	8.514	A
		Exit	1	1		663			663	692	0.1	0.0	0.060	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	427			427	434	0.2	0.0	0.520	A
		Exit	1	1		478			478	498	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	433			457	476	15.9	3.7	55.082	F
		Exit	1	1		367			367	377	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	478			478	498	0.0	0.0	0.000	A
				2	B	183			184	192	0.6	0.4	8.849	A
			2	1	(A, B)	660			661	689	0.1	0.0	0.234	A
		Exit	1	1		701			702	726	1.0	0.5	3.036	A

09:15 - 09:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	461	1120	0.412	461	466	1.1	0.8	5.703	A
		Exit	1	1		423			423	425	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	689	1165	0.591	689	697	3.2	1.5	8.354	A
		Exit	1	1		650			650	666	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	312	914	0.342	313	313	0.8	0.5	6.068	A
		Exit	1	1		400			400	405	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	564	1031	0.547	564	579	1.7	1.0	6.709	A
		Exit	1	1		555			556	560	0.0	0.0	0.023	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	362			362	363	0.0	0.0	0.119	A
		Exit	1	1		401			401	402	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	354			357	367	3.7	1.1	13.618	B
		Exit	1	1		307			307	312	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	401			401	402	0.0	0.0	0.000	A
				2	B	152			152	156	0.4	0.3	7.804	A
			2	1	(A, B)	553			553	557	0.0	0.0	0.108	A
		Exit	1	1		564			563	576	0.5	0.2	1.301	A

A50-Conjunction - 2032 DS Full, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	AV-1 - A50-Conjunction [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Linked roundabouts	1 - A50/Hilden Rd Roundabout	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout			1, 2, 3, 4	56.57	F
2	Poplars Ave/A50	T-Junction	Two-way			41.43	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2032 DS Full	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A50/Hilden Rd Roundabout	4 - A50	2	C	Simple (vertical queueing)	Normal	0	100.00	
2 - Poplars Ave/A50	C - A50 E	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd		ONE HOUR	✓	738	100.000
	2 - Orford Rd		ONE HOUR	✓	1020	100.000
	3 - Smith Drive		ONE HOUR	✓	358	100.000
	4 - A50	✓				
2 - Poplars Ave/A50	A - A50 W		ONE HOUR	✓	579	100.000
	B - Poplars Ave		ONE HOUR	✓	514	100.000
	C - A50 E	✓				

Origin-Destination Data

Demand (PCU/hr)

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	143	403	192
	2 - Orford Rd	298	0	109	613
	3 - Smith Drive	291	61	0	6
	4 - A50	100	663	17	5

Demand (PCU/hr)

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	330	249
	B - Poplars Ave	0	0	514
	C - A50 E	581	213	0

Vehicle Mix

Heavy Vehicle Percentages

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	0	0	1
	2 - Orford Rd	1	0	9	5
	3 - Smith Drive	2	0	0	14
	4 - A50	14	3	0	0

Heavy Vehicle Percentages

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	0	4
	B - Poplars Ave	0	0	2
	C - A50 E	2	4	0

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	15.25	3.5	C	678	1017
	2 - Orford Rd	138.79	48.2	F	928	1392
	3 - Smith Drive	10.46	1.1	B	329	493
	4 - A50	9.49	2.2	A	704	1056
2 - Poplars Ave/A50	A - A50 W	0.97	0.2	A	532	798
	B - Poplars Ave	147.79	25.4	F	466	699
	C - A50 E	3.07	0.8	A	731	1096

Main Results for each time segment

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	556	139	554	555	556	515	0.0	1.0	5.993	A
	2 - Orford Rd	758	189	465	757	761	644	0.0	2.2	9.826	A
	3 - Smith Drive	265	66	824	265	268	398	0.0	0.4	6.087	A
	4 - A50	585	146	483	586	572	606	0.0	1.1	6.737	A
2 - Poplars Ave/A50	A - A50 W	436	109		436	440	439	0.0	0.0	0.094	A
	B - Poplars Ave	383	96		385	379	408	0.0	1.2	12.168	B
	C - A50 E	599	150		599	602	574	0.0	0.4	2.338	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	670	168	648	666	657	622	1.0	1.7	7.837	A
	2 - Orford Rd	903	226	557	902	898	757	2.2	5.0	18.233	C
	3 - Smith Drive	324	81	986	325	324	474	0.4	0.7	7.486	A
	4 - A50	683	171	586	684	679	724	1.1	1.4	7.771	A
2 - Poplars Ave/A50	A - A50 W	520	130		520	519	524	0.0	0.0	0.282	A
	B - Poplars Ave	449	112		451	448	486	1.2	2.8	20.246	C
	C - A50 E	714	179		715	713	675	0.4	0.5	2.630	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	817	204	773	815	803	726	1.7	3.5	14.091	B
	2 - Orford Rd	1119	280	679	1032	1025	909	5.0	28.9	64.382	F
	3 - Smith Drive	393	98	1143	396	391	568	0.7	1.0	9.818	A
	4 - A50	806	202	692	807	794	848	1.4	2.2	9.260	A
2 - Poplars Ave/A50	A - A50 W	641	160		641	641	618	0.0	0.2	0.756	A
	B - Poplars Ave	560	140		514	511	577	2.8	16.3	73.890	F
	C - A50 E	837	209		836	823	796	0.5	0.8	3.070	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	809	202	771	808	814	734	3.5	3.5	15.253	C
	2 - Orford Rd	1117	279	671	1055	1041	908	28.9	48.2	138.789	F
	3 - Smith Drive	396	99	1156	397	392	571	1.0	1.1	10.458	B
	4 - A50	813	203	694	812	811	860	2.2	2.2	9.489	A
2 - Poplars Ave/A50	A - A50 W	640	160		640	636	619	0.2	0.2	0.973	A
	B - Poplars Ave	557	139		528	528	595	16.3	25.4	147.792	F
	C - A50 E	845	211		845	836	799	0.8	0.7	3.070	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	664	166	701	660	670	660	3.5	1.8	9.326	A
	2 - Orford Rd	911	228	548	1014	1039	812	48.2	16.7	104.990	F
	3 - Smith Drive	325	81	1084	325	327	478	1.1	0.8	8.643	A
	4 - A50	747	187	613	748	764	795	2.2	1.8	8.809	A
2 - Poplars Ave/A50	A - A50 W	524	131		524	520	573	0.2	0.0	0.495	A
	B - Poplars Ave	465	116		510	528	511	25.4	9.3	105.978	F
	C - A50 E	786	197		785	799	735	0.7	0.7	2.832	A

09:15 - 09:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	553	138	567	553	552	516	1.8	1.0	6.276	A
	2 - Orford Rd	763	191	461	769	823	660	16.7	2.2	21.071	C
	3 - Smith Drive	269	67	835	269	270	394	0.8	0.5	6.550	A
	4 - A50	592	148	490	593	619	614	1.8	1.1	7.235	A
2 - Poplars Ave/A50	A - A50 W	432	108		432	439	446	0.0	0.0	0.137	A
	B - Poplars Ave	383	96		397	417	407	9.3	1.4	27.965	D
	C - A50 E	604	151		605	635	581	0.7	0.4	2.304	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service	
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	556	1152	0.482	555	556	0.0	1.0	5.993	A	
		Exit	1	1		515			515	514	0.0	0.0	0.000	A	
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	758	1155	0.656	757	761	0.0	2.2	9.826	A	
		Exit	1	1		644			644	634	0.0	0.0	0.000	A	
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	265	878	0.302	265	268	0.0	0.4	6.087	A	
		Exit	1	1		398			398	397	0.0	0.0	0.000	A	
	4 - A50	Entry	1	1	1, 2, 3, 4	585	1034	0.565	586	572	0.0	1.1	6.737	A	
		Exit	1	1		606			606	612	0.0	0.0	0.028	A	
	2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	436			436	440	0.0	0.0	0.094	A
			Exit	1	1		439			439	442	0.0	0.0	0.000	A
B - Poplars Ave		Entry	1	1	A, C	383			385	379	0.0	1.2	12.168	B	
		Exit	1	1		408			408	411	0.0	0.0	0.000	A	
C - A50 E		Entry	1	1	A	439			439	442	0.0	0.0	0.000	A	
				2	B	160			160	159	0.0	0.4	8.400	A	
		Exit	1	1	(A, B)	599			599	603	0.0	0.0	0.125	A	
							573			574	567	0.0	0.2	1.239	A

08:15 - 08:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service	
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	670	1113	0.602	666	657	1.0	1.7	7.837	A	
		Exit	1	1		622			622	612	0.0	0.0	0.000	A	
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	903	1116	0.809	902	898	2.2	5.0	18.233	C	
		Exit	1	1		757			757	752	0.0	0.0	0.000	A	
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	324	814	0.398	325	324	0.4	0.7	7.486	A	
		Exit	1	1		474			474	471	0.0	0.0	0.000	A	
	4 - A50	Entry	1	1	1, 2, 3, 4	683	991	0.690	684	679	1.1	1.4	7.771	A	
		Exit	1	1		724			724	723	0.0	0.0	0.070	A	
	2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	520			520	519	0.0	0.0	0.282	A
			Exit	1	1		524			524	522	0.0	0.0	0.000	A
B - Poplars Ave		Entry	1	1	A, C	449			451	448	1.2	2.8	20.246	C	
		Exit	1	1		486			486	487	0.0	0.0	0.000	A	
C - A50 E		Entry	1	1	A	524			524	522	0.0	0.0	0.000	A	
				2	B	190			190	191	0.4	0.5	9.076	A	
			2	1	(A, B)	714			715	713	0.0	0.1	0.231	A	
		Exit	1	1		676			675	671	0.2	0.4	2.212	A	

08:30 - 08:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	817	1062	0.769	815	803	1.7	3.5	14.091	B
		Exit	1	1		726			726	718	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	1119	1063	1.053	1032	1025	5.0	28.9	64.382	F
		Exit	1	1		909			909	894	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	393	751	0.523	396	391	0.7	1.0	9.818	A
		Exit	1	1		568			568	566	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	806	946	0.852	807	794	1.4	2.2	9.260	A
		Exit	1	1		848			848	835	0.0	0.1	0.154	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	641			641	641	0.0	0.2	0.756	A
		Exit	1	1		618			618	604	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	560			514	511	2.8	16.3	73.890	F
		Exit	1	1		577			577	582	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	618			618	604	0.0	0.0	0.000	A
				2	B	219			218	219	0.5	0.7	10.091	B
			2	1	(A, B)	837			837	824	0.1	0.1	0.412	A
		Exit	1	1		796			796	787	0.4	0.9	3.997	A

08:45 - 09:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	809	1062	0.761	808	814	3.5	3.5	15.253	C
		Exit	1	1		734			734	728	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	1117	1066	1.047	1055	1041	28.9	48.2	138.789	F
		Exit	1	1		908			908	906	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	396	746	0.531	397	392	1.0	1.1	10.458	B
		Exit	1	1		571			571	573	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	813	945	0.860	812	811	2.2	2.2	9.489	A
		Exit	1	1		859			860	850	0.1	0.0	0.121	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	640			640	636	0.2	0.2	0.973	A
		Exit	1	1		619			619	613	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	557			528	528	16.3	25.4	147.792	F
		Exit	1	1		595			595	589	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	619			619	613	0.0	0.0	0.000	A
				2	B	226			226	223	0.7	0.7	10.213	B
		Exit	1	1	(A, B)	845			846	836	0.1	0.1	0.382	A
						799			799	798	0.9	1.0	4.391	A

09:00 - 09:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	664	1092	0.608	660	670	3.5	1.8	9.326	A
		Exit	1	1		660			660	667	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	911	1119	0.814	1014	1039	48.2	16.7	104.990	F
		Exit	1	1		812			812	835	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	325	775	0.419	325	327	1.1	0.8	8.643	A
		Exit	1	1		478			478	487	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	747	979	0.762	748	764	2.2	1.8	8.809	A
		Exit	1	1		795			795	812	0.0	0.0	0.099	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	524			524	520	0.2	0.0	0.495	A
		Exit	1	1		573			573	584	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	465			510	528	25.4	9.3	105.978	F
		Exit	1	1		511			511	513	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	573			573	584	0.0	0.0	0.000	A
				2	B	213			212	216	0.7	0.6	9.509	A
		Exit	1	1	(A, B)	786			786	799	0.1	0.1	0.305	A
						736			735	751	1.0	0.6	3.442	A

09:15 - 09:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	553	1147	0.482	553	552	1.8	1.0	6.276	A
		Exit	1	1		516			516	537	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	763	1157	0.659	769	823	16.7	2.2	21.071	C
		Exit	1	1		660			660	678	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	269	874	0.308	269	270	0.8	0.5	6.550	A
		Exit	1	1		394			394	404	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	592	1032	0.574	593	619	1.8	1.1	7.235	A
		Exit	1	1		614			614	645	0.0	0.0	0.033	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	432			432	439	0.0	0.0	0.137	A
		Exit	1	1		446			446	465	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	383			397	417	9.3	1.4	27.965	D
		Exit	1	1		407			407	422	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	446			446	465	0.0	0.0	0.000	A
				2	B	158			159	170	0.6	0.4	8.291	A
			2	1	(A, B)	604			604	634	0.1	0.0	0.133	A
		Exit	1	1		581			581	606	0.6	0.2	1.713	A

A50-Conjunction - 2018 Validation, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	AV-1 - A50-Conjunction [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout			1, 2, 3, 4	23.39	C
2	Poplars Ave/A50	T-Junction	Two-way			9.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2018 Validation	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A50/Hilden Rd Roundabout	4 - A50	2	C	Simple (vertical queueing)	Normal	0	100.00	
2 - Poplars Ave/A50	C - A50 E	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd		ONE HOUR	✓	600	100.000
	2 - Orford Rd		ONE HOUR	✓	836	100.000
	3 - Smith Drive		ONE HOUR	✓	88	100.000
	4 - A50	✓				
2 - Poplars Ave/A50	A - A50 W		ONE HOUR	✓	535	100.000
	B - Poplars Ave		ONE HOUR	✓	306	100.000
	C - A50 E	✓				

Origin-Destination Data

Demand (PCU/hr)

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	49	314	237
	2 - Orford Rd	90	0	117	629
	3 - Smith Drive	83	5	0	0
	4 - A50	277	500	13	0

Demand (PCU/hr)

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	51	484
	B - Poplars Ave	0	0	306
	C - A50 E	467	393	0

Vehicle Mix

Heavy Vehicle Percentages

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	4	3	4
	2 - Orford Rd	0	0	0	1
	3 - Smith Drive	4	0	0	0
	4 - A50	3	2	0	0

Heavy Vehicle Percentages

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	0	2
	B - Poplars Ave	0	0	2
	C - A50 E	2	2	0

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	10.77	2.2	B	551	826
	2 - Orford Rd	49.88	14.3	E	763	1145
	3 - Smith Drive	5.40	0.2	A	82	123
	4 - A50	7.26	2.0	A	730	1095
2 - Poplars Ave/A50	A - A50 W	0.87	0.1	A	494	741
	B - Poplars Ave	25.79	2.5	D	280	420
	C - A50 E	9.89	2.6	A	788	1183

Main Results for each time segment

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	453	113	392	453	452	340	0.0	0.7	5.005	A
	2 - Orford Rd	629	157	426	627	626	419	0.0	1.5	7.031	A
	3 - Smith Drive	64	16	722	64	66	331	0.0	0.0	4.321	A
	4 - A50	599	150	134	598	592	652	0.0	0.9	5.524	A
2 - Poplars Ave/A50	A - A50 W	409	102		409	406	349	0.0	0.0	0.068	A
	B - Poplars Ave	226	56		227	228	344	0.0	0.5	8.358	A
	C - A50 E	654	163		653	649	596	0.0	1.1	5.547	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	530	133	461	531	533	400	0.7	0.9	6.080	A
	2 - Orford Rd	737	184	502	744	746	490	1.5	2.2	10.981	B
	3 - Smith Drive	82	21	846	82	78	400	0.0	0.1	4.890	A
	4 - A50	705	176	157	703	699	771	0.9	1.2	6.006	A
2 - Poplars Ave/A50	A - A50 W	480	120		480	476	414	0.0	0.0	0.194	A
	B - Poplars Ave	272	68		272	270	408	0.5	0.8	10.322	B
	C - A50 E	771	193		774	773	704	1.1	1.5	7.032	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	664	166	571	661	653	502	0.9	2.1	10.042	B
	2 - Orford Rd	913	228	621	893	879	611	2.2	10.9	33.194	D
	3 - Smith Drive	100	25	1025	100	95	490	0.1	0.1	5.193	A
	4 - A50	876	219	198	875	857	927	1.2	1.7	7.010	A
2 - Poplars Ave/A50	A - A50 W	587	147		588	582	507	0.0	0.1	0.650	A
	B - Poplars Ave	336	84		339	333	478	0.8	1.9	19.290	C
	C - A50 E	930	233		929	916	872	1.5	2.5	9.168	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	663	166	573	658	661	500	2.1	2.2	10.768	B
	2 - Orford Rd	927	232	620	913	911	611	10.9	14.3	49.879	E
	3 - Smith Drive	99	25	1045	99	95	488	0.1	0.2	5.399	A
	4 - A50	879	220	197	876	872	946	1.7	2.0	7.261	A
2 - Poplars Ave/A50	A - A50 W	594	148		593	590	513	0.1	0.1	0.867	A
	B - Poplars Ave	337	84		340	337	492	1.9	2.5	25.794	D
	C - A50 E	948	237		949	946	876	2.5	2.6	9.890	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	547	137	471	548	550	406	2.2	1.0	7.253	A
	2 - Orford Rd	747	187	517	752	801	502	14.3	3.0	24.317	C
	3 - Smith Drive	81	20	866	81	80	403	0.2	0.1	4.945	A
	4 - A50	716	179	161	717	728	786	2.0	1.3	6.228	A
2 - Poplars Ave/A50	A - A50 W	483	121		482	481	430	0.1	0.1	0.265	A
	B - Poplars Ave	277	69		277	286	403	2.5	0.8	12.046	B
	C - A50 E	786	196		787	825	715	2.6	1.7	7.637	A

18:15 - 18:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	449	112	396	450	450	348	1.0	0.5	5.015	A
	2 - Orford Rd	626	156	422	620	636	423	3.0	1.5	7.698	A
	3 - Smith Drive	68	17	712	67	69	330	0.1	0.1	4.570	A
	4 - A50	606	152	136	608	606	643	1.3	0.9	5.578	A
2 - Poplars Ave/A50	A - A50 W	412	103		412	411	343	0.1	0.0	0.100	A
	B - Poplars Ave	233	58		234	231	335	0.8	0.5	8.520	A
	C - A50 E	641	160		638	656	606	1.7	1.1	5.509	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service	
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	453	1220	0.371	453	452	0.0	0.7	5.005	A	
		Exit	1	1		340			340	339	0.0	0.0	0.000	A	
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	629	1172	0.536	627	626	0.0	1.5	7.031	A	
		Exit	1	1		419			419	412	0.0	0.0	0.000	A	
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	64	919	0.069	64	66	0.0	0.0	4.321	A	
		Exit	1	1		331			331	332	0.0	0.0	0.000	A	
	4 - A50	Entry	1	1	1, 2, 3, 4	599	1182	0.506	598	592	0.0	0.9	5.524	A	
		Exit	1	1		652			652	652	0.0	0.0	0.273	A	
	2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	409			409	406	0.0	0.0	0.068	A
			Exit	1	1		349			349	353	0.0	0.0	0.000	A
B - Poplars Ave		Entry	1	1	A, C	226			227	228	0.0	0.5	8.358	A	
		Exit	1	1		344			344	336	0.0	0.0	0.000	A	
C - A50 E		Entry	1	1	A	349			349	353	0.0	0.0	0.000	A	
				2	B	305			304	296	0.0	0.9	10.201	B	
		Exit	1	1	(A, B)	654			654	653	0.0	0.2	0.866	A	
							596			596	593	0.0	0.1	0.727	A

17:15 - 17:30

Junction	Arm	Side	Lane level	Lane	Destinations	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	530	1191	0.445	531	533	0.7	0.9	6.080	A
		Exit	1	1		400			400	398	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	737	1140	0.647	744	746	1.5	2.2	10.981	B
		Exit	1	1		490			490	488	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	82	870	0.095	82	78	0.0	0.1	4.890	A
		Exit	1	1		400			400	397	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	705	1172	0.601	703	699	0.9	1.2	6.006	A
		Exit	1	1		770			771	774	0.0	0.1	0.587	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	480			480	476	0.0	0.0	0.194	A
		Exit	1	1		414			414	421	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	272			272	270	0.5	0.8	10.322	B
		Exit	1	1		408			408	398	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	414			414	421	0.0	0.0	0.000	A
				2	B	358			359	352	0.9	1.1	11.900	B
			2	1	(A, B)	771			772	774	0.2	0.3	1.596	A
		Exit	1	1		704			704	699	0.1	0.2	1.237	A

17:30 - 17:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	664	1146	0.580	661	653	0.9	2.1	10.042	B
		Exit	1	1		502			502	484	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	913	1088	0.839	893	879	2.2	10.9	33.194	D
		Exit	1	1		611			611	600	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	100	798	0.125	100	95	0.1	0.1	5.193	A
		Exit	1	1		490			490	480	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	876	1155	0.758	875	857	1.2	1.7	7.010	A
		Exit	1	1		927			927	917	0.1	0.4	1.320	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	587			588	582	0.0	0.1	0.650	A
		Exit	1	1		507			507	501	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	336			339	333	0.8	1.9	19.290	C
		Exit	1	1		478			478	472	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	507			507	501	0.0	0.0	0.000	A
				2	B	424			422	415	1.1	1.8	13.839	B
			2	1	(A, B)	930			931	918	0.3	0.8	2.876	A
		Exit	1	1		872			872	858	0.2	0.5	2.476	A

17:45 - 18:00

Junction	Arm	Side	Lane level	Lane	Destinations	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	663	1145	0.580	658	661	2.1	2.2	10.768	B
		Exit	1	1		500			500	496	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	927	1088	0.852	913	911	10.9	14.3	49.879	E
		Exit	1	1		611			611	610	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	99	790	0.125	99	95	0.1	0.2	5.399	A
		Exit	1	1		488			488	488	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	879	1155	0.761	876	872	1.7	2.0	7.261	A
		Exit	1	1		947			946	944	0.4	0.5	1.564	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	594			593	590	0.1	0.1	0.867	A
		Exit	1	1		513			513	513	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	337			340	337	1.9	2.5	25.794	D
		Exit	1	1		492			492	488	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	513			513	513	0.0	0.0	0.000	A
				2	B	435			436	432	1.8	1.7	14.377	B
			2	1	(A, B)	948			948	945	0.8	1.0	3.307	A
		Exit	1	1		877			876	871	0.5	0.7	2.827	A

18:00 - 18:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	547	1187	0.461	548	550	2.2	1.0	7.253	A
		Exit	1	1		406			406	418	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	747	1133	0.659	752	801	14.3	3.0	24.317	C
		Exit	1	1		502			502	509	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	81	862	0.094	81	80	0.2	0.1	4.945	A
		Exit	1	1		403			403	413	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	716	1171	0.612	717	728	2.0	1.3	6.228	A
		Exit	1	1		786			786	820	0.5	0.2	0.873	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	483			482	481	0.1	0.1	0.265	A
		Exit	1	1		430			430	448	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	277			277	286	2.5	0.8	12.046	B
		Exit	1	1		403			403	422	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	430			430	448	0.0	0.0	0.000	A
				2	B	356			357	377	1.7	1.3	12.378	B
			2	1	(A, B)	786			786	824	1.0	0.4	2.024	A
		Exit	1	1		713			715	723	0.7	0.3	1.508	A

18:15 - 18:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service	
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	449	1218	0.368	450	450	1.0	0.5	5.015	A	
		Exit	1	1		348			348	349	0.0	0.0	0.000	A	
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	626	1174	0.533	620	636	3.0	1.5	7.698	A	
		Exit	1	1		423			423	423	0.0	0.0	0.000	A	
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	68	923	0.073	67	69	0.1	0.1	4.570	A	
		Exit	1	1		330			330	335	0.0	0.0	0.000	A	
	4 - A50	Entry	1	1	1, 2, 3, 4	606	1181	0.513	608	606	1.3	0.9	5.578	A	
		Exit	1	1		643			643	654	0.2	0.1	0.235	A	
	2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	412			412	411	0.1	0.0	0.100	A
			Exit	1	1		343			343	353	0.0	0.0	0.000	A
B - Poplars Ave		Entry	1	1	A, C	233			234	231	0.8	0.5	8.520	A	
		Exit	1	1		335			335	342	0.0	0.0	0.000	A	
C - A50 E		Entry	1	1	A	343			343	353	0.0	0.0	0.000	A	
				2	B	297			295	302	1.3	0.8	10.199	B	
			2	1	(A, B)	641			639	654	0.4	0.2	0.859	A	
		Exit	1	1		606			606	603	0.3	0.1	0.834	A	

A50-Conjunction - 2022 DM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	AV-1 - A50-Conjunction [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout			1, 2, 3, 4	34.26	D
2	Poplars Ave/A50	T-Junction	Two-way			12.85	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2022 DM	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A50/Hilden Rd Roundabout	4 - A50	2	C	Simple (vertical queueing)	Normal	0	100.00	
2 - Poplars Ave/A50	C - A50 E	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd		ONE HOUR	✓	625	100.000
	2 - Orford Rd		ONE HOUR	✓	882	100.000
	3 - Smith Drive		ONE HOUR	✓	91	100.000
	4 - A50	✓				
2 - Poplars Ave/A50	A - A50 W		ONE HOUR	✓	566	100.000
	B - Poplars Ave		ONE HOUR	✓	326	100.000
	C - A50 E	✓				

Origin-Destination Data

Demand (PCU/hr)

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	52	340	233
	2 - Orford Rd	95	0	121	666
	3 - Smith Drive	84	6	0	1
	4 - A50	295	529	14	0

Demand (PCU/hr)

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	55	511
	B - Poplars Ave	0	0	326
	C - A50 E	491	402	0

Vehicle Mix

Heavy Vehicle Percentages

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	4	2	4
	2 - Orford Rd	0	0	0	1
	3 - Smith Drive	3	0	0	0
	4 - A50	3	2	0	0

Heavy Vehicle Percentages

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	0	2
	B - Poplars Ave	0	0	2
	C - A50 E	2	2	0

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	12.46	2.4	B	570	855
	2 - Orford Rd	78.03	23.3	F	809	1214
	3 - Smith Drive	5.46	0.2	A	84	127
	4 - A50	7.66	2.0	A	773	1159
2 - Poplars Ave/A50	A - A50 W	1.29	0.2	A	520	781
	B - Poplars Ave	41.33	4.3	E	299	449
	C - A50 E	9.81	2.6	A	820	1230

Main Results for each time segment

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	470	117	414	472	468	359	0.0	0.7	5.154	A
	2 - Orford Rd	661	165	445	664	660	442	0.0	1.3	7.882	A
	3 - Smith Drive	70	18	746	70	70	362	0.0	0.1	4.436	A
	4 - A50	631	158	141	632	629	675	0.0	1.0	5.643	A
2 - Poplars Ave/A50	A - A50 W	426	106		426	426	372	0.0	0.0	0.128	A
	B - Poplars Ave	244	61		245	247	346	0.0	0.5	9.152	A
	C - A50 E	677	169		677	670	630	0.0	1.0	5.607	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	555	139	499	551	555	428	0.7	1.1	6.494	A
	2 - Orford Rd	787	197	517	785	780	533	1.3	2.8	12.115	B
	3 - Smith Drive	84	21	885	84	81	418	0.1	0.1	4.593	A
	4 - A50	758	189	169	758	747	799	1.0	1.3	6.272	A
2 - Poplars Ave/A50	A - A50 W	510	127		510	506	440	0.0	0.0	0.288	A
	B - Poplars Ave	291	73		292	288	411	0.5	1.1	12.416	B
	C - A50 E	800	200		804	794	755	1.0	1.6	6.998	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	679	170	603	680	681	523	1.1	2.0	10.663	B
	2 - Orford Rd	973	243	641	931	917	642	2.8	16.3	41.317	E
	3 - Smith Drive	103	26	1059	103	102	513	0.1	0.2	5.459	A
	4 - A50	925	231	201	924	912	959	1.3	2.0	7.458	A
2 - Poplars Ave/A50	A - A50 W	630	157		630	627	531	0.0	0.2	1.088	A
	B - Poplars Ave	360	90		350	347	488	1.1	4.3	33.055	D
	C - A50 E	962	240		960	948	921	1.6	2.6	9.203	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	684	171	615	684	688	516	2.0	2.4	12.459	B
	2 - Orford Rd	969	242	641	941	938	657	16.3	23.3	78.034	F
	3 - Smith Drive	98	24	1061	98	99	521	0.2	0.2	5.438	A
	4 - A50	932	233	198	933	932	960	2.0	1.9	7.660	A
2 - Poplars Ave/A50	A - A50 W	622	155		621	625	528	0.2	0.2	1.293	A
	B - Poplars Ave	360	90		365	364	496	4.3	3.9	41.326	E
	C - A50 E	962	241		963	964	926	2.6	2.5	9.806	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	557	139	503	558	566	428	2.4	1.0	8.015	A
	2 - Orford Rd	794	199	525	821	869	536	23.3	5.6	45.227	E
	3 - Smith Drive	83	21	914	83	83	432	0.2	0.1	5.119	A
	4 - A50	760	190	169	762	773	828	1.9	1.3	6.544	A
2 - Poplars Ave/A50	A - A50 W	516	129		517	513	456	0.2	0.0	0.403	A
	B - Poplars Ave	290	72		289	303	426	3.9	1.1	16.145	C
	C - A50 E	829	207		831	872	757	2.5	1.8	8.246	A

18:15 - 18:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	475	119	411	477	474	360	1.0	0.6	5.219	A
	2 - Orford Rd	669	167	451	669	686	438	5.6	1.4	9.998	A
	3 - Smith Drive	69	17	759	68	70	360	0.1	0.1	4.456	A
	4 - A50	631	158	140	632	636	688	1.3	0.9	5.681	A
2 - Poplars Ave/A50	A - A50 W	419	105		419	424	380	0.0	0.0	0.122	A
	B - Poplars Ave	250	62		251	250	353	1.1	0.5	8.972	A
	C - A50 E	691	173		693	702	630	1.8	1.0	5.808	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service	
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	470	1211	0.388	472	468	0.0	0.7	5.154	A	
		Exit	1	1		359			359	358	0.0	0.0	0.000	A	
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	661	1164	0.568	664	660	0.0	1.3	7.882	A	
		Exit	1	1		442			442	440	0.0	0.0	0.000	A	
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	70	909	0.077	70	70	0.0	0.1	4.436	A	
		Exit	1	1		362			362	357	0.0	0.0	0.000	A	
	4 - A50	Entry	1	1	1, 2, 3, 4	631	1179	0.535	632	629	0.0	1.0	5.643	A	
		Exit	1	1		675			675	673	0.0	0.1	0.252	A	
	2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	426			426	426	0.0	0.0	0.128	A
			Exit	1	1		372			372	372	0.0	0.0	0.000	A
B - Poplars Ave		Entry	1	1	A, C	244			245	247	0.0	0.5	9.152	A	
		Exit	1	1		346			346	339	0.0	0.0	0.000	A	
C - A50 E		Entry	1	1	A	372			372	372	0.0	0.0	0.000	A	
				2	B	305			305	298	0.0	0.9	10.561	B	
		Exit	1	1	(A, B)	677			677	673	0.0	0.2	0.878	A	
							630			630	631	0.0	0.2	0.903	A

17:15 - 17:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	555	1175	0.472	551	555	0.7	1.1	6.494	A
		Exit	1	1		428			428	423	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	787	1133	0.695	785	780	1.3	2.8	12.115	B
		Exit	1	1		533			533	524	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	84	854	0.098	84	81	0.1	0.1	4.593	A
		Exit	1	1		418			418	421	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	758	1167	0.649	758	747	1.0	1.3	6.272	A
		Exit	1	1		800			799	795	0.1	0.2	0.610	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	510			510	506	0.0	0.0	0.288	A
		Exit	1	1		440			440	438	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	291			292	288	0.5	1.1	12.416	B
		Exit	1	1		411			411	403	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	440			440	438	0.0	0.0	0.000	A
				2	B	361			363	356	0.9	1.2	12.001	B
			2	1	(A, B)	800			801	796	0.2	0.4	1.604	A
		Exit	1	1		754			755	746	0.2	0.3	1.542	A

17:30 - 17:45

Junction	Arm	Side	Lane level	Lane	Destinations	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	679	1132	0.599	680	681	1.1	2.0	10.663	B
		Exit	1	1		523			523	512	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	973	1079	0.902	931	917	2.8	16.3	41.317	E
		Exit	1	1		642			642	639	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	103	785	0.132	103	102	0.1	0.2	5.459	A
		Exit	1	1		513			513	512	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	925	1153	0.802	924	912	1.3	2.0	7.458	A
		Exit	1	1		961			959	949	0.2	0.5	1.345	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	630			630	627	0.0	0.2	1.088	A
		Exit	1	1		531			531	523	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	360			350	347	1.1	4.3	33.055	D
		Exit	1	1		488			488	484	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	531			531	523	0.0	0.0	0.000	A
				2	B	429			429	424	1.2	1.7	14.007	B
			2	1	(A, B)	962			960	950	0.4	0.9	2.908	A
		Exit	1	1		921			921	911	0.3	0.8	3.134	A

17:45 - 18:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	684	1127	0.607	684	688	2.0	2.4	12.459	B
		Exit	1	1		516			516	519	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	969	1079	0.898	941	938	16.3	23.3	78.034	F
		Exit	1	1		657			657	654	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	98	784	0.125	98	99	0.2	0.2	5.438	A
		Exit	1	1		521			521	521	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	932	1155	0.807	933	932	2.0	1.9	7.660	A
		Exit	1	1		961			960	962	0.5	0.4	1.577	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	622			621	625	0.2	0.2	1.293	A
		Exit	1	1		528			528	529	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	360			365	364	4.3	3.9	41.326	E
		Exit	1	1		496			496	497	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	528			528	529	0.0	0.0	0.000	A
				2	B	434			434	435	1.7	1.7	14.462	B
			2	1	(A, B)	962			962	964	0.9	0.9	3.291	A
		Exit	1	1		925			926	927	0.8	0.8	3.404	A

18:00 - 18:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	557	1174	0.475	558	566	2.4	1.0	8.015	A
		Exit	1	1		428			428	441	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	794	1130	0.703	821	869	23.3	5.6	45.227	E
		Exit	1	1		536			536	543	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	83	842	0.099	83	83	0.2	0.1	5.119	A
		Exit	1	1		432			432	441	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	760	1167	0.651	762	773	1.9	1.3	6.544	A
		Exit	1	1		828			828	867	0.4	0.2	1.037	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	516			517	513	0.2	0.0	0.403	A
		Exit	1	1		456			456	479	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	290			289	303	3.9	1.1	16.145	C
		Exit	1	1		426			426	444	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	456			456	479	0.0	0.0	0.000	A
				2	B	374			375	393	1.7	1.4	13.061	B
			2	1	(A, B)	829			830	871	0.9	0.5	2.375	A
		Exit	1	1		755			757	768	0.8	0.3	1.810	A

18:15 - 18:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service	
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	475	1212	0.392	477	474	1.0	0.6	5.219	A	
		Exit	1	1		360			360	365	0.0	0.0	0.000	A	
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	669	1162	0.576	669	686	5.6	1.4	9.998	A	
		Exit	1	1		438			438	443	0.0	0.0	0.000	A	
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	69	904	0.076	68	70	0.1	0.1	4.456	A	
		Exit	1	1		360			360	362	0.0	0.0	0.000	A	
	4 - A50	Entry	1	1	1, 2, 3, 4	631	1179	0.535	632	636	1.3	0.9	5.681	A	
		Exit	1	1		688			688	696	0.2	0.0	0.347	A	
	2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	419			419	424	0.0	0.0	0.122	A
			Exit	1	1		380			380	385	0.0	0.0	0.000	A
B - Poplars Ave		Entry	1	1	A, C	250			251	250	1.1	0.5	8.972	A	
		Exit	1	1		353			353	358	0.0	0.0	0.000	A	
C - A50 E		Entry	1	1	A	380			380	385	0.0	0.0	0.000	A	
				2	B	312			312	317	1.4	0.9	10.681	B	
			2	1	(A, B)	691			692	700	0.5	0.1	1.027	A	
		Exit	1	1		630			630	633	0.3	0.2	0.923	A	

A50-Conjunction - 2022 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	AV-1 - A50-Conjunction [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout			1, 2, 3, 4	41.16	E
2	Poplars Ave/A50	T-Junction	Two-way			13.69	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2022 DS	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A50/Hilden Rd Roundabout	4 - A50	2	C	Simple (vertical queueing)	Normal	0	100.00	
2 - Poplars Ave/A50	C - A50 E	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd		ONE HOUR	✓	646	100.000
	2 - Orford Rd		ONE HOUR	✓	893	100.000
	3 - Smith Drive		ONE HOUR	✓	99	100.000
	4 - A50	✓				
2 - Poplars Ave/A50	A - A50 W		ONE HOUR	✓	571	100.000
	B - Poplars Ave		ONE HOUR	✓	328	100.000
	C - A50 E	✓				

Origin-Destination Data

Demand (PCU/hr)

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	54	344	248
	2 - Orford Rd	100	0	122	671
	3 - Smith Drive	92	6	0	1
	4 - A50	310	535	14	0

Demand (PCU/hr)

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	57	514
	B - Poplars Ave	0	0	328
	C - A50 E	491	404	0

Vehicle Mix

Heavy Vehicle Percentages

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	4	3	9
	2 - Orford Rd	0	0	0	2
	3 - Smith Drive	8	0	0	0
	4 - A50	7	2	0	0

Heavy Vehicle Percentages

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	0	2
	B - Poplars Ave	0	0	2
	C - A50 E	2	2	0

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	14.53	2.8	B	595	893
	2 - Orford Rd	96.95	30.6	F	813	1219
	3 - Smith Drive	5.82	0.2	A	90	135
	4 - A50	7.75	2.1	A	788	1182
2 - Poplars Ave/A50	A - A50 W	1.51	0.3	A	525	788
	B - Poplars Ave	44.48	4.3	E	299	449
	C - A50 E	10.26	2.8	B	819	1229

Main Results for each time segment

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	486	121	417	485	486	381	0.0	0.8	5.350	A
	2 - Orford Rd	660	165	455	661	668	447	0.0	1.6	8.077	A
	3 - Smith Drive	76	19	757	76	77	359	0.0	0.1	4.623	A
	4 - A50	648	162	149	648	641	683	0.0	1.0	5.695	A
2 - Poplars Ave/A50	A - A50 W	432	108		433	434	368	0.0	0.0	0.155	A
	B - Poplars Ave	245	61		246	245	342	0.0	0.6	9.171	A
	C - A50 E	671	168		669	674	638	0.0	1.2	5.775	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	584	146	496	585	582	455	0.8	1.1	7.126	A
	2 - Orford Rd	794	199	548	791	789	533	1.6	3.6	13.775	B
	3 - Smith Drive	85	21	905	85	87	434	0.1	0.1	5.104	A
	4 - A50	777	194	173	777	763	816	1.0	1.4	6.527	A
2 - Poplars Ave/A50	A - A50 W	515	129		515	510	433	0.0	0.0	0.400	A
	B - Poplars Ave	300	75		300	294	413	0.6	1.1	12.904	B
	C - A50 E	799	200		796	799	764	1.2	1.8	7.053	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	709	177	606	706	697	552	1.1	2.8	12.658	B
	2 - Orford Rd	986	246	662	933	920	650	3.6	18.5	47.150	E
	3 - Smith Drive	110	27	1075	110	108	520	0.1	0.2	5.815	A
	4 - A50	946	237	213	946	923	973	1.4	2.0	7.592	A
2 - Poplars Ave/A50	A - A50 W	636	159		636	627	522	0.0	0.3	1.297	A
	B - Poplars Ave	360	90		353	347	493	1.1	4.0	32.238	D
	C - A50 E	954	238		953	937	929	1.8	2.7	9.461	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	711	178	611	716	713	549	2.8	2.5	14.529	B
	2 - Orford Rd	976	244	673	926	937	655	18.5	30.6	96.955	F
	3 - Smith Drive	108	27	1077	109	109	521	0.2	0.2	5.726	A
	4 - A50	947	237	213	948	944	975	2.0	2.1	7.745	A
2 - Poplars Ave/A50	A - A50 W	627	157		627	628	522	0.3	0.3	1.506	A
	B - Poplars Ave	356	89		363	360	498	4.0	4.3	44.476	E
	C - A50 E	959	240		959	961	931	2.7	2.8	10.260	B

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	590	148	499	586	585	454	2.5	1.5	8.446	A
	2 - Orford Rd	790	198	548	845	890	537	30.6	7.0	61.115	F
	3 - Smith Drive	86	22	951	87	89	442	0.2	0.1	5.345	A
	4 - A50	774	193	178	775	793	860	2.1	1.3	6.815	A
2 - Poplars Ave/A50	A - A50 W	517	129		517	518	467	0.3	0.0	0.624	A
	B - Poplars Ave	295	74		299	309	442	4.3	1.1	20.320	C
	C - A50 E	848	212		853	882	759	2.8	1.8	8.402	A

18:15 - 18:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	492	123	412	493	489	370	1.5	0.7	5.837	A
	2 - Orford Rd	671	168	460	673	694	445	7.0	1.4	12.221	B
	3 - Smith Drive	74	18	768	74	75	365	0.1	0.1	4.863	A
	4 - A50	635	159	148	634	647	694	1.3	1.0	5.782	A
2 - Poplars Ave/A50	A - A50 W	424	106		425	427	377	0.0	0.0	0.157	A
	B - Poplars Ave	239	60		241	250	350	1.1	0.5	9.319	A
	C - A50 E	683	171		684	700	622	1.8	1.0	5.944	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	486	1210	0.402	485	486	0.0	0.8	5.350	A
		Exit	1	1		381			381	377	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	660	1160	0.569	661	668	0.0	1.6	8.077	A
		Exit	1	1		447			447	444	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	76	905	0.084	76	77	0.0	0.1	4.623	A
		Exit	1	1		359			359	359	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	648	1175	0.551	648	641	0.0	1.0	5.695	A
		Exit	1	1		683			683	692	0.0	0.1	0.268	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	432			433	434	0.0	0.0	0.155	A
		Exit	1	1		368			368	373	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	245			246	245	0.0	0.6	9.171	A
		Exit	1	1		342			342	345	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	368			368	373	0.0	0.0	0.000	A
				2	B	303			301	302	0.0	1.0	10.706	B
		Exit	1	1	(A, B)	671			671	678	0.0	0.2	0.946	A
							638			638	635	0.0	0.1	1.027

17:15 - 17:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	584	1177	0.496	585	582	0.8	1.1	7.126	A
		Exit	1	1		455			455	446	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	794	1119	0.710	791	789	1.6	3.6	13.775	B
		Exit	1	1		533			533	529	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	85	846	0.100	85	87	0.1	0.1	5.104	A
		Exit	1	1		434			434	430	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	777	1165	0.666	777	763	1.0	1.4	6.527	A
		Exit	1	1		817			816	816	0.1	0.1	0.658	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	515			515	510	0.0	0.0	0.400	A
		Exit	1	1		433			433	438	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	300			300	294	0.6	1.1	12.904	B
		Exit	1	1		413			413	411	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	433			433	438	0.0	0.0	0.000	A
				2	B	364			363	361	1.0	1.3	11.903	B
			2	1	(A, B)	799			797	800	0.2	0.5	1.661	A
		Exit	1	1		765			764	753	0.1	0.4	1.783	A

17:30 - 17:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	709	1131	0.627	706	697	1.1	2.8	12.658	B
		Exit	1	1		552			552	538	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	986	1070	0.921	933	920	3.6	18.5	47.150	E
		Exit	1	1		650			650	637	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	110	778	0.141	110	108	0.1	0.2	5.815	A
		Exit	1	1		520			520	514	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	946	1149	0.824	946	923	1.4	2.0	7.592	A
		Exit	1	1		972			973	958	0.1	0.5	1.400	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	636			636	627	0.0	0.3	1.297	A
		Exit	1	1		522			522	514	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	360			353	347	1.1	4.0	32.238	D
		Exit	1	1		493			493	485	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	522			522	514	0.0	0.0	0.000	A
				2	B	432			431	424	1.3	1.8	14.114	B
			2	1	(A, B)	954			954	939	0.5	0.9	3.047	A
		Exit	1	1		927			929	910	0.4	0.8	3.451	A

17:45 - 18:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	711	1129	0.630	716	713	2.8	2.5	14.529	B
		Exit	1	1		549			549	549	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	976	1066	0.916	926	937	18.5	30.6	96.955	F
		Exit	1	1		655			655	653	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	108	777	0.140	109	109	0.2	0.2	5.726	A
		Exit	1	1		521			521	522	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	947	1149	0.824	948	944	2.0	2.1	7.745	A
		Exit	1	1		974			975	980	0.5	0.4	1.681	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	627			627	628	0.3	0.3	1.506	A
		Exit	1	1		522			522	526	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	356			363	360	4.0	4.3	44.476	E
		Exit	1	1		498			498	497	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	522			522	526	0.0	0.0	0.000	A
				2	B	437			436	436	1.8	1.9	14.868	B
			2	1	(A, B)	959			959	962	0.9	1.0	3.526	A
		Exit	1	1		929			931	927	0.8	0.9	3.678	A

18:00 - 18:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	590	1176	0.502	586	585	2.5	1.5	8.446	A
		Exit	1	1		454			454	470	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	790	1119	0.706	845	890	30.6	7.0	61.115	F
		Exit	1	1		537			537	548	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	86	828	0.104	87	89	0.2	0.1	5.345	A
		Exit	1	1		442			442	450	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	774	1163	0.665	775	793	2.1	1.3	6.815	A
		Exit	1	1		859			860	890	0.4	0.2	1.113	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	517			517	518	0.3	0.0	0.624	A
		Exit	1	1		467			467	482	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	295			299	309	4.3	1.1	20.320	C
		Exit	1	1		442			442	454	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	467			467	482	0.0	0.0	0.000	A
				2	B	384			386	401	1.9	1.3	13.052	B
			2	1	(A, B)	848			850	880	1.0	0.5	2.503	A
		Exit	1	1		759			759	776	0.9	0.4	2.237	A

18:15 - 18:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service	
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	492	1212	0.406	493	489	1.5	0.7	5.837	A	
		Exit	1	1		370			370	381	0.0	0.0	0.000	A	
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	671	1158	0.580	673	694	7.0	1.4	12.221	B	
		Exit	1	1		445			445	451	0.0	0.0	0.000	A	
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	74	901	0.082	74	75	0.1	0.1	4.863	A	
		Exit	1	1		365			365	366	0.0	0.0	0.000	A	
	4 - A50	Entry	1	1	1, 2, 3, 4	635	1176	0.540	634	647	1.3	1.0	5.782	A	
		Exit	1	1		694			694	709	0.2	0.0	0.393	A	
	2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	424			425	427	0.0	0.0	0.157	A
			Exit	1	1		377			377	385	0.0	0.0	0.000	A
B - Poplars Ave		Entry	1	1	A, C	239			241	250	1.1	0.5	9.319	A	
		Exit	1	1		350			350	357	0.0	0.0	0.000	A	
C - A50 E		Entry	1	1	A	377			377	385	0.0	0.0	0.000	A	
				2	B	306			307	315	1.3	0.8	10.819	B	
			2	1	(A, B)	683			683	698	0.5	0.1	1.126	A	
		Exit	1	1		622			622	635	0.4	0.2	1.055	A	

A50-Conjunction - 2022 DS Full, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	AV-1 - A50-Conjunction [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout			1, 2, 3, 4	65.69	F
2	Poplars Ave/A50	T-Junction	Two-way			17.81	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2022 DS Full	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A50/Hilden Rd Roundabout	4 - A50	2	C	Simple (vertical queueing)	Normal	0	100.00	
2 - Poplars Ave/A50	C - A50 E	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd		ONE HOUR	✓	663	100.000
	2 - Orford Rd		ONE HOUR	✓	974	100.000
	3 - Smith Drive		ONE HOUR	✓	145	100.000
	4 - A50	✓				
2 - Poplars Ave/A50	A - A50 W		ONE HOUR	✓	612	100.000
	B - Poplars Ave		ONE HOUR	✓	337	100.000
	C - A50 E	✓				

Origin-Destination Data

Demand (PCU/hr)

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	73	368	222
	2 - Orford Rd	155	0	117	702
	3 - Smith Drive	138	6	0	1
	4 - A50	314	544	14	0

Demand (PCU/hr)

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	95	517
	B - Poplars Ave	0	0	337
	C - A50 E	492	409	0

Vehicle Mix

Heavy Vehicle Percentages

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	3	3	11
	2 - Orford Rd	0	0	0	2
	3 - Smith Drive	5	0	0	0
	4 - A50	7	2	0	0

Heavy Vehicle Percentages

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	0	2
	B - Poplars Ave	0	0	2
	C - A50 E	2	2	0

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	13.86	3.5	B	608	912
	2 - Orford Rd	160.96	54.4	F	891	1337
	3 - Smith Drive	6.36	0.3	A	133	199
	4 - A50	8.39	2.2	A	794	1191
2 - Poplars Ave/A50	A - A50 W	1.96	0.5	A	560	840
	B - Poplars Ave	67.47	7.5	F	309	463
	C - A50 E	9.94	2.6	A	821	1231

Main Results for each time segment

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	496	124	428	497	497	469	0.0	0.7	5.631	A
	2 - Orford Rd	736	184	452	735	725	473	0.0	2.2	8.985	A
	3 - Smith Drive	111	28	816	111	112	371	0.0	0.2	5.009	A
	4 - A50	665	166	233	664	652	693	0.0	1.1	5.935	A
2 - Poplars Ave/A50	A - A50 W	472	118		472	467	367	0.0	0.0	0.170	A
	B - Poplars Ave	258	64		258	253	383	0.0	0.8	9.690	A
	C - A50 E	679	170		676	668	656	0.0	1.2	5.926	A

17:15 – 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 – A50/Hilden Rd Roundabout	1 – Hilden Rd	590	147	491	593	590	541	0.7	1.0	6.855	A
	2 – Orford Rd	874	218	539	876	867	544	2.2	4.7	17.817	C
	3 – Smith Drive	128	32	970	127	129	445	0.2	0.2	5.401	A
	4 – A50	767	192	266	766	768	832	1.1	1.6	6.898	A
2 – Poplars Ave/A50	A – A50 W	545	136		545	547	445	0.0	0.1	0.508	A
	B – Poplars Ave	294	73		295	298	457	0.8	1.3	14.526	B
	C – A50 E	815	204		814	802	751	1.2	1.8	7.341	A

17:30 – 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 – A50/Hilden Rd Roundabout	1 – Hilden Rd	724	181	614	718	719	660	1.0	3.5	12.759	B
	2 – Orford Rd	1072	268	656	968	962	676	4.7	31.2	70.483	F
	3 – Smith Drive	161	40	1098	161	156	526	0.2	0.3	6.248	A
	4 – A50	949	237	324	950	925	936	1.6	2.2	8.195	A
2 – Poplars Ave/A50	A – A50 W	669	167		671	670	502	0.1	0.3	1.761	A
	B – Poplars Ave	370	93		368	348	515	1.3	5.8	48.260	E
	C – A50 E	912	228		911	909	932	1.8	2.6	9.678	A

17:45 – 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 – A50/Hilden Rd Roundabout	1 – Hilden Rd	730	182	616	736	742	660	3.5	2.3	13.858	B
	2 – Orford Rd	1077	269	673	985	983	678	31.2	54.4	160.959	F
	3 – Smith Drive	157	39	1114	157	160	544	0.3	0.3	6.362	A
	4 – A50	958	239	318	958	949	954	2.2	2.2	8.392	A
2 – Poplars Ave/A50	A – A50 W	675	169		672	672	516	0.3	0.5	1.962	A
	B – Poplars Ave	376	94		373	364	526	5.8	7.5	67.469	F
	C – A50 E	935	234		939	938	943	2.6	2.6	9.936	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	599	150	511	597	595	562	2.3	1.5	8.987	A
	2 - Orford Rd	860	215	545	968	999	563	54.4	22.3	133.653	F
	3 - Smith Drive	134	33	1054	134	134	458	0.3	0.2	6.038	A
	4 - A50	786	196	285	788	813	902	2.2	1.6	7.412	A
2 - Poplars Ave/A50	A - A50 W	553	138		553	556	480	0.5	0.1	0.759	A
	B - Poplars Ave	299	75		304	324	483	7.5	1.5	29.006	D
	C - A50 E	883	221		880	904	773	2.6	2.2	8.793	A

18:15 - 18:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	508	127	416	511	504	452	1.5	0.8	5.879	A
	2 - Orford Rd	729	182	464	755	807	462	22.3	2.5	31.652	D
	3 - Smith Drive	108	27	834	108	109	385	0.2	0.2	5.307	A
	4 - A50	640	160	227	640	655	714	1.6	1.2	6.207	A
2 - Poplars Ave/A50	A - A50 W	446	112		447	458	380	0.1	0.0	0.221	A
	B - Poplars Ave	254	64		253	254	391	1.5	0.8	10.295	B
	C - A50 E	701	175		701	741	630	2.2	1.1	6.585	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service	
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	496	1205	0.412	497	497	0.0	0.7	5.631	A	
		Exit	1	1		469			469	462	0.0	0.0	0.000	A	
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	736	1161	0.634	735	725	0.0	2.2	8.985	A	
		Exit	1	1		473			473	466	0.0	0.0	0.000	A	
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	111	882	0.126	111	112	0.0	0.2	5.009	A	
		Exit	1	1		371			371	374	0.0	0.0	0.000	A	
	4 - A50	Entry	1	1	1, 2, 3, 4	665	1140	0.583	664	652	0.0	1.1	5.935	A	
		Exit	1	1		693			693	685	0.0	0.0	0.296	A	
	2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	472			472	467	0.0	0.0	0.170	A
			Exit	1	1		367			367	366	0.0	0.0	0.000	A
B - Poplars Ave		Entry	1	1	A, C	258			258	253	0.0	0.8	9.690	A	
		Exit	1	1		383			383	375	0.0	0.0	0.000	A	
C - A50 E		Entry	1	1	A	367			367	366	0.0	0.0	0.000	A	
				2	B	310			309	302	0.0	1.0	10.802	B	
		Exit	1	1	(A, B)	679			677	672	0.0	0.2	0.995	A	
							656			656	647	0.0	0.2	1.158	A

17:15 - 17:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	590	1179	0.500	593	590	0.7	1.0	6.855	A
		Exit	1	1		541			541	540	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	874	1123	0.778	876	867	2.2	4.7	17.817	C
		Exit	1	1		544			544	547	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	128	820	0.156	127	129	0.2	0.2	5.401	A
		Exit	1	1		445			445	447	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	767	1126	0.681	766	768	1.1	1.6	6.898	A
		Exit	1	1		832			832	820	0.0	0.2	0.652	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	545			545	547	0.0	0.1	0.508	A
		Exit	1	1		445			445	441	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	294			295	298	0.8	1.3	14.526	B
		Exit	1	1		457			457	450	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	445			445	441	0.0	0.0	0.000	A
				2	B	369			369	362	1.0	1.3	12.331	B
			2	1	(A, B)	815			814	804	0.2	0.5	1.757	A
		Exit	1	1		751			751	756	0.2	0.5	2.132	A

17:30 - 17:45

Junction	Arm	Side	Lane level	Lane	Destinations	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	724	1128	0.642	718	719	1.0	3.5	12.759	B
		Exit	1	1		660			660	636	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	1072	1073	1.000	968	962	4.7	31.2	70.483	F
		Exit	1	1		676			676	662	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	161	769	0.209	161	156	0.2	0.3	6.248	A
		Exit	1	1		526			526	528	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	949	1102	0.862	950	925	1.6	2.2	8.195	A
		Exit	1	1		936			936	934	0.2	0.4	1.412	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	669			671	670	0.1	0.3	1.761	A
		Exit	1	1		502			502	499	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	370			368	348	1.3	5.8	48.260	E
		Exit	1	1		515			515	514	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	502			502	499	0.0	0.0	0.000	A
				2	B	409			409	410	1.3	1.7	14.565	B
			2	1	(A, B)	912			911	911	0.5	0.9	3.104	A
		Exit	1	1		934			932	910	0.5	1.3	4.215	A

17:45 - 18:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	730	1127	0.648	736	742	3.5	2.3	13.858	B
		Exit	1	1		660			660	653	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	1077	1065	1.011	985	983	31.2	54.4	160.959	F
		Exit	1	1		678			678	677	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	157	763	0.206	157	160	0.3	0.3	6.362	A
		Exit	1	1		544			544	544	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	958	1104	0.867	958	949	2.2	2.2	8.392	A
		Exit	1	1		953			954	960	0.4	0.4	1.528	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	675			672	672	0.3	0.5	1.962	A
		Exit	1	1		516			516	517	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	376			373	364	5.8	7.5	67.469	F
		Exit	1	1		526			526	524	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	516			516	517	0.0	0.0	0.000	A
				2	B	422			424	420	1.7	1.8	14.782	B
			2	1	(A, B)	935			937	938	0.9	0.8	3.299	A
		Exit	1	1		942			943	934	1.3	1.1	4.468	A

18:00 - 18:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	599	1170	0.512	597	595	2.3	1.5	8.987	A
		Exit	1	1		562			562	578	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	860	1121	0.767	968	999	54.4	22.3	133.653	F
		Exit	1	1		563			563	580	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	134	786	0.170	134	134	0.3	0.2	6.038	A
		Exit	1	1		458			458	463	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	786	1118	0.703	788	813	2.2	1.6	7.412	A
		Exit	1	1		903			902	920	0.4	0.3	1.182	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	553			553	556	0.5	0.1	0.759	A
		Exit	1	1		480			480	495	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	299			304	324	7.5	1.5	29.006	D
		Exit	1	1		483			483	493	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	480			480	495	0.0	0.0	0.000	A
				2	B	401			400	409	1.8	1.6	13.587	B
		Exit	1	1	(A, B)	883			881	903	0.8	0.7	2.655	A
							774			773	799	1.1	0.6	2.837

18:15 - 18:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	508	1210	0.420	511	504	1.5	0.8	5.879	A
		Exit	1	1		452			452	470	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	729	1156	0.631	755	807	22.3	2.5	31.652	D
		Exit	1	1		462			462	469	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	108	874	0.123	108	109	0.2	0.2	5.307	A
		Exit	1	1		385			385	387	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	640	1143	0.560	640	655	1.6	1.2	6.207	A
		Exit	1	1		714			714	750	0.3	0.1	0.531	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	446			447	458	0.1	0.0	0.221	A
		Exit	1	1		380			380	400	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	254			253	254	1.5	0.8	10.295	B
		Exit	1	1		391			391	411	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	380			380	400	0.0	0.0	0.000	A
				2	B	321			321	340	1.6	1.0	11.332	B
			2	1	(A, B)	701			701	738	0.7	0.2	1.447	A
		Exit	1	1		630			630	643	0.6	0.3	1.311	A

A50-Conjunction - 2027 DM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	AV-1 - A50-Conjunction [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout			1, 2, 3, 4	47.18	E
2	Poplars Ave/A50	T-Junction	Two-way			15.36	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2027 DM	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A50/Hilden Rd Roundabout	4 - A50	2	C	Simple (vertical queueing)	Normal	0	100.00	
2 - Poplars Ave/A50	C - A50 E	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd		ONE HOUR	✓	641	100.000
	2 - Orford Rd		ONE HOUR	✓	920	100.000
	3 - Smith Drive		ONE HOUR	✓	102	100.000
	4 - A50	✓				
2 - Poplars Ave/A50	A - A50 W		ONE HOUR	✓	588	100.000
	B - Poplars Ave		ONE HOUR	✓	344	100.000
	C - A50 E	✓				

Origin-Destination Data

Demand (PCU/hr)

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	55	356	230
	2 - Orford Rd	100	0	125	695
	3 - Smith Drive	95	6	0	1
	4 - A50	300	557	15	0

Demand (PCU/hr)

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	60	528
	B - Poplars Ave	0	0	344
	C - A50 E	514	407	0

Vehicle Mix

Heavy Vehicle Percentages

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	4	2	4
	2 - Orford Rd	0	0	0	1
	3 - Smith Drive	3	0	0	0
	4 - A50	3	2	0	0

Heavy Vehicle Percentages

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	0	2
	B - Poplars Ave	0	0	2
	C - A50 E	2	2	0

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	13.71	3.0	B	585	877
	2 - Orford Rd	112.57	36.3	F	841	1261
	3 - Smith Drive	5.65	0.2	A	94	141
	4 - A50	7.75	2.1	A	800	1199
2 - Poplars Ave/A50	A - A50 W	1.48	0.3	A	537	806
	B - Poplars Ave	53.75	5.2	F	316	474
	C - A50 E	9.83	2.9	A	844	1266

Main Results for each time segment

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	476	119	437	477	475	371	0.0	0.7	5.417	A
	2 - Orford Rd	691	173	447	694	687	466	0.0	1.5	8.286	A
	3 - Smith Drive	75	19	772	75	79	369	0.0	0.1	4.296	A
	4 - A50	660	165	151	657	651	696	0.0	1.2	5.723	A
2 - Poplars Ave/A50	A - A50 W	447	112		447	443	390	0.0	0.0	0.118	A
	B - Poplars Ave	259	65		257	256	351	0.0	1.0	9.435	A
	C - A50 E	698	174		697	692	658	0.0	1.1	5.626	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	570	143	524	569	570	445	0.7	1.2	7.135	A
	2 - Orford Rd	832	208	532	830	824	562	1.5	4.0	16.254	C
	3 - Smith Drive	95	24	917	94	92	445	0.1	0.2	4.862	A
	4 - A50	788	197	181	788	780	829	1.2	1.4	6.580	A
2 - Poplars Ave/A50	A - A50 W	529	132		529	525	460	0.0	0.0	0.435	A
	B - Poplars Ave	316	79		314	308	427	1.0	1.4	14.098	B
	C - A50 E	833	208		831	828	789	1.1	1.7	7.240	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	704	176	642	709	705	527	1.2	2.1	11.501	B
	2 - Orford Rd	1012	253	667	946	933	685	4.0	22.8	55.488	F
	3 - Smith Drive	111	28	1072	111	110	541	0.2	0.2	5.488	A
	4 - A50	959	240	212	958	942	972	1.4	2.1	7.753	A
2 - Poplars Ave/A50	A - A50 W	655	164		654	647	556	0.0	0.3	1.297	A
	B - Poplars Ave	382	95		370	364	488	1.4	5.2	40.033	E
	C - A50 E	975	244		978	960	955	1.7	2.4	9.528	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	698	175	639	693	704	533	2.1	3.0	13.711	B
	2 - Orford Rd	1010	253	645	966	961	687	22.8	36.3	112.571	F
	3 - Smith Drive	110	27	1084	109	113	527	0.2	0.2	5.648	A
	4 - A50	959	240	213	959	966	977	2.1	2.1	7.701	A
2 - Poplars Ave/A50	A - A50 W	637	159		636	647	543	0.3	0.3	1.482	A
	B - Poplars Ave	371	93		381	380	496	5.2	5.2	53.752	F
	C - A50 E	978	245		975	981	955	2.4	2.9	9.828	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	575	144	519	573	588	458	3.0	1.2	8.363	A
	2 - Orford Rd	810	202	538	899	925	555	36.3	9.0	79.886	F
	3 - Smith Drive	97	24	979	97	94	457	0.2	0.1	5.232	A
	4 - A50	780	195	196	780	806	882	2.1	1.4	6.816	A
2 - Poplars Ave/A50	A - A50 W	525	131		525	528	492	0.3	0.1	0.527	A
	B - Poplars Ave	310	77		310	325	452	5.2	1.3	21.193	C
	C - A50 E	882	221		887	916	778	2.9	1.8	8.568	A

18:15 - 18:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	485	121	431	484	484	374	1.2	0.8	5.581	A
	2 - Orford Rd	691	173	453	694	720	462	9.0	1.8	13.120	B
	3 - Smith Drive	75	19	775	75	77	372	0.1	0.1	4.639	A
	4 - A50	653	163	151	654	658	699	1.4	1.0	5.929	A
2 - Poplars Ave/A50	A - A50 W	432	108		432	436	384	0.1	0.0	0.146	A
	B - Poplars Ave	260	65		261	260	357	1.3	0.6	9.806	A
	C - A50 E	699	175		699	720	651	1.8	1.1	6.121	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service	
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	476	1201	0.396	477	475	0.0	0.7	5.417	A	
		Exit	1	1		371			371	372	0.0	0.0	0.000	A	
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	691	1163	0.594	694	687	0.0	1.5	8.286	A	
		Exit	1	1		466			466	460	0.0	0.0	0.000	A	
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	75	899	0.083	75	79	0.0	0.1	4.296	A	
		Exit	1	1		369			369	367	0.0	0.0	0.000	A	
	4 - A50	Entry	1	1	1, 2, 3, 4	660	1175	0.562	657	651	0.0	1.2	5.723	A	
		Exit	1	1		696			696	694	0.0	0.0	0.306	A	
	2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	447			447	443	0.0	0.0	0.118	A
			Exit	1	1		390			390	390	0.0	0.0	0.000	A
B - Poplars Ave		Entry	1	1	A, C	259			257	256	0.0	1.0	9.435	A	
		Exit	1	1		351			351	346	0.0	0.0	0.000	A	
C - A50 E		Entry	1	1	A	390			390	390	0.0	0.0	0.000	A	
				2	B	308			307	302	0.0	0.9	10.675	B	
		Exit	1	1	(A, B)	698			697	695	0.0	0.2	0.938	A	
							659			658	653	0.0	0.2	0.936	A

17:15 - 17:30

Junction	Arm	Side	Lane level	Lane	Destinations	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	570	1165	0.490	569	570	0.7	1.2	7.135	A
		Exit	1	1		445			445	442	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	832	1127	0.739	830	824	1.5	4.0	16.254	C
		Exit	1	1		562			562	557	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	95	841	0.113	94	92	0.1	0.2	4.862	A
		Exit	1	1		445			445	439	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	788	1162	0.678	788	780	1.2	1.4	6.580	A
		Exit	1	1		829			829	828	0.0	0.1	0.718	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	529			529	525	0.0	0.0	0.435	A
		Exit	1	1		460			460	464	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	316			314	308	1.0	1.4	14.098	B
		Exit	1	1		427			427	417	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	460			460	464	0.0	0.0	0.000	A
				2	B	372			371	364	0.9	1.3	12.294	B
			2	1	(A, B)	833			832	830	0.2	0.4	1.809	A
		Exit	1	1		788			789	779	0.2	0.3	1.883	A

17:30 - 17:45

Junction	Arm	Side	Lane level	Lane	Destinations	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	704	1116	0.631	709	705	1.2	2.1	11.501	B
		Exit	1	1		527			527	526	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	1012	1068	0.948	946	933	4.0	22.8	55.488	F
		Exit	1	1		685			685	669	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	111	779	0.143	111	110	0.2	0.2	5.488	A
		Exit	1	1		541			541	534	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	959	1149	0.834	958	942	1.4	2.1	7.753	A
		Exit	1	1		972			972	961	0.1	0.4	1.458	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	655			654	647	0.0	0.3	1.297	A
		Exit	1	1		556			556	541	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	382			370	364	1.4	5.2	40.033	E
		Exit	1	1		488			488	486	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	556			556	541	0.0	0.0	0.000	A
				2	B	420			422	420	1.3	1.6	14.603	B
			2	1	(A, B)	975			977	962	0.4	0.8	3.123	A
		Exit	1	1		958			955	942	0.3	1.1	3.551	A

17:45 - 18:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	698	1117	0.625	693	704	2.1	3.0	13.711	B
		Exit	1	1		533			533	538	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	1010	1078	0.937	966	961	22.8	36.3	112.571	F
		Exit	1	1		687			687	689	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	110	775	0.142	109	113	0.2	0.2	5.648	A
		Exit	1	1		527			527	537	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	959	1148	0.835	959	966	2.1	2.1	7.701	A
		Exit	1	1		979			977	980	0.4	0.6	1.640	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	637			636	647	0.3	0.3	1.482	A
		Exit	1	1		543			543	547	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	371			381	380	5.2	5.2	53.752	F
		Exit	1	1		496			496	500	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	543			543	547	0.0	0.0	0.000	A
				2	B	432			433	434	1.6	1.8	14.670	B
		Exit	1	1	(A, B)	978			975	982	0.8	1.1	3.336	A
						954			955	961	1.1	1.1	3.720	A

18:00 - 18:15

Junction	Arm	Side	Lane level	Lane	Destinations	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	575	1167	0.493	573	588	3.0	1.2	8.363	A
		Exit	1	1		458			458	465	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	810	1124	0.720	899	925	36.3	9.0	79.886	F
		Exit	1	1		555			555	573	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	97	816	0.119	97	94	0.2	0.1	5.232	A
		Exit	1	1		457			457	466	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	780	1156	0.675	780	806	2.1	1.4	6.816	A
		Exit	1	1		880			882	910	0.6	0.2	1.163	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	525			525	528	0.3	0.1	0.527	A
		Exit	1	1		492			492	506	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	310			310	325	5.2	1.3	21.193	C
		Exit	1	1		452			452	464	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	492			492	506	0.0	0.0	0.000	A
				2	B	393			396	410	1.8	1.3	13.384	B
			2	1	(A, B)	882			885	914	1.1	0.5	2.605	A
		Exit	1	1		778			778	800	1.1	0.5	2.139	A

18:15 - 18:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	485	1204	0.403	484	484	1.2	0.8	5.581	A
		Exit	1	1		374			374	378	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	691	1161	0.595	694	720	9.0	1.8	13.120	B
		Exit	1	1		462			462	465	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	75	898	0.084	75	77	0.1	0.1	4.639	A
		Exit	1	1		372			372	378	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	653	1175	0.556	654	658	1.4	1.0	5.929	A
		Exit	1	1		699			699	718	0.2	0.1	0.447	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	432			432	436	0.1	0.0	0.146	A
		Exit	1	1		384			384	402	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	260			261	260	1.3	0.6	9.806	A
		Exit	1	1		357			357	362	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	384			384	402	0.0	0.0	0.000	A
			2	1	B	314			315	318	1.3	0.9	11.110	B
		Exit	2	1	(A, B)	699			698	719	0.5	0.2	1.258	A
			1	1		651			651	654	0.5	0.1	1.124	A

A50-Conjunction - 2027 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	AV-1 - A50-Conjunction [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout			1, 2, 3, 4	93.35	F
2	Poplars Ave/A50	T-Junction	Two-way			25.28	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2027 DS	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A50/Hilden Rd Roundabout	4 - A50	2	C	Simple (vertical queueing)	Normal	0	100.00	
2 - Poplars Ave/A50	C - A50 E	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd		ONE HOUR	✓	671	100.000
	2 - Orford Rd		ONE HOUR	✓	998	100.000
	3 - Smith Drive		ONE HOUR	✓	146	100.000
	4 - A50	✓				
2 - Poplars Ave/A50	A - A50 W		ONE HOUR	✓	608	100.000
	B - Poplars Ave		ONE HOUR	✓	370	100.000
	C - A50 E	✓				

Origin-Destination Data

Demand (PCU/hr)

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	65	371	235
	2 - Orford Rd	130	0	123	745
	3 - Smith Drive	139	6	0	1
	4 - A50	304	585	15	0

Demand (PCU/hr)

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	90	518
	B - Poplars Ave	0	0	370
	C - A50 E	518	438	0

Vehicle Mix

Heavy Vehicle Percentages

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	3	3	10
	2 - Orford Rd	0	0	0	2
	3 - Smith Drive	5	0	0	0
	4 - A50	7	2	0	0

Heavy Vehicle Percentages

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	0	2
	B - Poplars Ave	0	0	2
	C - A50 E	2	2	0

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	16.59	3.5	C	618	927
	2 - Orford Rd	234.27	77.7	F	915	1372
	3 - Smith Drive	6.34	0.3	A	135	203
	4 - A50	8.37	2.3	A	820	1230
2 - Poplars Ave/A50	A - A50 W	1.93	0.4	A	555	833
	B - Poplars Ave	101.10	12.8	F	338	507
	C - A50 E	10.80	2.9	B	876	1314

Main Results for each time segment

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	509	127	453	506	502	432	0.0	0.9	5.813	A
	2 - Orford Rd	762	191	468	763	748	491	0.0	2.0	9.556	A
	3 - Smith Drive	111	28	848	112	110	383	0.0	0.1	5.098	A
	4 - A50	672	168	213	673	673	746	0.0	1.1	6.056	A
2 - Poplars Ave/A50	A - A50 W	453	113		453	458	397	0.0	0.0	0.160	A
	B - Poplars Ave	279	70		279	279	399	0.0	0.7	10.373	B
	C - A50 E	732	183		729	715	664	0.0	1.4	6.134	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	600	150	545	600	599	520	0.9	1.4	7.907	A
	2 - Orford Rd	897	224	557	889	879	588	2.0	6.8	22.578	C
	3 - Smith Drive	132	33	992	133	131	454	0.1	0.2	5.546	A
	4 - A50	814	204	249	816	803	875	1.1	1.5	6.853	A
2 - Poplars Ave/A50	A - A50 W	551	138		551	548	463	0.0	0.1	0.467	A
	B - Poplars Ave	333	83		335	328	482	0.7	1.4	16.013	C
	C - A50 E	859	215		862	850	803	1.4	1.9	8.261	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	744	186	646	730	726	600	1.4	3.5	13.385	B
	2 - Orford Rd	1089	272	675	944	953	702	6.8	42.3	95.004	F
	3 - Smith Drive	155	39	1081	156	153	538	0.2	0.3	6.283	A
	4 - A50	971	243	275	971	949	961	1.5	2.3	8.112	A
2 - Poplars Ave/A50	A - A50 W	676	169		677	670	508	0.1	0.4	1.797	A
	B - Poplars Ave	404	101		375	372	532	1.4	9.5	60.775	F
	C - A50 E	945	236		942	941	955	1.9	2.9	10.154	B

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	735	184	655	737	738	614	3.5	3.1	16.589	C
	2 - Orford Rd	1108	277	681	959	955	711	42.3	77.7	227.885	F
	3 - Smith Drive	164	41	1102	164	161	537	0.3	0.3	6.341	A
	4 - A50	975	244	292	977	976	975	2.3	2.3	8.369	A
2 - Poplars Ave/A50	A - A50 W	657	164		656	662	527	0.4	0.3	1.929	A
	B - Poplars Ave	408	102		396	397	531	9.5	12.8	101.104	F
	C - A50 E	960	240		963	958	960	2.9	2.6	10.804	B

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	611	153	547	615	616	538	3.1	1.4	9.913	A
	2 - Orford Rd	890	223	570	1015	1006	592	77.7	50.8	234.273	F
	3 - Smith Drive	138	34	1109	138	134	477	0.3	0.2	6.077	A
	4 - A50	813	203	271	814	855	977	2.3	1.6	7.413	A
2 - Poplars Ave/A50	A - A50 W	544	136		544	546	517	0.3	0.1	0.811	A
	B - Poplars Ave	325	81		341	374	530	12.8	2.0	45.523	E
	C - A50 E	959	240		963	954	801	2.6	2.4	9.497	A

18:15 - 18:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	509	127	452	510	511	447	1.4	0.8	6.380	A
	2 - Orford Rd	743	186	470	856	917	492	50.8	7.8	86.353	F
	3 - Smith Drive	111	28	928	111	112	399	0.2	0.2	5.555	A
	4 - A50	676	169	224	676	686	815	1.6	1.3	6.291	A
2 - Poplars Ave/A50	A - A50 W	453	113		453	456	435	0.1	0.0	0.232	A
	B - Poplars Ave	281	70		281	283	438	2.0	0.9	11.684	B
	C - A50 E	801	200		804	854	666	2.4	1.4	7.721	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service	
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	509	1194	0.426	506	502	0.0	0.9	5.813	A	
		Exit	1	1		432			432	429	0.0	0.0	0.000	A	
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	762	1154	0.660	763	748	0.0	2.0	9.556	A	
		Exit	1	1		491			491	489	0.0	0.0	0.000	A	
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	111	869	0.128	112	110	0.0	0.1	5.098	A	
		Exit	1	1		383			383	381	0.0	0.0	0.000	A	
	4 - A50	Entry	1	1	1, 2, 3, 4	672	1149	0.585	673	673	0.0	1.1	6.056	A	
		Exit	1	1		746			746	733	0.0	0.1	0.384	A	
	2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	453			453	458	0.0	0.0	0.160	A
			Exit	1	1		397			397	393	0.0	0.0	0.000	A
B - Poplars Ave		Entry	1	1	A, C	279			279	279	0.0	0.7	10.373	B	
		Exit	1	1		399			399	390	0.0	0.0	0.000	A	
C - A50 E		Entry	1	1	A	397			397	393	0.0	0.0	0.000	A	
				2	B	334			332	322	0.0	1.1	10.918	B	
		Exit	1	1	(A, B)	732			732	720	0.0	0.3	1.176	A	
							664			664	669	0.0	0.2	1.197	A

17:15 - 17:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	600	1156	0.519	600	599	0.9	1.4	7.907	A
		Exit	1	1		520			520	510	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	897	1116	0.804	889	879	2.0	6.8	22.578	C
		Exit	1	1		588			588	582	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	132	811	0.162	133	131	0.1	0.2	5.546	A
		Exit	1	1		454			454	452	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	814	1133	0.719	816	803	1.1	1.5	6.853	A
		Exit	1	1		875			875	868	0.1	0.2	0.951	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	551			551	548	0.0	0.1	0.467	A
		Exit	1	1		463			463	460	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	333			335	328	0.7	1.4	16.013	C
		Exit	1	1		482			482	473	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	463			463	460	0.0	0.0	0.000	A
				2	B	397			398	390	1.1	1.4	12.979	B
			2	1	(A, B)	859			860	851	0.3	0.5	2.299	A
		Exit	1	1		802			803	792	0.2	0.4	2.150	A

17:30 - 17:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	744	1114	0.668	730	726	1.4	3.5	13.385	B
		Exit	1	1		600			600	587	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	1089	1065	1.023	944	953	6.8	42.3	95.004	F
		Exit	1	1		702			702	692	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	155	776	0.200	156	153	0.2	0.3	6.283	A
		Exit	1	1		538			538	537	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	971	1122	0.865	971	949	1.5	2.3	8.112	A
		Exit	1	1		961			961	963	0.2	0.4	1.602	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	676			677	670	0.1	0.4	1.797	A
		Exit	1	1		508			508	509	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	404			375	372	1.4	9.5	60.775	F
		Exit	1	1		532			532	532	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	508			508	509	0.0	0.0	0.000	A
				2	B	436			435	432	1.4	1.9	14.695	B
			2	1	(A, B)	945			944	943	0.5	1.0	3.387	A
		Exit	1	1		954			955	939	0.4	1.2	4.154	A

17:45 - 18:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	735	1111	0.62	737	738	3.5	3.1	16.589	C
		Exit	1	1		614			614	606	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	1108	1062	1.043	959	955	42.3	77.7	227.885	F
		Exit	1	1		711			711	713	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	164	767	0.214	164	161	0.3	0.3	6.341	A
		Exit	1	1		537			537	539	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	975	1115	0.874	977	976	2.3	2.3	8.369	A
		Exit	1	1		974			975	973	0.4	0.5	1.876	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	657			656	662	0.4	0.3	1.929	A
		Exit	1	1		527			527	517	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	408			396	397	9.5	12.8	101.104	F
		Exit	1	1		531			531	538	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	527			527	517	0.0	0.0	0.000	A
				2	B	436			436	441	1.9	1.8	15.165	C
		Exit	1	1	(A, B)	960			962	957	1.0	0.9	3.823	A
							957			960	962	1.2	1.1	4.526

18:00 - 18:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	611	1156	0.529	615	616	3.1	1.4	9.913	A
		Exit	1	1		538			538	547	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	890	1110	0.802	1015	1006	77.7	50.8	234.273	F
		Exit	1	1		592			592	618	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	138	765	0.180	138	134	0.3	0.2	6.077	A
		Exit	1	1		477			477	477	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	813	1124	0.723	814	855	2.3	1.6	7.413	A
		Exit	1	1		976			977	969	0.5	0.4	1.400	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	544			544	546	0.3	0.1	0.811	A
		Exit	1	1		517			517	515	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	325			341	374	12.8	2.0	45.523	E
		Exit	1	1		530			530	521	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	517			517	515	0.0	0.0	0.000	A
				2	B	444			446	439	1.8	1.6	13.954	B
			2	1	(A, B)	959			961	953	0.9	0.7	3.079	A
		Exit	1	1		801			801	839	1.1	0.6	2.928	A

18:15 - 18:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	509	1195	0.426	510	511	1.4	0.8	6.380	A
		Exit	1	1		447			447	460	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	743	1153	0.644	856	917	50.8	7.8	86.353	F
		Exit	1	1		492			492	497	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	111	837	0.133	111	112	0.2	0.2	5.555	A
		Exit	1	1		399			399	407	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	676	1144	0.591	676	686	1.6	1.3	6.291	A
		Exit	1	1		815			815	863	0.4	0.1	0.843	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	453			453	456	0.1	0.0	0.232	A
		Exit	1	1		435			435	460	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	281			281	283	2.0	0.9	11.684	B
		Exit	1	1		438			438	461	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	435			435	460	0.0	0.0	0.000	A
				2	B	367			369	393	1.6	1.1	12.326	B
			2	1	(A, B)	801			802	852	0.7	0.3	2.098	A
		Exit	1	1		665			666	673	0.6	0.2	1.447	A

A50-Conjunction - 2032 DM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	AV-1 - A50-Conjunction [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout			1, 2, 3, 4	63.79	F
2	Poplars Ave/A50	T-Junction	Two-way			18.16	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2032 DM	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A50/Hilden Rd Roundabout	4 - A50	2	C	Simple (vertical queueing)	Normal	0	100.00	
2 - Poplars Ave/A50	C - A50 E	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd		ONE HOUR	✓	663	100.000
	2 - Orford Rd		ONE HOUR	✓	961	100.000
	3 - Smith Drive		ONE HOUR	✓	133	100.000
	4 - A50	✓				
2 - Poplars Ave/A50	A - A50 W		ONE HOUR	✓	593	100.000
	B - Poplars Ave		ONE HOUR	✓	363	100.000
	C - A50 E	✓				

Origin-Destination Data

Demand (PCU/hr)

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	58	377	228
	2 - Orford Rd	106	0	130	725
	3 - Smith Drive	123	6	0	4
	4 - A50	281	587	16	0

Demand (PCU/hr)

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	71	522
	B - Poplars Ave	0	0	363
	C - A50 E	540	413	0

Vehicle Mix

Heavy Vehicle Percentages

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	4	2	4
	2 - Orford Rd	0	0	0	1
	3 - Smith Drive	2	0	0	0
	4 - A50	3	1	0	0

Heavy Vehicle Percentages

2 - Poplars Ave/A50

		To		
		A - A50 W	B - Poplars Ave	C - A50 E
From	A - A50 W	0	0	2
	B - Poplars Ave	0	0	2
	C - A50 E	2	2	0

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	13.87	2.9	B	610	914
	2 - Orford Rd	157.29	52.6	F	882	1323
	3 - Smith Drive	6.09	0.2	A	123	185
	4 - A50	8.06	2.2	A	806	1209
2 - Poplars Ave/A50	A - A50 W	1.63	0.3	A	546	819
	B - Poplars Ave	68.68	9.1	F	331	497
	C - A50 E	9.29	2.8	A	870	1304

Main Results for each time segment

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	506	126	454	505	495	394	0.0	0.9	5.483	A
	2 - Orford Rd	722	180	474	724	721	485	0.0	1.8	8.829	A
	3 - Smith Drive	101	25	794	101	103	404	0.0	0.1	4.617	A
	4 - A50	665	166	181	666	663	714	0.0	1.0	5.797	A
2 - Poplars Ave/A50	A - A50 W	453	113		453	454	407	0.0	0.0	0.163	A
	B - Poplars Ave	270	68		270	273	364	0.0	0.8	9.999	A
	C - A50 E	714	179		713	706	667	0.0	1.4	5.868	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	598	150	554	599	600	453	0.9	1.1	7.464	A
	2 - Orford Rd	871	218	564	862	853	590	1.8	4.8	16.757	C
	3 - Smith Drive	121	30	953	122	117	472	0.1	0.1	4.994	A
	4 - A50	793	198	213	794	782	861	1.0	1.5	6.718	A
2 - Poplars Ave/A50	A - A50 W	537	134		537	531	487	0.0	0.1	0.384	A
	B - Poplars Ave	321	80		321	320	436	0.8	1.4	14.947	B
	C - A50 E	863	216		860	851	796	1.4	1.7	7.121	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	722	181	667	718	723	547	1.1	2.6	12.515	B
	2 - Orford Rd	1056	264	674	963	953	712	4.8	30.8	72.182	F
	3 - Smith Drive	143	36	1082	144	145	555	0.1	0.2	5.805	A
	4 - A50	964	241	247	967	941	978	1.5	2.0	7.800	A
2 - Poplars Ave/A50	A - A50 W	654	164		657	652	549	0.1	0.1	1.312	A
	B - Poplars Ave	394	99		379	373	503	1.4	6.2	42.014	E
	C - A50 E	981	245		978	970	965	1.7	2.8	9.140	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	736	184	668	734	730	559	2.6	2.9	13.870	B
	2 - Orford Rd	1056	264	686	969	972	716	30.8	52.6	157.295	F
	3 - Smith Drive	152	38	1086	153	152	569	0.2	0.2	6.090	A
	4 - A50	969	242	258	969	959	981	2.0	2.2	8.064	A
2 - Poplars Ave/A50	A - A50 W	662	166		662	651	560	0.1	0.3	1.631	A
	B - Poplars Ave	407	102		390	393	501	6.2	9.1	68.682	F
	C - A50 E	986	246		984	991	975	2.8	2.8	9.287	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	591	148	542	588	604	460	2.9	1.4	9.055	A
	2 - Orford Rd	874	219	550	961	981	581	52.6	24.1	135.360	F
	3 - Smith Drive	121	30	1033	120	119	478	0.2	0.2	5.598	A
	4 - A50	783	196	219	783	825	935	2.2	1.5	7.057	A
2 - Poplars Ave/A50	A - A50 W	527	132		527	531	533	0.3	0.1	0.536	A
	B - Poplars Ave	320	80		322	354	471	9.1	1.5	28.834	D
	C - A50 E	940	235		943	961	786	2.8	2.1	8.568	A

18:15 - 18:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	504	126	456	503	504	388	1.4	0.8	5.805	A
	2 - Orford Rd	710	178	470	737	800	490	24.1	3.4	36.856	E
	3 - Smith Drive	101	25	808	101	102	398	0.2	0.2	4.998	A
	4 - A50	662	166	181	663	676	728	1.5	1.0	6.022	A
2 - Poplars Ave/A50	A - A50 W	440	110		440	447	419	0.1	0.0	0.213	A
	B - Poplars Ave	275	69		274	281	366	1.5	0.8	10.879	B
	C - A50 E	734	183		736	785	665	2.1	1.1	6.395	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service	
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	506	1194	0.423	505	495	0.0	0.9	5.483	A	
		Exit	1	1		394			394	387	0.0	0.0	0.000	A	
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	722	1152	0.627	724	721	0.0	1.8	8.829	A	
		Exit	1	1		485			485	489	0.0	0.0	0.000	A	
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	101	890	0.114	101	103	0.0	0.1	4.617	A	
		Exit	1	1		404			404	395	0.0	0.0	0.000	A	
	4 - A50	Entry	1	1	1, 2, 3, 4	665	1162	0.572	666	663	0.0	1.0	5.797	A	
		Exit	1	1		714			714	711	0.0	0.1	0.336	A	
	2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	453			453	454	0.0	0.0	0.163	A
			Exit	1	1		407			407	404	0.0	0.0	0.000	A
B - Poplars Ave		Entry	1	1	A, C	270			270	273	0.0	0.8	9.999	A	
		Exit	1	1		364			364	359	0.0	0.0	0.000	A	
C - A50 E		Entry	1	1	A	407			407	404	0.0	0.0	0.000	A	
				2	B	307			306	302	0.0	1.1	11.130	B	
		Exit	1	1	(A, B)	714			714	711	0.0	0.3	1.058	A	
							666			667	670	0.0	0.2	1.015	A

17:15 - 17:30

Junction	Arm	Side	Lane level	Lane	Destinations	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	598	1153	0.519	599	600	0.9	1.1	7.464	A
		Exit	1	1		453			453	448	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	871	1113	0.782	862	853	1.8	4.8	16.757	C
		Exit	1	1		590			590	581	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	121	827	0.147	122	117	0.1	0.1	4.994	A
		Exit	1	1		472			472	473	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	793	1149	0.691	794	782	1.0	1.5	6.718	A
		Exit	1	1		861			861	850	0.1	0.2	0.688	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	537			537	531	0.0	0.1	0.384	A
		Exit	1	1		487			487	482	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	321			321	320	0.8	1.4	14.947	B
		Exit	1	1		436			436	433	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	487			487	482	0.0	0.0	0.000	A
				2	B	375			373	369	1.1	1.3	12.305	B
			2	1	(A, B)	863			862	852	0.3	0.4	1.776	A
		Exit	1	1		795			796	787	0.2	0.4	1.938	A

17:30 - 17:45

Junction	Arm	Side	Lane level	Lane	Destinations	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	722	1106	0.653	718	723	1.1	2.6	12.515	B
		Exit	1	1		547			547	540	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	1056	1065	0.992	963	953	4.8	30.8	72.182	F
		Exit	1	1		712			712	694	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	143	775	0.184	144	145	0.1	0.2	5.805	A
		Exit	1	1		555			555	555	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	964	1134	0.850	967	941	1.5	2.0	7.800	A
		Exit	1	1		979			978	971	0.2	0.4	1.362	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	654			657	652	0.1	0.1	1.312	A
		Exit	1	1		549			549	550	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	394			379	373	1.4	6.2	42.014	E
		Exit	1	1		503			503	497	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	549			549	550	0.0	0.0	0.000	A
				2	B	430			429	420	1.3	1.8	14.302	B
			2	1	(A, B)	981			979	972	0.4	0.9	2.932	A
		Exit	1	1		961			965	946	0.4	0.7	3.588	A

17:45 - 18:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	736	1105	0.666	734	730	2.6	2.9	13.870	B
		Exit	1	1		559			559	552	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	1056	1060	0.997	969	972	30.8	52.6	157.295	F
		Exit	1	1		716			716	709	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	152	774	0.196	153	152	0.2	0.2	6.090	A
		Exit	1	1		569			569	565	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	969	1130	0.858	969	959	2.0	2.2	8.064	A
		Exit	1	1		980			981	988	0.4	0.4	1.444	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	662			662	651	0.1	0.3	1.631	A
		Exit	1	1		560			560	565	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	407			390	393	6.2	9.1	68.682	F
		Exit	1	1		501			501	505	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	560			560	565	0.0	0.0	0.000	A
				2	B	425			424	426	1.8	1.9	14.420	B
		Exit	1	1	(A, B)	986			985	991	0.9	0.9	3.078	A
						975			975	964	0.7	1.2	4.002	A

18:00 - 18:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	591	1157	0.511	588	604	2.9	1.4	9.055	A
		Exit	1	1		460			460	477	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	874	1119	0.781	961	981	52.6	24.1	135.360	F
		Exit	1	1		581			581	605	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	121	795	0.152	120	119	0.2	0.2	5.598	A
		Exit	1	1		478			478	493	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	783	1146	0.683	783	825	2.2	1.5	7.057	A
		Exit	1	1		934			935	953	0.4	0.3	1.212	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	527			527	531	0.3	0.1	0.536	A
		Exit	1	1		533			533	541	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	320			322	354	9.1	1.5	28.834	D
		Exit	1	1		471			471	483	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	533			533	541	0.0	0.0	0.000	A
				2	B	409			409	420	1.9	1.5	13.552	B
			2	1	(A, B)	940			942	959	0.9	0.6	2.659	A
		Exit	1	1		787			786	825	1.2	0.5	2.313	A

18:15 - 18:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	504	1193	0.423	503	504	1.4	0.8	5.805	A
		Exit	1	1		388			388	397	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	710	1154	0.616	737	800	24.1	3.4	36.856	E
		Exit	1	1		490			490	500	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	101	885	0.115	101	102	0.2	0.2	4.998	A
		Exit	1	1		398			398	409	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	662	1162	0.570	663	676	1.5	1.0	6.022	A
		Exit	1	1		728			728	777	0.3	0.1	0.556	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	440			440	447	0.1	0.0	0.213	A
		Exit	1	1		419			419	442	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	275			274	281	1.5	0.8	10.879	B
		Exit	1	1		366			366	395	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	419			419	442	0.0	0.0	0.000	A
				2	B	316			316	343	1.5	0.9	11.401	B
			2	1	(A, B)	734			735	783	0.6	0.2	1.460	A
		Exit	1	1		664			665	676	0.5	0.2	1.242	A

A50-Conjunction - 2032 DS Full, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	AV-1 - A50-Conjunction [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	1 - A50/Hilden Rd Roundabout - 2 - Orford Rd - Lane Simulation	Arm 2: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout			1, 2, 3, 4	115.31	F
2	Poplars Ave/A50	T-Junction	Two-way			28.81	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2032 DS Full	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A50/Hilden Rd Roundabout	4 - A50	2	C	Simple (vertical queueing)	Normal	0	100.00	
2 - Poplars Ave/A50	C - A50 E	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd		ONE HOUR	✓	707	100.000
	2 - Orford Rd		ONE HOUR	✓	1050	100.000
	3 - Smith Drive		ONE HOUR	✓	172	100.000
	4 - A50	✓				
2 - Poplars Ave/A50	A - A50 W		ONE HOUR	✓	643	100.000
	B - Poplars Ave		ONE HOUR	✓	375	100.000
	C - A50 E	✓				

Origin-Destination Data

Demand (PCU/hr)

1 - A50/Hilden Rd Roundabout

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	78	402	227
	2 - Orford Rd	165	0	131	754
	3 - Smith Drive	165	6	0	1
	4 - A50	294	602	16	0

Demand (PCU/hr)

		To			
		A - A50 W	B - Poplars Ave	C - A50 E	
2 - Poplars Ave/A50	From	A - A50 W	0	123	520
		B - Poplars Ave	0	0	375
		C - A50 E	546	414	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50	
1 - A50/Hilden Rd Roundabout	From	1 - Hilden Rd	0	0	1	10
		2 - Orford Rd	0	0	0	1
		3 - Smith Drive	4	0	0	0
		4 - A50	7	1	0	0

Heavy Vehicle Percentages

		To			
		A - A50 W	B - Poplars Ave	C - A50 E	
2 - Poplars Ave/A50	From	A - A50 W	0	0	2
		B - Poplars Ave	0	0	2
		C - A50 E	2	2	0

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	15.16	3.4	C	648	972
	2 - Orford Rd	292.40	93.3	F	958	1437
	3 - Smith Drive	6.69	0.4	A	159	239
	4 - A50	8.71	2.4	A	820	1230
2 - Poplars Ave/A50	A - A50 W	2.57	0.7	A	589	883
	B - Poplars Ave	123.33	15.8	F	344	517
	C - A50 E	9.25	2.7	A	875	1312

Main Results for each time segment

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	530	132	462	530	530	473	0.0	1.1	5.953	A
	2 - Orford Rd	792	198	482	790	779	510	0.0	2.3	10.347	B
	3 - Smith Drive	135	34	863	136	133	409	0.0	0.2	5.123	A
	4 - A50	677	169	259	676	672	742	0.0	1.3	6.171	A
2 - Poplars Ave/A50	A - A50 W	482	120		481	482	413	0.0	0.1	0.199	A
	B - Poplars Ave	286	72		284	283	414	0.0	0.9	10.412	B
	C - A50 E	733	183		734	722	672	0.0	1.2	5.714	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	637	159	553	643	630	552	1.1	1.2	7.683	A
	2 - Orford Rd	929	232	587	920	916	610	2.3	7.7	23.607	C
	3 - Smith Drive	160	40	1007	160	156	499	0.2	0.3	6.020	A
	4 - A50	807	202	300	806	805	868	1.3	1.7	7.239	A
2 - Poplars Ave/A50	A - A50 W	575	144		574	575	483	0.1	0.2	0.675	A
	B - Poplars Ave	336	84		334	336	485	0.9	1.9	19.334	C
	C - A50 E	855	214		860	852	801	1.2	1.7	7.067	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	770	192	659	769	767	643	1.2	3.3	13.438	B
	2 - Orford Rd	1148	287	702	972	976	725	7.7	52.9	114.587	F
	3 - Smith Drive	193	48	1099	194	191	576	0.3	0.4	6.454	A
	4 - A50	956	239	345	956	946	948	1.7	2.3	8.465	A
2 - Poplars Ave/A50	A - A50 W	713	178		710	704	534	0.2	0.7	1.915	A
	B - Poplars Ave	409	102		381	376	547	1.9	10.6	71.012	F
	C - A50 E	940	235		941	933	950	1.7	2.3	8.618	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	780	195	663	784	782	651	3.3	3.4	15.156	C
	2 - Orford Rd	1141	285	716	988	981	733	52.9	93.3	275.093	F
	3 - Smith Drive	188	47	1110	187	190	594	0.4	0.4	6.688	A
	4 - A50	977	244	339	976	970	957	2.3	2.4	8.708	A
2 - Poplars Ave/A50	A - A50 W	712	178		714	711	537	0.7	0.5	2.567	A
	B - Poplars Ave	412	103		396	392	545	10.6	15.8	123.332	F
	C - A50 E	947	237		943	945	971	2.3	2.7	9.253	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	636	159	569	635	646	575	3.4	1.7	10.273	B
	2 - Orford Rd	950	237	581	1041	1027	623	93.3	72.7	292.403	F
	3 - Smith Drive	154	38	1108	154	158	513	0.4	0.3	6.184	A
	4 - A50	823	206	318	826	865	942	2.4	1.6	7.850	A
2 - Poplars Ave/A50	A - A50 W	571	143		570	578	522	0.5	0.1	0.969	A
	B - Poplars Ave	339	85		358	386	519	15.8	3.2	60.973	F
	C - A50 E	938	234		930	937	818	2.7	2.6	8.756	A

18:15 - 18:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignaled level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	535	134	468	537	541	483	1.7	0.8	6.833	A
	2 - Orford Rd	787	197	488	930	998	517	72.7	20.2	143.837	F
	3 - Smith Drive	125	31	985	124	130	433	0.3	0.3	5.780	A
	4 - A50	680	170	270	680	687	841	1.6	1.2	6.479	A
2 - Poplars Ave/A50	A - A50 W	481	120		481	478	475	0.1	0.0	0.238	A
	B - Poplars Ave	284	71		282	294	457	3.2	1.1	12.840	B
	C - A50 E	836	209		841	891	673	2.6	1.5	7.251	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service	
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	530	1191	0.445	530	530	0.0	1.1	5.953	A	
		Exit	1	1		473			473	470	0.0	0.0	0.000	A	
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	792	1148	0.690	790	779	0.0	2.3	10.347	B	
		Exit	1	1		510			510	506	0.0	0.0	0.000	A	
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	135	863	0.157	136	133	0.0	0.2	5.123	A	
		Exit	1	1		409			409	404	0.0	0.0	0.000	A	
	4 - A50	Entry	1	1	1, 2, 3, 4	677	1129	0.599	676	672	0.0	1.3	6.171	A	
		Exit	1	1		741			742	735	0.0	0.0	0.302	A	
	2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	482			481	482	0.0	0.1	0.199	A
			Exit	1	1		413			413	415	0.0	0.0	0.000	A
B - Poplars Ave		Entry	1	1	A, C	286			284	283	0.0	0.9	10.412	B	
		Exit	1	1		414			414	401	0.0	0.0	0.000	A	
C - A50 E		Entry	1	1	A	413			413	415	0.0	0.0	0.000	A	
				2	B	320			321	307	0.0	1.0	11.074	B	
		Exit	1	1	(A, B)	733			733	726	0.0	0.2	0.961	A	
							672			672	670	0.0	0.2	1.273	A

17:15 - 17:30

Junction	Arm	Side	Lane level	Lane	Destinations	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	637	1153	0.553	643	630	1.1	1.2	7.683	A
		Exit	1	1		552			552	550	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	929	1103	0.843	920	916	2.3	7.7	23.607	C
		Exit	1	1		610			610	605	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	160	805	0.199	160	156	0.2	0.3	6.020	A
		Exit	1	1		499			499	492	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	807	1112	0.725	806	805	1.3	1.7	7.239	A
		Exit	1	1		868			868	861	0.0	0.2	0.666	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	575			574	575	0.1	0.2	0.675	A
		Exit	1	1		483			483	484	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	336			334	336	0.9	1.9	19.334	C
		Exit	1	1		485			485	476	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	483			483	484	0.0	0.0	0.000	A
				2	B	374			377	367	1.0	1.3	12.332	B
			2	1	(A, B)	855			857	853	0.2	0.4	1.726	A
		Exit	1	1		801			801	800	0.2	0.7	2.529	A

17:30 - 17:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	770	1109	0.694	769	767	1.2	3.3	13.438	B
		Exit	1	1		643			643	637	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	1148	1053	1.090	972	976	7.7	52.9	114.587	F
		Exit	1	1		725			725	717	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	193	769	0.251	194	191	0.3	0.4	6.454	A
		Exit	1	1		576			576	579	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	956	1093	0.875	956	946	1.7	2.3	8.465	A
		Exit	1	1		947			948	946	0.2	0.3	1.182	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	713			710	704	0.2	0.7	1.915	A
		Exit	1	1		534			534	532	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	409			381	376	1.9	10.6	71.012	F
		Exit	1	1		547			547	538	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	534			534	532	0.0	0.0	0.000	A
				2	B	408			407	401	1.3	1.6	13.960	B
			2	1	(A, B)	940			941	934	0.4	0.7	2.595	A
		Exit	1	1		951			950	940	0.7	1.3	4.502	A

17:45 - 18:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	780	1107	0.705	784	782	3.3	3.4	15.156	C
		Exit	1	1		651			651	647	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	1141	1047	1.090	988	981	52.9	93.3	275.093	F
		Exit	1	1		733			733	732	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	188	764	0.246	187	190	0.4	0.4	6.688	A
		Exit	1	1		594			594	588	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	977	1095	0.892	976	970	2.3	2.4	8.708	A
		Exit	1	1		958			957	956	0.3	0.5	1.301	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	712			714	711	0.7	0.5	2.567	A
		Exit	1	1		537			537	538	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	412			396	392	10.6	15.8	123.332	F
		Exit	1	1		545			545	547	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	537			537	538	0.0	0.0	0.000	A
				2	B	409			406	407	1.6	1.8	14.643	B
			2	1	(A, B)	947			946	945	0.7	0.8	2.927	A
		Exit	1	1		970			971	963	1.3	1.3	4.972	A

18:00 - 18:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	636	1146	0.555	635	646	3.4	1.7	10.273	B
		Exit	1	1		575			575	592	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	950	1105	0.859	1041	1027	93.3	72.7	292.403	F
		Exit	1	1		623			623	645	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	154	765	0.201	154	158	0.4	0.3	6.184	A
		Exit	1	1		513			513	516	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	823	1104	0.745	826	865	2.4	1.6	7.850	A
		Exit	1	1		944			942	942	0.5	0.5	1.164	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	571			570	578	0.5	0.1	0.969	A
		Exit	1	1		522			522	527	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	339			358	386	15.8	3.2	60.973	F
		Exit	1	1		519			519	522	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	522			522	527	0.0	0.0	0.000	A
				2	B	411			408	409	1.8	1.7	13.844	B
		Exit	1	1	(A, B)	938			933	937	0.8	0.9	2.709	A
							817			818	855	1.3	0.5	3.339

18:15 - 18:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RF C	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A50/Hilden Rd Roundabout	1 - Hilden Rd	Entry	1	1	1, 2, 3, 4	535	1188	0.450	537	541	1.7	0.8	6.833	A
		Exit	1	1		483			483	501	0.0	0.0	0.000	A
	2 - Orford Rd	Entry	1	1	1, 2, 3, 4	787	1146	0.687	930	998	72.7	20.2	143.837	F
		Exit	1	1		517			517	519	0.0	0.0	0.000	A
	3 - Smith Drive	Entry	1	1	1, 2, 3, 4	125	814	0.153	124	130	0.3	0.3	5.780	A
		Exit	1	1		433			433	445	0.0	0.0	0.000	A
	4 - A50	Entry	1	1	1, 2, 3, 4	680	1124	0.604	680	687	1.6	1.2	6.479	A
		Exit	1	1		839			841	893	0.5	0.1	0.798	A
2 - Poplars Ave/A50	A - A50 W	Entry	1	1	B, C	481			481	478	0.1	0.0	0.238	A
		Exit	1	1		475			475	506	0.0	0.0	0.000	A
	B - Poplars Ave	Entry	1	1	A, C	284			282	294	3.2	1.1	12.840	B
		Exit	1	1		457			457	478	0.0	0.0	0.000	A
	C - A50 E	Entry	1	1	A	475			475	506	0.0	0.0	0.000	A
				2	B	364			366	385	1.7	1.2	12.389	B
		Exit	1	1	(A, B)	836			838	889	0.9	0.3	1.967	A
						673			673	680	0.5	0.2	1.500	A

APPENDIX 26

APPENDIX 27

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: Mill Lane. EPR. Blackbrook. Ballater Rbt Opt A.j9

Path: C:\Users\Brad\Highgate Transportation\HTp - Documents\1900 - Projects\1901 - Peel Hall\Modelling\Junctions 9\Mill Lane. Enfield Park Road. Blackbrook Avenue. Ballater Drive Roundabout

Report generation date: 30/01/2020 13:13:00

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
2018 Validation										
Arm 1	D1	0.4	2.65	0.28	A	D9	0.3	2.57	0.26	A
Arm 2		0.1	2.52	0.05	A		0.1	2.69	0.13	A
Arm 3		0.2	2.32	0.20	A		0.3	2.53	0.22	A
Arm 4		0.1	2.72	0.06	A		0.0	2.74	0.04	A
2022 Do Minimum										
Arm 1	D2	0.5	2.83	0.32	A	D10	0.4	2.61	0.27	A
Arm 2		0.1	2.64	0.06	A		0.1	2.73	0.13	A
Arm 3		0.3	2.37	0.21	A		0.3	2.55	0.22	A
Arm 4		0.1	2.76	0.06	A		0.0	2.75	0.04	A
2022 Do Something										
Arm 1	D3	0.5	2.90	0.34	A	D11	0.4	2.65	0.28	A
Arm 2		0.1	2.67	0.06	A		0.2	2.78	0.14	A
Arm 3		0.3	2.39	0.22	A		0.3	2.59	0.24	A
Arm 4		0.1	2.78	0.06	A		0.0	2.79	0.04	A
2022 Do Something Full										
Arm 1	D4	1.3	4.32	0.56	A	D12	0.7	3.29	0.42	A
Arm 2		0.1	3.28	0.09	A		0.3	3.42	0.22	A
Arm 3		0.5	2.78	0.32	A		0.7	3.49	0.41	A
Arm 4		0.1	3.11	0.07	A		0.1	3.45	0.05	A
2027 Do Minimum										
Arm 1	D5	0.5	2.93	0.35	A	D13	0.4	2.69	0.29	A
Arm 2		0.1	2.69	0.06	A		0.2	2.80	0.14	A
Arm 3		0.3	2.41	0.23	A		0.3	2.63	0.25	A
Arm 4		0.1	2.80	0.06	A		0.0	2.82	0.04	A
2027 Do Something										
Arm 1	D6	0.8	3.54	0.46	A	D14	0.6	2.99	0.36	A
Arm 2		0.1	2.98	0.07	A		0.2	3.15	0.19	A
Arm 3		0.4	2.56	0.27	A		0.5	3.11	0.35	A
Arm 4		0.1	2.93	0.06	A		0.0	3.19	0.05	A

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
2032 Do Minimum										
Arm 1	D7	0.6	3.07	0.38	A	D15	0.4	2.75	0.31	A
Arm 2		0.1	2.76	0.06	A		0.2	2.86	0.15	A
Arm 3		0.3	2.44	0.24	A		0.4	2.70	0.27	A
Arm 4		0.1	2.82	0.06	A		0.0	2.88	0.04	A
2032 Do Something Full										
Arm 1	D8	1.6	5.05	0.62	A	D16	0.8	3.48	0.45	A
Arm 2		0.1	3.45	0.08	A		0.3	3.50	0.22	A
Arm 3		0.6	2.89	0.36	A		0.9	3.86	0.47	A
Arm 4		0.1	3.19	0.07	A		0.1	3.67	0.05	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

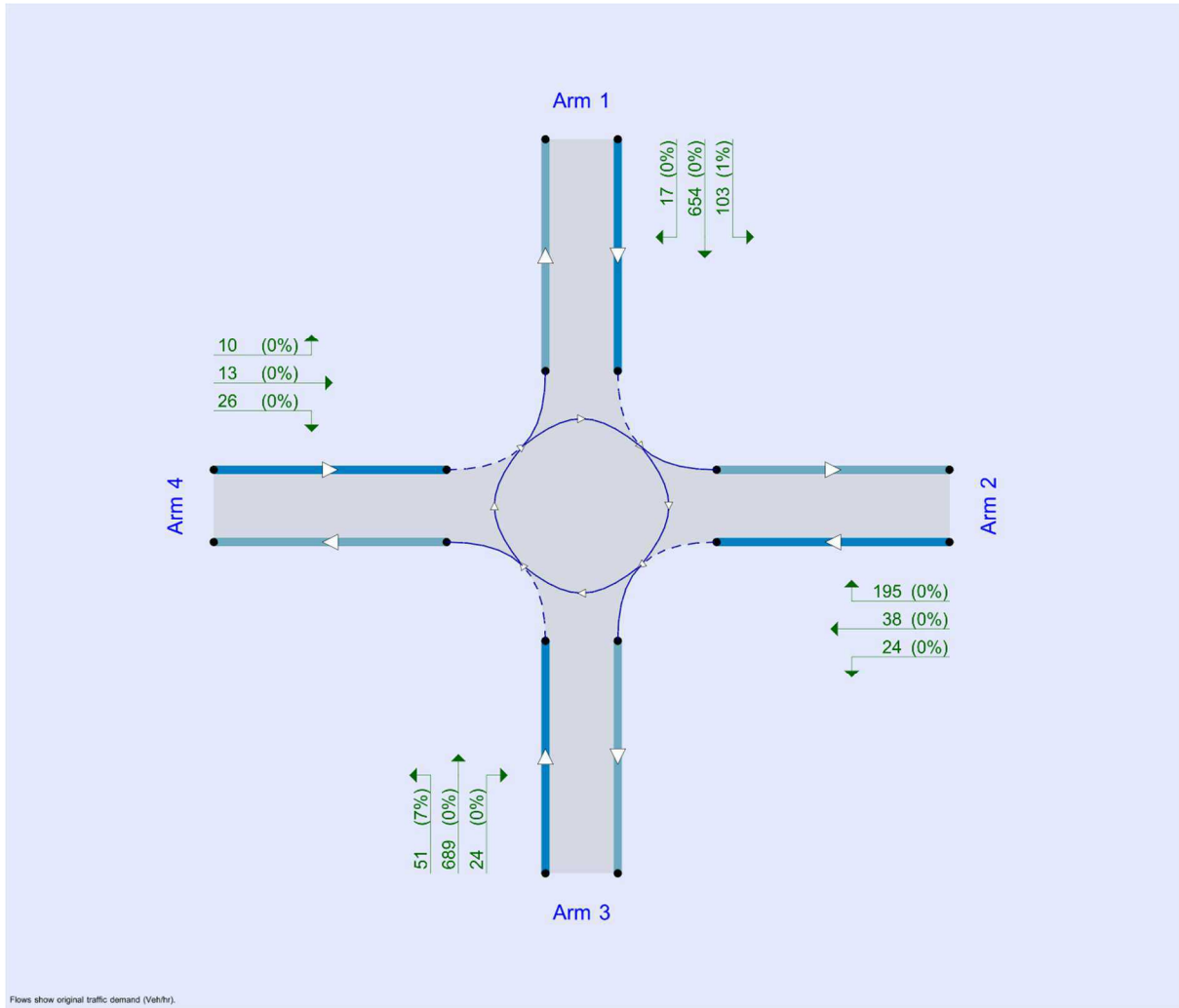
File summary

File Description

Title	
Location	
Site number	
Date	28/01/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\Brad
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin



Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Validation	AM	ONE HOUR	07:45	09:15	15	✓
D2	2022 Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓
D3	2022 Do Something	AM	ONE HOUR	07:45	09:15	15	✓
D4	2022 Do Something Full	AM	ONE HOUR	07:45	09:15	15	✓
D5	2027 Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓
D6	2027 Do Something	AM	ONE HOUR	07:45	09:15	15	✓
D7	2032 Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓
D8	2032 Do Something Full	AM	ONE HOUR	07:45	09:15	15	✓
D9	2018 Validation	PM	ONE HOUR	16:45	18:15	15	✓
D10	2022 Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓
D11	2022 Do Something	PM	ONE HOUR	16:45	18:15	15	✓
D12	2022 Do Something Full	PM	ONE HOUR	16:45	18:15	15	✓
D13	2027 Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓
D14	2027 Do Something	PM	ONE HOUR	16:45	18:15	15	✓
D15	2032 Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓
D16	2032 Do Something Full	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2018 Validation, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Mill Lane	
2	Enfield Park Road	
3	Blackbrook Avenue	
4	Ballater Drive	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	4.00	7.75	19.2	21.0	40.0	27.0	
2	2.86	7.20	34.0	22.0	40.0	27.0	
3	4.14	7.85	16.2	40.0	40.0	26.0	
4	3.05	7.24	20.6	22.0	40.0	36.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.693	1936
2	0.672	1827
3	0.709	1976
4	0.630	1665

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Validation	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	477	100.000
2		ONE HOUR	✓	72	100.000
3		ONE HOUR	✓	345	100.000
4		ONE HOUR	✓	77	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	82	393	2
	2	39	0	24	9
	3	316	15	0	14
	4	26	22	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	1	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.28	2.65	0.4	A	438	657
2	0.05	2.52	0.1	A	66	99
3	0.20	2.32	0.2	A	317	475
4	0.06	2.72	0.1	A	71	106

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	359	90	50	1898	0.189	358	286	0.0	0.2	2.337	A
2	54	14	318	1604	0.034	54	89	0.0	0.0	2.321	A
3	260	65	38	1944	0.134	259	335	0.0	0.2	2.137	A
4	58	14	278	1490	0.039	58	19	0.0	0.0	2.513	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	429	107	59	1891	0.227	429	342	0.2	0.3	2.461	A
2	65	16	381	1563	0.041	65	107	0.0	0.0	2.402	A
3	310	78	45	1938	0.160	310	401	0.2	0.2	2.210	A
4	69	17	332	1456	0.048	69	22	0.0	0.0	2.595	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	525	131	73	1882	0.279	525	419	0.3	0.4	2.652	A
2	79	20	467	1505	0.053	79	131	0.0	0.1	2.523	A
3	380	95	55	1931	0.197	380	491	0.2	0.2	2.319	A
4	85	21	407	1409	0.060	85	28	0.0	0.1	2.718	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	525	131	73	1882	0.279	525	419	0.4	0.4	2.652	A
2	79	20	467	1505	0.053	79	131	0.1	0.1	2.524	A
3	380	95	55	1931	0.197	380	491	0.2	0.2	2.320	A
4	85	21	407	1409	0.060	85	28	0.1	0.1	2.719	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	429	107	59	1891	0.227	429	343	0.4	0.3	2.464	A
2	65	16	381	1562	0.041	65	107	0.1	0.0	2.405	A
3	310	78	45	1938	0.160	310	401	0.2	0.2	2.212	A
4	69	17	333	1456	0.048	69	22	0.1	0.1	2.598	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	359	90	50	1898	0.189	359	287	0.3	0.2	2.339	A
2	54	14	319	1604	0.034	54	90	0.0	0.0	2.324	A
3	260	65	38	1944	0.134	260	336	0.2	0.2	2.137	A
4	58	14	279	1490	0.039	58	19	0.1	0.0	2.516	A

2022 Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022 Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	555	100.000
2		ONE HOUR	✓	78	100.000
3		ONE HOUR	✓	371	100.000
4		ONE HOUR	✓	77	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	87	466	2
	2	43	0	26	9
	3	341	16	0	14
	4	26	22	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	1	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.32	2.83	0.5	A	509	764
2	0.06	2.64	0.1	A	72	107
3	0.21	2.37	0.3	A	340	511
4	0.06	2.76	0.1	A	71	106

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	418	104	50	1898	0.220	417	308	0.0	0.3	2.430	A
2	59	15	373	1568	0.037	59	94	0.0	0.0	2.385	A
3	279	70	41	1942	0.144	279	391	0.0	0.2	2.163	A
4	58	14	300	1476	0.039	58	19	0.0	0.0	2.538	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	499	125	60	1891	0.264	499	368	0.3	0.4	2.585	A
2	70	18	447	1519	0.046	70	112	0.0	0.0	2.484	A
3	334	83	49	1936	0.172	333	468	0.2	0.2	2.245	A
4	69	17	359	1439	0.048	69	22	0.0	0.1	2.628	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	611	153	74	1882	0.325	611	451	0.4	0.5	2.832	A
2	86	21	547	1452	0.059	86	138	0.0	0.1	2.635	A
3	408	102	59	1929	0.212	408	573	0.2	0.3	2.367	A
4	85	21	440	1388	0.061	85	28	0.1	0.1	2.762	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	611	153	74	1882	0.325	611	451	0.5	0.5	2.833	A
2	86	21	547	1451	0.059	86	138	0.1	0.1	2.635	A
3	408	102	59	1929	0.212	408	574	0.3	0.3	2.367	A
4	85	21	440	1388	0.061	85	28	0.1	0.1	2.762	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	499	125	60	1891	0.264	499	369	0.5	0.4	2.589	A
2	70	18	447	1518	0.046	70	112	0.1	0.0	2.485	A
3	334	83	49	1936	0.172	334	469	0.3	0.2	2.246	A
4	69	17	360	1438	0.048	69	22	0.1	0.1	2.628	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	418	104	50	1898	0.220	418	309	0.4	0.3	2.435	A
2	59	15	374	1567	0.037	59	94	0.0	0.0	2.386	A
3	279	70	41	1942	0.144	279	393	0.2	0.2	2.167	A
4	58	14	301	1475	0.039	58	19	0.1	0.0	2.541	A

2022 Do Something, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2022 Do Something	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	582	100.000
2		ONE HOUR	✓	79	100.000
3		ONE HOUR	✓	383	100.000
4		ONE HOUR	✓	77	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	92	488	2
	2	44	0	26	9
	3	353	16	0	14
	4	26	22	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	1	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.34	2.90	0.5	A	534	801
2	0.06	2.67	0.1	A	72	109
3	0.22	2.39	0.3	A	351	527
4	0.06	2.78	0.1	A	71	106

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	438	110	50	1898	0.231	437	318	0.0	0.3	2.462	A
2	59	15	390	1557	0.038	59	98	0.0	0.0	2.404	A
3	288	72	41	1942	0.149	288	408	0.0	0.2	2.175	A
4	58	14	310	1470	0.039	58	19	0.0	0.0	2.549	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	523	131	60	1891	0.277	523	380	0.3	0.4	2.631	A
2	71	18	466	1505	0.047	71	117	0.0	0.0	2.509	A
3	344	86	49	1936	0.178	344	488	0.2	0.2	2.261	A
4	69	17	371	1431	0.048	69	22	0.0	0.1	2.642	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	641	160	74	1882	0.341	640	465	0.4	0.5	2.898	A
2	87	22	571	1435	0.061	87	143	0.0	0.1	2.669	A
3	422	105	61	1928	0.219	421	597	0.2	0.3	2.389	A
4	85	21	454	1379	0.061	85	28	0.1	0.1	2.781	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	641	160	74	1881	0.341	641	466	0.5	0.5	2.900	A
2	87	22	571	1435	0.061	87	143	0.1	0.1	2.669	A
3	422	105	61	1928	0.219	422	598	0.3	0.3	2.389	A
4	85	21	455	1379	0.061	85	28	0.1	0.1	2.781	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	523	131	60	1891	0.277	524	381	0.5	0.4	2.633	A
2	71	18	467	1505	0.047	71	117	0.1	0.0	2.512	A
3	344	86	49	1936	0.178	345	489	0.3	0.2	2.262	A
4	69	17	372	1431	0.048	69	22	0.1	0.1	2.643	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	438	110	50	1898	0.231	438	319	0.4	0.3	2.469	A
2	59	15	391	1556	0.038	60	98	0.0	0.0	2.407	A
3	288	72	41	1942	0.149	289	409	0.2	0.2	2.179	A
4	58	14	311	1469	0.039	58	19	0.1	0.0	2.550	A

2022 Do Something Full, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2022 Do Something Full	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	955	100.000
2		ONE HOUR	✓	99	100.000
3		ONE HOUR	✓	562	100.000
4		ONE HOUR	✓	77	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	153	800	2
	2	64	0	26	9
	3	532	16	0	14
	4	26	22	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	0	0	0
	2	1	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.56	4.32	1.3	A	876	1314
2	0.09	3.28	0.1	A	91	136
3	0.32	2.78	0.5	A	516	774
4	0.07	3.11	0.1	A	71	106

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	719	180	50	1901	0.378	717	467	0.0	0.6	3.033	A
2	75	19	624	1399	0.053	74	143	0.0	0.1	2.717	A
3	423	106	56	1932	0.219	422	642	0.0	0.3	2.382	A
4	58	14	460	1376	0.042	58	19	0.0	0.0	2.731	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	859	215	60	1894	0.453	858	559	0.6	0.8	3.470	A
2	89	22	746	1317	0.068	89	172	0.1	0.1	2.930	A
3	505	126	67	1925	0.263	505	768	0.3	0.4	2.535	A
4	69	17	550	1319	0.052	69	22	0.0	0.1	2.880	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1051	263	74	1885	0.558	1050	684	0.8	1.2	4.304	A
2	109	27	913	1206	0.090	109	210	0.1	0.1	3.282	A
3	619	155	82	1914	0.323	618	940	0.4	0.5	2.779	A
4	85	21	673	1241	0.068	85	28	0.1	0.1	3.113	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1051	263	74	1884	0.558	1051	685	1.2	1.3	4.321	A
2	109	27	915	1205	0.090	109	210	0.1	0.1	3.285	A
3	619	155	83	1914	0.323	619	941	0.5	0.5	2.779	A
4	85	21	674	1240	0.068	85	28	0.1	0.1	3.114	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	859	215	60	1894	0.453	860	560	1.3	0.8	3.490	A
2	89	22	748	1316	0.068	89	172	0.1	0.1	2.936	A
3	505	126	68	1924	0.263	506	770	0.5	0.4	2.539	A
4	69	17	551	1318	0.053	69	22	0.1	0.1	2.884	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	719	180	50	1901	0.378	720	469	0.8	0.6	3.052	A
2	75	19	626	1397	0.053	75	144	0.1	0.1	2.721	A
3	423	106	57	1932	0.219	423	644	0.4	0.3	2.387	A
4	58	14	461	1375	0.042	58	19	0.1	0.0	2.735	A

2027 Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2027 Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	593	100.000
2		ONE HOUR	✓	78	100.000
3		ONE HOUR	✓	397	100.000
4		ONE HOUR	✓	77	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	87	504	2
	2	42	0	27	9
	3	366	17	0	14
	4	26	22	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	1	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.35	2.93	0.5	A	544	816
2	0.06	2.69	0.1	A	72	107
3	0.23	2.41	0.3	A	364	546
4	0.06	2.80	0.1	A	71	106

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	446	112	51	1897	0.235	445	326	0.0	0.3	2.476	A
2	59	15	402	1549	0.038	59	95	0.0	0.0	2.415	A
3	299	75	40	1943	0.154	298	420	0.0	0.2	2.187	A
4	58	14	319	1464	0.040	58	19	0.0	0.0	2.559	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	533	133	61	1890	0.282	533	390	0.3	0.4	2.651	A
2	70	18	481	1496	0.047	70	113	0.0	0.0	2.524	A
3	357	89	48	1937	0.184	357	503	0.2	0.2	2.277	A
4	69	17	382	1425	0.049	69	22	0.0	0.1	2.655	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	653	163	75	1881	0.347	652	478	0.4	0.5	2.928	A
2	86	21	589	1424	0.060	86	139	0.0	0.1	2.689	A
3	437	109	58	1930	0.227	437	616	0.2	0.3	2.411	A
4	85	21	468	1371	0.062	85	28	0.1	0.1	2.799	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	653	163	75	1881	0.347	653	478	0.5	0.5	2.930	A
2	86	21	589	1424	0.060	86	139	0.1	0.1	2.690	A
3	437	109	58	1930	0.227	437	617	0.3	0.3	2.411	A
4	85	21	468	1370	0.062	85	28	0.1	0.1	2.799	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	533	133	61	1890	0.282	534	390	0.5	0.4	2.653	A
2	70	18	481	1496	0.047	70	113	0.1	0.0	2.525	A
3	357	89	48	1937	0.184	357	504	0.3	0.2	2.278	A
4	69	17	382	1424	0.049	69	22	0.1	0.1	2.656	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	446	112	51	1897	0.235	447	327	0.4	0.3	2.483	A
2	59	15	403	1548	0.038	59	95	0.0	0.0	2.419	A
3	299	75	40	1943	0.154	299	422	0.2	0.2	2.191	A
4	58	14	320	1464	0.040	58	19	0.1	0.0	2.562	A

2027 Do Something, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2027 Do Something	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	784	100.000
2		ONE HOUR	✓	84	100.000
3		ONE HOUR	✓	473	100.000
4		ONE HOUR	✓	77	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	111	671	2
	2	48	0	27	9
	3	442	17	0	14
	4	26	22	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	1	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.46	3.54	0.8	A	719	1079
2	0.07	2.98	0.1	A	77	116
3	0.27	2.56	0.4	A	434	651
4	0.06	2.93	0.1	A	71	106

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	590	148	51	1898	0.311	588	387	0.0	0.4	2.746	A
2	63	16	527	1465	0.043	63	113	0.0	0.0	2.568	A
3	356	89	44	1940	0.184	355	546	0.0	0.2	2.270	A
4	58	14	381	1425	0.041	58	19	0.0	0.0	2.632	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	705	176	61	1891	0.373	704	464	0.4	0.6	3.032	A
2	76	19	631	1395	0.054	75	135	0.0	0.1	2.726	A
3	425	106	53	1934	0.220	425	653	0.2	0.3	2.385	A
4	69	17	456	1378	0.050	69	22	0.0	0.1	2.749	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	863	216	75	1881	0.459	862	568	0.6	0.8	3.530	A
2	92	23	772	1301	0.071	92	165	0.1	0.1	2.978	A
3	521	130	65	1926	0.270	520	800	0.3	0.4	2.561	A
4	85	21	558	1314	0.065	85	28	0.1	0.1	2.928	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	863	216	75	1881	0.459	863	568	0.8	0.8	3.536	A
2	92	23	773	1300	0.071	92	165	0.1	0.1	2.979	A
3	521	130	65	1926	0.270	521	800	0.4	0.4	2.561	A
4	85	21	558	1313	0.065	85	28	0.1	0.1	2.929	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	705	176	61	1891	0.373	706	464	0.8	0.6	3.042	A
2	76	19	632	1394	0.054	76	135	0.1	0.1	2.729	A
3	425	106	53	1934	0.220	426	654	0.4	0.3	2.386	A
4	69	17	456	1378	0.050	69	22	0.1	0.1	2.752	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	590	148	51	1897	0.311	591	389	0.6	0.5	2.758	A
2	63	16	529	1463	0.043	63	113	0.1	0.0	2.573	A
3	356	89	44	1940	0.184	356	548	0.3	0.2	2.274	A
4	58	14	382	1425	0.041	58	19	0.1	0.0	2.635	A

2032 Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.82	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2032 Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	643	100.000
2		ONE HOUR	✓	79	100.000
3		ONE HOUR	✓	416	100.000
4		ONE HOUR	✓	77	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	92	549	2
	2	39	0	31	9
	3	384	18	0	14
	4	26	22	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	1	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.38	3.07	0.6	A	590	885
2	0.06	2.76	0.1	A	72	109
3	0.24	2.44	0.3	A	382	573
4	0.06	2.82	0.1	A	71	106

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	484	121	52	1897	0.255	483	337	0.0	0.3	2.543	A
2	59	15	435	1527	0.039	59	99	0.0	0.0	2.452	A
3	313	78	38	1945	0.161	312	457	0.0	0.2	2.204	A
4	58	14	331	1457	0.040	58	19	0.0	0.0	2.573	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	578	145	62	1890	0.306	578	403	0.3	0.4	2.743	A
2	71	18	521	1470	0.048	71	119	0.0	0.1	2.573	A
3	374	93	45	1939	0.193	374	547	0.2	0.2	2.299	A
4	69	17	396	1416	0.049	69	22	0.0	0.1	2.673	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	708	177	76	1880	0.377	707	494	0.4	0.6	3.067	A
2	87	22	638	1392	0.063	87	145	0.1	0.1	2.759	A
3	458	115	55	1932	0.237	458	670	0.2	0.3	2.441	A
4	85	21	485	1359	0.062	85	28	0.1	0.1	2.823	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	708	177	76	1880	0.377	708	494	0.6	0.6	3.070	A
2	87	22	639	1391	0.063	87	145	0.1	0.1	2.759	A
3	458	115	55	1932	0.237	458	671	0.3	0.3	2.441	A
4	85	21	486	1359	0.062	85	28	0.1	0.1	2.824	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	578	145	62	1890	0.306	579	404	0.6	0.4	2.746	A
2	71	18	522	1469	0.048	71	119	0.1	0.1	2.576	A
3	374	93	45	1939	0.193	374	548	0.3	0.2	2.300	A
4	69	17	397	1415	0.049	69	22	0.1	0.1	2.676	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	484	121	52	1897	0.255	484	338	0.4	0.3	2.551	A
2	59	15	437	1526	0.039	60	99	0.1	0.0	2.454	A
3	313	78	38	1945	0.161	313	459	0.2	0.2	2.206	A
4	58	14	332	1456	0.040	58	19	0.1	0.0	2.576	A

2032 Do Something Full, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2032 Do Something Full	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	1062	100.000
2		ONE HOUR	✓	83	100.000
3		ONE HOUR	✓	624	100.000
4		ONE HOUR	✓	77	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	161	899	2
	2	43	0	31	9
	3	591	19	0	14
	4	26	22	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	0	0	0
	2	1	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.62	5.05	1.6	A	975	1462
2	0.08	3.45	0.1	A	76	114
3	0.36	2.89	0.6	A	573	859
4	0.07	3.19	0.1	A	71	106

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	800	200	53	1899	0.421	797	496	0.0	0.7	3.257	A
2	62	16	698	1351	0.046	62	152	0.0	0.0	2.792	A
3	470	117	41	1944	0.242	469	719	0.0	0.3	2.437	A
4	58	14	490	1356	0.043	58	19	0.0	0.0	2.772	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	955	239	63	1892	0.505	954	593	0.7	1.0	3.831	A
2	75	19	835	1260	0.059	75	181	0.0	0.1	3.037	A
3	561	140	49	1938	0.289	561	861	0.3	0.4	2.613	A
4	69	17	587	1296	0.053	69	22	0.0	0.1	2.934	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1169	292	77	1882	0.621	1167	726	1.0	1.6	5.015	A
2	91	23	1022	1135	0.081	91	222	0.1	0.1	3.449	A
3	687	172	59	1931	0.356	686	1054	0.4	0.5	2.891	A
4	85	21	718	1213	0.070	85	27	0.1	0.1	3.191	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1169	292	77	1882	0.621	1169	727	1.6	1.6	5.049	A
2	91	23	1024	1133	0.081	91	222	0.1	0.1	3.454	A
3	687	172	59	1931	0.356	687	1056	0.5	0.6	2.894	A
4	85	21	719	1212	0.070	85	28	0.1	0.1	3.192	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	955	239	63	1892	0.505	957	594	1.6	1.0	3.860	A
2	75	19	838	1257	0.059	75	182	0.1	0.1	3.043	A
3	561	140	49	1938	0.289	562	864	0.6	0.4	2.615	A
4	69	17	588	1295	0.053	69	23	0.1	0.1	2.936	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	800	200	53	1899	0.421	801	497	1.0	0.7	3.280	A
2	62	16	701	1349	0.046	63	152	0.1	0.0	2.800	A
3	470	117	41	1944	0.242	470	723	0.4	0.3	2.442	A
4	58	14	492	1355	0.043	58	19	0.1	0.0	2.774	A

2018 Validation, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2018 Validation	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	439	100.000
2		ONE HOUR	✓	174	100.000
3		ONE HOUR	✓	364	100.000
4		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	60	362	17
	2	117	0	19	38
	3	294	19	0	51
	4	10	13	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	2	0	0
	2	0	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.26	2.57	0.3	A	403	604
2	0.13	2.69	0.1	A	160	239
3	0.22	2.53	0.3	A	334	501
4	0.04	2.74	0.0	A	45	67

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	331	83	44	1900	0.174	330	316	0.0	0.2	2.291	A
2	131	33	304	1623	0.081	131	69	0.0	0.1	2.412	A
3	274	69	129	1866	0.147	273	306	0.0	0.2	2.258	A
4	37	9	323	1462	0.025	37	80	0.0	0.0	2.525	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	395	99	52	1894	0.208	394	378	0.2	0.3	2.400	A
2	156	39	364	1583	0.099	156	83	0.1	0.1	2.523	A
3	327	82	155	1848	0.177	327	366	0.2	0.2	2.366	A
4	44	11	386	1422	0.031	44	95	0.0	0.0	2.612	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	483	121	64	1886	0.256	483	463	0.3	0.3	2.565	A
2	192	48	446	1528	0.125	191	101	0.1	0.1	2.693	A
3	401	100	189	1824	0.220	401	448	0.2	0.3	2.528	A
4	54	13	473	1367	0.039	54	117	0.0	0.0	2.740	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	483	121	64	1886	0.256	483	464	0.3	0.3	2.565	A
2	192	48	446	1527	0.125	192	101	0.1	0.1	2.694	A
3	401	100	189	1824	0.220	401	448	0.3	0.3	2.528	A
4	54	13	473	1367	0.039	54	117	0.0	0.0	2.740	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	395	99	52	1894	0.208	395	379	0.3	0.3	2.403	A
2	156	39	364	1582	0.099	157	83	0.1	0.1	2.524	A
3	327	82	155	1848	0.177	327	366	0.3	0.2	2.367	A
4	44	11	387	1422	0.031	44	95	0.0	0.0	2.612	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	331	83	44	1900	0.174	331	317	0.3	0.2	2.295	A
2	131	33	305	1622	0.081	131	69	0.1	0.1	2.414	A
3	274	69	130	1866	0.147	274	307	0.2	0.2	2.261	A
4	37	9	324	1461	0.025	37	80	0.0	0.0	2.528	A

2022 Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2022 Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	460	100.000
2		ONE HOUR	✓	179	100.000
3		ONE HOUR	✓	371	100.000
4		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	63	380	17
	2	120	0	21	38
	3	300	20	0	51
	4	10	13	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	2	0	0
	2	0	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.27	2.61	0.4	A	422	633
2	0.13	2.73	0.1	A	164	246
3	0.22	2.55	0.3	A	340	511
4	0.04	2.75	0.0	A	45	67

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	346	87	44	1900	0.182	345	323	0.0	0.2	2.315	A
2	135	34	318	1614	0.084	134	72	0.0	0.1	2.433	A
3	279	70	131	1865	0.150	279	321	0.0	0.2	2.268	A
4	37	9	330	1457	0.025	37	80	0.0	0.0	2.534	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	414	103	53	1894	0.218	413	386	0.2	0.3	2.431	A
2	161	40	380	1572	0.102	161	86	0.1	0.1	2.551	A
3	334	83	157	1847	0.181	333	384	0.2	0.2	2.378	A
4	44	11	395	1416	0.031	44	95	0.0	0.0	2.622	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	506	127	65	1885	0.269	506	473	0.3	0.4	2.610	A
2	197	49	465	1514	0.130	197	106	0.1	0.1	2.732	A
3	408	102	193	1822	0.224	408	470	0.2	0.3	2.546	A
4	54	13	484	1360	0.040	54	117	0.0	0.0	2.754	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	506	127	65	1885	0.269	506	473	0.4	0.4	2.610	A
2	197	49	466	1514	0.130	197	106	0.1	0.1	2.732	A
3	408	102	193	1822	0.224	408	470	0.3	0.3	2.546	A
4	54	13	484	1360	0.040	54	117	0.0	0.0	2.755	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	414	103	53	1894	0.218	414	387	0.4	0.3	2.434	A
2	161	40	381	1571	0.102	161	86	0.1	0.1	2.554	A
3	334	83	157	1847	0.181	334	384	0.3	0.2	2.381	A
4	44	11	396	1416	0.031	44	95	0.0	0.0	2.625	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	346	87	44	1900	0.182	347	324	0.3	0.2	2.317	A
2	135	34	319	1613	0.084	135	72	0.1	0.1	2.437	A
3	279	70	132	1865	0.150	279	322	0.2	0.2	2.272	A
4	37	9	331	1457	0.025	37	80	0.0	0.0	2.537	A

2022 Do Something, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2022 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	479	100.000
2		ONE HOUR	✓	188	100.000
3		ONE HOUR	✓	389	100.000
4		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	65	397	17
	2	129	0	21	38
	3	318	20	0	51
	4	10	13	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	2	0	0
	2	0	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.28	2.65	0.4	A	440	659
2	0.14	2.78	0.2	A	173	259
3	0.24	2.59	0.3	A	357	535
4	0.04	2.79	0.0	A	45	67

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	361	90	44	1900	0.190	360	343	0.0	0.2	2.336	A
2	142	35	330	1605	0.088	141	74	0.0	0.1	2.459	A
3	293	73	138	1861	0.157	292	333	0.0	0.2	2.293	A
4	37	9	351	1445	0.026	37	80	0.0	0.0	2.557	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	431	108	53	1894	0.227	430	411	0.2	0.3	2.460	A
2	169	42	395	1561	0.108	169	88	0.1	0.1	2.584	A
3	350	87	165	1842	0.190	350	399	0.2	0.2	2.411	A
4	44	11	420	1401	0.031	44	95	0.0	0.0	2.652	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	527	132	65	1885	0.280	527	503	0.3	0.4	2.650	A
2	207	52	484	1502	0.138	207	108	0.1	0.2	2.779	A
3	428	107	202	1816	0.236	428	489	0.2	0.3	2.593	A
4	54	13	514	1342	0.040	54	117	0.0	0.0	2.794	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	527	132	65	1885	0.280	527	503	0.4	0.4	2.650	A
2	207	52	484	1502	0.138	207	108	0.2	0.2	2.780	A
3	428	107	203	1816	0.236	428	489	0.3	0.3	2.593	A
4	54	13	514	1341	0.040	54	117	0.0	0.0	2.795	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	431	108	53	1894	0.227	431	411	0.4	0.3	2.461	A
2	169	42	396	1561	0.108	169	88	0.2	0.1	2.586	A
3	350	87	166	1842	0.190	350	399	0.3	0.2	2.414	A
4	44	11	420	1401	0.031	44	95	0.0	0.0	2.653	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	361	90	44	1900	0.190	361	344	0.3	0.2	2.339	A
2	142	35	331	1604	0.088	142	74	0.1	0.1	2.462	A
3	293	73	139	1861	0.157	293	334	0.2	0.2	2.296	A
4	37	9	352	1444	0.026	37	80	0.0	0.0	2.558	A

2022 Do Something Full, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2022 Do Something Full	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	720	100.000
2		ONE HOUR	✓	269	100.000
3		ONE HOUR	✓	663	100.000
4		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	100	603	17
	2	209	0	22	38
	3	592	20	0	51
	4	10	13	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	0	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.42	3.29	0.7	A	661	991
2	0.22	3.42	0.3	A	247	370
3	0.41	3.49	0.7	A	608	913
4	0.05	3.45	0.1	A	45	67

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	542	136	44	1902	0.285	540	609	0.0	0.4	2.641	A
2	203	51	485	1501	0.135	202	100	0.0	0.2	2.769	A
3	499	125	198	1826	0.273	498	489	0.0	0.4	2.708	A
4	37	9	616	1277	0.029	37	80	0.0	0.0	2.901	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	647	162	53	1896	0.341	647	728	0.4	0.5	2.881	A
2	242	60	580	1437	0.168	242	119	0.2	0.2	3.011	A
3	596	149	237	1798	0.331	596	585	0.4	0.5	2.991	A
4	44	11	737	1201	0.037	44	95	0.0	0.0	3.111	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	793	198	65	1888	0.420	792	892	0.5	0.7	3.283	A
2	296	74	711	1350	0.219	296	146	0.2	0.3	3.416	A
3	730	182	290	1761	0.415	729	716	0.5	0.7	3.485	A
4	54	13	903	1097	0.049	54	117	0.0	0.1	3.451	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	793	198	65	1888	0.420	793	893	0.7	0.7	3.286	A
2	296	74	711	1349	0.220	296	146	0.3	0.3	3.417	A
3	730	182	291	1761	0.415	730	717	0.7	0.7	3.492	A
4	54	13	904	1096	0.049	54	117	0.1	0.1	3.454	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	647	162	53	1896	0.341	648	730	0.7	0.5	2.885	A
2	242	60	581	1436	0.168	242	120	0.3	0.2	3.016	A
3	596	149	238	1798	0.331	597	586	0.7	0.5	3.000	A
4	44	11	739	1200	0.037	44	95	0.1	0.0	3.116	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	542	136	44	1902	0.285	543	611	0.5	0.4	2.650	A
2	203	51	487	1500	0.135	203	100	0.2	0.2	2.777	A
3	499	125	199	1825	0.273	500	491	0.5	0.4	2.718	A
4	37	9	619	1276	0.029	37	80	0.0	0.0	2.905	A

2027 Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2027 Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	495	100.000
2		ONE HOUR	✓	185	100.000
3		ONE HOUR	✓	411	100.000
4		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	63	415	17
	2	125	0	22	38
	3	338	22	0	51
	4	10	13	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	2	0	0
	2	0	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.29	2.69	0.4	A	454	681
2	0.14	2.80	0.2	A	170	255
3	0.25	2.63	0.3	A	377	566
4	0.04	2.82	0.0	A	45	67

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	373	93	46	1899	0.196	372	355	0.0	0.2	2.356	A
2	139	35	344	1596	0.087	139	74	0.0	0.1	2.470	A
3	309	77	135	1864	0.166	309	348	0.0	0.2	2.313	A
4	37	9	364	1436	0.026	37	80	0.0	0.0	2.572	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	445	111	55	1893	0.235	445	425	0.2	0.3	2.486	A
2	166	42	411	1551	0.107	166	88	0.1	0.1	2.600	A
3	369	92	162	1845	0.200	369	416	0.2	0.2	2.438	A
4	44	11	436	1391	0.032	44	95	0.0	0.0	2.672	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	545	136	67	1884	0.289	545	520	0.3	0.4	2.687	A
2	204	51	504	1488	0.137	204	108	0.1	0.2	2.801	A
3	453	113	198	1820	0.249	452	509	0.2	0.3	2.632	A
4	54	13	534	1329	0.041	54	117	0.0	0.0	2.822	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	545	136	67	1884	0.289	545	521	0.4	0.4	2.687	A
2	204	51	504	1488	0.137	204	108	0.2	0.2	2.801	A
3	453	113	198	1820	0.249	453	510	0.3	0.3	2.632	A
4	54	13	534	1329	0.041	54	117	0.0	0.0	2.822	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	445	111	55	1893	0.235	445	426	0.4	0.3	2.487	A
2	166	42	412	1550	0.107	166	88	0.2	0.1	2.601	A
3	369	92	162	1845	0.200	370	417	0.3	0.3	2.439	A
4	44	11	436	1391	0.032	44	95	0.0	0.0	2.675	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	373	93	46	1899	0.196	373	356	0.3	0.2	2.360	A
2	139	35	345	1595	0.087	139	74	0.1	0.1	2.474	A
3	309	77	136	1864	0.166	310	349	0.3	0.2	2.318	A
4	37	9	365	1435	0.026	37	80	0.0	0.0	2.574	A

2027 Do Something, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.07	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2027 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	620	100.000
2		ONE HOUR	✓	243	100.000
3		ONE HOUR	✓	566	100.000
4		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	81	522	17
	2	182	0	23	38
	3	493	22	0	51
	4	10	13	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	0	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.36	2.99	0.6	A	569	853
2	0.19	3.15	0.2	A	223	334
3	0.35	3.11	0.5	A	519	779
4	0.05	3.19	0.0	A	45	67

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	467	117	46	1901	0.245	465	514	0.0	0.3	2.505	A
2	183	46	424	1542	0.119	182	87	0.0	0.1	2.646	A
3	426	107	178	1838	0.232	425	429	0.0	0.3	2.544	A
4	37	9	523	1336	0.028	37	80	0.0	0.0	2.771	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	557	139	55	1895	0.294	557	615	0.3	0.4	2.690	A
2	218	55	508	1486	0.147	218	104	0.1	0.2	2.839	A
3	509	127	213	1814	0.281	508	513	0.3	0.4	2.758	A
4	44	11	626	1271	0.035	44	95	0.0	0.0	2.933	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	683	171	67	1887	0.362	682	753	0.4	0.6	2.987	A
2	268	67	622	1409	0.190	267	128	0.2	0.2	3.151	A
3	623	156	261	1780	0.350	623	628	0.4	0.5	3.108	A
4	54	13	767	1182	0.046	54	117	0.0	0.0	3.189	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	683	171	67	1887	0.362	683	754	0.6	0.6	2.989	A
2	268	67	622	1409	0.190	268	128	0.2	0.2	3.152	A
3	623	156	261	1780	0.350	623	629	0.5	0.5	3.111	A
4	54	13	767	1182	0.046	54	117	0.0	0.0	3.190	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	557	139	55	1895	0.294	558	617	0.6	0.4	2.693	A
2	218	55	508	1485	0.147	219	104	0.2	0.2	2.841	A
3	509	127	213	1814	0.281	509	514	0.5	0.4	2.761	A
4	44	11	627	1270	0.035	44	95	0.0	0.0	2.937	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	467	117	46	1901	0.246	467	516	0.4	0.3	2.512	A
2	183	46	426	1541	0.119	183	87	0.2	0.1	2.650	A
3	426	107	179	1838	0.232	426	430	0.4	0.3	2.550	A
4	37	9	525	1335	0.028	37	80	0.0	0.0	2.773	A

2032 Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2032 Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	523	100.000
2		ONE HOUR	✓	194	100.000
3		ONE HOUR	✓	440	100.000
4		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	66	440	17
	2	132	0	24	38
	3	366	23	0	51
	4	10	13	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	0	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.31	2.75	0.4	A	480	720
2	0.15	2.86	0.2	A	178	267
3	0.27	2.70	0.4	A	404	606
4	0.04	2.88	0.0	A	45	67

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	394	98	47	1901	0.207	393	381	0.0	0.3	2.386	A
2	146	37	363	1583	0.092	146	77	0.0	0.1	2.504	A
3	331	83	140	1862	0.178	330	368	0.0	0.2	2.350	A
4	37	9	391	1419	0.026	37	80	0.0	0.0	2.604	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	470	118	56	1895	0.248	470	456	0.3	0.3	2.526	A
2	174	44	434	1535	0.114	174	92	0.1	0.1	2.644	A
3	396	99	168	1842	0.215	395	440	0.2	0.3	2.488	A
4	44	11	468	1371	0.032	44	95	0.0	0.0	2.713	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	576	144	68	1886	0.305	575	559	0.3	0.4	2.747	A
2	214	53	531	1470	0.145	213	112	0.1	0.2	2.864	A
3	484	121	206	1816	0.267	484	539	0.3	0.4	2.703	A
4	54	13	573	1304	0.041	54	117	0.0	0.0	2.878	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	576	144	68	1886	0.305	576	559	0.4	0.4	2.747	A
2	214	53	532	1470	0.145	214	112	0.2	0.2	2.865	A
3	484	121	206	1815	0.267	484	539	0.4	0.4	2.704	A
4	54	13	574	1304	0.041	54	117	0.0	0.0	2.879	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	470	118	56	1895	0.248	471	457	0.4	0.3	2.530	A
2	174	44	435	1535	0.114	175	92	0.2	0.1	2.648	A
3	396	99	168	1842	0.215	396	441	0.4	0.3	2.489	A
4	44	11	469	1370	0.032	44	95	0.0	0.0	2.714	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	394	98	47	1901	0.207	394	383	0.3	0.3	2.389	A
2	146	37	364	1583	0.092	146	77	0.1	0.1	2.506	A
3	331	83	141	1861	0.178	331	369	0.3	0.2	2.353	A
4	37	9	393	1418	0.026	37	80	0.0	0.0	2.607	A

2032 Do Something Full, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2032 Do Something Full	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	774	100.000
2		ONE HOUR	✓	257	100.000
3		ONE HOUR	✓	764	100.000
4		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	103	654	17
	2	195	0	24	38
	3	689	24	0	51
	4	10	13	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	0	0	0	0
	3	0	0	0	7
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.45	3.48	0.8	A	710	1065
2	0.22	3.50	0.3	A	236	354
3	0.47	3.86	0.9	A	701	1052
4	0.05	3.67	0.1	A	45	67

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	583	146	47	1900	0.307	581	671	0.0	0.4	2.725	A
2	193	48	523	1476	0.131	193	105	0.0	0.2	2.805	A
3	575	144	188	1835	0.314	573	528	0.0	0.5	2.851	A
4	37	9	681	1236	0.030	37	80	0.0	0.0	3.001	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	696	174	57	1894	0.367	695	803	0.4	0.6	3.001	A
2	231	58	626	1406	0.164	231	126	0.2	0.2	3.062	A
3	687	172	225	1809	0.380	686	632	0.5	0.6	3.206	A
4	44	11	816	1152	0.038	44	95	0.0	0.0	3.249	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	852	213	69	1885	0.452	851	983	0.6	0.8	3.479	A
2	283	71	767	1312	0.216	283	154	0.2	0.3	3.497	A
3	841	210	275	1773	0.474	840	774	0.6	0.9	3.854	A
4	54	13	998	1036	0.052	54	117	0.0	0.1	3.663	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	852	213	69	1885	0.452	852	984	0.8	0.8	3.484	A
2	283	71	767	1311	0.216	283	154	0.3	0.3	3.499	A
3	841	210	275	1773	0.475	841	775	0.9	0.9	3.864	A
4	54	13	1000	1036	0.052	54	117	0.1	0.1	3.666	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	696	174	57	1894	0.367	697	805	0.8	0.6	3.009	A
2	231	58	627	1405	0.164	231	126	0.3	0.2	3.068	A
3	687	172	225	1808	0.380	688	634	0.9	0.6	3.218	A
4	44	11	818	1150	0.038	44	95	0.1	0.0	3.256	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	583	146	47	1900	0.307	583	674	0.6	0.4	2.734	A
2	193	48	525	1474	0.131	194	106	0.2	0.2	2.813	A
3	575	144	188	1834	0.314	576	531	0.6	0.5	2.862	A
4	37	9	684	1234	0.030	37	80	0.0	0.0	3.005	A

APPENDIX 28

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: Mill.EPR. Blackbrook. Capesthorpe Rd Rbt Opt A.j9

Path: C:\Users\Brad\Highgate Transportation\HTp - Documents\1900 - Projects\1901 - Peel Hall\Modelling\Junctions 9\Mill Lane. Enfield Park Road. Blackbrook Avenue. Capesthorpe Road Roundabout

Report generation date: 30/01/2020 16:01:52

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
2018 Validation										
Arm 1	D1	0.4	3.23	0.29	A	D9	0.3	2.98	0.26	A
Arm 2		0.3	4.71	0.21	A		0.4	4.99	0.27	A
Arm 3		0.4	3.50	0.29	A		0.3	3.32	0.25	A
Arm 4		0.3	3.12	0.25	A		0.3	3.03	0.21	A
2022 Do Minimum										
Arm 1	D2	0.5	3.55	0.35	A	D10	0.4	3.09	0.27	A
Arm 2		0.3	4.88	0.22	A		0.4	5.24	0.30	A
Arm 3		0.5	3.75	0.32	A		0.4	3.49	0.28	A
Arm 4		0.4	3.24	0.27	A		0.3	3.11	0.23	A
2022 Do Something										
Arm 1	D3	0.6	3.65	0.36	A	D11	0.4	3.15	0.29	A
Arm 2		0.3	4.92	0.22	A		0.4	5.32	0.30	A
Arm 3		0.5	3.79	0.33	A		0.4	3.61	0.30	A
Arm 4		0.4	3.29	0.28	A		0.3	3.14	0.24	A

2022 Do Something Full										
Arm 1	D4	1.4	5.76	0.59	A	D12	0.8	4.01	0.43	A
Arm 2		0.4	5.96	0.27	A		0.6	6.18	0.36	A
Arm 3		0.7	4.79	0.42	A		1.1	5.74	0.52	A
Arm 4		0.6	4.06	0.39	A		0.6	4.02	0.36	A
2027 Do Minimum										
Arm 1	D5	0.6	3.78	0.38	A	D13	0.4	3.24	0.30	A
Arm 2		0.3	5.16	0.25	A		0.5	5.47	0.32	A
Arm 3		0.5	3.95	0.34	A		0.5	3.73	0.32	A
Arm 4		0.4	3.40	0.30	A		0.4	3.25	0.27	A
2027 Do Something										
Arm 1	D6	1.0	4.83	0.51	A	D14	0.6	3.86	0.39	A
Arm 2		0.4	5.83	0.29	A		0.6	6.37	0.39	A
Arm 3		0.7	4.56	0.40	A		1.0	5.32	0.49	A
Arm 4		0.6	3.83	0.37	A		0.6	4.03	0.39	A
2032 Do Minimum										
Arm 1	D7	0.7	4.10	0.42	A	D15	0.5	3.38	0.32	A
Arm 2		0.4	5.46	0.28	A		0.5	5.70	0.34	A
Arm 3		0.6	4.27	0.38	A		0.5	3.98	0.35	A
Arm 4		0.5	3.59	0.33	A		0.4	3.41	0.30	A
2032 Do Something Full										
Arm 1	D8	4.3	15.52	0.82	C	D16	0.9	4.46	0.48	A
Arm 2		0.8	8.21	0.46	A		0.6	6.57	0.39	A
Arm 3		2.7	11.13	0.73	B		1.6	7.27	0.62	A
Arm 4		1.5	7.08	0.60	A		0.8	4.69	0.45	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

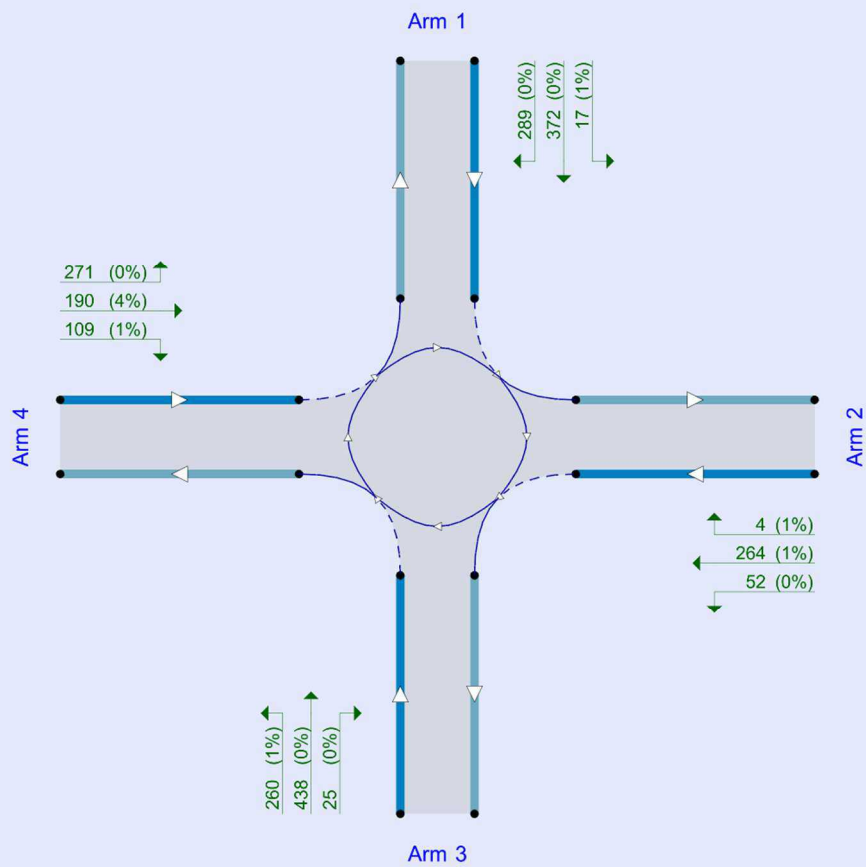
File summary

File Description

Title	
Location	
Site number	
Date	28/01/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\Brad
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin



Flows show original traffic demand (Veh/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Validation	AM	ONE HOUR	07:45	09:15	15	✓
D2	2022 Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓
D3	2022 Do Something	AM	ONE HOUR	07:45	09:15	15	✓
D4	2022 Do Something Full	AM	ONE HOUR	07:45	09:15	15	✓
D5	2027 Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓
D6	2027 Do Something	AM	ONE HOUR	07:45	09:15	15	✓
D7	2032 Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓
D8	2032 Do Something Full	AM	ONE HOUR	07:45	09:15	15	✓
D9	2018 Validation	PM	ONE HOUR	16:45	18:15	15	✓
D10	2022 Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓
D11	2022 Do Something	PM	ONE HOUR	16:45	18:15	15	✓
D12	2022 Do Something Full	PM	ONE HOUR	16:45	18:15	15	✓
D13	2027 Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓
D14	2027 Do Something	PM	ONE HOUR	16:45	18:15	15	✓
D15	2032 Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓
D16	2032 Do Something Full	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2018 Validation, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.49	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Blackbrook Avenue (N)	
2	Enfield Park Road	
3	Blackbrook Avenue (S)	
4	Capesthorne Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.90	8.70	15.3	27.4	39.5	51.8	
2	3.50	7.40	19.7	3.0	89.6	49.7	
3	3.80	7.90	15.6	16.7	39.5	51.4	
4	3.70	7.10	21.3	51.3	39.5	47.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.642	1788
2	0.307	1168
3	0.612	1673
4	0.643	1747

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Validation	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	417	100.000
2		ONE HOUR	✓	179	100.000
3		ONE HOUR	✓	382	100.000
4		ONE HOUR	✓	341	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	13	242	162
	2	4	0	35	140
	3	231	43	0	108
	4	96	174	71	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	1	0
	2	1	0	0	6
	3	0	0	0	3
	4	0	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.29	3.23	0.4	A	383	574
2	0.21	4.71	0.3	A	164	246
3	0.29	3.50	0.4	A	351	526
4	0.25	3.12	0.3	A	313	469

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	314	78	216	1637	0.192	313	248	0.0	0.2	2.718	A
2	135	34	357	1010	0.133	134	173	0.0	0.2	4.107	A
3	288	72	230	1516	0.190	287	261	0.0	0.2	2.928	A
4	257	64	209	1589	0.162	256	308	0.0	0.2	2.699	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	375	94	259	1609	0.233	375	297	0.2	0.3	2.915	A
2	161	40	427	989	0.163	161	207	0.2	0.2	4.342	A
3	343	86	275	1487	0.231	343	313	0.2	0.3	3.146	A
4	307	77	250	1563	0.196	306	368	0.2	0.2	2.865	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	459	115	317	1572	0.292	459	364	0.3	0.4	3.232	A
2	197	49	523	961	0.205	197	253	0.2	0.3	4.708	A
3	421	105	337	1449	0.290	420	383	0.3	0.4	3.497	A
4	375	94	306	1527	0.246	375	451	0.2	0.3	3.124	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	459	115	317	1572	0.292	459	364	0.4	0.4	3.235	A
2	197	49	523	961	0.205	197	253	0.3	0.3	4.711	A
3	421	105	337	1449	0.290	421	383	0.4	0.4	3.500	A
4	375	94	306	1527	0.246	375	451	0.3	0.3	3.125	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	375	94	259	1609	0.233	375	298	0.4	0.3	2.920	A
2	161	40	427	989	0.163	161	207	0.3	0.2	4.348	A
3	343	86	275	1487	0.231	344	313	0.4	0.3	3.149	A
4	307	77	250	1562	0.196	307	369	0.3	0.2	2.869	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	314	78	217	1637	0.192	314	249	0.3	0.2	2.724	A
2	135	34	358	1010	0.133	135	173	0.2	0.2	4.117	A
3	288	72	231	1515	0.190	288	262	0.3	0.2	2.935	A
4	257	64	209	1588	0.162	257	309	0.2	0.2	2.706	A

2022 Do Minimum, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022 Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	492	100.000
2		ONE HOUR	✓	186	100.000
3		ONE HOUR	✓	413	100.000
4		ONE HOUR	✓	371	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	14	260	218
	2	4	0	41	141
	3	246	49	0	118
	4	107	206	58	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1	2	3	4
1	0	1	1	0
2	2	0	0	6
3	0	0	0	2
4	0	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.35	3.55	0.5	A	451	677
2	0.22	4.88	0.3	A	171	256
3	0.32	3.75	0.5	A	379	568
4	0.27	3.24	0.4	A	340	511

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	370	93	235	1627	0.228	369	268	0.0	0.3	2.860	A
2	140	35	402	998	0.140	139	202	0.0	0.2	4.191	A
3	311	78	272	1494	0.208	310	269	0.0	0.3	3.038	A
4	279	70	224	1585	0.176	278	358	0.0	0.2	2.753	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	442	111	281	1597	0.277	442	321	0.3	0.4	3.117	A
2	167	42	481	975	0.172	167	242	0.2	0.2	4.457	A
3	371	93	326	1460	0.254	371	322	0.3	0.3	3.304	A
4	334	83	269	1557	0.214	333	428	0.2	0.3	2.941	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	542	135	344	1556	0.348	541	393	0.4	0.5	3.546	A
2	205	51	590	943	0.217	205	296	0.2	0.3	4.877	A
3	455	114	399	1415	0.321	454	395	0.3	0.5	3.746	A
4	408	102	329	1519	0.269	408	525	0.3	0.4	3.241	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	542	135	345	1556	0.348	542	393	0.5	0.5	3.549	A
2	205	51	590	943	0.217	205	296	0.3	0.3	4.879	A
3	455	114	400	1414	0.321	455	395	0.5	0.5	3.750	A
4	408	102	329	1519	0.269	408	525	0.4	0.4	3.241	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	442	111	282	1596	0.277	443	321	0.5	0.4	3.124	A
2	167	42	482	974	0.172	167	242	0.3	0.2	4.463	A
3	371	93	327	1460	0.254	372	323	0.5	0.3	3.312	A
4	334	83	269	1557	0.214	334	429	0.4	0.3	2.946	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	370	93	236	1626	0.228	371	269	0.4	0.3	2.870	A
2	140	35	404	997	0.140	140	203	0.2	0.2	4.202	A
3	311	78	274	1493	0.208	311	271	0.3	0.3	3.048	A
4	279	70	225	1585	0.176	280	359	0.3	0.2	2.758	A

2022 Do Something, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2022 Do Something	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	513	100.000
2		ONE HOUR	✓	185	100.000
3		ONE HOUR	✓	417	100.000
4		ONE HOUR	✓	384	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	14	270	229
	2	4	0	41	140
	3	251	49	0	117
	4	114	210	60	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	1	0
	2	1	0	0	6
	3	0	0	0	2
	4	0	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.36	3.65	0.6	A	471	706
2	0.22	4.92	0.3	A	170	255
3	0.33	3.79	0.5	A	383	574
4	0.28	3.29	0.4	A	352	529

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	386	97	239	1624	0.238	385	277	0.0	0.3	2.903	A
2	139	35	419	993	0.140	139	205	0.0	0.2	4.211	A
3	314	78	280	1489	0.211	313	278	0.0	0.3	3.057	A
4	289	72	228	1583	0.183	288	365	0.0	0.2	2.778	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	461	115	287	1593	0.289	461	331	0.3	0.4	3.179	A
2	166	42	502	969	0.172	166	245	0.2	0.2	4.484	A
3	375	94	335	1455	0.258	375	333	0.3	0.3	3.332	A
4	345	86	273	1555	0.222	345	437	0.2	0.3	2.975	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	565	141	351	1552	0.364	564	406	0.4	0.6	3.644	A
2	204	51	615	936	0.218	203	300	0.2	0.3	4.917	A
3	459	115	410	1408	0.326	459	408	0.3	0.5	3.789	A
4	423	106	334	1516	0.279	422	534	0.3	0.4	3.293	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	565	141	351	1551	0.364	565	406	0.6	0.6	3.648	A
2	204	51	615	935	0.218	204	301	0.3	0.3	4.920	A
3	459	115	411	1408	0.326	459	408	0.5	0.5	3.793	A
4	423	106	335	1515	0.279	423	535	0.4	0.4	3.293	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	461	115	287	1593	0.290	462	332	0.6	0.4	3.186	A
2	166	42	503	968	0.172	167	246	0.3	0.2	4.492	A
3	375	94	336	1455	0.258	375	334	0.5	0.3	3.336	A
4	345	86	274	1554	0.222	346	438	0.4	0.3	2.981	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	386	97	240	1623	0.238	387	278	0.4	0.3	2.911	A
2	139	35	421	993	0.140	139	206	0.2	0.2	4.220	A
3	314	78	281	1489	0.211	314	280	0.3	0.3	3.068	A
4	289	72	229	1583	0.183	289	366	0.3	0.2	2.785	A

2022 Do Something Full, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2022 Do Something Full	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	825	100.000
2		ONE HOUR	✓	205	100.000
3		ONE HOUR	✓	493	100.000
4		ONE HOUR	✓	525	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	16	418	391
	2	6	0	51	148
	3	322	50	0	121
	4	220	203	102	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	1	0	0
	2	2	0	0	5
	3	0	0	0	2
	4	0	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.59	5.76	1.4	A	757	1136
2	0.27	5.96	0.4	A	188	282
3	0.42	4.79	0.7	A	452	679
4	0.39	4.06	0.6	A	482	723

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	621	155	266	1615	0.385	619	411	0.0	0.6	3.605	A
2	154	39	683	924	0.167	154	202	0.0	0.2	4.667	A
3	371	93	409	1412	0.263	370	428	0.0	0.4	3.448	A
4	395	99	283	1550	0.255	394	495	0.0	0.3	3.109	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	742	185	319	1581	0.469	741	492	0.6	0.9	4.281	A
2	184	46	818	884	0.208	184	242	0.2	0.3	5.141	A
3	443	111	489	1363	0.325	443	513	0.4	0.5	3.912	A
4	472	118	339	1514	0.312	472	593	0.3	0.5	3.450	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	908	227	390	1534	0.592	906	602	0.9	1.4	5.712	A
2	226	56	1001	830	0.272	225	296	0.3	0.4	5.950	A
3	543	136	599	1295	0.419	542	627	0.5	0.7	4.774	A
4	578	145	415	1466	0.394	577	725	0.5	0.6	4.048	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	908	227	391	1534	0.592	908	603	1.4	1.4	5.756	A
2	226	56	1003	829	0.272	226	296	0.4	0.4	5.963	A
3	543	136	600	1294	0.419	543	629	0.7	0.7	4.790	A
4	578	145	416	1465	0.394	578	727	0.6	0.6	4.056	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	742	185	320	1580	0.469	744	494	1.4	0.9	4.318	A
2	184	46	821	883	0.209	185	242	0.4	0.3	5.159	A
3	443	111	491	1361	0.326	444	515	0.7	0.5	3.930	A
4	472	118	341	1514	0.312	473	595	0.6	0.5	3.463	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	621	155	268	1614	0.385	622	413	0.9	0.6	3.633	A
2	154	39	687	923	0.167	155	203	0.3	0.2	4.688	A
3	371	93	411	1411	0.263	372	431	0.5	0.4	3.467	A
4	395	99	285	1549	0.255	396	498	0.5	0.3	3.124	A

2027 Do Minimum, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2027 Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	531	100.000
2		ONE HOUR	✓	209	100.000
3		ONE HOUR	✓	432	100.000
4		ONE HOUR	✓	405	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	14	267	250
	2	5	0	55	149
	3	260	52	0	120
	4	118	197	90	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	1	0
	2	3	0	0	5
	3	0	0	0	2
	4	0	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.38	3.78	0.6	A	487	731
2	0.25	5.16	0.3	A	192	288
3	0.34	3.95	0.5	A	396	595
4	0.30	3.40	0.4	A	372	557

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	400	100	254	1614	0.248	398	287	0.0	0.3	2.959	A
2	157	39	455	991	0.159	157	197	0.0	0.2	4.310	A
3	325	81	303	1476	0.220	324	309	0.0	0.3	3.123	A
4	305	76	238	1575	0.194	304	389	0.0	0.2	2.830	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	477	119	305	1582	0.302	477	344	0.3	0.4	3.258	A
2	188	47	545	964	0.195	188	236	0.2	0.2	4.633	A
3	388	97	363	1439	0.270	388	370	0.3	0.4	3.426	A
4	364	91	285	1546	0.236	364	466	0.2	0.3	3.046	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	585	146	373	1538	0.380	584	421	0.4	0.6	3.774	A
2	230	58	668	928	0.248	230	289	0.2	0.3	5.154	A
3	476	119	444	1388	0.343	475	453	0.4	0.5	3.940	A
4	446	111	349	1505	0.296	445	571	0.3	0.4	3.395	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	585	146	373	1537	0.380	585	422	0.6	0.6	3.778	A
2	230	58	668	928	0.248	230	290	0.3	0.3	5.159	A
3	476	119	445	1388	0.343	476	454	0.5	0.5	3.946	A
4	446	111	349	1505	0.296	446	571	0.4	0.4	3.399	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	477	119	305	1581	0.302	478	345	0.6	0.4	3.264	A
2	188	47	546	964	0.195	188	237	0.3	0.2	4.642	A
3	388	97	364	1438	0.270	389	371	0.5	0.4	3.432	A
4	364	91	285	1545	0.236	365	467	0.4	0.3	3.049	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	400	100	255	1614	0.248	400	289	0.4	0.3	2.967	A
2	157	39	457	991	0.159	158	198	0.2	0.2	4.324	A
3	325	81	305	1475	0.221	326	311	0.4	0.3	3.135	A
4	305	76	239	1575	0.194	305	391	0.3	0.2	2.835	A

2027 Do Something, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2027 Do Something	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	699	100.000
2		ONE HOUR	✓	225	100.000
3		ONE HOUR	✓	487	100.000
4		ONE HOUR	✓	494	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	15	359	325
	2	7	0	55	163
	3	289	52	0	146
	4	164	213	117	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1	2	3	4
1	0	1	0	0
2	2	0	0	5
3	0	0	0	2
4	0	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.51	4.83	1.0	A	641	962
2	0.29	5.83	0.4	A	206	310
3	0.40	4.56	0.7	A	447	670
4	0.37	3.83	0.6	A	453	680

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	526	132	287	1601	0.329	524	345	0.0	0.5	3.336	A
2	169	42	601	948	0.179	169	210	0.0	0.2	4.613	A
3	367	92	371	1433	0.256	365	398	0.0	0.3	3.366	A
4	372	93	261	1562	0.238	371	475	0.0	0.3	3.019	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	628	157	343	1565	0.402	628	413	0.5	0.7	3.842	A
2	202	51	719	913	0.222	202	251	0.2	0.3	5.062	A
3	438	109	444	1388	0.315	437	477	0.3	0.5	3.784	A
4	444	111	313	1529	0.290	444	569	0.3	0.4	3.316	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	770	192	420	1515	0.508	768	506	0.7	1.0	4.814	A
2	248	62	880	865	0.286	247	308	0.3	0.4	5.821	A
3	536	134	544	1326	0.404	535	584	0.5	0.7	4.546	A
4	544	136	383	1485	0.366	543	697	0.4	0.6	3.821	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	770	192	421	1514	0.508	770	506	1.0	1.0	4.833	A
2	248	62	882	865	0.286	248	308	0.4	0.4	5.832	A
3	536	134	545	1326	0.404	536	585	0.7	0.7	4.559	A
4	544	136	383	1484	0.366	544	698	0.6	0.6	3.826	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	628	157	344	1564	0.402	630	414	1.0	0.7	3.858	A
2	202	51	722	912	0.222	203	252	0.4	0.3	5.077	A
3	438	109	446	1387	0.316	439	478	0.7	0.5	3.801	A
4	444	111	313	1529	0.290	445	571	0.6	0.4	3.322	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	526	132	288	1601	0.329	527	347	0.7	0.5	3.357	A
2	169	42	604	947	0.179	170	211	0.3	0.2	4.632	A
3	367	92	373	1432	0.256	367	400	0.5	0.3	3.381	A
4	372	93	262	1561	0.238	372	478	0.4	0.3	3.027	A

2032 Do Minimum, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2032 Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	580	100.000
2		ONE HOUR	✓	227	100.000
3		ONE HOUR	✓	464	100.000
4		ONE HOUR	✓	443	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	15	282	283
	2	5	0	56	166
	3	275	58	0	131
	4	122	220	101	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	2	0	0	5
	3	0	0	0	2
	4	0	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.42	4.10	0.7	A	532	798
2	0.28	5.46	0.4	A	208	312
3	0.38	4.27	0.6	A	426	639
4	0.33	3.59	0.5	A	407	610

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	437	109	284	1603	0.272	435	302	0.0	0.4	3.079	A
2	171	43	500	978	0.175	170	220	0.0	0.2	4.451	A
3	349	87	340	1452	0.241	348	329	0.0	0.3	3.257	A
4	334	83	254	1565	0.213	332	435	0.0	0.3	2.917	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	521	130	340	1566	0.333	521	361	0.4	0.5	3.441	A
2	204	51	598	949	0.215	204	263	0.2	0.3	4.831	A
3	417	104	408	1411	0.296	417	394	0.3	0.4	3.619	A
4	398	100	304	1533	0.260	398	521	0.3	0.3	3.170	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	639	160	417	1517	0.421	638	442	0.5	0.7	4.091	A
2	250	62	732	909	0.275	250	322	0.3	0.4	5.454	A
3	511	128	499	1354	0.377	510	483	0.4	0.6	4.262	A
4	488	122	372	1490	0.327	487	638	0.3	0.5	3.588	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	639	160	417	1516	0.421	639	443	0.7	0.7	4.101	A
2	250	62	733	909	0.275	250	323	0.4	0.4	5.463	A
3	511	128	500	1354	0.377	511	483	0.6	0.6	4.271	A
4	488	122	372	1490	0.327	488	639	0.5	0.5	3.592	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	521	130	341	1566	0.333	522	362	0.7	0.5	3.451	A
2	204	51	600	948	0.215	204	264	0.4	0.3	4.841	A
3	417	104	409	1410	0.296	418	395	0.6	0.4	3.630	A
4	398	100	304	1533	0.260	399	522	0.5	0.4	3.177	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	437	109	286	1602	0.273	437	303	0.5	0.4	3.093	A
2	171	43	502	977	0.175	171	221	0.3	0.2	4.468	A
3	349	87	342	1451	0.241	350	331	0.4	0.3	3.270	A
4	334	83	255	1564	0.213	334	437	0.4	0.3	2.925	A

2032 Do Something Full, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	11.24	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2032 Do Something Full	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	930	100.000
2		ONE HOUR	✓	338	100.000
3		ONE HOUR	✓	808	100.000
4		ONE HOUR	✓	685	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	30	431	469
	2	5	0	139	194
	3	403	268	0	137
	4	201	356	128	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	0	0	0
	2	1	0	0	2
	3	0	1	0	2
	4	0	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.82	15.52	4.3	C	853	1280
2	0.46	8.21	0.8	A	310	465
3	0.73	11.13	2.7	B	741	1112
4	0.60	7.08	1.5	A	629	943

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	700	175	563	1424	0.492	696	456	0.0	1.0	4.920	A
2	254	64	770	920	0.277	253	490	0.0	0.4	5.383	A
3	608	152	500	1356	0.449	605	523	0.0	0.8	4.775	A
4	516	129	506	1415	0.364	513	599	0.0	0.6	3.983	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	836	209	675	1352	0.618	834	546	1.0	1.6	6.904	A
2	304	76	922	874	0.348	303	587	0.4	0.5	6.299	A
3	726	182	599	1295	0.561	725	626	0.8	1.3	6.285	A
4	616	154	606	1351	0.456	615	717	0.6	0.8	4.884	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1024	256	824	1256	0.816	1014	667	1.6	4.1	14.346	B
2	372	93	1122	813	0.458	371	717	0.5	0.8	8.115	A
3	890	222	730	1215	0.732	884	763	1.3	2.6	10.696	B
4	754	189	740	1265	0.596	752	874	0.8	1.4	6.982	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	1024	256	828	1253	0.817	1023	670	4.1	4.3	15.517	C
2	372	93	1131	810	0.459	372	720	0.8	0.8	8.211	A
3	890	222	735	1212	0.734	889	768	2.6	2.7	11.127	B
4	754	189	744	1262	0.598	754	880	1.4	1.5	7.084	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	836	209	680	1349	0.620	846	551	4.3	1.7	7.302	A
2	304	76	935	870	0.349	305	591	0.8	0.5	6.385	A
3	726	182	606	1291	0.563	732	633	2.7	1.3	6.505	A
4	616	154	612	1347	0.457	618	726	1.5	0.9	4.957	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	700	175	568	1422	0.493	703	460	1.7	1.0	5.029	A
2	254	64	777	918	0.277	255	494	0.5	0.4	5.435	A
3	608	152	505	1353	0.450	610	527	1.3	0.8	4.860	A
4	516	129	511	1412	0.365	517	604	0.9	0.6	4.026	A

2018 Validation, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2018 Validation	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	381	100.000
2		ONE HOUR	✓	243	100.000
3		ONE HOUR	✓	334	100.000
4		ONE HOUR	✓	294	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	13	263	105
	2	3	0	44	196
	3	200	23	0	111
	4	110	118	66	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	1
	2	1	0	0	4
	3	0	0	0	2
	4	1	11	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.26	2.98	0.3	A	350	524
2	0.27	4.99	0.4	A	223	334
3	0.25	3.32	0.3	A	306	460
4	0.21	3.03	0.3	A	270	405

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	287	72	155	1677	0.171	286	235	0.0	0.2	2.587	A
2	183	46	326	1034	0.177	182	116	0.0	0.2	4.222	A
3	251	63	228	1519	0.166	251	280	0.0	0.2	2.836	A
4	221	55	170	1560	0.142	221	309	0.0	0.2	2.686	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	343	86	186	1656	0.207	342	281	0.2	0.3	2.740	A
2	218	55	390	1015	0.215	218	138	0.2	0.3	4.518	A
3	300	75	273	1491	0.201	300	335	0.2	0.3	3.022	A
4	264	66	203	1540	0.172	264	370	0.2	0.2	2.822	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	419	105	228	1628	0.258	419	344	0.3	0.3	2.979	A
2	268	67	477	989	0.271	267	169	0.3	0.4	4.988	A
3	368	92	334	1453	0.253	367	410	0.3	0.3	3.317	A
4	324	81	249	1512	0.214	323	453	0.2	0.3	3.029	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	419	105	228	1627	0.258	419	345	0.3	0.3	2.979	A
2	268	67	478	989	0.271	268	170	0.4	0.4	4.992	A
3	368	92	335	1452	0.253	368	411	0.3	0.3	3.318	A
4	324	81	249	1511	0.214	324	454	0.3	0.3	3.030	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	343	86	186	1656	0.207	343	282	0.3	0.3	2.744	A
2	218	55	391	1015	0.215	219	139	0.4	0.3	4.525	A
3	300	75	274	1491	0.201	301	336	0.3	0.3	3.025	A
4	264	66	203	1539	0.172	265	371	0.3	0.2	2.824	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	287	72	156	1676	0.171	287	236	0.3	0.2	2.590	A
2	183	46	327	1033	0.177	183	116	0.3	0.2	4.234	A
3	251	63	229	1518	0.166	252	281	0.3	0.2	2.843	A
4	221	55	170	1560	0.142	222	311	0.2	0.2	2.690	A

2022 Do Minimum, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2022 Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	401	100.000
2		ONE HOUR	✓	262	100.000
3		ONE HOUR	✓	369	100.000
4		ONE HOUR	✓	318	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	12	270	119
	2	3	0	47	212
	3	211	25	0	133
	4	106	128	84	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1	2	3	4
1	0	1	0	1
2	1	0	0	4
3	0	0	0	1
4	1	10	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.27	3.09	0.4	A	368	552
2	0.30	5.24	0.4	A	240	361
3	0.28	3.49	0.4	A	339	508
4	0.23	3.11	0.3	A	292	438

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	302	75	178	1662	0.182	301	240	0.0	0.2	2.643	A
2	197	49	355	1025	0.192	196	124	0.0	0.2	4.340	A
3	278	69	250	1510	0.184	277	301	0.0	0.2	2.919	A
4	239	60	179	1560	0.153	239	348	0.0	0.2	2.723	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	360	90	213	1639	0.220	360	287	0.2	0.3	2.816	A
2	236	59	425	1004	0.235	235	148	0.2	0.3	4.681	A
3	332	83	300	1479	0.224	331	360	0.2	0.3	3.138	A
4	286	71	215	1538	0.186	286	417	0.2	0.2	2.874	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	442	110	261	1606	0.275	441	352	0.3	0.4	3.090	A
2	288	72	520	976	0.296	288	182	0.3	0.4	5.231	A
3	406	102	367	1436	0.283	406	441	0.3	0.4	3.491	A
4	350	88	263	1508	0.232	350	510	0.2	0.3	3.107	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	442	110	261	1606	0.275	442	352	0.4	0.4	3.090	A
2	288	72	521	976	0.296	288	182	0.4	0.4	5.238	A
3	406	102	368	1436	0.283	406	442	0.4	0.4	3.494	A
4	350	88	263	1508	0.232	350	511	0.3	0.3	3.107	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	360	90	213	1638	0.220	361	288	0.4	0.3	2.820	A
2	236	59	426	1004	0.235	236	148	0.4	0.3	4.691	A
3	332	83	301	1478	0.224	332	361	0.4	0.3	3.141	A
4	286	71	215	1538	0.186	286	418	0.3	0.2	2.876	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	302	75	179	1662	0.182	302	241	0.3	0.2	2.649	A
2	197	49	356	1025	0.193	198	124	0.3	0.2	4.355	A
3	278	69	252	1509	0.184	278	302	0.3	0.2	2.924	A
4	239	60	180	1559	0.154	240	350	0.2	0.2	2.729	A

2022 Do Something, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2022 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	418	100.000
2		ONE HOUR	✓	266	100.000
3		ONE HOUR	✓	390	100.000
4		ONE HOUR	✓	329	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	12	275	131
	2	3	0	47	216
	3	223	25	0	142
	4	112	131	86	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	1
	2	1	0	0	4
	3	0	0	0	1
	4	1	9	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.29	3.15	0.4	A	384	575
2	0.30	5.32	0.4	A	244	366
3	0.30	3.61	0.4	A	358	537
4	0.24	3.14	0.3	A	302	453

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	315	79	182	1660	0.190	314	254	0.0	0.2	2.673	A
2	200	50	369	1021	0.196	199	126	0.0	0.2	4.376	A
3	294	73	262	1502	0.195	293	306	0.0	0.2	2.973	A
4	248	62	188	1561	0.159	247	367	0.0	0.2	2.738	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	376	94	217	1636	0.230	376	304	0.2	0.3	2.856	A
2	239	60	442	999	0.239	239	151	0.2	0.3	4.735	A
3	351	88	314	1470	0.239	350	367	0.2	0.3	3.216	A
4	296	74	225	1538	0.192	296	439	0.2	0.2	2.897	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	460	115	266	1603	0.287	460	372	0.3	0.4	3.149	A
2	293	73	541	969	0.302	292	185	0.3	0.4	5.314	A
3	429	107	385	1425	0.301	429	449	0.3	0.4	3.610	A
4	362	91	276	1507	0.240	362	538	0.2	0.3	3.144	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	460	115	266	1603	0.287	460	372	0.4	0.4	3.149	A
2	293	73	542	969	0.302	293	185	0.4	0.4	5.322	A
3	429	107	385	1425	0.301	429	449	0.4	0.4	3.614	A
4	362	91	276	1506	0.240	362	538	0.3	0.3	3.145	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	376	94	218	1636	0.230	376	304	0.4	0.3	2.858	A
2	239	60	443	999	0.239	240	151	0.4	0.3	4.744	A
3	351	88	315	1469	0.239	351	367	0.4	0.3	3.220	A
4	296	74	226	1538	0.192	296	440	0.3	0.2	2.901	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	315	79	182	1660	0.190	315	255	0.3	0.2	2.679	A
2	200	50	371	1020	0.196	201	127	0.3	0.2	4.394	A
3	294	73	264	1501	0.196	294	307	0.3	0.2	2.981	A
4	248	62	189	1560	0.159	248	369	0.2	0.2	2.744	A

2022 Do Something Full, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.87	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2022 Do Something Full	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	624	100.000
2		ONE HOUR	✓	293	100.000
3		ONE HOUR	✓	629	100.000
4		ONE HOUR	✓	462	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	15	344	265
	2	4	0	47	242
	3	401	22	0	206
	4	208	154	100	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	1	0	0
	2	1	0	0	3
	3	0	0	0	1
	4	0	8	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.43	4.01	0.8	A	573	859
2	0.36	6.18	0.6	A	269	403
3	0.52	5.74	1.1	A	577	866
4	0.36	4.02	0.6	A	424	636

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	470	117	207	1649	0.285	468	460	0.0	0.4	3.045	A
2	221	55	532	980	0.225	219	143	0.0	0.3	4.727	A
3	474	118	383	1430	0.331	472	368	0.0	0.5	3.746	A
4	348	87	320	1498	0.232	347	535	0.0	0.3	3.123	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	561	140	248	1621	0.346	560	550	0.4	0.5	3.391	A
2	263	66	637	948	0.278	263	172	0.3	0.4	5.250	A
3	565	141	459	1383	0.409	565	441	0.5	0.7	4.393	A
4	415	104	383	1459	0.285	415	640	0.3	0.4	3.449	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	687	172	303	1584	0.434	686	674	0.5	0.8	4.006	A
2	323	81	780	906	0.356	322	210	0.4	0.5	6.161	A
3	693	173	562	1320	0.525	691	540	0.7	1.1	5.709	A
4	509	127	469	1405	0.362	508	784	0.4	0.6	4.010	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	687	172	304	1584	0.434	687	675	0.8	0.8	4.015	A
2	323	81	781	905	0.356	323	210	0.5	0.6	6.176	A
3	693	173	563	1319	0.525	693	541	1.1	1.1	5.743	A
4	509	127	470	1404	0.362	509	785	0.6	0.6	4.018	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	561	140	249	1621	0.346	562	552	0.8	0.5	3.401	A
2	263	66	638	948	0.278	264	172	0.6	0.4	5.268	A
3	565	141	460	1383	0.409	567	442	1.1	0.7	4.424	A
4	415	104	385	1458	0.285	416	642	0.6	0.4	3.460	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	470	117	208	1648	0.285	470	462	0.5	0.4	3.059	A
2	221	55	534	979	0.225	221	144	0.4	0.3	4.752	A
3	474	118	385	1429	0.331	474	370	0.7	0.5	3.776	A
4	348	87	322	1497	0.232	348	538	0.4	0.3	3.136	A

2027 Do Minimum, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2027 Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	437	100.000
2		ONE HOUR	✓	277	100.000
3		ONE HOUR	✓	404	100.000
4		ONE HOUR	✓	364	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	13	279	145
	2	4	0	50	223
	3	222	26	0	156
	4	135	141	88	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	1
	2	1	0	0	4
	3	0	0	0	1
	4	1	9	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.30	3.24	0.4	A	401	601
2	0.32	5.47	0.5	A	254	381
3	0.32	3.73	0.5	A	371	556
4	0.27	3.25	0.4	A	334	501

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	329	82	191	1653	0.199	328	271	0.0	0.2	2.716	A
2	209	52	384	1016	0.205	208	135	0.0	0.3	4.445	A
3	304	76	279	1492	0.204	303	313	0.0	0.3	3.026	A
4	274	69	189	1562	0.175	273	393	0.0	0.2	2.793	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	393	98	229	1628	0.241	393	324	0.2	0.3	2.914	A
2	249	62	460	994	0.251	249	162	0.3	0.3	4.829	A
3	363	91	334	1457	0.249	363	375	0.3	0.3	3.290	A
4	327	82	226	1539	0.213	327	471	0.2	0.3	2.971	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	481	120	280	1593	0.302	481	397	0.3	0.4	3.234	A
2	305	76	563	963	0.317	304	198	0.3	0.5	5.458	A
3	445	111	409	1410	0.315	444	459	0.3	0.5	3.725	A
4	401	100	277	1507	0.266	400	576	0.3	0.4	3.252	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	481	120	281	1593	0.302	481	397	0.4	0.4	3.237	A
2	305	76	564	963	0.317	305	198	0.5	0.5	5.471	A
3	445	111	410	1410	0.316	445	459	0.5	0.5	3.729	A
4	401	100	277	1507	0.266	401	577	0.4	0.4	3.253	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	393	98	229	1627	0.241	393	325	0.4	0.3	2.919	A
2	249	62	461	994	0.251	250	162	0.5	0.3	4.841	A
3	363	91	335	1456	0.249	364	375	0.5	0.3	3.295	A
4	327	82	227	1538	0.213	328	472	0.4	0.3	2.973	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	329	82	192	1653	0.199	329	272	0.3	0.2	2.722	A
2	209	52	386	1016	0.205	209	136	0.3	0.3	4.461	A
3	304	76	280	1491	0.204	304	314	0.3	0.3	3.037	A
4	274	69	190	1561	0.176	274	395	0.3	0.2	2.799	A

2027 Do Something, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2027 Do Something	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	544	100.000
2		ONE HOUR	✓	325	100.000
3		ONE HOUR	✓	595	100.000
4		ONE HOUR	✓	520	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	14	316	214
	2	4	0	50	271
	3	316	26	0	253
	4	195	200	125	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1	2	3	4
1	0	1	0	0
2	1	0	0	3
3	0	0	0	1
4	0	6	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.39	3.86	0.6	A	499	749
2	0.39	6.37	0.6	A	298	447
3	0.49	5.32	1.0	A	546	819
4	0.39	4.03	0.6	A	477	716

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	410	102	263	1613	0.254	408	386	0.0	0.3	2.987	A
2	245	61	491	992	0.247	243	180	0.0	0.3	4.803	A
3	448	112	367	1439	0.311	446	368	0.0	0.4	3.621	A
4	391	98	259	1541	0.254	390	553	0.0	0.3	3.125	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	489	122	315	1578	0.310	489	462	0.3	0.4	3.302	A
2	292	73	588	963	0.304	292	216	0.3	0.4	5.362	A
3	535	134	439	1394	0.384	534	441	0.4	0.6	4.184	A
4	467	117	311	1509	0.310	467	663	0.3	0.4	3.452	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	599	150	386	1531	0.391	598	566	0.4	0.6	3.856	A
2	358	89	720	923	0.388	357	264	0.4	0.6	6.350	A
3	655	164	537	1333	0.492	654	540	0.6	1.0	5.291	A
4	573	143	380	1465	0.391	572	811	0.4	0.6	4.025	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	599	150	386	1531	0.391	599	567	0.6	0.6	3.863	A
2	358	89	721	923	0.388	358	264	0.6	0.6	6.370	A
3	655	164	538	1332	0.492	655	541	1.0	1.0	5.316	A
4	573	143	381	1465	0.391	573	813	0.6	0.6	4.033	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	489	122	316	1577	0.310	490	464	0.6	0.5	3.313	A
2	292	73	590	962	0.304	293	216	0.6	0.4	5.386	A
3	535	134	441	1393	0.384	536	442	1.0	0.6	4.209	A
4	467	117	312	1508	0.310	468	665	0.6	0.5	3.465	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	410	102	265	1612	0.254	410	388	0.5	0.3	2.996	A
2	245	61	494	991	0.247	245	181	0.4	0.3	4.828	A
3	448	112	369	1437	0.312	449	370	0.6	0.5	3.645	A
4	391	98	261	1540	0.254	392	556	0.5	0.3	3.137	A

2032 Do Minimum, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2032 Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	464	100.000
2		ONE HOUR	✓	292	100.000
3		ONE HOUR	✓	445	100.000
4		ONE HOUR	✓	406	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	14	295	155
	2	4	0	52	236
	3	233	27	0	185
	4	152	161	93	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	1
	2	1	0	0	4
	3	0	0	0	1
	4	1	8	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.32	3.38	0.5	A	426	639
2	0.34	5.70	0.5	A	268	402
3	0.35	3.98	0.5	A	408	613
4	0.30	3.41	0.4	A	373	559

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	349	87	211	1640	0.213	348	292	0.0	0.3	2.783	A
2	220	55	408	1009	0.218	219	152	0.0	0.3	4.547	A
3	335	84	296	1480	0.226	334	330	0.0	0.3	3.137	A
4	306	76	198	1561	0.196	305	432	0.0	0.2	2.864	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	417	104	252	1613	0.259	417	349	0.3	0.3	3.010	A
2	263	66	488	985	0.266	262	181	0.3	0.4	4.975	A
3	400	100	355	1444	0.277	400	395	0.3	0.4	3.448	A
4	365	91	237	1537	0.238	365	517	0.2	0.3	3.071	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	511	128	309	1575	0.324	510	428	0.3	0.5	3.381	A
2	321	80	597	953	0.337	321	222	0.4	0.5	5.693	A
3	490	122	434	1394	0.352	489	484	0.4	0.5	3.977	A
4	447	112	290	1504	0.297	447	633	0.3	0.4	3.403	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	511	128	309	1574	0.325	511	428	0.5	0.5	3.384	A
2	321	80	598	953	0.338	321	222	0.5	0.5	5.704	A
3	490	122	435	1393	0.352	490	484	0.5	0.5	3.984	A
4	447	112	291	1504	0.297	447	634	0.4	0.4	3.406	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	417	104	253	1612	0.259	418	350	0.5	0.4	3.014	A
2	263	66	489	985	0.266	263	182	0.5	0.4	4.989	A
3	400	100	356	1443	0.277	401	396	0.5	0.4	3.454	A
4	365	91	238	1536	0.238	365	519	0.4	0.3	3.077	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	349	87	212	1640	0.213	350	293	0.4	0.3	2.792	A
2	220	55	409	1009	0.218	220	152	0.4	0.3	4.566	A
3	335	84	298	1479	0.226	335	332	0.4	0.3	3.149	A
4	306	76	199	1560	0.196	306	434	0.3	0.2	2.869	A

2032 Do Something Full, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2032 Do Something Full	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	678	100.000
2		ONE HOUR	✓	320	100.000
3		ONE HOUR	✓	723	100.000
4		ONE HOUR	✓	570	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	17	372	289
	2	4	0	52	264
	3	438	25	0	260
	4	271	190	109	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	1	0	0
	2	1	0	0	1
	3	0	0	0	1
	4	0	4	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.48	4.46	0.9	A	622	933
2	0.39	6.57	0.6	A	294	440
3	0.62	7.27	1.6	A	663	995
4	0.45	4.69	0.8	A	523	785

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	510	128	243	1628	0.314	509	534	0.0	0.5	3.210	A
2	241	60	578	982	0.245	240	174	0.0	0.3	4.841	A
3	544	136	417	1411	0.386	542	400	0.0	0.6	4.130	A
4	429	107	350	1499	0.286	428	609	0.0	0.4	3.355	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	610	152	291	1596	0.382	609	640	0.5	0.6	3.644	A
2	288	72	691	947	0.304	287	208	0.3	0.4	5.450	A
3	650	162	500	1360	0.478	649	479	0.6	0.9	5.050	A
4	512	128	419	1456	0.352	512	730	0.4	0.5	3.813	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	746	187	356	1553	0.481	745	783	0.6	0.9	4.449	A
2	352	88	846	900	0.391	352	255	0.4	0.6	6.552	A
3	796	199	612	1292	0.616	793	586	0.9	1.6	7.184	A
4	628	157	512	1396	0.449	627	893	0.5	0.8	4.669	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	746	187	357	1553	0.481	746	785	0.9	0.9	4.463	A
2	352	88	848	900	0.392	352	255	0.6	0.6	6.575	A
3	796	199	613	1291	0.617	796	587	1.6	1.6	7.268	A
4	628	157	514	1395	0.450	628	895	0.8	0.8	4.688	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	610	152	292	1596	0.382	611	643	0.9	0.6	3.658	A
2	288	72	694	947	0.304	288	209	0.6	0.4	5.477	A
3	650	162	502	1359	0.478	653	480	1.6	0.9	5.112	A
4	512	128	422	1454	0.352	513	733	0.8	0.5	3.834	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	510	128	244	1627	0.314	511	538	0.6	0.5	3.227	A
2	241	60	580	981	0.246	241	175	0.4	0.3	4.870	A
3	544	136	420	1409	0.386	545	402	0.9	0.6	4.173	A
4	429	107	352	1498	0.287	430	613	0.5	0.4	3.371	A

APPENDIX 29

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: 1901 240120 Poplars Capesthorne Ra ASA.j9

Path: C:\Users\Charlie\Highgate Transportation\HTp - 1901 - Peel Hall\Modelling\Off-Site Junctions\CJ\Option A\Poplars Capesthorne Ra

Report generation date: 24/01/2020 12:54:45

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
A1 - 2022 Do Minimum										
1 - Capesthorne Road (W)	D1	0.7	4.65	0.40	A	D2	0.5	4.09	0.33	A
2 - Poplars Avenue (N)		0.3	3.83	0.25	A		0.4	3.79	0.30	A
3 - Capesthorne Road (E)		0.7	6.04	0.40	A		0.8	6.60	0.45	A
4 - Poplars Avenue (S)		0.1	3.46	0.11	A		0.1	4.13	0.12	A
A1 - 2022 Do Something										
1 - Capesthorne Road (W)	D3	0.7	4.69	0.41	A	D4	0.5	4.15	0.34	A
2 - Poplars Avenue (N)		0.5	4.45	0.35	A		0.5	3.90	0.32	A
3 - Capesthorne Road (E)		0.8	7.03	0.44	A		0.9	6.88	0.46	A
4 - Poplars Avenue (S)		0.1	3.49	0.11	A		0.1	4.22	0.13	A
A1 - 2022 Do Something (FULL)										
1 - Capesthorne Road (W)	D5	0.9	5.61	0.49	A	D6	0.7	4.85	0.43	A
2 - Poplars Avenue (N)		0.8	5.32	0.44	A		1.0	5.40	0.51	A
3 - Capesthorne Road (E)		1.5	10.36	0.60	B		1.5	10.63	0.60	B
4 - Poplars Avenue (S)		0.2	4.26	0.14	A		0.2	5.44	0.19	A
A1 - 2027 Do Minimum										
1 - Capesthorne Road (W)	D7	0.8	4.92	0.44	A	D8	0.6	4.21	0.36	A
2 - Poplars Avenue (N)		0.4	4.18	0.29	A		0.5	4.11	0.35	A
3 - Capesthorne Road (E)		0.8	6.73	0.45	A		0.9	7.17	0.47	A
4 - Poplars Avenue (S)		0.1	3.65	0.11	A		0.2	4.50	0.15	A
A1 - 2027 Do Something										
1 - Capesthorne Road (W)	D9	1.0	5.72	0.51	A	D10	1.0	5.65	0.51	A
2 - Poplars Avenue (N)		0.8	5.58	0.45	A		1.2	5.93	0.54	A
3 - Capesthorne Road (E)		1.6	10.91	0.62	B		1.8	12.39	0.64	B
4 - Poplars Avenue (S)		0.2	4.40	0.14	A		0.3	6.29	0.26	A
A1 - 2032 Do Minimum										
1 - Capesthorne Road (W)	D11	0.9	5.46	0.49	A	D12	0.7	4.62	0.41	A
2 - Poplars Avenue (N)		0.7	5.04	0.41	A		0.7	4.43	0.40	A
3 - Capesthorne Road (E)		1.0	8.27	0.51	A		1.0	7.86	0.50	A
4 - Poplars Avenue (S)		0.1	4.02	0.13	A		0.2	4.71	0.15	A
A1 - 2032 Do Something (FULL)										

1 - Capesthorpe Road (W)	D13	1.3	7.03	0.57	A	D14	1.1	5.83	0.52	A
2 - Poplars Avenue (N)		1.6	7.99	0.61	A		1.4	6.61	0.59	A
3 - Capesthorpe Road (E)		3.6	21.98	0.79	C		2.0	14.07	0.68	B
4 - Poplars Avenue (S)		0.2	5.38	0.20	A		0.3	6.46	0.23	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

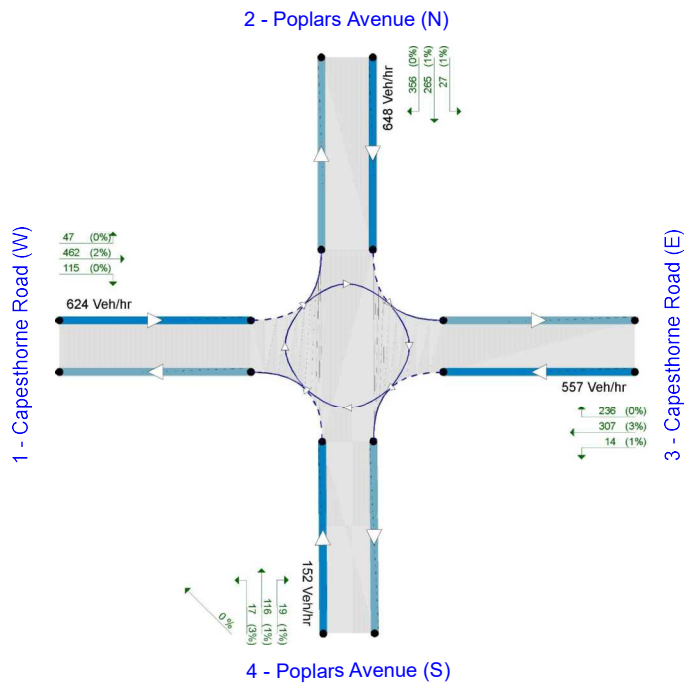
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	12/07/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	FRIELA
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin



Flows show original traffic demand (veh/hr)

The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022 Do Minimum	AM	ONE HOUR	07:45	09:15	15
D2	2022 Do Minimum	PM	ONE HOUR	16:45	18:15	15
D3	2022 Do Something	AM	ONE HOUR	07:45	09:15	15
D4	2022 Do Something	PM	ONE HOUR	16:45	18:15	15
D5	2022 Do Something (FULL)	AM	ONE HOUR	07:45	09:15	15
D6	2022 Do Something (FULL)	PM	ONE HOUR	16:45	18:15	15
D7	2027 Do Minimum	AM	ONE HOUR	07:45	09:15	15
D8	2027 Do Minimum	PM	ONE HOUR	16:45	18:15	15
D9	2027 Do Something	AM	ONE HOUR	07:45	09:15	15
D10	2027 Do Something	PM	ONE HOUR	16:45	18:15	15
D11	2032 Do Minimum	AM	ONE HOUR	07:45	09:15	15
D12	2032 Do Minimum	PM	ONE HOUR	16:45	18:15	15
D13	2032 Do Something (FULL)	AM	ONE HOUR	07:45	09:15	15
D14	2032 Do Something (FULL)	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	(Default Analysis Set)	100.000

(Default Analysis Set) - 2022 Do Minimum, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorne Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	4.77	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Capesthorne Road (W)	Eastbound
2	Poplars Avenue (N)	Southbound
3	Capesthorne Road (E)	Westbound
4	Poplars Avenue (S)	Northbound

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Capesthorne Road (W)	3.25	6.40	9.6	17.9	45.7	28.0	
2 - Poplars Avenue (N)	4.17	5.57	10.7	16.1	45.7	25.0	
3 - Capesthorne Road (E)	2.59	4.89	9.9	14.3	45.7	13.0	
4 - Poplars Avenue (S)	3.94	4.93	5.3	11.6	45.7	10.0	

Bypass

Arm	Arm has bypass	Bypass utilisation (%)
1 - Capesthorne Road (W)		
2 - Poplars Avenue (N)		
3 - Capesthorne Road (E)		
4 - Poplars Avenue (S)	✓	0

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Capesthorpe Road (W)	0.578	1454
2 - Poplars Avenue (N)	0.602	1570
3 - Capesthorpe Road (E)	0.546	1231
4 - Poplars Avenue (S)	0.583	1429

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022 Do Minimum	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorpe Road (W)		✓	470	100.000
2 - Poplars Avenue (N)		✓	278	100.000
3 - Capesthorpe Road (E)		✓	357	100.000
4 - Poplars Avenue (S)		✓	115	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Capesthorpe Road (W)	2 - Poplars Avenue (N)	3 - Capesthorpe Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorpe Road (W)	0	22	352	96
	2 - Poplars Avenue (N)	35	0	18	225
	3 - Capesthorpe Road (E)	242	101	0	14
	4 - Poplars Avenue (S)	7	95	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Capesthorpe Road (W)	2 - Poplars Avenue (N)	3 - Capesthorpe Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorpe Road (W)	0	0	3	0
	2 - Poplars Avenue (N)	1	0	1	1
	3 - Capesthorpe Road (E)	4	0	0	1
	4 - Poplars Avenue (S)	0	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorpe Road (W)	0.40	4.65	0.7	A
2 - Poplars Avenue (N)	0.25	3.83	0.3	A
3 - Capesthorpe Road (E)	0.40	6.04	0.7	A
4 - Poplars Avenue (S)	0.11	3.46	0.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	354	0	157	1333	0.266	352	0.4	3.668	A
2 - Poplars Avenue (N)	209	0	346	1344	0.156	209	0.2	3.169	A
3 - Capesthorpe Road (E)	269	0	267	1056	0.255	267	0.3	4.560	A
4 - Poplars Avenue (S)	87	0	283	1246	0.069	86	0.1	3.103	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	423	0	188	1315	0.321	422	0.5	4.030	A
2 - Poplars Avenue (N)	250	0	414	1302	0.192	250	0.2	3.419	A
3 - Capesthorpe Road (E)	321	0	320	1027	0.312	320	0.5	5.089	A
4 - Poplars Avenue (S)	103	0	339	1213	0.085	103	0.1	3.243	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	517	0	230	1291	0.401	517	0.7	4.643	A
2 - Poplars Avenue (N)	306	0	507	1246	0.246	306	0.3	3.830	A
3 - Capesthorpe Road (E)	393	0	391	989	0.397	392	0.7	6.023	A
4 - Poplars Avenue (S)	127	0	415	1168	0.108	127	0.1	3.456	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	517	0	230	1291	0.401	517	0.7	4.654	A
2 - Poplars Avenue (N)	306	0	508	1245	0.246	306	0.3	3.832	A
3 - Capesthorpe Road (E)	393	0	392	989	0.398	393	0.7	6.043	A
4 - Poplars Avenue (S)	127	0	416	1167	0.108	127	0.1	3.457	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	423	0	188	1315	0.321	423	0.5	4.041	A
2 - Poplars Avenue (N)	250	0	415	1302	0.192	250	0.2	3.427	A
3 - Capesthorpe Road (E)	321	0	321	1027	0.313	322	0.5	5.111	A
4 - Poplars Avenue (S)	103	0	341	1212	0.085	103	0.1	3.246	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	354	0	158	1332	0.266	354	0.4	3.682	A
2 - Poplars Avenue (N)	209	0	348	1343	0.156	210	0.2	3.178	A
3 - Capesthorpe Road (E)	269	0	268	1055	0.255	269	0.3	4.584	A
4 - Poplars Avenue (S)	87	0	285	1245	0.070	87	0.1	3.109	A

(Default Analysis Set) - 2022 Do Minimum, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorpe Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	4.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2022 Do Minimum	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorpe Road (W)		✓	402	100.000
2 - Poplars Avenue (N)		✓	376	100.000
3 - Capesthorpe Road (E)		✓	403	100.000
4 - Poplars Avenue (S)		✓	111	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Capesthorpe Road (W)	2 - Poplars Avenue (N)	3 - Capesthorpe Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorpe Road (W)	0	135	249	18
	2 - Poplars Avenue (N)	280	0	24	72
	3 - Capesthorpe Road (E)	358	16	0	29
	4 - Poplars Avenue (S)	4	91	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Capesthorpe Road (W)	2 - Poplars Avenue (N)	3 - Capesthorpe Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorpe Road (W)	0	6	3	0
	2 - Poplars Avenue (N)	1	0	1	1
	3 - Capesthorpe Road (E)	2	1	0	0
	4 - Poplars Avenue (S)	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorpe Road (W)	0.33	4.09	0.5	A
2 - Poplars Avenue (N)	0.30	3.79	0.4	A
3 - Capesthorpe Road (E)	0.45	6.60	0.8	A
4 - Poplars Avenue (S)	0.12	4.13	0.1	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	303	0	92	1348	0.225	301	0.3	3.438	A
2 - Poplars Avenue (N)	283	0	212	1425	0.199	282	0.2	3.146	A
3 - Capesthorpe Road (E)	303	0	278	1059	0.286	302	0.4	4.743	A
4 - Poplars Avenue (S)	84	0	490	1129	0.074	83	0.1	3.441	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	361	0	110	1337	0.270	361	0.4	3.687	A
2 - Poplars Avenue (N)	338	0	254	1399	0.242	338	0.3	3.391	A
3 - Capesthorpe Road (E)	362	0	332	1030	0.352	362	0.5	5.385	A
4 - Poplars Avenue (S)	100	0	587	1072	0.093	100	0.1	3.700	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	443	0	135	1324	0.334	442	0.5	4.081	A
2 - Poplars Avenue (N)	414	0	311	1364	0.303	414	0.4	3.783	A
3 - Capesthorpe Road (E)	444	0	407	989	0.449	443	0.8	6.571	A
4 - Poplars Avenue (S)	122	0	719	995	0.123	122	0.1	4.123	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	443	0	135	1323	0.334	443	0.5	4.086	A
2 - Poplars Avenue (N)	414	0	312	1364	0.303	414	0.4	3.787	A
3 - Capesthorpe Road (E)	444	0	407	989	0.449	444	0.8	6.601	A
4 - Poplars Avenue (S)	122	0	720	994	0.123	122	0.1	4.126	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	361	0	111	1337	0.270	362	0.4	3.691	A
2 - Poplars Avenue (N)	338	0	255	1399	0.242	338	0.3	3.397	A
3 - Capesthorpe Road (E)	362	0	333	1029	0.352	363	0.5	5.414	A
4 - Poplars Avenue (S)	100	0	589	1071	0.093	100	0.1	3.705	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	303	0	93	1347	0.225	303	0.3	3.446	A
2 - Poplars Avenue (N)	283	0	213	1424	0.199	283	0.2	3.157	A
3 - Capesthorpe Road (E)	303	0	279	1059	0.287	304	0.4	4.775	A
4 - Poplars Avenue (S)	84	0	493	1128	0.074	84	0.1	3.450	A

(Default Analysis Set) - 2022 Do Something, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorpe Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	5.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2022 Do Something	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorpe Road (W)		✓	482	100.000
2 - Poplars Avenue (N)		✓	392	100.000
3 - Capesthorpe Road (E)		✓	370	100.000
4 - Poplars Avenue (S)		✓	115	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Capesthorpe Road (W)	2 - Poplars Avenue (N)	3 - Capesthorpe Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorpe Road (W)	0	22	360	100
	2 - Poplars Avenue (N)	36	0	19	337
	3 - Capesthorpe Road (E)	251	105	0	14
	4 - Poplars Avenue (S)	7	95	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Capesthorpe Road (W)	2 - Poplars Avenue (N)	3 - Capesthorpe Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorpe Road (W)	0	0	2	0
	2 - Poplars Avenue (N)	1	0	1	1
	3 - Capesthorpe Road (E)	4	0	0	1
	4 - Poplars Avenue (S)	0	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorpe Road (W)	0.41	4.69	0.7	A
2 - Poplars Avenue (N)	0.35	4.45	0.5	A
3 - Capesthorpe Road (E)	0.44	7.03	0.8	A
4 - Poplars Avenue (S)	0.11	3.49	0.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	363	0	160	1341	0.271	361	0.4	3.671	A
2 - Poplars Avenue (N)	295	0	355	1340	0.220	294	0.3	3.438	A
3 - Capesthorpe Road (E)	279	0	355	1009	0.276	277	0.4	4.911	A
4 - Poplars Avenue (S)	87	0	294	1240	0.070	86	0.1	3.120	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	433	0	191	1323	0.328	433	0.5	4.043	A
2 - Poplars Avenue (N)	352	0	425	1298	0.272	352	0.4	3.807	A
3 - Capesthorpe Road (E)	333	0	425	971	0.343	332	0.5	5.629	A
4 - Poplars Avenue (S)	103	0	352	1206	0.086	103	0.1	3.265	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	531	0	234	1298	0.409	530	0.7	4.680	A
2 - Poplars Avenue (N)	432	0	520	1240	0.348	431	0.5	4.445	A
3 - Capesthorpe Road (E)	407	0	520	920	0.443	406	0.8	6.994	A
4 - Poplars Avenue (S)	127	0	431	1159	0.109	127	0.1	3.486	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	531	0	235	1298	0.409	531	0.7	4.691	A
2 - Poplars Avenue (N)	432	0	521	1240	0.348	432	0.5	4.454	A
3 - Capesthorpe Road (E)	407	0	521	920	0.443	407	0.8	7.027	A
4 - Poplars Avenue (S)	127	0	432	1158	0.109	127	0.1	3.488	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	433	0	192	1322	0.328	434	0.5	4.057	A
2 - Poplars Avenue (N)	352	0	426	1297	0.272	353	0.4	3.818	A
3 - Capesthorpe Road (E)	333	0	426	970	0.343	334	0.5	5.665	A
4 - Poplars Avenue (S)	103	0	353	1205	0.086	103	0.1	3.271	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	363	0	161	1340	0.271	363	0.4	3.685	A
2 - Poplars Avenue (N)	295	0	357	1339	0.220	295	0.3	3.452	A
3 - Capesthorpe Road (E)	279	0	357	1008	0.276	279	0.4	4.945	A
4 - Poplars Avenue (S)	87	0	296	1239	0.070	87	0.1	3.126	A

(Default Analysis Set) - 2022 Do Something, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorpe Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	4.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2022 Do Something	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorpe Road (W)		✓	413	100.000
2 - Poplars Avenue (N)		✓	400	100.000
3 - Capesthorpe Road (E)		✓	409	100.000
4 - Poplars Avenue (S)		✓	113	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Capesthorpe Road (W)	2 - Poplars Avenue (N)	3 - Capesthorpe Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorpe Road (W)	0	143	250	20
	2 - Poplars Avenue (N)	302	0	24	74
	3 - Capesthorpe Road (E)	364	16	0	29
	4 - Poplars Avenue (S)	4	93	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	6	3	0
	2 - Poplars Avenue (N)	1	0	1	1
	3 - Capesthorne Road (E)	2	1	0	0
	4 - Poplars Avenue (S)	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorne Road (W)	0.34	4.15	0.5	A
2 - Poplars Avenue (N)	0.32	3.90	0.5	A
3 - Capesthorne Road (E)	0.46	6.88	0.9	A
4 - Poplars Avenue (S)	0.13	4.22	0.1	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	311	0	94	1347	0.231	310	0.3	3.469	A
2 - Poplars Avenue (N)	301	0	214	1424	0.212	300	0.3	3.201	A
3 - Capesthorne Road (E)	308	0	297	1049	0.294	306	0.4	4.838	A
4 - Poplars Avenue (S)	85	0	511	1117	0.076	85	0.1	3.487	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	371	0	112	1336	0.278	371	0.4	3.729	A
2 - Poplars Avenue (N)	360	0	257	1398	0.257	359	0.3	3.466	A
3 - Capesthorne Road (E)	368	0	356	1017	0.362	367	0.6	5.535	A
4 - Poplars Avenue (S)	102	0	612	1058	0.096	101	0.1	3.764	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	455	0	137	1322	0.344	454	0.5	4.145	A
2 - Poplars Avenue (N)	440	0	315	1363	0.323	440	0.5	3.900	A
3 - Capesthorne Road (E)	450	0	435	974	0.462	449	0.8	6.847	A
4 - Poplars Avenue (S)	124	0	749	977	0.127	124	0.1	4.220	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	455	0	138	1322	0.344	455	0.5	4.150	A
2 - Poplars Avenue (N)	440	0	315	1362	0.323	440	0.5	3.904	A
3 - Capesthorpe Road (E)	450	0	436	973	0.463	450	0.9	6.880	A
4 - Poplars Avenue (S)	124	0	751	976	0.127	124	0.1	4.225	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	371	0	113	1336	0.278	372	0.4	3.737	A
2 - Poplars Avenue (N)	360	0	257	1397	0.257	360	0.3	3.471	A
3 - Capesthorpe Road (E)	368	0	357	1017	0.362	369	0.6	5.567	A
4 - Poplars Avenue (S)	102	0	615	1056	0.096	102	0.1	3.770	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	311	0	94	1346	0.231	311	0.3	3.481	A
2 - Poplars Avenue (N)	301	0	216	1423	0.212	301	0.3	3.209	A
3 - Capesthorpe Road (E)	308	0	298	1048	0.294	309	0.4	4.872	A
4 - Poplars Avenue (S)	85	0	514	1115	0.076	85	0.1	3.494	A

(Default Analysis Set) - 2022 Do Something (FULL), AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorpe Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	6.82	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2022 Do Something (FULL)	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorpe Road (W)		✓	551	100.000
2 - Poplars Avenue (N)		✓	476	100.000
3 - Capesthorpe Road (E)		✓	476	100.000
4 - Poplars Avenue (S)		✓	127	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Capesthorpe Road (W)	2 - Poplars Avenue (N)	3 - Capesthorpe Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorpe Road (W)	0	24	408	119
	2 - Poplars Avenue (N)	199	0	25	252
	3 - Capesthorpe Road (E)	289	174	0	13
	4 - Poplars Avenue (S)	9	105	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Capesthorpe Road (W)	2 - Poplars Avenue (N)	3 - Capesthorpe Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorpe Road (W)	0	0	2	0
	2 - Poplars Avenue (N)	0	0	1	1
	3 - Capesthorpe Road (E)	3	0	0	1
	4 - Poplars Avenue (S)	6	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorpe Road (W)	0.49	5.61	0.9	A
2 - Poplars Avenue (N)	0.44	5.32	0.8	A
3 - Capesthorpe Road (E)	0.60	10.36	1.5	B
4 - Poplars Avenue (S)	0.14	4.26	0.2	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	415	0	219	1307	0.317	413	0.5	4.017	A
2 - Poplars Avenue (N)	358	0	405	1315	0.272	357	0.4	3.752	A
3 - Capesthorpe Road (E)	358	0	427	979	0.366	356	0.6	5.758	A
4 - Poplars Avenue (S)	96	0	496	1120	0.085	95	0.1	3.513	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	495	0	262	1283	0.386	495	0.6	4.565	A
2 - Poplars Avenue (N)	428	0	485	1267	0.338	427	0.5	4.286	A
3 - Capesthorpe Road (E)	428	0	512	934	0.458	427	0.8	7.090	A
4 - Poplars Avenue (S)	114	0	594	1063	0.107	114	0.1	3.794	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	607	0	320	1249	0.486	605	0.9	5.582	A
2 - Poplars Avenue (N)	524	0	593	1201	0.436	523	0.8	5.305	A
3 - Capesthorpe Road (E)	524	0	626	872	0.601	522	1.5	10.202	B
4 - Poplars Avenue (S)	140	0	726	986	0.142	140	0.2	4.253	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	607	0	321	1249	0.486	607	0.9	5.607	A
2 - Poplars Avenue (N)	524	0	595	1200	0.437	524	0.8	5.325	A
3 - Capesthorpe Road (E)	524	0	628	871	0.602	524	1.5	10.361	B
4 - Poplars Avenue (S)	140	0	729	984	0.142	140	0.2	4.263	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	495	0	264	1282	0.386	497	0.6	4.593	A
2 - Poplars Avenue (N)	428	0	487	1266	0.338	429	0.5	4.307	A
3 - Capesthorpe Road (E)	428	0	514	933	0.459	430	0.9	7.203	A
4 - Poplars Avenue (S)	114	0	598	1060	0.108	114	0.1	3.808	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	415	0	220	1306	0.318	415	0.5	4.043	A
2 - Poplars Avenue (N)	358	0	407	1314	0.273	359	0.4	3.774	A
3 - Capesthorpe Road (E)	358	0	430	978	0.367	359	0.6	5.832	A
4 - Poplars Avenue (S)	96	0	500	1117	0.086	96	0.1	3.525	A

(Default Analysis Set) - 2022 Do Something (FULL), PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorpe Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	6.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2022 Do Something (FULL)	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorpe Road (W)		✓	502	100.000
2 - Poplars Avenue (N)		✓	619	100.000
3 - Capesthorpe Road (E)		✓	456	100.000
4 - Poplars Avenue (S)		✓	143	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Capesthorpe Road (W)	2 - Poplars Avenue (N)	3 - Capesthorpe Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorpe Road (W)	0	210	262	30
	2 - Poplars Avenue (N)	497	0	28	94
	3 - Capesthorpe Road (E)	385	45	0	26
	4 - Poplars Avenue (S)	6	121	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	4	3	0
	2 - Poplars Avenue (N)	1	0	1	1
	3 - Capesthorne Road (E)	2	0	0	0
	4 - Poplars Avenue (S)	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorne Road (W)	0.43	4.85	0.7	A
2 - Poplars Avenue (N)	0.51	5.40	1.0	A
3 - Capesthorne Road (E)	0.60	10.63	1.5	B
4 - Poplars Avenue (S)	0.19	5.44	0.2	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	378	0	136	1331	0.284	376	0.4	3.763	A
2 - Poplars Avenue (N)	466	0	231	1414	0.330	464	0.5	3.782	A
3 - Capesthorne Road (E)	343	0	466	959	0.358	341	0.6	5.808	A
4 - Poplars Avenue (S)	108	0	694	1010	0.107	107	0.1	3.985	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	451	0	163	1316	0.343	451	0.5	4.159	A
2 - Poplars Avenue (N)	556	0	277	1386	0.402	556	0.7	4.333	A
3 - Capesthorne Road (E)	410	0	558	909	0.451	409	0.8	7.186	A
4 - Poplars Avenue (S)	129	0	832	930	0.138	128	0.2	4.492	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	553	0	200	1295	0.427	552	0.7	4.835	A
2 - Poplars Avenue (N)	682	0	339	1348	0.506	680	1.0	5.380	A
3 - Capesthorne Road (E)	502	0	682	841	0.597	500	1.4	10.459	B
4 - Poplars Avenue (S)	157	0	1017	821	0.192	157	0.2	5.421	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	553	0	200	1295	0.427	553	0.7	4.848	A
2 - Poplars Avenue (N)	682	0	339	1348	0.506	682	1.0	5.404	A
3 - Capesthorpe Road (E)	502	0	684	840	0.597	502	1.5	10.629	B
4 - Poplars Avenue (S)	157	0	1021	819	0.192	157	0.2	5.441	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	451	0	164	1316	0.343	452	0.5	4.173	A
2 - Poplars Avenue (N)	556	0	277	1385	0.402	558	0.7	4.359	A
3 - Capesthorpe Road (E)	410	0	560	908	0.452	412	0.8	7.306	A
4 - Poplars Avenue (S)	129	0	837	927	0.139	129	0.2	4.514	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	378	0	137	1331	0.284	378	0.4	3.784	A
2 - Poplars Avenue (N)	466	0	232	1413	0.330	467	0.5	3.806	A
3 - Capesthorpe Road (E)	343	0	468	957	0.359	344	0.6	5.883	A
4 - Poplars Avenue (S)	108	0	699	1007	0.107	108	0.1	4.005	A

(Default Analysis Set) - 2027 Do Minimum, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorpe Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	5.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2027 Do Minimum	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)

HV Percentages	2.00
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Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorne Road (W)		✓	512	100.000
2 - Poplars Avenue (N)		✓	326	100.000
3 - Capesthorne Road (E)		✓	390	100.000
4 - Poplars Avenue (S)		✓	115	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	23	387	102
	2 - Poplars Avenue (N)	83	0	20	223
	3 - Capesthorne Road (E)	267	109	0	14
	4 - Poplars Avenue (S)	7	95	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	0	2	0
	2 - Poplars Avenue (N)	1	0	1	1
	3 - Capesthorne Road (E)	3	0	0	1
	4 - Poplars Avenue (S)	7	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorne Road (W)	0.44	4.92	0.8	A
2 - Poplars Avenue (N)	0.29	4.18	0.4	A
3 - Capesthorne Road (E)	0.45	6.73	0.8	A
4 - Poplars Avenue (S)	0.11	3.65	0.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	385	0	163	1339	0.288	384	0.4	3.762	A
2 - Poplars Avenue (N)	245	0	376	1327	0.185	245	0.2	3.322	A
3 - Capesthorpe Road (E)	294	0	306	1041	0.282	292	0.4	4.794	A
4 - Poplars Avenue (S)	87	0	344	1207	0.072	86	0.1	3.213	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	460	0	195	1320	0.349	460	0.5	4.179	A
2 - Poplars Avenue (N)	293	0	451	1282	0.229	293	0.3	3.639	A
3 - Capesthorpe Road (E)	351	0	366	1009	0.348	350	0.5	5.460	A
4 - Poplars Avenue (S)	103	0	412	1167	0.089	103	0.1	3.384	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	564	0	239	1295	0.435	563	0.8	4.907	A
2 - Poplars Avenue (N)	359	0	552	1221	0.294	358	0.4	4.173	A
3 - Capesthorpe Road (E)	429	0	449	965	0.445	428	0.8	6.699	A
4 - Poplars Avenue (S)	127	0	504	1113	0.114	126	0.1	3.649	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	564	0	239	1295	0.435	564	0.8	4.920	A
2 - Poplars Avenue (N)	359	0	553	1220	0.294	359	0.4	4.179	A
3 - Capesthorpe Road (E)	429	0	449	964	0.445	429	0.8	6.730	A
4 - Poplars Avenue (S)	127	0	505	1112	0.114	127	0.1	3.652	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	460	0	195	1320	0.349	461	0.5	4.197	A
2 - Poplars Avenue (N)	293	0	452	1281	0.229	294	0.3	3.646	A
3 - Capesthorpe Road (E)	351	0	367	1008	0.348	352	0.5	5.490	A
4 - Poplars Avenue (S)	103	0	414	1166	0.089	104	0.1	3.388	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	385	0	164	1338	0.288	386	0.4	3.781	A
2 - Poplars Avenue (N)	245	0	378	1326	0.185	246	0.2	3.333	A
3 - Capesthorpe Road (E)	294	0	308	1041	0.282	294	0.4	4.826	A
4 - Poplars Avenue (S)	87	0	346	1205	0.072	87	0.1	3.220	A

(Default Analysis Set) - 2027 Do Minimum, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorne Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	5.07	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2027 Do Minimum	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorne Road (W)		✓	438	100.000
2 - Poplars Avenue (N)		✓	434	100.000
3 - Capesthorne Road (E)		✓	410	100.000
4 - Poplars Avenue (S)		✓	131	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	156	262	20
	2 - Poplars Avenue (N)	350	0	25	59
	3 - Capesthorne Road (E)	366	16	0	28
	4 - Poplars Avenue (S)	4	110	17	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	0	3	0
	2 - Poplars Avenue (N)	1	0	1	1
	3 - Capesthorne Road (E)	2	1	0	0
	4 - Poplars Avenue (S)	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorne Road (W)	0.36	4.21	0.6	A
2 - Poplars Avenue (N)	0.35	4.11	0.5	A
3 - Capesthorne Road (E)	0.47	7.17	0.9	A
4 - Poplars Avenue (S)	0.15	4.50	0.2	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	330	0	107	1367	0.241	328	0.3	3.462	A
2 - Poplars Avenue (N)	327	0	224	1418	0.230	326	0.3	3.293	A
3 - Capesthorne Road (E)	309	0	322	1035	0.298	307	0.4	4.933	A
4 - Poplars Avenue (S)	99	0	549	1095	0.090	98	0.1	3.609	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	394	0	128	1355	0.291	393	0.4	3.746	A
2 - Poplars Avenue (N)	390	0	269	1391	0.281	390	0.4	3.597	A
3 - Capesthorne Road (E)	369	0	385	1001	0.368	368	0.6	5.682	A
4 - Poplars Avenue (S)	118	0	657	1031	0.114	118	0.1	3.940	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	482	0	157	1338	0.360	482	0.6	4.201	A
2 - Poplars Avenue (N)	478	0	329	1354	0.353	477	0.5	4.104	A
3 - Capesthorne Road (E)	451	0	472	954	0.473	450	0.9	7.127	A
4 - Poplars Avenue (S)	144	0	804	945	0.153	144	0.2	4.493	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	482	0	157	1338	0.360	482	0.6	4.207	A
2 - Poplars Avenue (N)	478	0	329	1354	0.353	478	0.5	4.110	A
3 - Capesthorpe Road (E)	451	0	472	954	0.473	451	0.9	7.165	A
4 - Poplars Avenue (S)	144	0	806	944	0.153	144	0.2	4.500	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	394	0	129	1354	0.291	394	0.4	3.751	A
2 - Poplars Avenue (N)	390	0	269	1390	0.281	391	0.4	3.603	A
3 - Capesthorpe Road (E)	369	0	386	1000	0.368	370	0.6	5.721	A
4 - Poplars Avenue (S)	118	0	660	1030	0.114	118	0.1	3.949	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	330	0	108	1366	0.241	330	0.3	3.474	A
2 - Poplars Avenue (N)	327	0	225	1417	0.231	327	0.3	3.305	A
3 - Capesthorpe Road (E)	309	0	323	1034	0.298	309	0.4	4.968	A
4 - Poplars Avenue (S)	99	0	552	1093	0.090	99	0.1	3.622	A

(Default Analysis Set) - 2027 Do Something, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorpe Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	7.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2027 Do Something	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorpe Road (W)		✓	586	100.000
2 - Poplars Avenue (N)		✓	484	100.000
3 - Capesthorpe Road (E)		✓	482	100.000
4 - Poplars Avenue (S)		✓	125	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Capesthorpe Road (W)	2 - Poplars Avenue (N)	3 - Capesthorpe Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorpe Road (W)	0	25	437	124
	2 - Poplars Avenue (N)	237	0	23	224
	3 - Capesthorpe Road (E)	334	135	0	13
	4 - Poplars Avenue (S)	10	102	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Capesthorpe Road (W)	2 - Poplars Avenue (N)	3 - Capesthorpe Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorpe Road (W)	0	0	2	0
	2 - Poplars Avenue (N)	0	0	1	1
	3 - Capesthorpe Road (E)	3	0	0	1
	4 - Poplars Avenue (S)	5	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorpe Road (W)	0.51	5.72	1.0	A
2 - Poplars Avenue (N)	0.45	5.58	0.8	A
3 - Capesthorpe Road (E)	0.62	10.91	1.6	B
4 - Poplars Avenue (S)	0.14	4.40	0.2	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	441	0	187	1325	0.333	439	0.5	4.054	A
2 - Poplars Avenue (N)	364	0	430	1301	0.280	363	0.4	3.832	A
3 - Capesthorpe Road (E)	363	0	439	971	0.374	361	0.6	5.878	A
4 - Poplars Avenue (S)	94	0	528	1101	0.086	94	0.1	3.575	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	527	0	224	1304	0.404	526	0.7	4.624	A
2 - Poplars Avenue (N)	435	0	515	1249	0.348	435	0.5	4.417	A
3 - Capesthorpe Road (E)	433	0	525	924	0.469	432	0.9	7.301	A
4 - Poplars Avenue (S)	112	0	633	1040	0.108	112	0.1	3.882	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	645	0	274	1275	0.506	644	1.0	5.688	A
2 - Poplars Avenue (N)	533	0	631	1179	0.452	532	0.8	5.552	A
3 - Capesthorpe Road (E)	531	0	643	861	0.616	528	1.6	10.715	B
4 - Poplars Avenue (S)	138	0	774	958	0.144	137	0.2	4.388	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	645	0	275	1275	0.506	645	1.0	5.717	A
2 - Poplars Avenue (N)	533	0	632	1178	0.452	533	0.8	5.579	A
3 - Capesthorpe Road (E)	531	0	644	860	0.617	531	1.6	10.907	B
4 - Poplars Avenue (S)	138	0	777	956	0.144	138	0.2	4.399	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	527	0	226	1303	0.404	528	0.7	4.652	A
2 - Poplars Avenue (N)	435	0	517	1248	0.349	436	0.5	4.441	A
3 - Capesthorpe Road (E)	433	0	527	923	0.469	436	0.9	7.434	A
4 - Poplars Avenue (S)	112	0	638	1037	0.108	113	0.1	3.895	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	441	0	189	1324	0.333	442	0.5	4.082	A
2 - Poplars Avenue (N)	364	0	433	1299	0.280	365	0.4	3.855	A
3 - Capesthorpe Road (E)	363	0	441	969	0.374	364	0.6	5.961	A
4 - Poplars Avenue (S)	94	0	533	1098	0.086	94	0.1	3.588	A

(Default Analysis Set) - 2027 Do Something, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorne Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	7.49	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2027 Do Something	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorne Road (W)		✓	603	100.000
2 - Poplars Avenue (N)		✓	644	100.000
3 - Capesthorne Road (E)		✓	475	100.000
4 - Poplars Avenue (S)		✓	180	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	262	293	48
	2 - Poplars Avenue (N)	552	0	27	65
	3 - Capesthorne Road (E)	432	18	0	25
	4 - Poplars Avenue (S)	7	156	17	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	3	2	0
	2 - Poplars Avenue (N)	1	0	1	1
	3 - Capesthorne Road (E)	2	1	0	0
	4 - Poplars Avenue (S)	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorne Road (W)	0.51	5.65	1.0	A
2 - Poplars Avenue (N)	0.54	5.93	1.2	A
3 - Capesthorne Road (E)	0.64	12.39	1.8	B
4 - Poplars Avenue (S)	0.26	6.29	0.3	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	454	0	143	1340	0.339	452	0.5	4.046	A
2 - Poplars Avenue (N)	485	0	268	1392	0.348	483	0.5	3.949	A
3 - Capesthorne Road (E)	358	0	498	939	0.381	355	0.6	6.138	A
4 - Poplars Avenue (S)	136	0	750	977	0.139	135	0.2	4.273	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	542	0	171	1324	0.410	541	0.7	4.598	A
2 - Poplars Avenue (N)	579	0	321	1360	0.426	578	0.7	4.598	A
3 - Capesthorne Road (E)	427	0	597	886	0.482	426	0.9	7.800	A
4 - Poplars Avenue (S)	162	0	899	890	0.182	162	0.2	4.943	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	664	0	210	1302	0.510	663	1.0	5.619	A
2 - Poplars Avenue (N)	709	0	393	1317	0.539	707	1.2	5.892	A
3 - Capesthorne Road (E)	523	0	730	814	0.643	520	1.7	12.102	B
4 - Poplars Avenue (S)	198	0	1099	773	0.257	198	0.3	6.256	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	664	0	210	1301	0.510	664	1.0	5.646	A
2 - Poplars Avenue (N)	709	0	394	1316	0.539	709	1.2	5.929	A
3 - Capesthorpe Road (E)	523	0	732	813	0.643	523	1.8	12.392	B
4 - Poplars Avenue (S)	198	0	1103	770	0.257	198	0.3	6.294	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	542	0	172	1323	0.410	543	0.7	4.624	A
2 - Poplars Avenue (N)	579	0	323	1359	0.426	581	0.7	4.631	A
3 - Capesthorpe Road (E)	427	0	600	885	0.483	430	0.9	7.977	A
4 - Poplars Avenue (S)	162	0	905	886	0.183	162	0.2	4.977	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	454	0	144	1339	0.339	455	0.5	4.073	A
2 - Poplars Avenue (N)	485	0	270	1391	0.348	486	0.5	3.978	A
3 - Capesthorpe Road (E)	358	0	502	938	0.381	359	0.6	6.232	A
4 - Poplars Avenue (S)	136	0	756	973	0.139	136	0.2	4.301	A

(Default Analysis Set) - 2032 Do Minimum, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorpe Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	5.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2032 Do Minimum	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorpe Road (W)		✓	571	100.000
2 - Poplars Avenue (N)		✓	442	100.000
3 - Capesthorpe Road (E)		✓	417	100.000
4 - Poplars Avenue (S)		✓	120	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Capesthorpe Road (W)	2 - Poplars Avenue (N)	3 - Capesthorpe Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorpe Road (W)	0	45	419	107
	2 - Poplars Avenue (N)	196	0	21	225
	3 - Capesthorpe Road (E)	285	118	0	14
	4 - Poplars Avenue (S)	8	98	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Capesthorpe Road (W)	2 - Poplars Avenue (N)	3 - Capesthorpe Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorpe Road (W)	0	0	2	0
	2 - Poplars Avenue (N)	0	0	1	1
	3 - Capesthorpe Road (E)	3	0	0	1
	4 - Poplars Avenue (S)	0	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorpe Road (W)	0.49	5.46	0.9	A
2 - Poplars Avenue (N)	0.41	5.04	0.7	A
3 - Capesthorpe Road (E)	0.51	8.27	1.0	A
4 - Poplars Avenue (S)	0.13	4.02	0.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	430	0	172	1334	0.322	428	0.5	3.966	A
2 - Poplars Avenue (N)	333	0	405	1316	0.253	331	0.3	3.653	A
3 - Capesthorpe Road (E)	314	0	396	994	0.316	312	0.5	5.268	A
4 - Poplars Avenue (S)	90	0	449	1151	0.078	90	0.1	3.391	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	513	0	206	1314	0.391	513	0.6	4.486	A
2 - Poplars Avenue (N)	397	0	485	1267	0.314	397	0.5	4.136	A
3 - Capesthorpe Road (E)	375	0	474	952	0.394	374	0.6	6.225	A
4 - Poplars Avenue (S)	108	0	538	1099	0.098	108	0.1	3.629	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	629	0	253	1288	0.488	627	0.9	5.440	A
2 - Poplars Avenue (N)	487	0	593	1201	0.405	486	0.7	5.028	A
3 - Capesthorpe Road (E)	459	0	580	895	0.513	458	1.0	8.205	A
4 - Poplars Avenue (S)	132	0	658	1029	0.128	132	0.1	4.012	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	629	0	253	1288	0.488	629	0.9	5.462	A
2 - Poplars Avenue (N)	487	0	595	1200	0.405	487	0.7	5.045	A
3 - Capesthorpe Road (E)	459	0	581	894	0.513	459	1.0	8.273	A
4 - Poplars Avenue (S)	132	0	659	1028	0.129	132	0.1	4.017	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	513	0	207	1314	0.391	515	0.6	4.511	A
2 - Poplars Avenue (N)	397	0	487	1266	0.314	398	0.5	4.154	A
3 - Capesthorpe Road (E)	375	0	476	951	0.394	376	0.7	6.283	A
4 - Poplars Avenue (S)	108	0	540	1098	0.098	108	0.1	3.639	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	430	0	173	1333	0.322	431	0.5	3.990	A
2 - Poplars Avenue (N)	333	0	407	1314	0.253	333	0.3	3.671	A
3 - Capesthorpe Road (E)	314	0	398	993	0.316	315	0.5	5.316	A
4 - Poplars Avenue (S)	90	0	452	1150	0.079	90	0.1	3.398	A

(Default Analysis Set) - 2032 Do Minimum, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorne Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	5.46	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2032 Do Minimum	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorne Road (W)		✓	501	100.000
2 - Poplars Avenue (N)		✓	484	100.000
3 - Capesthorne Road (E)		✓	423	100.000
4 - Poplars Avenue (S)		✓	122	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	204	276	21
	2 - Poplars Avenue (N)	407	0	26	51
	3 - Capesthorne Road (E)	380	17	0	26
	4 - Poplars Avenue (S)	4	100	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Capesthorpe Road (W)	2 - Poplars Avenue (N)	3 - Capesthorpe Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorpe Road (W)	0	4	2	0
	2 - Poplars Avenue (N)	1	0	1	1
	3 - Capesthorpe Road (E)	2	1	0	0
	4 - Poplars Avenue (S)	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorpe Road (W)	0.41	4.62	0.7	A
2 - Poplars Avenue (N)	0.40	4.43	0.7	A
3 - Capesthorpe Road (E)	0.50	7.86	1.0	A
4 - Poplars Avenue (S)	0.15	4.71	0.2	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	377	0	101	1358	0.278	376	0.4	3.662	A
2 - Poplars Avenue (N)	364	0	236	1412	0.258	363	0.3	3.428	A
3 - Capesthorpe Road (E)	318	0	359	1015	0.314	317	0.5	5.142	A
4 - Poplars Avenue (S)	92	0	602	1064	0.086	91	0.1	3.703	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	450	0	121	1346	0.335	450	0.5	4.015	A
2 - Poplars Avenue (N)	435	0	283	1383	0.315	435	0.5	3.792	A
3 - Capesthorpe Road (E)	380	0	430	976	0.389	380	0.6	6.023	A
4 - Poplars Avenue (S)	110	0	722	994	0.110	110	0.1	4.071	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	552	0	148	1331	0.414	551	0.7	4.610	A
2 - Poplars Avenue (N)	533	0	346	1345	0.396	532	0.7	4.426	A
3 - Capesthorpe Road (E)	466	0	527	924	0.504	464	1.0	7.802	A
4 - Poplars Avenue (S)	134	0	883	899	0.149	134	0.2	4.704	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	552	0	149	1331	0.415	552	0.7	4.620	A
2 - Poplars Avenue (N)	533	0	347	1345	0.396	533	0.7	4.435	A
3 - Capesthorpe Road (E)	466	0	527	924	0.504	466	1.0	7.856	A
4 - Poplars Avenue (S)	134	0	885	898	0.150	134	0.2	4.714	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	450	0	122	1346	0.335	451	0.5	4.027	A
2 - Poplars Avenue (N)	435	0	284	1383	0.315	436	0.5	3.806	A
3 - Capesthorpe Road (E)	380	0	431	976	0.390	382	0.6	6.076	A
4 - Poplars Avenue (S)	110	0	725	992	0.111	110	0.1	4.083	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	377	0	102	1357	0.278	378	0.4	3.675	A
2 - Poplars Avenue (N)	364	0	237	1411	0.258	365	0.3	3.444	A
3 - Capesthorpe Road (E)	318	0	361	1014	0.314	319	0.5	5.187	A
4 - Poplars Avenue (S)	92	0	606	1061	0.087	92	0.1	3.712	A

(Default Analysis Set) - 2032 Do Something (FULL), AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorpe Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	11.44	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2032 Do Something (FULL)	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorpe Road (W)		✓	624	100.000
2 - Poplars Avenue (N)		✓	648	100.000
3 - Capesthorpe Road (E)		✓	557	100.000
4 - Poplars Avenue (S)		✓	152	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Capesthorpe Road (W)	2 - Poplars Avenue (N)	3 - Capesthorpe Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorpe Road (W)	0	47	462	115
	2 - Poplars Avenue (N)	356	0	27	265
	3 - Capesthorpe Road (E)	307	236	0	14
	4 - Poplars Avenue (S)	17	116	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Capesthorpe Road (W)	2 - Poplars Avenue (N)	3 - Capesthorpe Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorpe Road (W)	0	0	2	0
	2 - Poplars Avenue (N)	0	0	1	1
	3 - Capesthorpe Road (E)	3	0	0	1
	4 - Poplars Avenue (S)	3	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorpe Road (W)	0.57	7.03	1.3	A
2 - Poplars Avenue (N)	0.61	7.99	1.6	A
3 - Capesthorpe Road (E)	0.79	21.98	3.6	C
4 - Poplars Avenue (S)	0.20	5.38	0.2	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	470	0	277	1274	0.369	467	0.6	4.452	A
2 - Poplars Avenue (N)	488	0	446	1292	0.378	485	0.6	4.452	A
3 - Capesthorpe Road (E)	419	0	551	914	0.459	416	0.8	7.182	A
4 - Poplars Avenue (S)	114	0	672	1020	0.112	114	0.1	3.969	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	561	0	332	1242	0.452	560	0.8	5.267	A
2 - Poplars Avenue (N)	583	0	535	1238	0.471	581	0.9	5.476	A
3 - Capesthorpe Road (E)	501	0	660	855	0.585	499	1.4	10.030	B
4 - Poplars Avenue (S)	137	0	805	943	0.145	136	0.2	4.462	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	687	0	405	1201	0.572	685	1.3	6.949	A
2 - Poplars Avenue (N)	713	0	654	1165	0.612	711	1.5	7.877	A
3 - Capesthorpe Road (E)	613	0	807	776	0.790	605	3.4	20.163	C
4 - Poplars Avenue (S)	167	0	980	841	0.199	167	0.2	5.337	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	687	0	408	1199	0.573	687	1.3	7.025	A
2 - Poplars Avenue (N)	713	0	656	1164	0.613	713	1.6	7.985	A
3 - Capesthorpe Road (E)	613	0	810	775	0.792	613	3.6	21.976	C
4 - Poplars Avenue (S)	167	0	989	836	0.200	167	0.2	5.381	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	561	0	337	1240	0.453	563	0.8	5.334	A
2 - Poplars Avenue (N)	583	0	538	1236	0.471	585	0.9	5.554	A
3 - Capesthorpe Road (E)	501	0	665	853	0.587	509	1.5	10.717	B
4 - Poplars Avenue (S)	137	0	818	936	0.146	137	0.2	4.510	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	470	0	280	1272	0.369	471	0.6	4.499	A
2 - Poplars Avenue (N)	488	0	450	1290	0.378	489	0.6	4.502	A
3 - Capesthorpe Road (E)	419	0	555	912	0.460	422	0.9	7.381	A
4 - Poplars Avenue (S)	114	0	680	1016	0.113	115	0.1	3.995	A

(Default Analysis Set) - 2032 Do Something (FULL), PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorne Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	8.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2032 Do Something (FULL)	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorne Road (W)		✓	612	100.000
2 - Poplars Avenue (N)		✓	711	100.000
3 - Capesthorne Road (E)		✓	482	100.000
4 - Poplars Avenue (S)		✓	153	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	289	290	33
	2 - Poplars Avenue (N)	615	0	31	65
	3 - Capesthorne Road (E)	399	59	0	24
	4 - Poplars Avenue (S)	6	129	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Capesthorpe Road (W)	2 - Poplars Avenue (N)	3 - Capesthorpe Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorpe Road (W)	0	3	2	0
	2 - Poplars Avenue (N)	1	0	1	1
	3 - Capesthorpe Road (E)	2	0	0	0
	4 - Poplars Avenue (S)	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorpe Road (W)	0.52	5.83	1.1	A
2 - Poplars Avenue (N)	0.59	6.61	1.4	A
3 - Capesthorpe Road (E)	0.68	14.07	2.0	B
4 - Poplars Avenue (S)	0.23	6.46	0.3	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	461	0	154	1332	0.346	459	0.5	4.110	A
2 - Poplars Avenue (N)	535	0	256	1400	0.382	533	0.6	4.140	A
3 - Capesthorpe Road (E)	363	0	534	922	0.394	360	0.6	6.383	A
4 - Poplars Avenue (S)	115	0	803	946	0.122	115	0.1	4.325	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	550	0	185	1315	0.418	549	0.7	4.696	A
2 - Poplars Avenue (N)	639	0	306	1369	0.467	638	0.9	4.916	A
3 - Capesthorpe Road (E)	433	0	640	864	0.501	432	1.0	8.295	A
4 - Poplars Avenue (S)	138	0	962	853	0.161	137	0.2	5.027	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	674	0	226	1292	0.522	672	1.1	5.797	A
2 - Poplars Avenue (N)	783	0	375	1328	0.590	781	1.4	6.553	A
3 - Capesthorpe Road (E)	531	0	783	787	0.674	527	2.0	13.626	B
4 - Poplars Avenue (S)	168	0	1176	728	0.231	168	0.3	6.420	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	674	0	227	1291	0.522	674	1.1	5.829	A
2 - Poplars Avenue (N)	783	0	375	1327	0.590	783	1.4	6.610	A
3 - Capesthorpe Road (E)	531	0	785	786	0.675	530	2.0	14.070	B
4 - Poplars Avenue (S)	168	0	1181	725	0.232	168	0.3	6.464	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	550	0	186	1314	0.419	552	0.7	4.729	A
2 - Poplars Avenue (N)	639	0	307	1369	0.467	641	0.9	4.964	A
3 - Capesthorpe Road (E)	433	0	643	863	0.502	437	1.0	8.540	A
4 - Poplars Avenue (S)	138	0	970	849	0.162	138	0.2	5.067	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	461	0	155	1332	0.346	462	0.5	4.141	A
2 - Poplars Avenue (N)	535	0	257	1399	0.383	536	0.6	4.177	A
3 - Capesthorpe Road (E)	363	0	538	920	0.395	364	0.7	6.499	A
4 - Poplars Avenue (S)	115	0	810	942	0.122	115	0.1	4.355	A

APPENDIX 30

Project	A49 Corridor, Warrington		
Report Title	Proposed VISSIM Modelling Methodology		
Version	1.2	Date:	01/11/2019
Prepared by:	Luke Best	Reviewed by:	Carl Moreno
Client:	Satnam Millenium Ltd.		

1. Introduction

1.1. This document is intended to set out the proposed methodology for the development of VISSIM micro-simulation models of the area to the north of Warrington, and south of Winwick, surrounding the A49 corridor (see Figure 1 below).

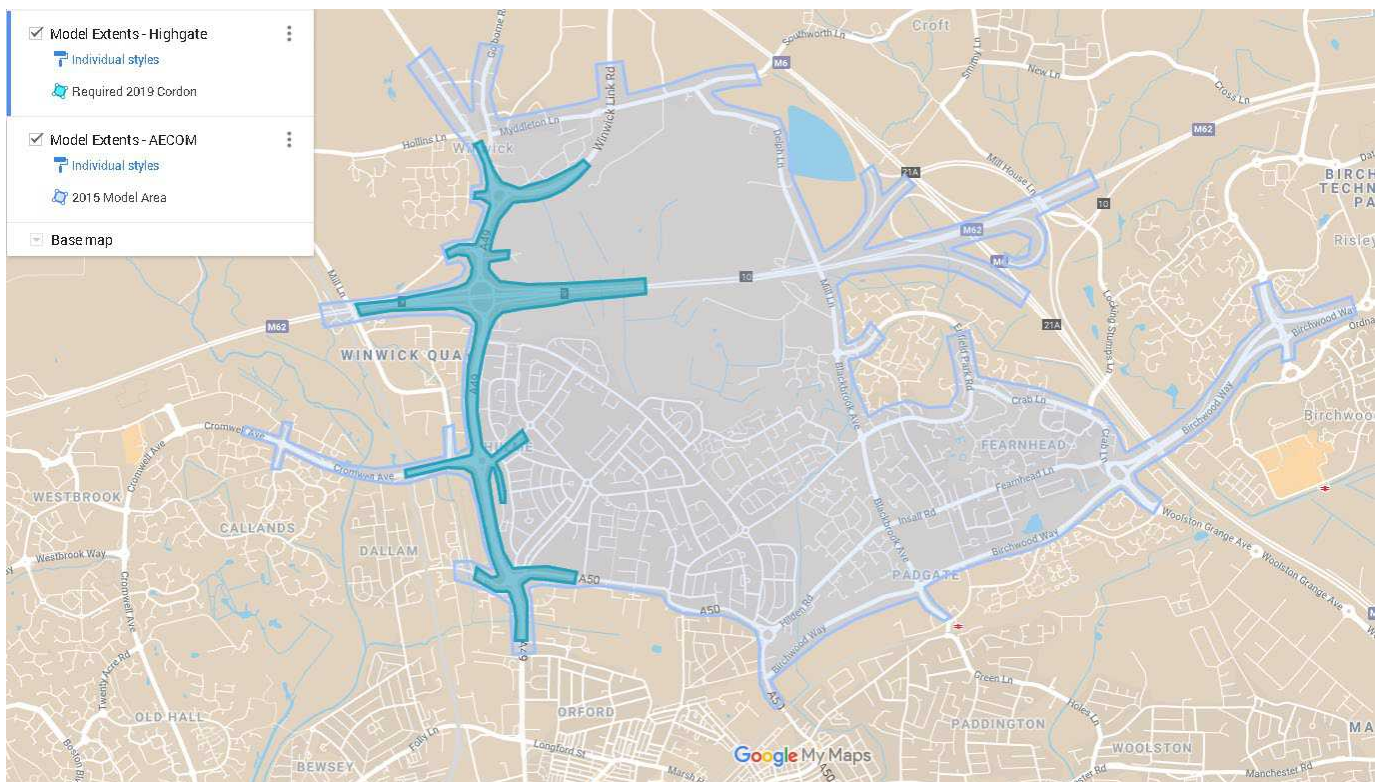


Figure 1: Proposed Model Extents

1.2. A corridor model of the A49 was developed in 2014 by AECOM, and then extended to cover the Peel Hall study area and growthed to a 2015 base year in 2017, as agreed with Highways England and Warrington Borough Council. Given that the area of interest is now the A49 corridor itself, rather than the much larger area of the extended Peel Hall study, there is now a need to cordon the model/s to the required A49 area only, which will make them much easier to work with, taking account of the following:

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 Email Luke@bestmoreconsulting.co.uk
 Address 11 Cofton Park Drive | Birmingham | B45 8DF

D:\Users\lukeb\BestMore Consulting\BM0123 - A49 Corridor, Warrington - Project
 Files\Issued\BM0123_A49CorridorWarrington_ModellingMethodology_v1.2.docx

- The models are already approved in their current extents and base flow years. There is a desire to adjust the model extents without needing to carry out another full recalibration and revalidation exercise.
 - The base year models are 2015, which is now 4-years old. Guidance states that models should not generally use traffic survey/ flow data older than 3-years old, without careful checking in order to ensure that the models are still representative and fully fit for purpose.
- 1.3. The aim of this document is therefore to set out a methodology which demonstrates that with the correct approach, sufficient due diligence and proof of checking, the current model/s can be used with minimal overall adjustment (other than that necessary to network extents and flows). Every effort will be made to prove that the models are still directly comparable to both the original models and to more current traffic survey information.
- 1.4. If this methodology is deemed acceptable, it should allow a faster route to a suitable base model proven to be robust and fit for purpose, without the need for a full validation and audit approval route – the model has already been approved, so the effort will be put into proving that performance is still comparable to the original model/s after the cordoning process.

2. Convert Existing Model to Static Assignment

Full Internal Peer Review:

- 2.1. It is already noted that the model is built in VISSIM version 8.00-04.
- 2.2. A check will be carried out as to whether converting this to a newer version of VISSIM (latest tested and stable version is currently 11.00-11) will make any sort of significant difference to calibration and validation data. Version 8 has previously been found to be less stable than more current versions, and also has early development implementations of certain tools (i.e. scenario manager) which can be extremely useful for ensuring consistency and efficiency of delivery. Later versions of VISSIM also make much better use of computer resources, leading to much faster run times.
- 2.3. If the validation and performance differences are proven to be minimal when compared against the original models running in the original software version, the model will be converted to a newer VISSIM version to take advantage of updated features, reliability, stability and speed.

Convert Assignment from Dynamic to Static:

- 2.4. Due to the need to 'freeze' the assignment found in the current AECOM model; it is proposed to convert the assignment from dynamic to static. As there is no route choice, it is not felt that this will necessarily affect the future usefulness of the model, whilst also contributing to the possibility of not needing a full re-validation of the base scenario by ensuring that all elements stay as close to the original as possible.
- 2.5. This is a process of going through each vehicle type, separately creating static routing (in theory, the inbuilt 'convert to static routing' tool found within the dynamic assignment module should just be able to do this in one go, but experience suggests carrying this out manually).
- 2.6. Once the assignment has been converted, a full check will be carried out in order to ensure no erroneous routes have been created, and a full visual check to check for any issues which would suggest issues with the assignment conversion.

3. Cordon Model Area to Agreed Extents:

Cordon Static Routing

- 3.1. This process is completed using a bespoke VBA macro which tracks the link sequence of each newly defined static route within the *.inpx file, cutting it and defining a new end on the links which will become the extents of the newly cordoned network.
- 3.2. A full visual check of all newly created cordoned static routing will be carried out at this stage to ensure that all routes previously passing through our area of interest are now captured and cordoned to the required extents.

Cordon Physical Network

- 3.3. The process of carefully trimming the network structure will be completed manually, cutting links to separate the agreed area of interest from the larger, older model. All network elements will need to be set to 'on' visually in order to ensure that no errors are created, or existing objects broken. PT lines will need adjusting as the link editing takes place, making sure that all routes passing through the agreed area of interest are adjusted to have new start and/ or end points.
- 3.4. The unwanted, larger model area will then be deleted, leaving the cordoned physical network with all physical elements intact, static routing per vehicle type, and public transport routing all as it was previously in the larger model.

Cordon Time Period

- 3.5. As a result of the considerable reduction in overall network scale and extents, it may prove reasonable to reduce the simulation time period currently found in the AECOM models, although this will need to be dependent on traffic conditions and the local peak profile. The current model simulation time periods are as follows:
 - AM model – 07:00-09:30 (2.5 hours)
 - PM model – 16:00-18:30 (2.5 hours)

- 3.6. There is currently heavy congestion in this area, so it may be that longer warm-up and/or cool-down periods are necessary, but with the revised, reduced model extents, a two-hour simulation period with half-hour warm-up and cool-down periods would normally be considered adequate.

Create New Vehicle Inputs

- 3.7. This process is also completed using a bespoke VBA macro, which will pick up all flows from all routes as the new cut down static routes are created and pass the data per vehicle type to new vehicle inputs for the cordoned model.
- 3.8. All vehicle inputs will then need manually checking – the internal VISSIM processing tool for converting dynamic assignment into static assignment tends to create a unique traffic composition for each vehicle input, for each time period, with vehicle types entered as a factor of the actual flow. This is rather clumsy to work with, as there is a volume and set of factors per vehicle type for every time period (every 10 minutes for this model), for every input. In comparison, the external VBA macro creates vehicle inputs with actual flows, per vehicle type, per time period, which is judged to be easier to work with. Any remaining VISSIM default input formats will therefore be converted so that all model inputs are consistent, in the same format.

4. Check Model Flows

Comparison Against Original 2015 Model Flows

- 4.1. First phase checks are to ensure that all data has been correctly converted from the original dynamic assignment models to the new static assignment models. Link counts and junction turning counts will be checked for all vehicle types. Differences will be expected to be minor – the GEH statistic will be used as a test, all measures will be expected to achieve 3 or lower.
- 4.2. Second phase checking will be to then compare the static 2015 models against all currently held traffic survey data. There is a large, mixed dataset including Automatic Traffic Counts (ATC), Manual Classified Counts (MCC) and Queue length surveys (see Figure at the end of this note). The data held covers a large range of relevant sites, as well as spanning the timeframe between 2014-2019. This is particularly useful, as it allows the assessment of the same, or similar, locations but at different times, in order to demonstrate how changes and trends have occurred.
- 4.3. Checks of flows and turning counts will be carried out using the GEH statistic and WebTAG flow criteria. Journey time data will be assessed using WebTAG guidance, as a minimum. Queues will be assessed visually.
- 4.4. Model journey times will be validated against a 'Big Data' source such as TrafficMaster (or similar) for a neutral month in 2019, to ensure that the model is representative of current conditions.
- 4.5. If there are discrepancies, these will likely fall into one of the following criteria:
 - *Network level volume difference* – This would likely primarily represent the naturally occurring difference from 2015-2019 due to background growth/ shrinkage in the wider area. This would generally manifest as a relatively even level of change across the entire network, whilst the overall vehicle flow patterns remained comparatively similar.
 - It is entirely possible that this level of change would not push any individual measures of flow volume and pattern over nationally acceptable validation criteria levels. If this was the case, the model/s would have been proven to still be relevant for use, regardless of the time since their original construction.

- If however there was found to be more significant levels of change (again, acting reasonably and using accepted WebTAG guidelines to inform the decision), it would be the simplest discrepancy to amend, as it would only be a matter of factoring the vehicle volumes for the network until comparative volumes & performance are achieved, with no real physical changes necessarily being needed to the approved model structure, as provided.
- *Local level volume difference* – Whilst this still may just represent the background growth difference from 2015-2019, this would likely manifest as certain areas experiencing localised growth or traffic pattern changes, whilst others did not, or experienced different levels of localised growth or traffic pattern changes. As with the wider network, this would most likely still fall within the ranges set out by WebTAG validation criteria (being used as guidance), which would allow the changes to be defined as non-critical or insignificant, and the model/s would have been proven to still be relevant for use, regardless of the time since their original construction.
- As with the network level volume difference, if there was found to be more significant levels of change in certain areas, a combination of local route factoring and manual volume tweaks for select movements should be able to still ultimately achieve comparative volumes & performance to those recorded in the updated traffic survey data, without any significant changes to the approved model structure, as provided. This should then still be able to be deemed as a model representative of onsite conditions, and therefore robust and fit for the purpose of current option testing.
- *Full Flow Profile & Tidal Flow Change* – This is the only foreseen scenario with a possible outcome that would mean the current model may not be suitable for use without major updating and revalidating. Although very much an outside possibility, this would be a worst-case outcome involving such significant levels of both traffic volume, and traffic profile change, as to render the existing models unsuitable for use. This of course depends on the severity of the differences found – it is a very unlikely outcome in most areas of the country, as four years is usually not nearly enough for the occurrence of any level of significant change.

4.6. In all scenarios apart from Full Flow Profile and Tidal Flow Change, there should be the option of either:

- Leaving the 2015 model as it is, without any changes to the flows, but just making sure that this exercise of cordoning and checking against multiple datasets is documented and carried forwards as a consideration in case of future issues; or,
- Making minor adjustments to the flows, either globally or locally, leading to the ability to effectively present the model as a base year fit for the purpose of 2019-based option testing.

5. Model Refinement & Re-Calibration:

- 5.1. Although it is planned that the model extents be reduced, and the model flows be either shown to be comparable or factored and adjusted to be comparable to an up to date traffic survey dataset, the aim is that there will not be much else which will need changing.
- 5.2. If there have been physical changes (i.e. new lanes or junction arrangements) which are now built and fully operational within the relevant section of the A49 corridor (or were built and operational within the new agreed area of interest when the 2019 surveys were carried out) then the inclusion of these needs to be considered.
- 5.3. There may also be minor, performance based, or primarily cosmetic based improvements which would add to the overall usability and/ or functionality of the updated model, whilst being shown to not impact on previously achieved performance indicators.
- 5.4. If the model has proven initially to perform in a demonstrably similar manner, in an updated version of VISSIM, one of the key changes would be to place the model under scenario management. This tool allows a greater level of efficiency and transparency to be achieved, with all peaks and scenarios sitting within one VISSIM model, and any model changes being tracked and auditable through the use of modification files.

6. Future Year Option & Mitigation Testing

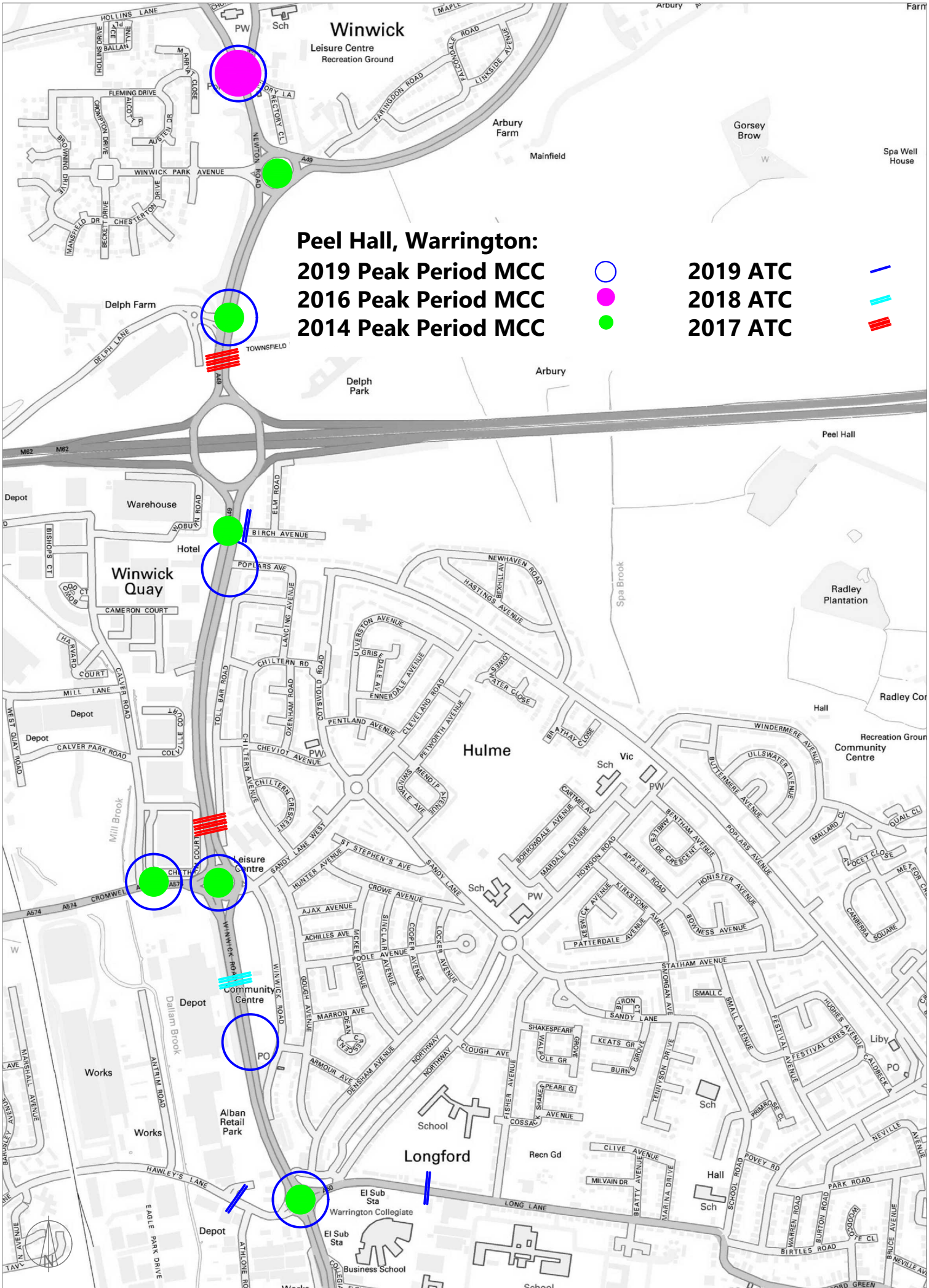
Proposed Scenarios for Testing

- 6.1. If the methodology included within this report is agreed and the work to cordon the base year models and prove that they are fit for purpose is successful, the following scenarios are proposed to be individually tested and analysed, using the resultant model of the included process as a base:
 - 2022 Do Minimum – Opening Year, No development
 - 2022 Do Something – (Opening Year, 120 Dwellings) – Access Strategy Option A
 - 2022 Do Something – (Opening Year, 120 Dwellings) – Access Strategy Option B
 - 2022 Do Something – (Opening Year, Full Development) – Access Strategy Option A
 - 2022 Do Something – (Opening Year, Full Development) – Access Strategy Option B
 - 2027 Do Something – (Opening Year +5, No Development) – Access Strategy Option A
 - 2027 Do Something – (Opening Year +5, No Development) – Access Strategy Option B
 - 2027 Do Something – (Opening Year +5, 600 Dwellings + Local Centre) – Access Strategy Option A
 - 2027 Do Something – (Opening Year +5, 600 Dwellings + Local Centre) – Access Strategy Option B
 - 2032 Do Something – (Opening Year +10, No Development) – Access Strategy Option A
 - 2032 Do Something – (Opening Year +10, No Development) – Access Strategy Option B

- 2032 Do Something – (Opening Year +10, Full Development) – Access Strategy Option A
 - 2032 Do Something – (Opening Year +10, Full Development) – Access Strategy Option B
- 6.2. Traffic flows will be cordoned from Warrington Borough Council's SATURN model (WMMTM16) recently run for the Peel hall development profile and future year scenarios and provided as hourly data. These outputs will then be processed to create per vehicle type flows in the form of excel network flow diagrams by the team at Highgate Transportation. Both sets of data will be made available to the modelling team.
- 6.3. Once received, these network flow diagrams will be simply converted to network origin destination data and entered into the VISSIM model modification files to create the static routing and vehicle input changes for each flow scenario.
- 6.4. The following committed mitigation measures will also be included as individual modification files, allowing them to be easily added and combined to each relevant test scenario at a later point (2027 and 2032 scenarios):
- M62 J9 (eastbound off-slip works)
 - Delph Lane/B&Q signalised junction improvement scheme
 - Winwick Roundabout mitigation
 - Junction 9 Retail Park junction modifications
- 6.5. Placing the entire project under the scenario manager tool allows each scenario to be separately 'constructed' using the modification files detailed in the previous bullet lists. This allows the combination of flow sets and combinations of mitigation/ network changes to originate from the same modification files, making checking and editing efficient and simpler to track.
- 6.6. Any tweaks to signal timings and/ or vehicle behaviour is then also recorded using per scenario modification files. This keeps the modelling process transparent, throughout all stages of modelling and analysis.

7. Summary

- 7.1. We seek WBC and Highways England to agree the above methodology and provide constructive comments where necessary.



Peel Hall, Warrington:
2019 Peak Period MCC
2016 Peak Period MCC
2014 Peak Period MCC

○ 2019 ATC
 ● 2018 ATC
 ● 2017 ATC

