Appendix 7

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: 17059- A5-Mira Roundabout.j9
Path: P:\17 jobs\059 MIRA - Southern Manufacturing Sector\Technical Assessments\Modelling - July 2022
Report generation date: 14/07/2022 15:37:36

»Ref Case, AM (07:00 - 08:00)
»Ref Case, AM (08:00 - 09:00)
»Ref Case, AM (09:00 - 10:00)
»Ref Case, PM (16:00 - 17:00)
»Ref Case, PM (17:00 - 18:00)
»Ref Case, PM (18:00 - 19:00)
»Ref Case + Development, AM (07:00 - 08:00)
»Ref Case + Development, AM (08:00 - 09:00)
»Ref Case + Development, AM (09:00 - 10:00)
»Ref Case + Development, PM (16:00 - 17:00)
»Ref Case + Development, PM (17:00 - 18:00)
»Ref Case + Development, PM (18:00 - 19:00)

Summary of junction performance

	AM (07:00 - 08:00)					AM (08:00 - 09:00)					AM (09:00 - 10:00)					PM (16:00 - 17:00)					PM (17:00 - 18:00)					PM (18:00 - 19:00)				
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
Ref Case																														
1 - Mira Drive	0.1	3.32	0.07	A		0.1	3.37	0.07	A		0.1	3.34	0.10	A		0.6	5.04	0.37	A		2.5	13.97	0.72	B		2.7	11.62	0.74	B	
2 - A5 South-East	2.0	4.52	0.67	A	4.95	3.7	7.20	0.79	A	7.51	1.6	4.01	0.61	A	4.27	1.1	3.27	0.51	A	3.64	1.4	4.05	0.59	A	6.25	1.3	4.02	0.56	A	5.70
3 - Site Access	0.1	4.65	0.12	A		0.3	7.07	0.25	A		0.1	4.27	0.11	A		0.1	3.56	0.07	A		0.1	4.24	0.09	A		0.1	4.37	0.08	A	
4 - A5 North-West	2.0	5.58	0.67	A		3.1	8.21	0.76	A		1.6	4.65	0.62	A		1.2	3.55	0.55	A		2.1	4.92	0.68	A		1.2	3.42	0.55	A	
Ref Case + Development																														
1 - Mira Drive	0.1	4.17	0.09	A		0.1	4.38	0.09	A		0.1	4.28	0.12	A		0.8	6.56	0.43	A		4.5	25.73	0.83	D		5.4	24.01	0.86	C	
2 - A5 South-East	2.5	5.73	0.72	A	7.83	6.4	12.68	0.87	B	18.98	2.0	5.13	0.67	A	6.49	1.1	3.45	0.53	A	4.73	1.5	4.26	0.60	A	8.86	1.4	4.52	0.59	A	9.02
3 - Site Access	0.9	8.54	0.46	A		1.1	13.16	0.53	B		0.5	6.45	0.34	A		1.0	7.05	0.51	A		0.8	7.00	0.44	A		0.7	7.38	0.41	A	
4 - A5 North-West	4.2	9.98	0.81	A		11.9	27.84	0.94	D		3.2	7.94	0.77	A		1.6	4.41	0.62	A		2.7	6.15	0.73	A		1.7	4.28	0.62	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. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	

Location	
Site number	
Date	24/02/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mtp\MTPGeneral
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	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D2	Ref Case	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D3	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D4	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D5	Ref Case	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D6	Ref Case	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	15	✓
D7	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D8	Ref Case + Development	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D9	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D10	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D11	Ref Case + Development	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D12	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Ref Case, AM (07:00 - 08:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Site Access - 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	4.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Mira Drive	
2	A5 South-East	
3	Site Access	
4	A5 North-West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Mira Drive	6.64	7.01	4.9	18.0	50.0	23.0	
2 - A5 South-East	8.30	8.30	0.0	25.0	50.0	30.0	
3 - Site Access	3.50	8.16	35.5	15.0	50.0	32.0	
4 - A5 North-West	8.50	8.50	0.0	25.0	50.0	34.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Mira Drive	0.698	2142
2 - A5 South-East	0.770	2539
3 - Site Access	0.660	2007
4 - A5 North-West	0.771	2565

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	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 - Mira Drive		ONE HOUR	✓	76	100.000
2 - A5 South-East		ONE HOUR	✓	1445	100.000
3 - Site Access		ONE HOUR	✓	100	100.000
4 - A5 North-West		ONE HOUR	✓	1213	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	48	6	22
	2 - A5 South-East	394	43	0	1008
	3 - Site Access	10	89	0	1
	4 - A5 North-West	198	999	13	3

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	2	4	5
	2 - A5 South-East	1	8	0	6
	3 - Site Access	0	0	0	50
	4 - A5 North-West	2	7	10	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 - Mira Drive	0.07	3.32	0.1	A	70	105
2 - A5 South-East	0.67	4.52	2.0	A	1326	1989
3 - Site Access	0.12	4.65	0.1	A	92	138
4 - A5 North-West	0.67	5.58	2.0	A	1113	1670

Main Results for each time segment

06:45 - 07:00

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 - Mira Drive	57	14	861	1458	0.039	57	452	0.0	0.0	2.568	A
2 - A5 South-East	1088	272	33	2400	0.453	1085	885	0.0	0.8	2.730	A
3 - Site Access	75	19	1103	1238	0.061	75	14	0.0	0.1	3.094	A
4 - A5 North-West	913	228	402	2119	0.431	910	776	0.0	0.8	2.970	A

07:00 - 07:15

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 - Mira Drive	68	17	1030	1336	0.051	68	541	0.0	0.1	2.838	A
2 - A5 South-East	1299	325	40	2395	0.542	1298	1059	0.8	1.2	3.276	A
3 - Site Access	90	22	1320	1089	0.083	90	17	0.1	0.1	3.601	A
4 - A5 North-West	1090	273	481	2061	0.529	1089	929	0.8	1.1	3.699	A

07:15 - 07:30

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 - Mira Drive	84	21	1260	1171	0.071	84	661	0.1	0.1	3.311	A
2 - A5 South-East	1591	398	48	2388	0.666	1588	1295	1.2	2.0	4.481	A
3 - Site Access	110	28	1615	886	0.124	110	21	0.1	0.1	4.636	A
4 - A5 North-West	1336	334	589	1982	0.674	1332	1136	1.1	2.0	5.509	A

07:30 - 07:45

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 - Mira Drive	84	21	1263	1168	0.072	84	663	0.1	0.1	3.318	A
2 - A5 South-East	1591	398	48	2388	0.666	1591	1298	2.0	2.0	4.517	A
3 - Site Access	110	28	1618	884	0.125	110	21	0.1	0.1	4.650	A
4 - A5 North-West	1336	334	590	1981	0.674	1335	1138	2.0	2.0	5.575	A

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 - Mira Drive	68	17	1034	1333	0.051	68	543	0.1	0.1	2.846	A
2 - A5 South-	1299	325	40	2395	0.54	1302	1063	2.0	1.2	3.306	A

East					2						
3 - Site Access	90	22	1325	1086	0.083	90	17	0.1	0.1	3.614	A
4 - A5 North-West	1090	273	483	2060	0.529	1094	932	2.0	1.1	3.741	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 - Mira Drive	57	14	865	1455	0.039	57	454	0.1	0.0	2.576	A
2 - A5 South-East	1088	272	33	2400	0.453	1089	889	1.2	0.8	2.751	A
3 - Site Access	75	19	1108	1235	0.061	75	14	0.1	0.1	3.104	A
4 - A5 North-West	913	228	404	2118	0.431	915	779	1.1	0.8	2.995	A

Ref Case, AM (08:00 - 09:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Site Access - 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	7.51	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	Ref Case	AM (08:00 - 09:00)	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 - Mira Drive		ONE HOUR	✓	73	100.000

2 - A5 South-East		ONE HOUR	✓	1709	100.000
3 - Site Access		ONE HOUR	✓	150	100.000
4 - A5 North-West		ONE HOUR	✓	1247	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Mira Drive	**2 - A5 South-East**	**3 - Site Access**	**4 - A5 North-West**
From	**1 - Mira Drive**	0	67	2	4
	2 - A5 South-East	514	35	0	1160
	3 - Site Access	22	127	0	1
	4 - A5 North-West	264	961	12	10

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Mira Drive	**2 - A5 South-East**	**3 - Site Access**	**4 - A5 North-West**
From	**1 - Mira Drive**	0	0	0	50
	2 - A5 South-East	1	25	0	7
	3 - Site Access	1	1	0	80
	4 - A5 North-West	2	10	9	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 - Mira Drive	0.07	3.37	0.1	A	67	100
2 - A5 South-East	0.79	7.20	3.7	A	1568	2352
3 - Site Access	0.25	7.07	0.3	A	138	206
4 - A5 North-West	0.76	8.21	3.1	A	1144	1716

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 - Mira Drive	55	14	859	1447	0.038	55	600	0.0	0.0	2.585	A
2 - A5 South-East	1287	322	21	2389	0.539	1282	893	0.0	1.2	3.240	A

3 - Site Access	113	28	1292	1089	0.104	112	11	0.0	0.1	3.684	A
4 - A5 North-West	939	235	524	1989	0.472	935	881	0.0	0.9	3.405	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 - Mira Drive	66	16	1027	1322	0.050	66	718	0.0	0.1	2.865	A
2 - A5 South-East	1536	384	25	2385	0.644	1534	1068	1.2	1.8	4.215	A
3 - Site Access	135	34	1546	915	0.147	135	13	0.1	0.2	4.614	A
4 - A5 North-West	1121	280	626	1914	0.586	1119	1055	0.9	1.4	4.516	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 - Mira Drive	80	20	1255	1153	0.070	80	877	0.1	0.1	3.355	A
2 - A5 South-East	1882	470	31	2381	0.790	1874	1305	1.8	3.6	7.006	A
3 - Site Access	165	41	1890	679	0.243	165	15	0.2	0.3	6.990	A
4 - A5 North-West	1373	343	766	1813	0.757	1366	1289	1.4	3.0	7.954	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 - Mira Drive	80	20	1260	1149	0.070	80	881	0.1	0.1	3.368	A
2 - A5 South-East	1882	470	31	2381	0.790	1881	1310	3.6	3.7	7.198	A
3 - Site Access	165	41	1897	674	0.245	165	15	0.3	0.3	7.072	A
4 - A5 North-West	1373	343	768	1811	0.758	1373	1294	3.0	3.1	8.209	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 - Mira Drive	66	16	1035	1316	0.050	66	723	0.1	0.1	2.878	A
2 - A5 South-East	1536	384	25	2385	0.644	1544	1076	3.7	1.8	4.317	A
3 - Site Access	135	34	1556	908	0.149	135	13	0.3	0.2	4.664	A
4 - A5 North-West	1121	280	630	1911	0.587	1128	1061	3.1	1.4	4.632	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 - Mira Drive	55	14	864	1443	0.038	55	604	0.1	0.0	2.594	A
2 - A5 South-East	1287	322	21	2389	0.539	1289	898	1.8	1.2	3.281	A
3 - Site Access	113	28	1300	1084	0.104	113	11	0.2	0.1	3.710	A
4 - A5 North-West	939	235	527	1987	0.473	941	886	1.4	0.9	3.451	A

Ref Case, AM (09:00 - 10:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Site Access - 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	4.27	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	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 - Mira Drive		ONE HOUR	✓	105	100.000
2 - A5 South-East		ONE HOUR	✓	1274	100.000
3 - Site Access		ONE HOUR	✓	91	100.000
4 - A5 North-West		ONE HOUR	✓	1145	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	61	3	41
	2 - A5 South-East	304	38	0	932
	3 - Site Access	11	79	0	1
	4 - A5 North-West	154	973	12	6

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	2	5	2
	2 - A5 South-East	2	32	0	9
	3 - Site Access	4	2	0	69
	4 - A5 North-West	2	8	13	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 - Mira Drive	0.10	3.34	0.1	A	96	145
2 - A5 South-East	0.61	4.01	1.6	A	1169	1754
3 - Site Access	0.11	4.27	0.1	A	84	125
4 - A5 North-West	0.62	4.65	1.6	A	1051	1576

Main Results for each time segment

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 - Mira Drive	79	20	832	1482	0.053	79	352	0.0	0.1	2.565	A
2 - A5 South-East	959	240	47	2316	0.414	956	864	0.0	0.7	2.641	A
3 - Site Access	69	17	992	1264	0.054	68	11	0.0	0.1	3.011	A
4 - A5 North-West	862	216	324	2148	0.401	859	736	0.0	0.7	2.786	A

09:00 - 09:15

Arm	Total	Junctio	Circulatin	Capacit	RFC	Throughpu	Throughpu	Start	End	Dela	Unsignalise

	Demand (Veh/hr)	n Arrivals (Veh)	g flow (Veh/hr)	y (Veh/hr)		t (Veh/hr)	t (exit side) (Veh/hr)	queue (Veh)	queue (Veh)	y (s)	d level of service
1 - Mira Drive	94	24	995	1361	0.069	94	421	0.1	0.1	2.841	A
2 - A5 South-East	1145	286	56	2310	0.496	1144	1034	0.7	1.0	3.086	A
3 - Site Access	82	20	1186	1129	0.072	82	13	0.1	0.1	3.436	A
4 - A5 North-West	1029	257	388	2100	0.490	1028	880	0.7	1.0	3.354	A

09:15 - 09:30

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 - Mira Drive	116	29	1217	1196	0.097	115	515	0.1	0.1	3.330	A
2 - A5 South-East	1403	351	68	2300	0.610	1400	1265	1.0	1.5	3.990	A
3 - Site Access	100	25	1452	946	0.106	100	16	0.1	0.1	4.258	A
4 - A5 North-West	1261	315	475	2035	0.619	1258	1077	1.0	1.6	4.617	A

09:30 - 09:45

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 - Mira Drive	116	29	1220	1194	0.097	116	516	0.1	0.1	3.336	A
2 - A5 South-East	1403	351	68	2300	0.610	1403	1267	1.5	1.6	4.010	A
3 - Site Access	100	25	1454	944	0.106	100	17	0.1	0.1	4.266	A
4 - A5 North-West	1261	315	476	2034	0.620	1261	1079	1.6	1.6	4.652	A

09:45 - 10:00

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 - Mira Drive	94	24	999	1358	0.069	95	423	0.1	0.1	2.847	A
2 - A5 South-East	1145	286	56	2310	0.496	1148	1037	1.6	1.0	3.103	A
3 - Site Access	82	20	1190	1127	0.073	82	14	0.1	0.1	3.445	A
4 - A5 North-West	1029	257	389	2100	0.490	1032	883	1.6	1.0	3.379	A

10:00 - 10:15

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 - Mira Drive	79	20	835	1479	0.053	79	354	0.1	0.1	2.570	A
2 - A5 South-East	959	240	47	2316	0.414	960	868	1.0	0.7	2.656	A

3 - Site Access	69	17	996	1261	0.054	69	11	0.1	0.1	3.021	A
4 - A5 North-West	862	216	326	2147	0.401	863	739	1.0	0.7	2.805	A

Ref Case, PM (16:00 - 17:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Site Access - 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	3.64	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	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 - Mira Drive		ONE HOUR	✓	381	100.000
2 - A5 South-East		ONE HOUR	✓	1061	100.000
3 - Site Access		ONE HOUR	✓	69	100.000
4 - A5 North-West		ONE HOUR	✓	1142	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	242	14	125
	2 - A5 South-East	69	55	0	937
	3 - Site Access	6	63	0	0
	4 - A5 North-West	19	1087	14	22

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	0	0	1
	2 - A5 South-East	0	1	0	6
	3 - Site Access	0	0	0	25
	4 - A5 North-West	0	6	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 - Mira Drive	0.37	5.04	0.6	A	350	524
2 - A5 South-East	0.51	3.27	1.1	A	974	1460
3 - Site Access	0.07	3.56	0.1	A	63	95
4 - A5 North-West	0.55	3.55	1.2	A	1048	1572

Main Results for each time segment

15:45 - 16:00

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 - Mira Drive	287	72	932	1453	0.197	286	71	0.0	0.2	3.082	A
2 - A5 South-East	799	200	131	2314	0.345	797	1086	0.0	0.5	2.370	A
3 - Site Access	52	13	907	1379	0.038	52	21	0.0	0.0	2.711	A
4 - A5 North-West	860	215	145	2320	0.371	857	814	0.0	0.6	2.457	A

16:00 - 16:15

Arm	Total	Junctio	Circulatin	Capacit	RFC	Throughpu	Throughpu	Start	End	Dela	Unsignalise

	Demand (Veh/hr)	n Arrivals (Veh)	g flow (Veh/hr)	y (Veh/hr)		t (Veh/hr)	t (exit side) (Veh/hr)	queue (Veh)	queue (Veh)	y (s)	d level of service
1 - Mira Drive	343	86	1115	1319	0.260	342	84	0.2	0.3	3.684	A
2 - A5 South-East	954	238	157	2295	0.416	953	1300	0.5	0.7	2.682	A
3 - Site Access	62	16	1085	1256	0.049	62	25	0.0	0.1	3.013	A
4 - A5 North-West	1027	257	173	2299	0.447	1026	974	0.6	0.8	2.826	A

16:15 - 16:30

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 - Mira Drive	419	105	1365	1136	0.369	419	103	0.3	0.6	5.014	A
2 - A5 South-East	1168	292	192	2269	0.515	1167	1591	0.7	1.1	3.262	A
3 - Site Access	76	19	1328	1088	0.070	76	31	0.1	0.1	3.556	A
4 - A5 North-West	1257	314	212	2271	0.554	1256	1192	0.8	1.2	3.541	A

16:30 - 16:45

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 - Mira Drive	419	105	1366	1134	0.370	419	103	0.6	0.6	5.035	A
2 - A5 South-East	1168	292	193	2268	0.515	1168	1593	1.1	1.1	3.271	A
3 - Site Access	76	19	1330	1087	0.070	76	31	0.1	0.1	3.560	A
4 - A5 North-West	1257	314	212	2270	0.554	1257	1193	1.2	1.2	3.552	A

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 - Mira Drive	343	86	1117	1317	0.260	343	85	0.6	0.4	3.701	A
2 - A5 South-East	954	238	158	2294	0.416	955	1303	1.1	0.7	2.692	A
3 - Site Access	62	16	1088	1254	0.049	62	25	0.1	0.1	3.018	A
4 - A5 North-West	1027	257	174	2299	0.447	1028	976	1.2	0.8	2.836	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 - Mira Drive	287	72	935	1450	0.198	287	71	0.4	0.2	3.098	A
2 - A5 South-East	799	200	132	2313	0.345	800	1091	0.7	0.5	2.380	A

3 - Site Access	52	13	910	1377	0.038	52	21	0.1	0.0	2.718	A
4 - A5 North-West	860	215	145	2319	0.371	861	817	0.8	0.6	2.470	A

Ref Case, PM (17:00 - 18:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Site Access - 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	6.25	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	Ref Case	PM (17:00 - 18:00)	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 - Mira Drive		ONE HOUR	✓	607	100.000
2 - A5 South-East		ONE HOUR	✓	1174	100.000
3 - Site Access		ONE HOUR	✓	74	100.000
4 - A5 North-West		ONE HOUR	✓	1396	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	404	31	172
	2 - A5 South-East	86	50	0	1038
	3 - Site Access	8	65	0	1
	4 - A5 North-West	28	1287	19	62

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	2	0	4
	2 - A5 South-East	3	6	0	5
	3 - Site Access	2	0	0	17
	4 - A5 North-West	4	5	1	7

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 - Mira Drive	0.72	13.97	2.5	B	557	835
2 - A5 South-East	0.59	4.05	1.4	A	1077	1616
3 - Site Access	0.09	4.24	0.1	A	68	102
4 - A5 North-West	0.68	4.92	2.1	A	1281	1921

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 - Mira Drive	457	114	1113	1296	0.353	455	92	0.0	0.5	4.269	A
2 - A5 South-East	884	221	213	2258	0.391	881	1355	0.0	0.6	2.610	A
3 - Site Access	56	14	1057	1270	0.044	56	37	0.0	0.0	2.964	A
4 - A5 North-West	1051	263	157	2324	0.452	1048	955	0.0	0.8	2.813	A

17:00 - 17:15

Arm	Total	Junctio	Circulatin	Capacit	RFC	Throughpu	Throughpu	Start	End	Dela	Unsignalise

	Demand (Veh/hr)	n Arrivals (Veh)	g flow (Veh/hr)	y (Veh/hr)		t (Veh/hr)	t (exit side) (Veh/hr)	queue (Veh)	queue (Veh)	y (s)	d level of service
1 - Mira Drive	546	136	1332	1140	0.479	544	110	0.5	0.9	6.029	A
2 - A5 South-East	1055	264	255	2226	0.474	1054	1621	0.6	0.9	3.068	A
3 - Site Access	67	17	1264	1127	0.059	66	45	0.0	0.1	3.395	A
4 - A5 North-West	1255	314	188	2301	0.545	1254	1143	0.8	1.2	3.433	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 - Mira Drive	668	167	1629	927	0.721	662	134	0.9	2.5	13.273	B
2 - A5 South-East	1293	323	310	2184	0.592	1290	1981	0.9	1.4	4.020	A
3 - Site Access	81	20	1546	932	0.087	81	55	0.1	0.1	4.230	A
4 - A5 North-West	1537	384	230	2269	0.677	1534	1398	1.2	2.1	4.870	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 - Mira Drive	668	167	1633	925	0.723	668	134	2.5	2.5	13.967	B
2 - A5 South-East	1293	323	313	2182	0.592	1293	1988	1.4	1.4	4.046	A
3 - Site Access	81	20	1550	930	0.088	81	55	0.1	0.1	4.244	A
4 - A5 North-West	1537	384	230	2269	0.677	1537	1401	2.1	2.1	4.918	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 - Mira Drive	546	136	1337	1136	0.480	552	110	2.5	0.9	6.228	A
2 - A5 South-East	1055	264	258	2224	0.475	1058	1631	1.4	0.9	3.090	A
3 - Site Access	67	17	1270	1123	0.059	67	45	0.1	0.1	3.408	A
4 - A5 North-West	1255	314	188	2300	0.546	1258	1148	2.1	1.2	3.468	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 - Mira Drive	457	114	1118	1292	0.354	459	92	0.9	0.6	4.327	A
2 - A5 South-East	884	221	214	2257	0.392	885	1362	0.9	0.6	2.626	A

3 - Site Access	56	14	1062	1266	0.044	56	38	0.1	0.0	2.975	A
4 - A5 North-West	1051	263	158	2324	0.452	1053	960	1.2	0.8	2.837	A

Ref Case, PM (18:00 - 19:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Site Access - 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	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
D6	Ref Case	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	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 - Mira Drive		ONE HOUR	✓	779	100.000
2 - A5 South-East		ONE HOUR	✓	1048	100.000
3 - Site Access		ONE HOUR	✓	63	100.000
4 - A5 North-West		ONE HOUR	✓	1156	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	408	24	347
	2 - A5 South-East	82	29	0	937
	3 - Site Access	7	55	0	1
	4 - A5 North-West	34	1045	12	65

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	1	0	1
	2 - A5 South-East	1	23	0	5
	3 - Site Access	0	1	0	18
	4 - A5 North-West	4	4	3	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 - Mira Drive	0.74	11.62	2.7	B	715	1072
2 - A5 South-East	0.56	4.02	1.3	A	962	1442
3 - Site Access	0.08	4.37	0.1	A	58	87
4 - A5 North-West	0.55	3.42	1.2	A	1061	1591

Main Results for each time segment

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 - Mira Drive	586	147	905	1470	0.399	584	92	0.0	0.7	4.049	A
2 - A5 South-East	789	197	336	2166	0.364	787	1153	0.0	0.6	2.605	A
3 - Site Access	47	12	1096	1241	0.038	47	27	0.0	0.0	3.016	A
4 - A5 North-West	870	218	130	2371	0.367	868	1013	0.0	0.6	2.392	A

18:00 - 18:15

Arm	Total	Junctio	Circulatin	Capacit	RFC	Throughpu	Throughpu	Start	End	Dela	Unsignalise

	Demand (Veh/hr)	n Arrivals (Veh)	g flow (Veh/hr)	y (Veh/hr)		t (Veh/hr)	t (exit side) (Veh/hr)	queue (Veh)	queue (Veh)	y (s)	d level of service
1 - Mira Drive	700	175	1083	1342	0.522	699	110	0.7	1.1	5.578	A
2 - A5 South-East	942	236	402	2118	0.445	941	1380	0.6	0.8	3.060	A
3 - Site Access	57	14	1311	1095	0.052	57	32	0.0	0.1	3.467	A
4 - A5 North-West	1039	260	155	2351	0.442	1038	1212	0.6	0.8	2.741	A

18:15 - 18:30

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 - Mira Drive	858	214	1326	1168	0.735	851	135	1.1	2.6	11.169	B
2 - A5 South-East	1154	288	490	2052	0.562	1152	1687	0.8	1.3	3.990	A
3 - Site Access	69	17	1603	897	0.077	69	39	0.1	0.1	4.351	A
4 - A5 North-West	1273	318	190	2324	0.548	1271	1482	0.8	1.2	3.413	A

18:30 - 18:45

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 - Mira Drive	858	214	1328	1166	0.735	857	135	2.6	2.7	11.624	B
2 - A5 South-East	1154	288	493	2050	0.563	1154	1692	1.3	1.3	4.016	A
3 - Site Access	69	17	1607	894	0.078	69	40	0.1	0.1	4.367	A
4 - A5 North-West	1273	318	190	2324	0.548	1273	1486	1.2	1.2	3.424	A

18:45 - 19:00

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 - Mira Drive	700	175	1086	1340	0.522	707	111	2.7	1.1	5.736	A
2 - A5 South-East	942	236	406	2115	0.446	944	1387	1.3	0.8	3.079	A
3 - Site Access	57	14	1317	1090	0.052	57	33	0.1	0.1	3.482	A
4 - A5 North-West	1039	260	156	2351	0.442	1041	1218	1.2	0.8	2.751	A

19:00 - 19:15

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 - Mira Drive	586	147	909	1468	0.400	588	93	1.1	0.7	4.102	A
2 - A5 South-East	789	197	338	2165	0.365	790	1159	0.8	0.6	2.620	A

3 - Site Access	47	12	1101	1237	0.038	47	27	0.1	0.0	3.025	A
4 - A5 North-West	870	218	130	2370	0.367	871	1018	0.8	0.6	2.403	A

Ref Case + Development, AM (07:00 - 08:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Site Access - 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	7.83	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	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 - Mira Drive		ONE HOUR	✓	76	100.000
2 - A5 South-East		ONE HOUR	✓	1445	100.000
3 - Site Access		ONE HOUR	✓	332	100.000
4 - A5 North-West		ONE HOUR	✓	1410	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	48	6	22
	2 - A5 South-East	394	43	0	1008
	3 - Site Access	10	164	2	156
	4 - A5 North-West	198	999	210	3

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	2	4	5
	2 - A5 South-East	1	8	0	6
	3 - Site Access	0	9	0	18
	4 - A5 North-West	2	7	5	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 - Mira Drive	0.09	4.17	0.1	A	70	105
2 - A5 South-East	0.72	5.73	2.5	A	1326	1989
3 - Site Access	0.46	8.54	0.9	A	305	457
4 - A5 North-West	0.81	9.98	4.2	A	1294	1941

Main Results for each time segment

06:45 - 07:00

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 - Mira Drive	57	14	1066	1307	0.044	57	452	0.0	0.0	2.878	A
2 - A5 South-East	1088	272	182	2285	0.476	1084	940	0.0	0.9	2.990	A
3 - Site Access	250	62	1103	1102	0.227	249	163	0.0	0.3	4.213	A
4 - A5 North-West	1062	265	460	2074	0.512	1057	892	0.0	1.0	3.528	A

07:00 - 07:15

Arm	Total	Junctio	Circulatin	Capacit	RFC	Throughpu	Throughpu	Start	End	Dela	Unsignalise

	Demand (Veh/hr)	n Arrivals (Veh)	g flow (Veh/hr)	y (Veh/hr)		t (Veh/hr)	t (exit side) (Veh/hr)	queue (Veh)	queue (Veh)	y (s)	d level of service
1 - Mira Drive	68	17	1275	1156	0.059	68	540	0.0	0.1	3.309	A
2 - A5 South-East	1299	325	218	2257	0.575	1297	1125	0.9	1.3	3.743	A
3 - Site Access	298	75	1320	970	0.308	298	196	0.3	0.4	5.353	A
4 - A5 North-West	1268	317	550	2005	0.632	1265	1067	1.0	1.7	4.844	A

07:15 - 07:30

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 - Mira Drive	84	21	1555	953	0.088	84	660	0.1	0.1	4.142	A
2 - A5 South-East	1591	398	266	2220	0.717	1586	1373	1.3	2.5	5.639	A
3 - Site Access	366	91	1614	790	0.463	364	239	0.4	0.8	8.423	A
4 - A5 North-West	1552	388	673	1913	0.812	1543	1305	1.7	4.1	9.490	A

07:30 - 07:45

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 - Mira Drive	84	21	1564	946	0.088	84	663	0.1	0.1	4.172	A
2 - A5 South-East	1591	398	267	2219	0.717	1591	1380	2.5	2.5	5.727	A
3 - Site Access	366	91	1618	787	0.464	365	240	0.8	0.9	8.539	A
4 - A5 North-West	1552	388	675	1911	0.812	1552	1309	4.1	4.2	9.982	A

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 - Mira Drive	68	17	1287	1147	0.060	68	544	0.1	0.1	3.336	A
2 - A5 South-East	1299	325	220	2256	0.576	1304	1135	2.5	1.4	3.797	A
3 - Site Access	298	75	1326	966	0.309	300	197	0.9	0.5	5.419	A
4 - A5 North-West	1268	317	553	2003	0.633	1277	1073	4.2	1.7	5.026	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 - Mira Drive	57	14	1073	1302	0.044	57	454	0.1	0.0	2.890	A
2 - A5 South-East	1088	272	183	2284	0.476	1090	946	1.4	0.9	3.020	A

3 - Site Access	250	62	1109	1099	0.227	251	165	0.5	0.3	4.247	A
4 - A5 North-West	1062	265	462	2072	0.512	1064	897	1.7	1.1	3.585	A

Ref Case + Development, AM (08:00 - 09:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Site Access - 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	18.98	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
D8	Ref Case + Development	AM (08:00 - 09:00)	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 - Mira Drive		ONE HOUR	✓	73	100.000
2 - A5 South-East		ONE HOUR	✓	1709	100.000
3 - Site Access		ONE HOUR	✓	281	100.000
4 - A5 North-West		ONE HOUR	✓	1491	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	67	2	4
	2 - A5 South-East	514	35	0	1160
	3 - Site Access	22	171	1	87
	4 - A5 North-West	264	961	256	10

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	0	0	50
	2 - A5 South-East	1	25	0	7
	3 - Site Access	1	10	0	37
	4 - A5 North-West	2	10	12	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 - Mira Drive	0.09	4.38	0.1	A	67	100
2 - A5 South-East	0.87	12.68	6.4	B	1568	2352
3 - Site Access	0.53	13.16	1.1	B	258	387
4 - A5 North-West	0.94	27.84	11.9	D	1368	2052

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 - Mira Drive	55	14	1074	1278	0.043	55	600	0.0	0.0	2.943	A
2 - A5 South-East	1287	322	205	2239	0.575	1281	925	0.0	1.3	3.739	A
3 - Site Access	212	53	1292	940	0.225	210	194	0.0	0.3	4.916	A
4 - A5 North-West	1123	281	557	1945	0.577	1117	945	0.0	1.3	4.320	A

08:00 - 08:15

Arm	Total	Junctio	Circulatin	Capacit	RFC	Throughpu	Throughpu	Start	End	Dela	Unsignalise

	Demand (Veh/hr)	n Arrivals (Veh)	g flow (Veh/hr)	y (Veh/hr)		t (Veh/hr)	t (exit side) (Veh/hr)	queue (Veh)	queue (Veh)	y (s)	d level of service
1 - Mira Drive	66	16	1285	1119	0.059	66	717	0.0	0.1	3.415	A
2 - A5 South-East	1536	384	245	2206	0.697	1533	1106	1.3	2.3	5.320	A
3 - Site Access	253	63	1545	790	0.320	252	232	0.3	0.5	6.679	A
4 - A5 North-West	1340	335	666	1864	0.719	1336	1131	1.3	2.5	6.750	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 - Mira Drive	80	20	1551	919	0.087	80	871	0.1	0.1	4.291	A
2 - A5 South-East	1882	470	295	2165	0.869	1866	1337	2.3	6.1	11.524	B
3 - Site Access	309	77	1882	591	0.524	307	280	0.5	1.1	12.577	B
4 - A5 North-West	1642	410	811	1757	0.934	1610	1377	2.5	10.3	21.145	C

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 - Mira Drive	80	20	1573	903	0.089	80	879	0.1	0.1	4.377	A
2 - A5 South-East	1882	470	299	2161	0.871	1880	1354	6.1	6.4	12.685	B
3 - Site Access	309	77	1896	582	0.531	309	284	1.1	1.1	13.157	B
4 - A5 North-West	1642	410	818	1753	0.937	1635	1387	10.3	11.9	27.837	D

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 - Mira Drive	66	16	1321	1092	0.060	66	731	0.1	0.1	3.510	A
2 - A5 South-East	1536	384	252	2200	0.698	1552	1135	6.4	2.4	5.694	A
3 - Site Access	253	63	1565	778	0.325	255	239	1.1	0.5	6.913	A
4 - A5 North-West	1340	335	675	1858	0.721	1377	1146	11.9	2.7	8.042	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 - Mira Drive	55	14	1084	1270	0.043	55	604	0.1	0.0	2.964	A
2 - A5 South-East	1287	322	206	2237	0.575	1291	933	2.4	1.4	3.821	A

3 - Site Access	212	53	1301	935	0.226	212	196	0.5	0.3	4.987	A
4 - A5 North-West	1123	281	561	1942	0.578	1128	952	2.7	1.4	4.449	A

Ref Case + Development, AM (09:00 - 10:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Site Access - 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	6.49	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)	Run automatically
D9	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 - Mira Drive		ONE HOUR	✓	105	100.000
2 - A5 South-East		ONE HOUR	✓	1274	100.000
3 - Site Access		ONE HOUR	✓	258	100.000
4 - A5 North-West		ONE HOUR	✓	1339	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	61	3	41
	2 - A5 South-East	304	38	0	932
	3 - Site Access	11	133	1	113
	4 - A5 North-West	154	973	206	6

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	2	5	2
	2 - A5 South-East	2	32	0	9
	3 - Site Access	4	11	0	22
	4 - A5 North-West	2	8	27	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 - Mira Drive	0.12	4.28	0.1	A	96	145
2 - A5 South-East	0.67	5.13	2.0	A	1169	1754
3 - Site Access	0.34	6.45	0.5	A	237	355
4 - A5 North-West	0.77	7.94	3.2	A	1229	1843

Main Results for each time segment

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 - Mira Drive	79	20	1018	1321	0.060	79	352	0.0	0.1	2.899	A
2 - A5 South-East	959	240	193	2183	0.439	956	904	0.0	0.8	2.926	A
3 - Site Access	194	49	991	1127	0.172	193	158	0.0	0.2	3.852	A
4 - A5 North-West	1008	252	365	2054	0.491	1004	819	0.0	1.0	3.415	A

09:00 - 09:15

Arm	Total	Junctio	Circulatin	Capacit	RFC	Throughpu	Throughpu	Start	End	Dela	Unsignalise

	Demand (Veh/hr)	n Arrivals (Veh)	g flow (Veh/hr)	y (Veh/hr)		t (Veh/hr)	t (exit side) (Veh/hr)	queue (Veh)	queue (Veh)	y (s)	d level of service
1 - Mira Drive	94	24	1218	1168	0.081	94	421	0.1	0.1	3.353	A
2 - A5 South-East	1145	286	231	2150	0.533	1144	1081	0.8	1.1	3.572	A
3 - Site Access	232	58	1186	1007	0.230	232	188	0.2	0.3	4.640	A
4 - A5 North-West	1204	301	437	2001	0.602	1202	980	1.0	1.5	4.493	A

09:15 - 09:30

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 - Mira Drive	116	29	1488	961	0.120	115	515	0.1	0.1	4.254	A
2 - A5 South-East	1403	351	282	2106	0.666	1399	1321	1.1	2.0	5.071	A
3 - Site Access	284	71	1451	844	0.337	283	230	0.3	0.5	6.412	A
4 - A5 North-West	1474	369	535	1928	0.765	1468	1199	1.5	3.1	7.716	A

09:30 - 09:45

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 - Mira Drive	116	29	1494	957	0.121	116	516	0.1	0.1	4.279	A
2 - A5 South-East	1403	351	283	2105	0.666	1403	1327	2.0	2.0	5.126	A
3 - Site Access	284	71	1454	842	0.337	284	231	0.5	0.5	6.453	A
4 - A5 North-West	1474	369	536	1927	0.765	1474	1202	3.1	3.2	7.940	A

09:45 - 10:00

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 - Mira Drive	94	24	1226	1161	0.081	95	423	0.1	0.1	3.375	A
2 - A5 South-East	1145	286	232	2149	0.533	1149	1089	2.0	1.2	3.609	A
3 - Site Access	232	58	1191	1004	0.231	233	190	0.5	0.3	4.671	A
4 - A5 North-West	1204	301	439	1999	0.602	1210	985	3.2	1.5	4.602	A

10:00 - 10:15

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 - Mira Drive	79	20	1024	1316	0.060	79	354	0.1	0.1	2.910	A
2 - A5 South-East	959	240	194	2182	0.440	961	909	1.2	0.8	2.951	A

3 - Site Access	194	49	996	1124	0.173	195	158	0.3	0.2	3.874	A
4 - A5 North-West	1008	252	367	2053	0.491	1010	823	1.5	1.0	3.461	A

Ref Case + Development, PM (16:00 - 17:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Site Access - 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	4.73	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	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 - Mira Drive		ONE HOUR	✓	381	100.000
2 - A5 South-East		ONE HOUR	✓	1061	100.000
3 - Site Access		ONE HOUR	✓	481	100.000
4 - A5 North-West		ONE HOUR	✓	1196	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	242	14	125
	2 - A5 South-East	69	55	0	937
	3 - Site Access	6	202	3	270
	4 - A5 North-West	19	1087	68	22

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	0	0	1
	2 - A5 South-East	0	1	0	6
	3 - Site Access	0	4	0	5
	4 - A5 North-West	0	6	19	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 - Mira Drive	0.43	6.56	0.8	A	350	524
2 - A5 South-East	0.53	3.45	1.1	A	974	1460
3 - Site Access	0.51	7.05	1.0	A	441	662
4 - A5 North-West	0.62	4.41	1.6	A	1097	1646

Main Results for each time segment

15:45 - 16:00

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 - Mira Drive	287	72	1078	1340	0.214	286	71	0.0	0.3	3.412	A
2 - A5 South-East	799	200	174	2275	0.351	797	1190	0.0	0.5	2.431	A
3 - Site Access	362	91	907	1320	0.274	361	64	0.0	0.4	3.752	A
4 - A5 North-West	900	225	251	2221	0.405	898	1016	0.0	0.7	2.714	A

16:00 - 16:15

Arm	Total	Junctio	Circulatin	Capacit	RFC	Throughpu	Throughpu	Start	End	Dela	Unsignalise

	Demand (Veh/hr)	n Arrivals (Veh)	g flow (Veh/hr)	y (Veh/hr)		t (Veh/hr)	t (exit side) (Veh/hr)	queue (Veh)	queue (Veh)	y (s)	d level of service
1 - Mira Drive	343	86	1290	1184	0.289	342	84	0.3	0.4	4.275	A
2 - A5 South-East	954	238	208	2249	0.424	953	1424	0.5	0.7	2.776	A
3 - Site Access	432	108	1085	1202	0.360	432	76	0.4	0.6	4.668	A
4 - A5 North-West	1075	269	301	2184	0.492	1074	1216	0.7	1.0	3.239	A

16:15 - 16:30

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 - Mira Drive	419	105	1579	971	0.432	418	103	0.4	0.8	6.498	A
2 - A5 South-East	1168	292	255	2213	0.528	1167	1742	0.7	1.1	3.437	A
3 - Site Access	530	132	1328	1041	0.509	528	93	0.6	1.0	6.983	A
4 - A5 North-West	1317	329	368	2135	0.617	1314	1488	1.0	1.6	4.376	A

16:30 - 16:45

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 - Mira Drive	419	105	1582	968	0.433	419	103	0.8	0.8	6.557	A
2 - A5 South-East	1168	292	255	2212	0.528	1168	1746	1.1	1.1	3.446	A
3 - Site Access	530	132	1330	1040	0.509	530	94	1.0	1.0	7.050	A
4 - A5 North-West	1317	329	369	2134	0.617	1317	1491	1.6	1.6	4.406	A

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 - Mira Drive	343	86	1295	1180	0.290	344	85	0.8	0.4	4.314	A
2 - A5 South-East	954	238	209	2248	0.424	955	1430	1.1	0.7	2.787	A
3 - Site Access	432	108	1088	1200	0.360	434	77	1.0	0.6	4.711	A
4 - A5 North-West	1075	269	302	2183	0.492	1078	1220	1.6	1.0	3.265	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 - Mira Drive	287	72	1083	1336	0.215	287	71	0.4	0.3	3.436	A
2 - A5 South-East	799	200	175	2275	0.351	800	1196	0.7	0.5	2.443	A

3 - Site Access	362	91	910	1318	0.275	363	64	0.6	0.4	3.771	A
4 - A5 North-West	900	225	253	2220	0.406	902	1021	1.0	0.7	2.732	A

Ref Case + Development, PM (17:00 - 18:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Site Access - 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	8.86	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	Ref Case + Development	PM (17:00 - 18:00)	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 - Mira Drive		ONE HOUR	✓	607	100.000
2 - A5 South-East		ONE HOUR	✓	1174	100.000
3 - Site Access		ONE HOUR	✓	365	100.000
4 - A5 North-West		ONE HOUR	✓	1439	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	404	31	172
	2 - A5 South-East	86	50	0	1038
	3 - Site Access	8	168	2	187
	4 - A5 North-West	28	1287	62	62

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	2	0	4
	2 - A5 South-East	3	6	0	5
	3 - Site Access	2	2	0	2
	4 - A5 North-West	4	5	17	7

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 - Mira Drive	0.83	25.73	4.5	D	557	835
2 - A5 South-East	0.60	4.26	1.5	A	1077	1616
3 - Site Access	0.44	7.00	0.8	A	335	502
4 - A5 North-West	0.73	6.15	2.7	A	1320	1981

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 - Mira Drive	457	114	1224	1214	0.377	455	92	0.0	0.6	4.743	A
2 - A5 South-East	884	221	247	2228	0.397	881	1432	0.0	0.7	2.669	A
3 - Site Access	275	69	1057	1251	0.220	274	71	0.0	0.3	3.682	A
4 - A5 North-West	1083	271	236	2252	0.481	1080	1095	0.0	0.9	3.062	A

17:00 - 17:15

Arm	Total	Junctio	Circulatin	Capacit	RFC	Throughpu	Throughpu	Start	End	Dela	Unsignalise

	Demand (Veh/hr)	n Arrivals (Veh)	g flow (Veh/hr)	y (Veh/hr)		t (Veh/hr)	t (exit side) (Veh/hr)	queue (Veh)	queue (Veh)	y (s)	d level of service
1 - Mira Drive	546	136	1464	1041	0.524	544	110	0.6	1.1	7.209	A
2 - A5 South-East	1055	264	295	2190	0.482	1054	1713	0.7	0.9	3.167	A
3 - Site Access	328	82	1264	1110	0.296	328	85	0.3	0.4	4.600	A
4 - A5 North-West	1294	323	282	2217	0.583	1292	1310	0.9	1.4	3.881	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 - Mira Drive	668	167	1790	808	0.827	656	134	1.1	4.2	22.155	C
2 - A5 South-East	1293	323	358	2141	0.604	1290	2088	0.9	1.5	4.220	A
3 - Site Access	402	100	1544	920	0.437	400	104	0.4	0.8	6.917	A
4 - A5 North-West	1584	396	345	2170	0.730	1579	1600	1.4	2.6	6.041	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 - Mira Drive	668	167	1796	804	0.832	667	134	4.2	4.5	25.730	D
2 - A5 South-East	1293	323	362	2138	0.605	1293	2101	1.5	1.5	4.259	A
3 - Site Access	402	100	1550	916	0.439	402	105	0.8	0.8	7.003	A
4 - A5 North-West	1584	396	346	2170	0.730	1584	1606	2.6	2.7	6.146	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 - Mira Drive	546	136	1472	1036	0.527	559	110	4.5	1.1	7.766	A
2 - A5 South-East	1055	264	301	2186	0.483	1058	1730	1.5	0.9	3.197	A
3 - Site Access	328	82	1272	1104	0.297	330	86	0.8	0.4	4.654	A
4 - A5 North-West	1294	323	283	2216	0.584	1299	1318	2.7	1.4	3.943	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 - Mira Drive	457	114	1230	1209	0.378	459	92	1.1	0.6	4.813	A
2 - A5 South-East	884	221	249	2226	0.397	885	1441	0.9	0.7	2.687	A

3 - Site Access	275	69	1062	1247	0.220	275	72	0.4	0.3	3.709	A
4 - A5 North-West	1083	271	237	2251	0.481	1085	1100	1.4	0.9	3.094	A

Ref Case + Development, PM (18:00 - 19:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Site Access - 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	9.02	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	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	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 - Mira Drive		ONE HOUR	✓	779	100.000
2 - A5 South-East		ONE HOUR	✓	1048	100.000
3 - Site Access		ONE HOUR	✓	311	100.000
4 - A5 North-West		ONE HOUR	✓	1269	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	408	24	347
	2 - A5 South-East	82	29	0	937
	3 - Site Access	7	137	2	165
	4 - A5 North-West	34	1045	125	65

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	1	0	1
	2 - A5 South-East	1	23	0	5
	3 - Site Access	0	7	0	11
	4 - A5 North-West	4	4	8	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 - Mira Drive	0.86	24.01	5.4	C	715	1072
2 - A5 South-East	0.59	4.52	1.4	A	962	1442
3 - Site Access	0.41	7.38	0.7	A	285	428
4 - A5 North-West	0.62	4.28	1.7	A	1164	1747

Main Results for each time segment

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 - Mira Drive	586	147	1053	1359	0.432	583	92	0.0	0.8	4.627	A
2 - A5 South-East	789	197	422	2098	0.376	787	1214	0.0	0.6	2.741	A
3 - Site Access	234	59	1095	1152	0.203	233	113	0.0	0.3	3.912	A
4 - A5 North-West	955	239	193	2310	0.414	953	1136	0.0	0.7	2.647	A

18:00 - 18:15

Arm	Total	Junctio	Circulatin	Capacit	RFC	Throughpu	Throughpu	Start	End	Dela	Unsignalise

	Demand (Veh/hr)	n Arrivals (Veh)	g flow (Veh/hr)	y (Veh/hr)		t (Veh/hr)	t (exit side) (Veh/hr)	queue (Veh)	queue (Veh)	y (s)	d level of service
1 - Mira Drive	700	175	1260	1209	0.579	698	110	0.8	1.4	7.014	A
2 - A5 South-East	942	236	505	2036	0.463	941	1453	0.6	0.9	3.285	A
3 - Site Access	280	70	1310	1017	0.275	279	136	0.3	0.4	4.875	A
4 - A5 North-West	1141	285	231	2280	0.500	1140	1359	0.7	1.0	3.155	A

18:15 - 18:30

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 - Mira Drive	858	214	1542	1005	0.854	843	135	1.4	5.0	20.666	C
2 - A5 South-East	1154	288	612	1955	0.590	1152	1772	0.9	1.4	4.468	A
3 - Site Access	342	86	1599	835	0.410	341	166	0.4	0.7	7.268	A
4 - A5 North-West	1397	349	282	2239	0.624	1395	1658	1.0	1.6	4.250	A

18:30 - 18:45

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 - Mira Drive	858	214	1545	1002	0.856	856	135	5.0	5.4	24.014	C
2 - A5 South-East	1154	288	619	1950	0.592	1154	1782	1.4	1.4	4.520	A
3 - Site Access	342	86	1607	830	0.412	342	166	0.7	0.7	7.377	A
4 - A5 North-West	1397	349	283	2239	0.624	1397	1666	1.6	1.7	4.278	A

18:45 - 19:00

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 - Mira Drive	700	175	1264	1205	0.581	716	111	5.4	1.4	7.596	A
2 - A5 South-East	942	236	514	2029	0.464	944	1467	1.4	0.9	3.328	A
3 - Site Access	280	70	1322	1010	0.277	281	137	0.7	0.4	4.946	A
4 - A5 North-West	1141	285	232	2279	0.501	1143	1371	1.7	1.0	3.176	A

19:00 - 19:15

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 - Mira Drive	586	147	1058	1355	0.433	589	93	1.4	0.8	4.716	A
2 - A5 South-East	789	197	425	2095	0.377	790	1221	0.9	0.6	2.761	A

3 - Site Access	234	59	1101	1149	0.204	235	114	0.4	0.3	3.942	A
4 - A5 North-West	955	239	194	2309	0.414	957	1142	1.0	0.7	2.666	A

Appendix 8

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: 17059- A444-Mira Roundabout.j9
Path: P:\17 jobs\059 MIRA - Southern Manufacturing Sector\Technical Assessments\Modelling - July 2022
Report generation date: 14/07/2022 15:40:18

»Ref Case, AM (07:00 - 08:00)
»Ref Case, AM (08:00 - 09:00)
»Ref Case, AM (09:00 - 10:00)
»Ref Case, PM (16:00 - 17:00)
»Ref Case, PM (17:00 - 18:00)
»Ref Case, PM (18:00 - 19:00)
»Ref Case + Development, AM (07:00 - 08:00)
»Ref Case + Development, AM (08:00 - 09:00)
»Ref Case + Development, AM (09:00 - 10:00)
»Ref Case + Development, PM (16:00 - 17:00)
»Ref Case + Development, PM (17:00 - 18:00)
»Ref Case + Development, PM (18:00 - 19:00)

Summary of junction performance

	AM (07:00 - 08:00)					AM (08:00 - 09:00)					AM (09:00 - 10:00)					PM (16:00 - 17:00)					PM (17:00 - 18:00)					PM (18:00 - 19:00)				
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
Ref Case																														
1 - A444 Weddington Lane (North-West)	0.2	3.45	0.19	A		0.2	3.37	0.14	A		0.2	3.24	0.13	A		0.2	3.33	0.16	A		0.3	3.52	0.22	A		0.2	3.24	0.15	A	
2 - Site Access	0.1	2.77	0.05	A	3.32	0.1	2.77	0.10	A	3.73	0.1	2.68	0.06	A	3.24	0.1	2.77	0.09	A	3.19	0.2	3.00	0.14	A	3.36	0.1	2.83	0.12	A	3.21
3 - A444 Weddington Lane (South-East)	0.4	3.33	0.27	A		0.7	4.07	0.40	A		0.4	3.36	0.28	A		0.3	3.25	0.26	A		0.4	3.42	0.29	A		0.4	3.36	0.27	A	
Ref Case + Development																														
1 - A444 Weddington Lane (North-West)	0.3	3.75	0.20	A		0.2	3.88	0.16	A		0.2	3.59	0.15	A		0.2	3.42	0.17	A		0.3	3.59	0.22	A		0.2	3.37	0.15	A	
2 - Site Access	0.1	3.23	0.12	A	3.76	0.2	3.20	0.14	A	5.14	0.1	3.08	0.11	A	4.06	0.2	3.24	0.20	A	3.40	0.3	3.39	0.23	A	3.54	0.2	3.20	0.19	A	3.48
3 - A444 Weddington Lane (South-East)	0.6	3.92	0.37	A		1.3	5.86	0.57	A		0.7	4.46	0.41	A		0.4	3.49	0.29	A		0.5	3.61	0.32	A		0.5	3.68	0.32	A	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	

Date	24/02/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mtp\MTPGeneral
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	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D2	Ref Case	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D3	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D4	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D5	Ref Case	PM (17:00 - 18:00)	ONE HOUR	15:45	17:15	15	✓
D6	Ref Case	PM (18:00 - 19:00)	ONE HOUR	15:45	17:15	15	✓
D7	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D8	Ref Case + Development	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D9	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D10	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D11	Ref Case + Development	PM (17:00 - 18:00)	ONE HOUR	15:45	17:15	15	✓
D12	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	15:45	17:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Ref Case, AM (07:00 - 08:00)

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	3.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A444 Weddington Lane (North-West)	
2	Site Access	
3	A444 Weddington Lane (South-East)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A444 Weddington Lane (North-West)	3.65	4.80	7.3	20.0	45.0	27.0	
2 - Site Access	3.50	5.17	25.4	40.0	45.0	21.0	
3 - A444 Weddington Lane (South-East)	3.75	5.55	9.8	20.0	45.0	28.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A444 Weddington Lane (North-West)	0.563	1351
2 - Site Access	0.617	1561
3 - A444 Weddington Lane (South-East)	0.589	1491

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	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 - A444 Weddington Lane (North-West)		ONE HOUR	✓	223	100.000

2 - Site Access		ONE HOUR	✓	61	100.000
3 - A444 Weddington Lane (South-East)		ONE HOUR	✓	369	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - A444 Weddington Lane (North-West)	**2 - Site Access**	**3 - A444 Weddington Lane (South-East)**
From	**1 - A444 Weddington Lane (North-West)**	0	3	220
	2 - Site Access	0	1	60
	3 - A444 Weddington Lane (South-East)	268	101	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A444 Weddington Lane (North-West)	**2 - Site Access**	**3 - A444 Weddington Lane (South-East)**
From	**1 - A444 Weddington Lane (North-West)**	0	0	0
	2 - Site Access	0	27	3
	3 - A444 Weddington Lane (South-East)	0	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 - A444 Weddington Lane (North-West)	0.19	3.45	0.2	A	205	307
2 - Site Access	0.05	2.77	0.1	A	56	84
3 - A444 Weddington Lane (South-East)	0.27	3.33	0.4	A	339	508

Main Results for each time segment

06:45 - 07:00

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 - A444 Weddington Lane (North-West)	168	42	77	1308	0.128	167	201	0.0	0.1	3.154	A
2 - Site Access	46	11	165	1411	0.033	46	79	0.0	0.0	2.636	A
3 - A444 Weddington Lane (South-East)	278	69	0.75	1486	0.187	277	210	0.0	0.2	2.976	A

07:00 - 07:15

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 - A444 Weddington Lane (North-West)	200	50	92	1299	0.154	200	241	0.1	0.2	3.275	A
2 - Site Access	55	14	198	1392	0.039	55	94	0.0	0.0	2.692	A
3 - A444 Weddington Lane (South-East)	332	83	1	1486	0.223	331	252	0.2	0.3	3.118	A

07:15 - 07:30

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 - A444 Weddington Lane (North-West)	246	61	112	1287	0.191	245	295	0.2	0.2	3.454	A
2 - Site Access	67	17	242	1365	0.049	67	116	0.0	0.1	2.772	A
3 - A444 Weddington Lane (South-East)	406	102	1	1486	0.273	406	308	0.3	0.4	3.334	A

07:30 - 07:45

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 - A444 Weddington Lane (North-West)	246	61	112	1287	0.191	246	295	0.2	0.2	3.454	A
2 - Site Access	67	17	242	1365	0.049	67	116	0.1	0.1	2.773	A
3 - A444 Weddington Lane (South-East)	406	102	1	1486	0.273	406	308	0.4	0.4	3.334	A

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 - A444 Weddington Lane (North-West)	200	50	92	1299	0.154	201	241	0.2	0.2	3.279	A
2 - Site Access	55	14	198	1392	0.039	55	94	0.1	0.0	2.694	A
3 - A444 Weddington Lane (South-East)	332	83	1	1486	0.223	332	252	0.4	0.3	3.120	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 - A444 Weddington Lane (North-West)	168	42	77	1308	0.128	168	202	0.2	0.1	3.161	A
2 - Site Access	46	11	166	1411	0.033	46	79	0.0	0.0	2.637	A
3 - A444 Weddington Lane (South-East)	278	69	0.75	1486	0.187	278	211	0.3	0.2	2.982	A

Ref Case, AM (08:00 - 09:00)

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	3.73	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	Ref Case	AM (08:00 - 09:00)	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 - A444 Weddington Lane (North-West)		ONE HOUR	✓	160	100.000
2 - Site Access		ONE HOUR	✓	128	100.000
3 - A444 Weddington Lane (South-East)		ONE HOUR	✓	546	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	3	157
	2 - Site Access	0	0	128
	3 - A444 Weddington Lane (South-East)	396	150	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	0	1
	2 - Site Access	0	0	1
	3 - A444 Weddington Lane (South-East)	0	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 - A444 Weddington Lane (North-West)	0.14	3.37	0.2	A	147	220
2 - Site Access	0.10	2.77	0.1	A	117	176
3 - A444 Weddington Lane (South-East)	0.40	4.07	0.7	A	501	752

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 - A444 Weddington Lane (North-West)	120	30	113	1275	0.094	120	297	0.0	0.1	3.117	A
2 - Site Access	96	24	118	1473	0.065	96	115	0.0	0.1	2.615	A
3 - A444 Weddington Lane (South-East)	411	103	0	1486	0.277	410	214	0.0	0.4	3.338	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 - A444 Weddington Lane (North-West)	144	36	135	1262	0.114	144	356	0.1	0.1	3.217	A
2 - Site Access	115	29	141	1458	0.079	115	137	0.1	0.1	2.679	A
3 - A444 Weddington Lane (South-East)	491	123	0	1486	0.330	490	256	0.4	0.5	3.612	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 - A444 Weddington Lane	176	44	165	1245	0.14	176	435	0.1	0.2	3.36	A

(North-West)					1					5	
2 - Site Access	141	35	173	1439	0.098	141	168	0.1	0.1	2.773	A
3 - A444 Weddington Lane (South-East)	601	150	0	1486	0.404	600	314	0.5	0.7	4.059	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 - A444 Weddington Lane (North-West)	176	44	165	1245	0.141	176	436	0.2	0.2	3.366	A
2 - Site Access	141	35	173	1439	0.098	141	168	0.1	0.1	2.773	A
3 - A444 Weddington Lane (South-East)	601	150	0	1486	0.404	601	314	0.7	0.7	4.066	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 - A444 Weddington Lane (North-West)	144	36	135	1262	0.114	144	357	0.2	0.1	3.221	A
2 - Site Access	115	29	141	1458	0.079	115	138	0.1	0.1	2.679	A
3 - A444 Weddington Lane (South-East)	491	123	0	1486	0.330	492	256	0.7	0.5	3.620	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 - A444 Weddington Lane (North-West)	120	30	113	1275	0.095	121	298	0.1	0.1	3.118	A
2 - Site Access	96	24	118	1472	0.065	96	115	0.1	0.1	2.617	A
3 - A444 Weddington Lane (South-East)	411	103	0	1486	0.277	412	215	0.5	0.4	3.349	A

Ref Case, AM (09:00 - 10:00)

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	3.24	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	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 - A444 Weddington Lane (North-West)		ONE HOUR	✓	155	100.000
2 - Site Access		ONE HOUR	✓	78	100.000
3 - A444 Weddington Lane (South-East)		ONE HOUR	✓	371	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	3	152
	2 - Site Access	0	0	78
	3 - A444 Weddington Lane (South-East)	283	88	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	0	1
	2 - Site Access	0	50	2
	3 - A444 Weddington Lane (South-East)	0	3	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 - A444 Weddington Lane (North-West)	0.13	3.24	0.2	A	142	213
2 - Site Access	0.06	2.68	0.1	A	72	107
3 - A444 Weddington Lane (South-East)	0.28	3.36	0.4	A	340	511

Main Results for each time segment

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 - A444 Weddington Lane (North-West)	117	29	66	1300	0.090	116	212	0.0	0.1	3.040	A
2 - Site Access	59	15	114	1461	0.040	59	68	0.0	0.0	2.567	A
3 - A444 Weddington Lane (South-East)	279	70	0	1480	0.189	278	173	0.0	0.2	2.995	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 - A444 Weddington Lane (North-West)	139	35	79	1293	0.108	139	254	0.1	0.1	3.120	A
2 - Site Access	70	18	137	1447	0.048	70	82	0.0	0.1	2.614	A
3 - A444 Weddington Lane (South-East)	334	83	0	1480	0.225	333	207	0.2	0.3	3.139	A

09:15 - 09:30

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 - A444 Weddington Lane (North-West)	171	43	97	1283	0.133	171	311	0.1	0.2	3.236	A
2 - Site Access	86	21	167	1428	0.060	86	100	0.1	0.1	2.681	A
3 - A444 Weddington Lane (South-East)	408	102	0	1480	0.276	408	253	0.3	0.4	3.358	A

09:30 - 09:45

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 - A444 Weddington Lane (North-West)	171	43	97	1283	0.133	171	312	0.2	0.2	3.236	A
2 - Site Access	86	21	167	1428	0.060	86	100	0.1	0.1	2.681	A
3 - A444 Weddington Lane (South-East)	408	102	0	1480	0.276	408	253	0.4	0.4	3.358	A

09:45 - 10:00

Arm	Total Dema	Junction	Circulating flow	Capacity	RFC	Throughput	Throughput (exit	Start queu	End queu	Delay (s)	Unsignalised level of

	nd (Veh/hr)	Arrivals (Veh)	(Veh/hr)	(Veh/hr)		(Veh/hr)	side) (Veh/hr)	e (Veh)	e (Veh)		service
1 - A444 Weddington Lane (North-West)	139	35	79	1293	0.108	139	255	0.2	0.1	3.120	A
2 - Site Access	70	18	137	1447	0.048	70	82	0.1	0.1	2.614	A
3 - A444 Weddington Lane (South-East)	334	83	0	1480	0.225	334	207	0.4	0.3	3.141	A

10:00 - 10:15

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 - A444 Weddington Lane (North-West)	117	29	66	1300	0.090	117	213	0.1	0.1	3.043	A
2 - Site Access	59	15	115	1460	0.040	59	69	0.1	0.0	2.570	A
3 - A444 Weddington Lane (South-East)	279	70	0	1480	0.189	280	173	0.3	0.2	3.001	A

Ref Case, PM (16:00 - 17:00)

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	3.19	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)	Run automatically
D4	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 - A444 Weddington Lane (North-West)		ONE HOUR	✓	194	100.000
2 - Site Access		ONE HOUR	✓	120	100.000

3 - A444 Weddington Lane (South-East)		ONE HOUR	✓	349	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	3	191
	2 - Site Access	1	0	119
	3 - A444 Weddington Lane (South-East)	278	71	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	0	1
	2 - Site Access	0	0	0
	3 - A444 Weddington Lane (South-East)	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 - A444 Weddington Lane (North-West)	0.16	3.33	0.2	A	178	267
2 - Site Access	0.09	2.77	0.1	A	110	165
3 - A444 Weddington Lane (South-East)	0.26	3.25	0.3	A	320	480

Main Results for each time segment

15:45 - 16:00

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 - A444 Weddington Lane (North-West)	146	37	53	1309	0.112	146	209	0.0	0.1	3.093	A
2 - Site Access	90	23	143	1472	0.061	90	56	0.0	0.1	2.605	A
3 - A444 Weddington Lane (South-East)	263	66	0.75	1490	0.176	262	233	0.0	0.2	2.930	A

16:00 - 16:15

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 - A444 Weddington Lane (North-West)	174	44	64	1303	0.134	174	251	0.1	0.2	3.189	A
2 - Site Access	108	27	172	1454	0.074	108	66	0.1	0.1	2.673	A
3 - A444 Weddington Lane (South-East)	314	78	0.90	1490	0.211	314	279	0.2	0.3	3.059	A

16:15 - 16:30

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 - A444 Weddington Lane (North-West)	214	53	78	1295	0.165	213	307	0.2	0.2	3.329	A
2 - Site Access	132	33	210	1430	0.092	132	81	0.1	0.1	2.773	A
3 - A444 Weddington Lane (South-East)	384	96	1	1490	0.258	384	341	0.3	0.3	3.255	A

16:30 - 16:45

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 - A444 Weddington Lane (North-West)	214	53	78	1295	0.165	214	307	0.2	0.2	3.329	A
2 - Site Access	132	33	210	1430	0.092	132	81	0.1	0.1	2.773	A
3 - A444 Weddington Lane (South-East)	384	96	1	1490	0.258	384	341	0.3	0.3	3.255	A

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 - A444 Weddington Lane (North-West)	174	44	64	1303	0.134	175	251	0.2	0.2	3.191	A
2 - Site Access	108	27	172	1454	0.074	108	67	0.1	0.1	2.674	A
3 - A444 Weddington Lane (South-East)	314	78	0.90	1490	0.211	314	279	0.3	0.3	3.061	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 - A444 Weddington Lane (North-West)	146	37	53	1308	0.112	146	210	0.2	0.1	3.099	A
2 - Site Access	90	23	144	1471	0.061	90	56	0.1	0.1	2.606	A
3 - A444 Weddington Lane (South-East)	263	66	0.75	1490	0.176	263	234	0.3	0.2	2.935	A

Ref Case, PM (17:00 - 18:00)

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	3.36	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	Ref Case	PM (17:00 - 18:00)	ONE HOUR	15:45	17:15	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 - A444 Weddington Lane (North-West)		ONE HOUR	✓	258	100.000
2 - Site Access		ONE HOUR	✓	171	100.000
3 - A444 Weddington Lane (South-East)		ONE HOUR	✓	394	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	5	253
	2 - Site Access	1	0	170
	3 - A444 Weddington Lane (South-East)	323	71	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	0	0
	2 - Site Access	0	0	0
	3 - A444 Weddington Lane (South-East)	0	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 - A444 Weddington Lane (North-West)	0.22	3.52	0.3	A	237	355
2 - Site Access	0.14	3.00	0.2	A	157	235
3 - A444 Weddington Lane (South-East)	0.29	3.42	0.4	A	362	542

Main Results for each time segment

15:45 - 16:00

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 - A444 Weddington Lane (North-West)	194	49	53	1321	0.147	194	243	0.0	0.2	3.191	A
2 - Site Access	129	32	190	1444	0.089	128	57	0.0	0.1	2.736	A
3 - A444 Weddington Lane (South-East)	297	74	0.75	1487	0.199	296	317	0.0	0.2	3.017	A

16:00 - 16:15

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 - A444 Weddington Lane (North-West)	232	58	64	1315	0.176	232	291	0.2	0.2	3.322	A
2 - Site Access	154	38	227	1421	0.108	154	68	0.1	0.1	2.840	A
3 - A444 Weddington Lane (South-East)	354	89	0.90	1487	0.238	354	380	0.2	0.3	3.176	A

16:15 - 16:30

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 - A444 Weddington Lane	284	71	78	1307	0.21	284	356	0.2	0.3	3.51	A

(North-West)					7					8	
2 - Site Access	188	47	278	1389	0.136	188	84	0.1	0.2	2.997	A
3 - A444 Weddington Lane (South-East)	434	108	1	1487	0.292	433	465	0.3	0.4	3.416	A

16:30 - 16:45

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 - A444 Weddington Lane (North-West)	284	71	78	1307	0.217	284	357	0.3	0.3	3.518	A
2 - Site Access	188	47	279	1389	0.136	188	84	0.2	0.2	2.997	A
3 - A444 Weddington Lane (South-East)	434	108	1	1487	0.292	434	466	0.4	0.4	3.416	A

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 - A444 Weddington Lane (North-West)	232	58	64	1315	0.176	232	292	0.3	0.2	3.326	A
2 - Site Access	154	38	228	1420	0.108	154	68	0.2	0.1	2.844	A
3 - A444 Weddington Lane (South-East)	354	89	0.90	1487	0.238	355	381	0.4	0.3	3.180	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 - A444 Weddington Lane (North-West)	194	49	53	1321	0.147	194	244	0.2	0.2	3.195	A
2 - Site Access	129	32	191	1443	0.089	129	57	0.1	0.1	2.740	A
3 - A444 Weddington Lane (South-East)	297	74	0.75	1487	0.199	297	319	0.3	0.3	3.026	A

Ref Case, PM (18:00 - 19:00)

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	3.21	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	Ref Case	PM (18:00 - 19:00)	ONE HOUR	15:45	17:15	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 - A444 Weddington Lane (North-West)		ONE HOUR	✓	172	100.000
2 - Site Access		ONE HOUR	✓	156	100.000
3 - A444 Weddington Lane (South-East)		ONE HOUR	✓	366	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	3	169
	2 - Site Access	1	1	154
	3 - A444 Weddington Lane (South-East)	306	60	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	0	1
	2 - Site Access	0	10	0
	3 - A444 Weddington Lane (South-East)	1	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 - A444 Weddington Lane (North-West)	0.15	3.24	0.2	A	158	237
2 - Site Access	0.12	2.83	0.1	A	143	215
3 - A444 Weddington Lane (South-East)	0.27	3.36	0.4	A	336	504

Main Results for each time segment

15:45 - 16:00

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 - A444 Weddington Lane (North-West)	129	32	46	1312	0.099	129	230	0.0	0.1	3.042	A
2 - Site Access	117	29	127	1481	0.079	117	48	0.0	0.1	2.639	A
3 - A444 Weddington Lane (South-East)	276	69	2	1475	0.187	275	242	0.0	0.2	2.998	A

16:00 - 16:15

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 - A444 Weddington Lane (North-West)	155	39	55	1307	0.118	155	276	0.1	0.1	3.122	A
2 - Site Access	140	35	152	1465	0.096	140	57	0.1	0.1	2.716	A
3 - A444 Weddington Lane (South-East)	329	82	2	1475	0.223	329	290	0.2	0.3	3.141	A

16:15 - 16:30

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 - A444 Weddington Lane (North-West)	189	47	67	1300	0.146	189	338	0.1	0.2	3.239	A
2 - Site Access	172	43	186	1444	0.119	172	70	0.1	0.1	2.828	A
3 - A444 Weddington Lane (South-East)	403	101	2	1474	0.273	403	355	0.3	0.4	3.359	A

16:30 - 16:45

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 - A444 Weddington Lane (North-West)	189	47	67	1300	0.146	189	338	0.2	0.2	3.239	A
2 - Site Access	172	43	186	1444	0.119	172	70	0.1	0.1	2.829	A
3 - A444 Weddington Lane (South-East)	403	101	2	1474	0.273	403	356	0.4	0.4	3.359	A

16:45 - 17:00

Arm	Total Dema	Junction	Circulating flow	Capacity	RFC	Throughput	Throughput (exit	Start queu	End queu	Delay (s)	Unsignalised level of

	nd (Veh/hr)	Arrivals (Veh)	(Veh/hr)	(Veh/hr)		(Veh/hr)	side) (Veh/hr)	e (Veh)	e (Veh)		service
1 - A444 Weddington Lane (North-West)	155	39	55	1307	0.118	155	276	0.2	0.1	3.123	A
2 - Site Access	140	35	152	1465	0.096	140	58	0.1	0.1	2.717	A
3 - A444 Weddington Lane (South-East)	329	82	2	1475	0.223	329	291	0.4	0.3	3.145	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 - A444 Weddington Lane (North-West)	129	32	46	1312	0.099	130	231	0.1	0.1	3.045	A
2 - Site Access	117	29	127	1481	0.079	118	48	0.1	0.1	2.640	A
3 - A444 Weddington Lane (South-East)	276	69	2	1475	0.187	276	243	0.3	0.2	3.004	A

Ref Case + Development, AM (07:00 - 08:00)

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	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
D7	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 - A444 Weddington Lane (North-West)		ONE HOUR	✓	223	100.000
2 - Site Access		ONE HOUR	✓	133	100.000
3 - A444 Weddington Lane (South-East)		ONE HOUR	✓	493	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	3	220
	2 - Site Access	0	3	130
	3 - A444 Weddington Lane (South-East)	268	225	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	0	0
	2 - Site Access	0	7	12
	3 - A444 Weddington Lane (South-East)	0	4	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 - A444 Weddington Lane (North-West)	0.20	3.75	0.3	A	205	307
2 - Site Access	0.12	3.23	0.1	A	122	183
3 - A444 Weddington Lane (South-East)	0.37	3.92	0.6	A	452	679

Main Results for each time segment

06:45 - 07:00

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 - A444 Weddington Lane (North-West)	168	42	171	1251	0.134	167	201	0.0	0.2	3.319	A
2 - Site Access	100	25	165	1304	0.077	100	173	0.0	0.1	2.989	A
3 - A444 Weddington Lane	371	93	2	1462	0.25	370	263	0.0	0.3	3.29	A

(South-East)					4					0	

07:00 - 07:15

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 - A444 Weddington Lane (North-West)	200	50	205	1232	0.163	200	241	0.2	0.2	3.490	A
2 - Site Access	120	30	198	1286	0.093	119	207	0.1	0.1	3.085	A
3 - A444 Weddington Lane (South-East)	443	111	3	1462	0.303	443	314	0.3	0.4	3.532	A

07:15 - 07:30

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 - A444 Weddington Lane (North-West)	246	61	251	1205	0.204	245	295	0.2	0.3	3.752	A
2 - Site Access	146	37	242	1262	0.116	146	254	0.1	0.1	3.227	A
3 - A444 Weddington Lane (South-East)	543	136	3	1462	0.371	542	385	0.4	0.6	3.912	A

07:30 - 07:45

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 - A444 Weddington Lane (North-West)	246	61	251	1204	0.204	246	295	0.3	0.3	3.753	A
2 - Site Access	146	37	242	1261	0.116	146	254	0.1	0.1	3.227	A
3 - A444 Weddington Lane (South-East)	543	136	3	1462	0.371	543	385	0.6	0.6	3.917	A

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 - A444 Weddington Lane (North-West)	200	50	205	1231	0.163	201	241	0.3	0.2	3.493	A
2 - Site Access	120	30	198	1286	0.093	120	208	0.1	0.1	3.086	A
3 - A444 Weddington Lane (South-East)	443	111	3	1462	0.303	444	315	0.6	0.4	3.536	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 - A444 Weddington Lane (North-West)	168	42	172	1251	0.134	168	202	0.2	0.2	3.324	A
2 - Site Access	100	25	166	1304	0.07	100	174	0.1	0.1	2.99	A

					7					0	
3 - A444 Weddington Lane (South-East)	371	93	2	1462	0.254	372	264	0.4	0.3	3.300	A

Ref Case + Development, AM (08:00 - 09:00)

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	5.14	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
D8	Ref Case + Development	AM (08:00 - 09:00)	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 - A444 Weddington Lane (North-West)		ONE HOUR	✓	160	100.000
2 - Site Access		ONE HOUR	✓	167	100.000
3 - A444 Weddington Lane (South-East)		ONE HOUR	✓	752	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - A444 Weddington Lane (North-West)	**2 - Site Access**	**3 - A444 Weddington Lane (South-East)**
From	**1 - A444 Weddington Lane (North-West)**	0	3	157
	2 - Site Access	0	1	166
	3 - A444 Weddington Lane (South-East)	396	356	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
	1 - A444 Weddington Lane (North-West)	0	0	1
	2 - Site Access	0	0	11
	3 - A444 Weddington Lane (South-East)	0	7	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 - A444 Weddington Lane (North-West)	0.16	3.88	0.2	A	147	220
2 - Site Access	0.14	3.20	0.2	A	153	230
3 - A444 Weddington Lane (South-East)	0.57	5.86	1.3	A	690	1035

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 - A444 Weddington Lane (North-West)	120	30	268	1179	0.102	120	297	0.0	0.1	3.398	A
2 - Site Access	126	31	118	1341	0.094	125	270	0.0	0.1	2.961	A
3 - A444 Weddington Lane (South-East)	566	142	0.75	1442	0.393	564	242	0.0	0.6	4.086	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 - A444 Weddington Lane (North-West)	144	36	320	1147	0.125	144	356	0.1	0.1	3.587	A
2 - Site Access	150	38	141	1328	0.113	150	323	0.1	0.1	3.056	A
3 - A444 Weddington Lane (South-East)	676	169	0.90	1442	0.469	675	290	0.6	0.9	4.687	A

08:15 - 08:30

Arm	Total Demand	Junction Arrival	Circulating flow (Veh/hr)	Capacity (Veh/hr	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue	End queue	Delay (s)	Unsignalised level of service

	(Veh/hr)	s (Veh)		)			(Veh/hr)	(Veh)	(Veh)		
1 - A444 Weddington Lane (North-West)	176	44	392	1104	0.160	176	435	0.1	0.2	3.876	A
2 - Site Access	184	46	173	1310	0.140	184	396	0.1	0.2	3.195	A
3 - A444 Weddington Lane (South-East)	828	207	1	1442	0.574	826	355	0.9	1.3	5.826	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 - A444 Weddington Lane (North-West)	176	44	393	1104	0.160	176	436	0.2	0.2	3.879	A
2 - Site Access	184	46	173	1310	0.140	184	396	0.2	0.2	3.196	A
3 - A444 Weddington Lane (South-East)	828	207	1	1442	0.574	828	356	1.3	1.3	5.861	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 - A444 Weddington Lane (North-West)	144	36	322	1146	0.125	144	357	0.2	0.1	3.591	A
2 - Site Access	150	38	141	1328	0.113	150	324	0.2	0.1	3.059	A
3 - A444 Weddington Lane (South-East)	676	169	0.90	1442	0.469	678	291	1.3	0.9	4.720	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 - A444 Weddington Lane (North-West)	120	30	269	1178	0.102	121	299	0.1	0.1	3.404	A
2 - Site Access	126	31	118	1341	0.094	126	271	0.1	0.1	2.965	A
3 - A444 Weddington Lane (South-East)	566	142	0.75	1442	0.393	567	243	0.9	0.7	4.119	A

Ref Case + Development, AM (09:00 - 10:00)

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	4.06	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	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 - A444 Weddington Lane (North-West)		ONE HOUR	✓	155	100.000
2 - Site Access		ONE HOUR	✓	131	100.000
3 - A444 Weddington Lane (South-East)		ONE HOUR	✓	505	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	3	152
	2 - Site Access	0	2	129
	3 - A444 Weddington Lane (South-East)	283	222	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	0	1
	2 - Site Access	0	5	11
	3 - A444 Weddington Lane (South-East)	0	21	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 - A444 Weddington Lane (North-West)	0.15	3.59	0.2	A	142	213
2 - Site Access	0.11	3.08	0.1	A	120	180
3 - A444 Weddington Lane (South-East)	0.41	4.46	0.7	A	463	695

Main Results for each time segment

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 - A444 Weddington Lane (North-West)	117	29	168	1225	0.095	116	212	0.0	0.1	3.246	A
2 - Site Access	99	25	114	1343	0.073	98	170	0.0	0.1	2.891	A
3 - A444 Weddington Lane (South-East)	380	95	2	1364	0.279	379	211	0.0	0.4	3.650	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 - A444 Weddington Lane (North-West)	139	35	201	1203	0.116	139	254	0.1	0.1	3.384	A
2 - Site Access	118	29	137	1331	0.089	118	204	0.1	0.1	2.967	A
3 - A444 Weddington Lane (South-East)	454	113	2	1364	0.333	454	252	0.4	0.5	3.954	A

09:15 - 09:30

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 - A444 Weddington Lane (North-West)	171	43	246	1172	0.146	171	311	0.1	0.2	3.592	A
2 - Site Access	144	36	167	1313	0.110	144	250	0.1	0.1	3.078	A
3 - A444 Weddington Lane (South-East)	556	139	2	1363	0.408	555	309	0.5	0.7	4.451	A

09:30 - 09:45

Arm	Total Demand (Veh/h	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

	r)							)	)		
1 - A444 Weddington Lane (North-West)	171	43	247	1172	0.146	171	312	0.2	0.2	3.593	A
2 - Site Access	144	36	167	1313	0.110	144	250	0.1	0.1	3.078	A
3 - A444 Weddington Lane (South-East)	556	139	2	1363	0.408	556	309	0.7	0.7	4.458	A

09:45 - 10:00

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 - A444 Weddington Lane (North-West)	139	35	202	1202	0.116	139	255	0.2	0.1	3.386	A
2 - Site Access	118	29	137	1331	0.089	118	204	0.1	0.1	2.970	A
3 - A444 Weddington Lane (South-East)	454	113	2	1364	0.333	455	253	0.7	0.5	3.964	A

10:00 - 10:15

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 - A444 Weddington Lane (North-West)	117	29	169	1225	0.095	117	213	0.1	0.1	3.251	A
2 - Site Access	99	25	115	1343	0.073	99	171	0.1	0.1	2.894	A
3 - A444 Weddington Lane (South-East)	380	95	2	1364	0.279	381	212	0.5	0.4	3.665	A

Ref Case + Development, PM (16:00 - 17:00)

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	3.40	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	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 - A444 Weddington Lane (North-West)		ONE HOUR	✓	194	100.000
2 - Site Access		ONE HOUR	✓	252	100.000
3 - A444 Weddington Lane (South-East)		ONE HOUR	✓	380	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	3	191
	2 - Site Access	1	4	247
	3 - A444 Weddington Lane (South-East)	278	102	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	0	1
	2 - Site Access	0	0	3
	3 - A444 Weddington Lane (South-East)	0	10	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 - A444 Weddington Lane (North-West)	0.17	3.42	0.2	A	178	267
2 - Site Access	0.20	3.24	0.2	A	231	347
3 - A444 Weddington Lane (South-East)	0.29	3.49	0.4	A	349	523

Main Results for each time segment

15:45 - 16:00

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 - A444 Weddington Lane (North-West)	146	37	80	1290	0.113	146	209	0.0	0.1	3.144	A
2 - Site Access	190	47	143	1430	0.133	189	82	0.0	0.2	2.900	A
3 - A444 Weddington Lane (South-East)	286	72	4	1449	0.197	285	329	0.0	0.2	3.088	A

16:00 - 16:15

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 - A444 Weddington Lane (North-West)	174	44	95	1280	0.136	174	251	0.1	0.2	3.255	A
2 - Site Access	227	57	172	1412	0.160	226	98	0.2	0.2	3.035	A
3 - A444 Weddington Lane (South-East)	342	85	4	1449	0.236	341	393	0.2	0.3	3.250	A

16:15 - 16:30

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 - A444 Weddington Lane (North-West)	214	53	117	1267	0.169	213	307	0.2	0.2	3.416	A
2 - Site Access	277	69	210	1389	0.200	277	120	0.2	0.2	3.237	A
3 - A444 Weddington Lane (South-East)	418	105	6	1448	0.289	418	482	0.3	0.4	3.494	A

16:30 - 16:45

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 - A444 Weddington Lane (North-West)	214	53	117	1267	0.169	214	307	0.2	0.2	3.416	A
2 - Site Access	277	69	210	1389	0.200	277	120	0.2	0.2	3.238	A
3 - A444 Weddington Lane (South-East)	418	105	6	1448	0.289	418	482	0.4	0.4	3.494	A

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 - A444 Weddington Lane (North-West)	174	44	95	1280	0.136	175	251	0.2	0.2	3.256	A
2 - Site Access	227	57	172	1412	0.160	227	98	0.2	0.2	3.039	A
3 - A444 Weddington Lane (South-East)	342	85	4	1449	0.236	342	394	0.4	0.3	3.252	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 - A444 Weddington Lane (North-West)	146	37	80	1289	0.113	146	210	0.2	0.1	3.148	A
2 - Site Access	190	47	144	1429	0.133	190	82	0.2	0.2	2.904	A
3 - A444 Weddington Lane (South-East)	286	72	4	1449	0.197	286	330	0.3	0.2	3.097	A

Ref Case + Development, PM (17:00 - 18:00)

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	3.54	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	Ref Case + Development	PM (17:00 - 18:00)	ONE HOUR	15:45	17:15	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 - A444 Weddington Lane (North-West)		ONE HOUR	✓	258	100.000
2 - Site Access		ONE HOUR	✓	284	100.000
3 - A444 Weddington Lane (South-East)		ONE HOUR	✓	418	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	5	253
	2 - Site Access	1	3	280
	3 - A444 Weddington Lane (South-East)	323	95	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	0	0
	2 - Site Access	0	0	1
	3 - A444 Weddington Lane (South-East)	0	9	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 - A444 Weddington Lane (North-West)	0.22	3.59	0.3	A	237	355
2 - Site Access	0.23	3.39	0.3	A	261	391
3 - A444 Weddington Lane (South-East)	0.32	3.61	0.5	A	384	575

Main Results for each time segment

15:45 - 16:00

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 - A444 Weddington Lane (North-West)	194	49	74	1306	0.149	194	243	0.0	0.2	3.233	A
2 - Site Access	214	53	190	1430	0.150	213	77	0.0	0.2	2.957	A

3 - A444 Weddington Lane (South-East)	315	79	3	1459	0.216	314	400	0.0	0.3	3.140	A

16:00 - 16:15

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 - A444 Weddington Lane (North-West)	232	58	88	1298	0.179	232	291	0.2	0.2	3.377	A
2 - Site Access	255	64	227	1407	0.181	255	93	0.2	0.2	3.125	A
3 - A444 Weddington Lane (South-East)	376	94	4	1459	0.258	375	479	0.3	0.3	3.323	A

16:15 - 16:30

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 - A444 Weddington Lane (North-West)	284	71	108	1285	0.221	284	356	0.2	0.3	3.594	A
2 - Site Access	313	78	278	1376	0.227	312	113	0.2	0.3	3.386	A
3 - A444 Weddington Lane (South-East)	460	115	4	1458	0.316	460	586	0.3	0.5	3.603	A

16:30 - 16:45

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 - A444 Weddington Lane (North-West)	284	71	108	1285	0.221	284	357	0.3	0.3	3.594	A
2 - Site Access	313	78	279	1375	0.227	313	113	0.3	0.3	3.386	A
3 - A444 Weddington Lane (South-East)	460	115	4	1458	0.316	460	587	0.5	0.5	3.606	A

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 - A444 Weddington Lane (North-West)	232	58	88	1297	0.179	232	292	0.3	0.2	3.382	A
2 - Site Access	255	64	228	1407	0.182	256	93	0.3	0.2	3.130	A
3 - A444 Weddington Lane (South-East)	376	94	4	1459	0.258	376	480	0.5	0.3	3.329	A

17:00 - 17:15

Arm	Total Demand (Veh/h	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

	r)							)	)		
1 - A444 Weddington Lane (North-West)	194	49	74	1306	0.149	194	244	0.2	0.2	3.240	A
2 - Site Access	214	53	191	1429	0.150	214	78	0.2	0.2	2.964	A
3 - A444 Weddington Lane (South-East)	315	79	3	1459	0.216	315	402	0.3	0.3	3.149	A

Ref Case + Development, PM (18:00 - 19:00)

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	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
D12	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	15:45	17:15	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 - A444 Weddington Lane (North-West)		ONE HOUR	✓	172	100.000
2 - Site Access		ONE HOUR	✓	241	100.000
3 - A444 Weddington Lane (South-East)		ONE HOUR	✓	427	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	3	169
	2 - Site Access	1	3	237
	3 - A444 Weddington Lane (South-East)	306	121	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	0	1
	2 - Site Access	0	3	4
	3 - A444 Weddington Lane (South-East)	1	7	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 - A444 Weddington Lane (North-West)	0.15	3.37	0.2	A	158	237
2 - Site Access	0.19	3.20	0.2	A	221	332
3 - A444 Weddington Lane (South-East)	0.32	3.68	0.5	A	392	588

Main Results for each time segment

15:45 - 16:00

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 - A444 Weddington Lane (North-West)	129	32	93	1283	0.101	129	230	0.0	0.1	3.120	A
2 - Site Access	181	45	127	1425	0.127	181	95	0.0	0.1	2.891	A
3 - A444 Weddington Lane (South-East)	321	80	3	1450	0.222	320	305	0.0	0.3	3.185	A

16:00 - 16:15

Arm	Total Demand	Junction Arrival	Circulating flow (Veh/hr)	Capacity (Veh/hr	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue	End queue	Delay (s)	Unsignalised level of service

	(Veh/hr)	s (Veh)		)			(Veh/hr)	(Veh)	(Veh)		
1 - A444 Weddington Lane (North-West)	155	39	111	1272	0.122	155	276	0.1	0.1	3.221	A
2 - Site Access	217	54	152	1410	0.154	217	114	0.1	0.2	3.015	A
3 - A444 Weddington Lane (South-East)	384	96	4	1449	0.265	384	365	0.3	0.4	3.378	A

16:15 - 16:30

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 - A444 Weddington Lane (North-West)	189	47	136	1257	0.151	189	338	0.1	0.2	3.371	A
2 - Site Access	265	66	186	1390	0.191	265	140	0.2	0.2	3.200	A
3 - A444 Weddington Lane (South-East)	470	118	4	1449	0.325	470	447	0.4	0.5	3.674	A

16:30 - 16:45

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 - A444 Weddington Lane (North-West)	189	47	137	1257	0.151	189	338	0.2	0.2	3.371	A
2 - Site Access	265	66	186	1390	0.191	265	140	0.2	0.2	3.200	A
3 - A444 Weddington Lane (South-East)	470	118	4	1449	0.325	470	447	0.5	0.5	3.677	A

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 - A444 Weddington Lane (North-West)	155	39	112	1272	0.122	155	276	0.2	0.1	3.222	A
2 - Site Access	217	54	152	1410	0.154	217	114	0.2	0.2	3.019	A
3 - A444 Weddington Lane (South-East)	384	96	4	1449	0.265	384	365	0.5	0.4	3.381	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 - A444 Weddington Lane (North-West)	129	32	93	1283	0.101	130	231	0.1	0.1	3.124	A
2 - Site Access	181	45	127	1425	0.127	182	96	0.2	0.1	2.895	A
3 - A444 Weddington Lane	321	80	3	1450	0.22	322	306	0.4	0.3	3.19	A

(South-East)					2					2	

Appendix 9

Figure 1 Reference Case (2031 Base) AM (07:00 - 08:00)

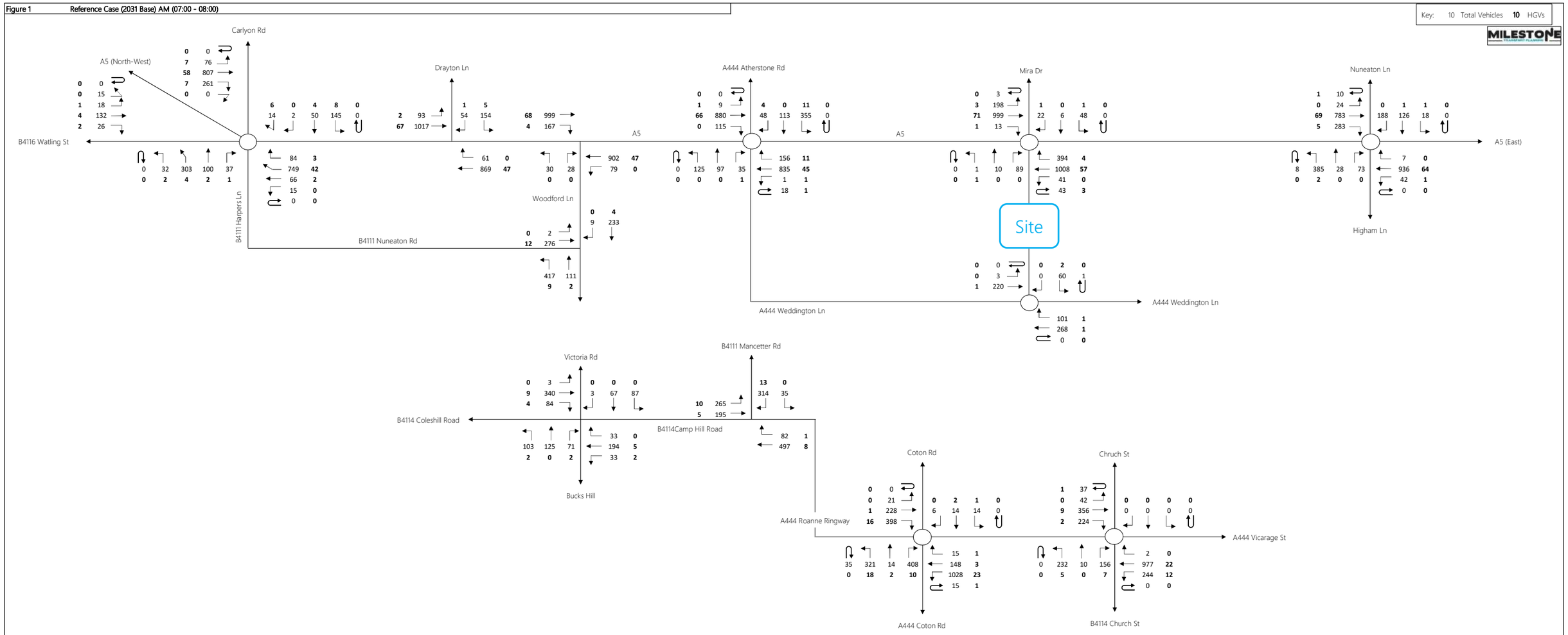


Figure 2 Reference Case (2031 Base) AM (08:00 - 09:00)

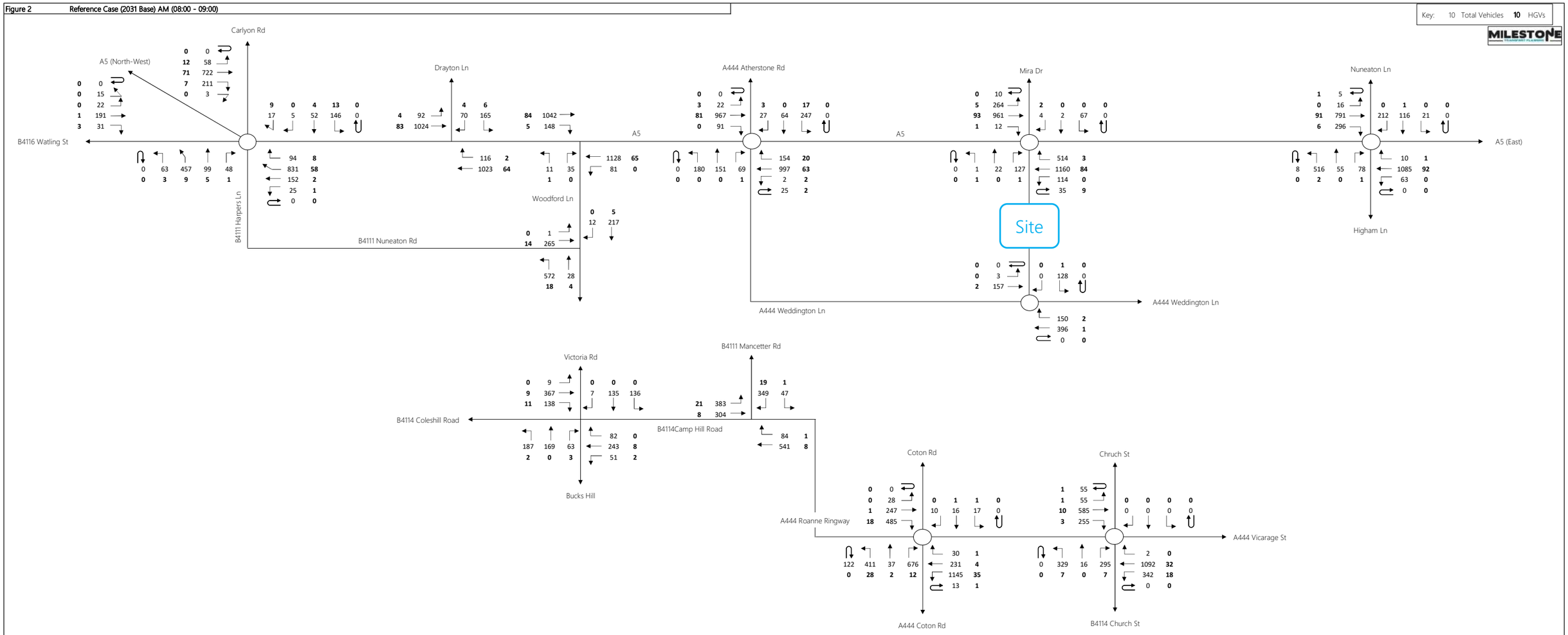


Figure 3 Reference Case (2031 Base) AM (09:00 - 10:00)

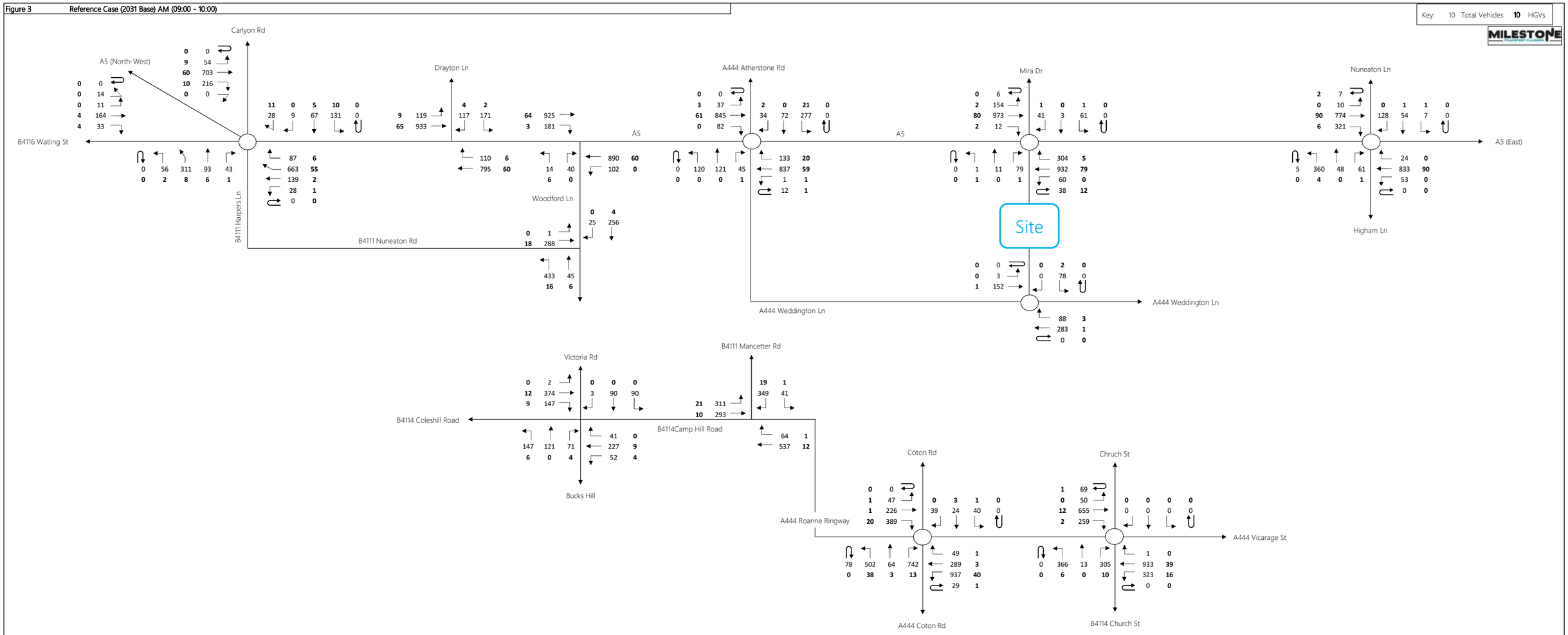


Figure 4 Reference Case (2031 Base) AM (16:00 - 17:00)

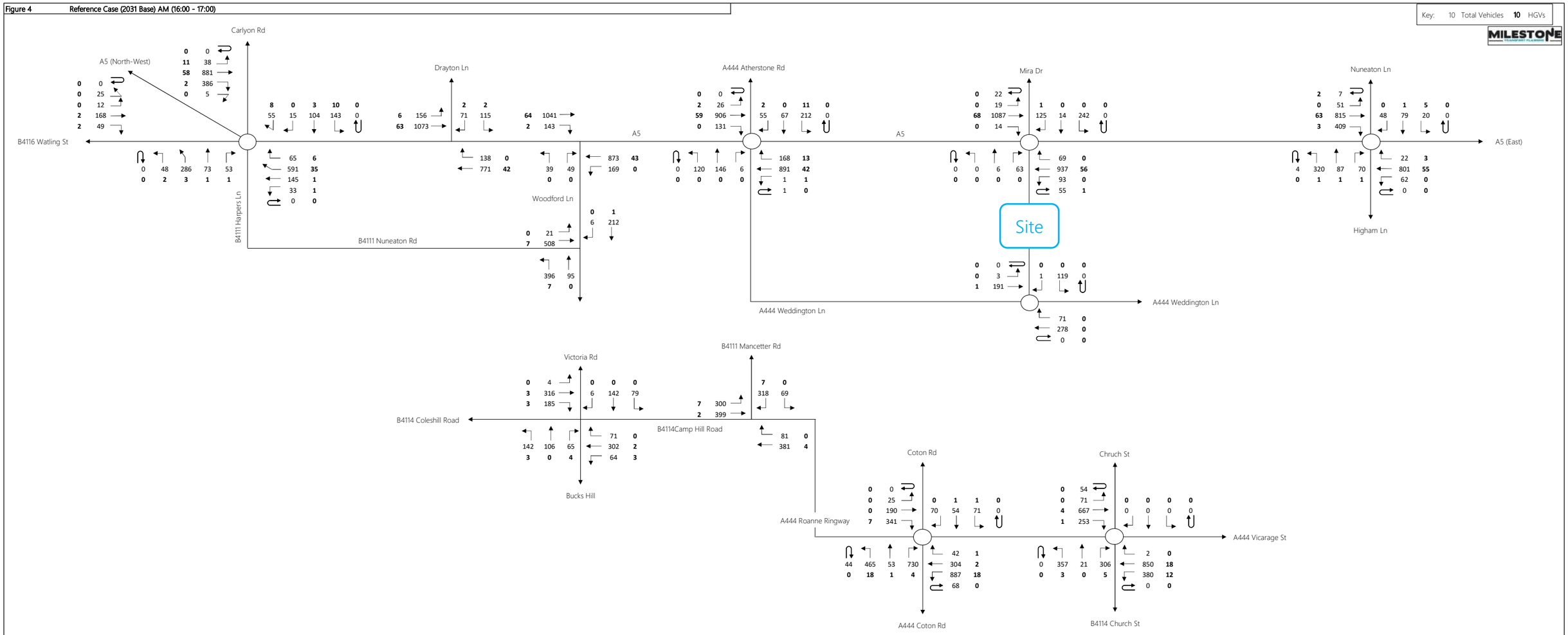


Figure 5 Reference Case (2031 Base) PM (17:00 - 18:00)

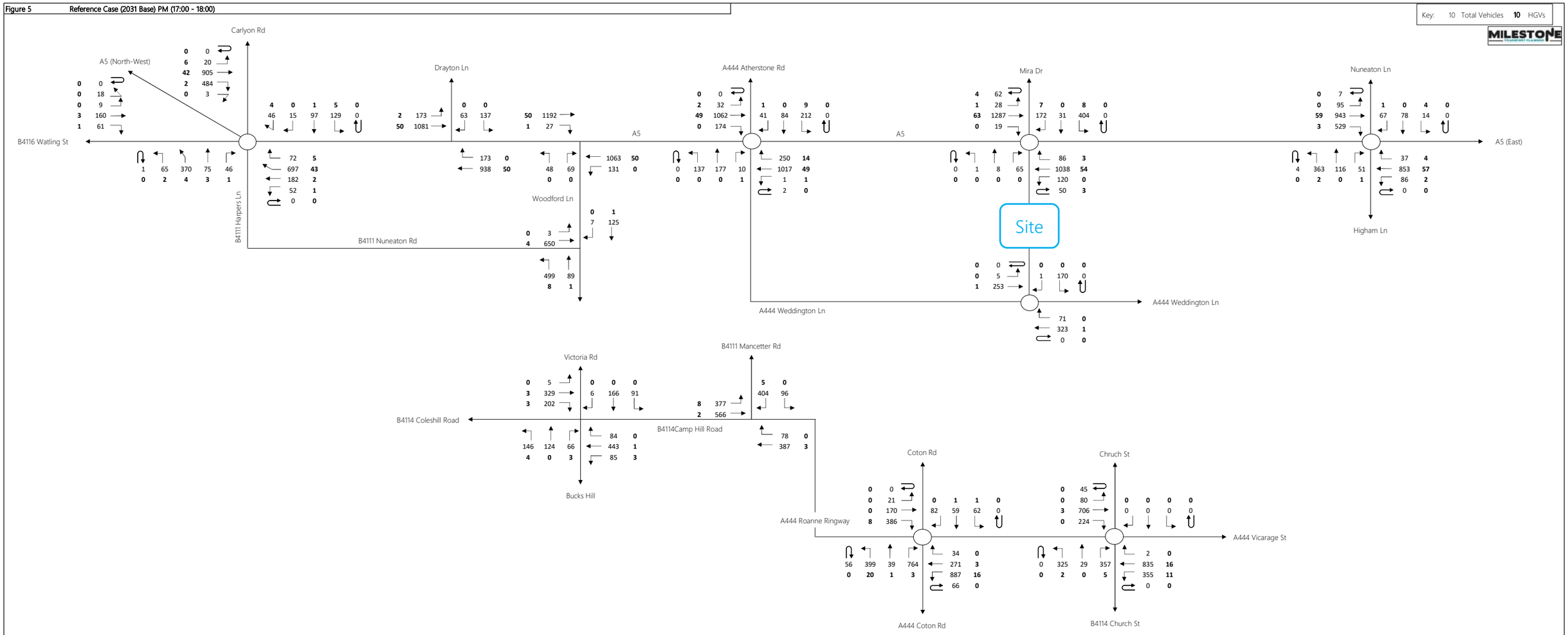


Figure 6 Reference Case (2031 Base) PM (18:00 - 19:00)

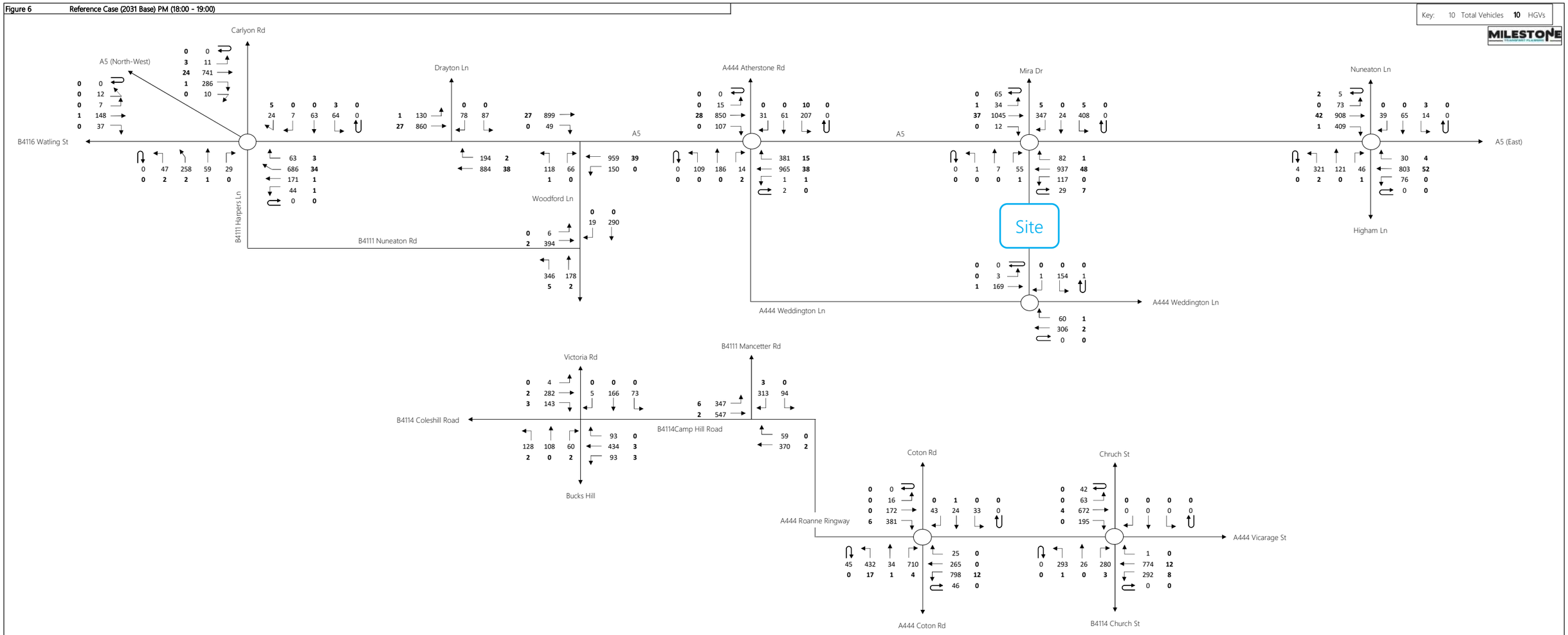


Figure 7 Development AM (07:00 - 08:00)

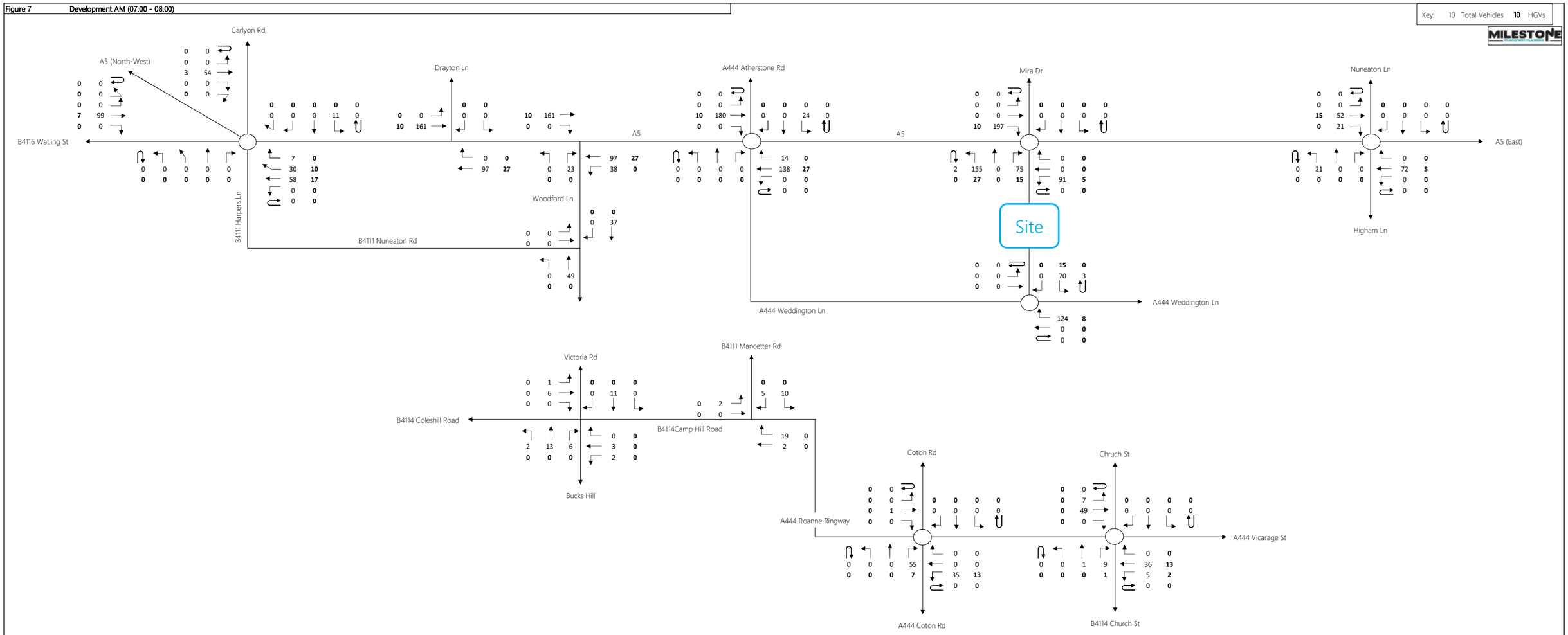


Figure 8 Development AM (08:00 - 09:00)

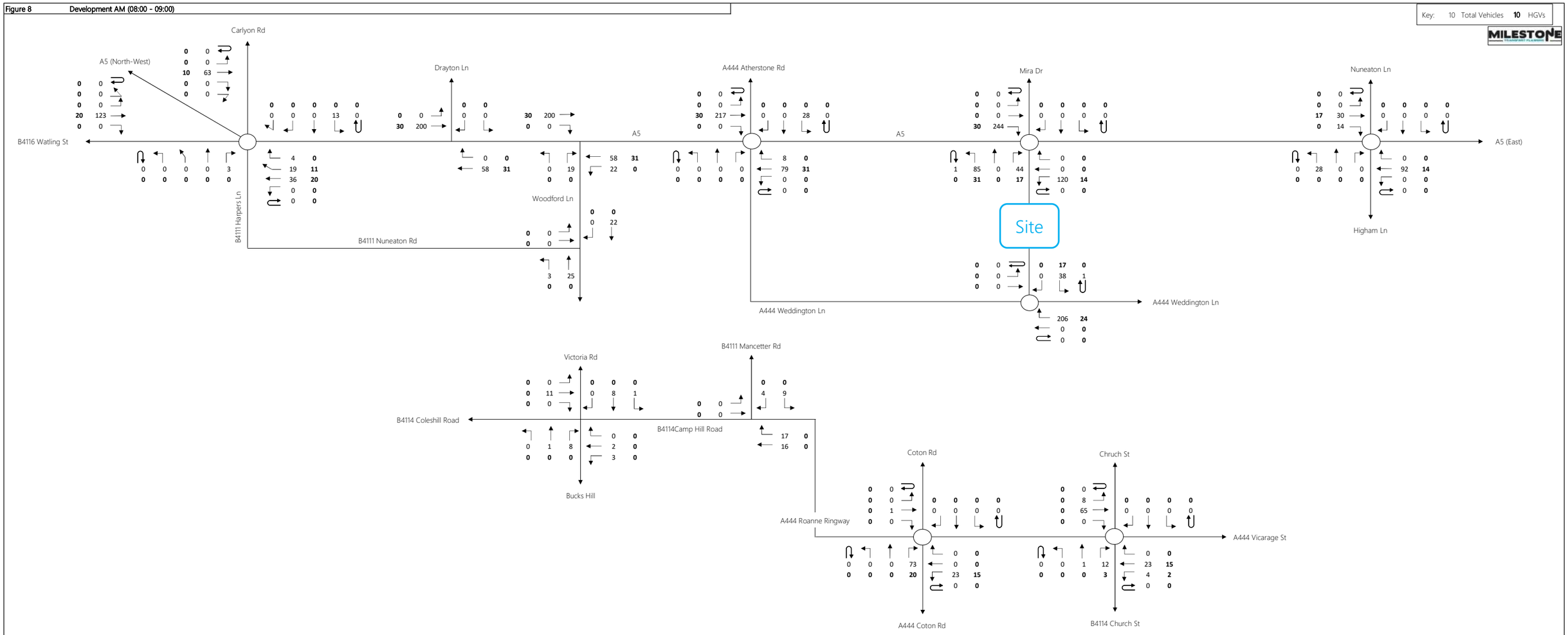


Figure 9 Development AM (09:00 - 10:00)

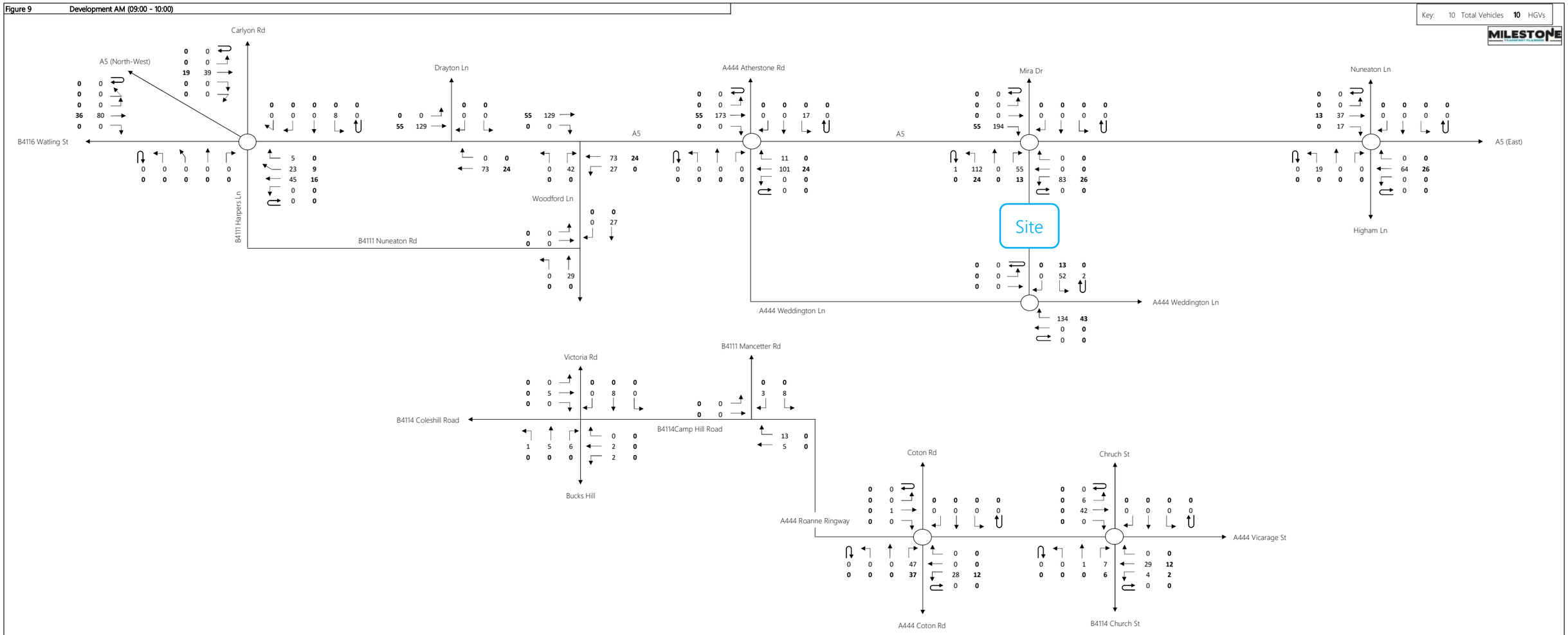


Figure 10 Development PM (16:00 - 17:00)

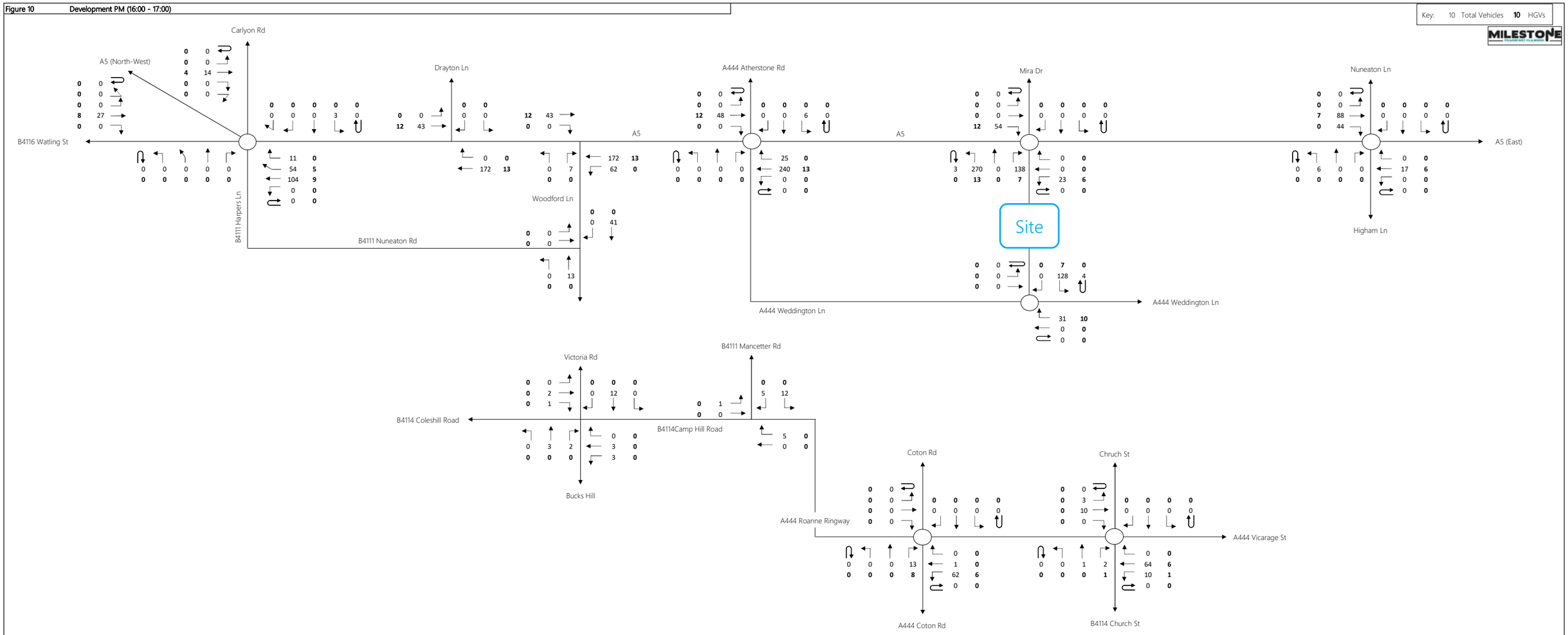


Figure 11 Development PM (17:00 - 18:00)

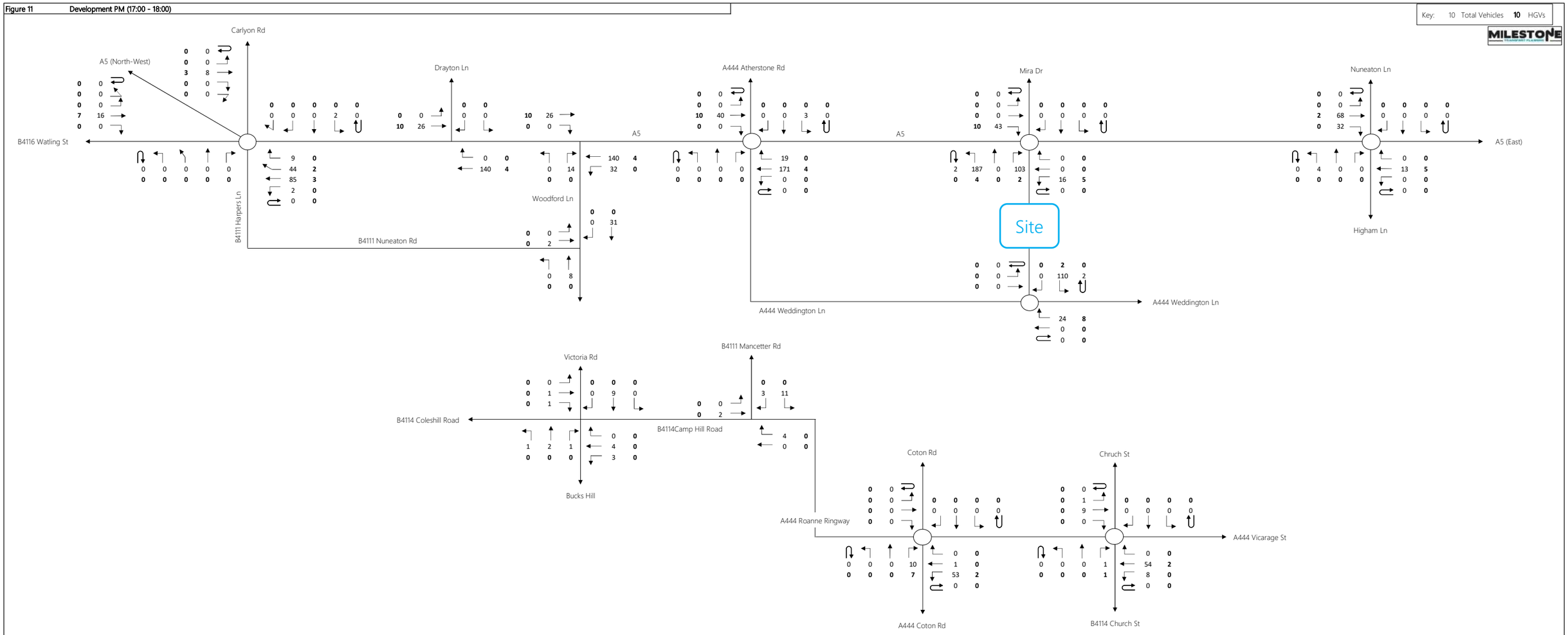


Figure 12 Development PM (18:00 - 19:00)

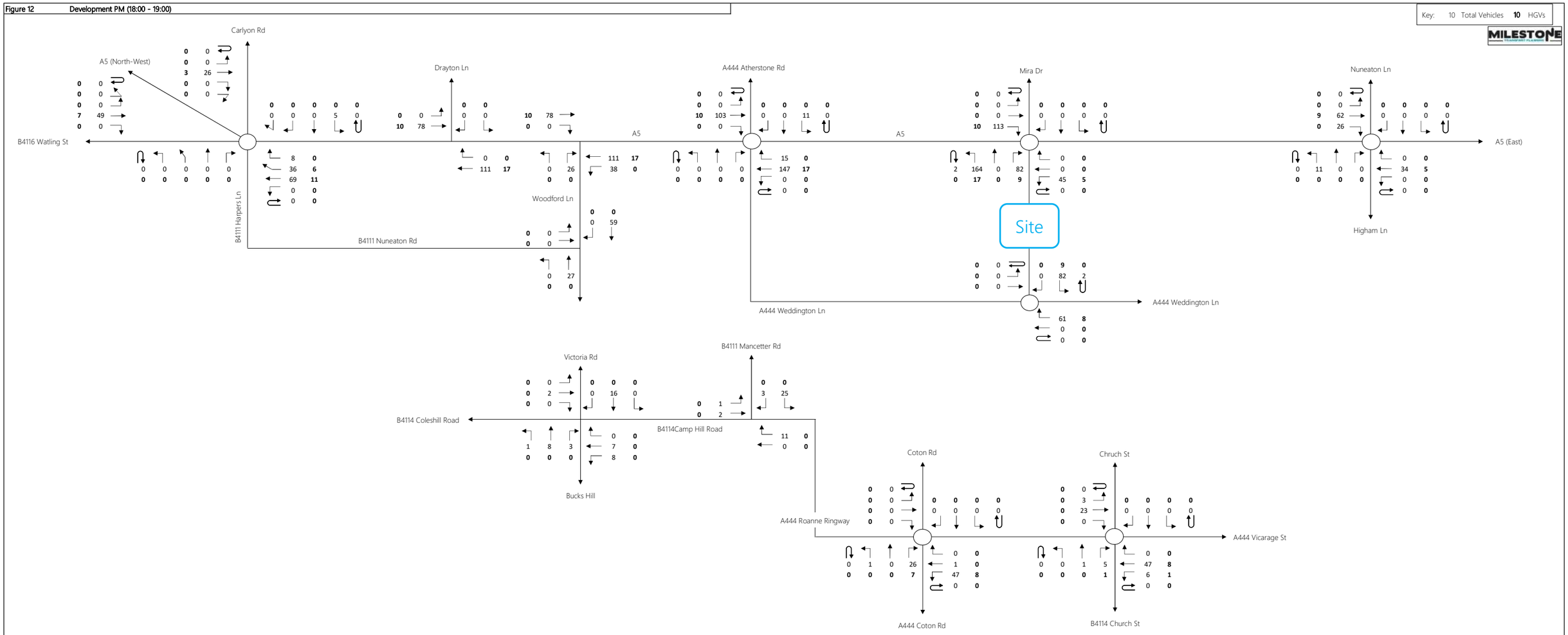


Figure 13 Reference Case + Development (2031 Base + Dev) AM (07:00 - 08:00)

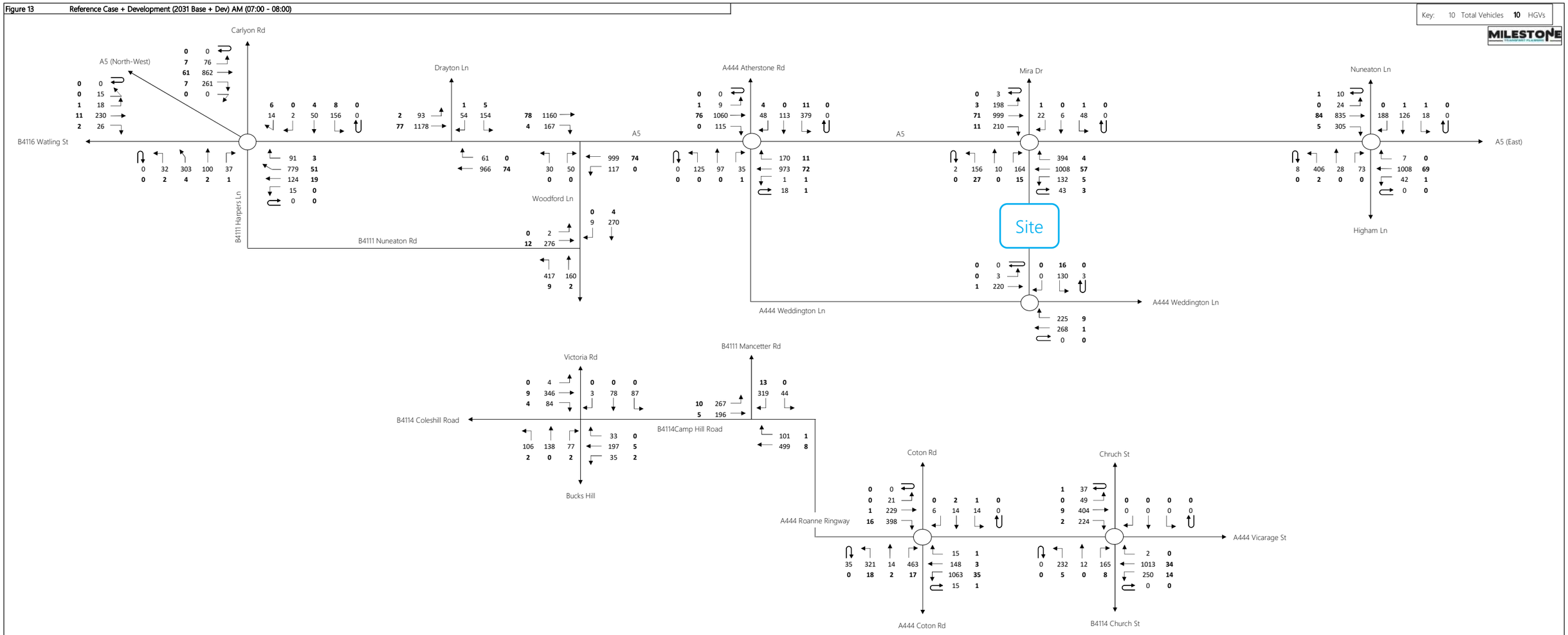


Figure 14 Reference Case + Development (2031 Base + Dev) AM (08:00 - 09:00)

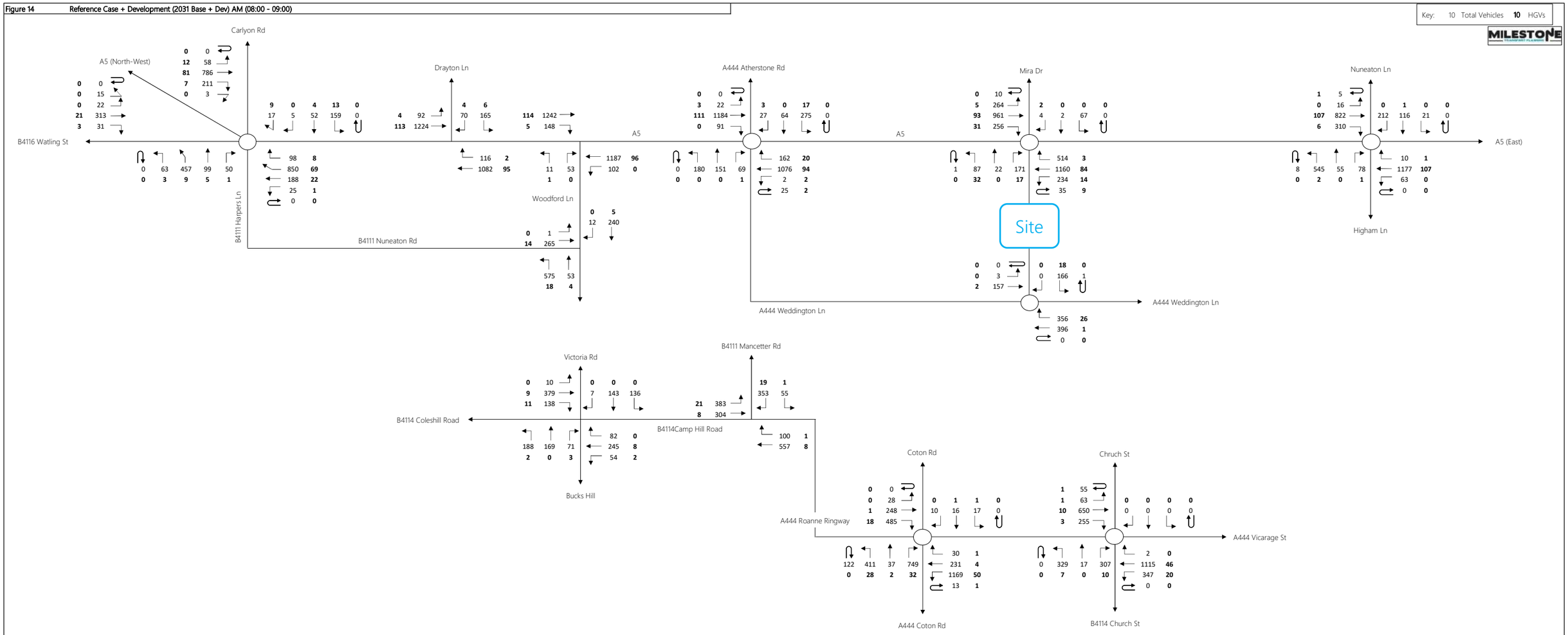


Figure 15 Reference Case + Development (2031 Base + Dev) AM (09:00 - 10:00)

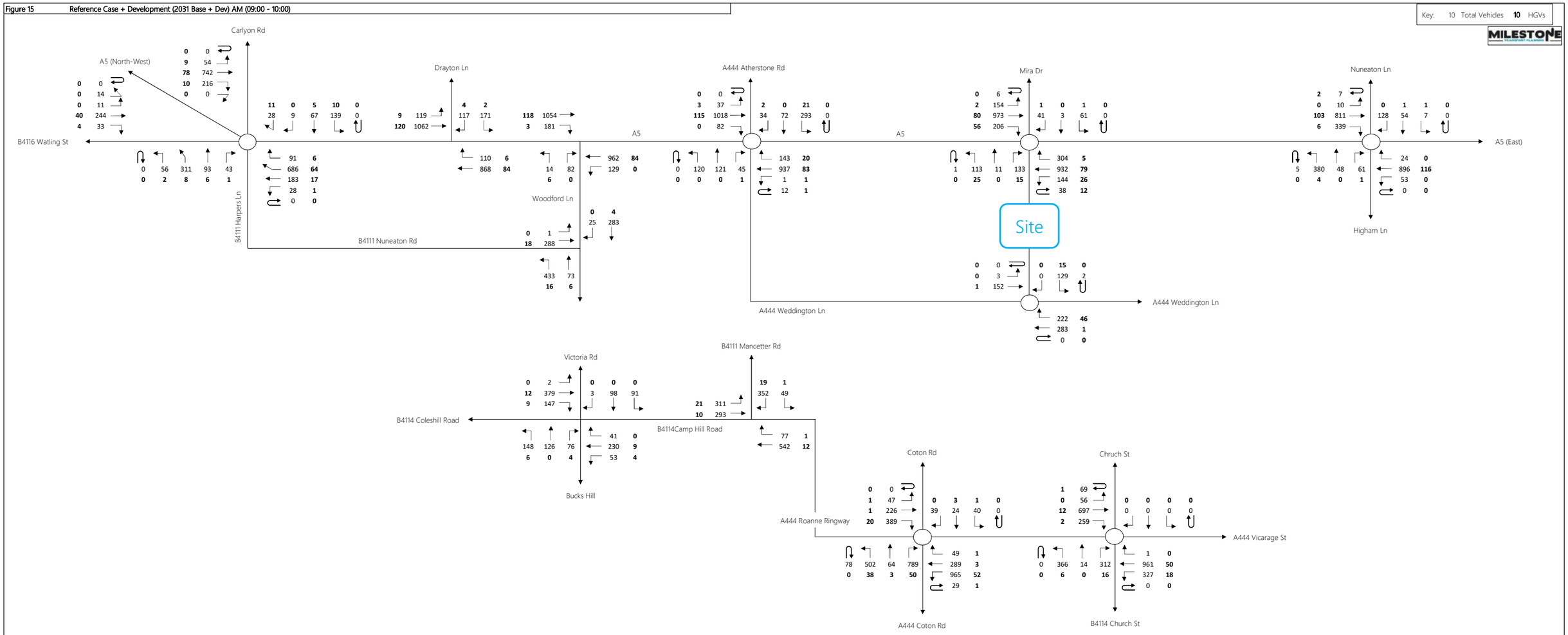


Figure 16 Reference Case + Development (2031 Base + Dev) PM (16:00 - 17:00)

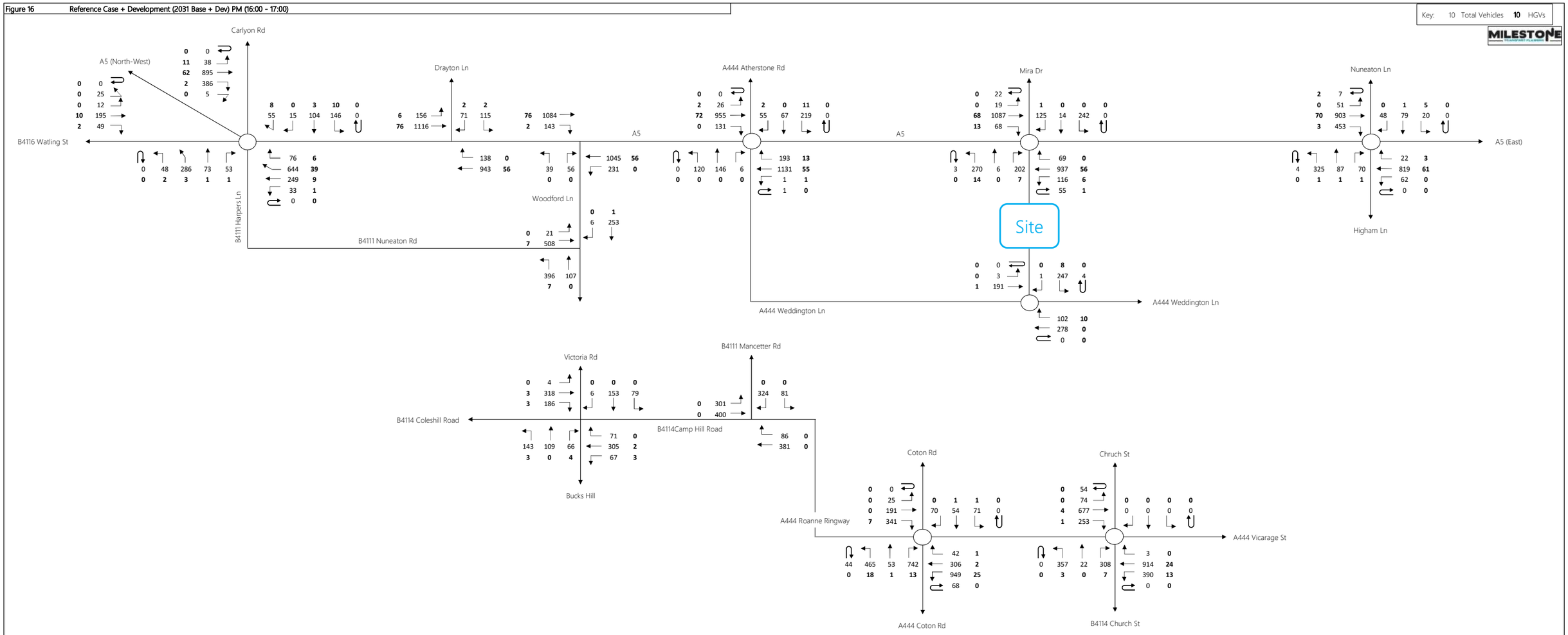


Figure 17 Reference Case + Development (2031 Base + Dev) PM (17:00 - 18:00)

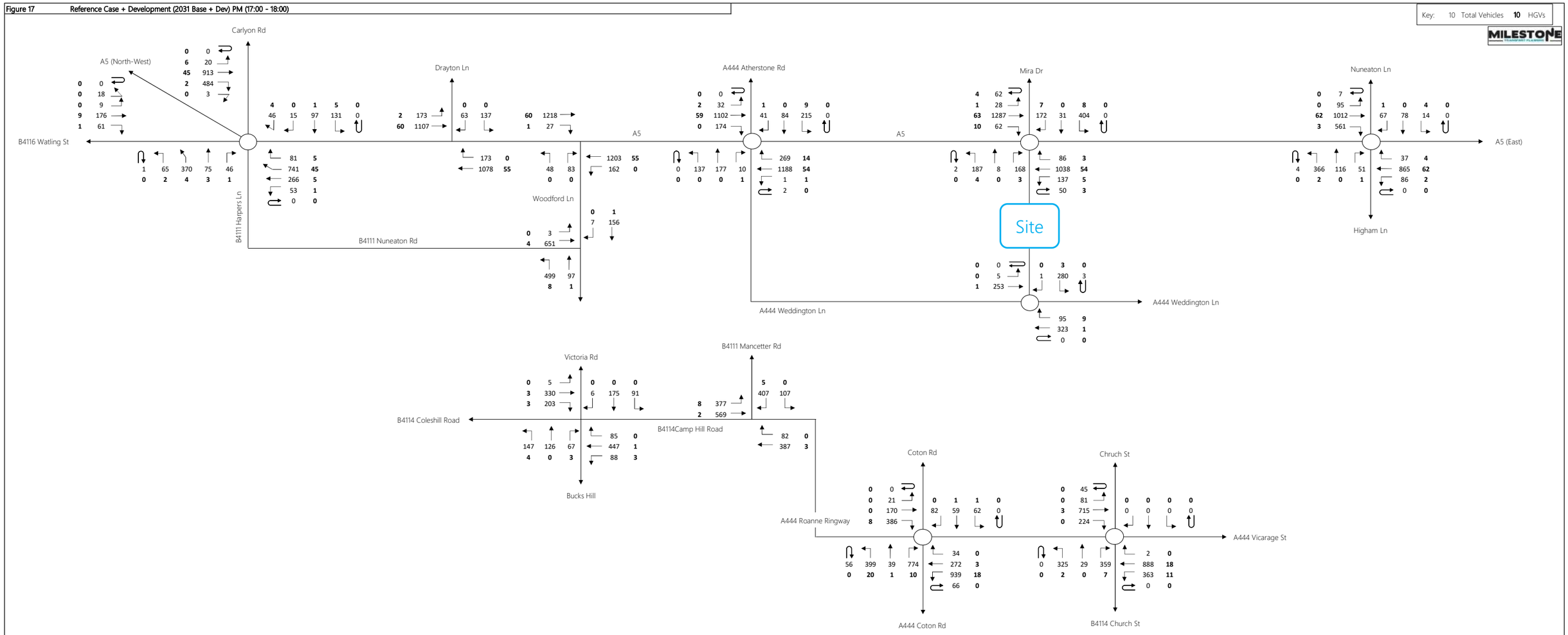
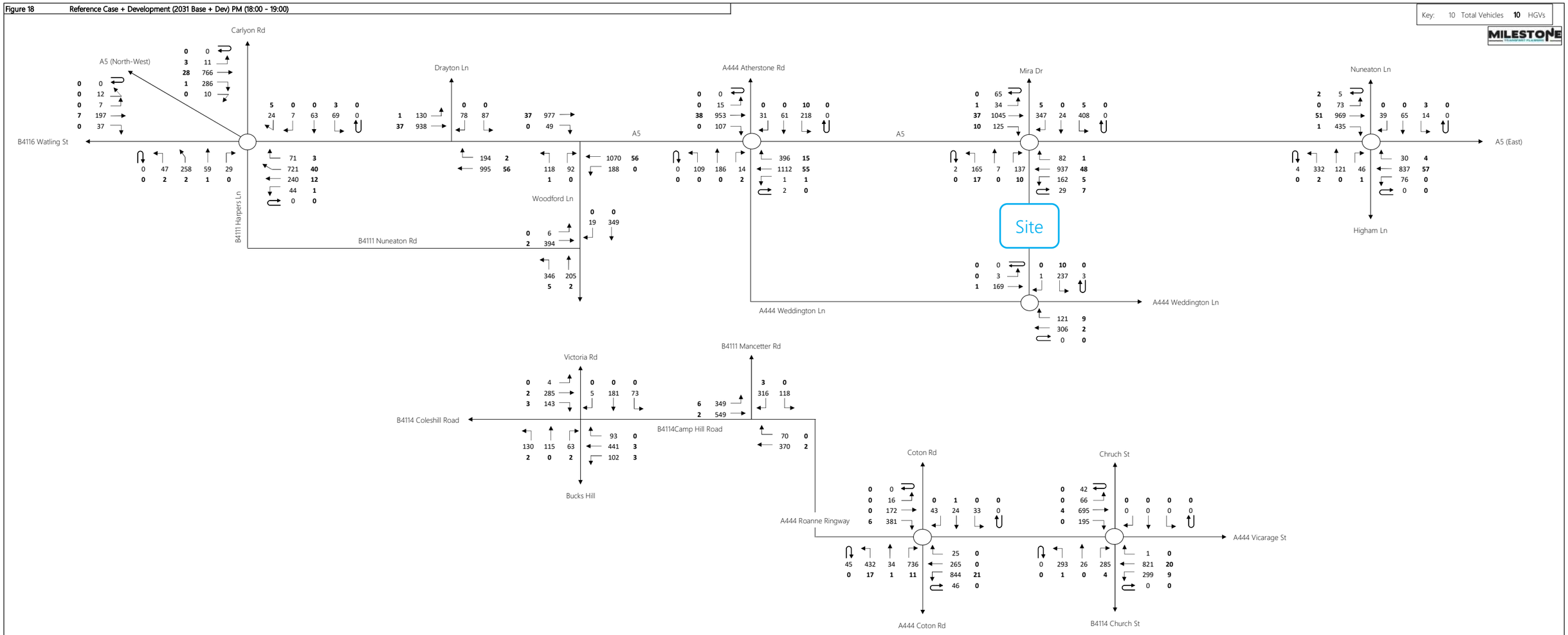


Figure 18 Reference Case + Development (2031 Base + Dev) PM (18:00 - 19:00)



Appendix 10

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: 17059 - A5 Watling St-Higham Lane Roundabout.j9
Path: P:\17 jobs\059 MIRA - Southern Manufacturing Sector\Technical Assessments\Modelling - July 2022
Report generation date: 14/07/2022 15:06:31

»Ref Case, AM (07:00 - 08:00)
»Ref Case, AM (08:00 - 09:00)
»Ref Case, AM (09:00 - 10:00)
»Ref Case, PM (16:00 - 17:00)
»Ref Case, PM (17:00 - 18:00)
»Ref Case, PM (18:00 - 19:00)
»Ref Case + Development, AM (07:00 - 08:00)
»Ref Case + Development, AM (08:00 - 09:00)
»Ref Case + Development, AM (09:00 - 10:00)
»Ref Case + Development, PM (16:00 - 17:00)
»Ref Case + Development, PM (17:00 - 18:00)
»Ref Case + Development, PM (18:00 - 19:00)

Summary of junction performance

	AM (07:00 - 08:00)					AM (08:00 - 09:00)					AM (09:00 - 10:00)					PM (16:00 - 17:00)					PM (17:00 - 18:00)					PM (18:00 - 19:00)				
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
Ref Case																														
1 - Nuneaton Lane	0.6	6.21	0.39	A	8.00	0.7	6.67	0.42	A	15.55	0.3	5.06	0.23	A	7.51	0.2	5.43	0.20	A	9.63	0.3	6.51	0.24	A	47.72	0.2	5.29	0.16	A	13.58
2 - A5 Watling Street (South-East)	3.0	10.30	0.76	B		9.1	27.31	0.91	D		2.2	8.01	0.69	A		1.9	7.13	0.66	A		3.2	10.91	0.77	B		1.9	7.06	0.66	A	
3 - Higham Lane	0.8	5.48	0.45	A		2.1	10.78	0.68	B		0.7	4.79	0.41	A		0.6	4.19	0.38	A		0.8	4.94	0.45	A		0.6	4.22	0.39	A	
4 - A5 Watling Street (North-West)	2.5	7.50	0.72	A		2.8	8.45	0.74	A		2.9	8.57	0.74	A		5.2	13.78	0.85	B		46.0	89.38	1.03	F		8.8	21.81	0.91	C	
Ref Case + Development																														
1 - Nuneaton Lane	0.7	6.89	0.41	A	10.19	0.8	7.25	0.44	A	30.05	0.3	5.39	0.24	A	9.24	0.3	6.23	0.22	A	16.94	0.3	6.63	0.24	A	86.63	0.2	5.73	0.17	A	22.82
2 - A5 Watling Street (South-East)	4.4	14.00	0.82	B		23.6	62.39	0.99	F		3.0	10.44	0.76	B		2.1	7.87	0.69	A		3.4	11.40	0.78	B		2.3	8.09	0.70	A	
3 - Higham Lane	1.0	6.22	0.50	A		3.0	14.57	0.76	B		0.8	5.39	0.45	A		0.6	4.29	0.39	A		0.8	4.96	0.45	A		0.7	4.45	0.41	A	
4 - A5 Watling Street (North-West)	3.3	9.28	0.77	A		3.5	10.11	0.78	B		3.6	10.29	0.79	B		11.4	28.03	0.93	D		94.8	164.97	1.10	F		17.1	39.88	0.96	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. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	24/02/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mtp\MTPGeneral
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	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D2	Ref Case	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D3	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D4	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D5	Ref Case	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D6	Ref Case	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	15	✓
D7	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D8	Ref Case + Development	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D9	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D10	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D11	Ref Case + Development	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D12	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Ref Case, AM (07:00 - 08:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A5 Watling Street (North-West) - 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	8.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Nuneaton Lane	
2	A5 Watling Street (South-East)	
3	Higham Lane	
4	A5 Watling Street (North-West)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Nuneaton Lane	2.50	8.10	27.2	25.0	54.0	35.0	
2 - A5 Watling Street (South-East)	4.20	7.95	29.1	20.0	54.0	47.0	
3 - Higham Lane	3.75	8.95	27.9	30.0	54.0	43.0	
4 - A5 Watling Street (North-West)	4.20	7.00	79.0	20.0	54.0	51.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Nuneaton Lane	0.600	1767
2 - A5 Watling Street (South-East)	0.620	1955
3 - Higham Lane	0.648	2062
4 - A5 Watling Street (North-West)	0.603	1886

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	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 - Nuneaton Lane		ONE HOUR	✓	332	100.000
2 - A5 Watling Street (South-East)		ONE HOUR	✓	985	100.000
3 - Higham Lane		ONE HOUR	✓	494	100.000
4 - A5 Watling Street (North-West)		ONE HOUR	✓	1100	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	18	126	188
	2 - A5 Watling Street (South-East)	7	0	42	936
	3 - Higham Lane	28	73	8	385
	4 - A5 Watling Street (North-West)	24	783	283	10

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	6	1	0
	2 - A5 Watling Street (South-East)	0	0	2	7
	3 - Higham Lane	1	0	0	0
	4 - A5 Watling Street (North-West)	0	9	2	11

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 - Nuneaton Lane	0.39	6.21	0.6	A	305	457
2 - A5 Watling Street (South-East)	0.76	10.30	3.0	B	904	1356
3 - Higham Lane	0.45	5.48	0.8	A	453	680
4 - A5 Watling Street (North-West)	0.72	7.50	2.5	A	1009	1514

Main Results for each time segment

06:45 - 07:00

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 - Nuneaton Lane	250	62	867	1204	0.208	249	44	0.0	0.3	3.767	A
2 - A5 Watling Street (South-East)	742	185	461	1560	0.475	738	655	0.0	0.9	4.360	A
3 - Higham Lane	372	93	855	1475	0.252	371	344	0.0	0.3	3.255	A
4 - A5 Watling Street (North-West)	828	207	87	1713	0.483	824	1139	0.0	0.9	4.032	A

07:00 - 07:15

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 - Nuneaton Lane	298	75	1038	1095	0.273	298	53	0.3	0.4	4.515	A
2 - A5 Watling Street (South-East)	885	221	552	1507	0.588	883	784	0.9	1.4	5.760	A
3 - Higham Lane	444	111	1024	1359	0.327	444	412	0.3	0.5	3.928	A
4 - A5 Watling Street (North-West)	989	247	104	1704	0.580	987	1363	0.9	1.4	5.012	A

07:15 - 07:30

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 - Nuneaton Lane	366	91	1269	948	0.386	365	65	0.4	0.6	6.158	A
2 - A5 Watling Street (South-East)	1085	271	675	1434	0.756	1078	959	1.4	3.0	9.942	A
3 - Higham Lane	544	136	1250	1204	0.452	543	504	0.5	0.8	5.428	A
4 - A5 Watling Street (North-West)	1211	303	127	1691	0.716	1207	1665	1.4	2.5	7.372	A

07:30 - 07:45

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 - Nuneaton Lane	366	91	1274	945	0.387	366	65	0.6	0.6	6.207	A
2 - A5 Watling Street (South-East)	1085	271	677	1433	0.757	1084	962	3.0	3.0	10.301	B
3 - Higham Lane	544	136	1256	1200	0.453	544	505	0.8	0.8	5.485	A
4 - A5 Watling Street (North-	1211	303	128	1690	0.71	1211	1672	2.5	2.5	7.504	A

West)					6						

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 - Nuneaton Lane	298	75	1045	1091	0.274	299	53	0.6	0.4	4.555	A
2 - A5 Watling Street (South-East)	885	221	555	1505	0.588	892	789	3.0	1.5	5.934	A
3 - Higham Lane	444	111	1032	1353	0.328	445	414	0.8	0.5	3.970	A
4 - A5 Watling Street (North-West)	989	247	105	1703	0.581	993	1373	2.5	1.4	5.101	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 - Nuneaton Lane	250	62	873	1200	0.208	250	45	0.4	0.3	3.791	A
2 - A5 Watling Street (South-East)	742	185	464	1558	0.476	744	659	1.5	0.9	4.430	A
3 - Higham Lane	372	93	861	1471	0.253	373	346	0.5	0.3	3.282	A
4 - A5 Watling Street (North-West)	828	207	87	1713	0.483	830	1146	1.4	0.9	4.086	A

Ref Case, AM (08:00 - 09:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A5 Watling Street (North-West) - 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	15.55	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
D2	Ref Case	AM (08:00 - 09:00)	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 - Nuneaton Lane		ONE HOUR	✓	349	100.000
2 - A5 Watling Street (South-East)		ONE HOUR	✓	1158	100.000
3 - Higham Lane		ONE HOUR	✓	657	100.000
4 - A5 Watling Street (North-West)		ONE HOUR	✓	1108	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	21	116	212
	2 - A5 Watling Street (South-East)	10	0	63	1085
	3 - Higham Lane	55	78	8	516
	4 - A5 Watling Street (North-West)	16	791	296	5

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	0	1	0
	2 - A5 Watling Street (South-East)	14	0	0	9
	3 - Higham Lane	0	1	0	0
	4 - A5 Watling Street (North-West)	0	11	2	19

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 - Nuneaton Lane	0.42	6.67	0.7	A	320	480
2 - A5 Watling Street (South-East)	0.91	27.31	9.1	D	1063	1594
3 - Higham Lane	0.68	10.78	2.1	B	603	904
4 - A5 Watling Street (North-West)	0.74	8.45	2.8	A	1017	1525

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 - Nuneaton Lane	263	66	883	1191	0.221	262	61	0.0	0.3	3.868	A
2 - A5 Watling Street (South-East)	872	218	477	1525	0.572	867	667	0.0	1.3	5.428	A
3 - Higham Lane	495	124	982	1376	0.360	492	362	0.0	0.6	4.066	A
4 - A5 Watling Street (North-West)	834	209	113	1675	0.498	830	1361	0.0	1.0	4.242	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 - Nuneaton Lane	314	78	1057	1079	0.291	313	73	0.3	0.4	4.700	A
2 - A5 Watling Street (South-East)	1041	260	572	1470	0.708	1037	799	1.3	2.4	8.231	A
3 - Higham Lane	591	148	1175	1241	0.476	589	433	0.6	0.9	5.511	A
4 - A5 Watling Street (North-West)	996	249	135	1663	0.599	994	1629	1.0	1.5	5.369	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 - Nuneaton Lane	384	96	1291	927	0.414	383	89	0.4	0.7	6.600	A
2 - A5 Watling Street (South-East)	1275	319	699	1397	0.913	1252	976	2.4	8.1	22.061	C
3 - Higham Lane	723	181	1422	1069	0.676	719	529	0.9	2.0	10.142	B
4 - A5 Watling Street (North-West)	1220	305	165	1646	0.741	1215	1976	1.5	2.8	8.253	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 - Nuneaton Lane	384	96	1297	924	0.416	384	89	0.7	0.7	6.672	A
2 - A5 Watling Street (South-East)	1275	319	701	1395	0.914	1271	980	8.1	9.1	27.311	D
3 - Higham Lane	723	181	1441	1056	0.685	723	532	2.0	2.1	10.782	B
4 - A5 Watling Street (North-	1220	305	166	1645	0.74	1220	1998	2.8	2.8	8.451	A

West)					2						

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 - Nuneaton Lane	314	78	1065	1074	0.292	315	74	0.7	0.4	4.752	A
2 - A5 Watling Street (South-East)	1041	260	575	1468	0.709	1067	804	9.1	2.5	9.539	A
3 - Higham Lane	591	148	1205	1220	0.484	595	437	2.1	0.9	5.802	A
4 - A5 Watling Street (North-West)	996	249	137	1662	0.599	1001	1663	2.8	1.5	5.494	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 - Nuneaton Lane	263	66	889	1187	0.221	263	61	0.4	0.3	3.900	A
2 - A5 Watling Street (South-East)	872	218	481	1523	0.573	876	672	2.5	1.4	5.611	A
3 - Higham Lane	495	124	992	1368	0.361	496	365	0.9	0.6	4.135	A
4 - A5 Watling Street (North-West)	834	209	114	1675	0.498	836	1375	1.5	1.0	4.304	A

Ref Case, AM (09:00 - 10:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A5 Watling Street (North-West) - 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	7.51	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	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 - Nuneaton Lane		ONE HOUR	✓	189	100.000
2 - A5 Watling Street (South-East)		ONE HOUR	✓	910	100.000
3 - Higham Lane		ONE HOUR	✓	474	100.000
4 - A5 Watling Street (North-West)		ONE HOUR	✓	1112	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	7	54	128
	2 - A5 Watling Street (South-East)	24	0	53	833
	3 - Higham Lane	48	61	5	360
	4 - A5 Watling Street (North-West)	10	774	321	7

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	17	1	0
	2 - A5 Watling Street (South-East)	0	0	0	11
	3 - Higham Lane	1	2	0	1
	4 - A5 Watling Street (North-West)	0	12	2	29

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 - Nuneaton Lane	0.23	5.06	0.3	A	173	260
2 - A5 Watling Street (South-East)	0.69	8.01	2.2	A	835	1253
3 - Higham Lane	0.41	4.79	0.7	A	435	652
4 - A5 Watling Street (North-West)	0.74	8.57	2.9	A	1020	1531

Main Results for each time segment

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 - Nuneaton Lane	142	36	875	1185	0.120	142	61	0.0	0.1	3.448	A
2 - A5 Watling Street (South-East)	685	171	386	1555	0.441	682	631	0.0	0.8	4.110	A
3 - Higham Lane	357	89	743	1518	0.235	356	324	0.0	0.3	3.095	A
4 - A5 Watling Street (North-West)	837	209	104	1671	0.501	833	996	0.0	1.0	4.285	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 - Nuneaton Lane	170	42	1048	1073	0.158	170	74	0.1	0.2	3.982	A
2 - A5 Watling Street (South-East)	818	205	462	1511	0.541	817	755	0.8	1.2	5.172	A
3 - Higham Lane	426	107	890	1415	0.301	426	389	0.3	0.4	3.636	A
4 - A5 Watling Street (North-West)	1000	250	124	1659	0.602	998	1192	1.0	1.5	5.424	A

09:15 - 09:30

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 - Nuneaton Lane	208	52	1281	923	0.225	208	90	0.2	0.3	5.030	A
2 - A5 Watling Street (South-East)	1002	250	565	1452	0.690	998	923	1.2	2.2	7.858	A
3 - Higham Lane	522	130	1088	1276	0.409	521	475	0.4	0.7	4.758	A
4 - A5 Watling Street (North-West)	1224	306	152	1644	0.745	1219	1457	1.5	2.8	8.368	A

09:30 - 09:45

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 - Nuneaton Lane	208	52	1286	920	0.226	208	90	0.3	0.3	5.058	A
2 - A5 Watling Street (South-East)	1002	250	567	1451	0.691	1002	927	2.2	2.2	8.009	A
3 - Higham Lane	522	130	1092	1273	0.410	522	477	0.7	0.7	4.789	A
4 - A5 Watling Street (North-	1224	306	152	1644	0.74	1224	1462	2.8	2.9	8.56	A

West)					5					8	

09:45 - 10:00

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 - Nuneaton Lane	170	42	1055	1069	0.159	170	74	0.3	0.2	4.010	A
2 - A5 Watling Street (South-East)	818	205	465	1509	0.542	822	761	2.2	1.2	5.269	A
3 - Higham Lane	426	107	896	1411	0.302	427	391	0.7	0.4	3.661	A
4 - A5 Watling Street (North-West)	1000	250	124	1659	0.603	1005	1199	2.9	1.5	5.546	A

10:00 - 10:15

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 - Nuneaton Lane	142	36	881	1181	0.120	142	62	0.2	0.1	3.468	A
2 - A5 Watling Street (South-East)	685	171	389	1553	0.441	687	635	1.2	0.8	4.162	A
3 - Higham Lane	357	89	748	1514	0.236	357	327	0.4	0.3	3.114	A
4 - A5 Watling Street (North-West)	837	209	104	1671	0.501	839	1002	1.5	1.0	4.343	A

Ref Case, PM (16:00 - 17:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A5 Watling Street (North-West) - 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	9.63	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
D4	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 - Nuneaton Lane		ONE HOUR	✓	147	100.000
2 - A5 Watling Street (South-East)		ONE HOUR	✓	885	100.000
3 - Higham Lane		ONE HOUR	✓	481	100.000
4 - A5 Watling Street (North-West)		ONE HOUR	✓	1282	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	20	79	48
	2 - A5 Watling Street (South-East)	22	0	62	801
	3 - Higham Lane	87	70	4	320
	4 - A5 Watling Street (North-West)	51	815	409	7

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	26	1	0
	2 - A5 Watling Street (South-East)	12	0	0	7
	3 - Higham Lane	1	1	0	0
	4 - A5 Watling Street (North-West)	0	8	1	22

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 - Nuneaton Lane	0.20	5.43	0.2	A	135	202
2 - A5 Watling Street (South-East)	0.66	7.13	1.9	A	812	1218
3 - Higham Lane	0.38	4.19	0.6	A	441	662
4 - A5 Watling Street (North-West)	0.85	13.78	5.2	B	1176	1765

Main Results for each time segment

15:45 - 16:00

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 - Nuneaton Lane	111	28	977	1104	0.100	110	120	0.0	0.1	3.621	A
2 - A5 Watling Street (South-East)	666	167	410	1592	0.419	663	678	0.0	0.7	3.865	A
3 - Higham Lane	362	91	658	1601	0.226	361	415	0.0	0.3	2.900	A
4 - A5 Watling Street (North-West)	965	241	137	1707	0.565	960	882	0.0	1.3	4.786	A

16:00 - 16:15

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 - Nuneaton Lane	132	33	1170	987	0.134	132	144	0.1	0.2	4.211	A
2 - A5 Watling Street (South-East)	796	199	491	1545	0.515	794	811	0.7	1.1	4.789	A
3 - Higham Lane	432	108	788	1512	0.286	432	497	0.3	0.4	3.332	A
4 - A5 Watling Street (North-West)	1152	288	164	1691	0.681	1149	1056	1.3	2.1	6.600	A

16:15 - 16:30

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 - Nuneaton Lane	162	40	1425	831	0.195	162	175	0.2	0.2	5.372	A
2 - A5 Watling Street (South-East)	974	244	598	1481	0.658	971	989	1.1	1.9	7.010	A
3 - Higham Lane	530	132	963	1390	0.381	529	606	0.4	0.6	4.173	A
4 - A5 Watling Street (North-West)	1412	353	201	1670	0.845	1400	1291	2.1	5.0	12.804	B

16:30 - 16:45

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 - Nuneaton Lane	162	40	1436	825	0.196	162	176	0.2	0.2	5.428	A
2 - A5 Watling Street (South-East)	974	244	602	1479	0.659	974	996	1.9	1.9	7.131	A
3 - Higham Lane	530	132	967	1388	0.381	530	610	0.6	0.6	4.192	A
4 - A5 Watling Street (North-	1412	353	201	1670	0.84	1411	1295	5.0	5.2	13.78	B

West)					5					1	

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 - Nuneaton Lane	132	33	1185	978	0.135	132	145	0.2	0.2	4.261	A
2 - A5 Watling Street (South-East)	796	199	496	1541	0.516	799	821	1.9	1.1	4.870	A
3 - Higham Lane	432	108	793	1508	0.287	433	502	0.6	0.4	3.352	A
4 - A5 Watling Street (North-West)	1152	288	165	1691	0.682	1165	1061	5.2	2.2	6.990	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 - Nuneaton Lane	111	28	986	1099	0.101	111	121	0.2	0.1	3.644	A
2 - A5 Watling Street (South-East)	666	167	413	1590	0.419	668	684	1.1	0.7	3.910	A
3 - Higham Lane	362	91	662	1598	0.227	363	418	0.4	0.3	2.913	A
4 - A5 Watling Street (North-West)	965	241	138	1707	0.565	969	887	2.2	1.3	4.899	A

Ref Case, PM (17:00 - 18:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A5 Watling Street (North-West) - 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	47.72	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
D5	Ref Case	PM (17:00 - 18:00)	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 - Nuneaton Lane		ONE HOUR	✓	159	100.000
2 - A5 Watling Street (South-East)		ONE HOUR	✓	976	100.000
3 - Higham Lane		ONE HOUR	✓	534	100.000
4 - A5 Watling Street (North-West)		ONE HOUR	✓	1574	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	14	78	67
	2 - A5 Watling Street (South-East)	37	0	86	853
	3 - Higham Lane	116	51	4	363
	4 - A5 Watling Street (North-West)	95	943	529	7

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	29	0	2
	2 - A5 Watling Street (South-East)	11	0	2	7
	3 - Higham Lane	0	2	0	1
	4 - A5 Watling Street (North-West)	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 - Nuneaton Lane	0.24	6.51	0.3	A	146	219
2 - A5 Watling Street (South-East)	0.77	10.91	3.2	B	896	1343
3 - Higham Lane	0.45	4.94	0.8	A	490	735
4 - A5 Watling Street (North-West)	1.03	89.38	46.0	F	1444	2166

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 - Nuneaton Lane	120	30	1147	1017	0.118	119	186	0.0	0.1	4.008	A
2 - A5 Watling Street (South-East)	735	184	512	1531	0.480	731	754	0.0	0.9	4.479	A
3 - Higham Lane	402	101	722	1549	0.260	401	521	0.0	0.3	3.130	A
4 - A5 Watling Street (North-West)	1185	296	156	1722	0.688	1176	967	0.0	2.2	6.499	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 - Nuneaton Lane	143	36	1370	882	0.162	143	222	0.1	0.2	4.870	A
2 - A5 Watling Street (South-East)	877	219	612	1473	0.596	875	900	0.9	1.5	6.005	A
3 - Higham Lane	480	120	865	1451	0.331	479	623	0.3	0.5	3.702	A
4 - A5 Watling Street (North-West)	1415	354	187	1704	0.830	1405	1157	2.2	4.6	11.690	B

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 - Nuneaton Lane	175	44	1597	745	0.235	175	267	0.2	0.3	6.311	A
2 - A5 Watling Street (South-East)	1075	269	721	1409	0.763	1068	1051	1.5	3.1	10.365	B
3 - Higham Lane	588	147	1055	1321	0.445	587	734	0.5	0.8	4.895	A
4 - A5 Watling Street (North-West)	1733	433	228	1679	1.032	1636	1413	4.6	28.9	46.918	E

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 - Nuneaton Lane	175	44	1625	728	0.240	175	269	0.3	0.3	6.509	A
2 - A5 Watling Street (South-East)	1075	269	731	1403	0.766	1074	1069	3.1	3.2	10.912	B
3 - Higham Lane	588	147	1061	1317	0.446	588	744	0.8	0.8	4.937	A
4 - A5 Watling Street (North-	1733	433	229	1679	1.03	1664	1420	28.9	46.0	89.37	F

West)					2					5	

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 - Nuneaton Lane	143	36	1531	784	0.182	143	233	0.3	0.2	5.620	A
2 - A5 Watling Street (South-East)	877	219	671	1438	0.610	884	1003	3.2	1.6	6.569	A
3 - Higham Lane	480	120	873	1445	0.332	481	682	0.8	0.5	3.737	A
4 - A5 Watling Street (North-West)	1415	354	188	1703	0.831	1577	1167	46.0	5.6	44.567	E

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 - Nuneaton Lane	120	30	1168	1004	0.119	120	188	0.2	0.1	4.075	A
2 - A5 Watling Street (South-East)	735	184	521	1526	0.481	737	767	1.6	0.9	4.577	A
3 - Higham Lane	402	101	728	1545	0.260	403	530	0.5	0.4	3.152	A
4 - A5 Watling Street (North-West)	1185	296	157	1722	0.688	1198	974	5.6	2.3	7.051	A

Ref Case, PM (18:00 - 19:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A5 Watling Street (North-West) - 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	13.58	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
D6	Ref Case	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	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 - Nuneaton Lane		ONE HOUR	✓	118	100.000
2 - A5 Watling Street (South-East)		ONE HOUR	✓	909	100.000
3 - Higham Lane		ONE HOUR	✓	492	100.000
4 - A5 Watling Street (North-West)		ONE HOUR	✓	1395	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	14	65	39
	2 - A5 Watling Street (South-East)	30	0	76	803
	3 - Higham Lane	121	46	4	321
	4 - A5 Watling Street (North-West)	73	908	409	5

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	21	0	0
	2 - A5 Watling Street (South-East)	14	0	0	6
	3 - Higham Lane	0	2	0	0
	4 - A5 Watling Street (North-West)	0	5	0	48

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 - Nuneaton Lane	0.16	5.29	0.2	A	108	162
2 - A5 Watling Street (South-East)	0.66	7.06	1.9	A	834	1251
3 - Higham Lane	0.39	4.22	0.6	A	451	677
4 - A5 Watling Street (North-West)	0.91	21.81	8.8	C	1280	1920

Main Results for each time segment

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 - Nuneaton Lane	89	22	1027	1102	0.081	88	168	0.0	0.1	3.553	A
2 - A5 Watling Street (South-East)	684	171	391	1618	0.423	681	725	0.0	0.7	3.833	A
3 - Higham Lane	370	93	657	1606	0.231	369	415	0.0	0.3	2.907	A
4 - A5 Watling Street (North-West)	1050	263	151	1734	0.606	1044	876	0.0	1.5	5.182	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 - Nuneaton Lane	106	27	1229	979	0.108	106	201	0.1	0.1	4.122	A
2 - A5 Watling Street (South-East)	817	204	468	1573	0.520	816	867	0.7	1.1	4.747	A
3 - Higham Lane	442	111	787	1517	0.291	442	497	0.3	0.4	3.345	A
4 - A5 Watling Street (North-West)	1254	314	180	1716	0.731	1250	1048	1.5	2.6	7.646	A

18:15 - 18:30

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 - Nuneaton Lane	130	32	1490	821	0.158	130	245	0.1	0.2	5.206	A
2 - A5 Watling Street (South-East)	1001	250	568	1514	0.661	997	1052	1.1	1.9	6.928	A
3 - Higham Lane	542	135	962	1397	0.388	541	603	0.4	0.6	4.200	A
4 - A5 Watling Street (North-West)	1536	384	221	1692	0.908	1514	1282	2.6	8.1	18.387	C

18:30 - 18:45

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 - Nuneaton Lane	130	32	1508	810	0.160	130	246	0.2	0.2	5.289	A
2 - A5 Watling Street (South-East)	1001	250	574	1510	0.663	1001	1064	1.9	1.9	7.060	A
3 - Higham Lane	542	135	965	1395	0.388	542	609	0.6	0.6	4.219	A
4 - A5 Watling Street (North-	1536	384	221	1691	0.90	1533	1286	8.1	8.8	21.80	C

West)					8					9	

18:45 - 19:00

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 - Nuneaton Lane	106	27	1256	963	0.110	106	203	0.2	0.1	4.203	A
2 - A5 Watling Street (South-East)	817	204	477	1567	0.521	821	886	1.9	1.1	4.840	A
3 - Higham Lane	442	111	792	1514	0.292	443	505	0.6	0.4	3.363	A
4 - A5 Watling Street (North-West)	1254	314	181	1715	0.731	1278	1054	8.8	2.8	8.651	A

19:00 - 19:15

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 - Nuneaton Lane	89	22	1038	1095	0.081	89	169	0.1	0.1	3.579	A
2 - A5 Watling Street (South-East)	684	171	395	1616	0.424	686	732	1.1	0.7	3.878	A
3 - Higham Lane	370	93	662	1604	0.231	371	419	0.4	0.3	2.920	A
4 - A5 Watling Street (North-West)	1050	263	152	1733	0.606	1055	881	2.8	1.6	5.347	A

Ref Case + Development, AM (07:00 - 08:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A5 Watling Street (North-West) - 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	10.19	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
D7	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 - Nuneaton Lane		ONE HOUR	✓	332	100.000
2 - A5 Watling Street (South-East)		ONE HOUR	✓	1057	100.000
3 - Higham Lane		ONE HOUR	✓	515	100.000
4 - A5 Watling Street (North-West)		ONE HOUR	✓	1174	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	18	126	188
	2 - A5 Watling Street (South-East)	7	0	42	1008
	3 - Higham Lane	28	73	8	406
	4 - A5 Watling Street (North-West)	24	835	305	10

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	6	1	0
	2 - A5 Watling Street (South-East)	0	0	2	7
	3 - Higham Lane	1	0	0	0
	4 - A5 Watling Street (North-West)	0	10	2	11

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 - Nuneaton Lane	0.41	6.89	0.7	A	305	457
2 - A5 Watling Street (South-East)	0.82	14.00	4.4	B	970	1455
3 - Higham Lane	0.50	6.22	1.0	A	473	709
4 - A5 Watling Street (North-West)	0.77	9.28	3.3	A	1077	1616

Main Results for each time segment

06:45 - 07:00

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 - Nuneaton Lane	250	62	922	1165	0.215	249	44	0.0	0.3	3.924	A
2 - A5 Watling Street (South-East)	796	199	477	1550	0.513	792	694	0.0	1.0	4.721	A
3 - Higham Lane	388	97	909	1438	0.270	386	360	0.0	0.4	3.419	A
4 - A5 Watling Street (North-West)	884	221	87	1702	0.519	880	1208	0.0	1.1	4.354	A

07:00 - 07:15

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 - Nuneaton Lane	298	75	1104	1048	0.285	298	53	0.3	0.4	4.793	A
2 - A5 Watling Street (South-East)	950	238	572	1495	0.636	948	831	1.0	1.7	6.547	A
3 - Higham Lane	463	116	1088	1315	0.352	462	432	0.4	0.5	4.217	A
4 - A5 Watling Street (North-West)	1055	264	104	1693	0.624	1053	1446	1.1	1.6	5.609	A

07:15 - 07:30

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 - Nuneaton Lane	366	91	1349	892	0.410	364	65	0.4	0.7	6.806	A
2 - A5 Watling Street (South-East)	1164	291	699	1420	0.820	1154	1015	1.7	4.2	13.058	B
3 - Higham Lane	567	142	1325	1152	0.492	565	527	0.5	1.0	6.118	A
4 - A5 Watling Street (North-West)	1293	323	127	1680	0.770	1286	1763	1.6	3.2	9.010	A

07:30 - 07:45

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 - Nuneaton Lane	366	91	1355	888	0.412	366	65	0.7	0.7	6.887	A
2 - A5 Watling Street (South-East)	1164	291	701	1418	0.821	1163	1019	4.2	4.4	14.004	B

3 - Higham Lane	567	142	1335	1145	0.495	567	529	1.0	1.0	6.222	A
4 - A5 Watling Street (North-West)	1293	323	128	1679	0.770	1292	1774	3.2	3.3	9.284	A

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 - Nuneaton Lane	298	75	1113	1043	0.286	300	53	0.7	0.4	4.852	A
2 - A5 Watling Street (South-East)	950	238	575	1492	0.637	961	837	4.4	1.8	6.899	A
3 - Higham Lane	463	116	1101	1306	0.355	465	435	1.0	0.6	4.288	A
4 - A5 Watling Street (North-West)	1055	264	105	1692	0.624	1062	1461	3.3	1.7	5.767	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 - Nuneaton Lane	250	62	929	1160	0.215	250	45	0.4	0.3	3.958	A
2 - A5 Watling Street (South-East)	796	199	481	1548	0.514	799	699	1.8	1.1	4.823	A
3 - Higham Lane	388	97	916	1433	0.271	388	363	0.6	0.4	3.452	A
4 - A5 Watling Street (North-West)	884	221	88	1702	0.519	886	1217	1.7	1.1	4.425	A

Ref Case + Development, AM (08:00 - 09:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A5 Watling Street (North-West) - 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	30.05	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
D8	Ref Case + Development	AM (08:00 - 09:00)	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 - Nuneaton Lane		ONE HOUR	✓	349	100.000
2 - A5 Watling Street (South-East)		ONE HOUR	✓	1250	100.000
3 - Higham Lane		ONE HOUR	✓	686	100.000
4 - A5 Watling Street (North-West)		ONE HOUR	✓	1153	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	21	116	212
	2 - A5 Watling Street (South-East)	10	0	63	1177
	3 - Higham Lane	55	78	8	545
	4 - A5 Watling Street (North-West)	16	822	310	5

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	0	1	0
	2 - A5 Watling Street (South-East)	14	0	0	9
	3 - Higham Lane	0	1	0	0
	4 - A5 Watling Street (North-West)	0	13	2	19

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 - Nuneaton Lane	0.44	7.25	0.8	A	320	480
2 - A5 Watling Street (South-East)	0.99	62.39	23.6	F	1147	1721
3 - Higham Lane	0.76	14.57	3.0	B	629	944

4 - A5 Watling Street (North-West)	0.78	10.11	3.5	B	1058	1587

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 - Nuneaton Lane	263	66	916	1162	0.226	262	61	0.0	0.3	3.993	A
2 - A5 Watling Street (South-East)	941	235	488	1518	0.620	935	690	0.0	1.6	6.107	A
3 - Higham Lane	516	129	1050	1328	0.389	514	372	0.0	0.6	4.411	A
4 - A5 Watling Street (North-West)	868	217	113	1654	0.525	864	1451	0.0	1.1	4.534	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 - Nuneaton Lane	314	78	1097	1044	0.301	313	73	0.3	0.4	4.924	A
2 - A5 Watling Street (South-East)	1124	281	584	1462	0.768	1117	826	1.6	3.2	10.251	B
3 - Higham Lane	617	154	1256	1184	0.521	615	446	0.6	1.1	6.304	A
4 - A5 Watling Street (North-West)	1037	259	135	1641	0.632	1034	1735	1.1	1.7	5.906	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 - Nuneaton Lane	384	96	1339	886	0.434	383	88	0.4	0.8	7.142	A
2 - A5 Watling Street (South-East)	1376	344	714	1388	0.992	1321	1008	3.2	17.1	37.940	E
3 - Higham Lane	755	189	1492	1020	0.741	749	542	1.1	2.7	12.976	B
4 - A5 Watling Street (North-West)	1269	317	164	1625	0.781	1263	2077	1.7	3.4	9.750	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 - Nuneaton Lane	384	96	1346	881	0.436	384	89	0.8	0.8	7.246	A
2 - A5 Watling Street (South-	1376	344	717	1386	0.99	1350	1014	17.1	23.6	62.38	F

East)					3					8	
3 - Higham Lane	755	189	1521	1000	0.756	754	546	2.7	3.0	14.567	B
4 - A5 Watling Street (North-West)	1269	317	166	1624	0.782	1269	2109	3.4	3.5	10.114	B

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 - Nuneaton Lane	314	78	1107	1037	0.302	315	74	0.8	0.4	4.993	A
2 - A5 Watling Street (South-East)	1124	281	588	1460	0.770	1204	834	23.6	3.5	18.158	C
3 - Higham Lane	617	154	1339	1126	0.548	624	453	3.0	1.2	7.268	A
4 - A5 Watling Street (North-West)	1037	259	138	1640	0.632	1043	1825	3.5	1.7	6.107	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 - Nuneaton Lane	263	66	924	1157	0.227	263	61	0.4	0.3	4.030	A
2 - A5 Watling Street (South-East)	941	235	491	1516	0.621	949	695	3.5	1.7	6.428	A
3 - Higham Lane	516	129	1065	1318	0.392	519	375	1.2	0.6	4.519	A
4 - A5 Watling Street (North-West)	868	217	114	1653	0.525	871	1469	1.7	1.1	4.617	A

Ref Case + Development, AM (09:00 - 10:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A5 Watling Street (North-West) - 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	9.24	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	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 - Nuneaton Lane		ONE HOUR	✓	189	100.000
2 - A5 Watling Street (South-East)		ONE HOUR	✓	973	100.000
3 - Higham Lane		ONE HOUR	✓	494	100.000
4 - A5 Watling Street (North-West)		ONE HOUR	✓	1167	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	7	54	128
	2 - A5 Watling Street (South-East)	24	0	53	896
	3 - Higham Lane	48	61	5	380
	4 - A5 Watling Street (North-West)	10	811	339	7

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	17	1	0
	2 - A5 Watling Street (South-East)	0	0	0	13
	3 - Higham Lane	1	2	0	1
	4 - A5 Watling Street (North-West)	0	13	2	29

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 - Nuneaton Lane	0.24	5.39	0.3	A	173	260
2 - A5 Watling Street (South-East)	0.76	10.44	3.0	B	893	1339
3 - Higham Lane	0.45	5.39	0.8	A	453	680

4 - A5 Watling Street (North-West)	0.79	10.29	3.6	B	1071	1606

Main Results for each time segment

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 - Nuneaton Lane	142	36	916	1155	0.123	142	61	0.0	0.1	3.550	A
2 - A5 Watling Street (South-East)	733	183	399	1521	0.482	729	658	0.0	0.9	4.526	A
3 - Higham Lane	372	93	790	1476	0.252	371	338	0.0	0.3	3.252	A
4 - A5 Watling Street (North-West)	879	220	103	1661	0.529	874	1057	0.0	1.1	4.553	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 - Nuneaton Lane	170	42	1097	1037	0.164	170	74	0.1	0.2	4.147	A
2 - A5 Watling Street (South-East)	875	219	478	1476	0.593	873	788	0.9	1.4	5.944	A
3 - Higham Lane	444	111	946	1365	0.325	444	405	0.3	0.5	3.904	A
4 - A5 Watling Street (North-West)	1049	262	124	1649	0.636	1047	1266	1.1	1.7	5.951	A

09:15 - 09:30

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 - Nuneaton Lane	208	52	1339	880	0.236	208	90	0.2	0.3	5.351	A
2 - A5 Watling Street (South-East)	1071	268	584	1417	0.756	1065	963	1.4	3.0	10.071	B
3 - Higham Lane	544	136	1155	1216	0.447	543	494	0.5	0.8	5.338	A
4 - A5 Watling Street (North-West)	1285	321	151	1634	0.786	1278	1547	1.7	3.5	9.913	A

09:30 - 09:45

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 - Nuneaton Lane	208	52	1346	875	0.238	208	90	0.3	0.3	5.394	A
2 - A5 Watling Street (South-	1071	268	587	1415	0.75	1071	968	3.0	3.0	10.43	B

East)					7					8	
3 - Higham Lane	544	136	1161	1212	0.449	544	496	0.8	0.8	5.390	A
4 - A5 Watling Street (North-West)	1285	321	152	1634	0.787	1285	1553	3.5	3.6	10.287	B

09:45 - 10:00

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 - Nuneaton Lane	170	42	1107	1031	0.165	170	74	0.3	0.2	4.186	A
2 - A5 Watling Street (South-East)	875	219	482	1474	0.593	881	795	3.0	1.5	6.131	A
3 - Higham Lane	444	111	955	1359	0.327	445	408	0.8	0.5	3.946	A
4 - A5 Watling Street (North-West)	1049	262	125	1649	0.636	1056	1276	3.6	1.8	6.149	A

10:00 - 10:15

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 - Nuneaton Lane	142	36	923	1150	0.124	143	62	0.2	0.1	3.574	A
2 - A5 Watling Street (South-East)	733	183	402	1519	0.482	735	664	1.5	0.9	4.602	A
3 - Higham Lane	372	93	796	1472	0.253	373	340	0.5	0.3	3.278	A
4 - A5 Watling Street (North-West)	879	220	104	1660	0.529	881	1065	1.8	1.1	4.637	A

Ref Case + Development, PM (16:00 - 17:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A5 Watling Street (North-West) - 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	16.94	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
D10	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 - Nuneaton Lane		ONE HOUR	✓	147	100.000
2 - A5 Watling Street (South-East)		ONE HOUR	✓	903	100.000
3 - Higham Lane		ONE HOUR	✓	486	100.000
4 - A5 Watling Street (North-West)		ONE HOUR	✓	1414	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	20	79	48
	2 - A5 Watling Street (South-East)	22	0	62	819
	3 - Higham Lane	87	70	4	325
	4 - A5 Watling Street (North-West)	51	903	453	7

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	26	1	0
	2 - A5 Watling Street (South-East)	12	0	0	7
	3 - Higham Lane	1	1	0	0
	4 - A5 Watling Street (North-West)	0	8	1	22

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 - Nuneaton Lane	0.22	6.23	0.3	A	135	202
2 - A5 Watling Street (South-East)	0.69	7.87	2.1	A	829	1243
3 - Higham Lane	0.39	4.29	0.6	A	446	669

4 - A5 Watling Street (North-West)	0.93	28.03	11.4	D	1298	1946

Main Results for each time segment

15:45 - 16:00

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 - Nuneaton Lane	111	28	1075	1044	0.106	110	120	0.0	0.1	3.853	A
2 - A5 Watling Street (South-East)	680	170	442	1573	0.432	677	743	0.0	0.8	4.004	A
3 - Higham Lane	366	91	672	1592	0.230	365	448	0.0	0.3	2.931	A
4 - A5 Watling Street (North-West)	1065	266	137	1707	0.624	1058	899	0.0	1.6	5.493	A

16:00 - 16:15

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 - Nuneaton Lane	132	33	1287	916	0.144	132	144	0.1	0.2	4.593	A
2 - A5 Watling Street (South-East)	812	203	529	1522	0.534	810	889	0.8	1.1	5.051	A
3 - Higham Lane	437	109	804	1501	0.291	436	536	0.3	0.4	3.381	A
4 - A5 Watling Street (North-West)	1271	318	164	1691	0.752	1266	1076	1.6	2.9	8.364	A

16:15 - 16:30

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 - Nuneaton Lane	162	40	1555	753	0.215	161	175	0.2	0.3	6.084	A
2 - A5 Watling Street (South-East)	994	249	641	1456	0.683	990	1075	1.1	2.1	7.669	A
3 - Higham Lane	535	134	983	1377	0.389	534	649	0.4	0.6	4.266	A
4 - A5 Watling Street (North-West)	1557	389	201	1670	0.932	1528	1316	2.9	10.0	22.045	C

16:30 - 16:45

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 - Nuneaton Lane	162	40	1577	739	0.219	162	176	0.3	0.3	6.235	A
2 - A5 Watling Street (South-	994	249	649	1451	0.68	994	1090	2.1	2.1	7.866	A

East)					5						
3 - Higham Lane	535	134	986	1375	0.389	535	657	0.6	0.6	4.287	A
4 - A5 Watling Street (North-West)	1557	389	201	1669	0.933	1551	1320	10.0	11.4	28.026	D

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 - Nuneaton Lane	132	33	1324	893	0.148	133	145	0.3	0.2	4.737	A
2 - A5 Watling Street (South-East)	812	203	542	1514	0.536	816	914	2.1	1.2	5.185	A
3 - Higham Lane	437	109	809	1497	0.292	438	549	0.6	0.4	3.404	A
4 - A5 Watling Street (North-West)	1271	318	165	1691	0.752	1304	1082	11.4	3.1	10.040	B

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 - Nuneaton Lane	111	28	1088	1037	0.107	111	121	0.2	0.1	3.890	A
2 - A5 Watling Street (South-East)	680	170	447	1570	0.433	681	751	1.2	0.8	4.058	A
3 - Higham Lane	366	91	676	1589	0.230	366	452	0.4	0.3	2.945	A
4 - A5 Watling Street (North-West)	1065	266	138	1707	0.624	1070	905	3.1	1.7	5.708	A

Ref Case + Development, PM (17:00 - 18:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A5 Watling Street (North-West) - 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	86.63	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 segment length (min)	Run automatically
D11	Ref Case + Development	PM (17:00 - 18:00)	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 - Nuneaton Lane		ONE HOUR	✓	159	100.000
2 - A5 Watling Street (South-East)		ONE HOUR	✓	988	100.000
3 - Higham Lane		ONE HOUR	✓	537	100.000
4 - A5 Watling Street (North-West)		ONE HOUR	✓	1675	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	14	78	67
	2 - A5 Watling Street (South-East)	37	0	86	865
	3 - Higham Lane	116	51	4	366
	4 - A5 Watling Street (North-West)	95	1012	561	7

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	29	0	2
	2 - A5 Watling Street (South-East)	11	0	2	7
	3 - Higham Lane	0	2	0	0
	4 - A5 Watling Street (North-West)	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 - Nuneaton Lane	0.24	6.63	0.3	A	146	219
2 - A5 Watling Street (South-East)	0.78	11.40	3.4	B	907	1360
3 - Higham Lane	0.45	4.96	0.8	A	493	739

4 - A5 Watling Street (North-West)	1.10	164.97	94.8	F	1537	2306

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 - Nuneaton Lane	120	30	1221	972	0.123	119	186	0.0	0.1	4.220	A
2 - A5 Watling Street (South-East)	744	186	536	1517	0.490	740	804	0.0	1.0	4.609	A
3 - Higham Lane	404	101	731	1553	0.260	403	545	0.0	0.4	3.124	A
4 - A5 Watling Street (North-West)	1261	315	156	1722	0.732	1250	978	0.0	2.7	7.480	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 - Nuneaton Lane	143	36	1455	830	0.172	143	222	0.1	0.2	5.231	A
2 - A5 Watling Street (South-East)	888	222	639	1457	0.610	886	959	1.0	1.5	6.277	A
3 - Higham Lane	483	121	875	1454	0.332	482	650	0.4	0.5	3.702	A
4 - A5 Watling Street (North-West)	1506	376	187	1703	0.884	1490	1171	2.7	6.6	15.778	C

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 - Nuneaton Lane	175	44	1627	727	0.241	175	262	0.2	0.3	6.511	A
2 - A5 Watling Street (South-East)	1088	272	727	1405	0.774	1081	1075	1.5	3.3	10.865	B
3 - Higham Lane	591	148	1067	1321	0.448	590	740	0.5	0.8	4.915	A
4 - A5 Watling Street (North-West)	1844	461	228	1679	1.099	1660	1429	6.6	52.6	73.817	F

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 - Nuneaton Lane	175	44	1641	718	0.244	175	263	0.3	0.3	6.629	A
2 - A5 Watling Street (South-	1088	272	732	1402	0.77	1087	1084	3.3	3.4	11.398	B

East)					6						
3 - Higham Lane	591	148	1073	1317	0.449	591	746	0.8	0.8	4.959	A
4 - A5 Watling Street (North-West)	1844	461	229	1678	1.099	1675	1436	52.6	94.8	164.974	F

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 - Nuneaton Lane	143	36	1639	719	0.199	143	234	0.3	0.3	6.257	A
2 - A5 Watling Street (South-East)	888	222	706	1418	0.626	895	1077	3.4	1.7	6.969	A
3 - Higham Lane	483	121	884	1448	0.333	484	716	0.8	0.5	3.742	A
4 - A5 Watling Street (North-West)	1506	376	188	1703	0.884	1685	1181	94.8	50.0	156.404	F

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 - Nuneaton Lane	120	30	1409	858	0.139	120	198	0.3	0.2	4.880	A
2 - A5 Watling Street (South-East)	744	186	604	1477	0.503	747	925	1.7	1.0	4.943	A
3 - Higham Lane	404	101	738	1549	0.261	405	612	0.5	0.4	3.151	A
4 - A5 Watling Street (North-West)	1261	315	157	1721	0.733	1449	986	50.0	2.9	24.572	C

Ref Case + Development, PM (18:00 - 19:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A5 Watling Street (North-West) - 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	22.82	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	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	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 - Nuneaton Lane		ONE HOUR	✓	118	100.000
2 - A5 Watling Street (South-East)		ONE HOUR	✓	943	100.000
3 - Higham Lane		ONE HOUR	✓	503	100.000
4 - A5 Watling Street (North-West)		ONE HOUR	✓	1482	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	14	65	39
	2 - A5 Watling Street (South-East)	30	0	76	837
	3 - Higham Lane	121	46	4	332
	4 - A5 Watling Street (North-West)	73	969	435	5

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Nuneaton Lane	2 - A5 Watling Street (South-East)	3 - Higham Lane	4 - A5 Watling Street (North-West)
From	1 - Nuneaton Lane	0	21	0	0
	2 - A5 Watling Street (South-East)	14	0	0	7
	3 - Higham Lane	0	2	0	0
	4 - A5 Watling Street (North-West)	0	5	0	48

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 - Nuneaton Lane	0.17	5.73	0.2	A	108	162
2 - A5 Watling Street (South-East)	0.70	8.09	2.3	A	865	1298
3 - Higham Lane	0.41	4.45	0.7	A	462	692

4 - A5 Watling Street (North-West)	0.96	39.88	17.1	E	1360	2040

Main Results for each time segment

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 - Nuneaton Lane	89	22	1092	1063	0.084	88	168	0.0	0.1	3.695	A
2 - A5 Watling Street (South-East)	710	177	410	1593	0.446	707	770	0.0	0.8	4.046	A
3 - Higham Lane	379	95	683	1585	0.239	377	434	0.0	0.3	2.978	A
4 - A5 Watling Street (North-West)	1116	279	151	1734	0.644	1109	909	0.0	1.8	5.699	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 - Nuneaton Lane	106	27	1306	933	0.114	106	201	0.1	0.1	4.353	A
2 - A5 Watling Street (South-East)	848	212	491	1546	0.548	846	921	0.8	1.2	5.131	A
3 - Higham Lane	452	113	817	1492	0.303	452	519	0.3	0.4	3.459	A
4 - A5 Watling Street (North-West)	1332	333	180	1716	0.777	1326	1089	1.8	3.3	9.092	A

18:15 - 18:30

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 - Nuneaton Lane	130	32	1566	775	0.168	130	244	0.1	0.2	5.574	A
2 - A5 Watling Street (South-East)	1038	260	591	1488	0.698	1034	1105	1.2	2.2	7.860	A
3 - Higham Lane	554	138	999	1366	0.405	553	626	0.4	0.7	4.421	A
4 - A5 Watling Street (North-West)	1632	408	221	1692	0.965	1589	1331	3.3	13.9	27.766	D

18:30 - 18:45

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 - Nuneaton Lane	130	32	1594	758	0.171	130	246	0.2	0.2	5.730	A
2 - A5 Watling Street (South-	1038	260	600	1483	0.70	1038	1125	2.2	2.3	8.089	A

East)					0						
3 - Higham Lane	554	138	1003	1363	0.406	554	635	0.7	0.7	4.446	A
4 - A5 Watling Street (North-West)	1632	408	221	1691	0.965	1619	1335	13.9	17.1	39.878	E

18:45 - 19:00

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 - Nuneaton Lane	106	27	1363	898	0.118	106	204	0.2	0.1	4.547	A
2 - A5 Watling Street (South-East)	848	212	509	1536	0.552	852	960	2.3	1.2	5.299	A
3 - Higham Lane	452	113	823	1488	0.304	453	538	0.7	0.4	3.484	A
4 - A5 Watling Street (North-West)	1332	333	181	1715	0.777	1386	1095	17.1	3.7	12.588	B

19:00 - 19:15

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 - Nuneaton Lane	89	22	1105	1054	0.084	89	169	0.1	0.1	3.729	A
2 - A5 Watling Street (South-East)	710	177	415	1590	0.446	712	779	1.2	0.8	4.106	A
3 - Higham Lane	379	95	688	1582	0.239	379	439	0.4	0.3	2.996	A
4 - A5 Watling Street (North-West)	1116	279	152	1733	0.644	1123	915	3.7	1.8	5.970	A

APPENDIX 11

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: 17059 - Redgate Roundabout.j9
Path: P:\17 jobs\059 MIRA - Southern Manufacturing Sector\Technical Assessments\Modelling - July 2022
Report generation date: 14/07/2022 15:34:46

»Ref Case, AM (07:00 - 08:00)
»Ref Case, AM (08:00 - 09:00)
»Ref Case, AM (09:00 - 10:00)
»Ref Case, PM (16:00 - 17:00)
»Ref Case, PM (17:00 - 18:00)
»Ref Case, PM (18:00 - 19:00)
»Ref Case + Development, AM (07:00 - 08:00)
»Ref Case + Development, AM (08:00 - 09:00)
»Ref Case + Development, AM (09:00 - 10:00)
»Ref Case + Development, PM (16:00 - 17:00)
»Ref Case + Development, PM (17:00 - 18:00)
»Ref Case + Development, PM (18:00 - 19:00)

Summary of junction performance

	AM (07:00 - 08:00)					AM (08:00 - 09:00)					AM (09:00 - 10:00)					PM (16:00 - 17:00)					PM (17:00 - 18:00)					PM (18:00 - 19:00)				
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
Ref Case																														
1 - A5 (East)	1.7	5.54	0.63	A	32.84	2.6	7.22	0.72	A	11.26	1.6	5.21	0.61	A	7.95	1.9	5.99	0.66	A	7.24	4.0	10.46	0.80	B	13.47	4.1	10.23	0.81	B	9.24
2 - A444 Weddington Lane	0.6	7.67	0.38	A		2.1	17.63	0.68	C		0.7	8.06	0.41	A		0.7	8.66	0.42	A		1.5	15.59	0.61	C		1.6	17.15	0.62	C	
3 - A5 (West)	1.1	3.46	0.52	A		1.4	4.27	0.59	A		1.0	3.37	0.50	A		1.2	3.74	0.55	A		2.1	5.40	0.68	A		1.2	4.02	0.54	A	
4 - A444 Atherstone Road	26.4	158.93	1.06	F		4.0	41.02	0.82	E		3.0	26.62	0.76	D		2.1	21.57	0.69	C		5.2	53.98	0.86	F		1.2	13.63	0.56	B	
Ref Case + Development																														
1 - A5 (East)	2.6	7.45	0.73	A	93.76	3.6	9.55	0.79	A	47.44	2.2	6.56	0.69	A	21.77	4.5	11.46	0.82	B	10.92	10.0	23.91	0.92	C	23.00	9.3	21.25	0.91	C	16.81
2 - A444 Weddington Lane	0.8	9.86	0.44	A		3.2	27.19	0.77	D		0.9	9.92	0.46	A		1.2	14.83	0.55	B		3.0	31.69	0.76	D		3.1	34.85	0.77	D	
3 - A5 (West)	1.6	4.35	0.61	A		2.4	6.20	0.71	A		1.6	4.51	0.61	A		1.4	4.14	0.58	A		2.3	5.92	0.70	A		1.6	4.78	0.61	A	
4 - A444 Atherstone Road	88.4	528.65	1.39	F		43.0	355.28	1.24	F		15.2	124.52	1.01	F		2.8	28.57	0.75	D		7.5	77.61	0.92	F		1.8	19.10	0.65	C	

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. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	03/03/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mtp\MTPGeneral
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	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D2	Ref Case	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D3	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D4	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D5	Ref Case	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D6	Ref Case	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	15	✓
D7	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D8	Ref Case + Development	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D9	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D10	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D11	Ref Case + Development	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D12	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Ref Case, AM (07:00 - 08:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - 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	32.84	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A5 (East)	
2	A444 Weddington Lane	
3	A5 (West)	
4	A444 Atherstone Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A5 (East)	5.30	7.45	90.4	20.0	33.0	49.0	
2 - A444 Weddington Lane	3.50	6.30	18.6	10.0	33.0	48.0	
3 - A5 (West)	8.30	8.30	0.0	20.0	30.0	23.0	
4 - A444 Atherstone Road	3.25	4.90	12.0	10.5	30.0	49.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A5 (East)	0.709	2065
2 - A444 Weddington Lane	0.570	1451
3 - A5 (West)	0.845	2576
4 - A444 Atherstone Road	0.518	1185

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	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 - A5 (East)		ONE HOUR	✓	1010	100.000
2 - A444 Weddington Lane		ONE HOUR	✓	257	100.000
3 - A5 (West)		ONE HOUR	✓	1004	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	516	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	**2 - A444 Weddington Lane**	**3 - A5 (West)**	**4 - A444 Atherstone Road**
From	**1 - A5 (East)**	18	1	835	156
	2 - A444 Weddington Lane	35	0	125	97
	3 - A5 (West)	880	115	0	9
	4 - A444 Atherstone Road	355	113	48	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	**2 - A444 Weddington Lane**	**3 - A5 (West)**	**4 - A444 Atherstone Road**
From	**1 - A5 (East)**	4	100	5	7
	2 - A444 Weddington Lane	3	0	0	0
	3 - A5 (West)	7	0	0	12
	4 - A444 Atherstone Road	3	0	8	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 - A5 (East)	0.63	5.54	1.7	A	927	1390
2 - A444 Weddington Lane	0.38	7.67	0.6	A	236	354
3 - A5 (West)	0.52	3.46	1.1	A	921	1382
4 - A444 Atherstone Road	1.06	158.93	26.4	F	473	710

Main Results for each time segment

06:45 - 07:00

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 - A5 (East)	760	190	206	1819	0.418	758	965	0.0	0.7	3.382	A
2 - A444 Weddington Lane	193	48	793	972	0.199	192	171	0.0	0.2	4.614	A
3 - A5 (West)	756	189	229	2235	0.338	754	756	0.0	0.5	2.428	A
4 - A444 Atherstone Road	388	97	787	732	0.531	384	196	0.0	1.1	10.220	B

07:00 - 07:15

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 - A5 (East)	908	227	246	1792	0.507	907	1154	0.7	1.0	4.061	A
2 - A444 Weddington Lane	231	58	949	878	0.263	231	205	0.2	0.4	5.553	A
3 - A5 (West)	903	226	275	2197	0.411	902	904	0.5	0.7	2.777	A
4 - A444 Atherstone Road	464	116	941	649	0.714	459	235	1.1	2.3	18.428	C

07:15 - 07:30

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 - A5 (East)	1112	278	286	1765	0.630	1109	1378	1.0	1.7	5.470	A
2 - A444 Weddington Lane	283	71	1156	755	0.375	282	240	0.4	0.6	7.603	A
3 - A5 (West)	1105	276	336	2146	0.515	1104	1102	0.7	1.1	3.449	A
4 - A444 Atherstone Road	568	142	1152	537	1.059	512	288	2.3	16.4	84.502	F

07:30 - 07:45

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 - A5 (East)	1112	278	291	1761	0.631	1112	1390	1.7	1.7	5.540	A
2 - A444 Weddington Lane	283	71	1160	752	0.376	283	243	0.6	0.6	7.672	A
3 - A5 (West)	1105	276	337	2146	0.515	1105	1106	1.1	1.1	3.459	A
4 - A444 Atherstone Road	568	142	1154	536	1.060	528	288	16.4	26.4	158.934	F

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 - A5 (East)	908	227	278	1770	0.513	911	1224	1.7	1.1	4.198	A
2 - A444 Weddington Lane	231	58	962	871	0.265	232	227	0.6	0.4	5.647	A
3 - A5 (West)	903	226	276	2196	0.411	904	917	1.1	0.7	2.788	A
4 - A444 Atherstone Road	464	116	944	648	0.716	558	236	26.4	2.8	63.517	F

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 - A5 (East)	760	190	210	1817	0.419	762	975	1.1	0.7	3.418	A
2 - A444 Weddington Lane	193	48	798	969	0.200	194	174	0.4	0.3	4.649	A
3 - A5 (West)	756	189	231	2233	0.338	757	761	0.7	0.5	2.440	A
4 - A444 Atherstone Road	388	97	790	730	0.532	395	198	2.8	1.2	10.940	B

Ref Case, AM (08:00 - 09:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - 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	11.26	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
D2	Ref Case	AM (08:00 - 09:00)	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 - A5 (East)		ONE HOUR	✓	1178	100.000
2 - A444 Weddington Lane		ONE HOUR	✓	400	100.000
3 - A5 (West)		ONE HOUR	✓	1080	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	338	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	25	2	997	154
	2 - A444 Weddington Lane	69	0	180	151
	3 - A5 (West)	967	91	0	22
	4 - A444 Atherstone Road	247	64	27	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	6	100	6	13
	2 - A444 Weddington Lane	1	0	0	0
	3 - A5 (West)	8	0	0	15
	4 - A444 Atherstone Road	7	0	10	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 - A5 (East)	0.72	7.22	2.6	A	1081	1621
2 - A444 Weddington Lane	0.68	17.63	2.1	C	367	551
3 - A5 (West)	0.59	4.27	1.4	A	991	1487
4 - A444 Atherstone Road	0.82	41.02	4.0	E	310	465

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 - A5 (East)	887	222	136	1838	0.483	883	980	0.0	0.9	3.758	A
2 - A444 Weddington Lane	301	75	902	900	0.334	299	118	0.0	0.5	5.968	A
3 - A5 (West)	813	203	299	2149	0.378	811	902	0.0	0.6	2.685	A
4 - A444 Atherstone Road	254	64	864	667	0.382	252	245	0.0	0.6	8.634	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 - A5 (East)	1059	265	163	1820	0.582	1057	1173	0.9	1.4	4.710	A
2 - A444 Weddington Lane	360	90	1080	792	0.454	358	141	0.5	0.8	8.269	A
3 - A5 (West)	971	243	358	2100	0.462	970	1080	0.6	0.9	3.182	A
4 - A444 Atherstone Road	304	76	1034	578	0.526	302	293	0.6	1.1	12.965	B

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 - A5 (East)	1297	324	197	1796	0.722	1292	1430	1.4	2.5	7.077	A
2 - A444 Weddington Lane	440	110	1319	647	0.681	436	171	0.8	2.0	16.690	C
3 - A5 (West)	1189	297	436	2035	0.584	1187	1319	0.9	1.4	4.234	A
4 - A444 Atherstone Road	372	93	1265	457	0.815	362	358	1.1	3.6	34.795	D

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 - A5 (East)	1297	324	200	1795	0.723	1297	1439	2.5	2.6	7.223	A
2 - A444 Weddington Lane	440	110	1324	644	0.684	440	173	2.0	2.1	17.631	C
3 - A5 (West)	1189	297	439	2033	0.585	1189	1325	1.4	1.4	4.267	A
4 - A444 Atherstone Road	372	93	1268	455	0.817	371	360	3.6	4.0	41.022	E

08:45 - 09:00

Arm	Total Demand	Junction Arrivals	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue	End queue	Delay (s)	Unsignalised level of service

	(Veh/hr)	(Veh)					(Veh/hr)	(Veh)	(Veh)		
1 - A5 (East)	1059	265	167	1817	0.583	1064	1187	2.6	1.4	4.808	A
2 - A444 Weddington Lane	360	90	1087	788	0.456	365	143	2.1	0.9	8.603	A
3 - A5 (West)	971	243	362	2097	0.463	973	1089	1.4	0.9	3.211	A
4 - A444 Atherstone Road	304	76	1039	576	0.528	315	296	4.0	1.2	14.388	B

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 - A5 (East)	887	222	138	1837	0.483	889	987	1.4	0.9	3.807	A
2 - A444 Weddington Lane	301	75	908	897	0.336	303	119	0.9	0.5	6.072	A
3 - A5 (West)	813	203	301	2147	0.379	814	909	0.9	0.6	2.704	A
4 - A444 Atherstone Road	254	64	869	665	0.383	257	247	1.2	0.6	8.867	A

Ref Case, AM (09:00 - 10:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - 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	7.95	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	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 - A5 (East)		ONE HOUR	✓	983	100.000
2 - A444 Weddington Lane		ONE HOUR	✓	286	100.000
3 - A5 (West)		ONE HOUR	✓	964	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	383	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	12	1	837	133
	2 - A444 Weddington Lane	45	0	120	121
	3 - A5 (West)	845	82	0	37
	4 - A444 Atherstone Road	277	72	34	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	6	100	7	15
	2 - A444 Weddington Lane	2	0	0	0
	3 - A5 (West)	7	0	0	8
	4 - A444 Atherstone Road	8	0	4	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 - A5 (East)	0.61	5.21	1.6	A	902	1353
2 - A444 Weddington Lane	0.41	8.06	0.7	A	262	394
3 - A5 (West)	0.50	3.37	1.0	A	885	1327
4 - A444 Atherstone Road	0.76	26.62	3.0	D	351	527

Main Results for each time segment

08:45 - 09:00

Arm	Total Demand	Junction Arrivals	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue	End queue	Delay (s)	Unsignalised level of service

	(Veh/hr)	(Veh)					(Veh/hr)	(Veh)	(Veh)		
1 - A5 (East)	740	185	141	1817	0.407	737	884	0.0	0.7	3.327	A
2 - A444 Weddington Lane	215	54	762	980	0.220	214	116	0.0	0.3	4.694	A
3 - A5 (West)	726	181	233	2222	0.327	724	743	0.0	0.5	2.399	A
4 - A444 Atherstone Road	288	72	739	734	0.393	286	218	0.0	0.6	7.996	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 - A5 (East)	884	221	168	1798	0.491	883	1058	0.7	1.0	3.926	A
2 - A444 Weddington Lane	257	64	912	888	0.290	257	139	0.3	0.4	5.696	A
3 - A5 (West)	867	217	279	2183	0.397	866	890	0.5	0.7	2.731	A
4 - A444 Atherstone Road	344	86	884	658	0.523	343	261	0.6	1.1	11.339	B

09:15 - 09:30

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 - A5 (East)	1082	271	205	1774	0.610	1080	1292	1.0	1.5	5.166	A
2 - A444 Weddington Lane	315	79	1116	763	0.413	314	169	0.4	0.7	7.987	A
3 - A5 (West)	1061	265	341	2130	0.498	1060	1088	0.7	1.0	3.359	A
4 - A444 Atherstone Road	422	105	1082	556	0.759	415	320	1.1	2.8	24.413	C

09:30 - 09:45

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 - A5 (East)	1082	271	207	1773	0.610	1082	1298	1.5	1.6	5.210	A
2 - A444 Weddington Lane	315	79	1119	762	0.414	315	171	0.7	0.7	8.058	A
3 - A5 (West)	1061	265	342	2130	0.498	1061	1091	1.0	1.0	3.369	A
4 - A444 Atherstone Road	422	105	1083	555	0.760	421	320	2.8	3.0	26.616	D

09:45 - 10:00

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 - A5 (East)	884	221	171	1797	0.49	886	1067	1.6	1.0	3.963	A

					2						
2 - A444 Weddington Lane	257	64	916	885	0.290	258	141	0.7	0.4	5.751	A
3 - A5 (West)	867	217	281	2182	0.397	868	894	1.0	0.7	2.743	A
4 - A444 Atherstone Road	344	86	886	657	0.524	352	262	3.0	1.1	12.057	B

10:00 - 10:15

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 - A5 (East)	740	185	142	1816	0.408	741	890	1.0	0.7	3.355	A
2 - A444 Weddington Lane	215	54	766	977	0.220	216	117	0.4	0.3	4.731	A
3 - A5 (West)	726	181	235	2221	0.327	726	747	0.7	0.5	2.411	A
4 - A444 Atherstone Road	288	72	742	732	0.394	290	219	1.1	0.7	8.183	A

Ref Case, PM (16:00 - 17:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - 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	7.24	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	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 - A5 (East)		ONE HOUR	✓	1061	100.000
2 - A444 Weddington Lane		ONE HOUR	✓	272	100.000
3 - A5 (West)		ONE HOUR	✓	1063	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	334	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	1	1	891	168
	2 - A444 Weddington Lane	6	0	120	146
	3 - A5 (West)	906	131	0	26
	4 - A444 Atherstone Road	212	67	55	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	0	100	5	8
	2 - A444 Weddington Lane	0	0	0	0
	3 - A5 (West)	7	0	0	8
	4 - A444 Atherstone Road	5	0	3	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 - A5 (East)	0.66	5.99	1.9	A	974	1460
2 - A444 Weddington Lane	0.42	8.66	0.7	A	250	374
3 - A5 (West)	0.55	3.74	1.2	A	975	1463
4 - A444 Atherstone Road	0.69	21.57	2.1	C	306	460

Main Results for each time segment

15:45 - 16:00

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 - A5 (East)	799	200	189	1829	0.437	796	844	0.0	0.8	3.475	A
2 - A444 Weddington Lane	205	51	836	950	0.216	204	149	0.0	0.3	4.817	A
3 - A5 (West)	800	200	241	2227	0.359	798	799	0.0	0.6	2.516	A
4 - A444 Atherstone Road	251	63	784	728	0.346	249	255	0.0	0.5	7.500	A

16:00 - 16:15

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 - A5 (East)	954	238	227	1803	0.529	952	1010	0.8	1.1	4.223	A
2 - A444 Weddington Lane	245	61	1001	851	0.287	244	179	0.3	0.4	5.925	A
3 - A5 (West)	956	239	288	2188	0.437	955	957	0.6	0.8	2.919	A
4 - A444 Atherstone Road	300	75	938	646	0.465	299	305	0.5	0.9	10.336	B

16:15 - 16:30

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 - A5 (East)	1168	292	277	1770	0.660	1165	1234	1.1	1.9	5.921	A
2 - A444 Weddington Lane	299	75	1224	717	0.417	298	218	0.4	0.7	8.566	A
3 - A5 (West)	1170	293	352	2134	0.548	1169	1170	0.8	1.2	3.721	A
4 - A444 Atherstone Road	368	92	1148	534	0.688	363	373	0.9	2.1	20.435	C

16:30 - 16:45

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 - A5 (East)	1168	292	278	1769	0.661	1168	1238	1.9	1.9	5.992	A
2 - A444 Weddington Lane	299	75	1228	715	0.419	299	219	0.7	0.7	8.661	A
3 - A5 (West)	1170	293	353	2134	0.549	1170	1174	1.2	1.2	3.736	A
4 - A444 Atherstone Road	368	92	1149	534	0.689	367	374	2.1	2.1	21.568	C

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 - A5 (East)	954	238	229	1802	0.529	957	1016	1.9	1.1	4.279	A

2 - A444 Weddington Lane	245	61	1006	848	0.288	246	180	0.7	0.4	5.993	A
3 - A5 (West)	956	239	290	2186	0.437	957	962	1.2	0.8	2.932	A
4 - A444 Atherstone Road	300	75	940	645	0.466	305	307	2.1	0.9	10.760	B

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 - A5 (East)	799	200	191	1828	0.437	800	849	1.1	0.8	3.507	A
2 - A444 Weddington Lane	205	51	841	947	0.216	205	150	0.4	0.3	4.859	A
3 - A5 (West)	800	200	242	2226	0.360	801	804	0.8	0.6	2.528	A
4 - A444 Atherstone Road	251	63	787	726	0.346	253	256	0.9	0.5	7.635	A

Ref Case, PM (17:00 - 18:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - 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	13.47	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
D5	Ref Case	PM (17:00 - 18:00)	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 - A5 (East)		ONE HOUR	✓	1270	100.000
2 - A444 Weddington Lane		ONE HOUR	✓	324	100.000
3 - A5 (West)		ONE HOUR	✓	1268	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	337	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	**2 - A444 Weddington Lane**	**3 - A5 (West)**	**4 - A444 Atherstone Road**
From	**1 - A5 (East)**	2	1	1017	250
	2 - A444 Weddington Lane	10	0	137	177
	3 - A5 (West)	1062	174	0	32
	4 - A444 Atherstone Road	212	84	41	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	**2 - A444 Weddington Lane**	**3 - A5 (West)**	**4 - A444 Atherstone Road**
From	**1 - A5 (East)**	0	100	5	6
	2 - A444 Weddington Lane	10	0	0	0
	3 - A5 (West)	5	0	0	8
	4 - A444 Atherstone Road	4	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 - A5 (East)	0.80	10.46	4.0	B	1165	1748
2 - A444 Weddington Lane	0.61	15.59	1.5	C	297	446
3 - A5 (West)	0.68	5.40	2.1	A	1164	1745
4 - A444 Atherstone Road	0.86	53.98	5.2	F	309	464

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 - A5 (East)	956	239	224	1811	0.528	952	964	0.0	1.1	4.166	A
2 - A444 Weddington Lane	244	61	982	861	0.283	242	194	0.0	0.4	5.802	A
3 - A5 (West)	955	239	329	2192	0.436	952	895	0.0	0.8	2.895	A
4 - A444 Atherstone Road	254	63	937	660	0.384	251	344	0.0	0.6	8.747	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 - A5 (East)	1142	285	268	1781	0.641	1139	1154	1.1	1.8	5.582	A
2 - A444 Weddington Lane	291	73	1175	746	0.390	290	232	0.4	0.6	7.882	A
3 - A5 (West)	1140	285	394	2138	0.533	1138	1072	0.8	1.1	3.599	A
4 - A444 Atherstone Road	303	76	1120	564	0.538	301	412	0.6	1.1	13.597	B

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 - A5 (East)	1398	350	324	1744	0.802	1390	1404	1.8	3.8	9.946	A
2 - A444 Weddington Lane	357	89	1432	592	0.602	353	281	0.6	1.5	14.866	B
3 - A5 (West)	1396	349	480	2065	0.676	1392	1306	1.1	2.0	5.322	A
4 - A444 Atherstone Road	371	93	1370	432	0.859	358	502	1.1	4.5	42.463	E

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 - A5 (East)	1398	350	328	1741	0.803	1398	1414	3.8	4.0	10.460	B
2 - A444 Weddington Lane	357	89	1442	587	0.608	357	284	1.5	1.5	15.590	C
3 - A5 (West)	1396	349	483	2062	0.677	1396	1315	2.0	2.1	5.399	A
4 - A444 Atherstone Road	371	93	1374	430	0.863	368	505	4.5	5.2	53.976	F

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 - A5 (East)	1142	285	275	1776	0.643	1150	1169	4.0	1.8	5.823	A
2 - A444 Weddington	291	73	1188	738	0.39	295	237	1.5	0.7	8.177	A

Lane					5						
3 - A5 (West)	1140	285	398	2134	0.534	1144	1084	2.1	1.2	3.648	A
4 - A444 Atherstone Road	303	76	1126	561	0.540	319	416	5.2	1.2	15.771	C

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 - A5 (East)	956	239	226	1810	0.528	959	971	1.8	1.1	4.247	A
2 - A444 Weddington Lane	244	61	989	857	0.285	245	196	0.7	0.4	5.895	A
3 - A5 (West)	955	239	332	2190	0.436	956	903	1.2	0.8	2.921	A
4 - A444 Atherstone Road	254	63	941	658	0.386	256	347	1.2	0.6	9.004	A

Ref Case, PM (18:00 - 19:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - 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	9.24	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	Ref Case	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	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 - A5 (East)		ONE HOUR	✓	1349	100.000

2 - A444 Weddington Lane		ONE HOUR	✓	309	100.000
3 - A5 (West)		ONE HOUR	✓	972	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	299	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	**2 - A444 Weddington Lane**	**3 - A5 (West)**	**4 - A444 Atherstone Road**
From	**1 - A5 (East)**	2	1	965	381
	2 - A444 Weddington Lane	14	0	109	186
	3 - A5 (West)	850	107	0	15
	4 - A444 Atherstone Road	207	61	31	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	**2 - A444 Weddington Lane**	**3 - A5 (West)**	**4 - A444 Atherstone Road**
From	**1 - A5 (East)**	0	100	4	4
	2 - A444 Weddington Lane	15	0	0	0
	3 - A5 (West)	3	0	0	1
	4 - A444 Atherstone Road	5	0	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 - A5 (East)	0.81	10.23	4.1	B	1238	1857
2 - A444 Weddington Lane	0.62	17.15	1.6	C	284	425
3 - A5 (West)	0.54	4.02	1.2	A	892	1338
4 - A444 Atherstone Road	0.56	13.63	1.2	B	274	412

Main Results for each time segment

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 - A5 (East)	1016	254	149	1883	0.539	1011	805	0.0	1.2	4.107	A

2 - A444 Weddington Lane	233	58	1033	834	0.279	231	127	0.0	0.4	5.955	A
3 - A5 (West)	732	183	437	2140	0.342	730	828	0.0	0.5	2.550	A
4 - A444 Atherstone Road	225	56	730	768	0.293	223	436	0.0	0.4	6.586	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 - A5 (East)	1213	303	179	1863	0.651	1210	963	1.2	1.8	5.489	A
2 - A444 Weddington Lane	278	69	1237	715	0.389	277	152	0.4	0.6	8.206	A
3 - A5 (West)	874	218	523	2067	0.423	873	991	0.5	0.7	3.014	A
4 - A444 Atherstone Road	269	67	874	695	0.387	268	522	0.4	0.6	8.421	A

18:15 - 18:30

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 - A5 (East)	1485	371	218	1836	0.809	1477	1178	1.8	4.0	9.784	A
2 - A444 Weddington Lane	340	85	1509	554	0.614	337	185	0.6	1.5	16.275	C
3 - A5 (West)	1070	268	637	1970	0.543	1068	1209	0.7	1.2	3.985	A
4 - A444 Atherstone Road	329	82	1069	594	0.554	327	636	0.6	1.2	13.363	B

18:30 - 18:45

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 - A5 (East)	1485	371	219	1835	0.809	1485	1181	4.0	4.1	10.232	B
2 - A444 Weddington Lane	340	85	1518	549	0.619	340	186	1.5	1.6	17.146	C
3 - A5 (West)	1070	268	642	1966	0.544	1070	1216	1.2	1.2	4.018	A
4 - A444 Atherstone Road	329	82	1071	593	0.555	329	641	1.2	1.2	13.631	B

18:45 - 19:00

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 - A5 (East)	1213	303	180	1862	0.651	1222	968	4.1	1.9	5.694	A
2 - A444 Weddington Lane	278	69	1249	708	0.393	281	153	1.6	0.7	8.519	A
3 - A5 (West)	874	218	529	2061	0.42	876	1001	1.2	0.7	3.04	A

					4					2	
4 - A444 Atherstone Road	269	67	877	693	0.388	271	528	1.2	0.6	8.576	A

19:00 - 19:15

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 - A5 (East)	1016	254	150	1882	0.540	1018	809	1.9	1.2	4.182	A
2 - A444 Weddington Lane	233	58	1041	830	0.280	234	128	0.7	0.4	6.050	A
3 - A5 (West)	732	183	440	2137	0.343	733	834	0.7	0.5	2.565	A
4 - A444 Atherstone Road	225	56	733	767	0.294	226	440	0.6	0.4	6.666	A

Ref Case + Development, AM (07:00 - 08:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - 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	93.76	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 segment length (min)	Run automatically
D7	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 - A5 (East)		ONE HOUR	✓	1162	100.000

2 - A444 Weddington Lane		ONE HOUR	✓	257	100.000
3 - A5 (West)		ONE HOUR	✓	1184	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	540	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	**2 - A444 Weddington Lane**	**3 - A5 (West)**	**4 - A444 Atherstone Road**
From	**1 - A5 (East)**	18	1	973	170
	2 - A444 Weddington Lane	35	0	125	97
	3 - A5 (West)	1060	115	0	9
	4 - A444 Atherstone Road	379	113	48	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	**2 - A444 Weddington Lane**	**3 - A5 (West)**	**4 - A444 Atherstone Road**
From	**1 - A5 (East)**	4	100	7	6
	2 - A444 Weddington Lane	3	0	0	0
	3 - A5 (West)	7	0	0	12
	4 - A444 Atherstone Road	3	0	8	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 - A5 (East)	0.73	7.45	2.6	A	1066	1599
2 - A444 Weddington Lane	0.44	9.86	0.8	A	236	354
3 - A5 (West)	0.61	4.35	1.6	A	1086	1630
4 - A444 Atherstone Road	1.39	528.65	88.4	F	496	743

Main Results for each time segment

06:45 - 07:00

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 - A5 (East)	875	219	206	1794	0.488	871	1116	0.0	0.9	3.884	A

2 - A444 Weddington Lane	193	48	906	897	0.216	192	171	0.0	0.3	5.105	A
3 - A5 (West)	891	223	240	2224	0.401	889	859	0.0	0.7	2.689	A
4 - A444 Atherstone Road	407	102	922	659	0.617	400	207	0.0	1.5	13.603	B

07:00 - 07:15

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 - A5 (East)	1045	261	244	1768	0.591	1043	1331	0.9	1.4	4.948	A
2 - A444 Weddington Lane	231	58	1084	789	0.293	230	203	0.3	0.4	6.441	A
3 - A5 (West)	1064	266	287	2185	0.487	1063	1027	0.7	0.9	3.205	A
4 - A444 Atherstone Road	485	121	1103	562	0.863	472	248	1.5	4.9	35.631	E

07:15 - 07:30

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 - A5 (East)	1279	320	254	1762	0.726	1275	1522	1.4	2.6	7.313	A
2 - A444 Weddington Lane	283	71	1312	651	0.435	282	217	0.4	0.8	9.714	A
3 - A5 (West)	1304	326	351	2133	0.611	1301	1242	0.9	1.6	4.315	A
4 - A444 Atherstone Road	595	149	1349	430	1.382	427	303	4.9	46.9	237.119	F

07:30 - 07:45

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 - A5 (East)	1279	320	254	1762	0.726	1279	1526	2.6	2.6	7.453	A
2 - A444 Weddington Lane	283	71	1316	648	0.437	283	217	0.8	0.8	9.858	A
3 - A5 (West)	1304	326	352	2132	0.612	1304	1247	1.6	1.6	4.346	A
4 - A444 Atherstone Road	595	149	1352	429	1.386	429	304	46.9	88.4	528.647	F

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 - A5 (East)	1045	261	269	1752	0.596	1049	1392	2.6	1.5	5.157	A
2 - A444 Weddington Lane	231	58	1097	780	0.296	232	220	0.8	0.4	6.586	A
3 - A5 (West)	1064	266	289	2184	0.48	1067	1041	1.6	1.0	3.229	A

					7						
4 - A444 Atherstone Road	485	121	1107	560	0.866	554	249	88.4	71.2	499.813	F

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 - A5 (East)	875	219	280	1744	0.502	877	1294	1.5	1.0	4.160	A
2 - A444 Weddington Lane	193	48	934	880	0.220	194	223	0.4	0.3	5.256	A
3 - A5 (West)	891	223	242	2223	0.401	893	886	1.0	0.7	2.707	A
4 - A444 Atherstone Road	407	102	926	657	0.619	648	208	71.2	10.9	234.710	F

Ref Case + Development, AM (08:00 - 09:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - 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	47.44	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	Ref Case + Development	AM (08:00 - 09:00)	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 - A5 (East)		ONE HOUR	✓	1265	100.000

2 - A444 Weddington Lane		ONE HOUR	✓	400	100.000
3 - A5 (West)		ONE HOUR	✓	1297	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	366	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	**2 - A444 Weddington Lane**	**3 - A5 (West)**	**4 - A444 Atherstone Road**
From	**1 - A5 (East)**	25	2	1076	162
	2 - A444 Weddington Lane	69	0	180	151
	3 - A5 (West)	1184	91	0	22
	4 - A444 Atherstone Road	275	64	27	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	**2 - A444 Weddington Lane**	**3 - A5 (West)**	**4 - A444 Atherstone Road**
From	**1 - A5 (East)**	6	100	9	12
	2 - A444 Weddington Lane	1	0	0	0
	3 - A5 (West)	9	0	0	15
	4 - A444 Atherstone Road	6	0	10	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 - A5 (East)	0.79	9.55	3.6	A	1161	1741
2 - A444 Weddington Lane	0.77	27.19	3.2	D	367	551
3 - A5 (West)	0.71	6.20	2.4	A	1190	1785
4 - A444 Atherstone Road	1.24	355.28	43.0	F	336	504

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 - A5 (East)	952	238	136	1798	0.530	948	1163	0.0	1.1	4.215	A

2 - A444 Weddington Lane	301	75	966	848	0.355	299	117	0.0	0.5	6.534	A
3 - A5 (West)	976	244	305	2125	0.460	973	961	0.0	0.8	3.116	A
4 - A444 Atherstone Road	276	69	1027	580	0.475	272	251	0.0	0.9	11.557	B

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 - A5 (East)	1137	284	162	1780	0.639	1135	1391	1.1	1.7	5.556	A
2 - A444 Weddington Lane	360	90	1157	730	0.493	358	140	0.5	1.0	9.638	A
3 - A5 (West)	1166	291	365	2076	0.562	1164	1150	0.8	1.3	3.942	A
4 - A444 Atherstone Road	329	82	1229	473	0.696	324	300	0.9	2.1	23.469	C

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 - A5 (East)	1393	348	179	1769	0.787	1386	1641	1.7	3.5	9.209	A
2 - A444 Weddington Lane	440	110	1407	574	0.767	432	158	1.0	2.9	24.125	C
3 - A5 (West)	1428	357	443	2012	0.710	1424	1397	1.3	2.4	6.075	A
4 - A444 Atherstone Road	403	101	1501	328	1.229	319	365	2.1	23.2	167.226	F

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 - A5 (East)	1393	348	181	1768	0.788	1392	1650	3.5	3.6	9.553	A
2 - A444 Weddington Lane	440	110	1414	570	0.773	440	159	2.9	3.2	27.186	D
3 - A5 (West)	1428	357	448	2008	0.711	1428	1406	2.4	2.4	6.204	A
4 - A444 Atherstone Road	403	101	1507	325	1.240	324	368	23.2	43.0	355.280	F

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 - A5 (East)	1137	284	196	1758	0.647	1144	1499	3.6	1.9	5.931	A
2 - A444 Weddington Lane	360	90	1176	718	0.501	368	164	3.2	1.0	10.538	B
3 - A5 (West)	1166	291	372	2070	0.56	1170	1173	2.4	1.3	4.020	A

					3						
4 - A444 Atherstone Road	329	82	1237	469	0.702	458	305	43.0	10.8	218.710	F

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 - A5 (East)	952	238	147	1790	0.532	955	1201	1.9	1.1	4.325	A
2 - A444 Weddington Lane	301	75	977	842	0.358	303	125	1.0	0.6	6.707	A
3 - A5 (West)	976	244	308	2122	0.460	978	972	1.3	0.9	3.153	A
4 - A444 Atherstone Road	276	69	1033	577	0.478	315	253	10.8	0.9	15.841	C

Ref Case + Development, AM (09:00 - 10:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - 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	21.77	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
D9	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 - A5 (East)		ONE HOUR	✓	1093	100.000

2 - A444 Weddington Lane		ONE HOUR	✓	286	100.000
3 - A5 (West)		ONE HOUR	✓	1137	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	399	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	**2 - A444 Weddington Lane**	**3 - A5 (West)**	**4 - A444 Atherstone Road**
From	**1 - A5 (East)**	12	1	937	143
	2 - A444 Weddington Lane	45	0	120	121
	3 - A5 (West)	1018	82	0	37
	4 - A444 Atherstone Road	293	72	34	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	**2 - A444 Weddington Lane**	**3 - A5 (West)**	**4 - A444 Atherstone Road**
From	**1 - A5 (East)**	6	100	9	14
	2 - A444 Weddington Lane	2	0	0	0
	3 - A5 (West)	11	0	0	8
	4 - A444 Atherstone Road	7	0	4	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 - A5 (East)	0.69	6.56	2.2	A	1003	1504
2 - A444 Weddington Lane	0.46	9.92	0.9	A	262	394
3 - A5 (West)	0.61	4.51	1.6	A	1043	1565
4 - A444 Atherstone Road	1.01	124.52	15.2	F	366	549

Main Results for each time segment

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 - A5 (East)	823	206	140	1791	0.459	819	1025	0.0	0.8	3.692	A

2 - A444 Weddington Lane	215	54	844	922	0.233	214	116	0.0	0.3	5.074	A
3 - A5 (West)	856	214	240	2143	0.400	853	818	0.0	0.7	2.786	A
4 - A444 Atherstone Road	300	75	868	655	0.459	297	226	0.0	0.8	9.969	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 - A5 (East)	983	246	168	1773	0.554	981	1226	0.8	1.2	4.533	A
2 - A444 Weddington Lane	257	64	1010	819	0.314	257	139	0.3	0.5	6.392	A
3 - A5 (West)	1022	256	288	2104	0.486	1021	979	0.7	0.9	3.322	A
4 - A444 Atherstone Road	359	90	1039	563	0.637	355	270	0.8	1.7	17.071	C

09:15 - 09:30

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 - A5 (East)	1203	301	198	1754	0.686	1200	1478	1.2	2.1	6.449	A
2 - A444 Weddington Lane	315	79	1233	681	0.463	313	164	0.5	0.8	9.760	A
3 - A5 (West)	1252	313	352	2051	0.610	1249	1194	0.9	1.5	4.476	A
4 - A444 Atherstone Road	439	110	1271	437	1.004	404	330	1.7	10.4	73.952	F

09:30 - 09:45

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 - A5 (East)	1203	301	202	1751	0.687	1203	1492	2.1	2.2	6.563	A
2 - A444 Weddington Lane	315	79	1238	678	0.465	315	167	0.8	0.9	9.920	A
3 - A5 (West)	1252	313	353	2050	0.611	1252	1199	1.5	1.6	4.509	A
4 - A444 Atherstone Road	439	110	1274	436	1.007	420	331	10.4	15.2	124.517	F

09:45 - 10:00

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 - A5 (East)	983	246	183	1764	0.557	986	1271	2.2	1.3	4.651	A
2 - A444 Weddington Lane	257	64	1020	813	0.316	259	149	0.9	0.5	6.513	A
3 - A5 (West)	1022	256	290	2102	0.48	1025	989	1.6	1.0	3.347	A

					6						
4 - A444 Atherstone Road	359	90	1043	561	0.640	412	272	15.2	1.9	31.952	D

10:00 - 10:15

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 - A5 (East)	823	206	143	1790	0.460	825	1034	1.3	0.9	3.734	A
2 - A444 Weddington Lane	215	54	850	919	0.234	216	118	0.5	0.3	5.125	A
3 - A5 (West)	856	214	242	2141	0.400	857	823	1.0	0.7	2.807	A
4 - A444 Atherstone Road	300	75	872	653	0.460	304	227	1.9	0.9	10.453	B

Ref Case + Development, PM (16:00 - 17:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - 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	10.92	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	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 - A5 (East)		ONE HOUR	✓	1326	100.000

2 - A444 Weddington Lane		ONE HOUR	✓	272	100.000
3 - A5 (West)		ONE HOUR	✓	1112	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	341	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	**2 - A444 Weddington Lane**	**3 - A5 (West)**	**4 - A444 Atherstone Road**
From	**1 - A5 (East)**	1	1	1131	193
	2 - A444 Weddington Lane	6	0	120	146
	3 - A5 (West)	955	131	0	26
	4 - A444 Atherstone Road	219	67	55	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	**2 - A444 Weddington Lane**	**3 - A5 (West)**	**4 - A444 Atherstone Road**
From	**1 - A5 (East)**	0	100	5	7
	2 - A444 Weddington Lane	0	0	0	0
	3 - A5 (West)	8	0	0	8
	4 - A444 Atherstone Road	5	0	3	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 - A5 (East)	0.82	11.46	4.5	B	1217	1825
2 - A444 Weddington Lane	0.55	14.83	1.2	B	250	374
3 - A5 (West)	0.58	4.14	1.4	A	1020	1531
4 - A444 Atherstone Road	0.75	28.57	2.8	D	313	469

Main Results for each time segment

15:45 - 16:00

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 - A5 (East)	998	250	189	1832	0.545	994	886	0.0	1.2	4.269	A

2 - A444 Weddington Lane	205	51	1034	832	0.246	203	149	0.0	0.3	5.715	A
3 - A5 (West)	837	209	259	2194	0.382	835	978	0.0	0.6	2.644	A
4 - A444 Atherstone Road	257	64	820	704	0.365	254	273	0.0	0.6	7.967	A

16:00 - 16:15

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 - A5 (East)	1192	298	227	1807	0.660	1189	1060	1.2	1.9	5.801	A
2 - A444 Weddington Lane	245	61	1237	710	0.344	244	178	0.3	0.5	7.705	A
3 - A5 (West)	1000	250	310	2152	0.465	999	1171	0.6	0.9	3.118	A
4 - A444 Atherstone Road	307	77	982	618	0.496	305	327	0.6	1.0	11.445	B

16:15 - 16:30

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 - A5 (East)	1460	365	276	1774	0.823	1450	1294	1.9	4.4	10.806	B
2 - A444 Weddington Lane	299	75	1508	548	0.547	297	217	0.5	1.2	14.206	B
3 - A5 (West)	1224	306	378	2096	0.584	1222	1427	0.9	1.4	4.109	A
4 - A444 Atherstone Road	375	94	1201	500	0.750	369	399	1.0	2.7	26.039	D

16:30 - 16:45

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 - A5 (East)	1460	365	278	1772	0.824	1459	1300	4.4	4.5	11.459	B
2 - A444 Weddington Lane	299	75	1519	542	0.553	299	219	1.2	1.2	14.833	B
3 - A5 (West)	1224	306	381	2094	0.585	1224	1437	1.4	1.4	4.139	A
4 - A444 Atherstone Road	375	94	1203	499	0.752	375	402	2.7	2.8	28.569	D

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 - A5 (East)	1192	298	230	1805	0.661	1202	1068	4.5	2.0	6.075	A
2 - A444 Weddington Lane	245	61	1252	701	0.349	247	181	1.2	0.5	7.970	A
3 - A5 (West)	1000	250	314	2149	0.46	1002	1185	1.4	0.9	3.143	A

					5						
4 - A444 Atherstone Road	307	77	985	616	0.497	314	331	2.8	1.0	12.180	B

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 - A5 (East)	998	250	191	1831	0.545	1001	891	2.0	1.2	4.354	A
2 - A444 Weddington Lane	205	51	1042	827	0.248	206	150	0.5	0.3	5.800	A
3 - A5 (West)	837	209	261	2192	0.382	838	987	0.9	0.6	2.660	A
4 - A444 Atherstone Road	257	64	824	702	0.366	258	276	1.0	0.6	8.141	A

Ref Case + Development, PM (17:00 - 18:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - 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	23.00	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
D11	Ref Case + Development	PM (17:00 - 18:00)	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 - A5 (East)		ONE HOUR	✓	1460	100.000

2 - A444 Weddington Lane		ONE HOUR	✓	324	100.000
3 - A5 (West)		ONE HOUR	✓	1308	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	340	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	**2 - A444 Weddington Lane**	**3 - A5 (West)**	**4 - A444 Atherstone Road**
From	**1 - A5 (East)**	2	1	1188	269
	2 - A444 Weddington Lane	10	0	137	177
	3 - A5 (West)	1102	174	0	32
	4 - A444 Atherstone Road	215	84	41	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	**2 - A444 Weddington Lane**	**3 - A5 (West)**	**4 - A444 Atherstone Road**
From	**1 - A5 (East)**	0	100	5	5
	2 - A444 Weddington Lane	10	0	0	0
	3 - A5 (West)	5	0	0	8
	4 - A444 Atherstone Road	4	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 - A5 (East)	0.92	23.91	10.0	C	1340	2010
2 - A444 Weddington Lane	0.76	31.69	3.0	D	297	446
3 - A5 (West)	0.70	5.92	2.3	A	1200	1800
4 - A444 Atherstone Road	0.92	77.61	7.5	F	312	468

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 - A5 (East)	1099	275	224	1815	0.606	1093	996	0.0	1.5	4.947	A

2 - A444 Weddington Lane	244	61	1123	778	0.313	242	194	0.0	0.5	6.692	A
3 - A5 (West)	985	246	343	2181	0.451	981	1022	0.0	0.8	2.993	A
4 - A444 Atherstone Road	256	64	966	645	0.397	253	358	0.0	0.6	9.145	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 - A5 (East)	1313	328	268	1785	0.735	1308	1192	1.5	2.7	7.469	A
2 - A444 Weddington Lane	291	73	1343	647	0.450	290	232	0.5	0.8	10.045	B
3 - A5 (West)	1176	294	410	2125	0.553	1174	1223	0.8	1.2	3.780	A
4 - A444 Atherstone Road	306	76	1156	545	0.561	303	428	0.6	1.2	14.776	B

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 - A5 (East)	1607	402	322	1749	0.919	1582	1447	2.7	8.9	19.300	C
2 - A444 Weddington Lane	357	89	1624	480	0.744	350	280	0.8	2.6	26.372	D
3 - A5 (West)	1440	360	495	2054	0.701	1436	1478	1.2	2.3	5.786	A
4 - A444 Atherstone Road	374	94	1414	409	0.915	355	518	1.2	6.0	54.329	F

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 - A5 (East)	1607	402	327	1745	0.921	1603	1459	8.9	10.0	23.914	C
2 - A444 Weddington Lane	357	89	1646	466	0.765	355	284	2.6	3.0	31.693	D
3 - A5 (West)	1440	360	503	2048	0.703	1440	1499	2.3	2.3	5.919	A
4 - A444 Atherstone Road	374	94	1418	407	0.920	368	525	6.0	7.5	77.612	F

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 - A5 (East)	1313	328	278	1778	0.738	1341	1214	10.0	2.9	8.749	A
2 - A444 Weddington Lane	291	73	1380	625	0.466	300	240	3.0	0.9	11.328	B
3 - A5 (West)	1176	294	422	2115	0.55	1180	1258	2.3	1.3	3.867	A

					6						
4 - A444 Atherstone Road	306	76	1162	541	0.565	330	440	7.5	1.4	18.904	C

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 - A5 (East)	1099	275	226	1813	0.606	1105	1004	2.9	1.6	5.119	A
2 - A444 Weddington Lane	244	61	1135	771	0.316	246	196	0.9	0.5	6.873	A
3 - A5 (West)	985	246	347	2178	0.452	986	1034	1.3	0.8	3.027	A
4 - A444 Atherstone Road	256	64	971	642	0.399	259	362	1.4	0.7	9.459	A

Ref Case + Development, PM (18:00 - 19:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - 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	16.81	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	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	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 - A5 (East)		ONE HOUR	✓	1511	100.000

2 - A444 Weddington Lane		ONE HOUR	✓	309	100.000
3 - A5 (West)		ONE HOUR	✓	1075	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	310	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	**2 - A444 Weddington Lane**	**3 - A5 (West)**	**4 - A444 Atherstone Road**
From	**1 - A5 (East)**	2	1	1112	396
	2 - A444 Weddington Lane	14	0	109	186
	3 - A5 (West)	953	107	0	15
	4 - A444 Atherstone Road	218	61	31	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	**2 - A444 Weddington Lane**	**3 - A5 (West)**	**4 - A444 Atherstone Road**
From	**1 - A5 (East)**	0	100	5	4
	2 - A444 Weddington Lane	15	0	0	0
	3 - A5 (West)	4	0	0	1
	4 - A444 Atherstone Road	5	0	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 - A5 (East)	0.91	21.25	9.3	C	1387	2080
2 - A444 Weddington Lane	0.77	34.85	3.1	D	284	425
3 - A5 (West)	0.61	4.78	1.6	A	986	1480
4 - A444 Atherstone Road	0.65	19.10	1.8	C	284	427

Main Results for each time segment

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 - A5 (East)	1138	284	149	1870	0.608	1131	890	0.0	1.5	4.835	A

2 - A444 Weddington Lane	233	58	1154	759	0.307	231	127	0.0	0.4	6.800	A
3 - A5 (West)	809	202	447	2112	0.383	807	937	0.0	0.6	2.755	A
4 - A444 Atherstone Road	233	58	808	725	0.322	232	447	0.0	0.5	7.271	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 - A5 (East)	1358	340	178	1850	0.734	1354	1065	1.5	2.7	7.184	A
2 - A444 Weddington Lane	278	69	1381	624	0.445	276	152	0.4	0.8	10.305	B
3 - A5 (West)	966	242	535	2038	0.474	965	1122	0.6	0.9	3.354	A
4 - A444 Atherstone Road	279	70	966	642	0.434	278	535	0.5	0.8	9.867	A

18:15 - 18:30

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 - A5 (East)	1664	416	218	1824	0.912	1641	1302	2.7	8.5	17.778	C
2 - A444 Weddington Lane	340	85	1673	451	0.754	333	185	0.8	2.7	28.698	D
3 - A5 (West)	1184	296	647	1944	0.609	1181	1358	0.9	1.5	4.705	A
4 - A444 Atherstone Road	341	85	1182	530	0.643	337	647	0.8	1.7	18.299	C

18:30 - 18:45

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 - A5 (East)	1664	416	219	1823	0.913	1660	1307	8.5	9.3	21.249	C
2 - A444 Weddington Lane	340	85	1693	439	0.775	339	186	2.7	3.1	34.850	D
3 - A5 (West)	1184	296	657	1936	0.611	1184	1376	1.5	1.6	4.785	A
4 - A444 Atherstone Road	341	85	1185	529	0.645	341	656	1.7	1.8	19.096	C

18:45 - 19:00

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 - A5 (East)	1358	340	180	1849	0.735	1384	1073	9.3	2.9	8.146	A
2 - A444 Weddington Lane	278	69	1411	606	0.458	287	153	3.1	0.9	11.572	B
3 - A5 (West)	966	242	550	2025	0.47	969	1148	1.6	0.9	3.415	A

					7						
4 - A444 Atherstone Road	279	70	970	640	0.435	283	549	1.8	0.8	10.171	B

19:00 - 19:15

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 - A5 (East)	1138	284	150	1869	0.609	1143	896	2.9	1.6	4.988	A
2 - A444 Weddington Lane	233	58	1165	752	0.309	234	128	0.9	0.5	6.979	A
3 - A5 (West)	809	202	453	2107	0.384	810	947	0.9	0.6	2.780	A
4 - A444 Atherstone Road	233	58	811	723	0.323	235	452	0.8	0.5	7.391	A

APPENDIX 12

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: 17059 - A5 Watling St-Woodford Lane.j9
Path: P:\17 jobs\059 MIRA - Southern Manufacturing Sector\Technical Assessments\Modelling - July 2022
Report generation date: 20/07/2022 15:29:25

»Ref Case, AM (07:00 - 08:00)
»Ref Case, AM (08:00 - 09:00)
»Ref Case, AM (09:00 - 10:00)
»Ref Case, PM (16:00 - 17:00)
»Ref Case, PM (17:00 - 18:00)
»Ref Case, PM (18:00 - 19:00)
»Ref Case + Development, AM (07:00 - 08:00)
»Ref Case + Development, AM (08:00 - 09:00)
»Ref Case + Development, AM (09:00 - 10:00)
»Ref Case + Development, PM (16:00 - 17:00)
»Ref Case + Development, PM (17:00 - 18:00)
»Ref Case + Development, PM (18:00 - 19:00)

Summary of junction performance

	AM (07:00 - 08:00)					AM (08:00 - 09:00)					AM (09:00 - 10:00)					PM (16:00 - 17:00)					PM (17:00 - 18:00)					PM (18:00 - 19:00)				
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
Ref Case																														
Stream B-C	0.2	16.86	0.13	C		6.1	1656.87	99999999.00	F		1.6	335.74	1.02	F		5.4	372.66	1.14	F		23.0	8934.31	7.23	F		0.6	16.53	0.37	C	
Stream B-A	1.7	234.16	0.72	F	4.00	19.7	1584.59	99999999.00	F	30.24	3.1	256.66	0.88	F	8.60	6.5	389.81	1.14	F	14.64	33.4	8807.99	7.07	F	395.60	1.9	101.44	0.69	F	3.96
Stream C-AB	0.7	13.03	0.40	B		0.8	17.19	0.44	C		0.8	14.32	0.44	B		0.5	12.55	0.35	B		0.1	10.11	0.08	B		0.1	9.63	0.13	A	
Ref Case + Development																														
Stream B-C	16.6	1669.74	99999999.00	F		9.1	2834.92	99999999.00	F		7.8	1120.26	99999999.00	F		21.6	1680.16	99999999.00	F		26.6	1359.00	99999999.00	F		41.5	2407.02	2.70	F	
Stream B-A	28.3	1663.13	99999999.00	F	50.80	42.6	1850.21	99999999.00	F	46.17	46.6	1793.34	99999999.00	F	65.60	31.7	1684.39	99999999.00	F	59.54	48.2	1352.15	99999999.00	F	62.33	32.7	2442.68	2.64	F	197.91
Stream C-AB	0.8	16.17	0.45	C		0.9	20.71	0.48	C		0.9	17.14	0.49	C		0.8	17.58	0.43	C		0.1	12.15	0.09	B		0.2	11.34	0.15	B	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	

Date	24/02/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mtp\MTPGeneral
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	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D2	Ref Case	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D3	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D4	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D5	Ref Case	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D6	Ref Case	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	15	✓
D7	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D8	Ref Case + Development	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D9	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D10	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D11	Ref Case + Development	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D12	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Ref Case, AM (07:00 - 08:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A5 Watling Street (South-East)		Major
B	Woodford Lane		Minor
C	A5 Watling Street (North-West)		Major

Major Arm Geometry

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)
C - A5 Watling Street (North-West)	6.50		✓	3.50	250.0	✓	16.00

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 - Woodford Lane	One lane plus flare	10.00	10.00	8.12	5.45	4.17	✓	3.00	125	250

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	721	0.129	0.325	0.204	0.464
B-C	879	0.132	0.333	-	-
C-B	820	0.311	0.311	-	-

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 segment length (min)	Run automatically
D1	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 (%)
A - A5 Watling Street (South-East)		ONE HOUR	✓	981	100.000
B - Woodford Lane		ONE HOUR	✓	58	100.000
C - A5 Watling Street (North-West)		ONE HOUR	✓	1166	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (South-East)	B - Woodford Lane	C - A5 Watling Street (North-West)
From	A - A5 Watling Street (South-East)	0	79	902
	B - Woodford Lane	28	0	30
	C - A5 Watling Street (North-West)	999	167	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 Watling Street (South-East)	B - Woodford Lane	C - A5 Watling Street (North-West)
From	A - A5 Watling Street (South-East)	0	0	5
	B - Woodford Lane	0	0	0
	C - A5 Watling Street (North-West)	7	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	0.13	16.86	0.2	C	28	41	6.36	9.24	0.07	6.36	9.24
B-A	0.72	234.16	1.7	F	26	39	48.08	74.85	0.53	48.08	74.85
C-AB	0.40	13.03	0.7	B	153	230	40.29	10.52	0.45	40.29	10.52
C-A					917	1375					
A-B					72	109					
A-C					828	1242					

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	6	621	0.036	22	0.0	0.0	6.012	A
B-A	21	5	258	0.082	21	0.0	0.1	15.144	C
C-AB	126	31	569	0.221	125	0.0	0.3	8.084	A
C-A	752	188			752				
A-B	59	15			59				
A-C	679	170			679				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	27	7	564	0.048	27	0.0	0.0	6.707	A
B-A	25	6	168	0.150	25	0.1	0.2	25.148	D
C-AB	150	38	523	0.287	150	0.3	0.4	9.628	A
C-A	898	225			898				
A-B	71	18			71				
A-C	811	203			811				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	33	8	346	0.095	33	0.0	0.1	11.488	B
B-A	31	8	43	0.715	26	0.2	1.4	179.020	F
C-AB	184	46	460	0.400	183	0.4	0.7	12.946	B
C-A	1100	275			1100				
A-B	87	22			87				
A-C	993	248			993				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	33	8	246	0.134	33	0.1	0.2	16.856	C
B-A	31	8	43	0.715	30	1.4	1.7	234.162	F
C-AB	184	46	460	0.400	184	0.7	0.7	13.035	B
C-A	1100	275			1100				
A-B	87	22			87				
A-C	993	248			993				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	27	7	549	0.049	27	0.2	0.1	6.904	A
B-A	25	6	170	0.148	31	1.7	0.2	27.090	D
C-AB	150	38	523	0.287	151	0.7	0.4	9.702	A
C-A	898	225			898				
A-B	71	18			71				
A-C	811	203			811				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	6	619	0.036	23	0.1	0.0	6.034	A
B-A	21	5	258	0.082	21	0.2	0.1	15.252	C
C-AB	126	31	569	0.221	126	0.4	0.3	8.142	A
C-A	752	188			752				
A-B	59	15			59				
A-C	679	170			679				

Queueing Delay Results for each time segment

06:45 - 07:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	0.55	0.04	6.012	A
B-A	1.24	0.08	15.144	C
C-AB	4.16	0.28	8.084	A

07:00 - 07:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	0.73	0.05	6.707	A
B-A	2.41	0.16	25.148	D
C-AB	5.95	0.40	9.628	A

07:15 - 07:30

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	1.50	0.10	11.488	B
B-A	15.22	1.01	179.020	F
C-AB	9.70	0.65	12.946	B

07:30 - 07:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	2.18	0.15	16.856	C
B-A	24.01	1.60	234.162	F
C-AB	9.98	0.67	13.035	B

07:45 - 08:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	0.81	0.05	6.904	A
B-A	3.77	0.25	27.090	D
C-AB	6.18	0.41	9.702	A

08:00 - 08:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	0.58	0.04	6.034	A
B-A	1.43	0.10	15.252	C
C-AB	4.32	0.29	8.142	A

Ref Case, AM (08:00 - 09:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		30.24	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
D2	Ref Case	AM (08:00 - 09:00)	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 (%)
A - A5 Watling Street (South-East)		ONE HOUR	✓	1209	100.000
B - Woodford Lane		ONE HOUR	✓	46	100.000
C - A5 Watling Street (North-West)		ONE HOUR	✓	1190	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (South-East)	B - Woodford Lane	C - A5 Watling Street (North-West)
From	A - A5 Watling Street (South-East)	0	81	1128
	B - Woodford Lane	35	0	11
	C - A5 Watling Street (North-West)	1042	148	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 Watling Street (South-East)	B - Woodford Lane	C - A5 Watling Street (North-West)
From	A - A5 Watling Street (South-East)	0	0	6
	B - Woodford Lane	0	0	13
	C - A5 Watling Street (North-West)	8	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	9999999999.00	1656.87	6.1	F	10	15	154.78	613.36	1.72	154.78	613.36
B-A	9999999999.00	1584.59	19.7	F	32	48	500.20	622.98	5.56	500.21	622.99
C-AB	0.44	17.19	0.8	C	136	204	43.93	12.94	0.49	43.94	12.94
C-A					956	1434					
A-B					74	111					
A-C					1035	1553					

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	2	463	0.018	8	0.0	0.0	7.923	A
B-A	26	7	206	0.128	26	0.0	0.1	19.969	C
C-AB	111	28	506	0.220	110	0.0	0.3	9.065	A
C-A	784	196			784				
A-B	61	15			61				
A-C	849	212			849				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	2	390	0.025	10	0.0	0.0	9.462	A
B-A	31	8	97	0.324	30	0.1	0.4	53.041	F
C-AB	133	33	450	0.296	133	0.3	0.4	11.318	B
C-A	937	234			937				
A-B	73	18			73				
A-C	1014	254			1014				

08:15 - 08:30

Stream	Total	Junction	Capacity	RFC	Throughput	Start	End	Delay (s)	Unsignalised

	Demand (Veh/hr)	Arrivals (Veh)	(Veh/hr)		(Veh/hr)	queue (Veh)	queue (Veh)		level of service
B-C	12	3	0	9999999999.000	0	0.0	3.1	1656.872	F
B-A	39	10	0	9999999999.000	0	0.4	10.1	1584.589	F
C-AB	163	41	372	0.438	162	0.4	0.8	16.985	C
C-A	1147	287			1147				
A-B	89	22			89				
A-C	1242	310			1242				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	3	0	9999999999.000	0	3.1	6.1	1122.734	F
B-A	39	10	0	9999999999.000	0	10.1	19.7	-4854.139	?
C-AB	163	41	372	0.438	163	0.8	0.8	17.192	C
C-A	1147	287			1147				
A-B	89	22			89				
A-C	1242	310			1242				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	2	30	0.332	26	6.1	2.2	462.934	F
B-A	31	8	96	0.328	91	19.7	4.7	467.115	F
C-AB	133	33	450	0.296	134	0.8	0.4	11.455	B
C-A	937	234			937				
A-B	73	18			73				
A-C	1014	254			1014				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	2	453	0.018	17	2.2	0.0	8.412	A
B-A	26	7	204	0.129	45	4.7	0.2	25.162	D
C-AB	111	28	506	0.220	112	0.4	0.3	9.141	A
C-A	784	196			784				
A-B	61	15			61				
A-C	849	212			849				

Queueing Delay Results for each time segment

07:45 - 08:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	0.26	0.02	7.923	A
B-A	2.00	0.13	19.969	C
C-AB	4.13	0.28	9.065	A

08:00 - 08:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	0.38	0.03	9.462	A

B-A	5.83	0.39	53.041	F
C-AB	6.18	0.41	11.318	B

08:15 - 08:30

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	23.09	1.54	1656.872	F
B-A	78.88	5.26	1584.589	F
C-AB	11.18	0.75	16.985	C

08:30 - 08:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	68.51	4.57	1122.734	F
B-A	223.39	14.89	-4854.139	?
C-AB	11.65	0.78	17.192	C

08:45 - 09:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	61.79	4.12	462.934	F
B-A	183.25	12.22	467.115	F
C-AB	6.50	0.43	11.455	B

09:00 - 09:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	0.75	0.05	8.412	A
B-A	6.85	0.46	25.162	D
C-AB	4.31	0.29	9.141	A

Ref Case, AM (09:00 - 10:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		8.60	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	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 (%)
A - A5 Watling Street (South-East)		ONE HOUR	✓	992	100.000
B - Woodford Lane		ONE HOUR	✓	54	100.000
C - A5 Watling Street (North-West)		ONE HOUR	✓	1106	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (South-East)	**B - Woodford Lane**	**C - A5 Watling Street (North-West)**
From	**A - A5 Watling Street (South-East)**	0	102	890
	B - Woodford Lane	40	0	14
	C - A5 Watling Street (North-West)	925	181	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 Watling Street (South-East)	**B - Woodford Lane**	**C - A5 Watling Street (North-West)**
From	**A - A5 Watling Street (South-East)**	0	0	7
	B - Woodford Lane	0	0	44
	C - A5 Watling Street (North-West)	7	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	1.02	335.74	1.6	F	13	19	19.24	59.92	0.21	19.24	59.92
B-A	0.88	256.66	3.1	F	37	55	77.54	84.50	0.86	77.54	84.50
C-AB	0.44	14.32	0.8	B	166	249	46.83	11.28	0.52	46.84	11.28
C-A					849	1273					
A-B					94	140					
A-C					817	1225					

Main Results for each time segment

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	3	406	0.026	10	0.0	0.0	9.097	A
B-A	30	8	274	0.110	30	0.0	0.1	14.708	B
C-AB	136	34	562	0.242	135	0.0	0.3	8.400	A
C-A	696	174			696				
A-B	77	19			77				
A-C	670	168			670				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	13	3	366	0.034	13	0.0	0.0	10.197	B
B-A	36	9	180	0.200	35	0.1	0.2	24.821	C
C-AB	163	41	515	0.316	162	0.3	0.5	10.175	B
C-A	832	208			832				
A-B	92	23			92				
A-C	800	200			800				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	15	4	112	0.137	15	0.0	0.2	36.791	E
B-A	44	11	51	0.869	36	0.2	2.3	194.181	F
C-AB	199	50	450	0.442	198	0.5	0.8	14.189	B
C-A	1018	255			1018				
A-B	112	28			112				
A-C	980	245			980				

09:30 - 09:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	15	4	15	1.019	10	0.2	1.6	335.736	F
B-A	44	11	50	0.877	41	2.3	3.1	256.661	F
C-AB	199	50	450	0.442	199	0.8	0.8	14.323	B
C-A	1018	255			1018				
A-B	112	28			112				
A-C	980	245			980				

09:45 - 10:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	13	3	359	0.035	19	1.6	0.0	10.761	B
B-A	36	9	179	0.201	47	3.1	0.3	29.573	D
C-AB	163	41	515	0.316	164	0.8	0.5	10.281	B
C-A	832	208			832				
A-B	92	23			92				
A-C	800	200			800				

10:00 - 10:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	3	405	0.026	11	0.0	0.0	9.118	A
B-A	30	8	273	0.110	31	0.3	0.1	14.874	B
C-AB	136	34	562	0.242	137	0.5	0.3	8.471	A
C-A	696	174			696				
A-B	77	19			77				
A-C	670	168			670				

Queueing Delay Results for each time segment

08:45 - 09:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	0.38	0.03	9.097	A
B-A	1.72	0.11	14.708	B
C-AB	4.68	0.31	8.400	A

09:00 - 09:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	0.52	0.03	10.197	B
B-A	3.39	0.23	24.821	C
C-AB	6.80	0.45	10.175	B

09:15 - 09:30

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	2.06	0.14	36.791	E
B-A	23.18	1.55	194.181	F
C-AB	11.48	0.77	14.189	B

09:30 - 09:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	14.94	1.00	335.736	F
B-A	40.65	2.71	256.661	F
C-AB	11.88	0.79	14.323	B

09:45 - 10:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	0.92	0.06	10.761	B
B-A	6.60	0.44	29.573	D
C-AB	7.11	0.47	10.281	B

10:00 - 10:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	0.42	0.03	9.118	A
B-A	2.00	0.13	14.874	B
C-AB	4.87	0.32	8.471	A

Ref Case, PM (16:00 - 17:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		14.64	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
D4	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 (%)
A - A5 Watling Street (South-East)		ONE HOUR	✓	1042	100.000
B - Woodford Lane		ONE HOUR	✓	88	100.000
C - A5 Watling Street (North-West)		ONE HOUR	✓	1184	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (South-East)	B - Woodford Lane	C - A5 Watling Street (North-West)
From	A - A5 Watling Street (South-East)	0	169	873
	B - Woodford Lane	49	0	39
	C - A5 Watling Street (North-West)	1041	143	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 Watling Street (South-East)	B - Woodford Lane	C - A5 Watling Street (North-West)
From	A - A5 Watling Street (South-East)	0	0	5
	B - Woodford Lane	0	0	0
	C - A5 Watling Street (North-West)	6	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	1.14	372.66	5.4	F	36	54	104.01	116.26	1.16	104.01	116.26
B-A	1.14	389.81	6.5	F	45	67	141.54	125.91	1.57	141.54	125.92
C-AB	0.35	12.55	0.5	B	131	197	33.45	10.20	0.37	33.46	10.20
C-A					955	1433					
A-B					155	233					
A-C					801	1202					

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	597	0.049	29	0.0	0.1	6.337	A
B-A	37	9	266	0.138	36	0.0	0.2	15.596	C
C-AB	108	27	561	0.192	107	0.0	0.2	7.915	A
C-A	784	196			784				
A-B	127	32			127				
A-C	657	164			657				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	35	9	534	0.066	35	0.1	0.1	7.209	A
B-A	44	11	175	0.252	43	0.2	0.3	27.281	D
C-AB	129	32	512	0.251	128	0.2	0.3	9.374	A
C-A	936	234			936				
A-B	152	38			152				
A-C	785	196			785				

16:15 - 16:30

Stream	Total	Junction	Capacity	RFC	Throughput	Start	End queue	Delay (s)	Unsignalised

	Demand (Veh/hr)	Arrivals (Veh)	(Veh/hr)		(Veh/hr)	queue (Veh)	(Veh)		level of service
B-C	43	11	38	1.144	29	0.1	3.5	306.067	F
B-A	54	13	48	1.125	39	0.3	4.0	277.988	F
C-AB	157	39	444	0.354	157	0.3	0.5	12.478	B
C-A	1146	287			1146				
A-B	186	47			186				
A-C	961	240			961				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	43	11	39	1.115	35	3.5	5.4	372.663	F
B-A	54	13	47	1.137	44	4.0	6.5	389.813	F
C-AB	157	39	444	0.354	157	0.5	0.5	12.547	B
C-A	1146	287			1146				
A-B	186	47			186				
A-C	961	240			961				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	35	9	511	0.069	56	5.4	0.1	8.292	A
B-A	44	11	174	0.254	68	6.5	0.4	41.765	E
C-AB	129	32	512	0.251	129	0.5	0.3	9.432	A
C-A	936	234			936				
A-B	152	38			152				
A-C	785	196			785				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	595	0.049	29	0.1	0.1	6.365	A
B-A	37	9	266	0.138	38	0.4	0.2	15.789	C
C-AB	108	27	561	0.192	108	0.3	0.2	7.962	A
C-A	784	196			784				
A-B	127	32			127				
A-C	657	164			657				

Queueing Delay Results for each time segment

15:45 - 16:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	0.75	0.05	6.337	A
B-A	2.22	0.15	15.596	C
C-AB	3.49	0.23	7.915	A

16:00 - 16:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	1.02	0.07	7.209	A

B-A	4.52	0.30	27.281	D
C-AB	4.96	0.33	9.374	A

16:15 - 16:30

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	31.14	2.08	306.067	F
B-A	36.97	2.46	277.988	F
C-AB	8.02	0.53	12.478	B

16:30 - 16:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	67.01	4.47	372.663	F
B-A	79.01	5.27	389.813	F
C-AB	8.22	0.55	12.547	B

16:45 - 17:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	3.30	0.22	8.292	A
B-A	16.20	1.08	41.765	E
C-AB	5.14	0.34	9.432	A

17:00 - 17:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	0.80	0.05	6.365	A
B-A	2.61	0.17	15.789	C
C-AB	3.61	0.24	7.962	A

Ref Case, PM (17:00 - 18:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		395.60	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 segment length (min)	Run automatically

D5	Ref Case	PM (17:00 - 18:00)	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 (%)
A - A5 Watling Street (South-East)		ONE HOUR	✓	1194	100.000
B - Woodford Lane		ONE HOUR	✓	117	100.000
C - A5 Watling Street (North-West)		ONE HOUR	✓	1219	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (South-East)	**B - Woodford Lane**	**C - A5 Watling Street (North-West)**
From	**A - A5 Watling Street (South-East)**	0	131	1063
	B - Woodford Lane	69	0	48
	C - A5 Watling Street (North-West)	1192	27	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 Watling Street (South-East)	**B - Woodford Lane**	**C - A5 Watling Street (North-West)**
From	**A - A5 Watling Street (South-East)**	0	0	5
	B - Woodford Lane	0	0	1
	C - A5 Watling Street (North-West)	4	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	7.23	8934.31	23.0	F	44	66	604.86	549.31	6.72	604.86	549.31
B-A	7.07	8807.99	33.4	F	63	95	913.98	577.41	10.16	913.99	577.42
C-AB	0.08	10.11	0.1	B	25	37	5.38	8.68	0.06	5.38	8.68
C-A					1094	1641					
A-B					120	180					
A-C					975	1463					

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	36	9	532	0.068	36	0.0	0.1	7.253	A
B-A	52	13	243	0.214	51	0.0	0.3	18.654	C
C-AB	20	5	518	0.039	20	0.0	0.0	7.228	A
C-A	897	224			897				
A-B	99	25			99				
A-C	800	200			800				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	43	11	447	0.097	43	0.1	0.1	8.914	A
B-A	62	16	146	0.426	60	0.3	0.7	41.475	E
C-AB	24	6	463	0.052	24	0.0	0.1	8.212	A
C-A	1072	268			1072				
A-B	118	29			118				
A-C	956	239			956				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	13	7	7.226	7	0.1	11.6	1398.991	F
B-A	76	19	11	7.029	10	0.7	17.1	1394.087	F
C-AB	30	7	386	0.077	30	0.1	0.1	10.106	B
C-A	1312	328			1312				
A-B	144	36			144				
A-C	1170	293			1170				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	13	7	7.146	7	11.6	23.0	8934.308	F
B-A	76	19	11	7.073	11	17.1	33.4	8807.992	F
C-AB	30	7	386	0.077	30	0.1	0.1	10.112	B
C-A	1312	328			1312				
A-B	144	36			144				
A-C	1170	293			1170				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	43	11	100	0.431	96	23.0	9.8	487.240	F
B-A	62	16	145	0.428	141	33.4	13.7	549.070	F
C-AB	24	6	463	0.052	24	0.1	0.1	8.217	A
C-A	1072	268			1072				
A-B	118	29			118				
A-C	956	239			956				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	36	9	495	0.073	75	9.8	0.1	9.405	A
B-A	52	13	242	0.214	106	13.7	0.3	38.511	E
C-AB	20	5	518	0.039	20	0.1	0.0	7.233	A
C-A	897	224			897				
A-B	99	25			99				
A-C	800	200			800				

Queueing Delay Results for each time segment

16:45 - 17:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	1.05	0.07	7.253	A
B-A	3.70	0.25	18.654	C
C-AB	0.60	0.04	7.228	A

17:00 - 17:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	1.54	0.10	8.914	A
B-A	9.19	0.61	41.475	E
C-AB	0.82	0.05	8.212	A

17:15 - 17:30

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	88.62	5.91	1398.991	F
B-A	133.67	8.91	1394.087	F
C-AB	1.24	0.08	10.106	B

17:30 - 17:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	259.62	17.31	8934.308	F
B-A	378.45	25.23	8807.992	F
C-AB	1.25	0.08	10.112	B

17:45 - 18:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	245.94	16.40	487.240	F
B-A	353.34	23.56	549.070	F
C-AB	0.84	0.06	8.217	A

18:00 - 18:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	8.10	0.54	9.405	A
B-A	35.62	2.37	38.511	E
C-AB	0.62	0.04	7.233	A

Ref Case, PM (18:00 - 19:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.96	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	Ref Case	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	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 (%)
A - A5 Watling Street (South-East)		ONE HOUR	✓	1109	100.000
B - Woodford Lane		ONE HOUR	✓	184	100.000
C - A5 Watling Street (North-West)		ONE HOUR	✓	948	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (South-East)	B - Woodford Lane	C - A5 Watling Street (North-West)
From	A - A5 Watling Street (South-East)	0	150	959
	B - Woodford Lane	66	0	118
	C - A5 Watling Street (North-West)	899	49	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A5 Watling Street (South-East)	B - Woodford Lane	C - A5 Watling Street (North-West)
From	A - A5 Watling Street (South-East)	0	0	4
	B - Woodford Lane	0	0	1
	C - A5 Watling Street (North-West)	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	0.37	16.53	0.6	C	108	162	28.72	10.61	0.32	28.72	10.61
B-A	0.69	101.44	1.9	F	61	91	65.16	43.03	0.72	65.16	43.04
C-AB	0.13	9.63	0.1	A	45	67	9.35	8.32	0.10	9.35	8.32
C-A					825	1237					
A-B					138	206					
A-C					880	1320					

Main Results for each time segment

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	89	22	602	0.148	88	0.0	0.2	7.002	A
B-A	50	12	293	0.169	49	0.0	0.2	14.690	B
C-AB	37	9	552	0.067	37	0.0	0.1	6.984	A
C-A	677	169			677				
A-B	113	28			113				
A-C	722	180			722				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	106	27	535	0.198	106	0.2	0.2	8.386	A
B-A	59	15	215	0.276	59	0.2	0.4	22.980	C
C-AB	44	11	500	0.088	44	0.1	0.1	7.897	A
C-A	808	202			808				
A-B	135	34			135				
A-C	862	216			862				

18:15 - 18:30

Stream	Total	Junction	Capacity	RFC	Throughput	Start	End queue	Delay (s)	Unsignalised

	Demand (Veh/hr)	Arrivals (Veh)	(Veh/hr)		(Veh/hr)	queue (Veh)	(Veh)		level of service
B-C	130	32	371	0.350	129	0.2	0.5	14.788	B
B-A	73	18	106	0.687	67	0.4	1.7	85.407	F
C-AB	54	13	428	0.126	54	0.1	0.1	9.624	A
C-A	990	247			990				
A-B	165	41			165				
A-C	1056	264			1056				

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	130	32	347	0.374	130	0.5	0.6	16.533	C
B-A	73	18	106	0.687	72	1.7	1.9	101.440	F
C-AB	54	13	428	0.126	54	0.1	0.1	9.634	A
C-A	990	247			990				
A-B	165	41			165				
A-C	1056	264			1056				

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	106	27	529	0.201	107	0.6	0.3	8.571	A
B-A	59	15	215	0.276	65	1.9	0.4	24.893	C
C-AB	44	11	500	0.088	44	0.1	0.1	7.908	A
C-A	808	202			808				
A-B	135	34			135				
A-C	862	216			862				

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	89	22	600	0.148	89	0.3	0.2	7.046	A
B-A	50	12	293	0.169	50	0.4	0.2	14.872	B
C-AB	37	9	552	0.067	37	0.1	0.1	6.995	A
C-A	677	169			677				
A-B	113	28			113				
A-C	722	180			722				

Queueing Delay Results for each time segment

17:45 - 18:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	2.49	0.17	7.002	A
B-A	2.83	0.19	14.690	B
C-AB	1.06	0.07	6.984	A

18:00 - 18:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	3.57	0.24	8.386	A

B-A	5.19	0.35	22.980	C
C-AB	1.44	0.10	7.897	A

18:15 - 18:30

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	7.45	0.50	14.788	B
B-A	19.82	1.32	85.407	F
C-AB	2.14	0.14	9.624	A

18:30 - 18:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	8.54	0.57	16.533	C
B-A	26.89	1.79	101.440	F
C-AB	2.17	0.14	9.634	A

18:45 - 19:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	3.98	0.27	8.571	A
B-A	7.14	0.48	24.893	C
C-AB	1.47	0.10	7.908	A

19:00 - 19:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	2.70	0.18	7.046	A
B-A	3.29	0.22	14.872	B
C-AB	1.08	0.07	6.995	A

Ref Case + Development, AM (07:00 - 08:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		50.80	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 segment length (min)	Run automatically
D7	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 (%)
A - A5 Watling Street (South-East)		ONE HOUR	✓	1116	100.000
B - Woodford Lane		ONE HOUR	✓	80	100.000
C - A5 Watling Street (North-West)		ONE HOUR	✓	1327	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (South-East)	B - Woodford Lane	C - A5 Watling Street (North-West)
From	A - A5 Watling Street (South-East)	0	117	999
	B - Woodford Lane	50	0	30
	C - A5 Watling Street (North-West)	1160	167	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 Watling Street (South-East)	B - Woodford Lane	C - A5 Watling Street (North-West)
From	A - A5 Watling Street (South-East)	0	0	7
	B - Woodford Lane	0	0	0
	C - A5 Watling Street (North-West)	7	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	9999999999.00	1669.74	16.6	F	28	41	454.12	659.85	5.05	454.12	659.85
B-A	9999999999.00	1663.13	28.3	F	46	69	825.15	719.39	9.17	825.16	719.39
C-AB	0.45	16.17	0.8	C	153	230	47.27	12.34	0.53	47.27	12.34
C-A					1064	1597					
A-B					107	161					
A-C					917	1375					

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	6	549	0.041	22	0.0	0.0	6.840	A
B-A	38	9	206	0.182	37	0.0	0.2	21.121	C
C-AB	126	31	532	0.236	125	0.0	0.3	8.805	A
C-A	873	218			873				
A-B	88	22			88				
A-C	752	188			752				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	27	7	455	0.059	27	0.0	0.1	8.417	A
B-A	45	11	100	0.449	43	0.2	0.7	61.107	F
C-AB	150	38	479	0.313	150	0.3	0.4	10.895	B
C-A	1043	261			1043				
A-B	105	26			105				
A-C	898	225			898				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	33	8	0	9999999999.000	0	0.1	8.3	1669.739	F
B-A	55	14	0	9999999999.000	0	0.7	14.5	1663.126	F
C-AB	184	46	406	0.453	182	0.4	0.8	15.982	C
C-A	1277	319			1277				
A-B	129	32			129				
A-C	1100	275			1100				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	33	8	0	9999999999.000	0	8.3	16.6	-2189.154	?
B-A	55	14	0	9999999999.000	0	14.5	28.3	-2579.668	?
C-AB	184	46	406	0.453	184	0.8	0.8	16.173	C
C-A	1277	319			1277				
A-B	129	32			129				
A-C	1100	275			1100				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	27	7	58	0.461	55	16.6	9.5	896.596	F
B-A	45	11	99	0.454	96	28.3	15.6	869.716	F
C-AB	150	38	479	0.313	152	0.8	0.5	11.030	B
C-A	1043	261			1043				

A-B	105	26			105				
A-C	898	225			898				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	23	6	495	0.046	61	9.5	0.0	9.056	A
B-A	38	9	205	0.183	99	15.6	0.2	58.376	F
C-AB	126	31	532	0.236	126	0.5	0.3	8.885	A
C-A	873	218			873				
A-B	88	22			88				
A-C	752	188			752				

Queueing Delay Results for each time segment

06:45 - 07:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	0.62	0.04	6.840	A
B-A	3.01	0.20	21.121	C
C-AB	4.52	0.30	8.805	A

07:00 - 07:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	0.91	0.06	8.417	A
B-A	9.35	0.62	61.107	F
C-AB	6.72	0.45	10.895	B

07:15 - 07:30

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	62.87	4.19	1669.739	F
B-A	114.14	7.61	1663.126	F
C-AB	11.89	0.79	15.982	C

07:30 - 07:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	186.73	12.45	-2189.154	?
B-A	320.58	21.37	-2579.668	?
C-AB	12.37	0.82	16.173	C

07:45 - 08:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	195.88	13.06	896.596	F
B-A	328.84	21.92	869.716	F
C-AB	7.05	0.47	11.030	B

08:00 - 08:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	7.11	0.47	9.056	A
B-A	49.25	3.28	58.376	F
C-AB	4.72	0.31	8.885	A

Ref Case + Development, AM (08:00 - 09:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		46.17	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	Ref Case + Development	AM (08:00 - 09:00)	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 (%)
A - A5 Watling Street (South-East)		ONE HOUR	✓	1289	100.000
B - Woodford Lane		ONE HOUR	✓	64	100.000
C - A5 Watling Street (North-West)		ONE HOUR	✓	1390	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (South-East)	B - Woodford Lane	C - A5 Watling Street (North-West)
From	A - A5 Watling Street (South-East)	0	102	1187
	B - Woodford Lane	53	0	11
	C - A5 Watling Street (North-West)	1242	148	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 Watling Street (South-East)	B - Woodford Lane	C - A5 Watling Street (North-West)
From	A - A5 Watling Street (South-East)	0	0	8
	B - Woodford Lane	0	0	13
	C - A5 Watling Street (North-West)	9	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	9999999999.00	2834.92	9.1	F	10	15	384.60	1524.11	4.27	403.32	1598.28
B-A	9999999999.00	1850.21	42.6	F	49	73	1753.79	1442.45	19.49	1820.05	1496.95
C-AB	0.48	20.71	0.9	C	136	204	50.25	14.80	0.56	50.25	14.80
C-A					1140	1710					
A-B					94	140					
A-C					1089	1634					

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	2	421	0.020	8	0.0	0.0	8.716	A
B-A	40	10	144	0.278	38	0.0	0.4	33.835	D
C-AB	111	28	482	0.231	110	0.0	0.3	9.654	A
C-A	935	234			935				
A-B	77	19			77				
A-C	894	223			894				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	2	5	2.078	3	0.0	1.7	2834.918	F
B-A	48	12	23	2.032	21	0.4	7.0	1850.210	F
C-AB	133	33	421	0.316	132	0.3	0.5	12.451	B
C-A	1117	279			1117				
A-B	92	23			92				
A-C	1067	267			1067				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	3	0	9999999999.000	0	1.7	4.8	1443.344	F
B-A	58	15	0	9999999999.000	0	7.0	21.6	1398.468	F
C-AB	163	41	337	0.484	161	0.5	0.9	20.324	C
C-A	1367	342			1367				
A-B	112	28			112				
A-C	1307	327			1307				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	3	0	9999999999.000	0	4.8	7.8	1114.148	F
B-A	58	15	0	9999999999.000	0	21.6	36.2	1069.011	F
C-AB	163	41	337	0.484	163	0.9	0.9	20.709	C
C-A	1367	342			1367				
A-B	112	28			112				
A-C	1307	327			1307				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	2	5	2.091	5	7.8	9.1	1908.633	F
B-A	48	12	22	2.148	22	36.2	42.6	1786.501	F
C-AB	133	33	421	0.316	135	0.9	0.5	12.659	B
C-A	1117	279			1117				
A-B	92	23			92				
A-C	1067	267			1067				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	2	30	0.273	27	9.1	4.3	930.836	F
B-A	40	10	142	0.280	139	42.6	17.7	791.180	F
C-AB	111	28	482	0.231	112	0.5	0.3	9.751	A

C-A	935	234			935				
A-B	77	19			77				
A-C	894	223			894				

Queueing Delay Results for each time segment

07:45 - 08:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	0.29	0.02	8.716	A
B-A	4.89	0.33	33.835	D
C-AB	4.39	0.29	9.654	A

08:00 - 08:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	14.03	0.94	2834.918	F
B-A	57.51	3.83	1850.210	F
C-AB	6.78	0.45	12.451	B

08:15 - 08:30

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	48.69	3.25	1443.344	F
B-A	214.72	14.31	1398.468	F
C-AB	13.26	0.88	20.324	C

08:30 - 08:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	94.10	6.27	1114.148	F
B-A	433.55	28.90	1069.011	F
C-AB	14.02	0.93	20.709	C

08:45 - 09:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	126.65	8.44	1908.633	F
B-A	590.77	39.38	1786.501	F
C-AB	7.20	0.48	12.659	B

09:00 - 09:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	100.84	6.72	930.836	F
B-A	452.34	30.16	791.180	F
C-AB	4.60	0.31	9.751	A

Ref Case + Development, AM (09:00 - 10:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		65.60	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 segment length (min)	Run automatically
D9	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 (%)
A - A5 Watling Street (South-East)		ONE HOUR	✓	1091	100.000
B - Woodford Lane		ONE HOUR	✓	96	100.000
C - A5 Watling Street (North-West)		ONE HOUR	✓	1235	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (South-East)	B - Woodford Lane	C - A5 Watling Street (North-West)
From	A - A5 Watling Street (South-East)	0	129	962
	B - Woodford Lane	82	0	14
	C - A5 Watling Street (North-West)	1054	181	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A5 Watling Street (South-East)	B - Woodford Lane	C - A5 Watling Street (North-West)
From	A - A5 Watling Street (South-East)	0	0	9
	B - Woodford Lane	0	0	44
	C - A5 Watling Street (North-West)	11	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	9999999999.00	1120.26	7.8	F	13	19	261.31	813.63	2.90	261.34	813.73
B-A	9999999999.00	1793.34	46.6	F	75	113	1662.23	883.64	18.47	1662.29	883.67
C-AB	0.49	17.14	0.9	C	166	249	53.42	12.87	0.59	53.43	12.87
C-A					967	1451					
A-B					118	178					
A-C					883	1324					

Main Results for each time segment

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	3	363	0.029	10	0.0	0.0	10.202	B
B-A	62	15	219	0.282	60	0.0	0.4	22.527	C
C-AB	136	34	534	0.255	135	0.0	0.3	8.989	A
C-A	794	198			794				
A-B	97	24			97				
A-C	724	181			724				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	13	3	246	0.051	12	0.0	0.1	15.439	C
B-A	74	18	113	0.651	69	0.4	1.5	75.850	F
C-AB	163	41	482	0.338	162	0.3	0.5	11.242	B
C-A	948	237			948				
A-B	116	29			116				
A-C	865	216			865				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	15	4	0	9999999999.000	0	0.1	3.9	-981.162	?
B-A	90	23	0	9999999999.000	0	1.5	24.1	1793.341	F
C-AB	199	50	409	0.487	198	0.5	0.9	16.891	C
C-A	1160	290			1160				
A-B	142	36			142				
A-C	1059	265			1059				

09:30 - 09:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	15	4	0	9999999999.000	0	3.9	7.8	-835.451	?
B-A	90	23	0	9999999999.000	0	24.1	46.6	-788.837	?
C-AB	199	50	409	0.487	199	0.9	0.9	17.140	C
C-A	1160	290			1160				
A-B	142	36			142				
A-C	1059	265			1059				

09:45 - 10:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	13	3	19	0.671	17	7.8	6.8	1120.265	F
B-A	74	18	112	0.658	110	46.6	37.7	1153.095	F
C-AB	163	41	482	0.338	164	0.9	0.5	11.404	B
C-A	948	237			948				
A-B	116	29			116				
A-C	865	216			865				

10:00 - 10:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	3	60	0.174	37	6.8	0.3	214.820	F
B-A	62	15	217	0.284	210	37.7	0.7	340.959	F
C-AB	136	34	534	0.255	137	0.5	0.3	9.082	A
C-A	794	198			794				
A-B	97	24			97				
A-C	724	181			724				

Queueing Delay Results for each time segment

08:45 - 09:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	0.43	0.03	10.202	B

B-A	5.22	0.35	22.527	C
C-AB	5.00	0.33	8.989	A

09:00 - 09:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	0.76	0.05	15.439	C
B-A	18.21	1.21	75.850	F
C-AB	7.50	0.50	11.242	B

09:15 - 09:30

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	29.70	1.98	-981.162	?
B-A	191.80	12.79	1793.341	F
C-AB	13.57	0.90	16.891	C

09:30 - 09:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	87.50	5.83	-835.451	?
B-A	530.37	35.36	-788.837	?
C-AB	14.20	0.95	17.140	C

09:45 - 10:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	108.83	7.26	1120.265	F
B-A	632.36	42.16	1153.095	F
C-AB	7.91	0.53	11.404	B

10:00 - 10:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	34.09	2.27	214.820	F
B-A	284.26	18.95	340.959	F
C-AB	5.23	0.35	9.082	A

Ref Case + Development, PM (16:00 - 17:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS

1	untitled	T-Junction	Two-way		59.54	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 segment length (min)	Run automatically
D10	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 (%)
A - A5 Watling Street (South-East)		ONE HOUR	✓	1276	100.000
B - Woodford Lane		ONE HOUR	✓	95	100.000
C - A5 Watling Street (North-West)		ONE HOUR	✓	1227	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (South-East)	B - Woodford Lane	C - A5 Watling Street (North-West)
From	A - A5 Watling Street (South-East)	0	231	1045
	B - Woodford Lane	56	0	39
	C - A5 Watling Street (North-West)	1084	143	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 Watling Street (South-East)	B - Woodford Lane	C - A5 Watling Street (North-West)
From	A - A5 Watling Street (South-East)	0	0	5
	B - Woodford Lane	0	0	0
	C - A5 Watling Street (North-West)	7	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	9999999999.00	1680.16	21.6	F	36	54	604.43	675.58	6.72	604.43	675.58
B-A	9999999999.00	1684.39	31.7	F	51	77	958.80	746.35	10.65	958.81	746.35
C-AB	0.43	17.58	0.8	C	131	197	42.93	13.09	0.48	42.94	13.09
C-A					995	1492					
A-B					212	318					
A-C					959	1438					

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	534	0.055	29	0.0	0.1	7.129	A
B-A	42	11	208	0.202	41	0.0	0.2	21.420	C
C-AB	108	27	504	0.213	107	0.0	0.3	9.024	A
C-A	816	204			816				
A-B	174	43			174				
A-C	787	197			787				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	35	9	432	0.081	35	0.1	0.1	9.057	A
B-A	50	13	104	0.485	48	0.2	0.8	62.314	F
C-AB	129	32	445	0.289	128	0.3	0.4	11.349	B
C-A	974	244			974				
A-B	208	52			208				
A-C	939	235			939				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	43	11	0	9999999999.000	0	0.1	10.8	1680.158	F
B-A	62	15	0	9999999999.000	0	0.8	16.2	1684.386	F
C-AB	157	39	362	0.435	156	0.4	0.7	17.360	C
C-A	1194	298			1194				
A-B	254	64			254				
A-C	1151	288			1151				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	43	11	0	9999999999.000	0	10.8	21.6	-1834.673	?
B-A	62	15	0	9999999999.000	0	16.2	31.7	-2156.431	?
C-AB	157	39	362	0.435	157	0.7	0.8	17.579	C
C-A	1194	298			1194				
A-B	254	64			254				
A-C	1151	288			1151				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	35	9	70	0.498	67	21.6	13.5	908.164	F
B-A	50	13	103	0.490	100	31.7	19.4	916.166	F
C-AB	129	32	445	0.289	130	0.8	0.4	11.487	B
C-A	974	244			974				
A-B	208	52			208				
A-C	939	235			939				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	459	0.064	83	13.5	0.1	11.069	B
B-A	42	11	207	0.203	119	19.4	0.3	85.812	F
C-AB	108	27	504	0.213	108	0.4	0.3	9.100	A
C-A	816	204			816				
A-B	174	43			174				
A-C	787	197			787				

Queueing Delay Results for each time segment

15:45 - 16:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	0.84	0.06	7.129	A
B-A	3.41	0.23	21.420	C
C-AB	3.97	0.26	9.024	A

16:00 - 16:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	1.27	0.08	9.057	A
B-A	10.62	0.71	62.314	F
C-AB	5.99	0.40	11.349	B

16:15 - 16:30

Stream	Queueing total delay (Veh-	Queueing rate of delay (Veh-	Average delay per arriving	Unsignalised level of

	min)	min/min)	vehicle (s)	service
B-C	81.82	5.45	1680.158	F
B-A	128.09	8.54	1684.386	F
C-AB	11.03	0.74	17.360	C

16:30 - 16:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	242.85	16.19	-1834.673	?
B-A	359.31	23.95	-2156.431	?
C-AB	11.51	0.77	17.579	C

16:45 - 17:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	262.98	17.53	908.164	F
B-A	382.64	25.51	916.166	F
C-AB	6.30	0.42	11.487	B

17:00 - 17:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	14.67	0.98	11.069	B
B-A	74.73	4.98	85.812	F
C-AB	4.14	0.28	9.100	A

Ref Case + Development, PM (17:00 - 18:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		62.33	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 segment length (min)	Run automatically

D11	Ref Case + Development	PM (17:00 - 18:00)	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 (%)
A - A5 Watling Street (South-East)		ONE HOUR	✓	1365	100.000
B - Woodford Lane		ONE HOUR	✓	131	100.000
C - A5 Watling Street (North-West)		ONE HOUR	✓	1245	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (South-East)	**B - Woodford Lane**	**C - A5 Watling Street (North-West)**
From	**A - A5 Watling Street (South-East)**	0	162	1203
	B - Woodford Lane	83	0	48
	C - A5 Watling Street (North-West)	1218	27	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 Watling Street (South-East)	**B - Woodford Lane**	**C - A5 Watling Street (North-West)**
From	**A - A5 Watling Street (South-East)**	0	0	5
	B - Woodford Lane	0	0	1
	C - A5 Watling Street (North-West)	5	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	9999999999.00	1359.00	26.6	F	44	66	1039.35	943.88	11.55	1053.41	956.65
B-A	9999999999.00	1352.15	48.2	F	76	114	1913.98	1005.21	21.27	1935.71	1016.62
C-AB	0.09	12.15	0.1	B	25	37	6.19	9.99	0.07	6.19	9.99
C-A					1118	1676					
A-B					149	223					
A-C					1104	1656					

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	36	9	476	0.076	36	0.0	0.1	8.167	A
B-A	62	16	198	0.315	61	0.0	0.4	25.832	D
C-AB	20	5	477	0.043	20	0.0	0.0	7.876	A
C-A	917	229			917				
A-B	122	30			122				
A-C	906	226			906				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	43	11	231	0.187	43	0.1	0.2	19.073	C
B-A	75	19	91	0.821	66	0.4	2.5	122.156	F
C-AB	24	6	414	0.059	24	0.0	0.1	9.240	A
C-A	1095	274			1095				
A-B	146	36			146				
A-C	1081	270			1081				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	13	0	9999999999.000	0	0.2	13.4	192.297	F
B-A	91	23	0	9999999999.000	0	2.5	25.3	8.745	A
C-AB	30	7	326	0.091	30	0.1	0.1	12.139	B
C-A	1341	335			1341				
A-B	178	45			178				
A-C	1325	331			1325				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	13	0	9999999999.000	0	13.4	26.6	36.714	E
B-A	91	23	0	9999999999.000	0	25.3	48.2	5.838	A
C-AB	30	7	326	0.091	30	0.1	0.1	12.151	B
C-A	1341	335			1341				
A-B	178	45			178				
A-C	1325	331			1325				

17:45 - 18:00

Stream	Total	Junction	Capacity	RFC	Throughput	Start	End queue	Delay (s)	Unsignalised

	Demand (Veh/hr)	Arrivals (Veh)	(Veh/hr)		(Veh/hr)	queue (Veh)	(Veh)		level of service
B-C	43	11	51	0.848	49	26.6	25.2	1359.003	F
B-A	75	19	91	0.821	89	48.2	44.6	1352.149	F
C-AB	24	6	414	0.059	24	0.1	0.1	9.249	A
C-A	1095	274			1095				
A-B	146	36			146				
A-C	1081	270			1081				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	36	9	112	0.322	108	25.2	7.2	561.187	F
B-A	62	16	197	0.317	193	44.6	12.0	539.356	F
C-AB	20	5	477	0.043	20	0.1	0.0	7.882	A
C-A	917	229			917				
A-B	122	30			122				
A-C	906	226			906				

Queueing Delay Results for each time segment

16:45 - 17:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	1.18	0.08	8.167	A
B-A	5.99	0.40	25.832	D
C-AB	0.66	0.04	7.876	A

17:00 - 17:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	3.16	0.21	19.073	C
B-A	27.35	1.82	122.156	F
C-AB	0.93	0.06	9.240	A

17:15 - 17:30

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	102.45	6.83	192.297	F
B-A	208.88	13.93	8.745	A
C-AB	1.48	0.10	12.139	B

17:30 - 17:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	300.64	20.04	36.714	E
B-A	551.58	36.77	5.838	A
C-AB	1.50	0.10	12.151	B

17:45 - 18:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	388.71	25.91	1359.003	F
B-A	695.97	46.40	1352.149	F
C-AB	0.95	0.06	9.249	A

18:00 - 18:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	243.21	16.21	561.187	F
B-A	424.20	28.28	539.356	F
C-AB	0.67	0.04	7.882	A

Ref Case + Development, PM (18:00 - 19:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		197.91	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 segment length (min)	Run automatically
D12	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	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 (%)
A - A5 Watling Street (South-East)		ONE HOUR	✓	1258	100.000
B - Woodford Lane		ONE HOUR	✓	210	100.000
C - A5 Watling Street (North-West)		ONE HOUR	✓	1026	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (South-East)	B - Woodford Lane	C - A5 Watling Street (North-West)
From	A - A5 Watling Street (South-East)	0	188	1070
	B - Woodford Lane	92	0	118
	C - A5 Watling Street (North-West)	977	49	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 Watling Street (South-East)	B - Woodford Lane	C - A5 Watling Street (North-West)
From	A - A5 Watling Street (South-East)	0	0	5
	B - Woodford Lane	0	0	1
	C - A5 Watling Street (North-West)	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	2.70	2407.02	41.5	F	108	162	1134.38	419.06	12.60	1134.39	419.06
B-A	2.64	2442.68	32.7	F	84	127	938.11	444.49	10.42	938.13	444.50
C-AB	0.15	11.34	0.2	B	45	67	10.61	9.43	0.12	10.61	9.43
C-A					897	1345					
A-B					173	259					
A-C					982	1473					

Main Results for each time segment

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	89	22	541	0.164	88	0.0	0.2	7.940	A
B-A	69	17	251	0.276	68	0.0	0.4	19.471	C
C-AB	37	9	513	0.072	37	0.0	0.1	7.545	A
C-A	736	184			736				
A-B	142	35			142				

A-C	806	201			806				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	106	27	443	0.239	106	0.2	0.3	10.642	B
B-A	83	21	162	0.511	80	0.4	1.0	43.020	E
C-AB	44	11	454	0.097	44	0.1	0.1	8.780	A
C-A	878	220			878				
A-B	169	42			169				
A-C	962	240			962				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	130	32	48	2.703	46	0.3	21.2	803.361	F
B-A	101	25	39	2.629	37	1.0	17.0	856.355	F
C-AB	54	13	371	0.145	54	0.1	0.2	11.331	B
C-A	1076	269			1076				
A-B	207	52			207				
A-C	1178	295			1178				

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	130	32	49	2.668	49	21.2	41.5	2407.020	F
B-A	101	25	38	2.640	38	17.0	32.7	2442.684	F
C-AB	54	13	371	0.145	54	0.2	0.2	11.339	B
C-A	1076	269			1076				
A-B	207	52			207				
A-C	1178	295			1178				

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	106	27	198	0.535	194	41.5	19.7	492.856	F
B-A	83	21	156	0.532	151	32.7	15.7	531.469	F
C-AB	44	11	454	0.097	44	0.2	0.1	8.795	A
C-A	878	220			878				
A-B	169	42			169				
A-C	962	240			962				

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	89	22	493	0.180	167	19.7	0.2	14.169	B

B-A	69	17	250	0.277	130	15.7	0.4	48.278	E
C-AB	37	9	513	0.072	37	0.1	0.1	7.560	A
C-A	736	184			736				
A-B	142	35			142				
A-C	806	201			806				

Queueing Delay Results for each time segment

17:45 - 18:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	2.81	0.19	7.940	A
B-A	5.12	0.34	19.471	C
C-AB	1.14	0.08	7.545	A

18:00 - 18:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	4.48	0.30	10.642	B
B-A	12.59	0.84	43.020	E
C-AB	1.60	0.11	8.780	A

18:15 - 18:30

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	163.87	10.92	803.361	F
B-A	135.98	9.07	856.355	F
C-AB	2.51	0.17	11.331	B

18:30 - 18:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	470.80	31.39	2407.020	F
B-A	372.90	24.86	2442.684	F
C-AB	2.55	0.17	11.339	B

18:45 - 19:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	459.11	30.61	492.856	F
B-A	363.06	24.20	531.469	F
C-AB	1.64	0.11	8.795	A

19:00 - 19:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	33.31	2.22	14.169	B
B-A	48.46	3.23	48.278	E
C-AB	1.17	0.08	7.560	A

APPENDIX 13

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: 17059 - A5 Watling St-Drayton Ln.j9
Path: P:\17 jobs\059 MIRA - Southern Manufacturing Sector\Technical Assessments\Modelling - July 2022
Report generation date: 20/07/2022 15:32:27

»Ref Case, AM (07:00 - 08:00)
»Ref Case, AM (08:00 - 09:00)
»Ref Case, AM (09:00 - 10:00)
»Ref Case, PM (16:00 - 17:00)
»Ref Case, PM (17:00 - 18:00)
»Ref Case, PM (18:00 - 19:00)
»Ref Case + Development, AM (07:00 - 08:00)
»Ref Case + Development, AM (08:00 - 09:00)
»Ref Case + Development, AM (09:00 - 10:00)
»Ref Case + Development, PM (16:00 - 17:00)
»Ref Case + Development, PM (17:00 - 18:00)
»Ref Case + Development, PM (18:00 - 19:00)

Summary of junction performance

	AM (07:00 - 08:00)					AM (08:00 - 09:00)					AM (09:00 - 10:00)					PM (16:00 - 17:00)					PM (17:00 - 18:00)					PM (18:00 - 19:00)				
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
Ref Case																														
Stream B-C	21.5	409.50	1.29	F		86.7	21314.86	16.21	F		49.5	1493.74	2.04	F		43.1	2864.04	3.00	F		76.4	1484.26	999999999.00	F		17.0	570.75	1.46	F	
Stream B-A	8.3	482.80	1.24	F	38.89	37.9	8322.72	15.71	F	1613.80	34.4	1528.19	1.98	F	185.91	27.0	2943.35	2.94	F	225.53	36.3	1513.89	999999999.00	F	113.26	15.3	590.88	1.45	F	42.88
Stream C-AB	0.2	10.34	0.16	B		0.5	13.17	0.32	B		0.4	12.44	0.30	B		0.7	16.09	0.40	C		1.0	19.76	0.51	C		0.8	14.16	0.46	B	
Ref Case + Development																														
Stream B-C	85.8	1449.37	999999999.00	F		125.9	2778.03	999999999.00	F		106.7	16489.14	27.40	F		64.5	1581.15	999999999.00	F		83.9	1848.75	999999999.00	F		41.9	9201.50	7.52	F	
Stream B-A	30.9	1486.13	999999999.00	F	116.90	53.9	2814.34	999999999.00	F	231.29	73.4	16863.08	27.21	F	1827.87	41.4	1605.23	999999999.00	F	113.33	39.3	1879.85	999999999.00	F	132.06	38.4	9300.93	7.36	F	606.22
Stream C-AB	0.2	12.45	0.19	B		0.6	18.29	0.39	C		0.5	15.58	0.34	C		0.7	17.62	0.43	C		1.1	20.81	0.53	C		0.9	16.07	0.49	C	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	

Date	24/02/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mtp\MTPGeneral
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	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D2	Ref Case	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D3	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D4	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D5	Ref Case	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D6	Ref Case	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	15	✓
D7	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D8	Ref Case + Development	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D9	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D10	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D11	Ref Case + Development	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D12	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Ref Case, AM (07:00 - 08:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		38.89	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A5 Watling Street (North-West)		Major
B	Drayton Lane		Minor
C	A5 Watling Street (South-East)		Major

Major Arm Geometry

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)
C - A5 Watling Street (South-East)	6.50		✓	3.50	250.0	✓	11.00

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 - Drayton Lane	One lane plus flare	10.00	7.02	3.69	2.20	2.20	✓	1.00	54	39

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	541	0.096	0.243	0.153	0.348
B-C	689	0.103	0.261	-	-
C-B	820	0.311	0.311	-	-

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 segment length (min)	Run automatically
D1	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 (%)
A - A5 Watling Street (North-West)		ONE HOUR	✓	1110	100.000
B - Drayton Lane		ONE HOUR	✓	208	100.000
C - A5 Watling Street (South-East)		ONE HOUR	✓	930	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (North-West)	B - Drayton Lane	C - A5 Watling Street (South-East)
From	A - A5 Watling Street (North-West)	0	93	1017
	B - Drayton Lane	54	0	154
	C - A5 Watling Street (South-East)	869	61	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 Watling Street (North-West)	B - Drayton Lane	C - A5 Watling Street (South-East)
From	A - A5 Watling Street (North-West)	0	2	7
	B - Drayton Lane	2	0	3
	C - A5 Watling Street (South-East)	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	1.29	409.50	21.5	F	141	212	483.39	136.83	5.37	483.40	136.83
B-A	1.24	482.80	8.3	F	50	74	211.82	170.99	2.35	211.83	171.00
C-AB	0.16	10.34	0.2	B	56	84	12.29	8.79	0.14	12.30	8.79
C-A					797	1196					
A-B					85	128					
A-C					933	1400					

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	116	29	427	0.271	114	0.0	0.4	11.464	B
B-A	41	10	205	0.199	40	0.0	0.2	21.697	C
C-AB	46	11	543	0.085	46	0.0	0.1	7.226	A
C-A	654	164			654				
A-B	70	18			70				
A-C	766	191			766				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	138	35	359	0.385	137	0.4	0.6	16.156	C
B-A	49	12	138	0.352	47	0.2	0.5	39.280	E
C-AB	55	14	490	0.112	55	0.1	0.1	8.273	A
C-A	781	195			781				
A-B	84	21			84				
A-C	914	229			914				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	170	42	135	1.259	125	0.6	11.6	216.662	F
B-A	59	15	48	1.235	41	0.5	5.0	322.255	F
C-AB	67	17	415	0.162	67	0.1	0.2	10.323	B
C-A	957	239			957				
A-B	102	26			102				
A-C	1120	280			1120				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	170	42	132	1.287	130	11.6	21.5	409.501	F
B-A	59	15	49	1.225	46	5.0	8.3	482.800	F
C-AB	67	17	415	0.162	67	0.2	0.2	10.337	B
C-A	957	239			957				
A-B	102	26			102				
A-C	1120	280			1120				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	138	35	278	0.499	220	21.5	1.1	115.837	F
B-A	49	12	106	0.458	78	8.3	1.0	165.565	F
C-AB	55	14	490	0.112	55	0.2	0.1	8.289	A
C-A	781	195			781				
A-B	84	21			84				
A-C	914	229			914				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	116	29	424	0.274	119	1.1	0.4	11.924	B
B-A	41	10	204	0.199	44	1.0	0.3	22.877	C
C-AB	46	11	543	0.085	46	0.1	0.1	7.238	A
C-A	654	164			654				
A-B	70	18			70				
A-C	766	191			766				

Queueing Delay Results for each time segment

06:45 - 07:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	5.20	0.35	11.464	B
B-A	3.33	0.22	21.697	C
C-AB	1.36	0.09	7.226	A

07:00 - 07:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	8.66	0.58	16.156	C
B-A	6.92	0.46	39.280	E
C-AB	1.87	0.12	8.273	A

07:15 - 07:30

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	99.47	6.63	216.662	F
B-A	45.61	3.04	322.255	F
C-AB	2.85	0.19	10.323	B

07:30 - 07:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	248.62	16.57	409.501	F
B-A	100.73	6.72	482.800	F
C-AB	2.89	0.19	10.337	B

07:45 - 08:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	115.28	7.69	115.837	F
B-A	50.84	3.39	165.565	F
C-AB	1.92	0.13	8.289	A

08:00 - 08:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	6.16	0.41	11.924	B
B-A	4.38	0.29	22.877	C
C-AB	1.40	0.09	7.238	A

Ref Case, AM (08:00 - 09:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1613.80	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 segment length (min)	Run automatically
D2	Ref Case	AM (08:00 - 09:00)	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 (%)
A - A5 Watling Street (North-West)		ONE HOUR	✓	1116	100.000
B - Drayton Lane		ONE HOUR	✓	235	100.000
C - A5 Watling Street (South-East)		ONE HOUR	✓	1139	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (North-West)	B - Drayton Lane	C - A5 Watling Street (South-East)
From	A - A5 Watling Street (North-West)	0	92	1024
	B - Drayton Lane	70	0	165
	C - A5 Watling Street (South-East)	1023	116	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A5 Watling Street (North-West)	B - Drayton Lane	C - A5 Watling Street (South-East)
From	A - A5 Watling Street (North-West)	0	4	8
	B - Drayton Lane	6	0	4
	C - A5 Watling Street (South-East)	6	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	16.21	21314.86	86.7	F	151	227	3630.59	959.16	40.34	4008.93	1059.11
B-A	15.71	8322.72	37.9	F	64	96	1624.57	1011.67	18.05	1793.96	1117.16
C-AB	0.32	13.17	0.5	B	106	160	28.22	10.61	0.31	28.23	10.61
C-A					939	1408					
A-B					84	127					
A-C					940	1409					

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	124	31	394	0.315	122	0.0	0.5	13.153	B
B-A	53	13	160	0.329	51	0.0	0.5	32.437	D
C-AB	87	22	529	0.165	87	0.0	0.2	8.132	A
C-A	770	193			770				
A-B	69	17			69				
A-C	771	193			771				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	148	37	241	0.616	144	0.4	1.5	35.949	E
B-A	63	16	85	0.737	57	0.5	1.9	112.419	F
C-AB	104	26	475	0.220	104	0.2	0.3	9.692	A
C-A	920	230			920				
A-B	83	21			83				
A-C	921	230			921				

08:15 - 08:30

Stream	Total	Junction	Capacity	RFC	Throughput	Start	End queue	Delay (s)	Unsignalised

	Demand (Veh/hr)	Arrivals (Veh)	(Veh/hr)		(Veh/hr)	queue (Veh)	(Veh)		level of service
B-C	182	45	11	15.891	11	1.5	44.0	1734.307	F
B-A	77	19	5	14.938	5	1.9	19.9	8322.722	F
C-AB	128	32	401	0.318	127	0.3	0.5	13.102	B
C-A	1126	282			1126				
A-B	101	25			101				
A-C	1127	282			1127				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	182	45	11	16.207	11	44.0	86.7	21314.859	F
B-A	77	19	5	15.710	5	19.9	37.9	2167.647	F
C-AB	128	32	401	0.318	128	0.5	0.5	13.169	B
C-A	1126	282			1126				
A-B	101	25			101				
A-C	1127	282			1127				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	148	37	170	0.871	168	86.7	81.7	1551.492	F
B-A	63	16	74	0.852	72	37.9	35.7	1583.577	F
C-AB	104	26	475	0.220	105	0.5	0.3	9.748	A
C-A	920	230			920				
A-B	83	21			83				
A-C	921	230			921				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	124	31	236	0.527	233	81.7	54.5	1056.479	F
B-A	53	13	102	0.516	99	35.7	24.0	1089.515	F
C-AB	87	22	529	0.165	88	0.3	0.2	8.171	A
C-A	770	193			770				
A-B	69	17			69				
A-C	771	193			771				

Queueing Delay Results for each time segment

07:45 - 08:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	6.34	0.42	13.153	B
B-A	6.22	0.41	32.437	D
C-AB	2.91	0.19	8.132	A

08:00 - 08:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	18.96	1.26	35.949	E

B-A	21.65	1.44	112.419	F
C-AB	4.16	0.28	9.692	A

08:15 - 08:30

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	341.34	22.76	1734.307	F
B-A	163.37	10.89	8322.722	F
C-AB	6.83	0.46	13.102	B

08:30 - 08:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	980.20	65.35	21314.859	F
B-A	433.60	28.91	2167.647	F
C-AB	7.00	0.47	13.169	B

08:45 - 09:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	1262.39	84.16	1551.492	F
B-A	552.04	36.80	1583.577	F
C-AB	4.31	0.29	9.748	A

09:00 - 09:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	1021.35	68.09	1056.479	F
B-A	447.70	29.85	1089.515	F
C-AB	3.01	0.20	8.171	A

Ref Case, AM (09:00 - 10:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		185.91	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 segment length (min)	Run automatically

D3	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 (%)
A - A5 Watling Street (North-West)		ONE HOUR	✓	1052	100.000
B - Drayton Lane		ONE HOUR	✓	288	100.000
C - A5 Watling Street (South-East)		ONE HOUR	✓	905	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (North-West)	**B - Drayton Lane**	**C - A5 Watling Street (South-East)**
From	**A - A5 Watling Street (North-West)**	0	119	933
	B - Drayton Lane	117	0	171
	C - A5 Watling Street (South-East)	795	110	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 Watling Street (North-West)	**B - Drayton Lane**	**C - A5 Watling Street (South-East)**
From	**A - A5 Watling Street (North-West)**	0	7	7
	B - Drayton Lane	3	0	1
	C - A5 Watling Street (South-East)	7	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	2.04	1493.74	49.5	F	157	235	1999.51	509.71	22.22	2062.11	525.67
B-A	1.98	1528.19	34.4	F	107	161	1425.86	531.24	15.84	1471.22	548.14
C-AB	0.30	12.44	0.4	B	101	151	25.88	10.25	0.29	25.88	10.26
C-A					730	1094					
A-B					109	164					
A-C					856	1284					

Main Results for each time segment

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	129	32	397	0.325	127	0.0	0.5	13.262	B
B-A	88	22	214	0.412	85	0.0	0.7	27.516	D
C-AB	83	21	525	0.158	82	0.0	0.2	8.108	A
C-A	599	150			599				
A-B	90	22			90				
A-C	702	176			702				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	154	38	251	0.613	150	0.5	1.4	34.449	D
B-A	105	26	139	0.754	99	0.7	2.3	79.203	F
C-AB	99	25	477	0.207	99	0.2	0.3	9.495	A
C-A	715	179			715				
A-B	107	27			107				
A-C	839	210			839				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	188	47	92	2.036	91	1.4	25.9	582.766	F
B-A	129	32	66	1.961	64	2.3	18.4	645.128	F
C-AB	121	30	410	0.295	121	0.3	0.4	12.391	B
C-A	875	219			875				
A-B	131	33			131				
A-C	1027	257			1027				

09:30 - 09:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	188	47	94	2.004	94	25.9	49.5	1493.745	F
B-A	129	32	65	1.976	65	18.4	34.4	1528.190	F
C-AB	121	30	410	0.295	121	0.4	0.4	12.440	B
C-A	875	219			875				
A-B	131	33			131				
A-C	1027	257			1027				

09:45 - 10:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	154	38	177	0.868	174	49.5	44.5	959.750	F
B-A	105	26	122	0.860	119	34.4	31.0	972.651	F
C-AB	99	25	477	0.207	99	0.4	0.3	9.547	A
C-A	715	179			715				
A-B	107	27			107				
A-C	839	210			839				

10:00 - 10:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	129	32	225	0.572	220	44.5	21.7	548.562	F
B-A	88	22	155	0.566	151	31.0	15.3	563.594	F
C-AB	83	21	525	0.158	83	0.3	0.2	8.145	A
C-A	599	150			599				
A-B	90	22			90				
A-C	702	176			702				

Queueing Delay Results for each time segment

08:45 - 09:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	6.63	0.44	13.262	B
B-A	8.92	0.59	27.516	D
C-AB	2.75	0.18	8.108	A

09:00 - 09:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	18.92	1.26	34.449	D
B-A	26.84	1.79	79.203	F
C-AB	3.87	0.26	9.495	A

09:15 - 09:30

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	207.20	13.81	582.766	F
B-A	156.58	10.44	645.128	F
C-AB	6.14	0.41	12.391	B

09:30 - 09:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	565.39	37.69	1493.745	F
B-A	396.11	26.41	1528.190	F
C-AB	6.27	0.42	12.440	B

09:45 - 10:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	705.05	47.00	959.750	F
B-A	490.12	32.67	972.651	F
C-AB	4.00	0.27	9.547	A

10:00 - 10:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	496.33	33.09	548.562	F
B-A	347.28	23.15	563.594	F
C-AB	2.84	0.19	8.145	A

Ref Case, PM (16:00 - 17:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		225.53	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 segment length (min)	Run automatically
D4	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 (%)
A - A5 Watling Street (North-West)		ONE HOUR	✓	1229	100.000
B - Drayton Lane		ONE HOUR	✓	186	100.000
C - A5 Watling Street (South-East)		ONE HOUR	✓	909	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (North-West)	B - Drayton Lane	C - A5 Watling Street (South-East)
From	A - A5 Watling Street (North-West)	0	156	1073
	B - Drayton Lane	71	0	115
	C - A5 Watling Street (South-East)	771	138	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 Watling Street (North-West)	B - Drayton Lane	C - A5 Watling Street (South-East)
From	A - A5 Watling Street (North-West)	0	4	6
	B - Drayton Lane	2	0	2
	C - A5 Watling Street (South-East)	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	3.00	2864.04	43.1	F	106	158	1431.74	542.71	15.91	1431.80	542.73
B-A	2.94	2943.35	27.0	F	65	98	932.87	572.75	10.37	933.00	572.83
C-AB	0.40	16.09	0.7	C	127	190	38.76	12.24	0.43	38.76	12.24
C-A					707	1061					
A-B					143	215					
A-C					985	1477					

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	87	22	399	0.217	85	0.0	0.3	11.460	B
B-A	53	13	190	0.282	52	0.0	0.4	25.887	D
C-AB	104	26	516	0.201	103	0.0	0.2	8.690	A
C-A	580	145			580				
A-B	117	29			117				
A-C	808	202			808				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	103	26	293	0.353	102	0.3	0.5	18.791	C
B-A	64	16	117	0.545	61	0.4	1.0	61.631	F
C-AB	124	31	457	0.271	124	0.2	0.4	10.778	B
C-A	693	173			693				
A-B	140	35			140				
A-C	965	241			965				

16:15 - 16:30

Stream	Total	Junction	Capacity	RFC	Throughput	Start	End queue	Delay (s)	Unsignalised

	Demand (Veh/hr)	Arrivals (Veh)	(Veh/hr)		(Veh/hr)	queue (Veh)	(Veh)		level of service
B-C	127	32	42	3.000	41	0.5	22.0	909.763	F
B-A	78	20	27	2.896	26	1.0	14.1	1000.123	F
C-AB	152	38	376	0.405	151	0.4	0.7	15.934	C
C-A	849	212			849				
A-B	172	43			172				
A-C	1181	295			1181				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	127	32	42	2.992	42	22.0	43.1	2864.041	F
B-A	78	20	27	2.945	26	14.1	27.0	2943.352	F
C-AB	152	38	376	0.405	152	0.7	0.7	16.093	C
C-A	849	212			849				
A-B	172	43			172				
A-C	1181	295			1181				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	103	26	155	0.669	151	43.1	31.1	892.355	F
B-A	64	16	96	0.662	93	27.0	19.7	908.171	F
C-AB	124	31	457	0.271	125	0.7	0.4	10.885	B
C-A	693	173			693				
A-B	140	35			140				
A-C	965	241			965				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	87	22	236	0.366	208	31.1	0.7	233.646	F
B-A	53	13	144	0.371	129	19.7	0.8	275.545	F
C-AB	104	26	516	0.201	104	0.4	0.3	8.754	A
C-A	580	145			580				
A-B	117	29			117				
A-C	808	202			808				

Queueing Delay Results for each time segment

15:45 - 16:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	3.89	0.26	11.460	B
B-A	5.14	0.34	25.887	D
C-AB	3.69	0.25	8.690	A

16:00 - 16:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	7.45	0.50	18.791	C

B-A	13.34	0.89	61.631	F
C-AB	5.49	0.37	10.778	B

16:15 - 16:30

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	170.50	11.37	909.763	F
B-A	114.66	7.64	1000.123	F
C-AB	9.81	0.65	15.934	C

16:30 - 16:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	487.76	32.52	2864.041	F
B-A	308.49	20.57	2943.352	F
C-AB	10.18	0.68	16.093	C

16:45 - 17:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	556.39	37.09	892.355	F
B-A	350.68	23.38	908.171	F
C-AB	5.75	0.38	10.885	B

17:00 - 17:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	205.76	13.72	233.646	F
B-A	140.56	9.37	275.545	F
C-AB	3.84	0.26	8.754	A

Ref Case, PM (17:00 - 18:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		113.26	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 segment length (min)	Run automatically

D5	Ref Case	PM (17:00 - 18:00)	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 (%)
A - A5 Watling Street (North-West)		ONE HOUR	✓	1254	100.000
B - Drayton Lane		ONE HOUR	✓	200	100.000
C - A5 Watling Street (South-East)		ONE HOUR	✓	1111	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (North-West)	**B - Drayton Lane**	**C - A5 Watling Street (South-East)**
From	**A - A5 Watling Street (North-West)**	0	173	1081
	B - Drayton Lane	63	0	137
	C - A5 Watling Street (South-East)	938	173	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 Watling Street (North-West)	**B - Drayton Lane**	**C - A5 Watling Street (South-East)**
From	**A - A5 Watling Street (North-West)**	0	1	5
	B - Drayton Lane	0	0	0
	C - A5 Watling Street (South-East)	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	9999999999.00	1484.26	76.4	F	126	189	3102.14	987.05	34.47	3313.03	1054.15
B-A	9999999999.00	1513.89	36.3	F	58	87	1511.54	1045.87	16.79	1615.14	1117.55
C-AB	0.51	19.76	1.0	C	159	238	56.41	14.20	0.63	56.42	14.21
C-A					861	1291					
A-B					159	238					
A-C					992	1488					

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	103	26	407	0.254	102	0.0	0.3	11.763	B
B-A	47	12	159	0.297	46	0.0	0.4	31.273	D
C-AB	130	33	514	0.253	129	0.0	0.3	9.321	A
C-A	706	177			706				
A-B	130	33			130				
A-C	814	203			814				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	123	31	246	0.500	121	0.3	0.9	28.157	D
B-A	57	14	80	0.704	52	0.4	1.7	111.011	F
C-AB	156	39	454	0.342	155	0.3	0.5	11.992	B
C-A	843	211			843				
A-B	156	39			156				
A-C	972	243			972				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	151	38	0	9999999999.000	0	0.9	38.7	72.691	F
B-A	69	17	0	9999999999.000	0	1.7	19.0	-74.037	?
C-AB	191	48	373	0.512	189	0.5	1.0	19.376	C
C-A	1032	258			1032				
A-B	190	48			190				
A-C	1190	298			1190				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	151	38	0	9999999999.000	0	38.7	76.4	6.250	A
B-A	69	17	0	9999999999.000	0	19.0	36.3	-68.276	?
C-AB	191	48	373	0.512	191	1.0	1.0	19.764	C
C-A	1032	258			1032				
A-B	190	48			190				
A-C	1190	298			1190				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	123	31	150	0.822	148	76.4	70.2	1484.262	F
B-A	57	14	71	0.802	69	36.3	33.3	1513.887	F
C-AB	156	39	454	0.342	158	1.0	0.5	12.208	B
C-A	843	211			843				
A-B	156	39			156				
A-C	972	243			972				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	103	26	227	0.454	224	70.2	40.0	890.167	F
B-A	47	12	107	0.443	104	33.3	19.2	921.164	F
C-AB	130	33	514	0.253	131	0.5	0.3	9.422	A
C-A	706	177			706				
A-B	130	33			130				
A-C	814	203			814				

Queueing Delay Results for each time segment

16:45 - 17:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	4.74	0.32	11.763	B
B-A	5.42	0.36	31.273	D
C-AB	4.96	0.33	9.321	A

17:00 - 17:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	12.73	0.85	28.157	D
B-A	19.30	1.29	111.011	F
C-AB	7.63	0.51	11.992	B

17:15 - 17:30

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	296.96	19.80	72.691	F
B-A	155.05	10.34	-74.037	?
C-AB	14.82	0.99	19.376	C

17:30 - 17:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	862.61	57.51	6.250	A
B-A	415.17	27.68	-68.276	?
C-AB	15.69	1.05	19.764	C

17:45 - 18:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	1099.04	73.27	1484.262	F
B-A	522.54	34.84	1513.887	F
C-AB	8.11	0.54	12.208	B

18:00 - 18:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	826.05	55.07	890.167	F
B-A	394.07	26.27	921.164	F
C-AB	5.20	0.35	9.422	A

Ref Case, PM (18:00 - 19:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		42.88	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	Ref Case	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	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 (%)
A - A5 Watling Street (North-West)		ONE HOUR	✓	990	100.000
B - Drayton Lane		ONE HOUR	✓	165	100.000
C - A5 Watling Street (South-East)		ONE HOUR	✓	1078	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (North-West)	B - Drayton Lane	C - A5 Watling Street (South-East)
From	A - A5 Watling Street (North-West)	0	130	860
	B - Drayton Lane	78	0	87
	C - A5 Watling Street (South-East)	884	194	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 Watling Street (North-West)	B - Drayton Lane	C - A5 Watling Street (South-East)
From	A - A5 Watling Street (North-West)	0	1	3
	B - Drayton Lane	0	0	0
	C - A5 Watling Street (South-East)	4	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	1.46	570.75	17.0	F	80	120	398.81	199.83	4.43	398.82	199.83
B-A	1.45	590.88	15.3	F	72	107	395.42	220.99	4.39	395.44	221.00
C-AB	0.46	14.16	0.8	B	178	267	49.66	11.16	0.55	49.67	11.16
C-A					811	1217					
A-B					119	179					
A-C					789	1184					

Main Results for each time segment

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	65	16	452	0.145	65	0.0	0.2	9.276	A
B-A	59	15	223	0.263	57	0.0	0.3	21.518	C
C-AB	146	37	577	0.253	145	0.0	0.3	8.311	A
C-A	666	166			666				
A-B	98	24			98				
A-C	647	162			647				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	78	20	406	0.193	78	0.2	0.2	10.975	B
B-A	70	18	154	0.455	68	0.3	0.8	41.153	E
C-AB	174	44	531	0.329	174	0.3	0.5	10.067	B
C-A	795	199			795				
A-B	117	29			117				
A-C	773	193			773				

18:15 - 18:30

Stream	Total	Junction	Capacity	RFC	Throughput	Start	End queue	Delay (s)	Unsignalised

	Demand (Veh/hr)	Arrivals (Veh)	(Veh/hr)		(Veh/hr)	queue (Veh)	(Veh)		level of service
B-C	96	24	65	1.464	60	0.2	9.3	347.258	F
B-A	86	21	60	1.427	55	0.8	8.4	372.651	F
C-AB	214	53	468	0.457	212	0.5	0.8	14.021	B
C-A	973	243			973				
A-B	143	36			143				
A-C	947	237			947				

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	96	24	66	1.456	65	9.3	17.0	570.746	F
B-A	86	21	59	1.451	58	8.4	15.3	590.878	F
C-AB	214	53	468	0.457	214	0.8	0.8	14.162	B
C-A	973	243			973				
A-B	143	36			143				
A-C	947	237			947				

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	78	20	164	0.478	142	17.0	1.2	208.316	F
B-A	70	18	136	0.516	125	15.3	1.6	260.521	F
C-AB	174	44	531	0.329	176	0.8	0.5	10.177	B
C-A	795	199			795				
A-B	117	29			117				
A-C	773	193			773				

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	65	16	488	0.134	70	1.2	0.2	8.694	A
B-A	59	15	223	0.263	64	1.6	0.4	23.232	C
C-AB	146	37	577	0.253	147	0.5	0.3	8.386	A
C-A	666	166			666				
A-B	98	24			98				
A-C	647	162			647				

Queueing Delay Results for each time segment

17:45 - 18:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	2.41	0.16	9.276	A
B-A	4.76	0.32	21.518	C
C-AB	4.97	0.33	8.311	A

18:00 - 18:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	3.42	0.23	10.975	B

B-A	10.34	0.69	41.153	E
C-AB	7.22	0.48	10.067	B

18:15 - 18:30

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	76.74	5.12	347.258	F
B-A	72.78	4.85	372.651	F
C-AB	12.17	0.81	14.021	B

18:30 - 18:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	197.37	13.16	570.746	F
B-A	178.51	11.90	590.878	F
C-AB	12.60	0.84	14.162	B

18:45 - 19:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	116.29	7.75	208.316	F
B-A	122.54	8.17	260.521	F
C-AB	7.54	0.50	10.177	B

19:00 - 19:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	2.59	0.17	8.694	A
B-A	6.50	0.43	23.232	C
C-AB	5.17	0.34	8.386	A

Ref Case + Development, AM (07:00 - 08:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		116.90	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 segment length (min)	Run automatically
D7	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 (%)
A - A5 Watling Street (North-West)		ONE HOUR	✓	1271	100.000
B - Drayton Lane		ONE HOUR	✓	208	100.000
C - A5 Watling Street (South-East)		ONE HOUR	✓	1027	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (North-West)	B - Drayton Lane	C - A5 Watling Street (South-East)
From	A - A5 Watling Street (North-West)	0	93	1178
	B - Drayton Lane	54	0	154
	C - A5 Watling Street (South-East)	966	61	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 Watling Street (North-West)	B - Drayton Lane	C - A5 Watling Street (South-East)
From	A - A5 Watling Street (North-West)	0	2	7
	B - Drayton Lane	2	0	3
	C - A5 Watling Street (South-East)	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	9999999999.00	1449.37	85.8	F	141	212	3445.55	975.30	38.28	3682.40	1042.34
B-A	9999999999.00	1486.13	30.9	F	50	74	1269.24	1024.59	14.10	1359.47	1097.43
C-AB	0.19	12.45	0.2	B	56	84	14.17	10.12	0.16	14.17	10.13
C-A					886	1330					
A-B					85	128					
A-C					1081	1621					

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	116	29	387	0.300	114	0.0	0.4	13.132	B
B-A	41	10	159	0.256	39	0.0	0.3	29.875	D
C-AB	46	11	503	0.091	46	0.0	0.1	7.861	A
C-A	727	182			727				
A-B	70	18			70				
A-C	887	222			887				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	138	35	268	0.517	136	0.4	1.0	26.844	D
B-A	49	12	82	0.593	45	0.3	1.2	91.603	F
C-AB	55	14	442	0.124	55	0.1	0.1	9.301	A
C-A	868	217			868				
A-B	84	21			84				
A-C	1059	265			1059				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	170	42	0	9999999999.000	0	1.0	43.4	1.580	A
B-A	59	15	0	9999999999.000	0	1.2	16.0	-276.081	?
C-AB	67	17	356	0.188	67	0.1	0.2	12.416	B
C-A	1064	266			1064				
A-B	102	26			102				
A-C	1297	324			1297				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	170	42	0	9999999999.000	0	43.4	85.8	-158.691	?
B-A	59	15	0	9999999999.000	0	16.0	30.9	-256.293	?
C-AB	67	17	356	0.188	67	0.2	0.2	12.445	B
C-A	1064	266			1064				
A-B	102	26			102				
A-C	1297	324			1297				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	138	35	177	0.781	175	85.8	76.6	1449.373	F
B-A	49	12	63	0.766	61	30.9	27.7	1486.131	F
C-AB	55	14	442	0.124	55	0.2	0.1	9.327	A
C-A	868	217			868				

A-B	84	21			84				
A-C	1059	265			1059				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	116	29	248	0.467	245	76.6	44.3	892.015	F
B-A	41	10	89	0.457	86	27.7	16.4	934.727	F
C-AB	46	11	503	0.091	46	0.1	0.1	7.880	A
C-A	727	182			727				
A-B	70	18			70				
A-C	887	222			887				

Queueing Delay Results for each time segment

06:45 - 07:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	5.91	0.39	13.132	B
B-A	4.46	0.30	29.875	D
C-AB	1.48	0.10	7.861	A

07:00 - 07:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	13.71	0.91	26.844	D
B-A	14.18	0.95	91.603	F
C-AB	2.10	0.14	9.301	A

07:15 - 07:30

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	333.04	22.20	1.580	A
B-A	129.00	8.60	-276.081	?
C-AB	3.42	0.23	12.416	B

07:30 - 07:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	968.88	64.59	-158.691	?
B-A	351.95	23.46	-256.293	?
C-AB	3.48	0.23	12.445	B

07:45 - 08:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	1217.67	81.18	1449.373	F
B-A	439.32	29.29	1486.131	F
C-AB	2.17	0.14	9.327	A

08:00 - 08:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	906.34	60.42	892.015	F

B-A	330.33	22.02	934.727	F
C-AB	1.52	0.10	7.880	A

Ref Case + Development, AM (08:00 - 09:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		231.29	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 segment length (min)	Run automatically
D8	Ref Case + Development	AM (08:00 - 09:00)	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 (%)
A - A5 Watling Street (North-West)		ONE HOUR	✓	1316	100.000
B - Drayton Lane		ONE HOUR	✓	235	100.000
C - A5 Watling Street (South-East)		ONE HOUR	✓	1198	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (North-West)	**B - Drayton Lane**	**C - A5 Watling Street (South-East)**
From	**A - A5 Watling Street (North-West)**	0	92	1224
	B - Drayton Lane	70	0	165
	C - A5 Watling Street (South-East)	1082	116	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 Watling Street (North-West)	B - Drayton Lane	C - A5 Watling Street (South-East)
From	A - A5 Watling Street (North-West)	0	4	9
	B - Drayton Lane	6	0	4
	C - A5 Watling Street (South-East)	9	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	9999999999.00	2778.03	125.9	F	151	227	5598.91	1479.17	62.21	7531.53	1989.75
B-A	9999999999.00	2814.34	53.9	F	64	96	2425.63	1510.51	26.95	3259.20	2029.61
C-AB	0.39	18.29	0.6	C	106	160	35.97	13.52	0.40	35.97	13.52
C-A					993	1489					
A-B					84	127					
A-C					1123	1685					

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	124	31	321	0.387	122	0.0	0.6	17.864	C
B-A	53	13	109	0.484	49	0.0	0.8	57.817	F
C-AB	87	22	476	0.183	86	0.0	0.2	9.218	A
C-A	815	204			815				
A-B	69	17			69				
A-C	921	230			921				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	148	37	81	1.836	78	0.6	18.3	1374.751	F
B-A	63	16	35	1.773	33	0.8	8.4	1589.097	F
C-AB	104	26	412	0.253	104	0.2	0.3	11.648	B
C-A	973	243			973				
A-B	83	21			83				
A-C	1100	275			1100				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	182	45	0	9999999999.000	0	18.3	63.7	1251.540	F
B-A	77	19	0	9999999999.000	0	8.4	27.6	1265.411	F
C-AB	128	32	324	0.394	127	0.3	0.6	18.082	C
C-A	1191	298			1191				
A-B	101	25			101				
A-C	1348	337			1348				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	182	45	0	9999999999.000	0	63.7	109.1	1233.631	F
B-A	77	19	0	9999999999.000	0	27.6	46.9	1243.983	F
C-AB	128	32	324	0.394	128	0.6	0.6	18.294	C
C-A	1191	298			1191				
A-B	101	25			101				
A-C	1348	337			1348				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	148	37	81	1.822	81	109.1	125.9	2778.030	F
B-A	63	16	35	1.805	35	46.9	53.9	2814.345	F
C-AB	104	26	412	0.253	105	0.6	0.3	11.769	B
C-A	973	243			973				
A-B	83	21			83				
A-C	1100	275			1100				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	124	31	188	0.659	187	125.9	110.2	2273.937	F
B-A	53	13	81	0.654	79	53.9	47.3	2306.734	F
C-AB	87	22	476	0.183	88	0.3	0.2	9.282	A
C-A	815	204			815				
A-B	69	17			69				
A-C	921	230			921				

Queueing Delay Results for each time segment

07:45 - 08:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	8.45	0.56	17.864	C
B-A	10.33	0.69	57.817	F
C-AB	3.29	0.22	9.218	A

08:00 - 08:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service

B-C	145.61	9.71	1374.751	F
B-A	71.07	4.74	1589.097	F
C-AB	4.98	0.33	11.648	B

08:15 - 08:30

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	615.25	41.02	1251.540	F
B-A	269.92	17.99	1265.411	F
C-AB	9.32	0.62	18.082	C

08:30 - 08:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	1296.50	86.43	1233.631	F
B-A	558.93	37.26	1243.983	F
C-AB	9.72	0.65	18.294	C

08:45 - 09:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	1762.63	117.51	2778.030	F
B-A	756.11	50.41	2814.345	F
C-AB	5.24	0.35	11.769	B

09:00 - 09:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	1770.46	118.03	2273.937	F
B-A	759.26	50.62	2306.734	F
C-AB	3.43	0.23	9.282	A

Ref Case + Development, AM (09:00 - 10:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1827.87	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 segment length (min)	Run automatically
D9	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 (%)
A - A5 Watling Street (North-West)		ONE HOUR	✓	1181	100.000
B - Drayton Lane		ONE HOUR	✓	288	100.000
C - A5 Watling Street (South-East)		ONE HOUR	✓	978	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (North-West)	B - Drayton Lane	C - A5 Watling Street (South-East)
From	A - A5 Watling Street (North-West)	0	119	1062
	B - Drayton Lane	117	0	171
	C - A5 Watling Street (South-East)	868	110	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 Watling Street (North-West)	B - Drayton Lane	C - A5 Watling Street (South-East)
From	A - A5 Watling Street (North-West)	0	7	11
	B - Drayton Lane	3	0	1
	C - A5 Watling Street (South-East)	10	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	27.40	16489.14	106.7	F	157	235	4787.45	1220.41	53.19	6115.30	1558.91
B-A	27.21	16863.08	73.4	F	107	161	3318.09	1236.23	36.87	4234.24	1577.57
C-AB	0.34	15.58	0.5	C	101	151	30.63	12.14	0.34	30.63	12.14
C-A					796	1195					
A-B					109	164					
A-C					975	1462					

Main Results for each time segment

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	129	32	335	0.384	126	0.0	0.6	17.074	C
B-A	88	22	167	0.528	84	0.0	1.0	41.807	E
C-AB	83	21	486	0.171	82	0.0	0.2	8.904	A
C-A	653	163			653				
A-B	90	22			90				
A-C	800	200			800				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	154	38	127	1.208	117	0.6	9.8	509.486	F
B-A	105	26	89	1.181	80	1.0	7.2	582.041	F
C-AB	99	25	430	0.230	99	0.2	0.3	10.864	B
C-A	780	195			780				
A-B	107	27			107				
A-C	955	239			955				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	188	47	7	25.798	7	9.8	55.0	16489.136	F
B-A	129	32	5	25.465	5	7.2	38.1	16863.084	F
C-AB	121	30	352	0.344	120	0.3	0.5	15.468	C
C-A	956	239			956				
A-B	131	33			131				
A-C	1169	292			1169				

09:30 - 09:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	188	47	7	27.404	7	55.0	100.4	2652.272	F
B-A	129	32	5	27.212	5	38.1	69.2	2669.151	F
C-AB	121	30	352	0.344	121	0.5	0.5	15.577	C
C-A	956	239			956				
A-B	131	33			131				
A-C	1169	292			1169				

09:45 - 10:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	154	38	128	1.197	128	100.4	106.7	2274.155	F
B-A	105	26	88	1.191	88	69.2	73.4	2287.736	F

C-AB	99	25	430	0.230	100	0.5	0.3	10.945	B
C-A	780	195			780				
A-B	107	27			107				
A-C	955	239			955				

10:00 - 10:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	129	32	190	0.677	189	106.7	91.8	1896.847	F
B-A	88	22	131	0.674	129	73.4	63.2	1908.705	F
C-AB	83	21	486	0.171	83	0.3	0.2	8.957	A
C-A	653	163			653				
A-B	90	22			90				
A-C	800	200			800				

Queueing Delay Results for each time segment

08:45 - 09:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	8.39	0.56	17.074	C
B-A	12.97	0.86	41.807	E
C-AB	3.01	0.20	8.904	A

09:00 - 09:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	85.57	5.70	509.486	F
B-A	66.50	4.43	582.041	F
C-AB	4.42	0.29	10.864	B

09:15 - 09:30

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	486.03	32.40	16489.136	F
B-A	340.08	22.67	16863.084	F
C-AB	7.61	0.51	15.468	C

09:30 - 09:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	1165.51	77.70	2652.272	F
B-A	804.82	53.65	2669.151	F
C-AB	7.85	0.52	15.577	C

09:45 - 10:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	1553.23	103.55	2274.155	F
B-A	1069.28	71.29	2287.736	F
C-AB	4.60	0.31	10.945	B

10:00 - 10:15

Stream	Queueing total delay (Veh-	Queueing rate of delay (Veh-	Average delay per arriving	Unsignalised level of

	min)	min/min)	vehicle (s)	service
B-C	1488.72	99.25	1896.847	F
B-A	1024.42	68.29	1908.705	F
C-AB	3.13	0.21	8.957	A

Ref Case + Development, PM (16:00 - 17:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		113.33	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 segment length (min)	Run automatically
D10	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 (%)
A - A5 Watling Street (North-West)		ONE HOUR	✓	1272	100.000
B - Drayton Lane		ONE HOUR	✓	186	100.000
C - A5 Watling Street (South-East)		ONE HOUR	✓	1081	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (North-West)	B - Drayton Lane	C - A5 Watling Street (South-East)
From	A - A5 Watling Street (North-West)	0	156	1116
	B - Drayton Lane	71	0	115
	C - A5 Watling Street (South-East)	943	138	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 Watling Street (North-West)	B - Drayton Lane	C - A5 Watling Street (South-East)
From	A - A5 Watling Street (North-West)	0	4	7
	B - Drayton Lane	2	0	2
	C - A5 Watling Street (South-East)	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	9999999999.00	1581.15	64.5	F	106	158	2700.67	1023.70	30.01	2926.74	1109.39
B-A	9999999999.00	1605.23	41.4	F	65	98	1772.30	1088.12	19.69	1918.41	1177.83
C-AB	0.43	17.62	0.7	C	127	190	41.41	13.08	0.46	41.41	13.08
C-A					865	1298					
A-B					143	215					
A-C					1024	1536					

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	87	22	377	0.229	85	0.0	0.3	12.283	B
B-A	53	13	158	0.339	52	0.0	0.5	33.342	D
C-AB	104	26	503	0.207	103	0.0	0.3	8.978	A
C-A	710	177			710				
A-B	117	29			117				
A-C	840	210			840				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	103	26	179	0.577	100	0.3	1.2	43.549	E
B-A	64	16	78	0.817	56	0.5	2.4	137.231	F
C-AB	124	31	441	0.281	124	0.3	0.4	11.313	B
C-A	848	212			848				
A-B	140	35			140				
A-C	1003	251			1003				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	127	32	0	9999999999.000	0	1.2	32.9	214.368	F
B-A	78	20	0	9999999999.000	0	2.4	21.9	84.519	F
C-AB	152	38	356	0.427	151	0.4	0.7	17.404	C
C-A	1038	260			1038				
A-B	172	43			172				
A-C	1229	307			1229				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	127	32	0	9999999999.000	0	32.9	64.5	92.404	F
B-A	78	20	0	9999999999.000	0	21.9	41.4	65.949	F
C-AB	152	38	356	0.427	152	0.7	0.7	17.619	C
C-A	1038	260			1038				
A-B	172	43			172				
A-C	1229	307			1229				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	103	26	116	0.894	114	64.5	61.9	1581.148	F
B-A	64	16	73	0.869	72	41.4	39.5	1605.232	F
C-AB	124	31	441	0.281	125	0.7	0.4	11.445	B
C-A	848	212			848				
A-B	140	35			140				
A-C	1003	251			1003				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	87	22	187	0.463	184	61.9	37.5	978.084	F
B-A	53	13	118	0.452	115	39.5	24.0	999.052	F
C-AB	104	26	503	0.207	104	0.4	0.3	9.046	A
C-A	710	177			710				
A-B	117	29			117				
A-C	840	210			840				

Queueing Delay Results for each time segment

15:45 - 16:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	4.15	0.28	12.283	B
B-A	6.46	0.43	33.342	D
C-AB	3.81	0.25	8.978	A

16:00 - 16:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service

B-C	15.75	1.05	43.549	E
B-A	25.79	1.72	137.231	F
C-AB	5.76	0.38	11.313	B

16:15 - 16:30

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	255.78	17.05	214.368	F
B-A	181.94	12.13	84.519	F
C-AB	10.67	0.71	17.404	C

16:30 - 16:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	730.59	48.71	92.404	F
B-A	475.08	31.67	65.949	F
C-AB	11.14	0.74	17.619	C

16:45 - 17:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	948.41	63.23	1581.148	F
B-A	606.92	40.46	1605.232	F
C-AB	6.05	0.40	11.445	B

17:00 - 17:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	745.99	49.73	978.084	F
B-A	476.11	31.74	999.052	F
C-AB	3.97	0.26	9.046	A

Ref Case + Development, PM (17:00 - 18:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		132.06	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 segment length (min)	Run automatically
D11	Ref Case + Development	PM (17:00 - 18:00)	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 (%)
A - A5 Watling Street (North-West)		ONE HOUR	✓	1280	100.000
B - Drayton Lane		ONE HOUR	✓	200	100.000
C - A5 Watling Street (South-East)		ONE HOUR	✓	1251	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (North-West)	B - Drayton Lane	C - A5 Watling Street (South-East)
From	A - A5 Watling Street (North-West)	0	173	1107
	B - Drayton Lane	63	0	137
	C - A5 Watling Street (South-East)	1078	173	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 Watling Street (North-West)	B - Drayton Lane	C - A5 Watling Street (South-East)
From	A - A5 Watling Street (North-West)	0	1	5
	B - Drayton Lane	0	0	0
	C - A5 Watling Street (South-East)	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	9999999999.00	1848.75	83.9	F	126	189	3678.27	1170.36	40.87	4153.20	1321.48
B-A	9999999999.00	1879.85	39.3	F	58	87	1753.27	1213.13	19.48	1980.03	1370.03
C-AB	0.53	20.81	1.1	C	159	238	58.58	14.74	0.65	58.59	14.75
C-A					989	1484					
A-B					159	238					
A-C					1016	1524					

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	103	26	392	0.263	102	0.0	0.4	12.356	B
B-A	47	12	137	0.345	45	0.0	0.5	38.460	E
C-AB	130	33	507	0.257	129	0.0	0.3	9.477	A
C-A	812	203			812				
A-B	130	33			130				
A-C	833	208			833				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	123	31	115	1.068	100	0.4	6.1	407.833	F
B-A	57	14	54	1.043	44	0.5	3.7	585.447	F
C-AB	156	39	447	0.348	155	0.3	0.5	12.300	B
C-A	969	242			969				
A-B	156	39			156				
A-C	995	249			995				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	151	38	0	9999999999.000	0	6.1	43.8	396.316	F
B-A	69	17	0	9999999999.000	0	3.7	21.0	384.515	F
C-AB	191	48	364	0.525	189	0.5	1.1	20.350	C
C-A	1186	297			1186				
A-B	190	48			190				
A-C	1219	305			1219				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	151	38	0	9999999999.000	0	43.8	81.5	334.184	F
B-A	69	17	0	9999999999.000	0	21.0	38.4	323.540	F
C-AB	191	48	364	0.525	191	1.1	1.1	20.811	C
C-A	1186	297			1186				
A-B	190	48			190				
A-C	1219	305			1219				

17:45 - 18:00

Stream	Total	Junction	Capacity	RFC	Throughput	Start	End queue	Delay (s)	Unsignalised

	Demand (Veh/hr)	Arrivals (Veh)	(Veh/hr)		(Veh/hr)	queue (Veh)	(Veh)		level of service
B-C	123	31	114	1.080	114	81.5	83.9	1848.749	F
B-A	57	14	53	1.063	53	38.4	39.3	1879.845	F
C-AB	156	39	447	0.348	158	1.1	0.5	12.548	B
C-A	969	242			969				
A-B	156	39			156				
A-C	995	249			995				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	103	26	210	0.491	208	83.9	57.7	1229.855	F
B-A	47	12	98	0.484	96	39.3	27.2	1259.355	F
C-AB	130	33	507	0.257	131	0.5	0.4	9.583	A
C-A	812	203			812				
A-B	130	33			130				
A-C	833	208			833				

Queueing Delay Results for each time segment

16:45 - 17:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	4.97	0.33	12.356	B
B-A	6.52	0.43	38.460	E
C-AB	5.04	0.34	9.477	A

17:00 - 17:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	56.92	3.79	407.833	F
B-A	35.50	2.37	585.447	F
C-AB	7.83	0.52	12.300	B

17:15 - 17:30

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	374.37	24.96	396.316	F
B-A	185.14	12.34	384.515	F
C-AB	15.55	1.04	20.350	C

17:30 - 17:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	940.02	62.67	334.184	F
B-A	445.26	29.68	323.540	F
C-AB	16.55	1.10	20.811	C

17:45 - 18:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	1240.35	82.69	1848.749	F
B-A	582.17	38.81	1879.845	F
C-AB	8.33	0.56	12.548	B

18:00 - 18:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	1061.64	70.78	1229.855	F
B-A	498.68	33.25	1259.355	F
C-AB	5.29	0.35	9.583	A

Ref Case + Development, PM (18:00 - 19:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		606.22	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 segment length (min)	Run automatically
D12	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	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 (%)
A - A5 Watling Street (North-West)		ONE HOUR	✓	1068	100.000
B - Drayton Lane		ONE HOUR	✓	165	100.000
C - A5 Watling Street (South-East)		ONE HOUR	✓	1189	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 Watling Street (North-West)	B - Drayton Lane	C - A5 Watling Street (South-East)
From	A - A5 Watling Street (North-West)	0	130	938
	B - Drayton Lane	78	0	87
	C - A5 Watling Street (South-East)	995	194	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 Watling Street (North-West)	B - Drayton Lane	C - A5 Watling Street (South-East)
From	A - A5 Watling Street (North-West)	0	1	4
	B - Drayton Lane	0	0	0
	C - A5 Watling Street (South-East)	6	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	7.52	9201.50	41.9	F	80	120	1503.22	753.19	16.70	1510.67	756.92
B-A	7.36	9300.93	38.4	F	72	107	1405.99	785.75	15.62	1412.99	789.66
C-AB	0.49	16.07	0.9	C	178	267	54.55	12.25	0.61	54.56	12.25
C-A					913	1369					
A-B					119	179					
A-C					861	1291					

Main Results for each time segment

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	65	16	427	0.154	65	0.0	0.2	9.935	A
B-A	59	15	189	0.310	57	0.0	0.4	26.896	D
C-AB	146	37	556	0.263	145	0.0	0.4	8.728	A
C-A	749	187			749				
A-B	98	24			98				

A-C	706	177			706				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	78	20	318	0.246	78	0.2	0.3	14.918	B
B-A	70	18	113	0.620	66	0.4	1.3	72.292	F
C-AB	174	44	506	0.345	174	0.4	0.5	10.814	B
C-A	894	224			894				
A-B	117	29			117				
A-C	843	211			843				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	96	24	13	7.324	13	0.3	21.1	1438.594	F
B-A	86	21	12	6.983	12	1.3	19.8	1520.743	F
C-AB	214	53	438	0.489	212	0.5	0.9	15.857	C
C-A	1095	274			1095				
A-B	143	36			143				
A-C	1033	258			1033				

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	96	24	13	7.523	13	21.1	41.9	9201.502	F
B-A	86	21	12	7.362	12	19.8	38.4	9300.931	F
C-AB	214	53	438	0.489	214	0.9	0.9	16.073	C
C-A	1095	274			1095				
A-B	143	36			143				
A-C	1033	258			1033				

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	78	20	116	0.677	113	41.9	33.2	1098.277	F
B-A	70	18	105	0.667	102	38.4	30.3	1104.727	F
C-AB	174	44	506	0.345	176	0.9	0.5	10.964	B
C-A	894	224			894				
A-B	117	29			117				
A-C	843	211			843				

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	65	16	177	0.370	172	33.2	6.6	433.461	F

B-A	59	15	161	0.366	155	30.3	6.1	439.269	F
C-AB	146	37	556	0.263	147	0.5	0.4	8.818	A
C-A	749	187			749				
A-B	98	24			98				
A-C	706	177			706				

Queueing Delay Results for each time segment

17:45 - 18:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	2.57	0.17	9.935	A
B-A	5.84	0.39	26.896	D
C-AB	5.21	0.35	8.728	A

18:00 - 18:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	4.56	0.30	14.918	B
B-A	16.71	1.11	72.292	F
C-AB	7.74	0.52	10.814	B

18:15 - 18:30

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	161.37	10.76	1438.594	F
B-A	159.01	10.60	1520.743	F
C-AB	13.71	0.91	15.857	C

18:30 - 18:45

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	472.45	31.50	9201.502	F
B-A	436.36	29.09	9300.931	F
C-AB	14.31	0.95	16.073	C

18:45 - 19:00

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	563.33	37.56	1098.277	F
B-A	514.96	34.33	1104.727	F
C-AB	8.14	0.54	10.964	B

19:00 - 19:15

Stream	Queueing total delay (Veh-min)	Queueing rate of delay (Veh-min/min)	Average delay per arriving vehicle (s)	Unsignalised level of service
B-C	298.95	19.93	433.461	F
B-A	273.09	18.21	439.269	F
C-AB	5.44	0.36	8.818	A

Appendix 14

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: 17059 - A5-B4116 Watling St (PICADY).j9
Path: P:\17 jobs\059 MIRA - Southern Manufacturing Sector\Technical Assessments\Modelling - July 2022
Report generation date: 14/07/2022 15:12:18

»Ref Case, AM (07:00 - 08:00)
»Ref Case, AM (08:00 - 09:00)
»Ref Case, AM (09:00 - 10:00)
»Ref Case, PM (16:00 - 17:00)
»Ref Case, PM (17:00 - 18:00)
»Ref Case, PM (18:00 - 19:00)
»Ref Case + Development, AM (07:00 - 08:00)
»Ref Case + Development, AM (08:00 - 09:00)
»Ref Case + Development, AM (09:00 - 10:00)
»Ref Case + Development, PM (16:00 - 17:00)
»Ref Case + Development, PM (17:00 - 18:00)
»Ref Case + Development, PM (18:00 - 19:00)

Summary of junction performance

	AM (07:00 - 08:00)					AM (08:00 - 09:00)					AM (09:00 - 10:00)					PM (16:00 - 17:00)					PM (17:00 - 18:00)					PM (18:00 - 19:00)				
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
Ref Case																														
Stream B-AC	0.3	5.42	0.24	A	0.69	0.5	5.94	0.32	A	0.82	0.4	5.72	0.28	A	0.85	0.5	5.97	0.32	A	1.08	0.4	5.82	0.31	A	0.90	0.3	5.34	0.25	A	0.80
Stream C-B	0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A	
Ref Case + Development																														
Stream B-AC	0.6	6.68	0.37	A	1.20	1.0	8.40	0.50	A	1.64	0.7	7.88	0.42	A	1.60	0.6	6.47	0.36	A	1.23	0.5	6.25	0.33	A	1.00	0.5	6.06	0.32	A	1.08
Stream C-B	0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	24/02/2022
Version	

Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mtp\MTPGeneral
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	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D2	Ref Case	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D3	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D4	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D5	Ref Case	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D6	Ref Case	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	15	✓
D7	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D8	Ref Case + Development	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D9	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D10	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D11	Ref Case + Development	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D12	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Ref Case, AM (07:00 - 08:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A5 South-West		Major
B	B4116 Watling St		Minor
C	A5 North-East		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 - A5 North-East	6.00			0.0		-

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 - B4116 Watling St	One lane	5.00	0	200

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	689	0.126	0.317	0.200	0.453
B-C	900	0.138	0.349	-	-
C-B	574	0.222	0.222	-	-

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 segment length (min)	Run automatically
D1	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 (%)
A - A5 South-West		ONE HOUR	✓	0	100.000
B - B4116 Watling St		ONE HOUR	✓	191	100.000
C - A5 North-East		ONE HOUR	✓	1286	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 South-West	B - B4116 Watling St	C - A5 North-East
From	A - A5 South-West	0	0	0
	B - B4116 Watling St	0	0	191
	C - A5 North-East	1286	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 South-West	B - B4116 Watling St	C - A5 North-East
From	A - A5 South-West	0	0	0
	B - B4116 Watling St	0	0	3
	C - A5 North-East	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.24	5.42	0.3	A	175	263
C-A					1180	1770
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					0	0

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	144	36	874	0.165	143	0.0	0.2	4.921	A
C-A	968	242			968				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				

A-C	0	0			0				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	172	43	874	0.197	172	0.2	0.2	5.125	A
C-A	1156	289			1156				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	210	53	874	0.241	210	0.2	0.3	5.421	A
C-A	1416	354			1416				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	210	53	874	0.241	210	0.3	0.3	5.425	A
C-A	1416	354			1416				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	172	43	874	0.197	172	0.3	0.2	5.133	A
C-A	1156	289			1156				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	144	36	874	0.165	144	0.2	0.2	4.933	A
C-A	968	242			968				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

Ref Case, AM (08:00 - 09:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.82	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
D2	Ref Case	AM (08:00 - 09:00)	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 (%)
A - A5 South-West		ONE HOUR	✓	0	100.000
B - B4116 Watling St		ONE HOUR	✓	259	100.000
C - A5 North-East		ONE HOUR	✓	1546	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 South-West	B - B4116 Watling St	C - A5 North-East
From	A - A5 South-West	0	0	0
	B - B4116 Watling St	0	0	259
	C - A5 North-East	1546	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 South-West	B - B4116 Watling St	C - A5 North-East
From	A - A5 South-West	0	0	0
	B - B4116 Watling St	0	0	1
	C - A5 North-East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.32	5.94	0.5	A	238	356
C-A					1419	2128
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	195	49	891	0.219	194	0.0	0.3	5.155	A
C-A	1164	291			1164				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	233	58	891	0.261	233	0.3	0.4	5.464	A
C-A	1390	347			1390				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	285	71	891	0.320	285	0.4	0.5	5.937	A
C-A	1702	426			1702				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	285	71	891	0.320	285	0.5	0.5	5.940	A
C-A	1702	426			1702				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				

A-C	0	0			0				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	233	58	891	0.261	233	0.5	0.4	5.476	A
C-A	1390	347			1390				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	195	49	891	0.219	195	0.4	0.3	5.177	A
C-A	1164	291			1164				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

Ref Case, AM (09:00 - 10:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.85	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	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 (%)
A - A5 South-West		ONE HOUR	✓	0	100.000

B - B4116 Watling St		ONE HOUR	✓	222	100.000
C - A5 North-East		ONE HOUR	✓	1225	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 South-West	**B - B4116 Watling St**	**C - A5 North-East**
From	**A - A5 South-West**	0	0	0
	B - B4116 Watling St	0	0	222
	C - A5 North-East	1225	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 South-West	**B - B4116 Watling St**	**C - A5 North-East**
From	**A - A5 South-West**	0	0	0
	B - B4116 Watling St	0	0	3
	C - A5 North-East	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.28	5.72	0.4	A	204	306
C-A					1124	1686
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					0	0

Main Results for each time segment

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	167	42	874	0.191	166	0.0	0.2	5.082	A
C-A	922	231			922				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	200	50	874	0.228	199	0.2	0.3	5.337	A
C-A	1101	275			1101				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	244	61	874	0.280	244	0.3	0.4	5.712	A
C-A	1349	337			1349				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

09:30 - 09:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	244	61	874	0.280	244	0.4	0.4	5.719	A
C-A	1349	337			1349				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

09:45 - 10:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	200	50	874	0.228	200	0.4	0.3	5.346	A
C-A	1101	275			1101				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

10:00 - 10:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	167	42	874	0.191	167	0.3	0.2	5.097	A
C-A	922	231			922				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

Ref Case, PM (16:00 - 17:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.08	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)	Run automatically
D4	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 (%)
A - A5 South-West		ONE HOUR	✓	0	100.000
B - B4116 Watling St		ONE HOUR	✓	254	100.000
C - A5 North-East		ONE HOUR	✓	1122	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 South-West	B - B4116 Watling St	C - A5 North-East
From	A - A5 South-West	0	0	0
	B - B4116 Watling St	0	0	254
	C - A5 North-East	1122	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 South-West	B - B4116 Watling St	C - A5 North-East
From	A - A5 South-West	0	0	0
	B - B4116 Watling St	0	0	2
	C - A5 North-East	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.32	5.97	0.5	A	233	350
C-A					1030	1544
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					0	0

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	191	48	882	0.217	190	0.0	0.3	5.192	A
C-A	845	211			845				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	228	57	882	0.259	228	0.3	0.3	5.499	A
C-A	1009	252			1009				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	280	70	882	0.317	279	0.3	0.5	5.965	A
C-A	1235	309			1235				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	280	70	882	0.317	280	0.5	0.5	5.972	A
C-A	1235	309			1235				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	228	57	882	0.259	229	0.5	0.4	5.511	A
C-A	1009	252			1009				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	191	48	882	0.217	192	0.4	0.3	5.214	A
C-A	845	211			845				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

Ref Case, PM (17:00 - 18:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.90	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	Ref Case	PM (17:00 - 18:00)	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 (%)
A - A5 South-West		ONE HOUR	✓	0	100.000
B - B4116 Watling St		ONE HOUR	✓	248	100.000
C - A5 North-East		ONE HOUR	✓	1306	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 South-West	B - B4116 Watling St	C - A5 North-East
From	A - A5 South-West	0	0	0
	B - B4116 Watling St	0	0	248
	C - A5 North-East	1306	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 South-West	B - B4116 Watling St	C - A5 North-East
From	A - A5 South-West	0	0	0
	B - B4116 Watling St	0	0	1
	C - A5 North-East	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.31	5.82	0.4	A	228	341
C-A					1198	1798
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	187	47	891	0.210	186	0.0	0.3	5.096	A
C-A	983	246			983				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	223	56	891	0.250	223	0.3	0.3	5.383	A

C-A	1174	294			1174				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	273	68	891	0.306	273	0.3	0.4	5.817	A
C-A	1438	359			1438				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	273	68	891	0.306	273	0.4	0.4	5.824	A
C-A	1438	359			1438				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	223	56	891	0.250	223	0.4	0.3	5.396	A
C-A	1174	294			1174				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	187	47	891	0.210	187	0.3	0.3	5.116	A
C-A	983	246			983				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

Ref Case, PM (18:00 - 19:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.80	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
D6	Ref Case	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	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 (%)
A - A5 South-West		ONE HOUR	✓	0	100.000
B - B4116 Watling St		ONE HOUR	✓	205	100.000
C - A5 North-East		ONE HOUR	✓	1119	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 South-West	B - B4116 Watling St	C - A5 North-East
From	A - A5 South-West	0	0	0
	B - B4116 Watling St	0	0	205
	C - A5 North-East	1119	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 South-West	B - B4116 Watling St	C - A5 North-East
From	A - A5 South-West	0	0	0
	B - B4116 Watling St	0	0	0
	C - A5 North-East	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

B-AC	0.25	5.34	0.3	A	188	282
C-A					1027	1540
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					0	0

Main Results for each time segment

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	154	39	900	0.171	154	0.0	0.2	4.818	A
C-A	842	211			842				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	184	46	900	0.205	184	0.2	0.3	5.027	A
C-A	1006	251			1006				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	226	56	900	0.251	225	0.3	0.3	5.334	A
C-A	1232	308			1232				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	226	56	900	0.251	226	0.3	0.3	5.338	A
C-A	1232	308			1232				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-AC	184	46	900	0.205	185	0.3	0.3	5.035	A
C-A	1006	251			1006				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	154	39	900	0.171	155	0.3	0.2	4.832	A
C-A	842	211			842				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

Ref Case + Development, AM (07:00 - 08:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.20	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	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 (%)
A - A5 South-West		ONE HOUR	✓	0	100.000
B - B4116 Watling St		ONE HOUR	✓	289	100.000
C - A5 North-East		ONE HOUR	✓	1323	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 South-West	B - B4116 Watling St	C - A5 North-East
From	A - A5 South-West	0	0	0
	B - B4116 Watling St	0	0	289
	C - A5 North-East	1323	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 South-West	B - B4116 Watling St	C - A5 North-East
From	A - A5 South-West	0	0	0
	B - B4116 Watling St	0	0	5
	C - A5 North-East	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.37	6.68	0.6	A	265	398
C-A					1214	1821
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					0	0

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	218	54	857	0.254	216	0.0	0.3	5.606	A
C-A	996	249			996				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	260	65	857	0.303	259	0.3	0.4	6.019	A

C-A	1189	297			1189				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	318	80	857	0.371	318	0.4	0.6	6.665	A
C-A	1457	364			1457				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	318	80	857	0.371	318	0.6	0.6	6.679	A
C-A	1457	364			1457				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	260	65	857	0.303	260	0.6	0.4	6.040	A
C-A	1189	297			1189				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	218	54	857	0.254	218	0.4	0.3	5.635	A
C-A	996	249			996				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

Ref Case + Development, AM (08:00 - 09:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.64	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	Ref Case + Development	AM (08:00 - 09:00)	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 (%)
A - A5 South-West		ONE HOUR	✓	0	100.000
B - B4116 Watling St		ONE HOUR	✓	382	100.000
C - A5 North-East		ONE HOUR	✓	1571	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 South-West	B - B4116 Watling St	C - A5 North-East
From	A - A5 South-West	0	0	0
	B - B4116 Watling St	0	0	382
	C - A5 North-East	1571	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 South-West	B - B4116 Watling St	C - A5 North-East
From	A - A5 South-West	0	0	0
	B - B4116 Watling St	0	0	6
	C - A5 North-East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue	Max LOS	Average	Total Junction

			(Veh)		Demand (Veh/hr)	Arrivals (Veh)
B-AC	0.50	8.40	1.0	A	351	526
C-A					1442	2162
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	288	72	849	0.339	286	0.0	0.5	6.366	A
C-A	1183	296			1183				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	343	86	849	0.404	343	0.5	0.7	7.102	A
C-A	1412	353			1412				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	421	105	849	0.495	419	0.7	1.0	8.356	A
C-A	1730	432			1730				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	421	105	849	0.495	421	1.0	1.0	8.400	A
C-A	1730	432			1730				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

08:45 - 09:00

Stream	Total	Junction	Capacity	RFC	Throughput	Start	End queue	Delay (s)	Unsignalised

	Demand (Veh/hr)	Arrivals (Veh)	(Veh/hr)		(Veh/hr)	queue (Veh)	(Veh)		level of service
B-AC	343	86	849	0.404	345	1.0	0.7	7.151	A
C-A	1412	353			1412				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	288	72	849	0.339	288	0.7	0.5	6.426	A
C-A	1183	296			1183				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

Ref Case + Development, AM (09:00 - 10:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.60	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	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 (%)
A - A5 South-West		ONE HOUR	✓	0	100.000
B - B4116 Watling St		ONE HOUR	✓	302	100.000

C - A5 North-East		ONE HOUR	✓	1253	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 South-West	**B - B4116 Watling St**	**C - A5 North-East**
From	**A - A5 South-West**	0	0	0
	B - B4116 Watling St	0	0	302
	C - A5 North-East	1253	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 South-West	**B - B4116 Watling St**	**C - A5 North-East**
From	**A - A5 South-West**	0	0	0
	B - B4116 Watling St	0	0	14
	C - A5 North-East	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.42	7.88	0.7	A	277	416
C-A					1150	1725
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					0	0

Main Results for each time segment

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	227	57	789	0.288	226	0.0	0.4	6.368	A
C-A	943	236			943				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

09:00 - 09:15

Stream	Total	Junction	Capacity	RFC	Throughput	Start	End queue	Delay (s)	Unsignalised

	Demand (Veh/hr)	Arrivals (Veh)	(Veh/hr)		(Veh/hr)	queue (Veh)	(Veh)		level of service
B-AC	271	68	789	0.344	271	0.4	0.5	6.938	A
C-A	1126	282			1126				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	333	83	789	0.421	332	0.5	0.7	7.850	A
C-A	1380	345			1380				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

09:30 - 09:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	333	83	789	0.421	332	0.7	0.7	7.877	A
C-A	1380	345			1380				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

09:45 - 10:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	271	68	789	0.344	272	0.7	0.5	6.970	A
C-A	1126	282			1126				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

10:00 - 10:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	227	57	789	0.288	228	0.5	0.4	6.415	A
C-A	943	236			943				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

Ref Case + Development, PM (16:00 - 17:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.23	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	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 (%)
A - A5 South-West		ONE HOUR	✓	0	100.000
B - B4116 Watling St		ONE HOUR	✓	281	100.000
C - A5 North-East		ONE HOUR	✓	1187	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 South-West	B - B4116 Watling St	C - A5 North-East
From	A - A5 South-West	0	0	0
	B - B4116 Watling St	0	0	281
	C - A5 North-East	1187	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 South-West	B - B4116 Watling St	C - A5 North-East
From	A - A5 South-West	0	0	0
	B - B4116 Watling St	0	0	4
	C - A5 North-East	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.36	6.47	0.6	A	258	387
C-A					1089	1634
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					0	0

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	212	53	865	0.244	210	0.0	0.3	5.486	A
C-A	894	223			894				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	253	63	865	0.292	252	0.3	0.4	5.869	A
C-A	1067	267			1067				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	309	77	865	0.358	309	0.4	0.6	6.461	A
C-A	1307	327			1307				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	309	77	865	0.358	309	0.6	0.6	6.474	A
C-A	1307	327			1307				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	253	63	865	0.292	253	0.6	0.4	5.887	A
C-A	1067	267			1067				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	212	53	865	0.244	212	0.4	0.3	5.511	A
C-A	894	223			894				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

Ref Case + Development, PM (17:00 - 18:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.00	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	Ref Case + Development	PM (17:00 - 18:00)	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 (%)
A - A5 South-West		ONE HOUR	✓	0	100.000
B - B4116 Watling St		ONE HOUR	✓	263	100.000

C - A5 North-East		ONE HOUR	✓	1360	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 South-West	**B - B4116 Watling St**	**C - A5 North-East**
From	**A - A5 South-West**	0	0	0
	B - B4116 Watling St	0	0	263
	C - A5 North-East	1360	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 South-West	**B - B4116 Watling St**	**C - A5 North-East**
From	**A - A5 South-West**	0	0	0
	B - B4116 Watling St	0	0	4
	C - A5 North-East	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.33	6.25	0.5	A	241	362
C-A					1248	1872
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	198	50	865	0.229	197	0.0	0.3	5.376	A
C-A	1024	256			1024				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

17:00 - 17:15

Stream	Total	Junction	Capacity	RFC	Throughput	Start	End queue	Delay (s)	Unsignalised

	Demand (Veh/hr)	Arrivals (Veh)	(Veh/hr)		(Veh/hr)	queue (Veh)	(Veh)		level of service
B-AC	236	59	865	0.273	236	0.3	0.4	5.718	A
C-A	1223	306			1223				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	290	72	865	0.335	289	0.4	0.5	6.241	A
C-A	1497	374			1497				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	290	72	865	0.335	290	0.5	0.5	6.251	A
C-A	1497	374			1497				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	236	59	865	0.273	237	0.5	0.4	5.734	A
C-A	1223	306			1223				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	198	50	865	0.229	198	0.4	0.3	5.398	A
C-A	1024	256			1024				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

Ref Case + Development, PM (18:00 - 19:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.08	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)	Run automatically
D12	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	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 (%)
A - A5 South-West		ONE HOUR	✓	0	100.000
B - B4116 Watling St		ONE HOUR	✓	254	100.000
C - A5 North-East		ONE HOUR	✓	1162	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A5 South-West	B - B4116 Watling St	C - A5 North-East
From	A - A5 South-West	0	0	0
	B - B4116 Watling St	0	0	254
	C - A5 North-East	1162	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A5 South-West	B - B4116 Watling St	C - A5 North-East
From	A - A5 South-West	0	0	0
	B - B4116 Watling St	0	0	3
	C - A5 North-East	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.32	6.06	0.5	A	233	350
C-A					1066	1599
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					0	0

Main Results for each time segment

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	191	48	874	0.219	190	0.0	0.3	5.257	A
C-A	875	219			875				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	228	57	874	0.261	228	0.3	0.4	5.572	A
C-A	1045	261			1045				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	280	70	874	0.320	279	0.4	0.5	6.049	A
C-A	1279	320			1279				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	280	70	874	0.320	280	0.5	0.5	6.058	A
C-A	1279	320			1279				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	228	57	874	0.261	229	0.5	0.4	5.584	A
C-A	1045	261			1045				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	191	48	874	0.219	192	0.4	0.3	5.278	A
C-A	875	219			875				
C-B	0	0	574	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	0	0			0				

Appendix 15

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Path: P:\17 jobs\059 MIRA - Southern Manufacturing Sector\Technical Assessments\Modelling - July 2022
Report generation date: 14/07/2022 15:22:13

»Ref Case, AM (07:00 - 08:00)
»Ref Case, AM (08:00 - 09:00)
»Ref Case, AM (09:00 - 10:00)
»Ref Case, PM (16:00 - 17:00)
»Ref Case, PM (17:00 - 18:00)
»Ref Case, PM (18:00 - 19:00)
»Ref Case + Development, AM (07:00 - 08:00)
»Ref Case + Development, AM (08:00 - 09:00)
»Ref Case + Development, AM (09:00 - 10:00)
»Ref Case + Development, PM (16:00 - 17:00)
»Ref Case + Development, PM (17:00 - 18:00)
»Ref Case + Development, PM (18:00 - 19:00)

Summary of junction performance

	AM (07:00 - 08:00)					AM (08:00 - 09:00)					AM (09:00 - 10:00)					PM (16:00 - 17:00)					PM (17:00 - 18:00)					PM (18:00 - 19:00)				
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
Ref Case																														
Stream B-AC	0.8	11.39	0.46	B	3.78	0.8	10.99	0.43	B	2.57	1.2	13.93	0.55	B	4.10	0.8	12.34	0.45	B	3.03	0.4	10.91	0.31	B	1.94	1.6	17.19	0.62	C	6.33
Stream C-AB	0.7	5.82	0.29	A		0.2	4.60	0.10	A		0.3	5.16	0.14	A		0.7	6.04	0.27	A		0.9	5.92	0.30	A		1.3	8.27	0.46	A	
Ref Case + Development																														
Stream B-AC	1.1	12.81	0.52	B	4.98	0.9	11.89	0.48	B	3.12	1.5	15.70	0.60	C	4.98	1.1	14.51	0.53	B	3.88	0.6	12.02	0.37	B	2.37	2.6	24.35	0.73	C	9.35
Stream C-AB	1.1	7.05	0.42	A		0.5	4.66	0.17	A		0.5	5.31	0.21	A		0.8	6.35	0.31	A		1.0	6.16	0.33	A		1.7	9.68	0.53	A	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	25/02/2022
Version	

Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mtp\MTPGeneral
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	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D2	Ref Case	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D3	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D4	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D5	Ref Case	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D6	Ref Case	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	15	✓
D7	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D8	Ref Case + Development	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D9	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D10	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D11	Ref Case + Development	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D12	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Ref Case, AM (07:00 - 08:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B4111 Nuneaton Road (North-West)		Major
B	Woodford Lane		Minor
C	B4111 Nuneaton Road (Sotuh-East)		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 - B4111 Nuneaton Road (Sotuh-East)	7.00			139.0	✓	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 - Woodford Lane	One lane	3.80	68	23

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	0.096	0.243	0.153	0.347
B-C	690	0.101	0.256	-	-
C-B	654	0.243	0.243	-	-

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 segment length (min)	Run automatically
D1	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 (%)
A - B4111 Nuneaton Road (North-West)		ONE HOUR	✓	278	100.000
B - Woodford Lane		ONE HOUR	✓	242	100.000
C - B4111 Nuneaton Road (Sotuh-East)		ONE HOUR	✓	528	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4111 Nuneaton Road (North-West)	B - Woodford Lane	C - B4111 Nuneaton Road (Sotuh-East)
From	A - B4111 Nuneaton Road (North-West)	0	2	276
	B - Woodford Lane	9	0	233
	C - B4111 Nuneaton Road (Sotuh-East)	417	111	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B4111 Nuneaton Road (North-West)	B - Woodford Lane	C - B4111 Nuneaton Road (Sotuh-East)
From	A - B4111 Nuneaton Road (North-West)	0	0	4
	B - Woodford Lane	0	0	2
	C - B4111 Nuneaton Road (Sotuh-East)	2	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.46	11.39	0.8	B	222	333
C-AB	0.29	5.82	0.7	A	193	289
C-A					292	438
A-B					2	3
A-C					253	380

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	182	46	611	0.298	181	0.0	0.4	8.333	A
C-AB	138	34	799	0.172	136	0.0	0.3	5.431	A
C-A	260	65			260				

A-B	2	0.38			2				
A-C	208	52			208				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	218	54	599	0.363	217	0.4	0.6	9.409	A
C-AB	182	46	832	0.219	182	0.3	0.4	5.544	A
C-A	292	73			292				
A-B	2	0.45			2				
A-C	248	62			248				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	266	67	582	0.458	265	0.6	0.8	11.319	B
C-AB	257	64	878	0.293	256	0.4	0.7	5.798	A
C-A	324	81			324				
A-B	2	0.55			2				
A-C	304	76			304				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	266	67	582	0.458	266	0.8	0.8	11.391	B
C-AB	258	64	879	0.293	258	0.7	0.7	5.818	A
C-A	324	81			324				
A-B	2	0.55			2				
A-C	304	76			304				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	218	54	599	0.363	219	0.8	0.6	9.490	A
C-AB	183	46	833	0.220	184	0.7	0.5	5.571	A
C-A	292	73			292				
A-B	2	0.45			2				
A-C	248	62			248				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	182	46	611	0.298	183	0.6	0.4	8.421	A
C-AB	138	35	799	0.173	139	0.5	0.3	5.461	A
C-A	259	65			259				
A-B	2	0.38			2				
A-C	208	52			208				

Ref Case, AM (08:00 - 09:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.57	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	Ref Case	AM (08:00 - 09:00)	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 (%)
A - B4111 Nuneaton Road (North-West)		ONE HOUR	✓	266	100.000
B - Woodford Lane		ONE HOUR	✓	229	100.000
C - B4111 Nuneaton Road (Sotuh-East)		ONE HOUR	✓	600	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4111 Nuneaton Road (North-West)	B - Woodford Lane	C - B4111 Nuneaton Road (Sotuh-East)
From	A - B4111 Nuneaton Road (North-West)	0	1	265
	B - Woodford Lane	12	0	217
	C - B4111 Nuneaton Road (Sotuh-East)	572	28	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B4111 Nuneaton Road (North-West)	B - Woodford Lane	C - B4111 Nuneaton Road (Sotuh-East)
From	A - B4111 Nuneaton Road (North-West)	0	0	5
	B - Woodford Lane	0	0	2
	C - B4111 Nuneaton Road (Sotuh-East)	3	15	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.43	10.99	0.8	B	210	315
C-AB	0.10	4.60	0.2	A	66	98
C-A					485	728
A-B					0.92	1
A-C					243	365

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	172	43	609	0.283	171	0.0	0.4	8.200	A
C-AB	44	11	826	0.053	44	0.0	0.1	4.601	A
C-A	408	102			408				
A-B	0.75	0.19			0.75				
A-C	200	50			200				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	206	51	597	0.345	205	0.4	0.5	9.190	A
C-AB	61	15	879	0.069	61	0.1	0.1	4.418	A
C-A	478	120			478				
A-B	0.90	0.22			0.90				
A-C	238	60			238				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	252	63	580	0.435	251	0.5	0.8	10.925	B
C-AB	91	23	953	0.096	91	0.1	0.2	4.197	A
C-A	569	142			569				

A-B	1	0.28			1				
A-C	292	73			292				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	252	63	580	0.435	252	0.8	0.8	10.985	B
C-AB	92	23	953	0.096	92	0.2	0.2	4.183	A
C-A	569	142			569				
A-B	1	0.28			1				
A-C	292	73			292				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	206	51	597	0.345	207	0.8	0.5	9.258	A
C-AB	61	15	879	0.070	61	0.2	0.1	4.382	A
C-A	478	120			478				
A-B	0.90	0.22			0.90				
A-C	238	60			238				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	172	43	609	0.283	173	0.5	0.4	8.276	A
C-AB	44	11	827	0.054	44	0.1	0.1	4.586	A
C-A	407	102			407				
A-B	0.75	0.19			0.75				
A-C	200	50			200				

Ref Case, AM (09:00 - 10:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario	Time Period	Traffic profile	Start time	Finish time	Time segment length	Run

	name	name	type	(HH:mm)	(HH:mm)	(min)	automatically
D3	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 (%)
A - B4111 Nuneaton Road (North-West)		ONE HOUR	✓	289	100.000
B - Woodford Lane		ONE HOUR	✓	281	100.000
C - B4111 Nuneaton Road (Sotuh-East)		ONE HOUR	✓	478	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4111 Nuneaton Road (North-West)	B - Woodford Lane	C - B4111 Nuneaton Road (Sotuh-East)
From	A - B4111 Nuneaton Road (North-West)	0	1	288
	B - Woodford Lane	25	0	256
	C - B4111 Nuneaton Road (Sotuh-East)	433	45	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B4111 Nuneaton Road (North-West)	B - Woodford Lane	C - B4111 Nuneaton Road (Sotuh-East)
From	A - B4111 Nuneaton Road (North-West)	0	0	6
	B - Woodford Lane	0	0	1
	C - B4111 Nuneaton Road (Sotuh-East)	4	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.55	13.93	1.2	B	258	387
C-AB	0.14	5.16	0.3	A	85	127
C-A					354	531
A-B					0.92	1
A-C					264	396

Main Results for each time segment

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	212	53	600	0.352	209	0.0	0.5	9.158	A
C-AB	60	15	756	0.079	59	0.0	0.1	5.165	A
C-A	300	75			300				
A-B	0.75	0.19			0.75				
A-C	217	54			217				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	253	63	587	0.431	252	0.5	0.7	10.720	B
C-AB	80	20	793	0.101	80	0.1	0.2	5.064	A
C-A	350	87			350				
A-B	0.90	0.22			0.90				
A-C	259	65			259				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	309	77	568	0.545	308	0.7	1.2	13.763	B
C-AB	114	29	844	0.136	114	0.2	0.3	4.948	A
C-A	412	103			412				
A-B	1	0.28			1				
A-C	317	79			317				

09:30 - 09:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	309	77	567	0.545	309	1.2	1.2	13.933	B
C-AB	115	29	845	0.136	115	0.3	0.3	4.941	A
C-A	412	103			412				
A-B	1	0.28			1				
A-C	317	79			317				

09:45 - 10:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	253	63	587	0.431	254	1.2	0.8	10.879	B
C-AB	80	20	793	0.101	80	0.3	0.2	5.040	A
C-A	350	87			350				
A-B	0.90	0.22			0.90				
A-C	259	65			259				

10:00 - 10:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	212	53	600	0.352	212	0.8	0.6	9.299	A

C-AB	60	15	756	0.079	60	0.2	0.1	5.160	A
C-A	300	75			300				
A-B	0.75	0.19			0.75				
A-C	217	54			217				

Ref Case, PM (16:00 - 17:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.03	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	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 (%)
A - B4111 Nuneaton Road (North-West)		ONE HOUR	✓	529	100.000
B - Woodford Lane		ONE HOUR	✓	218	100.000
C - B4111 Nuneaton Road (Sotuh-East)		ONE HOUR	✓	491	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4111 Nuneaton Road (North-West)	**B - Woodford Lane**	**C - B4111 Nuneaton Road (Sotuh-East)**
From	**A - B4111 Nuneaton Road (North-West)**	0	21	508
	B - Woodford Lane	6	0	212
	C - B4111 Nuneaton Road (Sotuh-East)	396	95	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - B4111 Nuneaton Road (North-West)	B - Woodford Lane	C - B4111 Nuneaton Road (Sotuh-East)
	A - B4111 Nuneaton Road (North-West)	0	0	1
	B - Woodford Lane	0	0	0
	C - B4111 Nuneaton Road (Sotuh-East)	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.45	12.34	0.8	B	200	300
C-AB	0.27	6.04	0.7	A	166	250
C-A					284	426
A-B					19	29
A-C					466	699

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	164	41	581	0.283	163	0.0	0.4	8.577	A
C-AB	118	29	761	0.155	116	0.0	0.3	5.583	A
C-A	252	63			252				
A-B	16	4			16				
A-C	382	96			382				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	196	49	560	0.350	195	0.4	0.5	9.851	A
C-AB	157	39	786	0.200	156	0.3	0.4	5.724	A
C-A	285	71			285				
A-B	19	5			19				
A-C	457	114			457				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	240	60	532	0.451	239	0.5	0.8	12.251	B
C-AB	224	56	822	0.273	223	0.4	0.7	6.018	A

C-A	317	79			317				
A-B	23	6			23				
A-C	559	140			559				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	240	60	532	0.451	240	0.8	0.8	12.339	B
C-AB	224	56	822	0.273	224	0.7	0.7	6.042	A
C-A	316	79			316				
A-B	23	6			23				
A-C	559	140			559				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	196	49	560	0.350	197	0.8	0.5	9.940	A
C-AB	157	39	786	0.200	158	0.7	0.4	5.757	A
C-A	284	71			284				
A-B	19	5			19				
A-C	457	114			457				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	164	41	581	0.283	165	0.5	0.4	8.667	A
C-AB	118	30	761	0.155	119	0.4	0.3	5.619	A
C-A	251	63			251				
A-B	16	4			16				
A-C	382	96			382				

Ref Case, PM (17:00 - 18:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.94	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
D5	Ref Case	PM (17:00 - 18:00)	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 (%)
A - B4111 Nuneaton Road (North-West)		ONE HOUR	✓	653	100.000
B - Woodford Lane		ONE HOUR	✓	132	100.000
C - B4111 Nuneaton Road (Sotuh-East)		ONE HOUR	✓	588	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4111 Nuneaton Road (North-West)	B - Woodford Lane	C - B4111 Nuneaton Road (Sotuh-East)
From	A - B4111 Nuneaton Road (North-West)	0	3	650
	B - Woodford Lane	7	0	125
	C - B4111 Nuneaton Road (Sotuh-East)	499	89	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B4111 Nuneaton Road (North-West)	B - Woodford Lane	C - B4111 Nuneaton Road (Sotuh-East)
From	A - B4111 Nuneaton Road (North-West)	0	0	1
	B - Woodford Lane	0	0	1
	C - B4111 Nuneaton Road (Sotuh-East)	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.31	10.91	0.4	B	121	182
C-AB	0.30	5.92	0.9	A	190	285
C-A					350	525
A-B					3	4
A-C					596	895

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	99	25	540	0.184	98	0.0	0.2	8.130	A
C-AB	127	32	792	0.161	126	0.0	0.3	5.407	A
C-A	315	79			315				
A-B	2	0.56			2				
A-C	489	122			489				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	513	0.231	118	0.2	0.3	9.104	A
C-AB	176	44	826	0.213	175	0.3	0.5	5.540	A
C-A	353	88			353				
A-B	3	0.67			3				
A-C	584	146			584				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	145	36	475	0.306	145	0.3	0.4	10.870	B
C-AB	265	66	876	0.302	263	0.5	0.9	5.887	A
C-A	383	96			383				
A-B	3	0.83			3				
A-C	716	179			716				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	145	36	475	0.306	145	0.4	0.4	10.908	B
C-AB	265	66	877	0.303	265	0.9	0.9	5.917	A
C-A	382	95			382				
A-B	3	0.83			3				
A-C	716	179			716				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	513	0.231	119	0.4	0.3	9.145	A
C-AB	177	44	827	0.214	178	0.9	0.5	5.581	A
C-A	352	88			352				
A-B	3	0.67			3				
A-C	584	146			584				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	99	25	540	0.184	100	0.3	0.2	8.177	A

C-AB	128	32	793	0.162	129	0.5	0.4	5.445	A
C-A	314	79			314				
A-B	2	0.56			2				
A-C	489	122			489				

Ref Case, PM (18:00 - 19:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.33	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	Ref Case	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	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 (%)
A - B4111 Nuneaton Road (North-West)		ONE HOUR	✓	400	100.000
B - Woodford Lane		ONE HOUR	✓	309	100.000
C - B4111 Nuneaton Road (Sotuh-East)		ONE HOUR	✓	524	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4111 Nuneaton Road (North-West)	**B - Woodford Lane**	**C - B4111 Nuneaton Road (Sotuh-East)**
From	**A - B4111 Nuneaton Road (North-West)**	0	6	394
	B - Woodford Lane	19	0	290
	C - B4111 Nuneaton Road (Sotuh-East)	346	178	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - B4111 Nuneaton Road (North-West)	B - Woodford Lane	C - B4111 Nuneaton Road (Sotuh-East)
	A - B4111 Nuneaton Road (North-West)	0	0	1
	B - Woodford Lane	0	0	0
	C - B4111 Nuneaton Road (Sotuh-East)	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.62	17.19	1.6	C	284	425
C-AB	0.46	8.27	1.3	A	282	423
C-A					199	298
A-B					6	8
A-C					362	542

Main Results for each time segment

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	233	58	592	0.393	230	0.0	0.6	9.880	A
C-AB	205	51	755	0.271	202	0.0	0.5	6.500	A
C-A	190	47			190				
A-B	5	1			5				
A-C	297	74			297				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	278	69	574	0.484	277	0.6	0.9	12.050	B
C-AB	268	67	778	0.344	267	0.5	0.7	7.046	A
C-A	203	51			203				
A-B	5	1			5				
A-C	354	89			354				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	340	85	549	0.620	338	0.9	1.6	16.814	C
C-AB	372	93	810	0.459	370	0.7	1.2	8.187	A

C-A	205	51			205				
A-B	7	2			7				
A-C	434	108			434				

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	340	85	549	0.620	340	1.6	1.6	17.195	C
C-AB	373	93	811	0.460	373	1.2	1.3	8.271	A
C-A	204	51			204				
A-B	7	2			7				
A-C	434	108			434				

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	278	69	574	0.484	280	1.6	1.0	12.356	B
C-AB	269	67	779	0.345	271	1.3	0.8	7.142	A
C-A	202	51			202				
A-B	5	1			5				
A-C	354	89			354				

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	233	58	592	0.393	234	1.0	0.7	10.089	B
C-AB	206	51	756	0.272	207	0.8	0.5	6.581	A
C-A	189	47			189				
A-B	5	1			5				
A-C	297	74			297				

Ref Case + Development, AM (07:00 - 08:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.98	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
D7	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 (%)
A - B4111 Nuneaton Road (North-West)		ONE HOUR	✓	278	100.000
B - Woodford Lane		ONE HOUR	✓	279	100.000
C - B4111 Nuneaton Road (Sotuh-East)		ONE HOUR	✓	577	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4111 Nuneaton Road (North-West)	B - Woodford Lane	C - B4111 Nuneaton Road (Sotuh-East)
From	A - B4111 Nuneaton Road (North-West)	0	2	276
	B - Woodford Lane	9	0	270
	C - B4111 Nuneaton Road (Sotuh-East)	417	160	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B4111 Nuneaton Road (North-West)	B - Woodford Lane	C - B4111 Nuneaton Road (Sotuh-East)
From	A - B4111 Nuneaton Road (North-West)	0	0	4
	B - Woodford Lane	0	0	1
	C - B4111 Nuneaton Road (Sotuh-East)	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.52	12.81	1.1	B	256	384
C-AB	0.42	7.05	1.1	A	277	415
C-A					253	379
A-B					2	3
A-C					253	380

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	210	53	617	0.340	208	0.0	0.5	8.758	A
C-AB	198	49	804	0.246	196	0.0	0.5	5.916	A
C-A	237	59			237				
A-B	2	0.38			2				
A-C	208	52			208				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	251	63	605	0.415	250	0.5	0.7	10.119	B
C-AB	262	65	837	0.313	261	0.5	0.7	6.264	A
C-A	257	64			257				
A-B	2	0.45			2				
A-C	248	62			248				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	307	77	588	0.522	306	0.7	1.1	12.685	B
C-AB	369	92	883	0.418	367	0.7	1.1	7.002	A
C-A	266	67			266				
A-B	2	0.55			2				
A-C	304	76			304				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	307	77	588	0.522	307	1.1	1.1	12.812	B
C-AB	370	93	884	0.419	370	1.1	1.1	7.053	A
C-A	265	66			265				
A-B	2	0.55			2				
A-C	304	76			304				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	251	63	605	0.415	252	1.1	0.7	10.246	B
C-AB	263	66	838	0.314	264	1.1	0.7	6.326	A
C-A	256	64			256				
A-B	2	0.45			2				
A-C	248	62			248				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	210	53	617	0.340	211	0.7	0.5	8.878	A

C-AB	199	50	805	0.247	200	0.7	0.5	5.974	A
C-A	236	59			236				
A-B	2	0.38			2				
A-C	208	52			208				

Ref Case + Development, AM (08:00 - 09:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.12	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	Ref Case + Development	AM (08:00 - 09:00)	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 (%)
A - B4111 Nuneaton Road (North-West)		ONE HOUR	✓	266	100.000
B - Woodford Lane		ONE HOUR	✓	252	100.000
C - B4111 Nuneaton Road (Sotuh-East)		ONE HOUR	✓	628	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4111 Nuneaton Road (North-West)	**B - Woodford Lane**	**C - B4111 Nuneaton Road (Sotuh-East)**
From	**A - B4111 Nuneaton Road (North-West)**	0	1	265
	B - Woodford Lane	12	0	240
	C - B4111 Nuneaton Road (Sotuh-East)	575	53	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B4111 Nuneaton Road (North-West)	B - Woodford Lane	C - B4111 Nuneaton Road (Sotuh-East)
From	A - B4111 Nuneaton Road (North-West)	0	0	5
	B - Woodford Lane	0	0	2
	C - B4111 Nuneaton Road (Sotuh-East)	3	8	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.48	11.89	0.9	B	231	347
C-AB	0.17	4.66	0.5	A	120	180
C-A					456	684
A-B					0.92	1
A-C					243	365

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	190	47	609	0.311	188	0.0	0.4	8.511	A
C-AB	81	20	853	0.095	80	0.0	0.2	4.657	A
C-A	392	98			392				
A-B	0.75	0.19			0.75				
A-C	200	50			200				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	227	57	597	0.379	226	0.4	0.6	9.680	A
C-AB	112	28	904	0.124	111	0.2	0.3	4.553	A
C-A	453	113			453				
A-B	0.90	0.22			0.90				
A-C	238	60			238				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	277	69	580	0.478	276	0.6	0.9	11.797	B
C-AB	167	42	976	0.171	167	0.3	0.5	4.462	A

C-A	524	131			524				
A-B	1	0.28			1				
A-C	292	73			292				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	277	69	580	0.478	277	0.9	0.9	11.886	B
C-AB	168	42	976	0.172	168	0.5	0.5	4.462	A
C-A	524	131			524				
A-B	1	0.28			1				
A-C	292	73			292				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	227	57	597	0.379	228	0.9	0.6	9.773	A
C-AB	112	28	905	0.124	113	0.5	0.3	4.545	A
C-A	452	113			452				
A-B	0.90	0.22			0.90				
A-C	238	60			238				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	190	47	609	0.311	190	0.6	0.5	8.609	A
C-AB	82	20	854	0.096	82	0.3	0.2	4.663	A
C-A	391	98			391				
A-B	0.75	0.19			0.75				
A-C	200	50			200				

Ref Case + Development, AM (09:00 - 10:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.98	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
D9	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 (%)
A - B4111 Nuneaton Road (North-West)		ONE HOUR	✓	289	100.000
B - Woodford Lane		ONE HOUR	✓	308	100.000
C - B4111 Nuneaton Road (Sotuh-East)		ONE HOUR	✓	506	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4111 Nuneaton Road (North-West)	B - Woodford Lane	C - B4111 Nuneaton Road (Sotuh-East)
From	A - B4111 Nuneaton Road (North-West)	0	1	288
	B - Woodford Lane	25	0	283
	C - B4111 Nuneaton Road (Sotuh-East)	433	73	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B4111 Nuneaton Road (North-West)	B - Woodford Lane	C - B4111 Nuneaton Road (Sotuh-East)
From	A - B4111 Nuneaton Road (North-West)	0	0	6
	B - Woodford Lane	0	0	1
	C - B4111 Nuneaton Road (Sotuh-East)	4	8	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.60	15.70	1.5	C	283	424
C-AB	0.21	5.31	0.5	A	134	202
C-A					330	495
A-B					0.92	1
A-C					264	396

Main Results for each time segment

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	232	58	601	0.386	229	0.0	0.6	9.618	A
C-AB	95	24	776	0.122	94	0.0	0.2	5.277	A
C-A	286	72			286				
A-B	0.75	0.19			0.75				
A-C	217	54			217				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	277	69	587	0.471	276	0.6	0.9	11.513	B
C-AB	127	32	811	0.156	126	0.2	0.3	5.268	A
C-A	328	82			328				
A-B	0.90	0.22			0.90				
A-C	259	65			259				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	339	85	568	0.597	337	0.9	1.4	15.429	C
C-AB	181	45	861	0.210	180	0.3	0.5	5.301	A
C-A	376	94			376				
A-B	1	0.28			1				
A-C	317	79			317				

09:30 - 09:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	339	85	568	0.597	339	1.4	1.5	15.705	C
C-AB	181	45	862	0.210	181	0.5	0.5	5.305	A
C-A	376	94			376				
A-B	1	0.28			1				
A-C	317	79			317				

09:45 - 10:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	277	69	587	0.471	279	1.5	0.9	11.756	B
C-AB	127	32	812	0.156	128	0.5	0.3	5.264	A
C-A	328	82			328				
A-B	0.90	0.22			0.90				
A-C	259	65			259				

10:00 - 10:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	232	58	601	0.386	233	0.9	0.6	9.805	A

C-AB	95	24	776	0.123	96	0.3	0.2	5.291	A
C-A	286	71			286				
A-B	0.75	0.19			0.75				
A-C	217	54			217				

Ref Case + Development, PM (16:00 - 17:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.88	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	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 (%)
A - B4111 Nuneaton Road (North-West)		ONE HOUR	✓	529	100.000
B - Woodford Lane		ONE HOUR	✓	259	100.000
C - B4111 Nuneaton Road (Sotuh-East)		ONE HOUR	✓	503	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4111 Nuneaton Road (North-West)	**B - Woodford Lane**	**C - B4111 Nuneaton Road (Sotuh-East)**
From	**A - B4111 Nuneaton Road (North-West)**	0	21	508
	B - Woodford Lane	6	0	253
	C - B4111 Nuneaton Road (Sotuh-East)	396	107	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B4111 Nuneaton Road (North-West)	B - Woodford Lane	C - B4111 Nuneaton Road (Sotuh-East)
From	A - B4111 Nuneaton Road (North-West)	0	0	1
	B - Woodford Lane	0	0	0
	C - B4111 Nuneaton Road (Sotuh-East)	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.53	14.51	1.1	B	238	356
C-AB	0.31	6.35	0.8	A	187	281
C-A					274	411
A-B					19	29
A-C					466	699

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	195	49	582	0.335	193	0.0	0.5	9.210	A
C-AB	132	33	761	0.174	131	0.0	0.3	5.713	A
C-A	246	62			246				
A-B	16	4			16				
A-C	382	96			382				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	233	58	562	0.415	232	0.5	0.7	10.898	B
C-AB	177	44	786	0.225	176	0.3	0.5	5.909	A
C-A	276	69			276				
A-B	19	5			19				
A-C	457	114			457				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	285	71	533	0.535	283	0.7	1.1	14.324	B
C-AB	252	63	822	0.307	251	0.5	0.8	6.318	A

C-A	301	75			301				
A-B	23	6			23				
A-C	559	140			559				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	285	71	533	0.535	285	1.1	1.1	14.507	B
C-AB	253	63	822	0.307	253	0.8	0.8	6.346	A
C-A	301	75			301				
A-B	23	6			23				
A-C	559	140			559				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	233	58	561	0.415	234	1.1	0.7	11.064	B
C-AB	177	44	787	0.225	178	0.8	0.5	5.952	A
C-A	275	69			275				
A-B	19	5			19				
A-C	457	114			457				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	195	49	582	0.335	196	0.7	0.5	9.346	A
C-AB	133	33	762	0.175	134	0.5	0.3	5.752	A
C-A	246	61			246				
A-B	16	4			16				
A-C	382	96			382				

Ref Case + Development, PM (17:00 - 18:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.37	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	Ref Case + Development	PM (17:00 - 18:00)	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 (%)
A - B4111 Nuneaton Road (North-West)		ONE HOUR	✓	654	100.000
B - Woodford Lane		ONE HOUR	✓	163	100.000
C - B4111 Nuneaton Road (Sotuh-East)		ONE HOUR	✓	596	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4111 Nuneaton Road (North-West)	B - Woodford Lane	C - B4111 Nuneaton Road (Sotuh-East)
From	A - B4111 Nuneaton Road (North-West)	0	3	651
	B - Woodford Lane	7	0	156
	C - B4111 Nuneaton Road (Sotuh-East)	499	97	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B4111 Nuneaton Road (North-West)	B - Woodford Lane	C - B4111 Nuneaton Road (Sotuh-East)
From	A - B4111 Nuneaton Road (North-West)	0	0	1
	B - Woodford Lane	0	0	1
	C - B4111 Nuneaton Road (Sotuh-East)	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.37	12.02	0.6	B	150	224
C-AB	0.33	6.16	1.0	A	207	311
C-A					340	510
A-B					3	4
A-C					597	896

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	123	31	543	0.226	122	0.0	0.3	8.517	A
C-AB	139	35	792	0.176	137	0.0	0.4	5.501	A
C-A	310	77			310				
A-B	2	0.56			2				
A-C	490	123			490				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	147	37	517	0.284	146	0.3	0.4	9.707	A
C-AB	192	48	826	0.232	191	0.4	0.6	5.679	A
C-A	344	86			344				
A-B	3	0.67			3				
A-C	585	146			585				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	179	45	479	0.375	179	0.4	0.6	11.953	B
C-AB	289	72	876	0.329	287	0.6	1.0	6.128	A
C-A	368	92			368				
A-B	3	0.83			3				
A-C	717	179			717				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	179	45	479	0.375	179	0.6	0.6	12.016	B
C-AB	290	72	877	0.330	289	1.0	1.0	6.164	A
C-A	367	92			367				
A-B	3	0.83			3				
A-C	717	179			717				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	147	37	517	0.284	147	0.6	0.4	9.772	A
C-AB	193	48	827	0.233	194	1.0	0.6	5.727	A
C-A	343	86			343				
A-B	3	0.67			3				
A-C	585	146			585				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	123	31	543	0.226	123	0.4	0.3	8.583	A

C-AB	140	35	793	0.177	141	0.6	0.4	5.544	A
C-A	309	77			309				
A-B	2	0.56			2				
A-C	490	123			490				

Ref Case + Development, PM (18:00 - 19:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		9.35	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	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	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 (%)
A - B4111 Nuneaton Road (North-West)		ONE HOUR	✓	400	100.000
B - Woodford Lane		ONE HOUR	✓	368	100.000
C - B4111 Nuneaton Road (Sotuh-East)		ONE HOUR	✓	551	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4111 Nuneaton Road (North-West)	**B - Woodford Lane**	**C - B4111 Nuneaton Road (Sotuh-East)**
From	**A - B4111 Nuneaton Road (North-West)**	0	6	394
	B - Woodford Lane	19	0	349
	C - B4111 Nuneaton Road (Sotuh-East)	346	205	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B4111 Nuneaton Road (North-West)	B - Woodford Lane	C - B4111 Nuneaton Road (Sotuh-East)
From	A - B4111 Nuneaton Road (North-West)	0	0	1
	B - Woodford Lane	0	0	0
	C - B4111 Nuneaton Road (Sotuh-East)	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.73	24.35	2.6	C	338	507
C-AB	0.53	9.68	1.7	A	326	489
C-A					179	269
A-B					6	8
A-C					362	542

Main Results for each time segment

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	277	69	594	0.466	274	0.0	0.9	11.115	B
C-AB	236	59	751	0.315	234	0.0	0.6	6.953	A
C-A	178	45			178				
A-B	5	1			5				
A-C	297	74			297				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	331	83	577	0.574	329	0.9	1.3	14.431	B
C-AB	310	77	774	0.400	308	0.6	0.9	7.748	A
C-A	186	46			186				
A-B	5	1			5				
A-C	354	89			354				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	405	101	552	0.735	400	1.3	2.5	23.043	C
C-AB	431	108	806	0.534	428	0.9	1.6	9.530	A

C-A	176	44			176				
A-B	7	2			7				
A-C	434	108			434				

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	405	101	551	0.735	405	2.5	2.6	24.354	C
C-AB	432	108	807	0.535	432	1.6	1.7	9.681	A
C-A	175	44			175				
A-B	7	2			7				
A-C	434	108			434				

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	331	83	576	0.574	336	2.6	1.4	15.253	C
C-AB	311	78	775	0.401	314	1.7	1.0	7.894	A
C-A	184	46			184				
A-B	5	1			5				
A-C	354	89			354				

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	277	69	594	0.466	279	1.4	0.9	11.497	B
C-AB	238	59	752	0.316	239	1.0	0.6	7.064	A
C-A	177	44			177				
A-B	5	1			5				
A-C	297	74			297				

Appendix 16

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: 17059 - Chapel End Crossroads.j9
Path: P:\17 jobs\059 MIRA - Southern Manufacturing Sector\Technical Assessments\Modelling - July 2022
Report generation date: 14/07/2022 15:26:53

»Ref Case, AM (07:00 - 08:00)
»Ref Case, AM (08:00 - 09:00)
»Ref Case, AM (09:00 - 10:00)
»Ref Case, PM (16:00 - 17:00)
»Ref Case, PM (17:00 - 18:00)
»Ref Case, PM (18:00 - 19:00)
»Ref Case + Development, AM (07:00 - 08:00)
»Ref Case + Development, AM (08:00 - 09:00)
»Ref Case + Development, AM (09:00 - 10:00)
»Ref Case + Development, PM (16:00 - 17:00)
»Ref Case + Development, PM (17:00 - 18:00)
»Ref Case + Development, PM (18:00 - 19:00)

Summary of junction performance

	AM (07:00 - 08:00)					AM (08:00 - 09:00)					AM (09:00 - 10:00)					PM (16:00 - 17:00)					PM (17:00 - 18:00)					PM (18:00 - 19:00)				
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
Ref Case																														
Stream B-ACD	2.3	26.52	0.71	D		25.6	192.95	1.08	F		5.1	53.10	0.86	F		4.7	52.90	0.85	F		21.3	201.78	1.08	F		5.3	62.82	0.87	F	
Stream A-BCD	0.1	5.16	0.07	A	9.30	0.4	5.82	0.20	A	57.16	0.2	5.28	0.10	A	16.62	0.4	5.31	0.18	A	16.91	0.7	5.10	0.25	A	48.59	0.7	5.04	0.26	A	18.36
Stream D-ABC	0.6	11.60	0.36	B		2.4	29.73	0.72	D		0.8	15.13	0.46	C		1.6	23.89	0.63	C		3.5	46.52	0.80	E		2.3	32.06	0.71	D	
Stream C-ABD	0.4	5.21	0.19	A		0.8	6.68	0.36	A		0.9	6.57	0.36	A		1.1	7.95	0.44	A		1.6	9.86	0.53	A		0.8	7.63	0.37	A	
Ref Case + Development																														
Stream B-ACD	3.1	33.70	0.77	D		33.0	241.36	1.12	F		6.6	67.01	0.90	F		5.4	59.89	0.87	F		24.7	228.95	1.10	F		7.5	85.82	0.92	F	
Stream A-BCD	0.1	5.14	0.07	A	11.60	0.4	5.83	0.20	A	70.60	0.2	5.27	0.10	A	20.42	0.4	5.29	0.18	A	18.96	0.7	5.11	0.26	A	55.34	0.7	5.02	0.27	A	24.20
Stream D-ABC	0.6	12.45	0.39	B		2.8	34.02	0.75	D		0.9	16.18	0.49	C		1.9	26.84	0.66	D		4.3	55.48	0.84	F		3.0	39.91	0.77	E	
Stream C-ABD	0.4	5.20	0.19	A		0.9	6.66	0.36	A		0.9	6.58	0.37	A		1.1	8.01	0.45	A		1.7	10.00	0.54	A		0.9	7.69	0.37	A	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	

Location	
Site number	
Date	24/02/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mtp\MTPGeneral
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	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D2	Ref Case	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D3	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D4	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D5	Ref Case	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D6	Ref Case	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	15	✓
D7	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D8	Ref Case + Development	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D9	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D10	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D11	Ref Case + Development	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D12	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Ref Case, AM (07:00 - 08:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		9.30	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B4114 Camp Hill Road (East)		Major
B	Bucks Hill		Minor
C	B4114 Camp Hill Road (West)		Major
D	Victoria Road		Minor

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)
A - B4114 Camp Hill Road (East)	8.40			250.0	✓	0.00
C - B4114 Camp Hill Road (West)	8.40			250.0	✓	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 - Bucks Hill	One lane	4.30	27	47
D - Victoria Road	One lane	3.60	120	24

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	719	-	-	-	-	-	-	0.249	0.356	0.249	-	-	-
B-A	576	0.094	0.237	0.237	-	-	-	0.149	0.339	-	0.237	0.237	0.119
B-C	739	0.101	0.256	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	576	0.094	0.237	0.237	-	-	-	0.149	0.339	0.149	-	-	-
B-D, offside lane	576	0.094	0.237	0.237	-	-	-	0.149	0.339	0.149	-	-	-
C-B	719	0.249	0.249	0.356	-	-	-	-	-	-	-	-	-
D-A	677	-	-	-	-	-	-	0.235	-	0.093	-	-	-
D-B, nearside lane	560	0.145	0.145	0.330	-	-	-	0.231	0.231	0.091	-	-	-
D-B, offside lane	560	0.145	0.145	0.330	-	-	-	0.231	0.231	0.091	-	-	-
D-C	560	-	0.145	0.330	0.115	0.231	0.231	0.231	0.231	0.091	-	-	-

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 segment length (min)	Run automatically
D1	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 (%)
A - B4114 Camp Hill Road (East)		ONE HOUR	✓	260	100.000
B - Bucks Hill		ONE HOUR	✓	299	100.000
C - B4114 Camp Hill Road (West)		ONE HOUR	✓	427	100.000
D - Victoria Road		ONE HOUR	✓	157	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B4114 Camp Hill Road (East)	B - Bucks Hill	C - B4114 Camp Hill Road (West)	D - Victoria Road
From	A - B4114 Camp Hill Road (East)	0	33	194	33
	B - Bucks Hill	71	0	103	125
	C - B4114 Camp Hill Road (West)	340	84	0	3
	D - Victoria Road	87	67	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B4114 Camp Hill Road (East)	B - Bucks Hill	C - B4114 Camp Hill Road (West)	D - Victoria Road
From	A - B4114 Camp Hill Road (East)	0	7	3	0
	B - Bucks Hill	3	0	2	0
	C - B4114 Camp Hill Road (West)	2	5	0	0
	D - Victoria Road	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.71	26.52	2.3	D	274	412
A-BCD	0.07	5.16	0.1	A	43	64
A-B					28	43

A-C					167	251
D-ABC	0.36	11.60	0.6	B	144	216
C-ABD	0.19	5.21	0.4	A	127	190
C-D					2	3
C-A					263	394

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	225	56	514	0.438	222	0.0	0.8	12.223	B
A-BCD	32	8	738	0.044	32	0.0	0.1	5.096	A
A-B	24	6			24				
A-C	140	35			140				
D-ABC	118	30	528	0.224	117	0.0	0.3	8.744	A
C-ABD	93	23	800	0.117	93	0.0	0.2	5.091	A
C-D	2	0.50			2				
C-A	226	57			226				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	269	67	493	0.545	267	0.8	1.2	15.839	C
A-BCD	41	10	744	0.055	41	0.1	0.1	5.116	A
A-B	28	7			28				
A-C	165	41			165				
D-ABC	141	35	509	0.277	141	0.3	0.4	9.762	A
C-ABD	121	30	824	0.147	121	0.2	0.3	5.130	A
C-D	2	0.57			2				
C-A	261	65			261				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	329	82	464	0.710	325	1.2	2.2	25.138	D
A-BCD	55	14	753	0.072	54	0.1	0.1	5.149	A
A-B	34	8			34				
A-C	198	50			198				
D-ABC	173	43	483	0.358	172	0.4	0.5	11.551	B
C-ABD	166	41	858	0.193	165	0.3	0.4	5.207	A
C-D	3	0.67			3				
C-A	302	75			302				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	329	82	464	0.710	329	2.2	2.3	26.519	D

A-BCD	55	14	753	0.072	55	0.1	0.1	5.157	A
A-B	34	8			34				
A-C	198	50			198				
D-ABC	173	43	483	0.358	173	0.5	0.6	11.605	B
C-ABD	166	41	858	0.193	166	0.4	0.4	5.209	A
C-D	3	0.67			3				
C-A	302	75			302				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	269	67	493	0.546	273	2.3	1.2	16.717	C
A-BCD	41	10	744	0.055	41	0.1	0.1	5.131	A
A-B	28	7			28				
A-C	165	41			165				
D-ABC	141	35	509	0.277	142	0.6	0.4	9.822	A
C-ABD	121	30	824	0.147	122	0.4	0.3	5.128	A
C-D	2	0.57			2				
C-A	260	65			260				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	225	56	513	0.439	227	1.2	0.8	12.651	B
A-BCD	32	8	738	0.044	33	0.1	0.1	5.107	A
A-B	24	6			24				
A-C	140	35			140				
D-ABC	118	30	528	0.224	119	0.4	0.3	8.813	A
C-ABD	94	23	800	0.117	94	0.3	0.2	5.101	A
C-D	2	0.50			2				
C-A	226	56			226				

Ref Case, AM (08:00 - 09:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		57.16	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 segment length (min)	Run automatically
D2	Ref Case	AM (08:00 - 09:00)	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 (%)
A - B4114 Camp Hill Road (East)		ONE HOUR	✓	376	100.000
B - Bucks Hill		ONE HOUR	✓	419	100.000
C - B4114 Camp Hill Road (West)		ONE HOUR	✓	514	100.000
D - Victoria Road		ONE HOUR	✓	278	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B4114 Camp Hill Road (East)	B - Bucks Hill	C - B4114 Camp Hill Road (West)	D - Victoria Road
From	A - B4114 Camp Hill Road (East)	0	51	243	82
	B - Bucks Hill	63	0	187	169
	C - B4114 Camp Hill Road (West)	367	138	0	9
	D - Victoria Road	136	135	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B4114 Camp Hill Road (East)	B - Bucks Hill	C - B4114 Camp Hill Road (West)	D - Victoria Road
From	A - B4114 Camp Hill Road (East)	0	4	3	0
	B - Bucks Hill	5	0	1	0
	C - B4114 Camp Hill Road (West)	2	8	0	0
	D - Victoria Road	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	1.08	192.95	25.6	F	384	577
A-BCD	0.20	5.82	0.4	A	119	178
A-B					39	59
A-C					187	280
D-ABC	0.72	29.73	2.4	D	255	383

C-ABD	0.36	6.68	0.8	A	226	339
C-D					6	9
C-A					239	359

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	315	79	499	0.632	309	0.0	1.6	18.365	C
A-BCD	88	22	751	0.117	87	0.0	0.2	5.412	A
A-B	34	8			34				
A-C	162	40			162				
D-ABC	209	52	489	0.428	206	0.0	0.7	12.596	B
C-ABD	163	41	780	0.209	162	0.0	0.4	5.811	A
C-D	5	1			5				
C-A	219	55			219				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	377	94	470	0.801	369	1.6	3.4	33.437	D
A-BCD	113	28	760	0.149	113	0.2	0.3	5.558	A
A-B	39	10			39				
A-C	186	46			186				
D-ABC	250	62	463	0.539	248	0.7	1.1	16.607	C
C-ABD	215	54	806	0.266	214	0.4	0.5	6.100	A
C-D	6	1			6				
C-A	242	60			242				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	461	115	429	1.074	412	3.4	15.9	106.120	F
A-BCD	156	39	775	0.201	155	0.3	0.4	5.801	A
A-B	45	11			45				
A-C	214	53			214				
D-ABC	306	77	427	0.717	301	1.1	2.3	27.725	D
C-ABD	300	75	842	0.357	299	0.5	0.8	6.663	A
C-D	6	2			6				
C-A	259	65			259				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	461	115	429	1.076	423	15.9	25.6	192.953	F
A-BCD	156	39	775	0.201	156	0.4	0.4	5.820	A
A-B	45	11			45				

A-C	213	53			213				
D-ABC	306	77	425	0.719	306	2.3	2.4	29.726	D
C-ABD	301	75	842	0.357	301	0.8	0.9	6.675	A
C-D	6	2			6				
C-A	259	65			259				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	377	94	469	0.803	453	25.6	6.6	139.374	F
A-BCD	114	28	760	0.149	114	0.4	0.3	5.592	A
A-B	39	10			39				
A-C	186	46			186				
D-ABC	250	62	462	0.541	255	2.4	1.2	17.773	C
C-ABD	215	54	806	0.267	216	0.9	0.5	6.108	A
C-D	6	1			6				
C-A	241	60			241				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	315	79	498	0.633	334	6.6	1.8	24.161	C
A-BCD	88	22	751	0.117	88	0.3	0.2	5.445	A
A-B	34	8			34				
A-C	161	40			161				
D-ABC	209	52	488	0.429	211	1.2	0.8	13.065	B
C-ABD	164	41	781	0.210	164	0.5	0.4	5.839	A
C-D	5	1			5				
C-A	218	54			218				

Ref Case, AM (09:00 - 10:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		16.62	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario	Time Period	Traffic profile	Start time	Finish time	Time segment length	Run

	name	name	type	(HH:mm)	(HH:mm)	(min)	automatically
D3	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 (%)
A - B4114 Camp Hill Road (East)		ONE HOUR	✓	320	100.000
B - Bucks Hill		ONE HOUR	✓	339	100.000
C - B4114 Camp Hill Road (West)		ONE HOUR	✓	523	100.000
D - Victoria Road		ONE HOUR	✓	183	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B4114 Camp Hill Road (East)	B - Bucks Hill	C - B4114 Camp Hill Road (West)	D - Victoria Road
From	A - B4114 Camp Hill Road (East)	0	52	227	41
	B - Bucks Hill	71	0	147	121
	C - B4114 Camp Hill Road (West)	374	147	0	2
	D - Victoria Road	90	90	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B4114 Camp Hill Road (East)	B - Bucks Hill	C - B4114 Camp Hill Road (West)	D - Victoria Road
From	A - B4114 Camp Hill Road (East)	0	7	4	0
	B - Bucks Hill	5	0	4	0
	C - B4114 Camp Hill Road (West)	3	6	0	0
	D - Victoria Road	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.86	53.10	5.1	F	311	467
A-BCD	0.10	5.28	0.2	A	58	87
A-B					44	66
A-C					191	287
D-ABC	0.46	15.13	0.8	C	168	252
C-ABD	0.36	6.57	0.9	A	237	355
C-D					1	2

C-A					242	363

Main Results for each time segment

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	255	64	498	0.513	251	0.0	1.0	14.368	B
A-BCD	43	11	741	0.058	43	0.0	0.1	5.158	A
A-B	37	9			37				
A-C	161	40			161				
D-ABC	138	34	497	0.277	136	0.0	0.4	9.936	A
C-ABD	171	43	799	0.214	170	0.0	0.4	5.714	A
C-D	1	0.30			1				
C-A	221	55			221				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	305	76	472	0.646	302	1.0	1.7	20.852	C
A-BCD	56	14	748	0.074	55	0.1	0.1	5.196	A
A-B	43	11			43				
A-C	189	47			189				
D-ABC	165	41	473	0.348	164	0.4	0.5	11.621	B
C-ABD	225	56	825	0.272	224	0.4	0.5	5.999	A
C-D	1	0.33			1				
C-A	244	61			244				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	373	93	435	0.859	362	1.7	4.5	43.902	E
A-BCD	76	19	760	0.100	76	0.1	0.2	5.259	A
A-B	51	13			51				
A-C	225	56			225				
D-ABC	201	50	440	0.458	200	0.5	0.8	14.969	B
C-ABD	313	78	863	0.362	311	0.5	0.9	6.550	A
C-D	1	0.35			1				
C-A	262	65			262				

09:30 - 09:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	373	93	434	0.860	371	4.5	5.1	53.099	F
A-BCD	76	19	759	0.100	76	0.2	0.2	5.275	A
A-B	51	13			51				
A-C	225	56			225				
D-ABC	201	50	439	0.459	201	0.8	0.8	15.135	C

C-ABD	313	78	863	0.363	313	0.9	0.9	6.574	A
C-D	1	0.35			1				
C-A	261	65			261				

09:45 - 10:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	305	76	471	0.647	317	5.1	2.0	25.073	D
A-BCD	56	14	747	0.075	56	0.2	0.1	5.224	A
A-B	43	11			43				
A-C	189	47			189				
D-ABC	165	41	473	0.348	166	0.8	0.5	11.778	B
C-ABD	225	56	826	0.273	226	0.9	0.6	6.021	A
C-D	1	0.33			1				
C-A	244	61			244				

10:00 - 10:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	255	64	497	0.513	259	2.0	1.1	15.308	C
A-BCD	43	11	740	0.058	43	0.1	0.1	5.180	A
A-B	37	9			37				
A-C	161	40			161				
D-ABC	138	34	496	0.278	138	0.5	0.4	10.071	B
C-ABD	172	43	800	0.215	173	0.6	0.4	5.748	A
C-D	1	0.29			1				
C-A	220	55			220				

Ref Case, PM (16:00 - 17:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		16.91	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	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 (%)
A - B4114 Camp Hill Road (East)		ONE HOUR	✓	437	100.000
B - Bucks Hill		ONE HOUR	✓	313	100.000
C - B4114 Camp Hill Road (West)		ONE HOUR	✓	505	100.000
D - Victoria Road		ONE HOUR	✓	227	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B4114 Camp Hill Road (East)	B - Bucks Hill	C - B4114 Camp Hill Road (West)	D - Victoria Road
From	A - B4114 Camp Hill Road (East)	0	64	302	71
	B - Bucks Hill	65	0	142	106
	C - B4114 Camp Hill Road (West)	316	185	0	4
	D - Victoria Road	79	142	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B4114 Camp Hill Road (East)	B - Bucks Hill	C - B4114 Camp Hill Road (West)	D - Victoria Road
From	A - B4114 Camp Hill Road (East)	0	5	1	0
	B - Bucks Hill	5	0	2	0
	C - B4114 Camp Hill Road (West)	1	2	0	0
	D - Victoria Road	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.85	52.90	4.7	F	287	431
A-BCD	0.18	5.31	0.4	A	114	172
A-B					50	75
A-C					237	355
D-ABC	0.63	23.89	1.6	C	208	312
C-ABD	0.44	7.95	1.1	A	275	413
C-D					2	4
C-A					186	279

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	236	59	484	0.487	232	0.0	0.9	14.114	B
A-BCD	82	21	788	0.104	81	0.0	0.2	5.090	A
A-B	43	11			43				
A-C	204	51			204				
D-ABC	171	43	466	0.367	169	0.0	0.6	12.019	B
C-ABD	202	51	775	0.261	200	0.0	0.5	6.254	A
C-D	2	0.56			2				
C-A	176	44			176				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	281	70	452	0.622	279	0.9	1.6	20.464	C
A-BCD	108	27	806	0.134	108	0.2	0.3	5.160	A
A-B	50	12			50				
A-C	235	59			235				
D-ABC	204	51	439	0.465	203	0.6	0.8	15.201	C
C-ABD	262	66	791	0.331	261	0.5	0.7	6.799	A
C-D	2	0.60			2				
C-A	189	47			189				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	345	86	407	0.846	334	1.6	4.2	43.944	E
A-BCD	152	38	832	0.183	152	0.3	0.4	5.296	A
A-B	58	14			58				
A-C	271	68			271				
D-ABC	250	62	400	0.624	247	0.8	1.6	23.033	C
C-ABD	360	90	816	0.441	358	0.7	1.1	7.889	A
C-D	2	0.61			2				
C-A	193	48			193				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	345	86	406	0.848	343	4.2	4.7	52.898	F
A-BCD	153	38	832	0.183	152	0.4	0.4	5.309	A
A-B	57	14			57				
A-C	271	68			271				
D-ABC	250	62	400	0.625	250	1.6	1.6	23.892	C
C-ABD	361	90	816	0.442	361	1.1	1.1	7.948	A
C-D	2	0.61			2				
C-A	193	48			193				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	281	70	451	0.624	293	4.7	1.8	24.278	C
A-BCD	109	27	805	0.135	109	0.4	0.3	5.186	A
A-B	50	12			50				
A-C	235	59			235				
D-ABC	204	51	438	0.466	207	1.6	0.9	15.781	C
C-ABD	263	66	792	0.332	265	1.1	0.7	6.860	A
C-D	2	0.60			2				
C-A	189	47			189				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	236	59	482	0.488	239	1.8	1.0	14.951	B
A-BCD	83	21	788	0.105	83	0.3	0.2	5.116	A
A-B	43	11			43				
A-C	203	51			203				
D-ABC	171	43	465	0.368	172	0.9	0.6	12.345	B
C-ABD	203	51	775	0.262	204	0.7	0.5	6.316	A
C-D	2	0.55			2				
C-A	175	44			175				

Ref Case, PM (17:00 - 18:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		48.59	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
D5	Ref Case	PM (17:00 - 18:00)	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 (%)
A - B4114 Camp Hill Road (East)		ONE HOUR	✓	612	100.000
B - Bucks Hill		ONE HOUR	✓	336	100.000
C - B4114 Camp Hill Road (West)		ONE HOUR	✓	536	100.000
D - Victoria Road		ONE HOUR	✓	263	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B4114 Camp Hill Road (East)	B - Bucks Hill	C - B4114 Camp Hill Road (West)	D - Victoria Road
From	A - B4114 Camp Hill Road (East)	0	85	443	84
	B - Bucks Hill	66	0	146	124
	C - B4114 Camp Hill Road (West)	329	202	0	5
	D - Victoria Road	91	166	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B4114 Camp Hill Road (East)	B - Bucks Hill	C - B4114 Camp Hill Road (West)	D - Victoria Road
From	A - B4114 Camp Hill Road (East)	0	4	0	0
	B - Bucks Hill	5	0	2	0
	C - B4114 Camp Hill Road (West)	1	2	0	0
	D - Victoria Road	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	1.08	201.78	21.3	F	308	462
A-BCD	0.25	5.10	0.7	A	173	260
A-B					63	94
A-C					326	489
D-ABC	0.80	46.52	3.5	E	241	362
C-ABD	0.53	9.86	1.6	A	316	475
C-D					3	4
C-A					173	259

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	253	63	444	0.570	248	0.0	1.3	17.955	C
A-BCD	117	29	864	0.135	116	0.0	0.3	4.810	A
A-B	55	14			55				
A-C	288	72			288				
D-ABC	198	50	443	0.447	195	0.0	0.8	14.332	B
C-ABD	228	57	754	0.303	226	0.0	0.6	6.807	A
C-D	3	0.66			3				
C-A	173	43			173				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	302	76	404	0.748	297	1.3	2.6	32.082	D
A-BCD	161	40	898	0.179	160	0.3	0.4	4.884	A
A-B	63	16			63				
A-C	327	82			327				
D-ABC	236	59	410	0.576	234	0.8	1.3	20.206	C
C-ABD	299	75	767	0.390	298	0.6	0.9	7.689	A
C-D	3	0.68			3				
C-A	180	45			180				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	370	92	346	1.071	327	2.6	13.2	111.611	F
A-BCD	240	60	949	0.253	239	0.4	0.7	5.078	A
A-B	70	17			70				
A-C	364	91			364				
D-ABC	290	72	364	0.795	282	1.3	3.2	40.382	E
C-ABD	419	105	788	0.532	416	0.9	1.6	9.707	A
C-D	3	0.64			3				
C-A	168	42			168				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	370	92	344	1.076	338	13.2	21.3	201.783	F
A-BCD	241	60	949	0.254	241	0.7	0.7	5.100	A
A-B	70	17			70				
A-C	363	91			363				
D-ABC	290	72	363	0.798	288	3.2	3.5	46.520	E
C-ABD	421	105	789	0.533	421	1.6	1.6	9.861	A
C-D	3	0.63			3				
C-A	167	42			167				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	302	76	401	0.753	371	21.3	4.0	122.068	F

A-BCD	162	40	898	0.180	163	0.7	0.4	4.914	A
A-B	63	16			63				
A-C	326	81			326				
D-ABC	236	59	408	0.579	245	3.5	1.4	22.963	C
C-ABD	301	75	769	0.392	304	1.6	0.9	7.821	A
C-D	3	0.68			3				
C-A	178	45			178				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	253	63	442	0.572	264	4.0	1.4	21.222	C
A-BCD	118	29	864	0.136	118	0.4	0.3	4.839	A
A-B	55	14			55				
A-C	288	72			288				
D-ABC	198	50	442	0.448	200	1.4	0.8	15.060	C
C-ABD	229	57	754	0.304	231	0.9	0.6	6.907	A
C-D	3	0.65			3				
C-A	171	43			171				

Ref Case, PM (18:00 - 19:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		18.36	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
D6	Ref Case	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	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 (%)
A - B4114 Camp Hill Road (East)		ONE HOUR	✓	620	100.000

B - Bucks Hill		ONE HOUR	✓	296	100.000
C - B4114 Camp Hill Road (West)		ONE HOUR	✓	429	100.000
D - Victoria Road		ONE HOUR	✓	244	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B4114 Camp Hill Road (East)	**B - Bucks Hill**	**C - B4114 Camp Hill Road (West)**	**D - Victoria Road**
From	**A - B4114 Camp Hill Road (East)**	0	93	434	93
	B - Bucks Hill	60	0	128	108
	C - B4114 Camp Hill Road (West)	282	143	0	4
	D - Victoria Road	73	166	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B4114 Camp Hill Road (East)	**B - Bucks Hill**	**C - B4114 Camp Hill Road (West)**	**D - Victoria Road**
From	**A - B4114 Camp Hill Road (East)**	0	3	1	0
	B - Bucks Hill	3	0	2	0
	C - B4114 Camp Hill Road (West)	1	2	0	0
	D - Victoria Road	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.87	62.82	5.3	F	272	407
A-BCD	0.26	5.04	0.7	A	186	278
A-B					68	101
A-C					316	473
D-ABC	0.71	32.06	2.3	D	224	336
C-ABD	0.37	7.63	0.8	A	208	313
C-D					3	4
C-A					183	274

Main Results for each time segment

17:45 - 18:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue	End queue (Veh)	Delay (s)	Unsignalised level of

	(Veh/hr)	(Veh)				(Veh)			service
B-ACD	223	56	463	0.482	219	0.0	0.9	14.592	B
A-BCD	127	32	882	0.144	126	0.0	0.3	4.758	A
A-B	60	15			60				
A-C	280	70			280				
D-ABC	184	46	450	0.408	181	0.0	0.7	13.238	B
C-ABD	153	38	727	0.210	152	0.0	0.4	6.249	A
C-D	2	0.59			2				
C-A	168	42			168				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	266	67	427	0.623	263	0.9	1.6	21.653	C
A-BCD	173	43	919	0.189	173	0.3	0.4	4.827	A
A-B	68	17			68				
A-C	316	79			316				
D-ABC	219	55	421	0.521	218	0.7	1.0	17.582	C
C-ABD	198	50	735	0.270	198	0.4	0.5	6.714	A
C-D	3	0.65			3				
C-A	185	46			185				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	326	81	376	0.866	314	1.6	4.6	50.101	F
A-BCD	255	64	972	0.263	254	0.4	0.7	5.021	A
A-B	75	19			75				
A-C	352	88			352				
D-ABC	269	67	380	0.707	264	1.0	2.2	29.956	D
C-ABD	273	68	747	0.366	272	0.5	0.8	7.590	A
C-D	3	0.70			3				
C-A	196	49			196				

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	326	81	375	0.868	323	4.6	5.3	62.822	F
A-BCD	256	64	973	0.263	256	0.7	0.7	5.040	A
A-B	75	19			75				
A-C	351	88			351				
D-ABC	269	67	379	0.708	268	2.2	2.3	32.063	D
C-ABD	274	68	748	0.366	274	0.8	0.8	7.631	A
C-D	3	0.69			3				
C-A	196	49			196				

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	266	67	426	0.625	280	5.3	1.8	26.720	D
A-BCD	174	43	919	0.189	175	0.7	0.4	4.858	A
A-B	68	17			68				

A-C	316	79			316				
D-ABC	219	55	420	0.522	224	2.3	1.1	18.750	C
C-ABD	199	50	735	0.271	200	0.8	0.5	6.760	A
C-D	3	0.65			3				
C-A	184	46			184				

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	223	56	461	0.483	226	1.8	1.0	15.504	C
A-BCD	128	32	882	0.145	129	0.4	0.3	4.788	A
A-B	60	15			60				
A-C	279	70			279				
D-ABC	184	46	450	0.409	185	1.1	0.7	13.715	B
C-ABD	154	38	727	0.211	154	0.5	0.4	6.300	A
C-D	2	0.59			2				
C-A	167	42			167				

Ref Case + Development, AM (07:00 - 08:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		11.60	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
D7	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 (%)
A - B4114 Camp Hill Road (East)		ONE HOUR	✓	265	100.000

B - Bucks Hill		ONE HOUR	✓	321	100.000
C - B4114 Camp Hill Road (West)		ONE HOUR	✓	434	100.000
D - Victoria Road		ONE HOUR	✓	168	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B4114 Camp Hill Road (East)	**B - Bucks Hill**	**C - B4114 Camp Hill Road (West)**	**D - Victoria Road**
From	**A - B4114 Camp Hill Road (East)**	0	35	197	33
	B - Bucks Hill	77	0	106	138
	C - B4114 Camp Hill Road (West)	346	84	0	4
	D - Victoria Road	87	78	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B4114 Camp Hill Road (East)	**B - Bucks Hill**	**C - B4114 Camp Hill Road (West)**	**D - Victoria Road**
From	**A - B4114 Camp Hill Road (East)**	0	6	3	0
	B - Bucks Hill	3	0	2	0
	C - B4114 Camp Hill Road (West)	2	5	0	0
	D - Victoria Road	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.77	33.70	3.1	D	295	442
A-BCD	0.07	5.14	0.1	A	43	64
A-B					30	45
A-C					170	255
D-ABC	0.39	12.45	0.6	B	154	231
C-ABD	0.19	5.20	0.4	A	128	192
C-D					3	5
C-A					267	400

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue	End queue (Veh)	Delay (s)	Unsignalised level of

	(Veh/hr)	(Veh)				(Veh)			service
B-ACD	242	60	509	0.475	238	0.0	0.9	13.127	B
A-BCD	33	8	740	0.044	32	0.0	0.1	5.088	A
A-B	25	6			25				
A-C	142	35			142				
D-ABC	126	32	520	0.243	125	0.0	0.3	9.083	A
C-ABD	94	24	802	0.117	93	0.0	0.2	5.078	A
C-D	3	0.66			3				
C-A	230	57			230				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	289	72	488	0.592	287	0.9	1.4	17.711	C
A-BCD	41	10	746	0.055	41	0.1	0.1	5.107	A
A-B	30	7			30				
A-C	167	42			167				
D-ABC	151	38	501	0.301	151	0.3	0.4	10.261	B
C-ABD	122	31	827	0.148	122	0.2	0.3	5.115	A
C-D	3	0.77			3				
C-A	265	66			265				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	353	88	458	0.772	347	1.4	3.0	30.846	D
A-BCD	55	14	755	0.073	55	0.1	0.1	5.138	A
A-B	36	9			36				
A-C	201	50			201				
D-ABC	185	46	474	0.390	184	0.4	0.6	12.381	B
C-ABD	168	42	862	0.195	167	0.3	0.4	5.192	A
C-D	4	0.89			4				
C-A	306	77			306				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	353	88	458	0.772	353	3.0	3.1	33.697	D
A-BCD	55	14	755	0.073	55	0.1	0.1	5.144	A
A-B	36	9			36				
A-C	201	50			201				
D-ABC	185	46	474	0.390	185	0.6	0.6	12.454	B
C-ABD	168	42	862	0.195	168	0.4	0.4	5.196	A
C-D	4	0.89			4				
C-A	306	77			306				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	289	72	487	0.592	295	3.1	1.5	19.300	C
A-BCD	41	10	745	0.055	41	0.1	0.1	5.122	A
A-B	30	7			30				

A-C	167	42			167				
D-ABC	151	38	501	0.302	152	0.6	0.4	10.341	B
C-ABD	122	31	827	0.148	123	0.4	0.3	5.113	A
C-D	3	0.76			3				
C-A	265	66			265				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	242	60	509	0.475	244	1.5	0.9	13.726	B
A-BCD	33	8	739	0.044	33	0.1	0.1	5.100	A
A-B	25	6			25				
A-C	142	35			142				
D-ABC	126	32	520	0.243	127	0.4	0.3	9.169	A
C-ABD	95	24	802	0.118	95	0.3	0.2	5.088	A
C-D	3	0.66			3				
C-A	230	57			230				

Ref Case + Development, AM (08:00 - 09:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		70.60	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 segment length (min)	Run automatically
D8	Ref Case + Development	AM (08:00 - 09:00)	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 (%)
A - B4114 Camp Hill Road (East)		ONE HOUR	✓	381	100.000

B - Bucks Hill		ONE HOUR	✓	428	100.000
C - B4114 Camp Hill Road (West)		ONE HOUR	✓	527	100.000
D - Victoria Road		ONE HOUR	✓	286	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B4114 Camp Hill Road (East)	**B - Bucks Hill**	**C - B4114 Camp Hill Road (West)**	**D - Victoria Road**
From	**A - B4114 Camp Hill Road (East)**	0	54	245	82
	B - Bucks Hill	71	0	188	169
	C - B4114 Camp Hill Road (West)	379	138	0	10
	D - Victoria Road	136	143	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B4114 Camp Hill Road (East)	**B - Bucks Hill**	**C - B4114 Camp Hill Road (West)**	**D - Victoria Road**
From	**A - B4114 Camp Hill Road (East)**	0	4	3	0
	B - Bucks Hill	5	0	1	0
	C - B4114 Camp Hill Road (West)	2	8	0	0
	D - Victoria Road	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	1.12	241.36	33.0	F	393	589
A-BCD	0.20	5.83	0.4	A	120	180
A-B					41	62
A-C					188	282
D-ABC	0.75	34.02	2.8	D	262	394
C-ABD	0.36	6.66	0.9	A	231	346
C-D					6	10
C-A					246	369

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue	End queue (Veh)	Delay (s)	Unsignalised level of

	(Veh/hr)	(Veh)				(Veh)			service
B-ACD	322	81	494	0.653	315	0.0	1.8	19.465	C
A-BCD	88	22	751	0.117	87	0.0	0.2	5.415	A
A-B	36	9			36				
A-C	163	41			163				
D-ABC	215	54	484	0.445	212	0.0	0.8	13.093	B
C-ABD	166	41	786	0.211	164	0.0	0.4	5.781	A
C-D	6	1			6				
C-A	225	56			225				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	385	96	464	0.829	376	1.8	3.9	37.519	E
A-BCD	114	29	761	0.150	114	0.2	0.3	5.565	A
A-B	41	10			41				
A-C	187	47			187				
D-ABC	257	64	458	0.562	255	0.8	1.2	17.639	C
C-ABD	219	55	813	0.269	218	0.4	0.5	6.073	A
C-D	7	2			7				
C-A	249	62			249				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	471	118	422	1.117	409	3.9	19.6	125.628	F
A-BCD	157	39	776	0.203	157	0.3	0.4	5.812	A
A-B	47	12			47				
A-C	215	54			215				
D-ABC	315	79	420	0.750	309	1.2	2.7	31.053	D
C-ABD	308	77	851	0.361	306	0.5	0.9	6.643	A
C-D	7	2			7				
C-A	266	66			266				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	471	118	421	1.120	417	19.6	33.0	241.356	F
A-BCD	158	39	776	0.203	158	0.4	0.4	5.833	A
A-B	47	12			47				
A-C	215	54			215				
D-ABC	315	79	418	0.753	314	2.7	2.8	34.024	D
C-ABD	308	77	851	0.362	308	0.9	0.9	6.656	A
C-D	7	2			7				
C-A	265	66			265				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	385	96	463	0.831	449	33.0	16.9	204.833	F
A-BCD	115	29	761	0.151	115	0.4	0.3	5.595	A
A-B	41	10			41				

A-C	187	47			187				
D-ABC	257	64	455	0.565	263	2.8	1.4	19.248	C
C-ABD	219	55	814	0.270	221	0.9	0.6	6.079	A
C-D	7	2			7				
C-A	248	62			248				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	322	81	493	0.654	381	16.9	2.1	46.167	E
A-BCD	88	22	751	0.118	89	0.3	0.2	5.450	A
A-B	36	9			36				
A-C	163	41			163				
D-ABC	215	54	483	0.446	217	1.4	0.8	13.673	B
C-ABD	166	42	787	0.212	167	0.6	0.4	5.810	A
C-D	6	1			6				
C-A	224	56			224				

Ref Case + Development, AM (09:00 - 10:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		20.42	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
D9	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 (%)
A - B4114 Camp Hill Road (East)		ONE HOUR	✓	324	100.000

B - Bucks Hill		ONE HOUR	✓	350	100.000
C - B4114 Camp Hill Road (West)		ONE HOUR	✓	528	100.000
D - Victoria Road		ONE HOUR	✓	192	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B4114 Camp Hill Road (East)	**B - Bucks Hill**	**C - B4114 Camp Hill Road (West)**	**D - Victoria Road**
From	**A - B4114 Camp Hill Road (East)**	0	53	230	41
	B - Bucks Hill	76	0	148	126
	C - B4114 Camp Hill Road (West)	379	147	0	2
	D - Victoria Road	91	98	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B4114 Camp Hill Road (East)	**B - Bucks Hill**	**C - B4114 Camp Hill Road (West)**	**D - Victoria Road**
From	**A - B4114 Camp Hill Road (East)**	0	7	4	0
	B - Bucks Hill	5	0	4	0
	C - B4114 Camp Hill Road (West)	3	6	0	0
	D - Victoria Road	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.90	67.01	6.6	F	321	482
A-BCD	0.10	5.27	0.2	A	59	88
A-B					45	67
A-C					194	291
D-ABC	0.49	16.18	0.9	C	176	264
C-ABD	0.37	6.58	0.9	A	238	358
C-D					1	2
C-A					245	367

Main Results for each time segment

08:45 - 09:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue	End queue (Veh)	Delay (s)	Unsignalised level of

	(Veh/hr)	(Veh)				(Veh)			service
B-ACD	263	66	494	0.534	259	0.0	1.1	15.086	C
A-BCD	43	11	742	0.058	43	0.0	0.1	5.152	A
A-B	38	9			38				
A-C	163	41			163				
D-ABC	145	36	493	0.293	143	0.0	0.4	10.248	B
C-ABD	172	43	801	0.215	171	0.0	0.4	5.707	A
C-D	1	0.30			1				
C-A	224	56			224				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	315	79	467	0.674	311	1.1	1.9	22.665	C
A-BCD	56	14	749	0.075	56	0.1	0.1	5.190	A
A-B	44	11			44				
A-C	191	48			191				
D-ABC	173	43	468	0.369	172	0.4	0.6	12.120	B
C-ABD	226	57	828	0.273	226	0.4	0.5	5.991	A
C-D	1	0.33			1				
C-A	247	62			247				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	385	96	429	0.898	370	1.9	5.6	51.805	F
A-BCD	77	19	761	0.101	76	0.1	0.2	5.250	A
A-B	52	13			52				
A-C	228	57			228				
D-ABC	211	53	434	0.487	210	0.6	0.9	15.963	C
C-ABD	316	79	866	0.365	314	0.5	0.9	6.551	A
C-D	1	0.35			1				
C-A	264	66			264				

09:30 - 09:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	385	96	428	0.899	381	5.6	6.6	67.007	F
A-BCD	77	19	761	0.101	77	0.2	0.2	5.266	A
A-B	52	13			52				
A-C	228	57			228				
D-ABC	211	53	434	0.488	211	0.9	0.9	16.181	C
C-ABD	316	79	866	0.365	316	0.9	0.9	6.576	A
C-D	1	0.35			1				
C-A	264	66			264				

09:45 - 10:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	315	79	466	0.675	332	6.6	2.2	29.723	D
A-BCD	56	14	749	0.075	56	0.2	0.1	5.216	A
A-B	44	11			44				

A-C	191	48			191				
D-ABC	173	43	468	0.369	174	0.9	0.6	12.316	B
C-ABD	227	57	828	0.274	228	0.9	0.6	6.013	A
C-D	1	0.33			1				
C-A	246	62			246				

10:00 - 10:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	263	66	493	0.535	268	2.2	1.2	16.276	C
A-BCD	43	11	741	0.059	44	0.1	0.1	5.173	A
A-B	38	9			38				
A-C	163	41			163				
D-ABC	145	36	492	0.294	145	0.6	0.4	10.404	B
C-ABD	173	43	802	0.216	174	0.6	0.4	5.743	A
C-D	1	0.29			1				
C-A	223	56			223				

Ref Case + Development, PM (16:00 - 17:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		18.96	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
D10	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 (%)
A - B4114 Camp Hill Road (East)		ONE HOUR	✓	443	100.000

B - Bucks Hill		ONE HOUR	✓	318	100.000
C - B4114 Camp Hill Road (West)		ONE HOUR	✓	508	100.000
D - Victoria Road		ONE HOUR	✓	238	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B4114 Camp Hill Road (East)	**B - Bucks Hill**	**C - B4114 Camp Hill Road (West)**	**D - Victoria Road**
From	**A - B4114 Camp Hill Road (East)**	0	67	305	71
	B - Bucks Hill	66	0	143	109
	C - B4114 Camp Hill Road (West)	318	186	0	4
	D - Victoria Road	79	153	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B4114 Camp Hill Road (East)	**B - Bucks Hill**	**C - B4114 Camp Hill Road (West)**	**D - Victoria Road**
From	**A - B4114 Camp Hill Road (East)**	0	5	1	0
	B - Bucks Hill	5	0	2	0
	C - B4114 Camp Hill Road (West)	1	2	0	0
	D - Victoria Road	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.87	59.89	5.4	F	292	438
A-BCD	0.18	5.29	0.4	A	115	173
A-B					52	79
A-C					239	358
D-ABC	0.66	26.84	1.9	D	218	328
C-ABD	0.45	8.01	1.1	A	278	417
C-D					2	4
C-A					186	279

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue	End queue (Veh)	Delay (s)	Unsignalised level of

	(Veh/hr)	(Veh)				(Veh)			service
B-ACD	239	60	481	0.498	236	0.0	1.0	14.463	B
A-BCD	83	21	791	0.105	82	0.0	0.2	5.077	A
A-B	45	11			45				
A-C	206	51			206				
D-ABC	179	45	462	0.388	177	0.0	0.6	12.513	B
C-ABD	204	51	775	0.263	202	0.0	0.5	6.272	A
C-D	2	0.55			2				
C-A	176	44			176				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	286	71	449	0.637	283	1.0	1.7	21.350	C
A-BCD	109	27	809	0.135	109	0.2	0.3	5.147	A
A-B	52	13			52				
A-C	237	59			237				
D-ABC	214	53	434	0.493	213	0.6	0.9	16.140	C
C-ABD	264	66	792	0.334	264	0.5	0.7	6.829	A
C-D	2	0.60			2				
C-A	190	47			190				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	350	88	403	0.868	338	1.7	4.7	48.055	E
A-BCD	154	38	836	0.184	153	0.3	0.4	5.280	A
A-B	60	15			60				
A-C	274	68			274				
D-ABC	262	66	396	0.662	259	0.9	1.8	25.587	D
C-ABD	364	91	816	0.446	362	0.7	1.1	7.948	A
C-D	2	0.61			2				
C-A	193	48			193				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	350	88	402	0.870	347	4.7	5.4	59.888	F
A-BCD	154	39	836	0.185	154	0.4	0.4	5.293	A
A-B	60	15			60				
A-C	273	68			273				
D-ABC	262	66	395	0.663	262	1.8	1.9	26.843	D
C-ABD	365	91	817	0.447	365	1.1	1.1	8.011	A
C-D	2	0.60			2				
C-A	192	48			192				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	286	71	448	0.639	300	5.4	1.9	26.317	D
A-BCD	110	27	808	0.136	110	0.4	0.3	5.172	A
A-B	52	13			52				

A-C	237	59			237				
D-ABC	214	53	433	0.494	217	1.9	1.0	16.926	C
C-ABD	265	66	792	0.335	267	1.1	0.7	6.892	A
C-D	2	0.59			2				
C-A	189	47			189				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	239	60	480	0.499	243	1.9	1.0	15.410	C
A-BCD	83	21	790	0.105	83	0.3	0.2	5.102	A
A-B	45	11			45				
A-C	205	51			205				
D-ABC	179	45	461	0.389	181	1.0	0.6	12.900	B
C-ABD	205	51	775	0.264	206	0.7	0.5	6.337	A
C-D	2	0.55			2				
C-A	176	44			176				

Ref Case + Development, PM (17:00 - 18:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		55.34	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 segment length (min)	Run automatically
D11	Ref Case + Development	PM (17:00 - 18:00)	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 (%)
A - B4114 Camp Hill Road (East)		ONE HOUR	✓	620	100.000

B - Bucks Hill		ONE HOUR	✓	340	100.000
C - B4114 Camp Hill Road (West)		ONE HOUR	✓	538	100.000
D - Victoria Road		ONE HOUR	✓	272	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B4114 Camp Hill Road (East)	**B - Bucks Hill**	**C - B4114 Camp Hill Road (West)**	**D - Victoria Road**
From	**A - B4114 Camp Hill Road (East)**	0	88	447	85
	B - Bucks Hill	67	0	147	126
	C - B4114 Camp Hill Road (West)	330	203	0	5
	D - Victoria Road	91	175	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B4114 Camp Hill Road (East)	**B - Bucks Hill**	**C - B4114 Camp Hill Road (West)**	**D - Victoria Road**
From	**A - B4114 Camp Hill Road (East)**	0	4	0	0
	B - Bucks Hill	5	0	2	0
	C - B4114 Camp Hill Road (West)	1	2	0	0
	D - Victoria Road	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	1.10	228.95	24.7	F	312	468
A-BCD	0.26	5.11	0.7	A	177	266
A-B					64	97
A-C					327	491
D-ABC	0.84	55.48	4.3	F	250	374
C-ABD	0.54	10.00	1.7	A	319	478
C-D					3	4
C-A					172	258

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue	End queue (Veh)	Delay (s)	Unsignalised level of

	(Veh/hr)	(Veh)				(Veh)			service
B-ACD	256	64	441	0.580	251	0.0	1.3	18.416	C
A-BCD	119	30	867	0.138	118	0.0	0.3	4.805	A
A-B	57	14			57				
A-C	290	73			290				
D-ABC	205	51	440	0.466	201	0.0	0.8	14.906	B
C-ABD	230	57	753	0.305	227	0.0	0.6	6.839	A
C-D	3	0.65			3				
C-A	173	43			173				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	306	76	400	0.763	300	1.3	2.8	33.831	D
A-BCD	164	41	902	0.182	164	0.3	0.4	4.880	A
A-B	65	16			65				
A-C	328	82			328				
D-ABC	245	61	407	0.601	242	0.8	1.4	21.570	C
C-ABD	302	75	766	0.394	301	0.6	0.9	7.743	A
C-D	3	0.68			3				
C-A	179	45			179				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	374	94	341	1.096	326	2.8	14.9	122.371	F
A-BCD	246	62	954	0.258	245	0.4	0.7	5.086	A
A-B	72	18			72				
A-C	365	91			365				
D-ABC	299	75	360	0.832	290	1.4	3.8	46.108	E
C-ABD	423	106	787	0.537	420	0.9	1.6	9.830	A
C-D	3	0.63			3				
C-A	167	42			167				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	374	94	339	1.103	335	14.9	24.7	228.952	F
A-BCD	247	62	954	0.259	247	0.7	0.7	5.112	A
A-B	72	18			72				
A-C	364	91			364				
D-ABC	299	75	359	0.835	298	3.8	4.3	55.477	F
C-ABD	425	106	788	0.539	424	1.6	1.7	9.996	A
C-D	3	0.63			3				
C-A	165	41			165				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	306	76	398	0.768	383	24.7	5.4	154.559	F
A-BCD	165	41	902	0.183	166	0.7	0.4	4.911	A
A-B	64	16			64				

A-C	328	82			328				
D-ABC	245	61	405	0.604	255	4.3	1.6	25.590	D
C-ABD	303	76	768	0.395	306	1.7	0.9	7.881	A
C-D	3	0.67			3				
C-A	178	44			178				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	256	64	439	0.582	272	5.4	1.5	23.238	C
A-BCD	120	30	867	0.139	121	0.4	0.3	4.835	A
A-B	57	14			57				
A-C	289	72			289				
D-ABC	205	51	438	0.467	208	1.6	0.9	15.789	C
C-ABD	231	58	753	0.307	232	0.9	0.6	6.941	A
C-D	3	0.65			3				
C-A	171	43			171				

Ref Case + Development, PM (18:00 - 19:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		24.20	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	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	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 (%)
A - B4114 Camp Hill Road (East)		ONE HOUR	✓	636	100.000

B - Bucks Hill		ONE HOUR	✓	308	100.000
C - B4114 Camp Hill Road (West)		ONE HOUR	✓	432	100.000
D - Victoria Road		ONE HOUR	✓	259	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B4114 Camp Hill Road (East)	**B - Bucks Hill**	**C - B4114 Camp Hill Road (West)**	**D - Victoria Road**
From	**A - B4114 Camp Hill Road (East)**	0	102	441	93
	B - Bucks Hill	63	0	130	115
	C - B4114 Camp Hill Road (West)	285	143	0	4
	D - Victoria Road	73	181	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B4114 Camp Hill Road (East)	**B - Bucks Hill**	**C - B4114 Camp Hill Road (West)**	**D - Victoria Road**
From	**A - B4114 Camp Hill Road (East)**	0	3	1	0
	B - Bucks Hill	3	0	2	0
	C - B4114 Camp Hill Road (West)	1	2	0	0
	D - Victoria Road	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.92	85.82	7.5	F	283	424
A-BCD	0.27	5.02	0.7	A	190	285
A-B					74	111
A-C					320	479
D-ABC	0.77	39.91	3.0	E	238	356
C-ABD	0.37	7.69	0.9	A	210	315
C-D					3	4
C-A					184	276

Main Results for each time segment

17:45 - 18:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue	End queue (Veh)	Delay (s)	Unsignalised level of

	(Veh/hr)	(Veh)				(Veh)			service
B-ACD	232	58	457	0.507	228	0.0	1.0	15.450	C
A-BCD	130	32	890	0.146	128	0.0	0.3	4.727	A
A-B	66	16			66				
A-C	284	71			284				
D-ABC	195	49	445	0.438	192	0.0	0.8	14.053	B
C-ABD	154	38	726	0.212	152	0.0	0.4	6.270	A
C-D	2	0.59			2				
C-A	169	42			169				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	277	69	421	0.658	274	1.0	1.8	23.953	C
A-BCD	177	44	928	0.191	177	0.3	0.4	4.795	A
A-B	74	19			74				
A-C	320	80			320				
D-ABC	233	58	415	0.561	231	0.8	1.2	19.339	C
C-ABD	200	50	733	0.272	199	0.4	0.5	6.746	A
C-D	3	0.65			3				
C-A	186	47			186				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	339	85	369	0.920	322	1.8	6.1	62.031	F
A-BCD	263	66	984	0.267	262	0.4	0.7	4.993	A
A-B	82	21			82				
A-C	355	89			355				
D-ABC	285	71	373	0.764	279	1.2	2.8	35.947	E
C-ABD	276	69	746	0.370	274	0.5	0.8	7.648	A
C-D	3	0.69			3				
C-A	197	49			197				

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	339	85	367	0.923	333	6.1	7.5	85.823	F
A-BCD	263	66	984	0.268	263	0.7	0.7	5.015	A
A-B	82	21			82				
A-C	355	89			355				
D-ABC	285	71	373	0.765	284	2.8	3.0	39.906	E
C-ABD	276	69	746	0.370	276	0.8	0.9	7.693	A
C-D	3	0.69			3				
C-A	197	49			197				

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	277	69	419	0.661	298	7.5	2.1	34.000	D
A-BCD	178	44	928	0.192	179	0.7	0.4	4.824	A
A-B	74	18			74				

A-C	320	80			320				
D-ABC	233	58	414	0.562	239	3.0	1.3	21.286	C
C-ABD	200	50	734	0.273	202	0.9	0.5	6.793	A
C-D	3	0.65			3				
C-A	185	46			185				

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	232	58	456	0.509	236	2.1	1.1	16.668	C
A-BCD	130	33	890	0.146	131	0.4	0.3	4.757	A
A-B	65	16			65				
A-C	283	71			283				
D-ABC	195	49	444	0.439	197	1.3	0.8	14.687	B
C-ABD	154	39	726	0.213	155	0.5	0.4	6.321	A
C-D	2	0.59			2				
C-A	168	42			168				

Appendix 17

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: 17059 - B4114 Camp Hill Rd-B4111 Mancetter Rd.j9
Path: P:\17 jobs\059 MIRA - Southern Manufacturing Sector\Technical Assessments\Modelling - July 2022
Report generation date: 14/07/2022 15:25:02

»Ref Case, AM (07:00 - 08:00)
»Ref Case, AM (08:00 - 09:00)
»Ref Case, AM (09:00 - 10:00)
»Ref Case, PM (16:00 - 17:00)
»Ref Case, PM (17:00 - 18:00)
»Ref Case, PM (18:00 - 19:00)
»Ref Case + Development, AM (07:00 - 08:00)
»Ref Case + Development, AM (08:00 - 09:00)
»Ref Case + Development, AM (09:00 - 10:00)
»Ref Case + Development, PM (16:00 - 17:00)
»Ref Case + Development, PM (17:00 - 18:00)
»Ref Case + Development, PM (18:00 - 19:00)

Summary of junction performance

	AM (07:00 - 08:00)					AM (08:00 - 09:00)					AM (09:00 - 10:00)					PM (16:00 - 17:00)					PM (17:00 - 18:00)					PM (18:00 - 19:00)				
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
	Ref Case																													
Stream B-AC	2.6	25.56	0.73	D	8.96	10.1	88.34	0.95	F	26.87	5.8	52.13	0.88	F	16.32	4.3	38.73	0.83	E	12.12	51.0	316.83	1.19	F	86.43	11.3	94.96	0.97	F	25.22
Stream C-AB	1.0	12.85	0.51	B		3.3	25.19	0.77	D		1.7	17.04	0.63	C		1.1	12.29	0.53	B		2.1	16.55	0.67	C		1.5	14.04	0.61	B	
	Ref Case + Development																													
Stream B-AC	3.3	31.53	0.78	D	10.60	16.0	128.99	1.01	F	36.75	8.2	71.46	0.92	F	21.28	6.3	54.32	0.89	F	16.43	64.4	407.33	1.25	F	111.91	27.5	197.74	1.09	F	51.30
Stream C-AB	1.1	13.26	0.52	B		3.6	26.52	0.78	D		1.7	17.47	0.63	C		1.1	12.40	0.54	B		2.1	16.63	0.67	C		1.6	14.33	0.61	B	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	24/02/2022
Version	

Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mtp\MTPGeneral
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	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D2	Ref Case	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D3	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D4	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D5	Ref Case	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D6	Ref Case	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	15	✓
D7	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D8	Ref Case + Development	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D9	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D10	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D11	Ref Case + Development	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D12	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Ref Case, AM (07:00 - 08:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		8.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B4114 Camp Hill Road		Major
B	B4111 Mancetter Road		Minor
C	B4114 Tuttle Hill		Major

Major Arm Geometry

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)
C - B4114 Tuttle Hill	7.00		✓	3.00	250.0	✓	7.00

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 - B4111 Mancetter Road	One lane	4.20	119	88

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	629	0.109	0.277	0.174	0.395
B-C	761	0.112	0.282	-	-
C-B	781	0.290	0.290	-	-

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 segment length (min)	Run automatically
D1	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 (%)
A - B4114 Camp Hill Road		ONE HOUR	✓	579	100.000
B - B4111 Mancetter Road		ONE HOUR	✓	349	100.000
C - B4114 Tuttle Hill		ONE HOUR	✓	460	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4114 Camp Hill Road	B - B4111 Mancetter Road	C - B4114 Tuttle Hill
From	A - B4114 Camp Hill Road	0	82	497
	B - B4111 Mancetter Road	35	0	314
	C - B4114 Tuttle Hill	195	265	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B4114 Camp Hill Road	B - B4111 Mancetter Road	C - B4114 Tuttle Hill
From	A - B4114 Camp Hill Road	0	1	2
	B - B4111 Mancetter Road	1	0	4
	C - B4114 Tuttle Hill	3	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.73	25.56	2.6	D	320	480
C-AB	0.51	12.85	1.0	B	244	365
C-A					178	268
A-B					75	113
A-C					456	684

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	263	66	590	0.446	260	0.0	0.8	10.811	B
C-AB	200	50	628	0.318	198	0.0	0.5	8.336	A
C-A	147	37			147				
A-B	62	15			62				

A-C	374	94			374				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	314	78	563	0.558	312	0.8	1.2	14.263	B
C-AB	238	60	604	0.395	238	0.5	0.6	9.807	A
C-A	175	44			175				
A-B	74	18			74				
A-C	447	112			447				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	384	96	524	0.734	379	1.2	2.5	24.052	C
C-AB	293	73	573	0.511	291	0.6	1.0	12.724	B
C-A	213	53			213				
A-B	90	23			90				
A-C	547	137			547				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	384	96	524	0.734	384	2.5	2.6	25.557	D
C-AB	293	73	573	0.511	293	1.0	1.0	12.855	B
C-A	213	53			213				
A-B	90	23			90				
A-C	547	137			547				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	314	78	562	0.558	319	2.6	1.3	15.096	C
C-AB	238	60	604	0.395	240	1.0	0.7	9.927	A
C-A	175	44			175				
A-B	74	18			74				
A-C	447	112			447				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	263	66	589	0.446	265	1.3	0.8	11.154	B
C-AB	200	50	628	0.318	200	0.7	0.5	8.439	A
C-A	147	37			147				
A-B	62	15			62				
A-C	374	94			374				

Ref Case, AM (08:00 - 09:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		26.87	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
D2	Ref Case	AM (08:00 - 09:00)	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 (%)
A - B4114 Camp Hill Road		ONE HOUR	✓	625	100.000
B - B4111 Mancetter Road		ONE HOUR	✓	396	100.000
C - B4114 Tuttle Hill		ONE HOUR	✓	687	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4114 Camp Hill Road	B - B4111 Mancetter Road	C - B4114 Tuttle Hill
From	A - B4114 Camp Hill Road	0	84	541
	B - B4111 Mancetter Road	47	0	349
	C - B4114 Tuttle Hill	304	383	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B4114 Camp Hill Road	B - B4111 Mancetter Road	C - B4114 Tuttle Hill
From	A - B4114 Camp Hill Road	0	2	2
	B - B4111 Mancetter Road	2	0	6
	C - B4114 Tuttle Hill	2	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.95	88.34	10.1	F	363	545
C-AB	0.77	25.19	3.3	D	368	552
C-A					263	394
A-B					77	116
A-C					496	745

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	298	75	550	0.542	294	0.0	1.1	13.793	B
C-AB	289	72	613	0.471	286	0.0	0.9	10.875	B
C-A	228	57			228				
A-B	63	16			63				
A-C	407	102			407				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	356	89	515	0.692	352	1.1	2.1	21.648	C
C-AB	349	87	594	0.587	347	0.9	1.4	14.446	B
C-A	269	67			269				
A-B	76	19			76				
A-C	486	122			486				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	436	109	459	0.951	413	2.1	7.8	60.528	F
C-AB	465	116	608	0.765	458	1.4	3.1	23.308	C
C-A	291	73			291				
A-B	92	23			92				
A-C	596	149			596				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	436	109	457	0.954	427	7.8	10.1	88.338	F
C-AB	465	116	607	0.766	464	3.1	3.3	25.194	D
C-A	291	73			291				
A-B	92	23			92				

A-C	596	149			596				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	356	89	513	0.694	387	10.1	2.5	33.746	D
C-AB	349	87	593	0.588	356	3.3	1.5	15.597	C
C-A	269	67			269				
A-B	76	19			76				
A-C	486	122			486				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	298	75	550	0.543	303	2.5	1.2	14.884	B
C-AB	289	72	613	0.471	291	1.5	0.9	11.266	B
C-A	228	57			228				
A-B	63	16			63				
A-C	407	102			407				

Ref Case, AM (09:00 - 10:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		16.32	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
D3	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 (%)
A - B4114 Camp Hill Road		ONE HOUR	✓	601	100.000

B - B4111 Mancetter Road		ONE HOUR	✓	390	100.000
C - B4114 Tuttle Hill		ONE HOUR	✓	604	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4114 Camp Hill Road	**B - B4111 Mancetter Road**	**C - B4114 Tuttle Hill**
From	**A - B4114 Camp Hill Road**	0	64	537
	B - B4111 Mancetter Road	41	0	349
	C - B4114 Tuttle Hill	293	311	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B4114 Camp Hill Road	**B - B4111 Mancetter Road**	**C - B4114 Tuttle Hill**
From	**A - B4114 Camp Hill Road**	0	1	2
	B - B4111 Mancetter Road	1	0	5
	C - B4114 Tuttle Hill	3	7	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.88	52.13	5.8	F	358	537
C-AB	0.63	17.04	1.7	C	289	433
C-A					265	398
A-B					59	88
A-C					493	739

Main Results for each time segment

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	294	73	569	0.516	289	0.0	1.0	12.687	B
C-AB	234	59	606	0.387	232	0.0	0.6	9.563	A
C-A	220	55			220				
A-B	48	12			48				
A-C	404	101			404				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	351	88	538	0.652	348	1.0	1.8	18.620	C
C-AB	281	70	583	0.481	279	0.6	0.9	11.798	B
C-A	262	66			262				
A-B	58	14			58				
A-C	483	121			483				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	429	107	491	0.875	416	1.8	5.1	42.247	E
C-AB	352	88	563	0.625	349	0.9	1.6	16.632	C
C-A	313	78			313				
A-B	70	18			70				
A-C	591	148			591				

09:30 - 09:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	429	107	490	0.876	427	5.1	5.8	52.130	F
C-AB	352	88	563	0.625	352	1.6	1.7	17.043	C
C-A	313	78			313				
A-B	70	18			70				
A-C	591	148			591				

09:45 - 10:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	351	88	537	0.652	366	5.8	2.0	22.564	C
C-AB	281	70	583	0.481	283	1.7	1.0	12.114	B
C-A	262	66			262				
A-B	58	14			58				
A-C	483	121			483				

10:00 - 10:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	294	73	569	0.516	297	2.0	1.1	13.415	B
C-AB	234	59	606	0.387	236	1.0	0.6	9.755	A
C-A	220	55			220				
A-B	48	12			48				
A-C	404	101			404				

Ref Case, PM (16:00 - 17:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		12.12	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
D4	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 (%)
A - B4114 Camp Hill Road		ONE HOUR	✓	462	100.000
B - B4111 Mancetter Road		ONE HOUR	✓	387	100.000
C - B4114 Tuttle Hill		ONE HOUR	✓	699	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4114 Camp Hill Road	B - B4111 Mancetter Road	C - B4114 Tuttle Hill
From	A - B4114 Camp Hill Road	0	81	381
	B - B4111 Mancetter Road	69	0	318
	C - B4114 Tuttle Hill	399	300	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B4114 Camp Hill Road	B - B4111 Mancetter Road	C - B4114 Tuttle Hill
From	A - B4114 Camp Hill Road	0	0	1
	B - B4111 Mancetter Road	0	0	2
	C - B4114 Tuttle Hill	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.83	38.73	4.3	E	355	533
C-AB	0.53	12.29	1.1	B	276	415
C-A					365	547
A-B					74	111
A-C					350	524

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	291	73	590	0.494	288	0.0	1.0	11.758	B
C-AB	226	56	667	0.339	224	0.0	0.5	8.097	A
C-A	300	75			300				
A-B	61	15			61				
A-C	287	72			287				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	348	87	560	0.621	345	1.0	1.6	16.573	C
C-AB	270	68	648	0.417	269	0.5	0.7	9.485	A
C-A	358	90			358				
A-B	73	18			73				
A-C	343	86			343				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	426	107	515	0.828	417	1.6	4.0	33.705	D
C-AB	333	83	626	0.532	332	0.7	1.1	12.159	B
C-A	436	109			436				
A-B	89	22			89				
A-C	419	105			419				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	426	107	515	0.828	425	4.0	4.3	38.730	E
C-AB	333	83	626	0.532	333	1.1	1.1	12.288	B
C-A	436	109			436				
A-B	89	22			89				
A-C	419	105			419				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	348	87	560	0.622	358	4.3	1.7	18.701	C
C-AB	270	68	648	0.417	272	1.1	0.7	9.606	A
C-A	358	90			358				
A-B	73	18			73				
A-C	343	86			343				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	291	73	590	0.494	294	1.7	1.0	12.301	B
C-AB	226	56	667	0.339	227	0.7	0.5	8.199	A
C-A	300	75			300				
A-B	61	15			61				
A-C	287	72			287				

Ref Case, PM (17:00 - 18:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		86.43	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 segment length (min)	Run automatically
D5	Ref Case	PM (17:00 - 18:00)	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 (%)
A - B4114 Camp Hill Road		ONE HOUR	✓	465	100.000
B - B4111 Mancetter Road		ONE HOUR	✓	500	100.000
C - B4114 Tuttle Hill		ONE HOUR	✓	943	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4114 Camp Hill Road	B - B4111 Mancetter Road	C - B4114 Tuttle Hill
From	A - B4114 Camp Hill Road	0	78	387
	B - B4111 Mancetter Road	96	0	404
	C - B4114 Tuttle Hill	566	377	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B4114 Camp Hill Road	B - B4111 Mancetter Road	C - B4114 Tuttle Hill
From	A - B4114 Camp Hill Road	0	0	1
	B - B4111 Mancetter Road	0	0	1
	C - B4114 Tuttle Hill	0	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.19	316.83	51.0	F	459	688
C-AB	0.67	16.55	2.1	C	356	534
C-A					509	764
A-B					72	107
A-C					355	533

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	376	94	568	0.663	369	0.0	1.9	17.514	C
C-AB	284	71	667	0.426	281	0.0	0.7	9.269	A
C-A	426	106			426				
A-B	59	15			59				
A-C	291	73			291				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	449	112	528	0.851	439	1.9	4.5	36.535	E

C-AB	342	86	652	0.524	341	0.7	1.1	11.496	B
C-A	506	126			506				
A-B	70	18			70				
A-C	348	87			348				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	551	138	463	1.188	455	4.5	28.5	151.018	F
C-AB	442	110	660	0.670	438	1.1	2.0	16.043	C
C-A	596	149			596				
A-B	86	21			86				
A-C	426	107			426				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	551	138	462	1.191	461	28.5	51.0	316.830	F
C-AB	442	110	659	0.670	442	2.0	2.1	16.546	C
C-A	596	149			596				
A-B	86	21			86				
A-C	426	107			426				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	449	112	527	0.853	517	51.0	34.2	296.851	F
C-AB	342	86	652	0.525	346	2.1	1.1	11.887	B
C-A	506	126			506				
A-B	70	18			70				
A-C	348	87			348				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	376	94	567	0.664	504	34.2	2.3	100.602	F
C-AB	284	71	667	0.426	286	1.1	0.8	9.485	A
C-A	426	106			426				
A-B	59	15			59				
A-C	291	73			291				

Ref Case, PM (18:00 - 19:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		25.22	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
D6	Ref Case	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	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 (%)
A - B4114 Camp Hill Road		ONE HOUR	✓	429	100.000
B - B4111 Mancetter Road		ONE HOUR	✓	407	100.000
C - B4114 Tuttle Hill		ONE HOUR	✓	894	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4114 Camp Hill Road	B - B4111 Mancetter Road	C - B4114 Tuttle Hill
From	A - B4114 Camp Hill Road	0	59	370
	B - B4111 Mancetter Road	94	0	313
	C - B4114 Tuttle Hill	547	347	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B4114 Camp Hill Road	B - B4111 Mancetter Road	C - B4114 Tuttle Hill
From	A - B4114 Camp Hill Road	0	0	1
	B - B4111 Mancetter Road	0	0	1
	C - B4114 Tuttle Hill	0	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

B-AC	0.97	94.96	11.3	F	373	560
C-AB	0.61	14.04	1.5	B	323	484
C-A					497	746
A-B					54	81
A-C					340	509

Main Results for each time segment

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	306	77	564	0.544	302	0.0	1.2	13.521	B
C-AB	261	65	674	0.388	259	0.0	0.6	8.621	A
C-A	412	103			412				
A-B	44	11			44				
A-C	279	70			279				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	366	91	525	0.697	362	1.2	2.1	21.535	C
C-AB	313	78	659	0.476	312	0.6	0.9	10.331	B
C-A	490	123			490				
A-B	53	13			53				
A-C	333	83			333				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	448	112	465	0.965	422	2.1	8.6	63.389	F
C-AB	394	98	650	0.606	391	0.9	1.5	13.789	B
C-A	591	148			591				
A-B	65	16			65				
A-C	407	102			407				

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	448	112	464	0.966	437	8.6	11.3	94.955	F
C-AB	394	98	650	0.606	394	1.5	1.5	14.038	B
C-A	591	148			591				
A-B	65	16			65				
A-C	407	102			407				

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-AC	366	91	524	0.698	401	11.3	2.5	35.493	E
C-AB	313	78	658	0.476	316	1.5	0.9	10.578	B
C-A	490	123			490				
A-B	53	13			53				
A-C	333	83			333				

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	306	77	563	0.544	312	2.5	1.2	14.608	B
C-AB	261	65	674	0.388	263	0.9	0.6	8.774	A
C-A	412	103			412				
A-B	44	11			44				
A-C	279	70			279				

Ref Case + Development, AM (07:00 - 08:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		10.60	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
D7	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 (%)
A - B4114 Camp Hill Road		ONE HOUR	✓	600	100.000
B - B4111 Mancetter Road		ONE HOUR	✓	363	100.000
C - B4114 Tuttle Hill		ONE HOUR	✓	463	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4114 Camp Hill Road	B - B4111 Mancetter Road	C - B4114 Tuttle Hill
From	A - B4114 Camp Hill Road	0	101	499
	B - B4111 Mancetter Road	44	0	319
	C - B4114 Tuttle Hill	196	267	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B4114 Camp Hill Road	B - B4111 Mancetter Road	C - B4114 Tuttle Hill
From	A - B4114 Camp Hill Road	0	1	2
	B - B4111 Mancetter Road	1	0	4
	C - B4114 Tuttle Hill	3	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.78	31.53	3.3	D	333	500
C-AB	0.52	13.26	1.1	B	246	368
C-A					179	269
A-B					93	139
A-C					458	687

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	273	68	581	0.470	270	0.0	0.9	11.442	B
C-AB	201	50	623	0.323	199	0.0	0.5	8.452	A
C-A	148	37			148				
A-B	76	19			76				
A-C	376	94			376				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	326	82	553	0.590	324	0.9	1.4	15.613	C

C-AB	240	60	599	0.401	239	0.5	0.7	10.000	A
C-A	176	44			176				
A-B	91	23			91				
A-C	449	112			449				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	400	100	511	0.782	393	1.4	3.1	28.738	D
C-AB	295	74	567	0.521	294	0.7	1.1	13.113	B
C-A	214	54			214				
A-B	111	28			111				
A-C	549	137			549				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	400	100	511	0.782	399	3.1	3.3	31.527	D
C-AB	295	74	567	0.521	295	1.1	1.1	13.261	B
C-A	214	54			214				
A-B	111	28			111				
A-C	549	137			549				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	326	82	552	0.591	334	3.3	1.5	16.965	C
C-AB	240	60	599	0.401	242	1.1	0.7	10.128	B
C-A	176	44			176				
A-B	91	23			91				
A-C	449	112			449				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	273	68	581	0.470	276	1.5	0.9	11.887	B
C-AB	201	50	623	0.323	202	0.7	0.5	8.559	A
C-A	148	37			148				
A-B	76	19			76				
A-C	376	94			376				

Ref Case + Development, AM (08:00 - 09:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		36.75	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	Ref Case + Development	AM (08:00 - 09:00)	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 (%)
A - B4114 Camp Hill Road		ONE HOUR	✓	657	100.000
B - B4111 Mancetter Road		ONE HOUR	✓	408	100.000
C - B4114 Tuttle Hill		ONE HOUR	✓	687	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4114 Camp Hill Road	B - B4111 Mancetter Road	C - B4114 Tuttle Hill
From	A - B4114 Camp Hill Road	0	100	557
	B - B4111 Mancetter Road	55	0	353
	C - B4114 Tuttle Hill	304	383	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B4114 Camp Hill Road	B - B4111 Mancetter Road	C - B4114 Tuttle Hill
From	A - B4114 Camp Hill Road	0	1	1
	B - B4111 Mancetter Road	2	0	5
	C - B4114 Tuttle Hill	2	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue	Max LOS	Average	Total Junction

			(Veh)		Demand (Veh/hr)	Arrivals (Veh)
B-AC	1.01	128.99	16.0	F	374	562
C-AB	0.78	26.52	3.6	D	370	554
C-A					261	391
A-B					92	138
A-C					511	767

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	307	77	545	0.564	302	0.0	1.2	14.575	B
C-AB	289	72	608	0.476	286	0.0	0.9	11.051	B
C-A	228	57			228				
A-B	75	19			75				
A-C	419	105			419				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	367	92	506	0.724	362	1.2	2.4	24.195	C
C-AB	349	87	588	0.594	347	0.9	1.4	14.815	B
C-A	268	67			268				
A-B	90	22			90				
A-C	501	125			501				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	449	112	446	1.008	415	2.4	10.9	77.847	F
C-AB	470	118	606	0.776	462	1.4	3.3	24.307	C
C-A	286	72			286				
A-B	110	28			110				
A-C	613	153			613				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	449	112	444	1.012	429	10.9	16.0	128.994	F
C-AB	470	118	605	0.777	469	3.3	3.6	26.515	D
C-A	286	72			286				
A-B	110	28			110				
A-C	613	153			613				

08:45 - 09:00

Stream	Total	Junction	Capacity	RFC	Throughput	Start	End queue	Delay (s)	Unsignalised

	Demand (Veh/hr)	Arrivals (Veh)	(Veh/hr)		(Veh/hr)	queue (Veh)	(Veh)		level of service
B-AC	367	92	505	0.727	419	16.0	3.0	55.853	F
C-AB	349	87	587	0.595	357	3.6	1.5	16.126	C
C-A	268	67			268				
A-B	90	22			90				
A-C	501	125			501				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	307	77	544	0.565	314	3.0	1.3	16.093	C
C-AB	289	72	608	0.476	292	1.5	0.9	11.465	B
C-A	228	57			228				
A-B	75	19			75				
A-C	419	105			419				

Ref Case + Development, AM (09:00 - 10:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		21.28	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
D9	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 (%)
A - B4114 Camp Hill Road		ONE HOUR	✓	619	100.000
B - B4111 Mancetter Road		ONE HOUR	✓	401	100.000

C - B4114 Tuttle Hill		ONE HOUR	✓	604	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4114 Camp Hill Road	**B - B4111 Mancetter Road**	**C - B4114 Tuttle Hill**
From	**A - B4114 Camp Hill Road**	0	77	542
	B - B4111 Mancetter Road	49	0	352
	C - B4114 Tuttle Hill	293	311	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B4114 Camp Hill Road	**B - B4111 Mancetter Road**	**C - B4114 Tuttle Hill**
From	**A - B4114 Camp Hill Road**	0	1	2
	B - B4111 Mancetter Road	1	0	5
	C - B4114 Tuttle Hill	3	7	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.92	71.46	8.2	F	368	552
C-AB	0.63	17.47	1.7	C	289	434
C-A					265	398
A-B					71	106
A-C					497	746

Main Results for each time segment

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	302	75	561	0.538	297	0.0	1.1	13.429	B
C-AB	234	59	602	0.389	232	0.0	0.6	9.657	A
C-A	220	55			220				
A-B	58	14			58				
A-C	408	102			408				

09:00 - 09:15

Stream	Total	Junction	Capacity	RFC	Throughput	Start	End queue	Delay (s)	Unsignalised

	Demand (Veh/hr)	Arrivals (Veh)	(Veh/hr)		(Veh/hr)	queue (Veh)	(Veh)		level of service
B-AC	360	90	528	0.683	357	1.1	2.0	20.589	C
C-AB	281	70	579	0.485	280	0.6	0.9	11.969	B
C-A	262	66			262				
A-B	69	17			69				
A-C	487	122			487				

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	442	110	478	0.923	423	2.0	6.7	52.528	F
C-AB	352	88	558	0.631	349	0.9	1.7	17.019	C
C-A	313	78			313				
A-B	85	21			85				
A-C	597	149			597				

09:30 - 09:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	442	110	478	0.924	436	6.7	8.2	71.460	F
C-AB	352	88	558	0.631	352	1.7	1.7	17.469	C
C-A	313	78			313				
A-B	85	21			85				
A-C	597	149			597				

09:45 - 10:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	360	90	528	0.683	384	8.2	2.3	28.332	D
C-AB	281	70	579	0.485	284	1.7	1.0	12.305	B
C-A	262	66			262				
A-B	69	17			69				
A-C	487	122			487				

10:00 - 10:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	302	75	561	0.538	306	2.3	1.2	14.389	B
C-AB	234	59	602	0.389	236	1.0	0.6	9.854	A
C-A	220	55			220				
A-B	58	14			58				
A-C	408	102			408				

Ref Case + Development, PM (16:00 - 17:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		16.43	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
D10	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 (%)
A - B4114 Camp Hill Road		ONE HOUR	✓	467	100.000
B - B4111 Mancetter Road		ONE HOUR	✓	405	100.000
C - B4114 Tuttle Hill		ONE HOUR	✓	701	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4114 Camp Hill Road	B - B4111 Mancetter Road	C - B4114 Tuttle Hill
From	A - B4114 Camp Hill Road	0	86	381
	B - B4111 Mancetter Road	81	0	324
	C - B4114 Tuttle Hill	400	301	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B4114 Camp Hill Road	B - B4111 Mancetter Road	C - B4114 Tuttle Hill
From	A - B4114 Camp Hill Road	0	0	1
	B - B4111 Mancetter Road	0	0	2
	C - B4114 Tuttle Hill	1	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.89	54.32	6.3	F	372	557
C-AB	0.54	12.40	1.1	B	277	416
C-A					366	549
A-B					79	118
A-C					350	524

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	305	76	582	0.524	301	0.0	1.1	12.611	B
C-AB	227	57	666	0.341	225	0.0	0.5	8.128	A
C-A	301	75			301				
A-B	65	16			65				
A-C	287	72			287				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	364	91	551	0.661	361	1.1	1.8	18.663	C
C-AB	271	68	647	0.419	270	0.5	0.7	9.538	A
C-A	359	90			359				
A-B	77	19			77				
A-C	343	86			343				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	446	111	503	0.886	431	1.8	5.4	43.270	E
C-AB	335	84	625	0.536	333	0.7	1.1	12.261	B
C-A	437	109			437				
A-B	95	24			95				
A-C	419	105			419				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	446	111	503	0.886	443	5.4	6.3	54.322	F
C-AB	335	84	625	0.536	335	1.1	1.1	12.397	B
C-A	437	109			437				
A-B	95	24			95				
A-C	419	105			419				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	364	91	550	0.662	381	6.3	2.1	23.035	C
C-AB	271	68	647	0.419	273	1.1	0.7	9.663	A
C-A	359	90			359				
A-B	77	19			77				
A-C	343	86			343				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	305	76	582	0.524	309	2.1	1.1	13.371	B
C-AB	227	57	666	0.341	228	0.7	0.5	8.235	A
C-A	301	75			301				
A-B	65	16			65				
A-C	287	72			287				

Ref Case + Development, PM (17:00 - 18:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		111.91	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 segment length (min)	Run automatically
D11	Ref Case + Development	PM (17:00 - 18:00)	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 (%)
A - B4114 Camp Hill Road		ONE HOUR	✓	469	100.000
B - B4111 Mancetter Road		ONE HOUR	✓	514	100.000

C - B4114 Tuttle Hill		ONE HOUR	✓	946	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4114 Camp Hill Road	B - B4111 Mancetter Road	C - B4114 Tuttle Hill
From	A - B4114 Camp Hill Road	0	82	387
	B - B4111 Mancetter Road	107	0	407
	C - B4114 Tuttle Hill	569	377	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B4114 Camp Hill Road	B - B4111 Mancetter Road	C - B4114 Tuttle Hill
From	A - B4114 Camp Hill Road	0	0	1
	B - B4111 Mancetter Road	0	0	1
	C - B4114 Tuttle Hill	0	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.25	407.33	64.4	F	472	707
C-AB	0.67	16.63	2.1	C	356	534
C-A					512	768
A-B					75	113
A-C					355	533

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	387	97	560	0.690	379	0.0	2.1	19.030	C
C-AB	284	71	666	0.427	281	0.0	0.7	9.292	A
C-A	428	107			428				
A-B	62	15			62				
A-C	291	73			291				

17:00 - 17:15

Stream	Total	Junction	Capacity	RFC	Throughput	Start	End queue	Delay (s)	Unsignalised

	Demand (Veh/hr)	Arrivals (Veh)	(Veh/hr)		(Veh/hr)	queue (Veh)	(Veh)		level of service
B-AC	462	116	519	0.890	448	2.1	5.6	43.550	E
C-AB	342	86	652	0.525	341	0.7	1.1	11.532	B
C-A	508	127			508				
A-B	74	18			74				
A-C	348	87			348				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	566	141	452	1.251	447	5.6	35.4	185.433	F
C-AB	442	111	659	0.671	439	1.1	2.0	16.115	C
C-A	599	150			599				
A-B	90	23			90				
A-C	426	107			426				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	566	141	451	1.255	450	35.4	64.4	398.209	F
C-AB	442	111	659	0.671	442	2.0	2.1	16.626	C
C-A	599	150			599				
A-B	90	23			90				
A-C	426	107			426				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	462	116	518	0.892	510	64.4	52.4	407.326	F
C-AB	342	86	651	0.525	346	2.1	1.1	11.931	B
C-A	508	127			508				
A-B	74	18			74				
A-C	348	87			348				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	387	97	559	0.692	549	52.4	11.9	218.200	F
C-AB	284	71	666	0.427	286	1.1	0.8	9.505	A
C-A	428	107			428				
A-B	62	15			62				
A-C	291	73			291				

Ref Case + Development, PM (18:00 - 19:00)

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		51.30	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 segment length (min)	Run automatically
D12	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	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 (%)
A - B4114 Camp Hill Road		ONE HOUR	✓	440	100.000
B - B4111 Mancetter Road		ONE HOUR	✓	434	100.000
C - B4114 Tuttle Hill		ONE HOUR	✓	898	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B4114 Camp Hill Road	B - B4111 Mancetter Road	C - B4114 Tuttle Hill
From	A - B4114 Camp Hill Road	0	70	370
	B - B4111 Mancetter Road	118	0	316
	C - B4114 Tuttle Hill	549	349	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B4114 Camp Hill Road	B - B4111 Mancetter Road	C - B4114 Tuttle Hill
From	A - B4114 Camp Hill Road	0	0	1
	B - B4111 Mancetter Road	0	0	1
	C - B4114 Tuttle Hill	0	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.09	197.74	27.5	F	398	597
C-AB	0.61	14.33	1.6	B	325	488
C-A					499	748
A-B					64	96
A-C					340	509

Main Results for each time segment

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	327	82	547	0.598	321	0.0	1.4	15.592	C
C-AB	263	66	672	0.391	260	0.0	0.6	8.700	A
C-A	413	103			413				
A-B	53	13			53				
A-C	279	70			279				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	390	98	505	0.772	384	1.4	3.0	28.207	D
C-AB	315	79	656	0.481	314	0.6	0.9	10.497	B
C-A	492	123			492				
A-B	63	16			63				
A-C	333	83			333				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	478	119	441	1.084	423	3.0	16.7	105.151	F
C-AB	397	99	648	0.612	394	0.9	1.6	14.054	B
C-A	592	148			592				
A-B	77	19			77				
A-C	407	102			407				

18:30 - 18:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	478	119	440	1.086	435	16.7	27.5	197.736	F
C-AB	397	99	648	0.613	397	1.6	1.6	14.326	B
C-A	592	148			592				
A-B	77	19			77				
A-C	407	102			407				

18:45 - 19:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	390	98	504	0.773	481	27.5	4.8	126.680	F
C-AB	315	79	656	0.481	318	1.6	1.0	10.727	B
C-A	492	123			492				
A-B	63	16			63				
A-C	333	83			333				

19:00 - 19:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	327	82	546	0.599	340	4.8	1.6	18.492	C
C-AB	263	66	672	0.391	264	1.0	0.7	8.858	A
C-A	413	103			413				
A-B	53	13			53				
A-C	279	70			279				

Appendix 18

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: 17059 - A444-Coton Rd.j9
Path: P:\17 jobs\059 MIRA - Southern Manufacturing Sector\Technical Assessments\Modelling - July 2022
Report generation date: 14/07/2022 15:19:02

»Ref Case, AM (07:00 - 08:00)
»Ref Case, AM (08:00 - 09:00)
»Ref Case, AM (09:00 - 10:00)
»Ref Case, PM (16:00 - 17:00)
»Ref Case, PM (17:00 - 18:00)
»Ref Case, PM (18:00 - 19:00)
»Ref Case + Development, AM (07:00 - 08:00)
»Ref Case + Development, AM (08:00 - 09:00)
»Ref Case + Development, AM (09:00 - 10:00)
»Ref Case + Development, PM (16:00 - 17:00)
»Ref Case + Development, PM (17:00 - 18:00)
»Ref Case + Development, PM (18:00 - 19:00)

Summary of junction performance

	AM (07:00 - 08:00)					AM (08:00 - 09:00)					AM (09:00 - 10:00)					PM (16:00 - 17:00)					PM (17:00 - 18:00)					PM (18:00 - 19:00)				
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
Ref Case																														
1 - Coton Road	0.0	4.34	0.04	A	4.96	0.1	5.35	0.07	A	9.22	0.2	5.43	0.15	A	7.16	0.3	5.35	0.24	A	6.25	0.4	5.82	0.27	A	6.09	0.1	4.52	0.12	A	4.79
2 - A444 Vicarage Street	2.5	6.97	0.72	A		6.3	15.21	0.87	C		3.3	8.40	0.77	A		2.9	7.38	0.75	A		2.9	7.52	0.74	A		1.8	5.21	0.64	A	
3 - A444 Coton Road	0.6	2.64	0.39	A		1.8	4.65	0.64	A		2.9	6.93	0.75	A		2.4	6.05	0.71	A		2.1	5.40	0.68	A		1.8	4.73	0.64	A	
4 - A444 Roanne Ringway	0.8	4.10	0.45	A		1.3	5.81	0.57	A		1.1	5.46	0.53	A		0.7	4.36	0.43	A		0.8	4.55	0.45	A		0.7	4.10	0.42	A	
Ref Case + Development																														
1 - Coton Road	0.0	4.02	0.04	A	4.62	0.1	5.88	0.07	A	10.76	0.2	5.90	0.16	A	8.25	0.3	5.46	0.25	A	7.00	0.4	5.93	0.27	A	6.61	0.2	5.25	0.14	A	5.63
2 - A444 Vicarage Street	2.4	6.37	0.71	A		7.6	18.13	0.89	C		3.7	9.35	0.79	A		3.6	8.89	0.79	A		3.4	8.57	0.77	A		2.4	6.76	0.71	A	
3 - A444 Coton Road	0.7	2.81	0.42	A		2.1	5.35	0.68	A		3.6	8.43	0.79	A		2.5	6.33	0.72	A		2.1	5.60	0.68	A		1.9	4.91	0.65	A	
4 - A444 Roanne Ringway	0.7	3.65	0.42	A		1.5	6.50	0.60	A		1.2	5.99	0.55	A		0.8	4.45	0.43	A		0.8	4.63	0.45	A		0.8	4.91	0.46	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. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	24/02/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mtp\MTPGeneral
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	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D2	Ref Case	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D3	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D4	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D5	Ref Case	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D6	Ref Case	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	15	✓
D7	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D8	Ref Case + Development	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D9	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D10	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D11	Ref Case + Development	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D12	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Ref Case, AM (07:00 - 08:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A444 Roanne Ringway - 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	4.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Coton Road	
2	A444 Vicarage Street	
3	A444 Coton Road	
4	A444 Roanne Ringway	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Coton Road	4.40	7.80	11.8	40.0	50.0	36.0	
2 - A444 Vicarage Street	6.75	9.10	21.3	25.0	50.0	57.0	
3 - A444 Coton Road	7.10	8.80	12.0	25.0	50.0	38.0	
4 - A444 Roanne Ringway	3.50	9.00	49.3	17.0	50.0	43.0	

Pelican/Puffin Crossings

Arm	Space between crossing and junc. entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
1 - Coton Road	3.00	3.00	2.90	1.00	6.00	6.00	7.00
2 - A444 Vicarage Street	5.00	3.00	2.90	1.00	6.00	6.00	7.00
4 - A444 Roanne Ringway	7.00	3.00	2.90	1.00	6.00	6.00	7.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Coton Road	0.643	1876
2 - A444 Vicarage Street	0.709	2355

3 - A444 Coton Road	0.747	2461
4 - A444 Roanne Ringway	0.681	2166

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	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 - Coton Road		ONE HOUR	✓	34	100.000
2 - A444 Vicarage Street		ONE HOUR	✓	1206	100.000
3 - A444 Coton Road		ONE HOUR	✓	778	100.000
4 - A444 Roanne Ringway		ONE HOUR	✓	647	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Coton Road	[ONEHOUR]	60.00
2 - A444 Vicarage Street	[ONEHOUR]	60.00
3 - A444 Coton Road		
4 - A444 Roanne Ringway	[ONEHOUR]	60.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Coton Road	**2 - A444 Vicarage Street**	**3 - A444 Coton Road**	**4 - A444 Roanne Ringway**
From	**1 - Coton Road**	0	14	14	6
	2 - A444 Vicarage Street	15	15	1028	148
	3 - A444 Coton Road	14	408	35	321
	4 - A444 Roanne Ringway	21	228	398	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Coton Road	2 - A444 Vicarage Street	3 - A444 Coton Road	4 - A444 Roanne Ringway
From	1 - Coton Road	0	8	18	7
	2 - A444 Vicarage Street	7	3	2	2
	3 - A444 Coton Road	16	2	0	6
	4 - A444 Roanne Ringway	1	0	4	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 - Coton Road	0.04	4.34	0.0	A	31	47
2 - A444 Vicarage Street	0.72	6.97	2.5	A	1107	1660
3 - A444 Coton Road	0.39	2.64	0.6	A	714	1071
4 - A444 Roanne Ringway	0.45	4.10	0.8	A	594	891

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	26	6	814	45.17	1102	0.023	26	38	0.0	0.0	3.344	A
2 - A444 Vicarage Street	908	227	340	45.17	1913	0.475	904	499	0.0	0.9	3.555	A
3 - A444 Coton Road	586	146	138		2269	0.258	584	1106	0.0	0.3	2.135	A
4 - A444 Roanne Ringway	487	122	366	45.17	1692	0.288	485	357	0.0	0.4	2.980	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	31	8	974	53.94	1001	0.031	31	45	0.0	0.0	3.708	A
2 - A444 Vicarage Street	1084	271	407	53.94	1875	0.578	1082	597	0.9	1.4	4.531	A
3 - A444 Coton Road	699	175	165		2249	0.311	699	1324	0.3	0.4	2.323	A
4 - A444 Roanne Ringway	582	145	438	53.94	1665	0.349	581	427	0.4	0.5	3.319	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	37	9	1192	66.06	868	0.043	37	55	0.0	0.0	4.333	A
2 - A444 Vicarage Street	1328	332	498	66.06	1835	0.724	1323	731	1.4	2.5	6.968	A
3 - A444 Coton Road	857	214	202		2221	0.386	856	1619	0.4	0.6	2.635	A
4 - A444 Roanne Ringway	712	178	536	66.06	1588	0.449	711	522	0.5	0.8	4.101	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	37	9	1194	66.06	868	0.043	37	55	0.0	0.0	4.335	A
2 - A444 Vicarage Street	1328	332	499	66.06	1866	0.712	1328	732	2.5	2.5	6.698	A
3 - A444 Coton Road	857	214	203		2221	0.386	857	1624	0.6	0.6	2.638	A
4 - A444 Roanne Ringway	712	178	536	66.06	1595	0.447	712	523	0.8	0.8	4.079	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	31	8	976	53.94	1000	0.031	31	45	0.0	0.0	3.711	A
2 - A444 Vicarage Street	1084	271	408	53.94	1911	0.567	1089	599	2.5	1.3	4.405	A
3 - A444 Coton Road	699	175	166		2248	0.311	700	1331	0.6	0.5	2.326	A
4 - A444 Roanne Ringway	582	145	438	53.94	1667	0.349	583	428	0.8	0.5	3.326	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	26	6	817	45.17	1101	0.023	26	38	0.0	0.0	3.347	A
2 - A444 Vicarage Street	908	227	341	45.17	1938	0.468	910	501	1.3	0.9	3.504	A
3 - A444 Coton Road	586	146	139		2268	0.258	586	1112	0.5	0.3	2.142	A
4 - A444 Roanne Ringway	487	122	367	45.17	1692	0.288	488	358	0.5	0.4	2.992	A

Ref Case, AM (08:00 - 09:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A444 Roanne Ringway - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Pedestrian Crossing	1 - Coton Road - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - A444 Vicarage Street - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - A444 Roanne Ringway - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

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	9.22	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	Ref Case	AM (08:00 - 09:00)	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 - Coton Road		ONE HOUR	✓	43	100.000
2 - A444 Vicarage Street		ONE HOUR	✓	1419	100.000
3 - A444 Coton Road		ONE HOUR	✓	1246	100.000
4 - A444 Roanne Ringway		ONE HOUR	✓	760	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Coton Road	[ONEHOUR]	1.00
2 - A444 Vicarage Street	[ONEHOUR]	1.00
3 - A444 Coton Road		
4 - A444 Roanne Ringway	[ONEHOUR]	1.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Coton Road	2 - A444 Vicarage Street	3 - A444 Coton Road	4 - A444 Roanne Ringway
From	1 - Coton Road	0	17	16	10
	2 - A444 Vicarage Street	30	13	1145	231
	3 - A444 Coton Road	37	676	122	411
	4 - A444 Roanne Ringway	28	247	485	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Coton Road	2 - A444 Vicarage Street	3 - A444 Coton Road	4 - A444 Roanne Ringway
From	1 - Coton Road	0	7	7	1
	2 - A444 Vicarage Street	3	5	3	2
	3 - A444 Coton Road	6	2	0	7
	4 - A444 Roanne Ringway	1	0	4	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 - Coton Road	0.07	5.35	0.1	A	39	59
2 - A444 Vicarage Street	0.87	15.21	6.3	C	1302	1953
3 - A444 Coton Road	0.64	4.65	1.8	A	1143	1715
4 - A444 Roanne Ringway	0.57	5.81	1.3	A	697	1046

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	32	8	1158	0.00	1056	0.031	32	71	0.0	0.0	3.515	A
2 - A444 Vicarage Street	1068	267	475	0.00	1952	0.547	1064	715	0.0	1.2	4.029	A
3 - A444 Coton Road	938	235	213		2219	0.423	935	1326	0.0	0.7	2.798	A
4 - A444 Roanne Ringway	572	143	659	0.00	1665	0.344	570	489	0.0	0.5	3.283	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	39	10	1385	0.00	915	0.042	39	85	0.0	0.0	4.109	A
2 - A444 Vicarage Street	1276	319	568	0.00	1886	0.676	1272	856	1.2	2.1	5.834	A
3 - A444 Coton Road	1120	280	255		2188	0.512	1119	1586	0.7	1.0	3.361	A
4 - A444 Roanne Ringway	683	171	788	0.00	1577	0.433	682	585	0.5	0.8	4.019	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	47	12	1695	0.00	722	0.066	47	104	0.0	0.1	5.333	A
2 - A444 Vicarage Street	1562	391	695	0.00	1796	0.870	1547	1047	2.1	6.0	13.670	B
3 - A444 Coton Road	1372	343	310		2148	0.639	1369	1932	1.0	1.7	4.607	A
4 - A444 Roanne Ringway	837	209	964	0.00	1458	0.574	835	714	0.8	1.3	5.754	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	47	12	1699	0.00	720	0.066	47	105	0.1	0.1	5.353	A
2 - A444 Vicarage Street	1562	391	697	0.00	1794	0.871	1561	1049	6.0	6.3	15.212	C
3 - A444 Coton Road	1372	343	312		2146	0.639	1372	1945	1.7	1.8	4.652	A
4 - A444 Roanne Ringway	837	209	967	0.00	1456	0.575	837	718	1.3	1.3	5.809	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	39	10	1391	0.00	911	0.042	39	86	0.1	0.0	4.128	A
2 - A444 Vicarage Street	1276	319	571	0.00	1884	0.677	1292	859	6.3	2.1	6.253	A
3 - A444 Coton Road	1120	280	259		2185	0.513	1123	1605	1.8	1.1	3.399	A
4 - A444 Roanne Ringway	683	171	792	0.00	1575	0.434	685	590	1.3	0.8	4.059	A

09:00 - 09:15

Arm	Total Demand	Junction Arrival	Circulating flow (Veh/hr)	Pedestrian demand	Capacity (Veh/hr	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue	End queue	Delay (s)	Unsignalised level of service

	(Veh/hr)	s (Veh)		(Ped/hr)	)			(Veh/hr)	(Veh)	(Veh)		
1 - Coton Road	32	8	1163	0.00	1053	0.031	32	72	0.0	0.0	3.530	A
2 - A444 Vicarage Street	1068	267	477	0.00	1950	0.548	1072	719	2.1	1.2	4.115	A
3 - A444 Coton Road	938	235	215		2218	0.423	939	1335	1.1	0.7	2.818	A
4 - A444 Roanne Ringway	572	143	662	0.00	1663	0.344	573	492	0.8	0.5	3.306	A

Ref Case, AM (09:00 - 10:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A444 Roanne Ringway - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Pedestrian Crossing	1 - Coton Road - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - A444 Vicarage Street - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - A444 Roanne Ringway - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

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	7.16	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)	Run automatically
D3	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 - Coton Road		ONE HOUR	✓	103	100.000
2 - A444 Vicarage Street		ONE HOUR	✓	1304	100.000
3 - A444 Coton Road		ONE HOUR	✓	1386	100.000
4 - A444 Roanne Ringway		ONE HOUR	✓	662	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Coton Road	[ONEHOUR]	1.00
2 - A444 Vicarage Street	[ONEHOUR]	1.00
3 - A444 Coton Road		
4 - A444 Roanne Ringway	[ONEHOUR]	1.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Coton Road	**2 - A444 Vicarage Street**	**3 - A444 Coton Road**	**4 - A444 Roanne Ringway**
From	**1 - Coton Road**	0	40	24	39
	2 - A444 Vicarage Street	49	29	937	289
	3 - A444 Coton Road	64	742	78	502
	4 - A444 Roanne Ringway	47	226	389	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Coton Road	**2 - A444 Vicarage Street**	**3 - A444 Coton Road**	**4 - A444 Roanne Ringway**
From	**1 - Coton Road**	0	4	13	1
	2 - A444 Vicarage Street	3	2	4	1
	3 - A444 Coton Road	4	2	0	7
	4 - A444 Roanne Ringway	1	0	5	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 - Coton Road	0.15	5.43	0.2	A	95	142
2 - A444 Vicarage Street	0.77	8.40	3.3	A	1197	1795
3 - A444 Coton Road	0.75	6.93	2.9	A	1272	1908
4 - A444 Roanne Ringway	0.53	5.46	1.1	A	607	911

Main Results for each time segment

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	78	19	1098	0.00	1099	0.071	77	120	0.0	0.1	3.524	A
2 - A444 Vicarage Street	982	245	398	0.00	1997	0.492	978	778	0.0	1.0	3.521	A
3 - A444 Coton Road	1043	261	304		2149	0.486	1040	1071	0.0	0.9	3.235	A
4 - A444 Roanne Ringway	498	125	722	0.00	1615	0.309	497	623	0.0	0.4	3.211	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	93	23	1314	0.00	963	0.096	92	144	0.1	0.1	4.134	A
2 - A444 Vicarage Street	1172	293	476	0.00	1941	0.604	1170	931	1.0	1.5	4.659	A
3 - A444 Coton Road	1246	311	364		2105	0.592	1244	1282	0.9	1.4	4.171	A
4 - A444 Roanne Ringway	595	149	863	0.00	1520	0.392	594	745	0.4	0.6	3.887	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	113	28	1607	0.00	780	0.145	113	176	0.1	0.2	5.400	A
2 - A444 Vicarage Street	1436	359	582	0.00	1865	0.770	1429	1138	1.5	3.2	8.136	A
3 - A444 Coton Road	1526	382	445		2046	0.746	1520	1566	1.4	2.8	6.771	A
4 - A444 Roanne Ringway	729	182	1055	0.00	1390	0.524	727	910	0.6	1.1	5.413	A

09:30 - 09:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	113	28	1612	0.00	777	0.146	113	176	0.2	0.2	5.427	A
2 - A444 Vicarage Street	1436	359	584	0.00	1863	0.770	1435	1142	3.2	3.3	8.397	A
3 - A444 Coton Road	1526	382	447		2045	0.746	1526	1572	2.8	2.9	6.927	A
4 - A444 Roanne Ringway	729	182	1059	0.00	1388	0.525	729	914	1.1	1.1	5.463	A

09:45 - 10:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	93	23	1321	0.00	959	0.097	93	144	0.2	0.1	4.160	A
2 - A444 Vicarage Street	1172	293	478	0.00	1939	0.605	1179	936	3.3	1.5	4.780	A
3 - A444 Coton Road	1246	311	367		2103	0.592	1252	1290	2.9	1.5	4.256	A
4 - A444 Roanne Ringway	595	149	869	0.00	1516	0.393	597	750	1.1	0.7	3.925	A

10:00 - 10:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	78	19	1104	0.00	1095	0.071	78	121	0.1	0.1	3.538	A
2 - A444 Vicarage Street	982	245	400	0.00	1995	0.492	984	782	1.5	1.0	3.567	A
3 - A444 Coton Road	1043	261	306		2148	0.486	1046	1077	1.5	1.0	3.274	A
4 - A444 Roanne Ringway	498	125	726	0.00	1613	0.309	499	626	0.7	0.4	3.237	A

Ref Case, PM (16:00 - 17:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A444 Roanne Ringway - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Pedestrian Crossing	1 - Coton Road - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - A444 Vicarage Street - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - A444 Roanne Ringway - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

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	6.25	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	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 - Coton Road		ONE HOUR	✓	195	100.000
2 - A444 Vicarage Street		ONE HOUR	✓	1301	100.000
3 - A444 Coton Road		ONE HOUR	✓	1292	100.000
4 - A444 Roanne Ringway		ONE HOUR	✓	556	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Coton Road	[ONEHOUR]	0.00
2 - A444 Vicarage Street	[ONEHOUR]	0.00
3 - A444 Coton Road		
4 - A444 Roanne Ringway	[ONEHOUR]	0.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Coton Road	2 - A444 Vicarage Street	3 - A444 Coton Road	4 - A444 Roanne Ringway
From	1 - Coton Road	0	71	54	70
	2 - A444 Vicarage Street	42	68	887	304
	3 - A444 Coton Road	53	730	44	465
	4 - A444 Roanne Ringway	25	190	341	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Coton Road	2 - A444 Vicarage Street	3 - A444 Coton Road	4 - A444 Roanne Ringway
From	1 - Coton Road	0	1	1	0
	2 - A444 Vicarage Street	2	1	2	1
	3 - A444 Coton Road	2	1	0	4
	4 - A444 Roanne Ringway	1	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 - Coton Road	0.24	5.35	0.3	A	179	268
2 - A444 Vicarage Street	0.75	7.38	2.9	A	1194	1791
3 - A444 Coton Road	0.71	6.05	2.4	A	1186	1778
4 - A444 Roanne Ringway	0.43	4.36	0.7	A	510	765

Main Results for each time segment

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	147	37	1030	0.00	1199	0.122	146	90	0.0	0.1	3.418	A
2 - A444 Vicarage Street	979	245	382	0.00	2046	0.479	976	795	0.0	0.9	3.353	A
3 - A444 Coton Road	973	243	363		2142	0.454	969	995	0.0	0.8	3.060	A
4 - A444 Roanne Ringway	419	105	703	0.00	1660	0.252	417	629	0.0	0.3	2.893	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	175	44	1233	0.00	1068	0.164	175	108	0.1	0.2	4.030	A
2 - A444 Vicarage Street	1170	292	457	0.00	1993	0.587	1168	951	0.9	1.4	4.352	A
3 - A444 Coton Road	1161	290	434		2090	0.556	1160	1190	0.8	1.2	3.864	A
4 - A444 Roanne Ringway	500	125	841	0.00	1567	0.319	499	753	0.3	0.5	3.371	A

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	215	54	1508	0.00	891	0.241	214	132	0.2	0.3	5.320	A
2 - A444 Vicarage Street	1432	358	559	0.00	1920	0.746	1427	1163	1.4	2.8	7.205	A
3 - A444 Coton Road	1423	356	531		2018	0.705	1418	1455	1.2	2.3	5.954	A
4 - A444 Roanne Ringway	612	153	1028	0.00	1439	0.425	611	921	0.5	0.7	4.341	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	215	54	1512	0.00	888	0.242	215	132	0.3	0.3	5.346	A
2 - A444 Vicarage Street	1432	358	560	0.00	1920	0.746	1432	1166	2.8	2.9	7.378	A
3 - A444 Coton Road	1423	356	533		2017	0.705	1422	1460	2.3	2.4	6.054	A
4 - A444 Roanne Ringway	612	153	1032	0.00	1437	0.426	612	924	0.7	0.7	4.363	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	175	44	1238	0.00	1065	0.165	176	108	0.3	0.2	4.054	A
2 - A444 Vicarage Street	1170	292	459	0.00	1992	0.587	1175	955	2.9	1.4	4.441	A
3 - A444 Coton Road	1161	290	437		2088	0.556	1166	1197	2.4	1.3	3.925	A
4 - A444 Roanne Ringway	500	125	846	0.00	1564	0.320	501	757	0.7	0.5	3.393	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	147	37	1035	0.00	1196	0.123	147	91	0.2	0.1	3.433	A
2 - A444 Vicarage Street	979	245	384	0.00	2045	0.479	982	799	1.4	0.9	3.392	A
3 - A444 Coton Road	973	243	365		2141	0.454	974	1000	1.3	0.8	3.092	A
4 - A444 Roanne Ringway	419	105	707	0.00	1658	0.252	419	633	0.5	0.3	2.906	A

Ref Case, PM (17:00 - 18:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A444 Roanne Ringway - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Pedestrian Crossing	1 - Coton Road - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - A444 Vicarage Street - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - A444 Roanne Ringway -	Pedestrian crossing uses default flow of 0. Is this correct?

		Pedestrian crossing	

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	6.09	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	Ref Case	PM (17:00 - 18:00)	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 - Coton Road		ONE HOUR	✓	203	100.000
2 - A444 Vicarage Street		ONE HOUR	✓	1258	100.000
3 - A444 Coton Road		ONE HOUR	✓	1258	100.000
4 - A444 Roanne Ringway		ONE HOUR	✓	577	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Coton Road	[ONEHOUR]	0.00
2 - A444 Vicarage Street	[ONEHOUR]	0.00
3 - A444 Coton Road		
4 - A444 Roanne Ringway	[ONEHOUR]	0.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Coton Road	2 - A444 Vicarage Street	3 - A444 Coton Road	4 - A444 Roanne Ringway
From	1 - Coton Road	0	62	59	82
	2 - A444 Vicarage Street	34	66	887	271
	3 - A444 Coton Road	39	764	56	399
	4 - A444 Roanne Ringway	21	170	386	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Coton Road	2 - A444 Vicarage Street	3 - A444 Coton Road	4 - A444 Roanne Ringway
From	1 - Coton Road	0	1	2	0
	2 - A444 Vicarage Street	1	0	2	1
	3 - A444 Coton Road	2	0	0	5
	4 - A444 Roanne Ringway	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 - Coton Road	0.27	5.82	0.4	A	186	279
2 - A444 Vicarage Street	0.74	7.52	2.9	A	1154	1732
3 - A444 Coton Road	0.68	5.40	2.1	A	1154	1732
4 - A444 Roanne Ringway	0.45	4.55	0.8	A	529	794

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	153	38	1082	0.00	1166	0.131	152	71	0.0	0.2	3.548	A
2 - A444 Vicarage Street	947	237	437	0.00	2008	0.472	944	797	0.0	0.9	3.372	A
3 - A444 Coton Road	947	237	340		2170	0.437	944	1041	0.0	0.8	2.930	A
4 - A444 Roanne Ringway	434	109	720	0.00	1653	0.263	433	564	0.0	0.4	2.949	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	182	46	1295	0.00	1030	0.177	182	84	0.2	0.2	4.245	A
2 - A444 Vicarage Street	1131	283	523	0.00	1947	0.581	1129	953	0.9	1.4	4.391	A
3 - A444 Coton Road	1131	283	407		2120	0.533	1129	1246	0.8	1.1	3.629	A
4 - A444 Roanne Ringway	519	130	861	0.00	1558	0.333	518	675	0.4	0.5	3.461	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	224	56	1584	0.00	845	0.265	223	103	0.2	0.4	5.784	A
2 - A444 Vicarage Street	1385	346	641	0.00	1864	0.743	1379	1166	1.4	2.8	7.345	A
3 - A444 Coton Road	1385	346	497		2053	0.675	1381	1523	1.1	2.0	5.330	A
4 - A444 Roanne Ringway	635	159	1053	0.00	1428	0.445	634	825	0.5	0.8	4.526	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	224	56	1588	0.00	842	0.265	223	103	0.4	0.4	5.816	A
2 - A444 Vicarage Street	1385	346	642	0.00	1863	0.744	1385	1169	2.8	2.9	7.524	A
3 - A444 Coton Road	1385	346	499		2052	0.675	1385	1528	2.0	2.1	5.396	A
4 - A444 Roanne Ringway	635	159	1056	0.00	1426	0.445	635	828	0.8	0.8	4.550	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	182	46	1300	0.00	1027	0.178	183	85	0.4	0.2	4.272	A
2 - A444 Vicarage Street	1131	283	525	0.00	1945	0.581	1137	958	2.9	1.4	4.484	A
3 - A444 Coton Road	1131	283	409		2118	0.534	1135	1253	2.1	1.2	3.675	A
4 - A444 Roanne Ringway	519	130	865	0.00	1555	0.334	520	679	0.8	0.5	3.484	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	153	38	1087	0.00	1163	0.131	153	71	0.2	0.2	3.564	A
2 - A444 Vicarage Street	947	237	440	0.00	2006	0.472	949	801	1.4	0.9	3.411	A
3 - A444 Coton Road	947	237	342		2168	0.437	949	1047	1.2	0.8	2.957	A
4 - A444 Roanne Ringway	434	109	723	0.00	1650	0.263	435	567	0.5	0.4	2.963	A

Ref Case, PM (18:00 - 19:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A444 Roanne Ringway - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Pedestrian Crossing	1 - Coton Road - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - A444 Vicarage Street - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - A444 Roanne Ringway - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

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	4.79	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)	Run automatically
D6	Ref Case	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	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 - Coton Road		ONE HOUR	✓	100	100.000
2 - A444 Vicarage Street		ONE HOUR	✓	1134	100.000
3 - A444 Coton Road		ONE HOUR	✓	1221	100.000
4 - A444 Roanne Ringway		ONE HOUR	✓	569	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Coton Road	[ONEHOUR]	0.00
2 - A444 Vicarage Street	[ONEHOUR]	0.00
3 - A444 Coton Road		
4 - A444 Roanne Ringway	[ONEHOUR]	0.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Coton Road	2 - A444 Vicarage Street	3 - A444 Coton Road	4 - A444 Roanne Ringway
From	1 - Coton Road	0	33	24	43
	2 - A444 Vicarage Street	25	46	798	265
	3 - A444 Coton Road	34	710	45	432
	4 - A444 Roanne Ringway	16	172	381	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Coton Road	2 - A444 Vicarage Street	3 - A444 Coton Road	4 - A444 Roanne Ringway
From	1 - Coton Road	0	0	2	0
	2 - A444 Vicarage Street	2	0	2	0
	3 - A444 Coton Road	2	1	0	4
	4 - A444 Roanne Ringway	0	0	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 - Coton Road	0.12	4.52	0.1	A	92	138
2 - A444 Vicarage Street	0.64	5.21	1.8	A	1041	1561
3 - A444 Coton Road	0.64	4.73	1.8	A	1120	1681
4 - A444 Roanne Ringway	0.42	4.10	0.7	A	522	783

Main Results for each time segment

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	75	19	1016	0.00	1212	0.062	75	56	0.0	0.1	3.167	A
2 - A444 Vicarage Street	854	213	370	0.00	2061	0.414	851	721	0.0	0.7	2.969	A
3 - A444 Coton Road	919	230	284		2203	0.417	916	937	0.0	0.7	2.792	A
4 - A444 Roanne Ringway	428	107	645	0.00	1710	0.250	427	555	0.0	0.3	2.803	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	90	22	1216	0.00	1083	0.083	90	67	0.1	0.1	3.624	A
2 - A444 Vicarage Street	1019	255	443	0.00	2010	0.507	1018	863	0.7	1.0	3.625	A
3 - A444 Coton Road	1098	274	340		2162	0.508	1096	1121	0.7	1.0	3.373	A
4 - A444 Roanne Ringway	512	128	772	0.00	1624	0.315	511	664	0.3	0.5	3.234	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	110	28	1488	0.00	907	0.121	110	82	0.1	0.1	4.513	A
2 - A444 Vicarage Street	1249	312	542	0.00	1940	0.644	1246	1056	1.0	1.8	5.161	A
3 - A444 Coton Road	1344	336	416		2106	0.638	1341	1371	1.0	1.7	4.690	A
4 - A444 Roanne Ringway	626	157	945	0.00	1506	0.416	625	813	0.5	0.7	4.086	A

18:30 - 18:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	110	28	1491	0.00	906	0.122	110	83	0.1	0.1	4.525	A
2 - A444 Vicarage Street	1249	312	543	0.00	1939	0.644	1249	1058	1.8	1.8	5.210	A
3 - A444 Coton Road	1344	336	417		2105	0.639	1344	1374	1.7	1.8	4.729	A
4 - A444 Roanne Ringway	626	157	947	0.00	1504	0.416	626	815	0.7	0.7	4.100	A

18:45 - 19:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	90	22	1220	0.00	1080	0.083	90	68	0.1	0.1	3.638	A
2 - A444 Vicarage Street	1019	255	444	0.00	2009	0.507	1022	866	1.8	1.0	3.662	A
3 - A444 Coton Road	1098	274	342		2161	0.508	1101	1125	1.8	1.0	3.403	A
4 - A444 Roanne Ringway	512	128	775	0.00	1622	0.315	513	667	0.7	0.5	3.250	A

19:00 - 19:15

Arm	Total Demand	Junction Arrival	Circulating flow (Veh/hr)	Pedestrian demand	Capacity (Veh/hr	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue	End queue	Delay (s)	Unsignalised level of service

	(Veh/hr)	s (Veh)		(Ped/hr)	)			(Veh/hr)	(Veh)	(Veh)		
1 - Coton Road	75	19	1021	0.00	1209	0.062	75	57	0.1	0.1	3.178	A
2 - A444 Vicarage Street	854	213	372	0.00	2060	0.414	855	724	1.0	0.7	2.992	A
3 - A444 Coton Road	919	230	286		2202	0.417	921	941	1.0	0.7	2.813	A
4 - A444 Roanne Ringway	428	107	648	0.00	1708	0.251	429	558	0.5	0.3	2.814	A

Ref Case + Development, AM (07:00 - 08:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A444 Roanne Ringway - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Pedestrian Crossing	1 - Coton Road - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - A444 Vicarage Street - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - A444 Roanne Ringway - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

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
D7	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 - Coton Road		ONE HOUR	✓	34	100.000
2 - A444 Vicarage Street		ONE HOUR	✓	1241	100.000
3 - A444 Coton Road		ONE HOUR	✓	833	100.000
4 - A444 Roanne Ringway		ONE HOUR	✓	648	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Coton Road	[ONEHOUR]	1.00
2 - A444 Vicarage Street	[ONEHOUR]	1.00
3 - A444 Coton Road		
4 - A444 Roanne Ringway	[ONEHOUR]	1.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Coton Road	2 - A444 Vicarage Street	3 - A444 Coton Road	4 - A444 Roanne Ringway
From	1 - Coton Road	0	14	14	6
	2 - A444 Vicarage Street	15	15	1063	148
	3 - A444 Coton Road	14	463	35	321
	4 - A444 Roanne Ringway	21	229	398	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Coton Road	2 - A444 Vicarage Street	3 - A444 Coton Road	4 - A444 Roanne Ringway
From	1 - Coton Road	0	8	18	7
	2 - A444 Vicarage Street	7	3	3	2
	3 - A444 Coton Road	16	4	0	6
	4 - A444 Roanne Ringway	1	0	4	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 - Coton Road	0.04	4.02	0.0	A	31	47
2 - A444 Vicarage Street	0.71	6.37	2.4	A	1139	1708
3 - A444 Coton Road	0.42	2.81	0.7	A	764	1147
4 - A444 Roanne Ringway	0.42	3.65	0.7	A	595	892

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	26	6	856	0.00	1169	0.022	26	38	0.0	0.0	3.147	A
2 - A444 Vicarage Street	934	234	340	0.00	2045	0.457	931	541	0.0	0.8	3.223	A
3 - A444 Coton Road	627	157	138		2247	0.279	626	1133	0.0	0.4	2.218	A
4 - A444 Roanne Ringway	488	122	407	0.00	1831	0.266	486	357	0.0	0.4	2.674	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	31	8	1024	0.00	1070	0.029	31	45	0.0	0.0	3.463	A
2 - A444 Vicarage Street	1116	279	407	0.00	1997	0.559	1114	648	0.8	1.3	4.071	A
3 - A444 Coton Road	749	187	165		2227	0.336	748	1356	0.4	0.5	2.434	A
4 - A444 Roanne Ringway	583	146	487	0.00	1776	0.328	582	427	0.4	0.5	3.013	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	37	9	1254	0.00	934	0.040	37	55	0.0	0.0	4.015	A
2 - A444 Vicarage Street	1366	342	498	0.00	1931	0.708	1362	793	1.3	2.4	6.275	A
3 - A444 Coton Road	917	229	202		2200	0.417	916	1658	0.5	0.7	2.802	A
4 - A444 Roanne Ringway	713	178	596	0.00	1700	0.420	713	522	0.5	0.7	3.640	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	37	9	1255	0.00	933	0.040	37	55	0.0	0.0	4.019	A
2 - A444 Vicarage Street	1366	342	499	0.00	1931	0.708	1366	794	2.4	2.4	6.375	A
3 - A444 Coton Road	917	229	203		2200	0.417	917	1662	0.7	0.7	2.806	A
4 - A444 Roanne	713	178	597	0.00	1700	0.42	713	523	0.7	0.7	3.64	A

Ringway						0					8	

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	31	8	1026	0.00	1068	0.029	31	45	0.0	0.0	3.468	A
2 - A444 Vicarage Street	1116	279	408	0.00	1996	0.559	1120	649	2.4	1.3	4.130	A
3 - A444 Coton Road	749	187	166		2227	0.336	750	1362	0.7	0.5	2.440	A
4 - A444 Roanne Ringway	583	146	488	0.00	1775	0.328	583	428	0.7	0.5	3.024	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	26	6	859	0.00	1167	0.022	26	38	0.0	0.0	3.152	A
2 - A444 Vicarage Street	934	234	341	0.00	2044	0.457	936	543	1.3	0.8	3.257	A
3 - A444 Coton Road	627	157	139		2247	0.279	628	1139	0.5	0.4	2.225	A
4 - A444 Roanne Ringway	488	122	408	0.00	1830	0.267	488	358	0.5	0.4	2.682	A

Ref Case + Development, AM (08:00 - 09:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A444 Roanne Ringway - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Pedestrian Crossing	1 - Coton Road - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - A444 Vicarage Street - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - A444 Roanne Ringway - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

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	10.76	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	Ref Case + Development	AM (08:00 - 09:00)	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 - Coton Road		ONE HOUR	✓	43	100.000
2 - A444 Vicarage Street		ONE HOUR	✓	1443	100.000
3 - A444 Coton Road		ONE HOUR	✓	1319	100.000
4 - A444 Roanne Ringway		ONE HOUR	✓	761	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Coton Road	[ONEHOUR]	1.00
2 - A444 Vicarage Street	[ONEHOUR]	1.00
3 - A444 Coton Road		
4 - A444 Roanne Ringway	[ONEHOUR]	1.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Coton Road	**2 - A444 Vicarage Street**	**3 - A444 Coton Road**	**4 - A444 Roanne Ringway**
From	**1 - Coton Road**	0	17	16	10
	2 - A444 Vicarage Street	30	13	1169	231
	3 - A444 Coton Road	37	749	122	411
	4 - A444 Roanne Ringway	28	248	485	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Coton Road	2 - A444 Vicarage Street	3 - A444 Coton Road	4 - A444 Roanne Ringway
From	1 - Coton Road	0	7	7	1
	2 - A444 Vicarage Street	3	5	4	2
	3 - A444 Coton Road	6	4	0	7
	4 - A444 Roanne Ringway	1	0	4	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 - Coton Road	0.07	5.88	0.1	A	39	59
2 - A444 Vicarage Street	0.89	18.13	7.6	C	1324	1986
3 - A444 Coton Road	0.68	5.35	2.1	A	1210	1816
4 - A444 Roanne Ringway	0.60	6.50	1.5	A	698	1047

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	32	8	1213	0.00	1015	0.032	32	71	0.0	0.0	3.662	A
2 - A444 Vicarage Street	1086	272	475	0.00	1937	0.561	1081	771	0.0	1.3	4.183	A
3 - A444 Coton Road	993	248	213		2197	0.452	990	1343	0.0	0.8	2.975	A
4 - A444 Roanne Ringway	573	143	714	0.00	1620	0.354	571	489	0.0	0.5	3.422	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	39	10	1452	0.00	865	0.045	39	85	0.0	0.0	4.354	A
2 - A444 Vicarage Street	1297	324	568	0.00	1871	0.693	1293	922	1.3	2.2	6.191	A
3 - A444 Coton Road	1186	296	255		2166	0.547	1184	1607	0.8	1.2	3.661	A
4 - A444 Roanne Ringway	684	171	854	0.00	1524	0.449	683	585	0.5	0.8	4.276	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	47	12	1775	0.00	662	0.071	47	104	0.0	0.1	5.853	A
2 - A444 Vicarage Street	1589	397	695	0.00	1782	0.892	1569	1128	2.2	7.1	15.693	C
3 - A444 Coton Road	1452	363	309		2127	0.683	1449	1955	1.2	2.1	5.281	A
4 - A444 Roanne Ringway	838	209	1044	0.00	1393	0.601	835	714	0.8	1.5	6.422	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	47	12	1780	0.00	659	0.072	47	105	0.1	0.1	5.883	A
2 - A444 Vicarage Street	1589	397	697	0.00	1780	0.892	1587	1131	7.1	7.6	18.126	C
3 - A444 Coton Road	1452	363	312		2124	0.684	1452	1971	2.1	2.1	5.354	A
4 - A444 Roanne Ringway	838	209	1047	0.00	1391	0.602	838	717	1.5	1.5	6.504	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	39	10	1459	0.00	861	0.045	39	86	0.1	0.0	4.379	A
2 - A444 Vicarage Street	1297	324	571	0.00	1869	0.694	1318	926	7.6	2.3	6.777	A
3 - A444 Coton Road	1186	296	259		2163	0.548	1189	1630	2.1	1.2	3.710	A
4 - A444 Roanne Ringway	684	171	858	0.00	1521	0.450	687	591	1.5	0.8	4.331	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	32	8	1219	0.00	1011	0.032	32	72	0.0	0.0	3.680	A
2 - A444 Vicarage Street	1086	272	477	0.00	1935	0.561	1090	774	2.3	1.3	4.282	A
3 - A444 Coton Road	993	248	215		2196	0.452	995	1353	1.2	0.8	3.003	A
4 - A444 Roanne Ringway	573	143	717	0.00	1618	0.354	574	492	0.8	0.6	3.451	A

Ref Case + Development, AM (09:00 - 10:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A444 Roanne Ringway - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Pedestrian Crossing	1 - Coton Road - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - A444 Vicarage Street - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - A444 Roanne Ringway - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

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	8.25	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	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 - Coton Road		ONE HOUR	✓	103	100.000
2 - A444 Vicarage Street		ONE HOUR	✓	1332	100.000
3 - A444 Coton Road		ONE HOUR	✓	1433	100.000
4 - A444 Roanne Ringway		ONE HOUR	✓	662	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Coton Road	[ONEHOUR]	1.00

2 - A444 Vicarage Street	[ONEHOUR]	1.00
3 - A444 Coton Road		
4 - A444 Roanne Ringway	[ONEHOUR]	1.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Coton Road	**2 - A444 Vicarage Street**	**3 - A444 Coton Road**	**4 - A444 Roanne Ringway**
From	**1 - Coton Road**	0	40	24	39
	2 - A444 Vicarage Street	49	29	965	289
	3 - A444 Coton Road	64	789	78	502
	4 - A444 Roanne Ringway	47	226	389	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Coton Road	**2 - A444 Vicarage Street**	**3 - A444 Coton Road**	**4 - A444 Roanne Ringway**
From	**1 - Coton Road**	0	4	13	1
	2 - A444 Vicarage Street	3	2	5	1
	3 - A444 Coton Road	4	6	0	7
	4 - A444 Roanne Ringway	1	0	5	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 - Coton Road	0.16	5.90	0.2	A	95	142
2 - A444 Vicarage Street	0.79	9.35	3.7	A	1222	1833
3 - A444 Coton Road	0.79	8.43	3.6	A	1315	1972
4 - A444 Roanne Ringway	0.55	5.99	1.2	A	607	911

Main Results for each time segment

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	78	19	1133	0.00	1062	0.073	77	120	0.0	0.1	3.654	A

2 - A444 Vicarage Street	1003	251	398	0.00	1982	0.506	999	813	0.0	1.0	3.645	A
3 - A444 Coton Road	1079	270	304		2105	0.512	1075	1092	0.0	1.0	3.478	A
4 - A444 Roanne Ringway	498	125	757	0.00	1576	0.316	497	622	0.0	0.5	3.329	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	93	23	1356	0.00	920	0.101	92	144	0.1	0.1	4.352	A
2 - A444 Vicarage Street	1197	299	476	0.00	1927	0.621	1195	973	1.0	1.6	4.904	A
3 - A444 Coton Road	1288	322	364		2063	0.625	1286	1307	1.0	1.6	4.620	A
4 - A444 Roanne Ringway	595	149	905	0.00	1473	0.404	594	745	0.5	0.7	4.093	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	113	28	1657	0.00	727	0.156	113	175	0.1	0.2	5.860	A
2 - A444 Vicarage Street	1467	367	582	0.00	1851	0.792	1458	1188	1.6	3.6	8.980	A
3 - A444 Coton Road	1578	394	445		2005	0.787	1570	1596	1.6	3.5	8.135	A
4 - A444 Roanne Ringway	729	182	1106	0.00	1334	0.547	727	909	0.7	1.2	5.913	A

09:30 - 09:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	113	28	1663	0.00	723	0.157	113	176	0.2	0.2	5.904	A
2 - A444 Vicarage Street	1467	367	583	0.00	1850	0.793	1466	1193	3.6	3.7	9.351	A
3 - A444 Coton Road	1578	394	447		2004	0.787	1577	1603	3.5	3.6	8.429	A
4 - A444 Roanne Ringway	729	182	1111	0.00	1330	0.548	729	914	1.2	1.2	5.988	A

09:45 - 10:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	93	23	1365	0.00	914	0.101	93	145	0.2	0.1	4.387	A
2 - A444 Vicarage Street	1197	299	478	0.00	1925	0.622	1206	980	3.7	1.7	5.061	A
3 - A444 Coton Road	1288	322	367		2060	0.62	1296	1317	3.6	1.7	4.75	A

						5					4	
4 - A444 Roanne Ringway	595	149	913	0.00	1468	0.405	597	751	1.2	0.7	4.144	A

10:00 - 10:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	78	19	1140	0.00	1058	0.073	78	121	0.1	0.1	3.674	A
2 - A444 Vicarage Street	1003	251	400	0.00	1981	0.506	1005	818	1.7	1.0	3.699	A
3 - A444 Coton Road	1079	270	306		2104	0.513	1081	1099	1.7	1.1	3.527	A
4 - A444 Roanne Ringway	498	125	761	0.00	1573	0.317	499	626	0.7	0.5	3.357	A

Ref Case + Development, PM (16:00 - 17:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A444 Roanne Ringway - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Pedestrian Crossing	1 - Coton Road - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - A444 Vicarage Street - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - A444 Roanne Ringway - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

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	7.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period	Traffic profile	Start time	Finish time	Time segment	Run

		name	type	(HH:mm)	(HH:mm)	length (min)	automatically
D10	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 - Coton Road		ONE HOUR	✓	195	100.000
2 - A444 Vicarage Street		ONE HOUR	✓	1365	100.000
3 - A444 Coton Road		ONE HOUR	✓	1304	100.000
4 - A444 Roanne Ringway		ONE HOUR	✓	557	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Coton Road	[ONEHOUR]	0.00
2 - A444 Vicarage Street	[ONEHOUR]	0.00
3 - A444 Coton Road		
4 - A444 Roanne Ringway	[ONEHOUR]	0.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Coton Road	2 - A444 Vicarage Street	3 - A444 Coton Road	4 - A444 Roanne Ringway
From	1 - Coton Road	0	71	54	70
	2 - A444 Vicarage Street	42	68	949	306
	3 - A444 Coton Road	53	742	44	465
	4 - A444 Roanne Ringway	25	191	341	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Coton Road	2 - A444 Vicarage Street	3 - A444 Coton Road	4 - A444 Roanne Ringway
From	1 - Coton Road	0	1	1	0
	2 - A444 Vicarage Street	2	1	3	1
	3 - A444 Coton Road	2	2	0	4
	4 - A444 Roanne Ringway	1	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 - Coton Road	0.25	5.46	0.3	A	179	268
2 - A444 Vicarage Street	0.79	8.89	3.6	A	1253	1879
3 - A444 Coton Road	0.72	6.33	2.5	A	1197	1795
4 - A444 Roanne Ringway	0.43	4.45	0.8	A	511	767

Main Results for each time segment

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	147	37	1040	0.00	1189	0.123	146	90	0.0	0.1	3.450	A
2 - A444 Vicarage Street	1028	257	382	0.00	2032	0.506	1024	804	0.0	1.0	3.556	A
3 - A444 Coton Road	982	245	364		2130	0.461	978	1041	0.0	0.8	3.118	A
4 - A444 Roanne Ringway	419	105	712	0.00	1651	0.254	418	631	0.0	0.3	2.918	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	175	44	1244	0.00	1056	0.166	175	108	0.1	0.2	4.084	A
2 - A444 Vicarage Street	1227	307	457	0.00	1979	0.620	1225	962	1.0	1.6	4.757	A
3 - A444 Coton Road	1172	293	436		2077	0.564	1171	1246	0.8	1.3	3.964	A
4 - A444 Roanne Ringway	501	125	852	0.00	1555	0.322	500	755	0.3	0.5	3.411	A

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	215	54	1522	0.00	876	0.245	214	132	0.2	0.3	5.434	A
2 - A444 Vicarage Street	1503	376	559	0.00	1907	0.788	1495	1177	1.6	3.6	8.575	A
3 - A444 Coton Road	1436	359	533		2006	0.716	1431	1522	1.3	2.5	6.210	A
4 - A444 Roanne Ringway	613	153	1041	0.00	1425	0.430	612	922	0.5	0.7	4.423	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	215	54	1526	0.00	874	0.246	215	132	0.3	0.3	5.463	A
2 - A444 Vicarage Street	1503	376	560	0.00	1906	0.788	1503	1180	3.6	3.6	8.893	A
3 - A444 Coton Road	1436	359	535		2004	0.716	1436	1528	2.5	2.5	6.326	A
4 - A444 Roanne Ringway	613	153	1045	0.00	1423	0.431	613	926	0.7	0.8	4.447	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	175	44	1250	0.00	1052	0.167	176	108	0.3	0.2	4.109	A
2 - A444 Vicarage Street	1227	307	459	0.00	1978	0.620	1235	967	3.6	1.7	4.896	A
3 - A444 Coton Road	1172	293	439		2074	0.565	1177	1254	2.5	1.3	4.033	A
4 - A444 Roanne Ringway	501	125	857	0.00	1551	0.323	502	760	0.8	0.5	3.432	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	147	37	1045	0.00	1186	0.124	147	91	0.2	0.1	3.468	A
2 - A444 Vicarage Street	1028	257	384	0.00	2030	0.506	1030	808	1.7	1.0	3.606	A
3 - A444 Coton Road	982	245	367		2128	0.461	984	1047	1.3	0.9	3.152	A
4 - A444 Roanne Ringway	419	105	716	0.00	1648	0.254	420	634	0.5	0.3	2.931	A

Ref Case + Development, PM (17:00 - 18:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A444 Roanne Ringway - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Pedestrian Crossing	1 - Coton Road - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - A444 Vicarage Street - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - A444 Roanne Ringway - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

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	6.61	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
D11	Ref Case + Development	PM (17:00 - 18:00)	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 - Coton Road		ONE HOUR	✓	203	100.000
2 - A444 Vicarage Street		ONE HOUR	✓	1311	100.000
3 - A444 Coton Road		ONE HOUR	✓	1268	100.000
4 - A444 Roanne Ringway		ONE HOUR	✓	577	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Coton Road	[ONEHOUR]	0.00
2 - A444 Vicarage Street	[ONEHOUR]	0.00
3 - A444 Coton Road		
4 - A444 Roanne Ringway	[ONEHOUR]	0.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Coton Road	2 - A444 Vicarage Street	3 - A444 Coton Road	4 - A444 Roanne Ringway
From	1 - Coton Road	0	62	59	82
	2 - A444 Vicarage Street	34	66	939	272
	3 - A444 Coton Road	39	774	56	399
	4 - A444 Roanne Ringway	21	170	386	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Coton Road	2 - A444 Vicarage Street	3 - A444 Coton Road	4 - A444 Roanne Ringway
From	1 - Coton Road	0	1	2	0
	2 - A444 Vicarage Street	1	0	2	1
	3 - A444 Coton Road	2	1	0	5
	4 - A444 Roanne Ringway	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 - Coton Road	0.27	5.93	0.4	A	186	279
2 - A444 Vicarage Street	0.77	8.57	3.4	A	1203	1804
3 - A444 Coton Road	0.68	5.60	2.1	A	1164	1745
4 - A444 Roanne Ringway	0.45	4.63	0.8	A	529	794

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	153	38	1090	0.00	1158	0.132	152	71	0.0	0.2	3.578	A
2 - A444 Vicarage Street	987	247	437	0.00	2007	0.492	983	804	0.0	1.0	3.502	A
3 - A444 Coton Road	955	239	340		2156	0.443	951	1080	0.0	0.8	2.980	A
4 - A444 Roanne Ringway	434	109	727	0.00	1644	0.264	433	565	0.0	0.4	2.969	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	182	46	1304	0.00	1020	0.179	182	84	0.2	0.2	4.296	A
2 - A444 Vicarage Street	1179	295	523	0.00	1946	0.605	1176	962	1.0	1.5	4.662	A
3 - A444 Coton Road	1140	285	407		2107	0.541	1138	1292	0.8	1.2	3.709	A
4 - A444 Roanne Ringway	519	130	870	0.00	1547	0.335	518	676	0.4	0.5	3.497	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	224	56	1595	0.00	833	0.268	223	103	0.2	0.4	5.901	A
2 - A444 Vicarage Street	1443	361	640	0.00	1864	0.775	1436	1177	1.5	3.3	8.287	A
3 - A444 Coton Road	1396	349	498		2041	0.684	1392	1579	1.2	2.1	5.518	A
4 - A444 Roanne Ringway	635	159	1064	0.00	1415	0.449	634	826	0.5	0.8	4.600	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	224	56	1599	0.00	830	0.269	223	103	0.4	0.4	5.935	A
2 - A444 Vicarage Street	1443	361	642	0.00	1863	0.775	1443	1180	3.3	3.4	8.566	A
3 - A444 Coton Road	1396	349	500		2039	0.685	1396	1585	2.1	2.1	5.595	A
4 - A444 Roanne Ringway	635	159	1067	0.00	1413	0.450	635	829	0.8	0.8	4.626	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	182	46	1309	0.00	1016	0.180	183	85	0.4	0.2	4.325	A
2 - A444 Vicarage Street	1179	295	525	0.00	1945	0.606	1186	967	3.4	1.6	4.785	A
3 - A444 Coton Road	1140	285	410		2105	0.542	1144	1301	2.1	1.2	3.759	A
4 - A444 Roanne Ringway	519	130	874	0.00	1544	0.336	520	680	0.8	0.5	3.521	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	153	38	1095	0.00	1154	0.132	153	71	0.2	0.2	3.595	A
2 - A444 Vicarage Street	987	247	440	0.00	2006	0.492	989	808	1.6	1.0	3.551	A
3 - A444 Coton Road	955	239	343		2155	0.443	956	1086	1.2	0.8	3.006	A
4 - A444 Roanne Ringway	434	109	731	0.00	1641	0.265	435	568	0.5	0.4	2.985	A

Ref Case + Development, PM (18:00 - 19:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - A444 Roanne Ringway - 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	5.63	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
D12	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	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 - Coton Road		ONE HOUR	✓	100	100.000
2 - A444 Vicarage Street		ONE HOUR	✓	1180	100.000
3 - A444 Coton Road		ONE HOUR	✓	1247	100.000
4 - A444 Roanne Ringway		ONE HOUR	✓	569	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Coton Road	[ONEHOUR]	60.00
2 - A444 Vicarage Street	[ONEHOUR]	60.00
3 - A444 Coton Road		
4 - A444 Roanne Ringway	[ONEHOUR]	60.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Coton Road	2 - A444 Vicarage Street	3 - A444 Coton Road	4 - A444 Roanne Ringway
From	1 - Coton Road	0	33	24	43
	2 - A444 Vicarage Street	25	46	844	265
	3 - A444 Coton Road	34	736	45	432
	4 - A444 Roanne Ringway	16	172	381	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Coton Road	2 - A444 Vicarage Street	3 - A444 Coton Road	4 - A444 Roanne Ringway
From	1 - Coton Road	0	0	2	0
	2 - A444 Vicarage Street	2	0	2	0
	3 - A444 Coton Road	2	1	0	4
	4 - A444 Roanne Ringway	0	0	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 - Coton Road	0.14	5.25	0.2	A	92	138
2 - A444 Vicarage Street	0.71	6.76	2.4	A	1083	1624
3 - A444 Coton Road	0.65	4.91	1.9	A	1144	1716
4 - A444 Roanne Ringway	0.46	4.91	0.8	A	522	783

Main Results for each time segment

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	75	19	1036	45.17	1104	0.068	75	56	0.0	0.1	3.499	A
2 - A444 Vicarage Street	888	222	370	45.17	1912	0.465	885	741	0.0	0.9	3.495	A
3 - A444 Coton Road	939	235	284		2203	0.426	936	971	0.0	0.7	2.834	A
4 - A444 Roanne Ringway	428	107	665	45.17	1567	0.273	427	555	0.0	0.4	3.152	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	90	22	1239	53.94	971	0.093	90	67	0.1	0.1	4.085	A
2 - A444 Vicarage Street	1061	265	443	53.94	1870	0.567	1059	886	0.9	1.3	4.432	A
3 - A444 Coton Road	1121	280	340		2162	0.518	1120	1162	0.7	1.1	3.447	A
4 - A444 Roanne Ringway	512	128	796	53.94	1477	0.346	511	664	0.4	0.5	3.726	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	110	28	1516	66.06	796	0.138	110	82	0.1	0.2	5.244	A
2 - A444 Vicarage Street	1299	325	542	66.06	1823	0.713	1295	1084	1.3	2.4	6.757	A
3 - A444 Coton Road	1373	343	416		2107	0.652	1370	1420	1.1	1.8	4.864	A
4 - A444 Roanne Ringway	626	157	973	66.06	1357	0.462	625	813	0.5	0.8	4.913	A

18:30 - 18:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	110	28	1519	66.06	796	0.138	110	83	0.2	0.2	5.248	A
2 - A444 Vicarage Street	1299	325	543	66.06	1852	0.702	1299	1087	2.4	2.4	6.522	A
3 - A444 Coton Road	1373	343	417		2106	0.652	1373	1425	1.8	1.9	4.911	A
4 - A444 Roanne Ringway	626	157	975	66.06	1364	0.459	626	815	0.8	0.8	4.882	A

18:45 - 19:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Coton Road	90	22	1244	53.94	970	0.093	90	68	0.2	0.1	4.093	A
2 - A444 Vicarage Street	1061	265	444	53.94	1903	0.557	1065	890	2.4	1.3	4.320	A
3 - A444 Coton Road	1121	280	342		2161	0.519	1124	1167	1.9	1.1	3.483	A
4 - A444 Roanne Ringway	512	128	799	53.94	1486	0.344	513	667	0.8	0.5	3.704	A

19:00 - 19:15

Arm	Total Demand	Junction Arrival	Circulating flow (Veh/hr)	Pedestrian demand	Capacity (Veh/hr	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue	End queue	Delay (s)	Unsignalised level of service

	(Veh/hr)	s (Veh)		(Ped/hr)	)			(Veh/hr)	(Veh)	(Veh)		
1 - Coton Road	75	19	1040	45.17	1103	0.068	75	57	0.1	0.1	3.505	A
2 - A444 Vicarage Street	888	222	372	45.17	1935	0.459	890	744	1.3	0.9	3.451	A
3 - A444 Coton Road	939	235	286		2202	0.426	940	976	1.1	0.7	2.857	A
4 - A444 Roanne Ringway	428	107	668	45.17	1576	0.272	429	558	0.5	0.4	3.142	A

Appendix 19

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: 17059 - A444-Church Street.j9
Path: P:\17 jobs\059 MIRA - Southern Manufacturing Sector\Technical Assessments\Modelling - July 2022
Report generation date: 14/07/2022 15:16:24

»Ref Case, AM (07:00 - 08:00)
»Ref Case, AM (08:00 - 09:00)
»Ref Case, AM (09:00 - 10:00)
»Ref Case, PM (16:00 - 17:00)
»Ref Case, PM (17:00 - 18:00)
»Ref Case, PM (18:00 - 19:00)
»Ref Case + Development, AM (07:00 - 08:00)
»Ref Case + Development, AM (08:00 - 09:00)
»Ref Case + Development, AM (09:00 - 10:00)
»Ref Case + Development, PM (16:00 - 17:00)
»Ref Case + Development, PM (17:00 - 18:00)
»Ref Case + Development, PM (18:00 - 19:00)

Summary of junction performance

	AM (07:00 - 08:00)					AM (08:00 - 09:00)					AM (09:00 - 10:00)					PM (16:00 - 17:00)					PM (17:00 - 18:00)					PM (18:00 - 19:00)				
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
Ref Case																														
1 - Church Street (North)	0.0	0.00	0.00	A	8.53	0.0	0.00	0.00	A	18.46	0.0	0.00	0.00	A	10.29	0.0	0.00	0.00	A	8.52	0.0	0.00	0.00	A	8.07	0.0	0.00	0.00	A	5.91
2 - A444 Vicarage Street (North-East)	4.3	11.90	0.82	B		12.0	29.20	0.94	D		4.8	12.83	0.83	B		3.7	10.13	0.79	B		3.0	8.46	0.76	A		2.0	6.14	0.67	A	
3 - Church Street (South)	0.7	5.77	0.41	A		2.5	13.29	0.72	B		2.3	11.44	0.71	B		1.8	8.81	0.65	A		1.9	9.10	0.66	A		1.1	6.23	0.53	A	
4 - A444 Vicarage Street (South-West)	0.8	3.95	0.44	A		1.6	5.44	0.61	A		2.0	6.36	0.67	A		2.0	6.40	0.67	A		2.2	6.93	0.69	A		1.6	5.45	0.62	A	
Ref Case + Development																														
1 - Church Street (North)	0.0	0.00	0.00	A	7.96	0.0	0.00	0.00	A	24.21	0.0	0.00	0.00	A	12.03	0.0	0.00	0.00	A	10.48	0.0	0.00	0.00	A	9.03	0.0	0.00	0.00	A	6.40
2 - A444 Vicarage Street (North-East)	4.1	10.97	0.81	B		17.1	40.19	0.96	E		5.8	15.31	0.86	C		5.3	13.68	0.85	B		3.8	10.02	0.79	B		2.3	6.83	0.70	A	
3 - Church Street (South)	0.8	6.22	0.44	A		3.0	15.53	0.76	C		2.7	13.32	0.74	B		2.1	10.23	0.68	B		2.2	10.13	0.69	B		1.2	6.70	0.55	A	
4 - A444 Vicarage Street (South-West)	0.8	3.54	0.44	A		2.0	6.31	0.66	A		2.3	7.16	0.70	A		2.1	6.60	0.68	A		2.3	7.10	0.70	A		1.7	5.73	0.64	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. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	24/02/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mtp\MTPGeneral
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	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D2	Ref Case	AM (08:00 - 09:00)	ONE HOUR	06:45	08:15	15	✓
D3	Ref Case	AM (09:00 - 10:00)	ONE HOUR	06:45	08:15	15	✓
D4	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D5	Ref Case	PM (17:00 - 18:00)	ONE HOUR	15:45	17:15	15	✓
D6	Ref Case	PM (18:00 - 19:00)	ONE HOUR	15:45	17:15	15	✓
D7	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D8	Ref Case + Development	AM (08:00 - 09:00)	ONE HOUR	06:45	08:15	15	✓
D9	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	06:45	08:15	15	✓
D10	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D11	Ref Case + Development	PM (17:00 - 18:00)	ONE HOUR	15:45	17:15	15	✓
D12	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	15:45	17:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Ref Case, AM (07:00 - 08:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Church Street (South) - 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	8.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Church Street (North)	
2	A444 Vicarage Street (North-East)	
3	Church Street (South)	
4	A444 Vicarage Street (South-West)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Church Street (North)	3.80	5.10	3.5	25.0	48.0	21.0	
2 - A444 Vicarage Street (North-East)	6.30	7.90	3.1	15.0	48.0	42.0	
3 - Church Street (South)	4.30	6.00	55.0	20.0	48.0	18.0	
4 - A444 Vicarage Street (South-West)	6.50	7.30	1.1	18.0	48.0	39.0	

Pelican/Puffin Crossings

Arm	Space between crossing and junc. entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
1 - Church Street (North)	3.00	3.00	2.90	1.00	6.00	6.00	7.00
2 - A444 Vicarage Street (North-East)	2.00	3.00	2.90	1.00	6.00	6.00	7.00
4 - A444 Vicarage Street (South-West)	5.00	3.00	2.90	1.00	6.00	6.00	7.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Church Street (North)	0.568	1385

2 - A444 Vicarage Street (North-East)	0.652	1971
3 - Church Street (South)	0.657	1845
4 - A444 Vicarage Street (South-West)	0.658	1967

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	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 - Church Street (North)		ONE HOUR	✓	0	100.000
2 - A444 Vicarage Street (North-East)		ONE HOUR	✓	1223	100.000
3 - Church Street (South)		ONE HOUR	✓	398	100.000
4 - A444 Vicarage Street (South-West)		ONE HOUR	✓	659	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Church Street (North)	[ONEHOUR]	60.00
2 - A444 Vicarage Street (North-East)	[ONEHOUR]	60.00
3 - Church Street (South)		
4 - A444 Vicarage Street (South-West)	[ONEHOUR]	60.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Church Street (North)	**2 - A444 Vicarage Street (North-East)**	**3 - Church Street (South)**	**4 - A444 Vicarage Street (South-West)**
From	**1 - Church Street (North)**	0	0	0	0
	2 - A444 Vicarage Street (North-East)	2	0	244	977
	3 - Church Street (South)	10	156	0	232
	4 - A444 Vicarage Street (South-West)	42	356	224	37

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Church Street (North)	2 - A444 Vicarage Street (North-East)	3 - Church Street (South)	4 - A444 Vicarage Street (South-West)
From	1 - Church Street (North)	0	0	0	0
	2 - A444 Vicarage Street (North-East)	0	0	5	2
	3 - Church Street (South)	4	5	0	2
	4 - A444 Vicarage Street (South-West)	1	3	1	2

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 - Church Street (North)	0.00	0.00	0.0	A	0	0
2 - A444 Vicarage Street (North-East)	0.82	11.90	4.3	B	1122	1683
3 - Church Street (South)	0.41	5.77	0.7	A	365	548
4 - A444 Vicarage Street (South-West)	0.44	3.95	0.8	A	605	907

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	580	45.17	962	0.000	0	41	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	921	230	196	45.17	1674	0.550	916	384	0.0	1.2	4.719	A
3 - Church Street (South)	300	75	761		1294	0.232	298	351	0.0	0.3	3.611	A
4 - A444 Vicarage Street (South-West)	496	124	126	45.17	1701	0.292	494	933	0.0	0.4	2.980	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	694	53.94	887	0.000	0	48	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1099	275	234	53.94	1674	0.657	1097	460	1.2	1.9	6.207	A
3 - Church Street (South)	358	89	911		1196	0.299	357	420	0.3	0.4	4.287	A

4 - A444 Vicarage Street (South-West)	592	148	151	53.94	1674	0.354	592	1118	0.4	0.5	3.324	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	850	66.06	788	0.000	0	59	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1347	337	287	66.06	1647	0.817	1337	563	1.9	4.2	11.283	B
3 - Church Street (South)	438	110	1111		1067	0.411	437	513	0.4	0.7	5.711	A
4 - A444 Vicarage Street (South-West)	726	181	185	66.06	1635	0.444	725	1364	0.5	0.8	3.948	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	851	66.06	788	0.000	0	59	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1347	337	287	66.06	1647	0.818	1346	564	4.2	4.3	11.899	B
3 - Church Street (South)	438	110	1118		1062	0.413	438	515	0.7	0.7	5.771	A
4 - A444 Vicarage Street (South-West)	726	181	185	66.06	1642	0.442	726	1371	0.8	0.8	3.928	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	696	53.94	886	0.000	0	49	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1099	275	235	53.94	1693	0.650	1109	461	4.3	1.9	6.273	A
3 - Church Street (South)	358	89	921		1190	0.301	359	423	0.7	0.4	4.339	A
4 - A444 Vicarage Street (South-West)	592	148	151	53.94	1683	0.352	593	1129	0.8	0.5	3.307	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	583	45.17	960	0.000	0	41	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	921	230	197	45.17	1710	0.538	924	386	1.9	1.2	4.591	A
3 - Church Street (South)	300	75	767		1290	0.232	300	353	0.4	0.3	3.641	A

4 - A444 Vicarage Street (South-West)	496	124	127	45.17	1711	0.290	497	941	0.5	0.4	2.964	A

Ref Case, AM (08:00 - 09:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Church Street (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Pedestrian Crossing	1 - Church Street (North) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - A444 Vicarage Street (North-East) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - A444 Vicarage Street (South-West) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

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	18.46	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
D2	Ref Case	AM (08:00 - 09:00)	ONE HOUR	06:45	08:15	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 - Church Street (North)		ONE HOUR	✓	0	100.000
2 - A444 Vicarage Street (North-East)		ONE HOUR	✓	1436	100.000
3 - Church Street (South)		ONE HOUR	✓	640	100.000
4 - A444 Vicarage Street (South-West)		ONE HOUR	✓	950	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Church Street (North)	[ONEHOUR]	1.00
2 - A444 Vicarage Street (North-East)	[ONEHOUR]	1.00
3 - Church Street (South)		
4 - A444 Vicarage Street (South-West)	[ONEHOUR]	1.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Church Street (North)	2 - A444 Vicarage Street (North-East)	3 - Church Street (South)	4 - A444 Vicarage Street (South-West)
From	1 - Church Street (North)	0	0	0	0
	2 - A444 Vicarage Street (North-East)	2	0	342	1092
	3 - Church Street (South)	16	295	0	329
	4 - A444 Vicarage Street (South-West)	55	585	255	55

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Church Street (North)	2 - A444 Vicarage Street (North-East)	3 - Church Street (South)	4 - A444 Vicarage Street (South-West)
From	1 - Church Street (North)	0	0	0	0
	2 - A444 Vicarage Street (North-East)	0	0	5	3
	3 - Church Street (South)	1	2	0	2
	4 - A444 Vicarage Street (South-West)	1	2	1	2

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 - Church Street (North)	0.00	0.00	0.0	A	0	0
2 - A444 Vicarage Street (North-East)	0.94	29.20	12.0	D	1318	1977
3 - Church Street (South)	0.72	13.29	2.5	B	587	881
4 - A444 Vicarage Street (South-West)	0.61	5.44	1.6	A	872	1308

Main Results for each time segment

06:45 - 07:00

Arm	Total Dema	Junction	Circulating flow	Pedestrian	Capacity	RFC	Throughput	Throughput (exit	Start	End que	Delay	Unsignalised level

	nd (Veh/hr)	Arrivals (Veh)	(Veh/hr)	demand (Ped/hr)	(Veh/hr)		(Veh/hr)	side) (Veh/hr)	queue (Veh)	ue (Veh)	(s)	of service
1 - Church Street (North)	0	0	892	0.00	869	0.000	0	55	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1081	270	233	0.00	1756	0.616	1075	660	0.0	1.6	5.236	A
3 - Church Street (South)	482	120	860		1239	0.389	479	447	0.0	0.6	4.722	A
4 - A444 Vicarage Street (South-West)	715	179	234	0.00	1781	0.402	713	1105	0.0	0.7	3.362	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1068	0.00	767	0.000	0	66	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1291	323	278	0.00	1727	0.748	1286	790	1.6	2.9	8.065	A
3 - Church Street (South)	575	144	1029		1127	0.510	574	535	0.6	1.0	6.485	A
4 - A444 Vicarage Street (South-West)	854	214	281	0.00	1750	0.488	853	1322	0.7	0.9	4.007	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1305	0.00	630	0.000	0	80	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1581	395	341	0.00	1687	0.937	1551	965	2.9	10.5	22.524	C
3 - Church Street (South)	705	176	1242		986	0.714	699	649	1.0	2.4	12.313	B
4 - A444 Vicarage Street (South-West)	1046	261	342	0.00	1710	0.612	1044	1599	0.9	1.6	5.385	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1310	0.00	627	0.000	0	80	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1581	395	341	0.00	1687	0.937	1575	969	10.5	12.0	29.198	D
3 - Church Street (South)	705	176	1260		974	0.724	704	656	2.4	2.5	13.292	B
4 - A444 Vicarage Street (South-West)	1046	261	344	0.00	1708	0.612	1046	1620	1.6	1.6	5.436	A

07:45 - 08:00

Arm	Total Dema	Junction	Circulating flow	Pedestrian	Capacity	RFC	Throughput	Throughput (exit	Start	End que	Delay	Unsignalised level

	nd (Veh/hr)	Arrivals (Veh)	(Veh/hr)	demand (Ped/hr)	(Veh/hr)		(Veh/hr)	side) (Veh/hr)	queue (Veh)	ue (Veh)	(s)	of service
1 - Church Street (North)	0	0	1075	0.00	763	0.000	0	66	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1291	323	279	0.00	1726	0.748	1327	795	12.0	3.1	9.765	A
3 - Church Street (South)	575	144	1060		1107	0.520	581	546	2.5	1.1	6.923	A
4 - A444 Vicarage Street (South-West)	854	214	284	0.00	1748	0.489	856	1357	1.6	1.0	4.051	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	898	0.00	865	0.000	0	55	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1081	270	234	0.00	1755	0.616	1087	664	3.1	1.6	5.430	A
3 - Church Street (South)	482	120	870		1233	0.391	484	451	1.1	0.6	4.814	A
4 - A444 Vicarage Street (South-West)	715	179	237	0.00	1779	0.402	716	1117	1.0	0.7	3.390	A

Ref Case, AM (09:00 - 10:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Church Street (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Pedestrian Crossing	1 - Church Street (North) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - A444 Vicarage Street (North-East) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - A444 Vicarage Street (South-West) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

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	10.29	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	Ref Case	AM (09:00 - 10:00)	ONE HOUR	06:45	08:15	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 - Church Street (North)		ONE HOUR	✓	0	100.000
2 - A444 Vicarage Street (North-East)		ONE HOUR	✓	1257	100.000
3 - Church Street (South)		ONE HOUR	✓	684	100.000
4 - A444 Vicarage Street (South-West)		ONE HOUR	✓	1033	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Church Street (North)	[ONEHOUR]	1.00
2 - A444 Vicarage Street (North-East)	[ONEHOUR]	1.00
3 - Church Street (South)		
4 - A444 Vicarage Street (South-West)	[ONEHOUR]	1.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Church Street (North)	2 - A444 Vicarage Street (North-East)	3 - Church Street (South)	4 - A444 Vicarage Street (South-West)
From	1 - Church Street (North)	0	0	0	0
	2 - A444 Vicarage Street (North-East)	1	0	323	933
	3 - Church Street (South)	13	305	0	366
	4 - A444 Vicarage Street (South-West)	50	655	259	69

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Church Street (North)	2 - A444 Vicarage Street (North-East)	3 - Church Street (South)	4 - A444 Vicarage Street (South-West)
From	1 - Church Street (North)	0	0	0	0
	2 - A444 Vicarage Street (North-East)	0	0	5	4
	3 - Church Street (South)	1	3	0	2
	4 - A444 Vicarage Street (South-West)	0	2	1	1

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 - Church Street (North)	0.00	0.00	0.0	A	0	0
2 - A444 Vicarage Street (North-East)	0.83	12.83	4.8	B	1153	1730
3 - Church Street (South)	0.71	11.44	2.3	B	628	941
4 - A444 Vicarage Street (South-West)	0.67	6.36	2.0	A	948	1422

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	966	0.00	825	0.000	0	48	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	946	237	246	0.00	1735	0.546	942	720	0.0	1.2	4.512	A
3 - Church Street (South)	515	129	751		1302	0.396	512	436	0.0	0.6	4.547	A
4 - A444 Vicarage Street (South-West)	778	194	239	0.00	1778	0.438	775	1025	0.0	0.8	3.579	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1156	0.00	715	0.000	0	57	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1130	283	294	0.00	1704	0.663	1127	861	1.2	1.9	6.205	A
3 - Church Street (South)	615	154	899		1203	0.511	613	522	0.6	1.0	6.089	A

4 - A444 Vicarage Street (South-West)	929	232	286	0.00	1746	0.532	927	1227	0.8	1.1	4.389	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1413	0.00	566	0.000	0	70	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1384	346	360	0.00	1663	0.832	1373	1053	1.9	4.6	12.014	B
3 - Church Street (South)	753	188	1096		1072	0.702	748	637	1.0	2.3	10.948	B
4 - A444 Vicarage Street (South-West)	1137	284	349	0.00	1704	0.667	1134	1495	1.1	2.0	6.274	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1418	0.00	563	0.000	0	70	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1384	346	361	0.00	1662	0.833	1383	1057	4.6	4.8	12.828	B
3 - Church Street (South)	753	188	1104		1067	0.706	753	641	2.3	2.3	11.435	B
4 - A444 Vicarage Street (South-West)	1137	284	351	0.00	1703	0.668	1137	1506	2.0	2.0	6.362	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1163	0.00	711	0.000	0	58	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1130	283	296	0.00	1703	0.663	1141	867	4.8	2.0	6.527	A
3 - Church Street (South)	615	154	910		1196	0.514	620	527	2.3	1.1	6.304	A
4 - A444 Vicarage Street (South-West)	929	232	289	0.00	1744	0.532	932	1241	2.0	1.2	4.452	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	972	0.00	822	0.000	0	48	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	946	237	247	0.00	1734	0.546	950	724	2.0	1.2	4.607	A
3 - Church Street (South)	515	129	758		1297	0.397	517	439	1.1	0.7	4.619	A

4 - A444 Vicarage Street (South-West)	778	194	241	0.00	1776	0.438	779	1033	1.2	0.8	3.617	A

Ref Case, PM (16:00 - 17:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Church Street (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Pedestrian Crossing	1 - Church Street (North) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - A444 Vicarage Street (North-East) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - A444 Vicarage Street (South-West) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

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	8.52	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	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 - Church Street (North)		ONE HOUR	✓	0	100.000
2 - A444 Vicarage Street (North-East)		ONE HOUR	✓	1232	100.000
3 - Church Street (South)		ONE HOUR	✓	684	100.000
4 - A444 Vicarage Street (South-West)		ONE HOUR	✓	1045	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Church Street (North)	[ONEHOUR]	0.00
2 - A444 Vicarage Street (North-East)	[ONEHOUR]	0.00
3 - Church Street (South)		
4 - A444 Vicarage Street (South-West)	[ONEHOUR]	0.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Church Street (North)	2 - A444 Vicarage Street (North-East)	3 - Church Street (South)	4 - A444 Vicarage Street (South-West)
From	1 - Church Street (North)	0	0	0	0
	2 - A444 Vicarage Street (North-East)	2	0	380	850
	3 - Church Street (South)	21	306	0	357
	4 - A444 Vicarage Street (South-West)	71	667	253	54

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Church Street (North)	2 - A444 Vicarage Street (North-East)	3 - Church Street (South)	4 - A444 Vicarage Street (South-West)
From	1 - Church Street (North)	0	0	0	0
	2 - A444 Vicarage Street (North-East)	0	0	3	2
	3 - Church Street (South)	0	2	0	1
	4 - A444 Vicarage Street (South-West)	0	1	0	1

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 - Church Street (North)	0.00	0.00	0.0	A	0	0
2 - A444 Vicarage Street (North-East)	0.79	10.13	3.7	B	1131	1696
3 - Church Street (South)	0.65	8.81	1.8	A	628	941
4 - A444 Vicarage Street (South-West)	0.67	6.40	2.0	A	959	1438

Main Results for each time segment

15:45 - 16:00

Arm	Total Dema	Junction	Circulating flow	Pedestrian	Capacity	RFC	Throughput	Throughput (exit	Start	End que	Delay	Unsignalised level

	nd (Veh/hr)	Arrivals (Veh)	(Veh/hr)	demand (Ped/hr)	(Veh/hr)		(Veh/hr)	side) (Veh/hr)	queue (Veh)	ue (Veh)	(s)	of service
1 - Church Street (North)	0	0	960	0.00	834	0.000	0	70	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	928	232	230	0.00	1779	0.521	923	729	0.0	1.1	4.185	A
3 - Church Street (South)	515	129	679		1371	0.376	513	474	0.0	0.6	4.180	A
4 - A444 Vicarage Street (South-West)	787	197	247	0.00	1790	0.440	784	945	0.0	0.8	3.567	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1149	0.00	725	0.000	0	84	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1108	277	276	0.00	1750	0.633	1105	873	1.1	1.7	5.559	A
3 - Church Street (South)	615	154	813		1283	0.479	614	568	0.6	0.9	5.368	A
4 - A444 Vicarage Street (South-West)	939	235	295	0.00	1758	0.534	938	1131	0.8	1.1	4.383	A

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1405	0.00	578	0.000	0	103	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1356	339	337	0.00	1711	0.793	1349	1068	1.7	3.6	9.730	A
3 - Church Street (South)	753	188	992		1165	0.647	750	694	0.9	1.8	8.601	A
4 - A444 Vicarage Street (South-West)	1151	288	361	0.00	1714	0.671	1147	1381	1.1	2.0	6.309	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1409	0.00	576	0.000	0	103	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1356	339	338	0.00	1710	0.793	1356	1071	3.6	3.7	10.131	B
3 - Church Street (South)	753	188	997		1161	0.649	753	697	1.8	1.8	8.813	A
4 - A444 Vicarage Street (South-West)	1151	288	362	0.00	1713	0.672	1150	1388	2.0	2.0	6.396	A

16:45 - 17:00

Arm	Total Dema	Junction	Circulating flow	Pedestrian	Capacity	RFC	Throughput	Throughput (exit	Start	End que	Delay	Unsignalised level

	nd (Veh/hr)	Arrivals (Veh)	(Veh/hr)	demand (Ped/hr)	(Veh/hr)		(Veh/hr)	side) (Veh/hr)	queue (Veh)	ue (Veh)	(s)	of service
1 - Church Street (North)	0	0	1155	0.00	721	0.000	0	85	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1108	277	277	0.00	1749	0.633	1115	878	3.7	1.8	5.750	A
3 - Church Street (South)	615	154	820		1278	0.481	618	572	1.8	0.9	5.487	A
4 - A444 Vicarage Street (South-West)	939	235	297	0.00	1756	0.535	943	1141	2.0	1.2	4.444	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	966	0.00	830	0.000	0	71	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	928	232	232	0.00	1778	0.522	930	734	1.8	1.1	4.257	A
3 - Church Street (South)	515	129	684		1368	0.376	516	478	0.9	0.6	4.232	A
4 - A444 Vicarage Street (South-West)	787	197	248	0.00	1789	0.440	788	952	1.2	0.8	3.605	A

Ref Case, PM (17:00 - 18:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Church Street (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Pedestrian Crossing	1 - Church Street (North) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - A444 Vicarage Street (North-East) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - A444 Vicarage Street (South-West) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

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	8.07	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
D5	Ref Case	PM (17:00 - 18:00)	ONE HOUR	15:45	17:15	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 - Church Street (North)		ONE HOUR	✓	0	100.000
2 - A444 Vicarage Street (North-East)		ONE HOUR	✓	1192	100.000
3 - Church Street (South)		ONE HOUR	✓	711	100.000
4 - A444 Vicarage Street (South-West)		ONE HOUR	✓	1055	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Church Street (North)	[ONEHOUR]	0.00
2 - A444 Vicarage Street (North-East)	[ONEHOUR]	0.00
3 - Church Street (South)		
4 - A444 Vicarage Street (South-West)	[ONEHOUR]	0.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Church Street (North)	2 - A444 Vicarage Street (North-East)	3 - Church Street (South)	4 - A444 Vicarage Street (South-West)
From	1 - Church Street (North)	0	0	0	0
	2 - A444 Vicarage Street (North-East)	2	0	355	835
	3 - Church Street (South)	29	357	0	325
	4 - A444 Vicarage Street (South-West)	80	706	224	45

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Church Street (North)	2 - A444 Vicarage Street (North-East)	3 - Church Street (South)	4 - A444 Vicarage Street (South-West)
From	1 - Church Street (North)	0	0	0	0
	2 - A444 Vicarage Street (North-East)	0	0	3	2
	3 - Church Street (South)	0	2	0	1
	4 - A444 Vicarage Street (South-West)	0	0	0	1

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 - Church Street (North)	0.00	0.00	0.0	A	0	0
2 - A444 Vicarage Street (North-East)	0.76	8.46	3.0	A	1094	1641
3 - Church Street (South)	0.66	9.10	1.9	A	652	979
4 - A444 Vicarage Street (South-West)	0.69	6.93	2.2	A	968	1452

Main Results for each time segment

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	999	0.00	814	0.000	0	83	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	897	224	202	0.00	1798	0.499	893	797	0.0	1.0	3.964	A
3 - Church Street (South)	535	134	661		1382	0.387	533	434	0.0	0.6	4.225	A
4 - A444 Vicarage Street (South-West)	794	199	291	0.00	1772	0.448	791	903	0.0	0.8	3.657	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1195	0.00	702	0.000	0	100	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1072	268	241	0.00	1772	0.605	1070	954	1.0	1.5	5.107	A
3 - Church Street (South)	639	160	791		1297	0.493	638	520	0.6	1.0	5.454	A

4 - A444 Vicarage Street (South-West)	948	237	348	0.00	1734	0.547	947	1081	0.8	1.2	4.566	A

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1461	0.00	550	0.000	0	122	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1312	328	295	0.00	1738	0.755	1307	1166	1.5	3.0	8.234	A
3 - Church Street (South)	783	196	967		1181	0.663	779	635	1.0	1.9	8.850	A
4 - A444 Vicarage Street (South-West)	1162	290	425	0.00	1682	0.691	1158	1321	1.2	2.2	6.812	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1466	0.00	547	0.000	0	122	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1312	328	296	0.00	1737	0.755	1312	1170	3.0	3.0	8.456	A
3 - Church Street (South)	783	196	971		1178	0.665	783	637	1.9	1.9	9.099	A
4 - A444 Vicarage Street (South-West)	1162	290	427	0.00	1681	0.691	1161	1327	2.2	2.2	6.927	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1203	0.00	697	0.000	0	100	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1072	268	243	0.00	1771	0.605	1078	960	3.0	1.6	5.231	A
3 - Church Street (South)	639	160	797		1293	0.494	643	523	1.9	1.0	5.575	A
4 - A444 Vicarage Street (South-West)	948	237	351	0.00	1732	0.548	952	1089	2.2	1.2	4.641	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1005	0.00	810	0.000	0	84	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	897	224	203	0.00	1797	0.499	900	802	1.6	1.0	4.023	A
3 - Church Street (South)	535	134	666		1380	0.388	537	437	1.0	0.6	4.279	A

4 - A444 Vicarage Street (South-West)	794	199	293	0.00	1771	0.449	796	909	1.2	0.8	3.701	A

Ref Case, PM (18:00 - 19:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Church Street (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Pedestrian Crossing	1 - Church Street (North) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - A444 Vicarage Street (North-East) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - A444 Vicarage Street (South-West) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

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	5.91	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
D6	Ref Case	PM (18:00 - 19:00)	ONE HOUR	15:45	17:15	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 - Church Street (North)		ONE HOUR	✓	0	100.000
2 - A444 Vicarage Street (North-East)		ONE HOUR	✓	1067	100.000
3 - Church Street (South)		ONE HOUR	✓	599	100.000
4 - A444 Vicarage Street (South-West)		ONE HOUR	✓	972	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Church Street (North)	[ONEHOUR]	0.00
2 - A444 Vicarage Street (North-East)	[ONEHOUR]	0.00
3 - Church Street (South)		
4 - A444 Vicarage Street (South-West)	[ONEHOUR]	0.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Church Street (North)	2 - A444 Vicarage Street (North-East)	3 - Church Street (South)	4 - A444 Vicarage Street (South-West)
From	1 - Church Street (North)	0	0	0	0
	2 - A444 Vicarage Street (North-East)	1	0	292	774
	3 - Church Street (South)	26	280	0	293
	4 - A444 Vicarage Street (South-West)	63	672	195	42

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Church Street (North)	2 - A444 Vicarage Street (North-East)	3 - Church Street (South)	4 - A444 Vicarage Street (South-West)
From	1 - Church Street (North)	0	0	0	0
	2 - A444 Vicarage Street (North-East)	0	0	3	2
	3 - Church Street (South)	1	1	0	0
	4 - A444 Vicarage Street (South-West)	0	1	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 - Church Street (North)	0.00	0.00	0.0	A	0	0
2 - A444 Vicarage Street (North-East)	0.67	6.14	2.0	A	979	1469
3 - Church Street (South)	0.53	6.23	1.1	A	550	824
4 - A444 Vicarage Street (South-West)	0.62	5.45	1.6	A	892	1338

Main Results for each time segment

15:45 - 16:00

Arm	Total Dema	Junction	Circulating flow	Pedestrian	Capacity	RFC	Throughput	Throughput (exit	Start	End que	Delay	Unsignalised level

	nd (Veh/hr)	Arrivals (Veh)	(Veh/hr)	demand (Ped/hr)	(Veh/hr)		(Veh/hr)	side) (Veh/hr)	queue (Veh)	ue (Veh)	(s)	of service
1 - Church Street (North)	0	0	892	0.00	874	0.000	0	67	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	803	201	178	0.00	1813	0.443	800	714	0.0	0.8	3.543	A
3 - Church Street (South)	451	113	613		1428	0.316	449	365	0.0	0.5	3.672	A
4 - A444 Vicarage Street (South-West)	732	183	230	0.00	1802	0.406	729	832	0.0	0.7	3.346	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1067	0.00	773	0.000	0	81	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	959	240	213	0.00	1791	0.536	958	855	0.8	1.1	4.313	A
3 - Church Street (South)	538	135	733		1348	0.400	538	437	0.5	0.7	4.440	A
4 - A444 Vicarage Street (South-West)	874	218	276	0.00	1772	0.493	873	996	0.7	1.0	3.997	A

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1306	0.00	637	0.000	0	99	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1175	294	260	0.00	1761	0.667	1171	1046	1.1	2.0	6.075	A
3 - Church Street (South)	660	165	897		1239	0.532	658	535	0.7	1.1	6.176	A
4 - A444 Vicarage Street (South-West)	1070	268	337	0.00	1732	0.618	1068	1218	1.0	1.6	5.401	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1309	0.00	635	0.000	0	99	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1175	294	261	0.00	1760	0.667	1175	1048	2.0	2.0	6.144	A
3 - Church Street (South)	660	165	899		1237	0.533	659	536	1.1	1.1	6.232	A
4 - A444 Vicarage Street (South-West)	1070	268	338	0.00	1731	0.618	1070	1221	1.6	1.6	5.446	A

16:45 - 17:00

Arm	Total Dema	Junction	Circulating flow	Pedestrian	Capacity	RFC	Throughput	Throughput (exit	Start	End que	Delay	Unsignalised level

	nd (Veh/hr)	Arrivals (Veh)	(Veh/hr)	demand (Ped/hr)	(Veh/hr)		(Veh/hr)	side) (Veh/hr)	queue (Veh)	ue (Veh)	(s)	of service
1 - Church Street (North)	0	0	1072	0.00	771	0.000	0	81	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	959	240	214	0.00	1791	0.536	962	858	2.0	1.2	4.365	A
3 - Church Street (South)	538	135	737		1345	0.400	540	439	1.1	0.7	4.482	A
4 - A444 Vicarage Street (South-West)	874	218	277	0.00	1771	0.493	876	1000	1.6	1.0	4.034	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	897	0.00	871	0.000	0	68	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	803	201	179	0.00	1813	0.443	805	718	1.2	0.8	3.578	A
3 - Church Street (South)	451	113	616		1426	0.316	452	367	0.7	0.5	3.698	A
4 - A444 Vicarage Street (South-West)	732	183	232	0.00	1801	0.406	733	836	1.0	0.7	3.372	A

Ref Case + Development, AM (07:00 - 08:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Church Street (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Pedestrian Crossing	1 - Church Street (North) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - A444 Vicarage Street (North-East) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - A444 Vicarage Street (South-West) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

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	7.96	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	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 - Church Street (North)		ONE HOUR	✓	0	100.000
2 - A444 Vicarage Street (North-East)		ONE HOUR	✓	1265	100.000
3 - Church Street (South)		ONE HOUR	✓	409	100.000
4 - A444 Vicarage Street (South-West)		ONE HOUR	✓	714	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Church Street (North)	[ONEHOUR]	1.00
2 - A444 Vicarage Street (North-East)	[ONEHOUR]	1.00
3 - Church Street (South)		
4 - A444 Vicarage Street (South-West)	[ONEHOUR]	1.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Church Street (North)	2 - A444 Vicarage Street (North-East)	3 - Church Street (South)	4 - A444 Vicarage Street (South-West)
From	1 - Church Street (North)	0	0	0	0
	2 - A444 Vicarage Street (North-East)	2	0	250	1013
	3 - Church Street (South)	12	165	0	232
	4 - A444 Vicarage Street (South-West)	49	404	224	37

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Church Street (North)	2 - A444 Vicarage Street (North-East)	3 - Church Street (South)	4 - A444 Vicarage Street (South-West)
From	1 - Church Street (North)	0	0	0	0
	2 - A444 Vicarage Street (North-East)	0	0	6	3
	3 - Church Street (South)	4	5	0	2
	4 - A444 Vicarage Street (South-West)	1	2	1	2

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 - Church Street (North)	0.00	0.00	0.0	A	0	0
2 - A444 Vicarage Street (North-East)	0.81	10.97	4.1	B	1161	1741
3 - Church Street (South)	0.44	6.22	0.8	A	375	563
4 - A444 Vicarage Street (South-West)	0.44	3.54	0.8	A	655	983

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	623	0.00	1023	0.000	0	47	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	952	238	196	0.00	1778	0.536	948	427	0.0	1.1	4.316	A
3 - Church Street (South)	308	77	788		1271	0.242	307	355	0.0	0.3	3.729	A
4 - A444 Vicarage Street (South-West)	538	134	134	0.00	1845	0.291	536	961	0.0	0.4	2.746	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	745	0.00	951	0.000	0	57	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1137	284	234	0.00	1753	0.649	1135	511	1.1	1.8	5.794	A
3 - Church Street (South)	368	92	944		1169	0.315	367	425	0.3	0.5	4.486	A

4 - A444 Vicarage Street (South-West)	642	160	161	0.00	1827	0.351	641	1150	0.4	0.5	3.034	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	912	0.00	854	0.000	0	69	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1393	348	287	0.00	1720	0.810	1384	625	1.8	4.0	10.458	B
3 - Church Street (South)	450	113	1151		1033	0.436	449	520	0.5	0.8	6.152	A
4 - A444 Vicarage Street (South-West)	786	197	197	0.00	1803	0.436	785	1404	0.5	0.8	3.534	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	914	0.00	853	0.000	0	69	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1393	348	287	0.00	1719	0.810	1392	626	4.0	4.1	10.967	B
3 - Church Street (South)	450	113	1158		1029	0.438	450	522	0.8	0.8	6.223	A
4 - A444 Vicarage Street (South-West)	786	197	197	0.00	1802	0.436	786	1411	0.8	0.8	3.541	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	747	0.00	950	0.000	0	57	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1137	284	235	0.00	1753	0.649	1146	513	4.1	1.9	6.020	A
3 - Church Street (South)	368	92	953		1163	0.316	369	428	0.8	0.5	4.540	A
4 - A444 Vicarage Street (South-West)	642	160	161	0.00	1827	0.351	643	1160	0.8	0.5	3.042	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	626	0.00	1021	0.000	0	47	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	952	238	197	0.00	1777	0.536	955	429	1.9	1.2	4.395	A
3 - Church Street (South)	308	77	794		1267	0.243	308	358	0.5	0.3	3.757	A

4 - A444 Vicarage Street (South-West)	538	134	135	0.00	1845	0.291	538	968	0.5	0.4	2.756	A

Ref Case + Development, AM (08:00 - 09:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Church Street (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Pedestrian Crossing	1 - Church Street (North) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - A444 Vicarage Street (North-East) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - A444 Vicarage Street (South-West) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

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	24.21	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
D8	Ref Case + Development	AM (08:00 - 09:00)	ONE HOUR	06:45	08:15	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 - Church Street (North)		ONE HOUR	✓	0	100.000
2 - A444 Vicarage Street (North-East)		ONE HOUR	✓	1464	100.000
3 - Church Street (South)		ONE HOUR	✓	653	100.000

4 - A444 Vicarage Street (South-West)		ONE HOUR	✓	1023	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Church Street (North)	[ONEHOUR]	1.00
2 - A444 Vicarage Street (North-East)	[ONEHOUR]	1.00
3 - Church Street (South)		
4 - A444 Vicarage Street (South-West)	[ONEHOUR]	1.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Church Street (North)	2 - A444 Vicarage Street (North-East)	3 - Church Street (South)	4 - A444 Vicarage Street (South-West)
From	1 - Church Street (North)	0	0	0	0
	2 - A444 Vicarage Street (North-East)	2	0	347	1115
	3 - Church Street (South)	17	307	0	329
	4 - A444 Vicarage Street (South-West)	63	650	255	55

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Church Street (North)	2 - A444 Vicarage Street (North-East)	3 - Church Street (South)	4 - A444 Vicarage Street (South-West)
From	1 - Church Street (North)	0	0	0	0
	2 - A444 Vicarage Street (North-East)	0	0	6	4
	3 - Church Street (South)	1	3	0	2
	4 - A444 Vicarage Street (South-West)	1	2	1	2

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 - Church Street (North)	0.00	0.00	0.0	A	0	0
2 - A444 Vicarage Street (North-East)	0.96	40.19	17.1	E	1343	2015
3 - Church Street (South)	0.76	15.53	3.0	C	599	899
4 - A444 Vicarage Street (South-West)	0.66	6.31	2.0	A	939	1408

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	950	0.00	834	0.000	0	61	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1102	276	232	0.00	1739	0.634	1095	717	0.0	1.7	5.533	A
3 - Church Street (South)	492	123	877		1217	0.404	489	451	0.0	0.7	4.926	A
4 - A444 Vicarage Street (South-West)	770	193	244	0.00	1772	0.435	767	1122	0.0	0.8	3.571	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1137	0.00	726	0.000	0	74	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1316	329	278	0.00	1711	0.769	1310	859	1.7	3.2	8.857	A
3 - Church Street (South)	587	147	1049		1103	0.532	585	539	0.7	1.1	6.935	A
4 - A444 Vicarage Street (South-West)	920	230	292	0.00	1740	0.528	918	1342	0.8	1.1	4.372	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1389	0.00	579	0.000	0	90	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1612	403	340	0.00	1671	0.964	1569	1048	3.2	13.8	27.847	D
3 - Church Street (South)	719	180	1258		963	0.746	712	652	1.1	2.8	13.983	B
4 - A444 Vicarage Street (South-West)	1126	282	356	0.00	1698	0.663	1123	1615	1.1	1.9	6.222	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1394	0.00	576	0.000	0	90	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1612	403	341	0.00	1671	0.965	1599	1053	13.8	17.1	40.185	E
3 - Church Street (South)	719	180	1281		948	0.758	718	660	2.8	3.0	15.528	C
4 - A444 Vicarage Street (South-West)	1126	282	358	0.00	1696	0.664	1126	1640	1.9	2.0	6.312	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1145	0.00	721	0.000	0	74	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1316	329	280	0.00	1710	0.770	1370	866	17.1	3.5	12.188	B
3 - Church Street (South)	587	147	1095		1072	0.548	594	555	3.0	1.2	7.643	A
4 - A444 Vicarage Street (South-West)	920	230	297	0.00	1737	0.529	923	1393	2.0	1.1	4.436	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	956	0.00	830	0.000	0	62	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1102	276	234	0.00	1739	0.634	1109	722	3.5	1.8	5.780	A
3 - Church Street (South)	492	123	888		1210	0.406	494	455	1.2	0.7	5.041	A
4 - A444 Vicarage Street (South-West)	770	193	247	0.00	1771	0.435	772	1135	1.1	0.8	3.610	A

Ref Case + Development, AM (09:00 - 10:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Church Street (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Pedestrian Crossing	1 - Church Street (North) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - A444 Vicarage Street (North-East) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - A444 Vicarage Street (South-West) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

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	12.03	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
D9	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	06:45	08:15	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 - Church Street (North)		ONE HOUR	✓	0	100.000
2 - A444 Vicarage Street (North-East)		ONE HOUR	✓	1289	100.000
3 - Church Street (South)		ONE HOUR	✓	692	100.000
4 - A444 Vicarage Street (South-West)		ONE HOUR	✓	1081	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Church Street (North)	[ONEHOUR]	1.00
2 - A444 Vicarage Street (North-East)	[ONEHOUR]	1.00
3 - Church Street (South)		
4 - A444 Vicarage Street (South-West)	[ONEHOUR]	1.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Church Street (North)	**2 - A444 Vicarage Street (North-East)**	**3 - Church Street (South)**	**4 - A444 Vicarage Street (South-West)**
From	**1 - Church Street (North)**	0	0	0	0
	2 - A444 Vicarage Street (North-East)	1	0	327	961
	3 - Church Street (South)	14	312	0	366
	4 - A444 Vicarage Street (South-West)	56	697	259	69

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Church Street (North)	2 - A444 Vicarage Street (North-East)	3 - Church Street (South)	4 - A444 Vicarage Street (South-West)
From	1 - Church Street (North)	0	0	0	0
	2 - A444 Vicarage Street (North-East)	0	0	5	5
	3 - Church Street (South)	1	5	0	2
	4 - A444 Vicarage Street (South-West)	0	2	1	1

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 - Church Street (North)	0.00	0.00	0.0	A	0	0
2 - A444 Vicarage Street (North-East)	0.86	15.31	5.8	C	1183	1774
3 - Church Street (South)	0.74	13.32	2.7	B	635	952
4 - A444 Vicarage Street (South-West)	0.70	7.16	2.3	A	992	1488

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1002	0.00	801	0.000	0	53	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	970	243	246	0.00	1723	0.563	965	756	0.0	1.3	4.724	A
3 - Church Street (South)	521	130	772		1272	0.410	518	439	0.0	0.7	4.760	A
4 - A444 Vicarage Street (South-West)	814	203	245	0.00	1770	0.460	810	1046	0.0	0.8	3.738	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1200	0.00	686	0.000	0	64	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1159	290	294	0.00	1692	0.685	1155	905	1.3	2.1	6.664	A
3 - Church Street (South)	622	156	924		1171	0.531	620	526	0.7	1.1	6.521	A

4 - A444 Vicarage Street (South-West)	972	243	293	0.00	1738	0.559	970	1251	0.8	1.3	4.679	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1465	0.00	532	0.000	0	78	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1419	355	360	0.00	1651	0.860	1406	1105	2.1	5.5	13.950	B
3 - Church Street (South)	762	190	1125		1037	0.735	756	641	1.1	2.6	12.537	B
4 - A444 Vicarage Street (South-West)	1190	298	357	0.00	1694	0.702	1186	1523	1.3	2.3	7.023	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1472	0.00	528	0.000	0	78	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1419	355	361	0.00	1650	0.860	1418	1111	5.5	5.8	15.312	C
3 - Church Street (South)	762	190	1134		1031	0.739	761	645	2.6	2.7	13.320	B
4 - A444 Vicarage Street (South-West)	1190	298	360	0.00	1693	0.703	1190	1536	2.3	2.3	7.160	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1209	0.00	681	0.000	0	64	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1159	290	296	0.00	1691	0.685	1173	913	5.8	2.2	7.135	A
3 - Church Street (South)	622	156	938		1162	0.536	628	531	2.7	1.2	6.828	A
4 - A444 Vicarage Street (South-West)	972	243	297	0.00	1735	0.560	976	1269	2.3	1.3	4.767	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1009	0.00	797	0.000	0	54	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	970	243	247	0.00	1722	0.564	974	762	2.2	1.3	4.841	A
3 - Church Street (South)	521	130	779		1267	0.411	523	443	1.2	0.7	4.849	A

4 - A444 Vicarage Street (South-West)	814	203	247	0.00	1769	0.460	816	1055	1.3	0.9	3.781	A

Ref Case + Development, PM (16:00 - 17:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Church Street (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Pedestrian Crossing	1 - Church Street (North) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - A444 Vicarage Street (North-East) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - A444 Vicarage Street (South-West) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

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	10.48	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	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 - Church Street (North)		ONE HOUR	✓	0	100.000
2 - A444 Vicarage Street (North-East)		ONE HOUR	✓	1307	100.000
3 - Church Street (South)		ONE HOUR	✓	687	100.000

4 - A444 Vicarage Street (South-West)		ONE HOUR	✓	1058	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Church Street (North)	[ONEHOUR]	0.00
2 - A444 Vicarage Street (North-East)	[ONEHOUR]	0.00
3 - Church Street (South)		
4 - A444 Vicarage Street (South-West)	[ONEHOUR]	0.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Church Street (North)	2 - A444 Vicarage Street (North-East)	3 - Church Street (South)	4 - A444 Vicarage Street (South-West)
From	1 - Church Street (North)	0	0	0	0
	2 - A444 Vicarage Street (North-East)	3	0	390	914
	3 - Church Street (South)	22	308	0	357
	4 - A444 Vicarage Street (South-West)	74	677	253	54

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Church Street (North)	2 - A444 Vicarage Street (North-East)	3 - Church Street (South)	4 - A444 Vicarage Street (South-West)
From	1 - Church Street (North)	0	0	0	0
	2 - A444 Vicarage Street (North-East)	0	0	3	3
	3 - Church Street (South)	0	2	0	1
	4 - A444 Vicarage Street (South-West)	0	1	0	1

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 - Church Street (North)	0.00	0.00	0.0	A	0	0
2 - A444 Vicarage Street (North-East)	0.85	13.68	5.3	B	1199	1799
3 - Church Street (South)	0.68	10.23	2.1	B	630	946
4 - A444 Vicarage Street (South-West)	0.68	6.60	2.1	A	971	1456

Main Results for each time segment

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	969	0.00	829	0.000	0	74	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	984	246	230	0.00	1767	0.557	979	738	0.0	1.2	4.539	A
3 - Church Street (South)	517	129	727		1335	0.387	515	482	0.0	0.6	4.376	A
4 - A444 Vicarage Street (South-West)	797	199	249	0.00	1788	0.445	793	993	0.0	0.8	3.607	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1159	0.00	719	0.000	0	89	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1175	294	276	0.00	1739	0.676	1172	884	1.2	2.0	6.314	A
3 - Church Street (South)	618	154	871		1240	0.498	616	577	0.6	1.0	5.763	A
4 - A444 Vicarage Street (South-West)	951	238	299	0.00	1755	0.542	950	1188	0.8	1.2	4.460	A

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1417	0.00	571	0.000	0	109	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1439	360	337	0.00	1700	0.847	1427	1080	2.0	5.1	12.673	B
3 - Church Street (South)	756	189	1060		1113	0.680	752	703	1.0	2.1	9.859	A
4 - A444 Vicarage Street (South-West)	1165	291	365	0.00	1711	0.681	1161	1448	1.2	2.1	6.500	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1422	0.00	568	0.000	0	109	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1439	360	338	0.00	1699	0.847	1438	1084	5.1	5.3	13.684	B
3 - Church Street (South)	756	189	1068		1108	0.683	756	708	2.1	2.1	10.226	B
4 - A444 Vicarage Street (South-West)	1165	291	367	0.00	1710	0.681	1165	1458	2.1	2.1	6.598	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1167	0.00	715	0.000	0	89	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1175	294	277	0.00	1738	0.676	1188	890	5.3	2.1	6.690	A
3 - Church Street (South)	618	154	882		1232	0.501	622	583	2.1	1.0	5.944	A
4 - A444 Vicarage Street (South-West)	951	238	301	0.00	1753	0.542	955	1202	2.1	1.2	4.529	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	975	0.00	825	0.000	0	75	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	984	246	232	0.00	1766	0.557	987	743	2.1	1.3	4.642	A
3 - Church Street (South)	517	129	734		1331	0.389	519	485	1.0	0.6	4.440	A
4 - A444 Vicarage Street (South-West)	797	199	251	0.00	1787	0.446	798	1001	1.2	0.8	3.648	A

Ref Case + Development, PM (17:00 - 18:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Church Street (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Pedestrian Crossing	1 - Church Street (North) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - A444 Vicarage Street (North-East) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - A444 Vicarage Street (South-West) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

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	9.03	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	Ref Case + Development	PM (17:00 - 18:00)	ONE HOUR	15:45	17:15	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 - Church Street (North)		ONE HOUR	✓	0	100.000
2 - A444 Vicarage Street (North-East)		ONE HOUR	✓	1253	100.000
3 - Church Street (South)		ONE HOUR	✓	713	100.000
4 - A444 Vicarage Street (South-West)		ONE HOUR	✓	1065	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Church Street (North)	[ONEHOUR]	0.00
2 - A444 Vicarage Street (North-East)	[ONEHOUR]	0.00
3 - Church Street (South)		
4 - A444 Vicarage Street (South-West)	[ONEHOUR]	0.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Church Street (North)	**2 - A444 Vicarage Street (North-East)**	**3 - Church Street (South)**	**4 - A444 Vicarage Street (South-West)**
From	**1 - Church Street (North)**	0	0	0	0
	2 - A444 Vicarage Street (North-East)	2	0	363	888
	3 - Church Street (South)	29	359	0	325
	4 - A444 Vicarage Street (South-West)	81	715	224	45

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Church Street (North)	2 - A444 Vicarage Street (North-East)	3 - Church Street (South)	4 - A444 Vicarage Street (South-West)
From	1 - Church Street (North)	0	0	0	0
	2 - A444 Vicarage Street (North-East)	0	0	3	2
	3 - Church Street (South)	0	2	0	1
	4 - A444 Vicarage Street (South-West)	0	0	0	1

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 - Church Street (North)	0.00	0.00	0.0	A	0	0
2 - A444 Vicarage Street (North-East)	0.79	10.02	3.8	B	1150	1725
3 - Church Street (South)	0.69	10.13	2.2	B	654	981
4 - A444 Vicarage Street (South-West)	0.70	7.10	2.3	A	977	1466

Main Results for each time segment

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1007	0.00	809	0.000	0	84	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	943	236	202	0.00	1798	0.525	939	805	0.0	1.1	4.172	A
3 - Church Street (South)	537	134	701		1356	0.396	534	440	0.0	0.6	4.351	A
4 - A444 Vicarage Street (South-West)	802	200	292	0.00	1771	0.453	799	943	0.0	0.8	3.689	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1205	0.00	696	0.000	0	101	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1126	282	241	0.00	1772	0.636	1124	964	1.1	1.7	5.531	A
3 - Church Street (South)	641	160	839		1265	0.507	640	527	0.6	1.0	5.735	A

4 - A444 Vicarage Street (South-West)	957	239	350	0.00	1732	0.553	956	1128	0.8	1.2	4.626	A

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1473	0.00	543	0.000	0	123	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1380	345	295	0.00	1738	0.794	1372	1177	1.7	3.7	9.628	A
3 - Church Street (South)	785	196	1024		1143	0.687	781	643	1.0	2.1	9.811	A
4 - A444 Vicarage Street (South-West)	1173	293	427	0.00	1681	0.698	1168	1377	1.2	2.3	6.971	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1478	0.00	540	0.000	0	123	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1380	345	296	0.00	1737	0.794	1379	1182	3.7	3.8	10.022	B
3 - Church Street (South)	785	196	1029		1140	0.689	785	646	2.1	2.2	10.135	B
4 - A444 Vicarage Street (South-West)	1173	293	429	0.00	1679	0.698	1172	1385	2.3	2.3	7.098	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1213	0.00	691	0.000	0	101	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1126	282	243	0.00	1771	0.636	1134	971	3.8	1.8	5.720	A
3 - Church Street (South)	641	160	846		1260	0.509	645	531	2.2	1.0	5.899	A
4 - A444 Vicarage Street (South-West)	957	239	353	0.00	1730	0.553	962	1139	2.3	1.3	4.707	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1013	0.00	806	0.000	0	85	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	943	236	203	0.00	1797	0.525	946	810	1.8	1.1	4.243	A
3 - Church Street (South)	537	134	706		1353	0.397	538	443	1.0	0.7	4.427	A

4 - A444 Vicarage Street (South-West)	802	200	294	0.00	1770	0.453	803	950	1.3	0.8	3.734	A

Ref Case + Development, PM (18:00 - 19:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Church Street (South) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Pedestrian Crossing	1 - Church Street (North) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - A444 Vicarage Street (North-East) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - A444 Vicarage Street (South-West) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

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	6.40	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	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	15:45	17:15	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 - Church Street (North)		ONE HOUR	✓	0	100.000
2 - A444 Vicarage Street (North-East)		ONE HOUR	✓	1121	100.000
3 - Church Street (South)		ONE HOUR	✓	604	100.000

4 - A444 Vicarage Street (South-West)		ONE HOUR	✓	998	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Church Street (North)	[ONEHOUR]	0.00
2 - A444 Vicarage Street (North-East)	[ONEHOUR]	0.00
3 - Church Street (South)		
4 - A444 Vicarage Street (South-West)	[ONEHOUR]	0.00

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Church Street (North)	2 - A444 Vicarage Street (North-East)	3 - Church Street (South)	4 - A444 Vicarage Street (South-West)
From	1 - Church Street (North)	0	0	0	0
	2 - A444 Vicarage Street (North-East)	1	0	299	821
	3 - Church Street (South)	26	285	0	293
	4 - A444 Vicarage Street (South-West)	66	695	195	42

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Church Street (North)	2 - A444 Vicarage Street (North-East)	3 - Church Street (South)	4 - A444 Vicarage Street (South-West)
From	1 - Church Street (North)	0	0	0	0
	2 - A444 Vicarage Street (North-East)	0	0	3	2
	3 - Church Street (South)	1	1	0	0
	4 - A444 Vicarage Street (South-West)	0	1	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 - Church Street (North)	0.00	0.00	0.0	A	0	0
2 - A444 Vicarage Street (North-East)	0.70	6.83	2.3	A	1029	1543
3 - Church Street (South)	0.55	6.70	1.2	A	554	831
4 - A444 Vicarage Street (South-West)	0.64	5.73	1.7	A	916	1374

Main Results for each time segment

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	913	0.00	862	0.000	0	70	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	844	211	178	0.00	1814	0.465	840	735	0.0	0.9	3.688	A
3 - Church Street (South)	455	114	648		1405	0.324	453	370	0.0	0.5	3.774	A
4 - A444 Vicarage Street (South-West)	751	188	234	0.00	1800	0.418	749	867	0.0	0.7	3.417	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1093	0.00	759	0.000	0	83	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1008	252	213	0.00	1791	0.563	1006	880	0.9	1.3	4.576	A
3 - Church Street (South)	543	136	775		1320	0.412	542	443	0.5	0.7	4.626	A
4 - A444 Vicarage Street (South-West)	897	224	280	0.00	1769	0.507	896	1038	0.7	1.0	4.116	A

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1336	0.00	619	0.000	0	102	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1234	309	260	0.00	1761	0.701	1230	1076	1.3	2.3	6.729	A
3 - Church Street (South)	665	166	948		1205	0.552	663	542	0.7	1.2	6.622	A
4 - A444 Vicarage Street (South-West)	1099	275	342	0.00	1728	0.636	1096	1269	1.0	1.7	5.671	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1340	0.00	617	0.000	0	102	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1234	309	261	0.00	1761	0.701	1234	1079	2.3	2.3	6.833	A
3 - Church Street (South)	665	166	951		1203	0.553	665	544	1.2	1.2	6.696	A
4 - A444 Vicarage Street (South-West)	1099	275	343	0.00	1727	0.636	1099	1273	1.7	1.7	5.727	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	1098	0.00	756	0.000	0	84	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	1008	252	214	0.00	1791	0.563	1012	884	2.3	1.3	4.647	A
3 - Church Street (South)	543	136	780		1317	0.412	545	446	1.2	0.7	4.677	A
4 - A444 Vicarage Street (South-West)	897	224	282	0.00	1768	0.507	900	1043	1.7	1.0	4.160	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/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 - Church Street (North)	0	0	918	0.00	859	0.000	0	70	0.0	0.0	0.000	A
2 - A444 Vicarage Street (North-East)	844	211	179	0.00	1813	0.466	846	739	1.3	0.9	3.727	A
3 - Church Street (South)	455	114	652		1402	0.324	456	373	0.7	0.5	3.806	A
4 - A444 Vicarage Street (South-West)	751	188	235	0.00	1799	0.418	753	872	1.0	0.7	3.447	A

Appendix 20

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: 17059 - Redgate Roundabout Mitigation.j9
Path: P:\17 jobs\059 MIRA - Southern Manufacturing Sector\Technical Assessments\Modelling - July 2022\Mitigation Models
Report generation date: 14/07/2022 15:48:15

»Ref Case, AM (07:00 - 08:00)
»Ref Case, AM (08:00 - 09:00)
»Ref Case, AM (09:00 - 10:00)
»Ref Case, PM (16:00 - 17:00)
»Ref Case, PM (17:00 - 18:00)
»Ref Case, PM (18:00 - 19:00)
»Ref Case + Development, AM (07:00 - 08:00)
»Ref Case + Development, AM (08:00 - 09:00)
»Ref Case + Development, AM (09:00 - 10:00)
»Ref Case + Development, PM (16:00 - 17:00)
»Ref Case + Development, PM (17:00 - 18:00)
»Ref Case + Development, PM (18:00 - 19:00)

Summary of junction performance

	AM (07:00 - 08:00)					AM (08:00 - 09:00)					AM (09:00 - 10:00)					PM (16:00 - 17:00)					PM (17:00 - 18:00)					PM (18:00 - 19:00)				
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
Ref Case																														
1 - A5 (East)	1.2	3.99	0.55	A	4.37	1.7	4.77	0.63	A	4.94	1.1	3.81	0.53	A	3.96	1.3	4.18	0.58	A	4.22	2.3	5.97	0.70	A	5.95	2.4	5.85	0.71	A	5.15
2 - A444 Weddington Lane	0.3	3.83	0.23	A		0.7	5.48	0.40	A		0.3	3.90	0.25	A		0.3	4.07	0.25	A		0.5	5.35	0.35	A		0.5	5.60	0.35	A	
3 - A5 (West)	1.2	3.77	0.54	A		1.5	4.69	0.61	A		1.1	3.66	0.52	A		1.3	4.10	0.57	A		2.3	6.08	0.70	A		1.3	4.32	0.56	A	
4 - A444 Atherstone Road	1.0	6.61	0.51	A		0.6	5.75	0.37	A		0.6	5.14	0.38	A		0.5	4.88	0.33	A		0.6	5.92	0.38	A		0.4	4.23	0.28	A	
Ref Case + Development																														
1 - A5 (East)	1.8	5.10	0.64	A	5.67	2.2	5.86	0.69	A	6.68	1.5	4.52	0.60	A	5.00	2.5	6.27	0.72	A	5.45	3.9	9.02	0.80	A	7.68	3.9	8.51	0.80	A	6.91
2 - A444 Weddington Lane	0.3	4.45	0.26	A		0.8	6.37	0.44	A		0.4	4.38	0.28	A		0.4	5.32	0.31	A		0.7	6.85	0.40	A		0.7	7.06	0.40	A	
3 - A5 (West)	1.7	4.84	0.64	A		2.8	7.12	0.74	A		1.7	5.02	0.64	A		1.5	4.57	0.61	A		2.7	6.74	0.73	A		1.7	5.21	0.63	A	
4 - A444 Atherstone Road	1.5	9.40	0.61	A		0.9	8.31	0.48	A		0.8	6.71	0.45	A		0.5	5.24	0.35	A		0.6	6.25	0.39	A		0.4	4.74	0.31	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. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	03/03/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mtp\MTPGeneral
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	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D2	Ref Case	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D3	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D4	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D5	Ref Case	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D6	Ref Case	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	15	✓
D7	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	15	✓
D8	Ref Case + Development	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D9	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	15	✓
D10	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	15	✓
D11	Ref Case + Development	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D12	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Ref Case, AM (07:00 - 08:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A444 Weddington Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A5 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A444 Atherstone Road - 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	4.37	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A5 (East)	
2	A444 Weddington Lane	
3	A5 (West)	
4	A444 Atherstone Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A5 (East)	7.50	8.30	54.5	15.0	50.0	44.0	
2 - A444 Weddington Lane	3.60	8.02	35.5	30.0	50.0	33.0	
3 - A5 (West)	7.00	8.04	52.8	22.0	50.0	27.0	
4 - A444 Atherstone Road	3.20	7.56	40.2	20.0	50.0	31.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A5 (East)	0.711	2342
2 - A444 Weddington Lane	0.678	2060

3 - A5 (West)	0.755	2453
4 - A444 Atherstone Road	0.654	1943

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	Ref Case	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 - A5 (East)		ONE HOUR	✓	1010	100.000
2 - A444 Weddington Lane		ONE HOUR	✓	257	100.000
3 - A5 (West)		ONE HOUR	✓	1004	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	516	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	**2 - A444 Weddington Lane**	**3 - A5 (West)**	**4 - A444 Atherstone Road**
From	**1 - A5 (East)**	18	1	835	156
	2 - A444 Weddington Lane	35	0	125	97
	3 - A5 (West)	880	115	0	9
	4 - A444 Atherstone Road	355	113	48	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	**2 - A444 Weddington Lane**	**3 - A5 (West)**	**4 - A444 Atherstone Road**
From	**1 - A5 (East)**	4	100	5	7
	2 - A444 Weddington Lane	3	0	0	0
	3 - A5 (West)	7	0	0	12
	4 - A444 Atherstone Road	3	0	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue	Max LOS	Average	Total Junction

			(Veh)		Demand (Veh/hr)	Arrivals (Veh)
1 - A5 (East)	0.55	3.99	1.2	A	927	1390
2 - A444 Weddington Lane	0.23	3.83	0.3	A	236	354
3 - A5 (West)	0.54	3.77	1.2	A	921	1382
4 - A444 Atherstone Road	0.51	6.61	1.0	A	473	710

Main Results for each time segment

06:45 - 07:00

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 - A5 (East)	760	190	207	2080	0.366	758	967	0.0	0.6	2.718	A
2 - A444 Weddington Lane	193	48	793	1487	0.130	193	172	0.0	0.1	2.780	A
3 - A5 (West)	756	189	230	2139	0.353	754	757	0.0	0.5	2.598	A
4 - A444 Atherstone Road	388	97	787	1360	0.286	387	197	0.0	0.4	3.693	A

07:00 - 07:15

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 - A5 (East)	908	227	248	2052	0.442	907	1157	0.6	0.8	3.142	A
2 - A444 Weddington Lane	231	58	949	1376	0.168	231	206	0.1	0.2	3.144	A
3 - A5 (West)	903	226	275	2106	0.429	902	905	0.5	0.7	2.989	A
4 - A444 Atherstone Road	464	116	941	1256	0.369	463	235	0.4	0.6	4.539	A

07:15 - 07:30

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 - A5 (East)	1112	278	303	2014	0.552	1110	1415	0.8	1.2	3.975	A
2 - A444 Weddington Lane	283	71	1162	1224	0.231	283	252	0.2	0.3	3.820	A
3 - A5 (West)	1105	276	336	2060	0.537	1104	1108	0.7	1.1	3.758	A
4 - A444 Atherstone Road	568	142	1152	1113	0.510	566	288	0.6	1.0	6.560	A

07:30 - 07:45

Arm	Total Deman	Junction	Circulating flow	Capacity	RFC	Throughput (Veh/hr)	Throughput (exit	Start queu	End queu	Delay (s)	Unsignalised level of

	d (Veh/hr)	Arrivals (Veh)	(Veh/hr)	(Veh/hr)			side) (Veh/hr)	e (Veh)	e (Veh)		service
1 - A5 (East)	1112	278	304	2014	0.552	1112	1418	1.2	1.2	3.991	A
2 - A444 Weddington Lane	283	71	1164	1223	0.231	283	252	0.3	0.3	3.828	A
3 - A5 (West)	1105	276	337	2060	0.537	1105	1110	1.1	1.2	3.771	A
4 - A444 Atherstone Road	568	142	1154	1112	0.511	568	288	1.0	1.0	6.615	A

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 - A5 (East)	908	227	249	2052	0.443	910	1161	1.2	0.8	3.156	A
2 - A444 Weddington Lane	231	58	952	1374	0.168	231	206	0.3	0.2	3.151	A
3 - A5 (West)	903	226	276	2105	0.429	904	908	1.2	0.8	3.000	A
4 - A444 Atherstone Road	464	116	944	1254	0.370	466	236	1.0	0.6	4.577	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 - A5 (East)	760	190	208	2079	0.366	761	971	0.8	0.6	2.734	A
2 - A444 Weddington Lane	193	48	797	1484	0.130	194	173	0.2	0.2	2.791	A
3 - A5 (West)	756	189	231	2138	0.353	757	760	0.8	0.5	2.608	A
4 - A444 Atherstone Road	388	97	790	1358	0.286	389	197	0.6	0.4	3.722	A

Ref Case, AM (08:00 - 09:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A444 Weddington Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A5 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A444 Atherstone Road - 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	4.94	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	Ref Case	AM (08:00 - 09:00)	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 - A5 (East)		ONE HOUR	✓	1178	100.000
2 - A444 Weddington Lane		ONE HOUR	✓	400	100.000
3 - A5 (West)		ONE HOUR	✓	1080	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	338	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	25	2	997	154
	2 - A444 Weddington Lane	69	0	180	151
	3 - A5 (West)	967	91	0	22
	4 - A444 Atherstone Road	247	64	27	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	6	100	6	13
	2 - A444 Weddington Lane	1	0	0	0
	3 - A5 (West)	8	0	0	15
	4 - A444 Atherstone Road	7	0	10	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 - A5 (East)	0.63	4.77	1.7	A	1081	1621
2 - A444 Weddington Lane	0.40	5.48	0.7	A	367	551
3 - A5 (West)	0.61	4.69	1.5	A	991	1487
4 - A444 Atherstone Road	0.37	5.75	0.6	A	310	465

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 - A5 (East)	887	222	137	2095	0.423	884	981	0.0	0.7	2.965	A
2 - A444 Weddington Lane	301	75	903	1403	0.215	300	118	0.0	0.3	3.262	A
3 - A5 (West)	813	203	299	2061	0.395	810	903	0.0	0.6	2.873	A
4 - A444 Atherstone Road	254	64	864	1264	0.201	253	245	0.0	0.3	3.558	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 - A5 (East)	1059	265	163	2077	0.510	1058	1174	0.7	1.0	3.528	A
2 - A444 Weddington Lane	360	90	1080	1274	0.282	359	141	0.3	0.4	3.933	A
3 - A5 (West)	971	243	358	2017	0.481	970	1081	0.6	0.9	3.435	A
4 - A444 Atherstone Road	304	76	1034	1152	0.264	303	294	0.3	0.4	4.239	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 - A5 (East)	1297	324	200	2052	0.632	1294	1437	1.0	1.7	4.735	A
2 - A444 Weddington Lane	440	110	1322	1099	0.401	439	172	0.4	0.7	5.448	A
3 - A5 (West)	1189	297	438	1958	0.607	1187	1323	0.9	1.5	4.654	A
4 - A444 Atherstone Road	372	93	1266	1000	0.372	371	359	0.4	0.6	5.720	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 - A5 (East)	1297	324	200	2052	0.632	1297	1440	1.7	1.7	4.769	A
2 - A444 Weddington Lane	440	110	1324	1097	0.401	440	173	0.7	0.7	5.481	A
3 - A5 (West)	1189	297	439	1957	0.608	1189	1326	1.5	1.5	4.688	A
4 - A444 Atherstone Road	372	93	1268	998	0.373	372	360	0.6	0.6	5.751	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 - A5 (East)	1059	265	164	2076	0.510	1062	1179	1.7	1.0	3.556	A
2 - A444 Weddington Lane	360	90	1084	1271	0.283	361	142	0.7	0.4	3.959	A
3 - A5 (West)	971	243	360	2016	0.482	973	1085	1.5	0.9	3.459	A
4 - A444 Atherstone Road	304	76	1038	1150	0.264	305	295	0.6	0.4	4.264	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 - A5 (East)	887	222	137	2094	0.423	888	986	1.0	0.7	2.989	A
2 - A444 Weddington Lane	301	75	907	1400	0.215	302	118	0.4	0.3	3.279	A
3 - A5 (West)	813	203	301	2060	0.395	814	908	0.9	0.7	2.894	A
4 - A444 Atherstone Road	254	64	868	1262	0.202	255	247	0.4	0.3	3.576	A

Ref Case, AM (09:00 - 10:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A444 Weddington Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A5 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A444 Atherstone Road - 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	3.96	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	Ref Case	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 - A5 (East)		ONE HOUR	✓	983	100.000
2 - A444 Weddington Lane		ONE HOUR	✓	286	100.000
3 - A5 (West)		ONE HOUR	✓	964	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	383	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	12	1	837	133
	2 - A444 Weddington Lane	45	0	120	121
	3 - A5 (West)	845	82	0	37
	4 - A444 Atherstone Road	277	72	34	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	6	100	7	15
	2 - A444 Weddington Lane	2	0	0	0
	3 - A5 (West)	7	0	0	8
	4 - A444 Atherstone Road	8	0	4	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 - A5 (East)	0.53	3.81	1.1	A	902	1353
2 - A444 Weddington Lane	0.25	3.90	0.3	A	262	394
3 - A5 (West)	0.52	3.66	1.1	A	885	1327
4 - A444 Atherstone Road	0.38	5.14	0.6	A	351	527

Main Results for each time segment

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 - A5 (East)	740	185	141	2071	0.357	738	885	0.0	0.6	2.695	A
2 - A444 Weddington Lane	215	54	763	1497	0.144	215	116	0.0	0.2	2.805	A
3 - A5 (West)	726	181	233	2128	0.341	724	744	0.0	0.5	2.561	A
4 - A444 Atherstone Road	288	72	739	1348	0.214	287	218	0.0	0.3	3.391	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 - A5 (East)	884	221	169	2053	0.430	883	1059	0.6	0.8	3.075	A
2 - A444 Weddington Lane	257	64	913	1388	0.185	257	139	0.2	0.2	3.183	A
3 - A5 (West)	867	217	279	2093	0.414	866	890	0.5	0.7	2.932	A
4 - A444 Atherstone Road	344	86	884	1253	0.275	344	261	0.3	0.4	3.958	A

09:15 - 09:30

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 - A5 (East)	1082	271	207	2028	0.534	1081	1296	0.8	1.1	3.794	A
2 - A444 Weddington Lane	315	79	1117	1238	0.254	314	170	0.2	0.3	3.894	A
3 - A5 (West)	1061	265	342	2045	0.519	1060	1090	0.7	1.1	3.649	A
4 - A444 Atherstone Road	422	105	1082	1123	0.375	421	320	0.4	0.6	5.117	A

09:30 - 09:45

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 - A5 (East)	1082	271	207	2028	0.534	1082	1298	1.1	1.1	3.806	A
2 - A444 Weddington Lane	315	79	1119	1237	0.255	315	171	0.3	0.3	3.902	A
3 - A5 (West)	1061	265	342	2045	0.519	1061	1091	1.1	1.1	3.659	A
4 - A444 Atherstone Road	422	105	1083	1122	0.376	422	320	0.6	0.6	5.136	A

09:45 - 10:00

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 - A5 (East)	884	221	169	2053	0.431	885	1062	1.1	0.8	3.087	A
2 - A444 Weddington Lane	257	64	915	1386	0.186	258	140	0.3	0.2	3.193	A
3 - A5 (West)	867	217	280	2092	0.414	868	892	1.1	0.7	2.943	A
4 - A444 Atherstone Road	344	86	886	1251	0.275	345	262	0.6	0.4	3.977	A

10:00 - 10:15

Arm	Total Demand	Junction Arrivals	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue	End queue	Delay (s)	Unsignalised level of service

	(Veh/hr)	(Veh)					(Veh/hr)	(Veh)	(Veh)		
1 - A5 (East)	740	185	142	2071	0.357	741	889	0.8	0.6	2.709	A
2 - A444 Weddington Lane	215	54	766	1495	0.144	216	117	0.2	0.2	2.816	A
3 - A5 (West)	726	181	234	2127	0.341	727	747	0.7	0.5	2.571	A
4 - A444 Atherstone Road	288	72	742	1346	0.214	289	219	0.4	0.3	3.405	A

Ref Case, PM (16:00 - 17:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A444 Weddington Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A5 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A444 Atherstone Road - 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	4.22	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	Ref Case	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 - A5 (East)		ONE HOUR	✓	1061	100.000

2 - A444 Weddington Lane		ONE HOUR	✓	272	100.000
3 - A5 (West)		ONE HOUR	✓	1063	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	334	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	**2 - A444 Weddington Lane**	**3 - A5 (West)**	**4 - A444 Atherstone Road**
From	**1 - A5 (East)**	1	1	891	168
	2 - A444 Weddington Lane	6	0	120	146
	3 - A5 (West)	906	131	0	26
	4 - A444 Atherstone Road	212	67	55	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	**2 - A444 Weddington Lane**	**3 - A5 (West)**	**4 - A444 Atherstone Road**
From	**1 - A5 (East)**	0	100	5	8
	2 - A444 Weddington Lane	0	0	0	0
	3 - A5 (West)	7	0	0	8
	4 - A444 Atherstone Road	5	0	3	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 - A5 (East)	0.58	4.18	1.3	A	974	1460
2 - A444 Weddington Lane	0.25	4.07	0.3	A	250	374
3 - A5 (West)	0.57	4.10	1.3	A	975	1463
4 - A444 Atherstone Road	0.33	4.88	0.5	A	306	460

Main Results for each time segment

15:45 - 16:00

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 - A5 (East)	799	200	190	2089	0.382	796	844	0.0	0.6	2.779	A

2 - A444 Weddington Lane	205	51	837	1462	0.140	204	149	0.0	0.2	2.860	A
3 - A5 (West)	800	200	241	2132	0.375	798	800	0.0	0.6	2.693	A
4 - A444 Atherstone Road	251	63	784	1350	0.186	251	255	0.0	0.2	3.269	A

16:00 - 16:15

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 - A5 (East)	954	238	227	2064	0.462	953	1010	0.6	0.9	3.236	A
2 - A444 Weddington Lane	245	61	1001	1345	0.182	244	179	0.2	0.2	3.271	A
3 - A5 (West)	956	239	288	2097	0.456	955	957	0.6	0.8	3.147	A
4 - A444 Atherstone Road	300	75	938	1247	0.241	300	305	0.2	0.3	3.799	A

16:15 - 16:30

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 - A5 (East)	1168	292	278	2030	0.576	1166	1237	0.9	1.3	4.160	A
2 - A444 Weddington Lane	299	75	1226	1184	0.253	299	219	0.2	0.3	4.064	A
3 - A5 (West)	1170	293	353	2049	0.571	1168	1172	0.8	1.3	4.077	A
4 - A444 Atherstone Road	368	92	1148	1107	0.332	367	374	0.3	0.5	4.861	A

16:30 - 16:45

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 - A5 (East)	1168	292	279	2029	0.576	1168	1239	1.3	1.3	4.180	A
2 - A444 Weddington Lane	299	75	1228	1183	0.253	299	219	0.3	0.3	4.074	A
3 - A5 (West)	1170	293	353	2049	0.571	1170	1174	1.3	1.3	4.097	A
4 - A444 Atherstone Road	368	92	1149	1106	0.333	368	374	0.5	0.5	4.877	A

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 - A5 (East)	954	238	228	2064	0.462	956	1013	1.3	0.9	3.256	A
2 - A444 Weddington Lane	245	61	1004	1342	0.182	245	179	0.3	0.2	3.283	A
3 - A5 (West)	956	239	289	2097	0.45	958	960	1.3	0.8	3.16	A

					6					7	
4 - A444 Atherstone Road	300	75	940	1246	0.241	301	306	0.5	0.3	3.813	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 - A5 (East)	799	200	191	2089	0.382	800	848	0.9	0.6	2.796	A
2 - A444 Weddington Lane	205	51	840	1460	0.140	205	150	0.2	0.2	2.871	A
3 - A5 (West)	800	200	242	2132	0.375	801	804	0.8	0.6	2.707	A
4 - A444 Atherstone Road	251	63	787	1348	0.187	252	256	0.3	0.2	3.286	A

Ref Case, PM (17:00 - 18:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A444 Weddington Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A5 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A444 Atherstone Road - 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	5.95	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	Ref Case	PM (17:00 - 18:00)	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 - A5 (East)		ONE HOUR	✓	1270	100.000
2 - A444 Weddington Lane		ONE HOUR	✓	324	100.000
3 - A5 (West)		ONE HOUR	✓	1268	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	337	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	2	1	1017	250
	2 - A444 Weddington Lane	10	0	137	177
	3 - A5 (West)	1062	174	0	32
	4 - A444 Atherstone Road	212	84	41	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	0	100	5	6
	2 - A444 Weddington Lane	10	0	0	0
	3 - A5 (West)	5	0	0	8
	4 - A444 Atherstone Road	4	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 - A5 (East)	0.70	5.97	2.3	A	1165	1748
2 - A444 Weddington Lane	0.35	5.35	0.5	A	297	446
3 - A5 (West)	0.70	6.08	2.3	A	1164	1745
4 - A444 Atherstone Road	0.38	5.92	0.6	A	309	464

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 - A5 (East)	956	239	224	2072	0.461	953	965	0.0	0.9	3.206	A
2 - A444 Weddington Lane	244	61	983	1356	0.180	243	194	0.0	0.2	3.231	A
3 - A5 (West)	955	239	329	2103	0.454	951	896	0.0	0.8	3.116	A
4 - A444 Atherstone Road	254	63	936	1270	0.200	253	344	0.0	0.2	3.536	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 - A5 (East)	1142	285	268	2043	0.559	1140	1154	0.9	1.3	3.981	A
2 - A444 Weddington Lane	291	73	1176	1218	0.239	291	233	0.2	0.3	3.880	A
3 - A5 (West)	1140	285	394	2055	0.555	1138	1073	0.8	1.2	3.921	A
4 - A444 Atherstone Road	303	76	1120	1148	0.264	303	412	0.2	0.4	4.258	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 - A5 (East)	1398	350	328	2002	0.698	1394	1412	1.3	2.3	5.883	A
2 - A444 Weddington Lane	357	89	1438	1032	0.346	356	284	0.3	0.5	5.319	A
3 - A5 (West)	1396	349	482	1989	0.702	1392	1312	1.2	2.3	5.989	A
4 - A444 Atherstone Road	371	93	1370	982	0.378	370	504	0.4	0.6	5.873	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 - A5 (East)	1398	350	329	2001	0.699	1398	1416	2.3	2.3	5.966	A
2 - A444 Weddington Lane	357	89	1442	1029	0.347	357	285	0.5	0.5	5.355	A
3 - A5 (West)	1396	349	483	1988	0.702	1396	1316	2.3	2.3	6.082	A
4 - A444 Atherstone Road	371	93	1374	979	0.379	371	505	0.6	0.6	5.918	A

17:45 - 18:00

Arm	Total Demand	Junction Arrivals	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue	End queue	Delay (s)	Unsignalised level of service

	(Veh/hr)	(Veh)					(Veh/hr)	(Veh)	(Veh)		
1 - A5 (East)	1142	285	270	2042	0.559	1146	1160	2.3	1.3	4.037	A
2 - A444 Weddington Lane	291	73	1182	1214	0.240	292	234	0.5	0.3	3.909	A
3 - A5 (West)	1140	285	396	2053	0.555	1144	1078	2.3	1.3	3.979	A
4 - A444 Atherstone Road	303	76	1126	1144	0.265	304	414	0.6	0.4	4.292	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 - A5 (East)	956	239	226	2072	0.462	958	970	1.3	0.9	3.238	A
2 - A444 Weddington Lane	244	61	988	1352	0.180	244	195	0.3	0.2	3.251	A
3 - A5 (West)	955	239	331	2102	0.454	956	901	1.3	0.8	3.148	A
4 - A444 Atherstone Road	254	63	941	1266	0.200	254	346	0.4	0.3	3.556	A

Ref Case, PM (18:00 - 19:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A444 Weddington Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A5 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A444 Atherstone Road - 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	5.15	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	Ref Case	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	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 - A5 (East)		ONE HOUR	✓	1349	100.000
2 - A444 Weddington Lane		ONE HOUR	✓	309	100.000
3 - A5 (West)		ONE HOUR	✓	972	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	299	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	2	1	965	381
	2 - A444 Weddington Lane	14	0	109	186
	3 - A5 (West)	850	107	0	15
	4 - A444 Atherstone Road	207	61	31	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	0	100	4	4
	2 - A444 Weddington Lane	15	0	0	0
	3 - A5 (West)	3	0	0	1
	4 - A444 Atherstone Road	5	0	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 - A5 (East)	0.71	5.85	2.4	A	1238	1857
2 - A444 Weddington Lane	0.35	5.60	0.5	A	284	425
3 - A5 (West)	0.56	4.32	1.3	A	892	1338
4 - A444 Atherstone Road	0.28	4.23	0.4	A	274	412

Main Results for each time segment

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 - A5 (East)	1016	254	149	2148	0.473	1012	805	0.0	0.9	3.161	A
2 - A444 Weddington Lane	233	58	1035	1322	0.176	232	127	0.0	0.2	3.302	A
3 - A5 (West)	732	183	437	2059	0.355	730	829	0.0	0.5	2.703	A
4 - A444 Atherstone Road	225	56	730	1402	0.161	224	437	0.0	0.2	3.054	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 - A5 (East)	1213	303	179	2128	0.570	1211	964	0.9	1.3	3.920	A
2 - A444 Weddington Lane	278	69	1238	1179	0.236	277	152	0.2	0.3	3.989	A
3 - A5 (West)	874	218	523	1994	0.438	873	992	0.5	0.8	3.209	A
4 - A444 Atherstone Road	269	67	874	1309	0.205	269	522	0.2	0.3	3.459	A

18:15 - 18:30

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 - A5 (East)	1485	371	219	2100	0.707	1481	1179	1.3	2.4	5.774	A
2 - A444 Weddington Lane	340	85	1514	986	0.345	339	186	0.3	0.5	5.559	A
3 - A5 (West)	1070	268	640	1905	0.562	1068	1213	0.8	1.3	4.291	A
4 - A444 Atherstone Road	329	82	1069	1182	0.278	329	639	0.3	0.4	4.214	A

18:30 - 18:45

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 - A5 (East)	1485	371	219	2100	0.707	1485	1181	2.4	2.4	5.852	A
2 - A444 Weddington Lane	340	85	1518	983	0.346	340	186	0.5	0.5	5.598	A

3 - A5 (West)	1070	268	642	1904	0.562	1070	1217	1.3	1.3	4.318	A
4 - A444 Atherstone Road	329	82	1071	1181	0.279	329	641	0.4	0.4	4.225	A

18:45 - 19:00

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 - A5 (East)	1213	303	179	2127	0.570	1217	967	2.4	1.3	3.971	A
2 - A444 Weddington Lane	278	69	1244	1175	0.236	279	152	0.5	0.3	4.018	A
3 - A5 (West)	874	218	526	1992	0.439	876	997	1.3	0.8	3.233	A
4 - A444 Atherstone Road	269	67	877	1307	0.206	269	525	0.4	0.3	3.468	A

19:00 - 19:15

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 - A5 (East)	1016	254	150	2147	0.473	1017	809	1.3	0.9	3.192	A
2 - A444 Weddington Lane	233	58	1040	1318	0.176	233	127	0.3	0.2	3.318	A
3 - A5 (West)	732	183	440	2057	0.356	733	833	0.8	0.6	2.721	A
4 - A444 Atherstone Road	225	56	733	1400	0.161	225	439	0.3	0.2	3.066	A

Ref Case + Development, AM (07:00 - 08:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A444 Weddington Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A5 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A444 Atherstone Road - 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	5.67	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	Ref Case + Development	AM (07:00 - 08:00)	ONE HOUR	06:45	08:15	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 - A5 (East)		ONE HOUR	✓	1162	100.000
2 - A444 Weddington Lane		ONE HOUR	✓	257	100.000
3 - A5 (West)		ONE HOUR	✓	1184	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	540	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	18	1	973	170
	2 - A444 Weddington Lane	35	0	125	97
	3 - A5 (West)	1060	115	0	9
	4 - A444 Atherstone Road	379	113	48	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	4	100	7	6
	2 - A444 Weddington Lane	3	0	0	0
	3 - A5 (West)	7	0	0	12
	4 - A444 Atherstone Road	3	0	8	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 - A5 (East)	0.64	5.10	1.8	A	1066	1599
2 - A444 Weddington Lane	0.26	4.45	0.3	A	236	354
3 - A5 (West)	0.64	4.84	1.7	A	1086	1630
4 - A444 Atherstone Road	0.61	9.40	1.5	A	496	743

Main Results for each time segment

06:45 - 07:00

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 - A5 (East)	875	219	207	2051	0.427	872	1119	0.0	0.7	3.045	A
2 - A444 Weddington Lane	193	48	907	1397	0.138	193	172	0.0	0.2	2.988	A
3 - A5 (West)	891	223	240	2130	0.419	889	860	0.0	0.7	2.894	A
4 - A444 Atherstone Road	407	102	922	1268	0.321	405	207	0.0	0.5	4.160	A

07:00 - 07:15

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 - A5 (East)	1045	261	248	2024	0.516	1043	1339	0.7	1.1	3.667	A
2 - A444 Weddington Lane	231	58	1086	1268	0.182	231	206	0.2	0.2	3.470	A
3 - A5 (West)	1064	266	287	2095	0.508	1063	1029	0.7	1.0	3.484	A
4 - A444 Atherstone Road	485	121	1103	1146	0.424	484	248	0.5	0.7	5.434	A

07:15 - 07:30

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 - A5 (East)	1279	320	303	1986	0.644	1276	1638	1.1	1.8	5.051	A
2 - A444 Weddington Lane	283	71	1328	1093	0.259	282	251	0.2	0.3	4.437	A
3 - A5 (West)	1304	326	352	2048	0.637	1301	1259	1.0	1.7	4.802	A
4 - A444 Atherstone Road	595	149	1349	979	0.607	591	303	0.7	1.5	9.207	A

07:30 - 07:45

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 - A5 (East)	1279	320	304	1986	0.644	1279	1643	1.8	1.8	5.096	A
2 - A444 Weddington Lane	283	71	1331	1091	0.259	283	252	0.3	0.3	4.455	A
3 - A5 (West)	1304	326	352	2047	0.637	1304	1262	1.7	1.7	4.841	A
4 - A444 Atherstone Road	595	149	1352	977	0.608	594	304	1.5	1.5	9.395	A

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 - A5 (East)	1045	261	249	2022	0.517	1047	1346	1.8	1.1	3.705	A
2 - A444 Weddington Lane	231	58	1090	1265	0.183	232	207	0.3	0.2	3.484	A
3 - A5 (West)	1064	266	288	2094	0.508	1067	1033	1.7	1.0	3.516	A
4 - A444 Atherstone Road	485	121	1107	1143	0.425	489	249	1.5	0.7	5.529	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 - A5 (East)	875	219	208	2050	0.427	876	1125	1.1	0.7	3.071	A
2 - A444 Weddington Lane	193	48	912	1394	0.139	194	173	0.2	0.2	2.999	A
3 - A5 (West)	891	223	241	2129	0.419	893	864	1.0	0.7	2.916	A
4 - A444 Atherstone Road	407	102	926	1265	0.321	408	208	0.7	0.5	4.205	A

Ref Case + Development, AM (08:00 - 09:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A444 Weddington Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A5 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Warning	Geometry	4 - A444 Atherstone Road - 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	6.68	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	Ref Case + Development	AM (08:00 - 09:00)	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 - A5 (East)		ONE HOUR	✓	1265	100.000
2 - A444 Weddington Lane		ONE HOUR	✓	400	100.000
3 - A5 (West)		ONE HOUR	✓	1297	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	366	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	25	2	1076	162
	2 - A444 Weddington Lane	69	0	180	151
	3 - A5 (West)	1184	91	0	22
	4 - A444 Atherstone Road	275	64	27	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	6	100	9	12
	2 - A444 Weddington Lane	1	0	0	0
	3 - A5 (West)	9	0	0	15
	4 - A444 Atherstone Road	6	0	10	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 - A5 (East)	0.69	5.86	2.2	A	1161	1741
2 - A444 Weddington Lane	0.44	6.37	0.8	A	367	551
3 - A5 (West)	0.74	7.12	2.8	A	1190	1785
4 - A444 Atherstone Road	0.48	8.31	0.9	A	336	504

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 - A5 (East)	952	238	136	2049	0.465	949	1165	0.0	0.9	3.263	A
2 - A444 Weddington Lane	301	75	968	1340	0.225	300	118	0.0	0.3	3.458	A
3 - A5 (West)	976	244	305	2038	0.479	973	962	0.0	0.9	3.369	A
4 - A444 Atherstone Road	276	69	1027	1158	0.238	274	251	0.0	0.3	4.067	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 - A5 (East)	1137	284	163	2031	0.560	1136	1394	0.9	1.3	4.011	A
2 - A444 Weddington Lane	360	90	1158	1199	0.300	359	141	0.3	0.4	4.282	A
3 - A5 (West)	1166	291	365	1994	0.585	1164	1152	0.9	1.4	4.329	A
4 - A444 Atherstone Road	329	82	1229	1023	0.322	328	301	0.3	0.5	5.180	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 - A5 (East)	1393	348	200	2007	0.694	1389	1703	1.3	2.2	5.785	A
2 - A444 Weddington Lane	440	110	1416	1008	0.437	439	172	0.4	0.8	6.312	A
3 - A5 (West)	1428	357	447	1934	0.738	1423	1409	1.4	2.7	6.965	A
4 - A444 Atherstone Road	403	101	1502	840	0.480	401	368	0.5	0.9	8.177	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 - A5 (East)	1393	348	200	2007	0.694	1393	1710	2.2	2.2	5.859	A
2 - A444 Weddington Lane	440	110	1420	1005	0.438	440	173	0.8	0.8	6.374	A
3 - A5 (West)	1428	357	448	1933	0.739	1428	1413	2.7	2.8	7.117	A
4 - A444 Atherstone Road	403	101	1507	836	0.482	403	369	0.9	0.9	8.308	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 - A5 (East)	1137	284	164	2031	0.560	1141	1403	2.2	1.3	4.064	A
2 - A444 Weddington Lane	360	90	1164	1195	0.301	361	142	0.8	0.4	4.324	A
3 - A5 (West)	1166	291	367	1992	0.585	1171	1157	2.8	1.4	4.412	A
4 - A444 Atherstone Road	329	82	1236	1018	0.323	331	302	0.9	0.5	5.256	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 - A5 (East)	952	238	137	2048	0.465	954	1172	1.3	0.9	3.293	A
2 - A444 Weddington Lane	301	75	973	1336	0.225	302	118	0.4	0.3	3.480	A
3 - A5 (West)	976	244	307	2037	0.479	978	968	1.4	0.9	3.410	A
4 - A444 Atherstone Road	276	69	1033	1154	0.239	276	253	0.5	0.3	4.105	A

Ref Case + Development, AM (09:00 - 10:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A444 Weddington Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A5 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A444 Atherstone Road - 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	5.00	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	Ref Case + Development	AM (09:00 - 10:00)	ONE HOUR	08:45	10:15	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 - A5 (East)		ONE HOUR	✓	1093	100.000
2 - A444 Weddington Lane		ONE HOUR	✓	286	100.000
3 - A5 (West)		ONE HOUR	✓	1137	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	399	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	12	1	937	143
	2 - A444 Weddington Lane	45	0	120	121
	3 - A5 (West)	1018	82	0	37
	4 - A444 Atherstone Road	293	72	34	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	6	100	9	14
	2 - A444 Weddington Lane	2	0	0	0
	3 - A5 (West)	11	0	0	8
	4 - A444 Atherstone Road	7	0	4	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 - A5 (East)	0.60	4.52	1.5	A	1003	1504
2 - A444 Weddington Lane	0.28	4.38	0.4	A	262	394
3 - A5 (West)	0.64	5.02	1.7	A	1043	1565
4 - A444 Atherstone Road	0.45	6.71	0.8	A	366	549

Main Results for each time segment

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 - A5 (East)	823	206	141	2042	0.403	820	1026	0.0	0.7	2.939	A
2 - A444 Weddington Lane	215	54	845	1428	0.151	215	116	0.0	0.2	2.964	A
3 - A5 (West)	856	214	241	2052	0.417	853	819	0.0	0.7	2.995	A
4 - A444 Atherstone Road	300	75	868	1252	0.240	299	226	0.0	0.3	3.775	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 - A5 (East)	983	246	169	2024	0.485	982	1228	0.7	0.9	3.449	A
2 - A444 Weddington Lane	257	64	1011	1305	0.197	257	139	0.2	0.2	3.433	A
3 - A5 (West)	1022	256	288	2017	0.507	1021	980	0.7	1.0	3.609	A
4 - A444 Atherstone Road	359	90	1039	1135	0.316	358	270	0.3	0.5	4.629	A

09:15 - 09:30

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 - A5 (East)	1203	301	206	2000	0.602	1201	1503	0.9	1.5	4.496	A
2 - A444 Weddington Lane	315	79	1237	1138	0.277	314	170	0.2	0.4	4.368	A
3 - A5 (West)	1252	313	353	1970	0.636	1249	1199	1.0	1.7	4.976	A
4 - A444 Atherstone Road	439	110	1271	977	0.449	438	331	0.5	0.8	6.656	A

09:30 - 09:45

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 - A5 (East)	1203	301	207	1999	0.602	1203	1506	1.5	1.5	4.523	A
2 - A444 Weddington Lane	315	79	1240	1136	0.277	315	171	0.4	0.4	4.382	A
3 - A5 (West)	1252	313	353	1969	0.636	1252	1201	1.7	1.7	5.017	A
4 - A444 Atherstone Road	439	110	1274	975	0.450	439	331	0.8	0.8	6.713	A

09:45 - 10:00

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 - A5 (East)	983	246	170	2024	0.486	985	1233	1.5	1.0	3.474	A
2 - A444 Weddington Lane	257	64	1015	1303	0.197	258	140	0.4	0.2	3.445	A
3 - A5 (West)	1022	256	289	2016	0.507	1025	983	1.7	1.0	3.643	A
4 - A444 Atherstone Road	359	90	1043	1133	0.317	360	271	0.8	0.5	4.669	A

10:00 - 10:15

Arm	Total Demand	Junction Arrivals	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue	End queue	Delay (s)	Unsignalised level of service

	(Veh/hr)	(Veh)					(Veh/hr)	(Veh)	(Veh)		
1 - A5 (East)	823	206	142	2042	0.403	824	1032	1.0	0.7	2.958	A
2 - A444 Weddington Lane	215	54	849	1426	0.151	216	117	0.2	0.2	2.975	A
3 - A5 (West)	856	214	242	2051	0.417	857	822	1.0	0.7	3.018	A
4 - A444 Atherstone Road	300	75	872	1249	0.241	301	227	0.5	0.3	3.803	A

Ref Case + Development, PM (16:00 - 17:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A444 Weddington Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A5 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A444 Atherstone Road - 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	5.45	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	Ref Case + Development	PM (16:00 - 17:00)	ONE HOUR	15:45	17:15	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 - A5 (East)		ONE HOUR	✓	1326	100.000
2 - A444 Weddington Lane		ONE HOUR	✓	272	100.000
3 - A5 (West)		ONE HOUR	✓	1112	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	341	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	1	1	1131	193
	2 - A444 Weddington Lane	6	0	120	146
	3 - A5 (West)	955	131	0	26
	4 - A444 Atherstone Road	219	67	55	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	0	100	5	7
	2 - A444 Weddington Lane	0	0	0	0
	3 - A5 (West)	8	0	0	8
	4 - A444 Atherstone Road	5	0	3	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 - A5 (East)	0.72	6.27	2.5	A	1217	1825
2 - A444 Weddington Lane	0.31	5.32	0.4	A	250	374
3 - A5 (West)	0.61	4.57	1.5	A	1020	1531
4 - A444 Atherstone Road	0.35	5.24	0.5	A	313	469

Main Results for each time segment

15:45 - 16:00

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 - A5 (East)	998	250	190	2093	0.477	995	886	0.0	0.9	3.265	A
2 - A444 Weddington Lane	205	51	1035	1322	0.155	204	149	0.0	0.2	3.220	A
3 - A5 (West)	837	209	260	2101	0.398	835	980	0.0	0.7	2.835	A
4 - A444 Atherstone Road	257	64	820	1321	0.194	256	274	0.0	0.2	3.377	A

16:00 - 16:15

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 - A5 (East)	1192	298	227	2068	0.576	1190	1061	0.9	1.3	4.093	A
2 - A444 Weddington Lane	245	61	1239	1176	0.208	244	179	0.2	0.3	3.862	A
3 - A5 (West)	1000	250	311	2064	0.484	999	1172	0.7	0.9	3.376	A
4 - A444 Atherstone Road	307	77	982	1212	0.253	306	328	0.2	0.3	3.972	A

16:15 - 16:30

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 - A5 (East)	1460	365	278	2034	0.718	1455	1298	1.3	2.5	6.177	A
2 - A444 Weddington Lane	299	75	1515	979	0.306	299	219	0.3	0.4	5.284	A
3 - A5 (West)	1224	306	380	2013	0.608	1222	1434	0.9	1.5	4.536	A
4 - A444 Atherstone Road	375	94	1201	1064	0.353	375	401	0.3	0.5	5.215	A

16:30 - 16:45

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 - A5 (East)	1460	365	279	2033	0.718	1460	1300	2.5	2.5	6.274	A
2 - A444 Weddington Lane	299	75	1519	976	0.307	299	219	0.4	0.4	5.320	A
3 - A5 (West)	1224	306	381	2012	0.608	1224	1438	1.5	1.5	4.568	A
4 - A444 Atherstone Road	375	94	1203	1062	0.353	375	402	0.5	0.5	5.239	A

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 - A5 (East)	1192	298	228	2068	0.577	1197	1064	2.5	1.4	4.154	A

2 - A444 Weddington Lane	245	61	1245	1172	0.209	245	179	0.4	0.3	3.888	A
3 - A5 (West)	1000	250	312	2063	0.485	1002	1178	1.5	0.9	3.403	A
4 - A444 Atherstone Road	307	77	985	1210	0.253	307	329	0.5	0.3	3.994	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 - A5 (East)	998	250	191	2093	0.477	1000	890	1.4	0.9	3.299	A
2 - A444 Weddington Lane	205	51	1041	1318	0.155	205	150	0.3	0.2	3.236	A
3 - A5 (West)	837	209	261	2100	0.399	838	985	0.9	0.7	2.854	A
4 - A444 Atherstone Road	257	64	824	1318	0.195	257	275	0.3	0.2	3.395	A

Ref Case + Development, PM (17:00 - 18:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A444 Weddington Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A5 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A444 Atherstone Road - 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	7.68	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	Ref Case + Development	PM (17:00 - 18:00)	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 - A5 (East)		ONE HOUR	✓	1460	100.000
2 - A444 Weddington Lane		ONE HOUR	✓	324	100.000
3 - A5 (West)		ONE HOUR	✓	1308	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	340	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	2	1	1188	269
	2 - A444 Weddington Lane	10	0	137	177
	3 - A5 (West)	1102	174	0	32
	4 - A444 Atherstone Road	215	84	41	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	0	100	5	5
	2 - A444 Weddington Lane	10	0	0	0
	3 - A5 (West)	5	0	0	8
	4 - A444 Atherstone Road	4	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 - A5 (East)	0.80	9.02	3.9	A	1340	2010
2 - A444 Weddington Lane	0.40	6.85	0.7	A	297	446
3 - A5 (West)	0.73	6.74	2.7	A	1200	1800
4 - A444 Atherstone Road	0.39	6.25	0.6	A	312	468

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 - A5 (East)	1099	275	224	2077	0.529	1095	997	0.0	1.1	3.650	A
2 - A444 Weddington Lane	244	61	1125	1256	0.194	243	194	0.0	0.2	3.550	A
3 - A5 (West)	985	246	343	2093	0.470	981	1024	0.0	0.9	3.225	A
4 - A444 Atherstone Road	256	64	966	1250	0.205	255	358	0.0	0.3	3.616	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 - A5 (East)	1313	328	268	2047	0.641	1310	1193	1.1	1.8	4.869	A
2 - A444 Weddington Lane	291	73	1346	1099	0.265	291	232	0.2	0.4	4.451	A
3 - A5 (West)	1176	294	411	2043	0.576	1174	1226	0.9	1.3	4.134	A
4 - A444 Atherstone Road	306	76	1156	1124	0.272	305	429	0.3	0.4	4.397	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 - A5 (East)	1607	402	328	2006	0.801	1599	1458	1.8	3.9	8.672	A
2 - A444 Weddington Lane	357	89	1643	888	0.402	356	284	0.4	0.7	6.744	A
3 - A5 (West)	1440	360	502	1975	0.729	1435	1497	1.3	2.6	6.602	A
4 - A444 Atherstone Road	374	94	1413	953	0.393	373	524	0.4	0.6	6.198	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 - A5 (East)	1607	402	329	2005	0.802	1607	1463	3.9	3.9	9.018	A
2 - A444 Weddington Lane	357	89	1651	882	0.404	357	285	0.7	0.7	6.847	A
3 - A5 (West)	1440	360	504	1973	0.730	1440	1504	2.6	2.7	6.743	A
4 - A444 Atherstone	374	94	1418	950	0.39	374	526	0.6	0.6	6.25	A

Road					4					5	

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 - A5 (East)	1313	328	270	2046	0.642	1321	1200	3.9	1.8	5.026	A
2 - A444 Weddington Lane	291	73	1357	1091	0.267	292	234	0.7	0.4	4.516	A
3 - A5 (West)	1176	294	414	2041	0.576	1181	1236	2.7	1.4	4.211	A
4 - A444 Atherstone Road	306	76	1163	1119	0.273	307	432	0.6	0.4	4.438	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 - A5 (East)	1099	275	226	2076	0.530	1102	1002	1.8	1.1	3.706	A
2 - A444 Weddington Lane	244	61	1132	1251	0.195	244	195	0.4	0.2	3.581	A
3 - A5 (West)	985	246	346	2092	0.471	987	1031	1.4	0.9	3.262	A
4 - A444 Atherstone Road	256	64	972	1246	0.205	256	361	0.4	0.3	3.638	A

Ref Case + Development, PM (18:00 - 19:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A444 Weddington Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A5 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A444 Atherstone Road - 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	6.91	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
D12	Ref Case + Development	PM (18:00 - 19:00)	ONE HOUR	17:45	19:15	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 - A5 (East)		ONE HOUR	✓	1511	100.000
2 - A444 Weddington Lane		ONE HOUR	✓	309	100.000
3 - A5 (West)		ONE HOUR	✓	1075	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	310	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	2	1	1112	396
	2 - A444 Weddington Lane	14	0	109	186
	3 - A5 (West)	953	107	0	15
	4 - A444 Atherstone Road	218	61	31	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	0	100	5	4
	2 - A444 Weddington Lane	15	0	0	0
	3 - A5 (West)	4	0	0	1
	4 - A444 Atherstone Road	5	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue	Max LOS	Average	Total Junction

			(Veh)		Demand (Veh/hr)	Arrivals (Veh)
1 - A5 (East)	0.80	8.51	3.9	A	1387	2080
2 - A444 Weddington Lane	0.40	7.06	0.7	A	284	425
3 - A5 (West)	0.63	5.21	1.7	A	986	1480
4 - A444 Atherstone Road	0.31	4.74	0.4	A	284	427

Main Results for each time segment

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 - A5 (East)	1138	284	149	2133	0.533	1133	891	0.0	1.1	3.584	A
2 - A444 Weddington Lane	233	58	1156	1232	0.189	232	127	0.0	0.2	3.597	A
3 - A5 (West)	809	202	448	2032	0.398	807	939	0.0	0.7	2.931	A
4 - A444 Atherstone Road	233	58	807	1347	0.173	233	448	0.0	0.2	3.229	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 - A5 (East)	1358	340	179	2113	0.643	1356	1066	1.1	1.8	4.738	A
2 - A444 Weddington Lane	278	69	1383	1071	0.259	277	152	0.2	0.3	4.531	A
3 - A5 (West)	966	242	537	1966	0.492	965	1123	0.7	1.0	3.592	A
4 - A444 Atherstone Road	279	70	966	1243	0.224	278	536	0.2	0.3	3.731	A

18:15 - 18:30

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 - A5 (East)	1664	416	219	2086	0.798	1656	1304	1.8	3.8	8.219	A
2 - A444 Weddington Lane	340	85	1689	856	0.398	339	186	0.3	0.7	6.951	A
3 - A5 (West)	1184	296	656	1877	0.631	1181	1372	1.0	1.7	5.152	A
4 - A444 Atherstone Road	341	85	1182	1102	0.310	341	654	0.3	0.4	4.724	A

18:30 - 18:45

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 - A5 (East)	1664	416	219	2085	0.798	1663	1307	3.8	3.9	8.508	A
2 - A444 Weddington Lane	340	85	1696	850	0.400	340	186	0.7	0.7	7.059	A
3 - A5 (West)	1184	296	658	1874	0.631	1184	1378	1.7	1.7	5.210	A
4 - A444 Atherstone Road	341	85	1185	1100	0.310	341	657	0.4	0.4	4.743	A

18:45 - 19:00

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 - A5 (East)	1358	340	179	2112	0.643	1366	1070	3.9	1.8	4.876	A
2 - A444 Weddington Lane	278	69	1394	1064	0.261	279	152	0.7	0.4	4.594	A
3 - A5 (West)	966	242	541	1963	0.492	969	1132	1.7	1.0	3.635	A
4 - A444 Atherstone Road	279	70	970	1241	0.225	279	540	0.4	0.3	3.746	A

19:00 - 19:15

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 - A5 (East)	1138	284	150	2132	0.533	1140	895	1.8	1.2	3.637	A
2 - A444 Weddington Lane	233	58	1163	1226	0.190	233	127	0.4	0.2	3.625	A
3 - A5 (West)	809	202	451	2030	0.399	811	945	1.0	0.7	2.956	A
4 - A444 Atherstone Road	233	58	811	1345	0.174	234	450	0.3	0.2	3.243	A

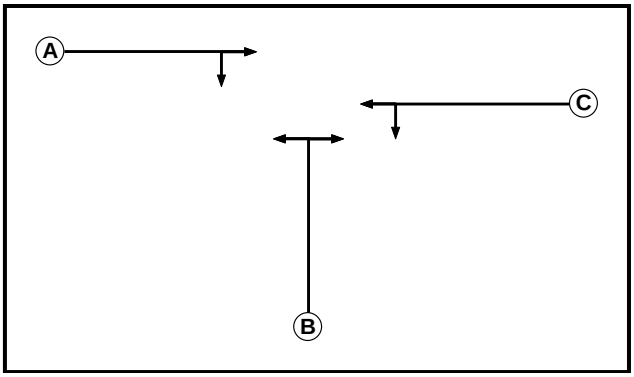
Appendix 21

MTP Results Summary

User and Project Details

Project:	
Title:	
Location:	
File name:	17059 - A5 Watling St-Woodford Lane Mitigation.lsg3x
Author:	
Company:	
Address:	
Notes:	

Phase Diagram



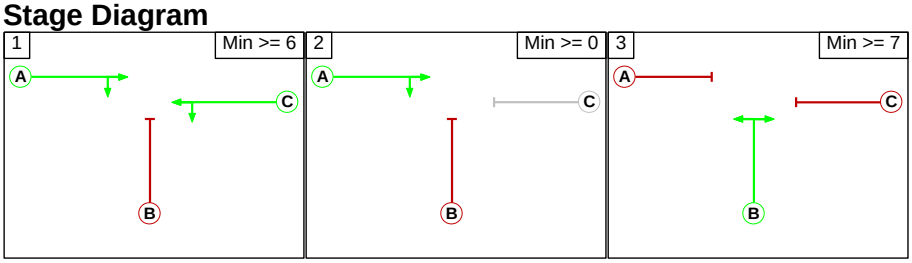
Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7

Phase Intergreens Matrix

		Starting Phase		
		A	B	C
Terminating Phase	A		7	-
	B	7		6
	C	-	6	

Stage Diagram



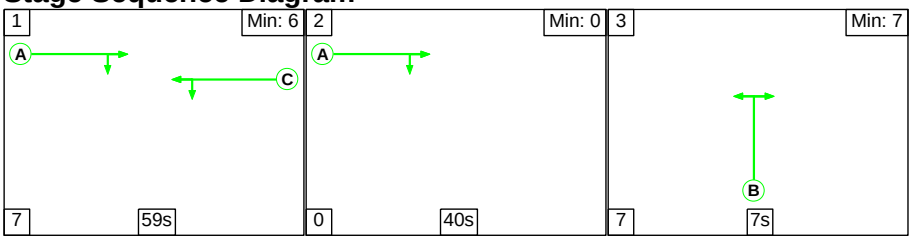
MTP Results Summary

Phase Delays

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

Scenario 1: 'Ref Case + Development AM (07:00 - 08:00)' (FG7: 'Ref Case + Development AM (1)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



Lane Input Data

Junction: Unnamed Junction

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	U	A	2	3	28.0	Geom	-	3.25	0.00	Y	Arm 4 Ahead	Inf
1/2	O	A	2	3	28.0	Geom	-	3.25	0.00	N	Arm 4 Ahead Arm 5 Right	Inf 8.00
2/1 (Woodford Lane)	U	B	2	3	5.0	Geom	-	3.00	0.00	Y	Arm 3 Left	10.00
2/2 (Woodford Lane)	U	B	2	3	60.0	Geom	-	3.25	0.00	N	Arm 4 Right	15.00
3/1	U		2	3	28.0	Geom	-	3.25	0.00	Y		
3/2	U		2	3	28.0	Geom	-	3.25	0.00	N		
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A5 Watling Street (South-East))	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Ahead Arm 5 Left	Inf 18.00
6/2 (A5 Watling Street (South-East))	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Ahead	Inf

Give-Way Lane Input Data

Junction: Unnamed Junction

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)
1/2	5/1 (Right)	1439	0	6/1	1.09	All	3.00	3.00	0.50	3	2.00
				6/2	1.09	All					

MTP Results Summary

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
7: 'Ref Case + Development AM (1)'	07:00	08:00	01:00	

Traffic Flows, Actual

Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	117	1099	1216
	B	50	0	30	80
	C	1248	171	0	1419
	Tot.	1298	288	1129	2715

MTP Results Summary

Network Results

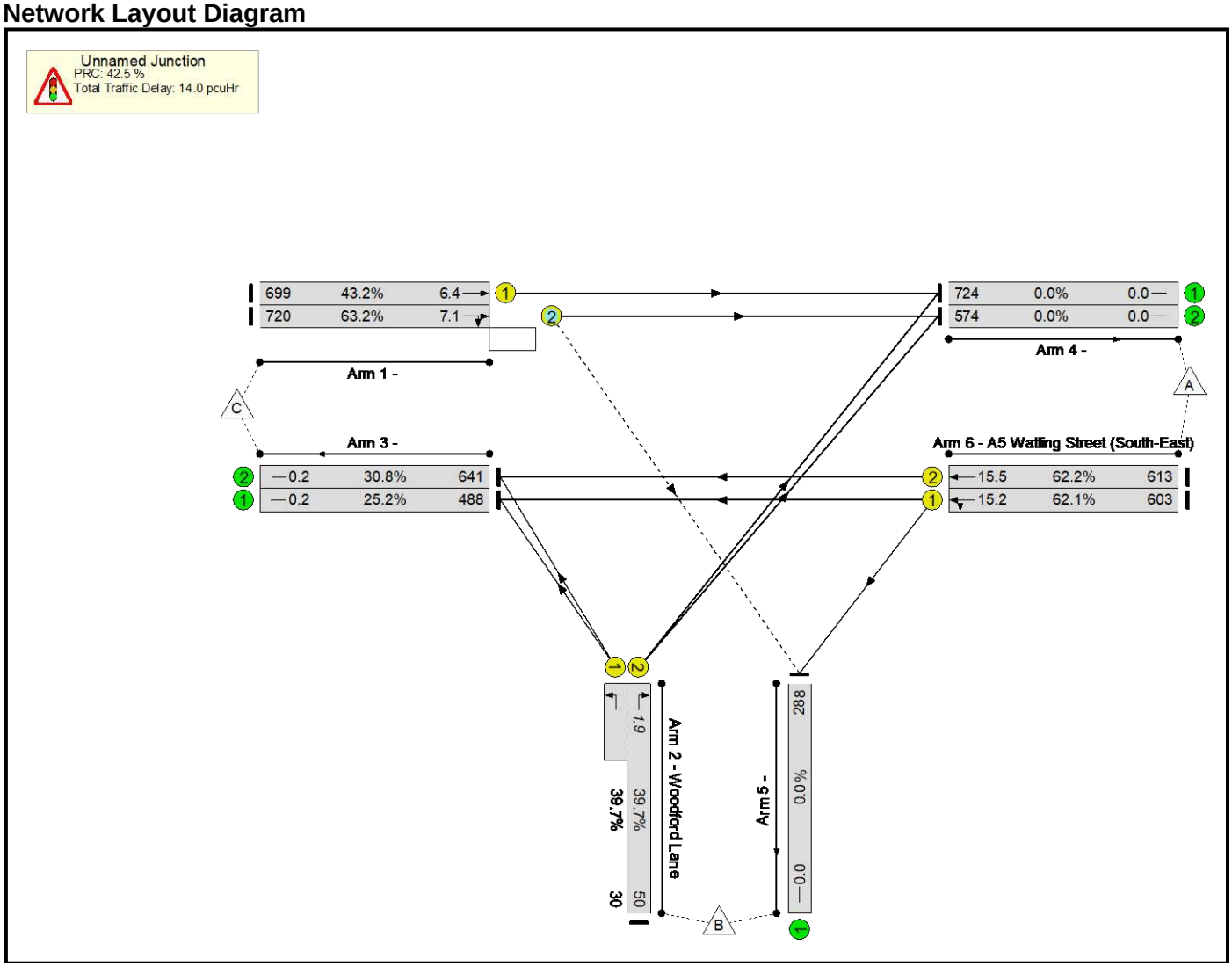
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**63.2%**	**31**	**136**	**4**	**14.0**	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**63.2%**	**31**	**136**	**4**	**14.0**	-
1/1	Ahead	U	A		1	99	-	699	1940	1617	43.2%	-	-	-	0.9	6.4
1/2	Ahead Right	O	A		1	99	-	720	1991	1140	63.2%	31	136	4	2.4	7.1
2/2+2/1	Woodford Lane Left Right	U	B		1	7	-	80	1891:1665	126+76	39.7 : 39.7%	-	-	-	1.5	1.9
3/1		U	-		-	-	-	488	1940	1940	25.2%	-	-	-	0.2	0.2
3/2		U	-		-	-	-	641	2080	2080	30.8%	-	-	-	0.2	0.2
6/1	A5 Watling Street (South-East) Ahead Left	U	C		1	60	-	603	1909	970	62.1%	-	-	-	4.4	15.2
6/2	A5 Watling Street (South-East) Ahead	U	C		1	60	-	613	1940	986	62.2%	-	-	-	4.4	15.5

C1 PRC for Signalled Lanes (%): 42.5 Total Delay for Signalled Lanes (pcuHr): 13.61 Cycle Time (s): 120

PRC Over All Lanes (%): 42.5 Total Delay Over All Lanes(pcuHr): 14.00

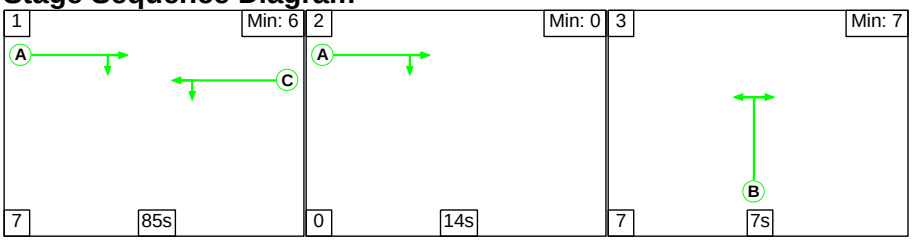
MTP Results Summary

Network Layout Diagram



Scenario 2: 'Ref Case + Development AM (08:00 - 09:00)' (FG8: 'Ref Case + Development AM (2)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



Lane Input Data

Junction: Unnamed Junction

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	U	A	2	3	28.0	Geom	-	3.25	0.00	Y	Arm 4 Ahead	Inf
1/2	O	A	2	3	28.0	Geom	-	3.25	0.00	N	Arm 4 Ahead Arm 5 Right	Inf 8.00
2/1 (Woodford Lane)	U	B	2	3	5.0	Geom	-	3.00	0.00	Y	Arm 3 Left	10.00
2/2 (Woodford Lane)	U	B	2	3	60.0	Geom	-	3.25	0.00	N	Arm 4 Right	15.00
3/1	U		2	3	28.0	Geom	-	3.25	0.00	Y		
3/2	U		2	3	28.0	Geom	-	3.25	0.00	N		
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A5 Watling Street (South-East))	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Ahead Arm 5 Left	Inf 18.00
6/2 (A5 Watling Street (South-East))	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Ahead	Inf

Give-Way Lane Input Data

Junction: Unnamed Junction

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)
1/2	5/1 (Right)	1439	0	6/1	1.09	All	3.00	3.00	0.50	3	2.00
				6/2	1.09	All					

MTP Results Summary

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
8: 'Ref Case + Development AM (2)'	08:00	09:00	01:00	

Traffic Flows, Actual

Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	103	1313	1416
	B	54	0	12	66
	C	1386	152	0	1538
	Tot.	1440	255	1325	3020

MTP Results Summary

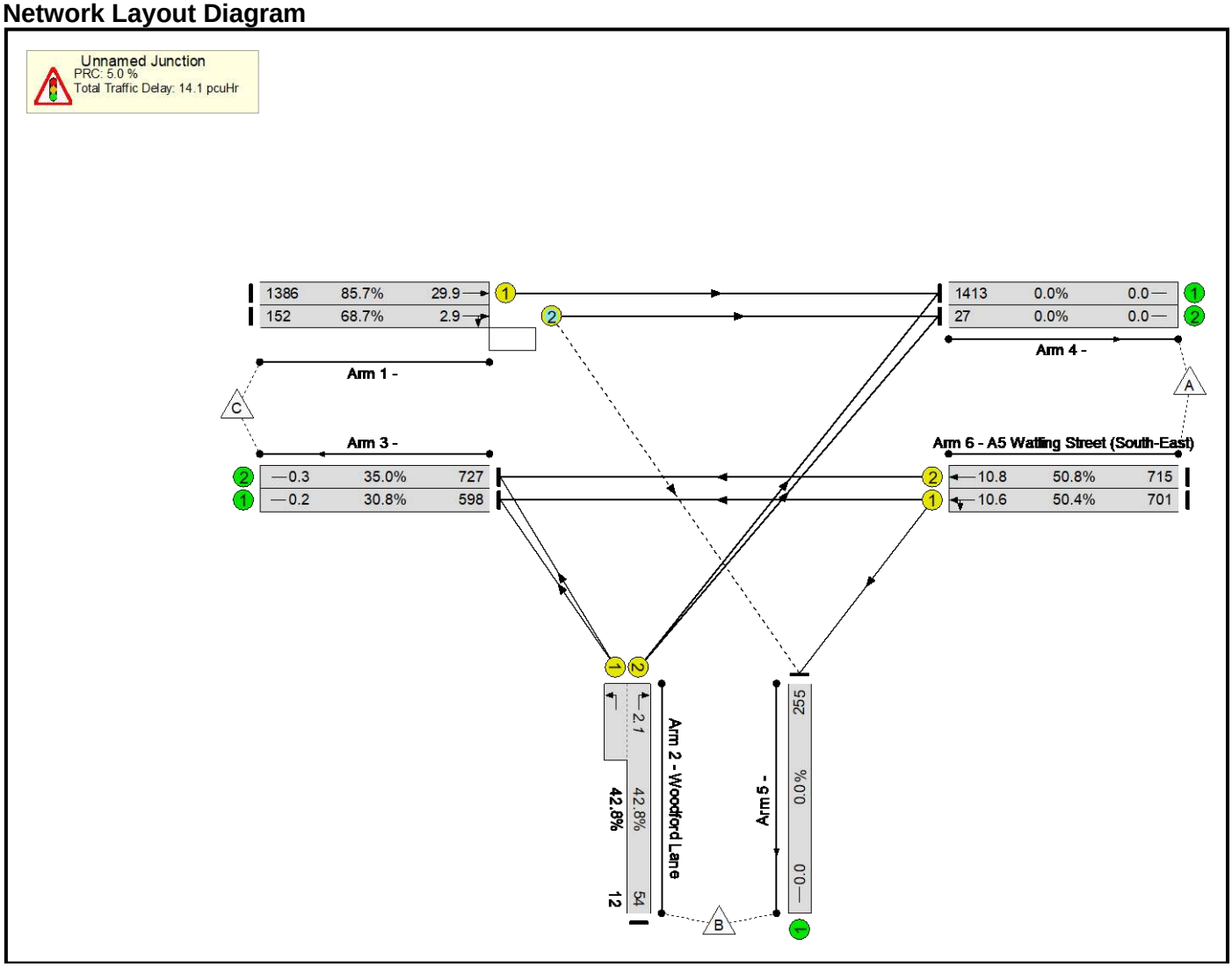
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**85.7%**	**0**	**148**	**4**	**14.1**	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**85.7%**	**0**	**148**	**4**	**14.1**	-
1/1	Ahead	U	A		1	99	-	1386	1940	1617	85.7%	-	-	-	5.2	29.9
1/2	Ahead Right	O	A		1	99	-	152	1752	221	68.7%	0	148	4	3.2	2.9
2/2+2/1	Woodford Lane Left Right	U	B		1	7	-	66	1891:1665	126+28	42.8 : 42.8%	-	-	-	1.4	2.1
3/1		U	-		-	-	-	598	1940	1940	30.8%	-	-	-	0.2	0.2
3/2		U	-		-	-	-	727	2080	2080	35.0%	-	-	-	0.3	0.3
6/1	A5 Watling Street (South-East) Ahead Left	U	C		1	86	-	701	1917	1390	50.4%	-	-	-	1.9	10.6
6/2	A5 Watling Street (South-East) Ahead	U	C		1	86	-	715	1940	1407	50.8%	-	-	-	1.9	10.8

C1 PRC for Signalled Lanes (%): 5.0 Total Delay for Signalled Lanes (pcuHr): 13.56 Cycle Time (s): 120
PRC Over All Lanes (%): 5.0 Total Delay Over All Lanes(pcuHr): 14.05

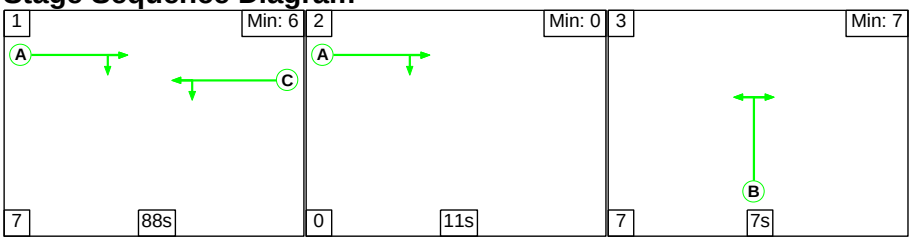
MTP Results Summary

Network Layout Diagram



Scenario 3: 'Ref Case + Development AM (09:00 - 10:00)' (FG9: 'Ref Case + Development AM (3)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



Lane Input Data

Junction: Unnamed Junction

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	U	A	2	3	28.0	Geom	-	3.25	0.00	Y	Arm 4 Ahead	Inf
1/2	O	A	2	3	28.0	Geom	-	3.25	0.00	N	Arm 4 Ahead Arm 5 Right	Inf 8.00
2/1 (Woodford Lane)	U	B	2	3	5.0	Geom	-	3.00	0.00	Y	Arm 3 Left	10.00
2/2 (Woodford Lane)	U	B	2	3	60.0	Geom	-	3.25	0.00	N	Arm 4 Right	15.00
3/1	U		2	3	28.0	Geom	-	3.25	0.00	Y		
3/2	U		2	3	28.0	Geom	-	3.25	0.00	N		
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A5 Watling Street (South-East))	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Ahead Arm 5 Left	Inf 18.00
6/2 (A5 Watling Street (South-East))	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Ahead	Inf

Give-Way Lane Input Data

Junction: Unnamed Junction

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)
1/2	5/1 (Right)	1439	0	6/1	1.09	All	3.00	3.00	0.50	3	2.00
				6/2	1.09	All					

MTP Results Summary

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
9: 'Ref Case + Development AM (3)'	09:00	10:00	01:00	

Traffic Flows, Actual

Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	129	1071	1200
	B	82	0	20	102
	C	1226	184	0	1410
	Tot.	1308	313	1091	2712

MTP Results Summary

Network Results

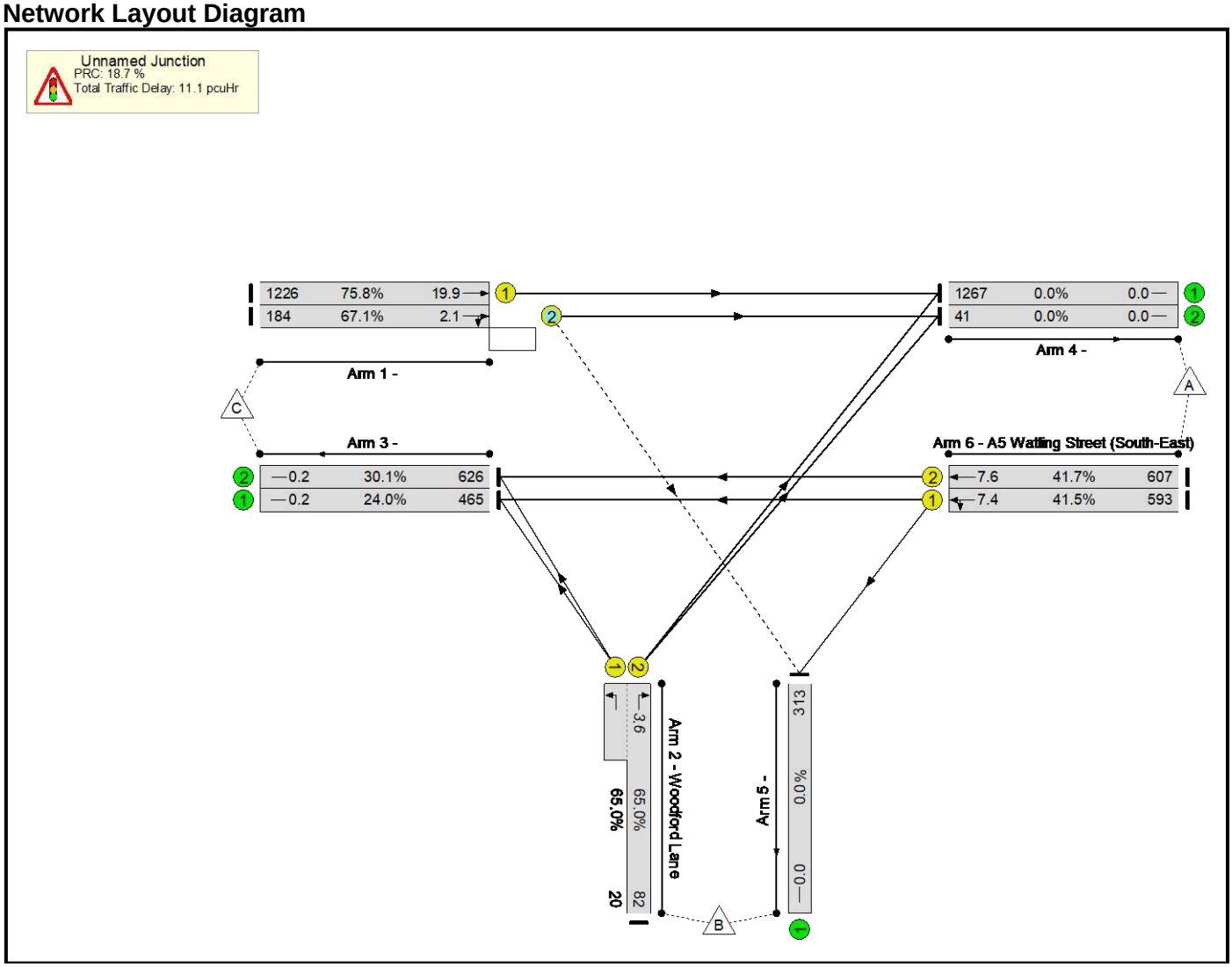
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**75.8%**	**83**	**96**	**5**	**11.1**	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**75.8%**	**83**	**96**	**5**	**11.1**	-
1/1	Ahead	U	A		1	99	-	1226	1940	1617	75.8%	-	-	-	3.1	19.9
1/2	Ahead Right	O	A		1	99	-	184	1752	274	67.1%	83	96	5	2.7	2.1
2/2+2/1	Woodford Lane Left Right	U	B		1	7	-	102	1891:1665	126+31	65.0 : 65.0%	-	-	-	2.4	3.6
3/1		U	-		-	-	-	465	1940	1940	24.0%	-	-	-	0.2	0.2
3/2		U	-		-	-	-	626	2080	2080	30.1%	-	-	-	0.2	0.2
6/1	A5 Watling Street (South-East) Ahead Left	U	C		1	89	-	593	1905	1429	41.5%	-	-	-	1.3	7.4
6/2	A5 Watling Street (South-East) Ahead	U	C		1	89	-	607	1940	1455	41.7%	-	-	-	1.3	7.6

C1 PRC for Signalled Lanes (%): 18.7 Total Delay for Signalled Lanes (pcuHr): 10.75 Cycle Time (s): 120

PRC Over All Lanes (%): 18.7 Total Delay Over All Lanes(pcuHr): 11.12

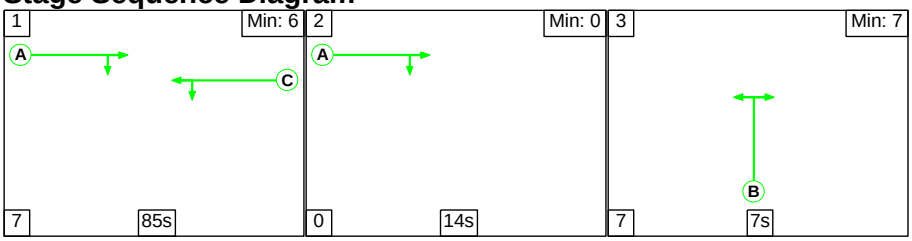
MTP Results Summary

Network Layout Diagram



Scenario 4: 'Ref Case + Development PM (16:00 - 17:00)' (FG10: 'Ref Case + Development PM (1)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



Lane Input Data

Junction: Unnamed Junction

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	U	A	2	3	28.0	Geom	-	3.25	0.00	Y	Arm 4 Ahead	Inf
1/2	O	A	2	3	28.0	Geom	-	3.25	0.00	N	Arm 4 Ahead Arm 5 Right	Inf 8.00
2/1 (Woodford Lane)	U	B	2	3	5.0	Geom	-	3.00	0.00	Y	Arm 3 Left	10.00
2/2 (Woodford Lane)	U	B	2	3	60.0	Geom	-	3.25	0.00	N	Arm 4 Right	15.00
3/1	U		2	3	28.0	Geom	-	3.25	0.00	Y		
3/2	U		2	3	28.0	Geom	-	3.25	0.00	N		
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A5 Watling Street (South-East))	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Ahead Arm 5 Left	Inf 18.00
6/2 (A5 Watling Street (South-East))	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Ahead	Inf

Give-Way Lane Input Data

Junction: Unnamed Junction

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)
1/2	5/1 (Right)	1439	0	6/1	1.09	All	3.00	3.00	0.50	3	2.00
				6/2	1.09	All					

MTP Results Summary

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
10: 'Ref Case + Development PM (1)'	16:00	17:00	01:00	

Traffic Flows, Actual

Actual Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	231	1115	1346
	B	56	0	39	95
	C	1173	144	0	1317
	Tot.	1229	375	1154	2758

MTP Results Summary

Network Results

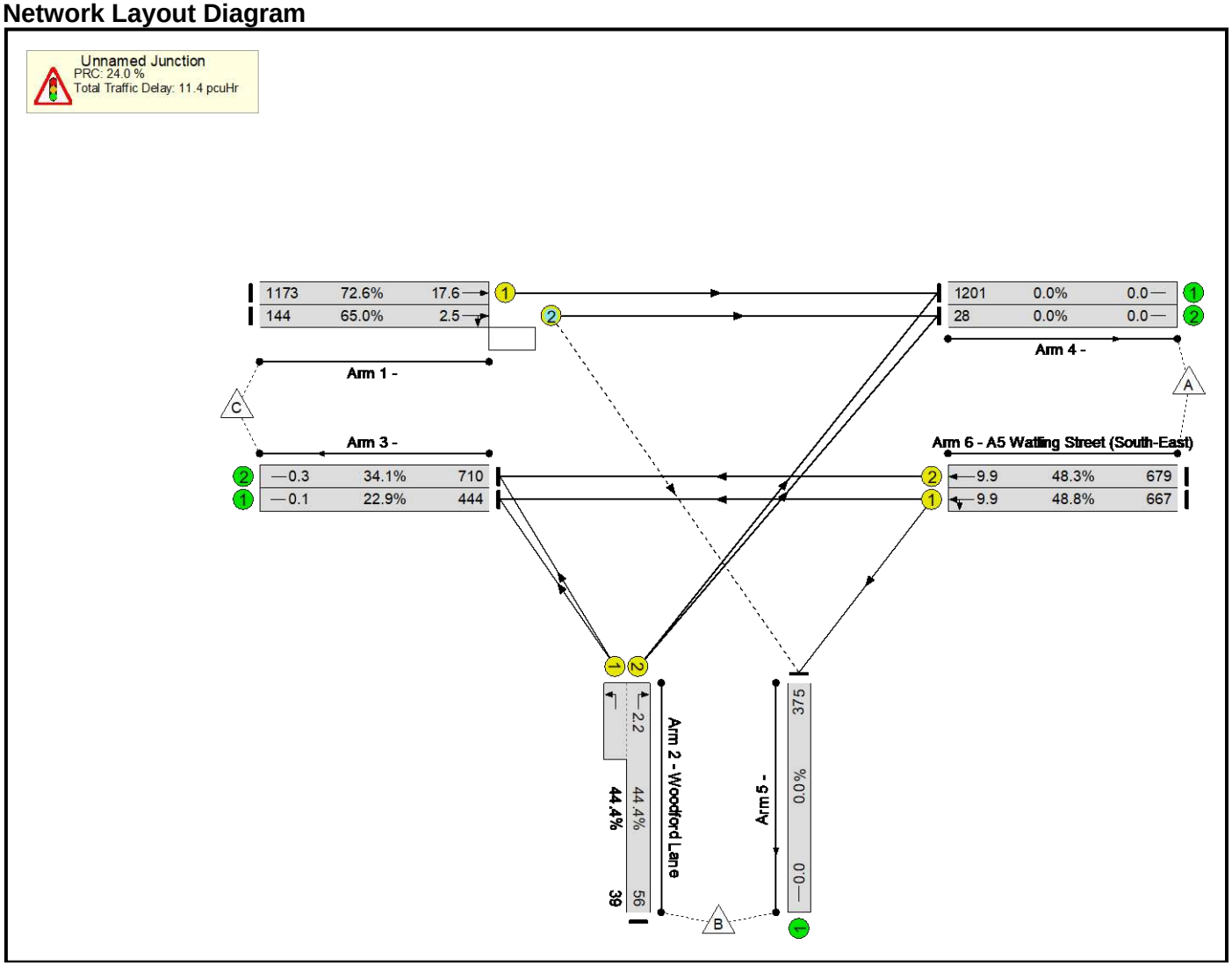
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**72.6%**	**0**	**140**	**4**	**11.4**	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**72.6%**	**0**	**140**	**4**	**11.4**	-
1/1	Ahead	U	A		1	99	-	1173	1940	1617	72.6%	-	-	-	2.7	17.6
1/2	Ahead Right	O	A		1	99	-	144	1752	221	65.0%	0	140	4	2.9	2.5
2/2+2/1	Woodford Lane Left Right	U	B		1	7	-	95	1891:1665	126+88	44.4 : 44.4%	-	-	-	1.8	2.2
3/1		U	-		-	-	-	444	1940	1940	22.9%	-	-	-	0.1	0.1
3/2		U	-		-	-	-	710	2080	2080	34.1%	-	-	-	0.3	0.3
6/1	A5 Watling Street (South-East) Ahead Left	U	C		1	86	-	667	1886	1367	48.8%	-	-	-	1.8	9.9
6/2	A5 Watling Street (South-East) Ahead	U	C		1	86	-	679	1940	1407	48.3%	-	-	-	1.8	9.9

C1 PRC for Signalled Lanes (%): 24.0 Total Delay for Signalled Lanes (pcuHr): 10.97 Cycle Time (s): 120

PRC Over All Lanes (%): 24.0 Total Delay Over All Lanes(pcuHr): 11.38

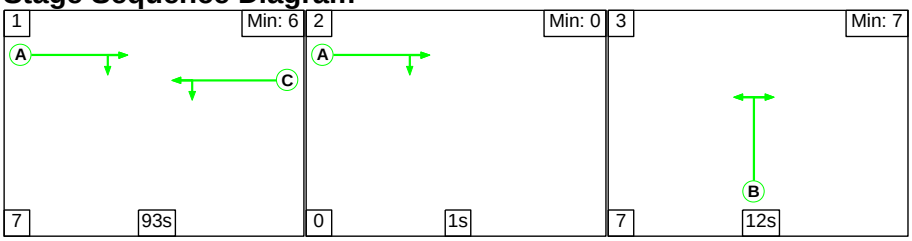
MTP Results Summary

Network Layout Diagram



Scenario 5: 'Ref Case + Development PM (17:00 - 18:00)' (FG11: 'Ref Case + Development PM (2)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



Lane Input Data

Junction: Unnamed Junction

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	U	A	2	3	28.0	Geom	-	3.25	0.00	Y	Arm 4 Ahead	Inf
1/2	O	A	2	3	28.0	Geom	-	3.25	0.00	N	Arm 4 Ahead Arm 5 Right	Inf 8.00
2/1 (Woodford Lane)	U	B	2	3	5.0	Geom	-	3.00	0.00	Y	Arm 3 Left	10.00
2/2 (Woodford Lane)	U	B	2	3	60.0	Geom	-	3.25	0.00	N	Arm 4 Right	15.00
3/1	U		2	3	28.0	Geom	-	3.25	0.00	Y		
3/2	U		2	3	28.0	Geom	-	3.25	0.00	N		
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A5 Watling Street (South-East))	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Ahead Arm 5 Left	Inf 18.00
6/2 (A5 Watling Street (South-East))	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Ahead	Inf

Give-Way Lane Input Data

Junction: Unnamed Junction

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)
1/2	5/1 (Right)	1439	0	6/1	1.09	All	3.00	3.00	0.50	3	2.00
				6/2	1.09	All					

MTP Results Summary

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
11: 'Ref Case + Development PM (2)'	16:00	17:00	01:00	

Traffic Flows, Actual

Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	162	1262	1424
	B	83	0	48	131
	C	1288	27	0	1315
	Tot.	1371	189	1310	2870

MTP Results Summary

Network Results

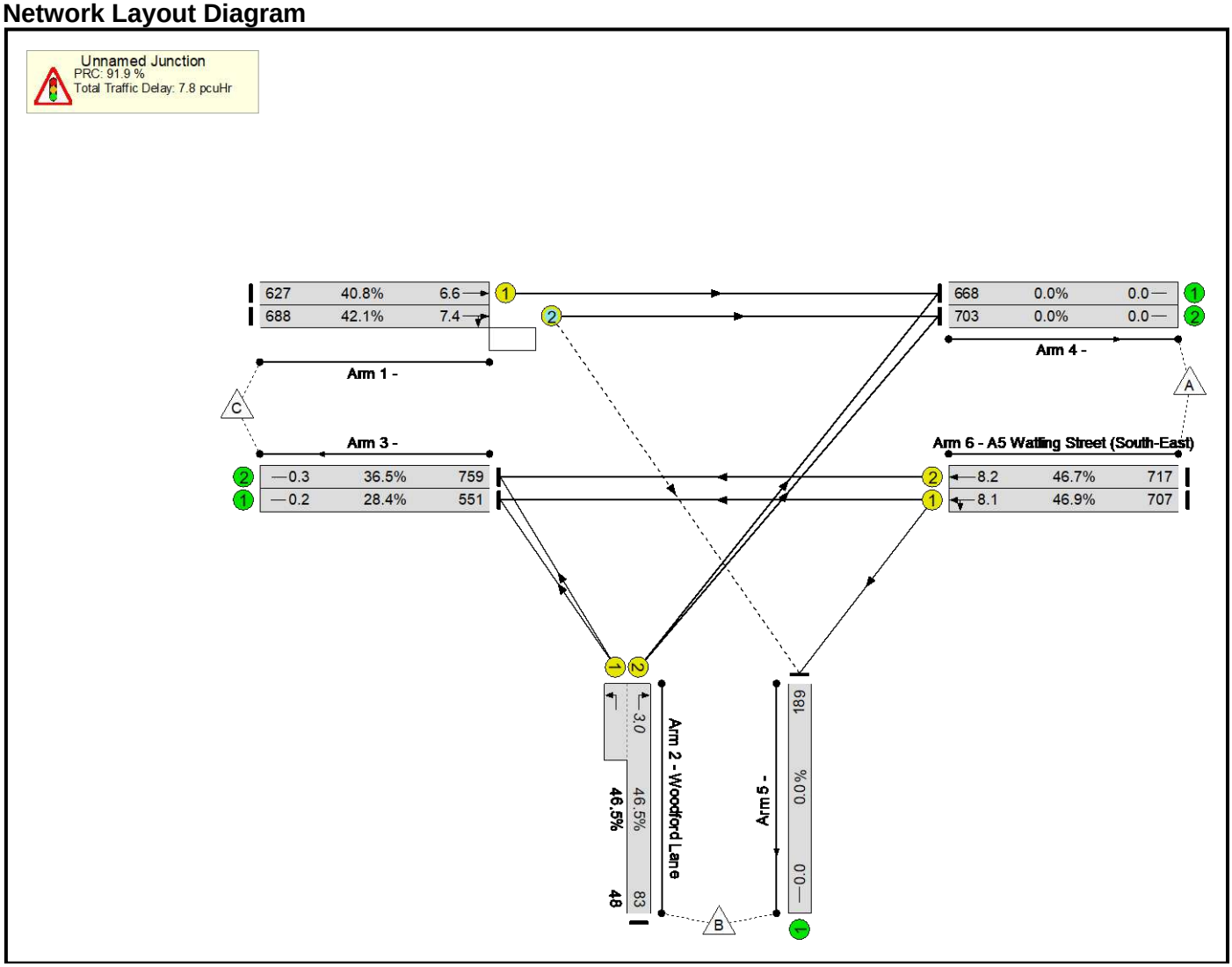
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**46.9%**	**0**	**0**	**27**	**7.8**	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**46.9%**	**0**	**0**	**27**	**7.8**	-
1/1	Ahead	U	A		1	94	-	627	1940	1536	40.8%	-	-	-	1.0	6.6
1/2	Ahead Right	O	A		1	94	-	688	2065	1635	42.1%	0	0	27	1.5	7.4
2/2+2/1	Woodford Lane Left Right	U	B		1	12	-	131	1891:1665	179+103	46.5 : 46.5%	-	-	-	2.2	3.0
3/1		U	-		-	-	-	551	1940	1940	28.4%	-	-	-	0.2	0.2
3/2		U	-		-	-	-	759	2080	2080	36.5%	-	-	-	0.3	0.3
6/1	A5 Watling Street (South-East) Ahead Left	U	C		1	94	-	707	1904	1507	46.9%	-	-	-	1.3	8.1
6/2	A5 Watling Street (South-East) Ahead	U	C		1	94	-	717	1940	1536	46.7%	-	-	-	1.3	8.2

C1 PRC for Signalled Lanes (%): 91.9 Total Delay for Signalled Lanes (pcuHr): 7.29 Cycle Time (s): 120

PRC Over All Lanes (%): 91.9 Total Delay Over All Lanes(pcuHr): 7.78

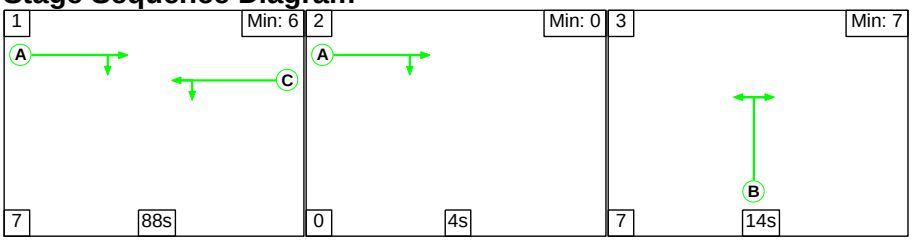
MTP Results Summary

Network Layout Diagram



Scenario 6: 'Ref Case + Development PM (18:00 - 19:00)' (FG12: 'Ref Case + Development PM (3)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



Lane Input Data

Junction: Unnamed Junction

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	U	A	2	3	28.0	Geom	-	3.25	0.00	Y	Arm 4 Ahead	Inf
1/2	O	A	2	3	28.0	Geom	-	3.25	0.00	N	Arm 4 Ahead Arm 5 Right	Inf 8.00
2/1 (Woodford Lane)	U	B	2	3	5.0	Geom	-	3.00	0.00	Y	Arm 3 Left	10.00
2/2 (Woodford Lane)	U	B	2	3	60.0	Geom	-	3.25	0.00	N	Arm 4 Right	15.00
3/1	U		2	3	28.0	Geom	-	3.25	0.00	Y		
3/2	U		2	3	28.0	Geom	-	3.25	0.00	N		
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A5 Watling Street (South-East))	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Ahead Arm 5 Left	Inf 18.00
6/2 (A5 Watling Street (South-East))	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Ahead	Inf

Give-Way Lane Input Data

Junction: Unnamed Junction

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)
1/2	5/1 (Right)	1439	0	6/1	1.09	All	3.00	3.00	0.50	3	2.00
				6/2	1.09	All					

MTP Results Summary

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
12: 'Ref Case + Development PM (3)'	17:00	18:00	01:00	

Traffic Flows, Actual

Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	188	1143	1331
	B	92	0	120	212
	C	1024	49	0	1073
	Tot.	1116	237	1263	2616

MTP Results Summary

Network Results

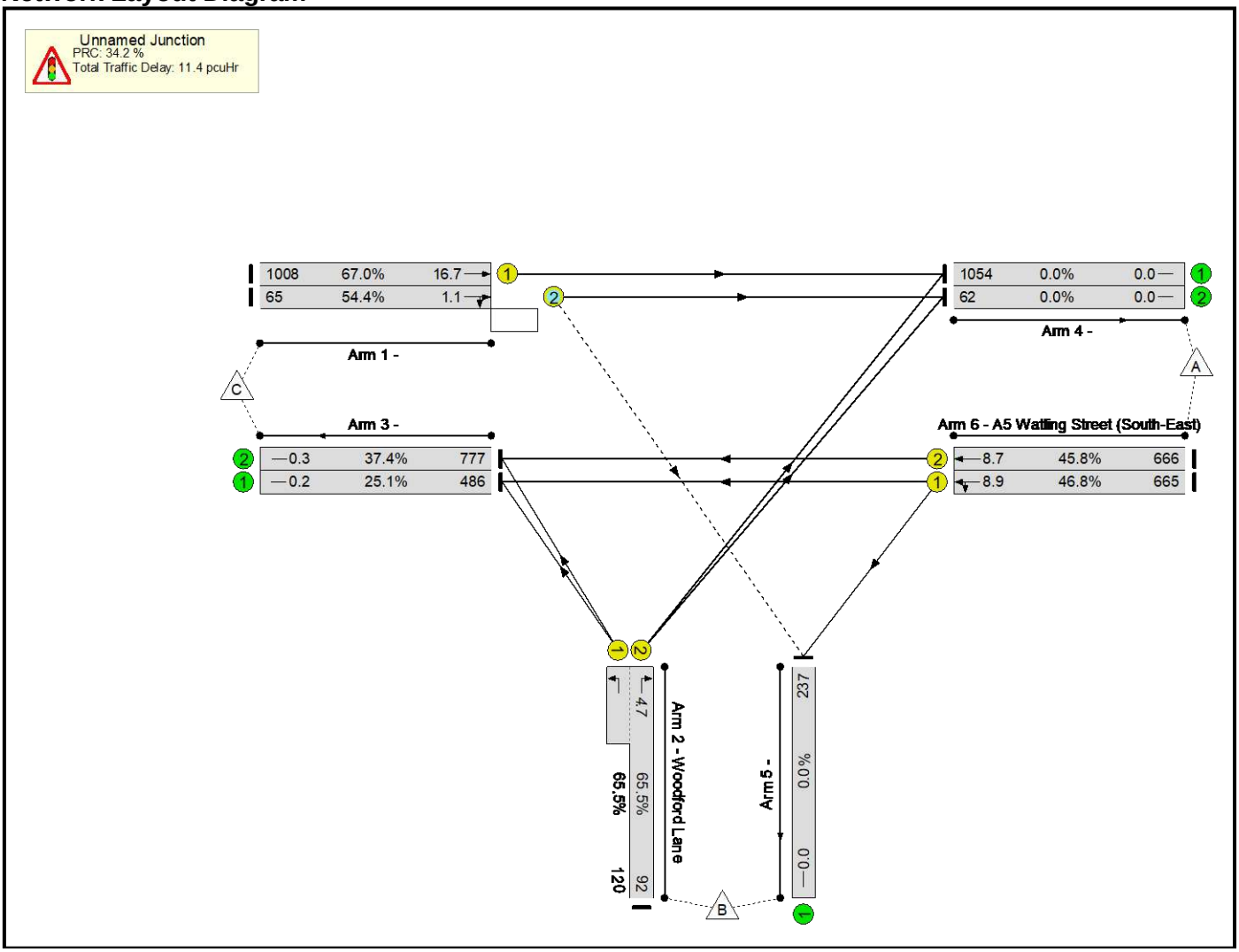
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**67.0%**	**0**	**30**	**19**	**11.4**	**-**
Unnamed Junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**67.0%**	**0**	**30**	**19**	**11.4**	**-**
1/1	Ahead	U	A		1	92	-	1008	1940	1504	67.0%	-	-	-	2.8	16.7
1/2	Ahead Right	O	A		1	92	-	65	1822	119	54.4%	0	30	19	1.4	1.1
2/2+2/1	Woodford Lane Left Right	U	B		1	14	-	212	1891:1665	140+183	65.5 : 65.5%	-	-	-	3.8	4.7
3/1		U	-		-	-	-	486	1940	1940	25.1%	-	-	-	0.2	0.2
3/2		U	-		-	-	-	777	2080	2080	37.4%	-	-	-	0.3	0.3
6/1	A5 Watling Street (South-East) Ahead Left	U	C		1	89	-	665	1895	1421	46.8%	-	-	-	1.5	8.9
6/2	A5 Watling Street (South-East) Ahead	U	C		1	89	-	666	1940	1455	45.8%	-	-	-	1.5	8.7

C1 PRC for Signalled Lanes (%): 34.2 Total Delay for Signalled Lanes (pcuHr): 10.96 Cycle Time (s): 120

PRC Over All Lanes (%): 34.2 Total Delay Over All Lanes(pcuHr): 11.42

MTP Results Summary

Network Layout Diagram



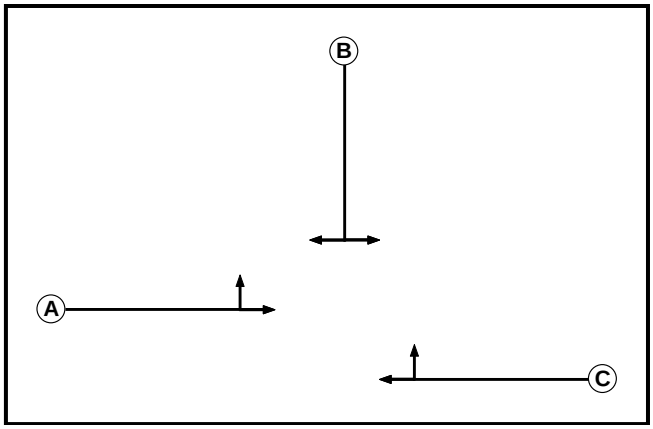
Appendix 22

MTP Results Summary

User and Project Details

Project:	
Title:	
Location:	
File name:	17059 - A5 Watling St-Drayton Lane Mitigation.lsg3x
Author:	
Company:	
Address:	
Notes:	

Phase Diagram



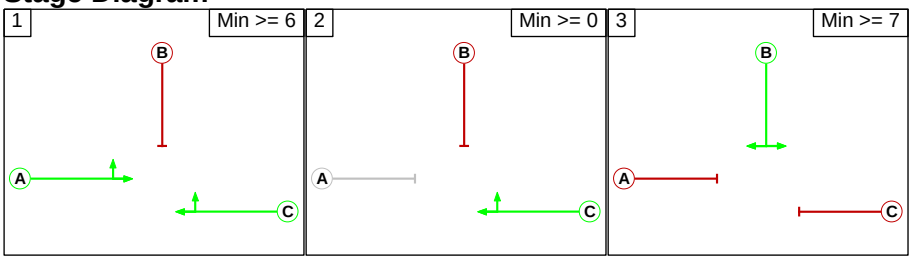
Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7

Phase Intergreens Matrix

		Starting Phase		
		A	B	C
Terminating Phase	A		7	-
	B	6		7
	C	-	7	

Stage Diagram



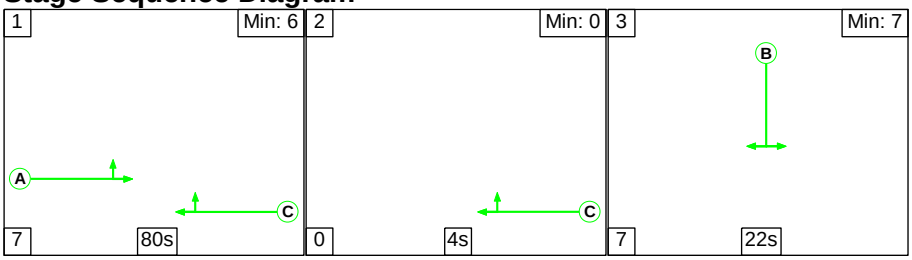
MTP Results Summary

Phase Delays

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

Scenario 1: 'Ref Case + Development AM (07:00 - 08:00)' (FG12: 'Ref Case + Development PM (3)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



Lane Input Data

Junction: Unnamed Junction

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 (A5 Watling Street (North-West))	U	A	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Ahead	15.00
											Arm 4 Left	Inf
1/2 (A5 Watling Street (North-West))	U	A	2	3	60.0	Geom	-	3.25	0.00	N	Arm 3 Ahead	Inf
2/1 (Drayton Lane)	U	B	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Left	8.00
											Arm 5 Right	8.00
3/1	U		2	3	60.0	Geom	-	3.25	0.00	Y		
3/2	U		2	3	60.0	Geom	-	3.25	0.00	N		
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A5 Watling Street (South-East))	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 5 Ahead	Inf
6/2 (A5 Watling Street (South-East))	O	C	2	3	60.0	Geom	-	3.25	0.00	N	Arm 4 Right	10.00
											Arm 5 Ahead	Inf

Give-Way Lane Input Data

Junction: Unnamed Junction

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)
6/2 (A5 Watling Street (South-East))	4/1 (Right)	1439	0	1/1	1.09	All	3.00	3.00	0.50	3	2.00
				1/2	1.09	All					

MTP Results Summary

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
12: 'Ref Case + Development PM (3)'	18:00	19:00	01:00	

Traffic Flows, Actual

Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	95	1265	1360
	B	56	0	159	215
	C	1067	61	0	1128
	Tot.	1123	156	1424	2703

MTP Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**70.2%**	**0**	**33**	**28**	**14.9**	**-**
Unnamed Junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**70.2%**	**0**	**33**	**28**	**14.9**	**-**
1/1	A5 Watling Street (North-West) Ahead Left	U	A		1	81	-	617	1789	1222	50.5%	-	-	-	2.1	10.4
1/2	A5 Watling Street (North-West) Ahead	U	A		1	81	-	743	2080	1421	52.3%	-	-	-	2.5	12.7
2/1	Drayton Lane Left Right	U	B		1	22	-	215	1634	313	68.6%	-	-	-	3.8	7.7
3/1		U	-		-	-	-	587	1940	1940	30.3%	-	-	-	0.2	0.2
3/2		U	-		-	-	-	837	2080	2080	40.2%	-	-	-	0.3	0.3
6/1	A5 Watling Street (South-East) Ahead	U	C		1	84	-	965	1940	1374	70.2%	-	-	-	3.9	19.7
6/2	A5 Watling Street (South-East) Right Ahead	O	C		1	84	-	163	1969	240	67.8%	0	33	28	2.1	2.7

C1

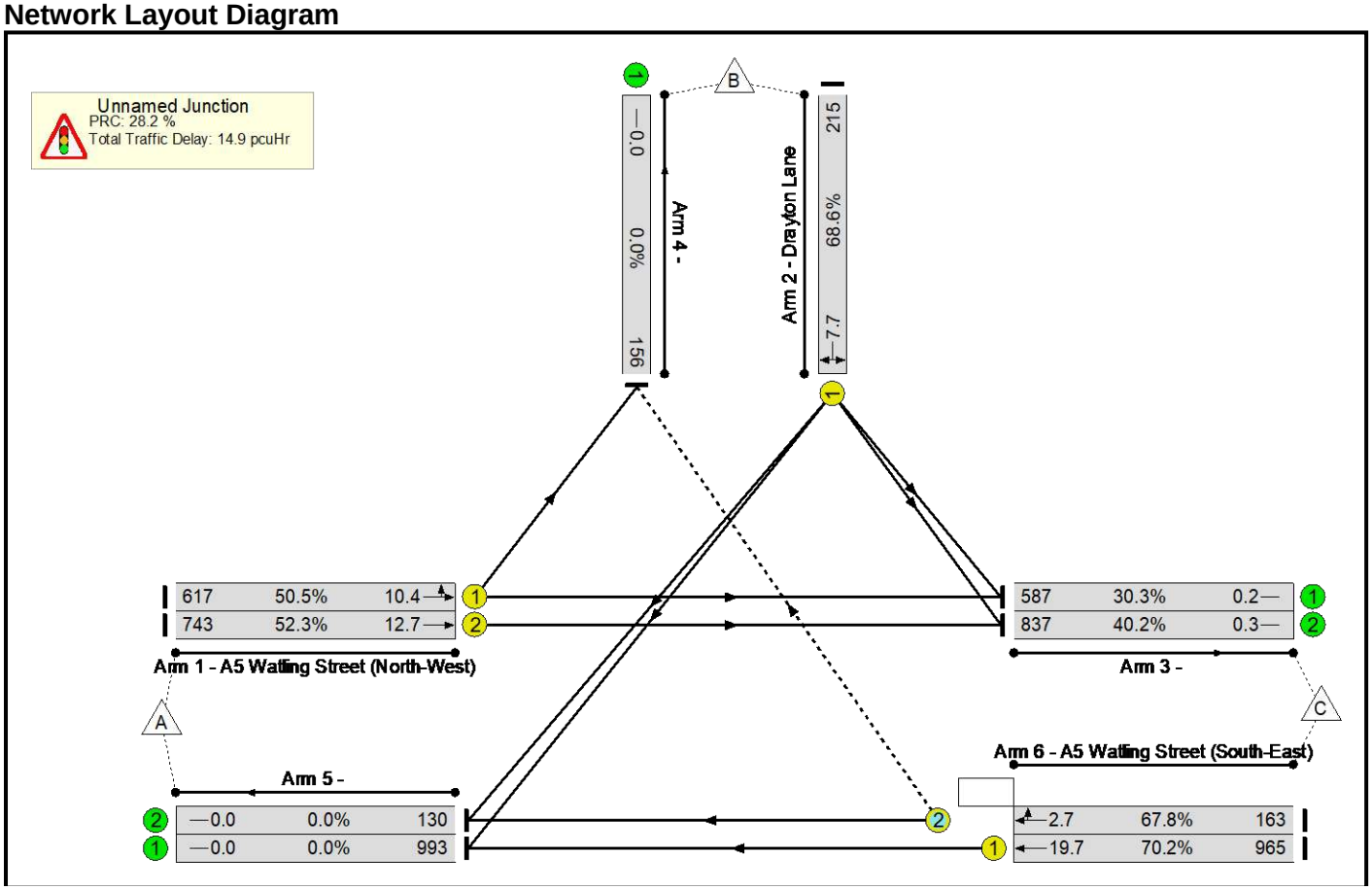
PRC for Signalled Lanes (%): 28.2
PRC Over All Lanes (%): 28.2

Total Delay for Signalled Lanes (pcuHr): 14.37
Total Delay Over All Lanes(pcuHr): 14.92

Cycle Time (s): 120

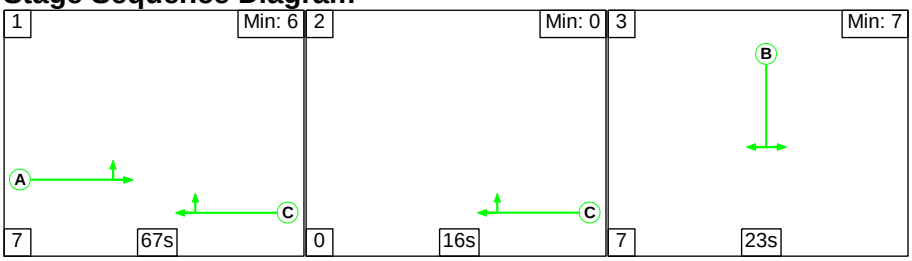
MTP Results Summary

Network Layout Diagram



Scenario 2: 'Ref Case + Development AM (08:00 - 09:00)' (FG8: 'Ref Case + Development AM (2)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



Lane Input Data

Junction: Unnamed Junction

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 (A5 Watling Street (North-West))	U	A	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Ahead	15.00
											Arm 4 Left	Inf
1/2 (A5 Watling Street (North-West))	U	A	2	3	60.0	Geom	-	3.25	0.00	N	Arm 3 Ahead	Inf
2/1 (Drayton Lane)	U	B	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Left	8.00
											Arm 5 Right	8.00
3/1	U		2	3	60.0	Geom	-	3.25	0.00	Y		
3/2	U		2	3	60.0	Geom	-	3.25	0.00	N		
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A5 Watling Street (South-East))	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 5 Ahead	Inf
6/2 (A5 Watling Street (South-East))	O	C	2	3	60.0	Geom	-	3.25	0.00	N	Arm 4 Right	10.00
											Arm 5 Ahead	Inf

Give-Way Lane Input Data

Junction: Unnamed Junction

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)
6/2 (A5 Watling Street (South-East))	4/1 (Right)	1439	0	1/1	1.09	All	3.00	3.00	0.50	3	2.00
				1/2	1.09	All					

MTP Results Summary

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
8: 'Ref Case + Development AM (2)'	08:00	09:00	01:00	

Traffic Flows, Actual

Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	96	1367	1463
	B	74	0	172	246
	C	1207	118	0	1325
	Tot.	1281	214	1539	3034

MTP Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**75.7%**	**0**	**115**	**3**	**22.3**	**-**
Unnamed Junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**75.7%**	**0**	**115**	**3**	**22.3**	**-**
1/1	A5 Watling Street (North-West) Ahead Left	U	A		1	68	-	666	1787	1028	64.8%	-	-	-	4.1	15.9
1/2	A5 Watling Street (North-West) Ahead	U	A		1	68	-	797	2080	1196	66.6%	-	-	-	4.9	19.1
2/1	Drayton Lane Left Right	U	B		1	23	-	246	1634	327	75.3%	-	-	-	4.6	9.2
3/1		U	-		-	-	-	641	1940	1940	33.0%	-	-	-	0.2	0.2
3/2		U	-		-	-	-	898	2080	2080	43.2%	-	-	-	0.4	0.4
6/1	A5 Watling Street (South-East) Ahead	U	C		1	83	-	1028	1940	1358	75.7%	-	-	-	4.8	23.2
6/2	A5 Watling Street (South-East) Right Ahead	O	C		1	83	-	297	1963	406	73.1%	0	115	3	3.3	4.8

C1

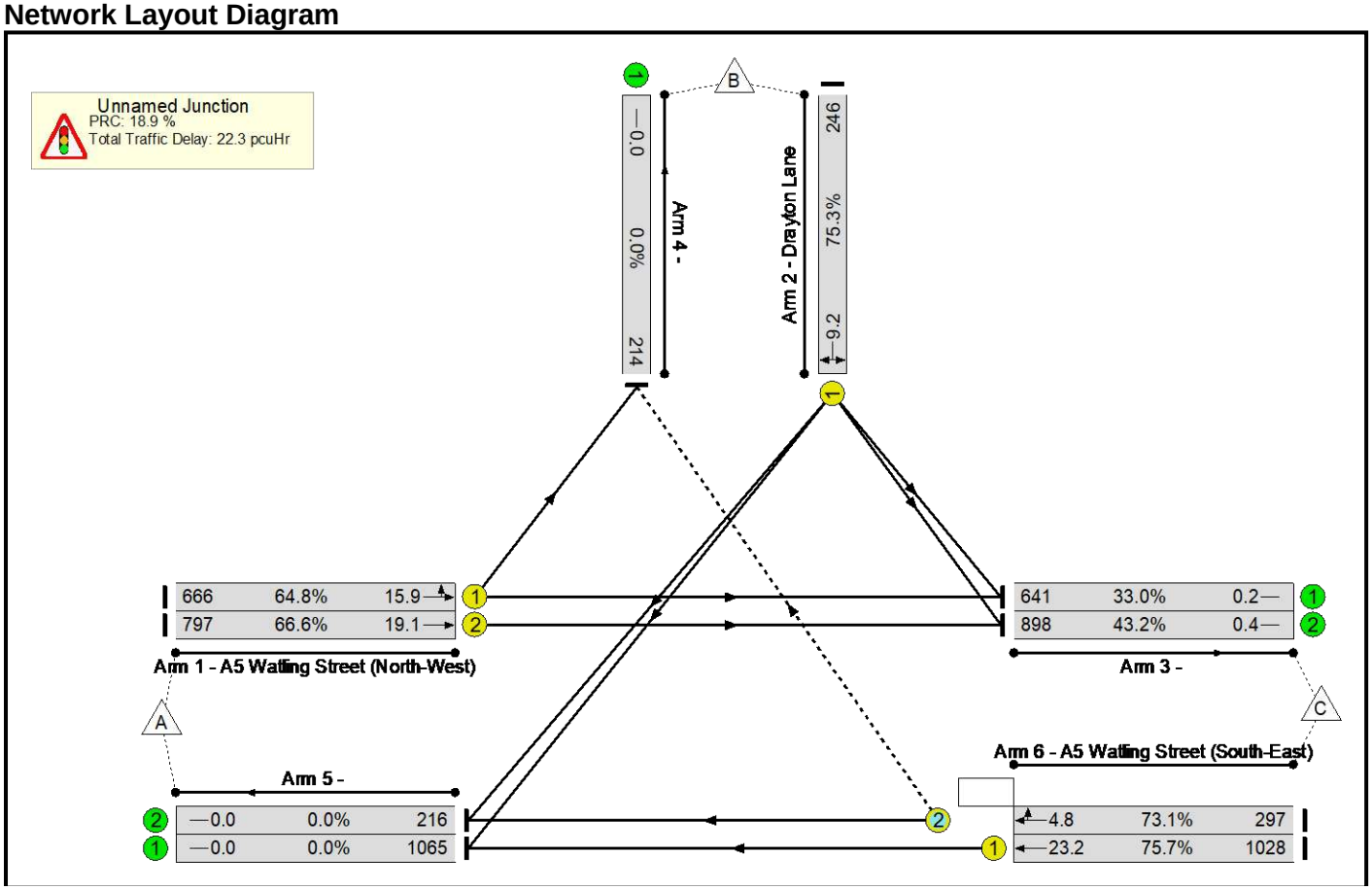
PRC for Signalled Lanes (%): 18.9
PRC Over All Lanes (%): 18.9

Total Delay for Signalled Lanes (pcuHr): 21.64
Total Delay Over All Lanes(pcuHr): 22.27

Cycle Time (s): 120

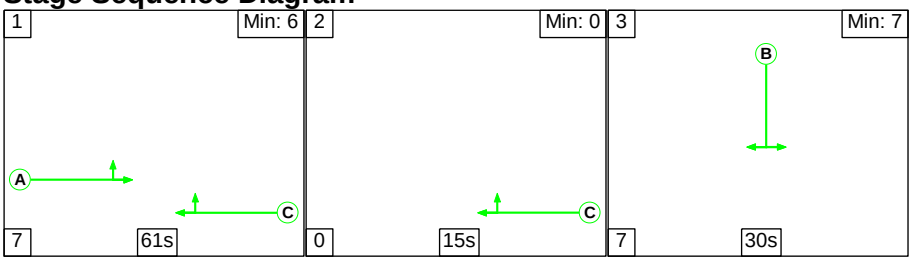
MTP Results Summary

Network Layout Diagram



Scenario 3: 'Ref Case + Development AM (09:00 - 10:00)' (FG9: 'Ref Case + Development AM (3)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



Lane Input Data

Junction: Unnamed Junction

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 (A5 Watling Street (North-West))	U	A	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Ahead	15.00
											Arm 4 Left	Inf
1/2 (A5 Watling Street (North-West))	U	A	2	3	60.0	Geom	-	3.25	0.00	N	Arm 3 Ahead	Inf
2/1 (Drayton Lane)	U	B	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Left	8.00
											Arm 5 Right	8.00
3/1	U		2	3	60.0	Geom	-	3.25	0.00	Y		
3/2	U		2	3	60.0	Geom	-	3.25	0.00	N		
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A5 Watling Street (South-East))	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 5 Ahead	Inf
6/2 (A5 Watling Street (South-East))	O	C	2	3	60.0	Geom	-	3.25	0.00	N	Arm 4 Right	10.00
											Arm 5 Ahead	Inf

Give-Way Lane Input Data

Junction: Unnamed Junction

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)
6/2 (A5 Watling Street (South-East))	4/1 (Right)	1439	0	1/1	1.09	All	3.00	3.00	0.50	3	2.00
				1/2	1.09	All					

MTP Results Summary

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
9: 'Ref Case + Development AM (3)'	09:00	10:00	01:00	

Traffic Flows, Actual

Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	127	1237	1364
	B	121	0	173	294
	C	976	116	0	1092
	Tot.	1097	243	1410	2750

MTP Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**69.6%**	**0**	**113**	**3**	**22.2**	**-**
Unnamed Junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**69.6%**	**0**	**113**	**3**	**22.2**	**-**
1/1	A5 Watling Street (North-West) Ahead Left	U	A		1	62	-	623	1797	943	66.0%	-	-	-	4.6	16.0
1/2	A5 Watling Street (North-West) Ahead	U	A		1	62	-	741	2080	1092	67.9%	-	-	-	5.4	19.2
2/1	Drayton Lane Left Right	U	B		1	30	-	294	1634	422	69.6%	-	-	-	4.4	9.9
3/1		U	-		-	-	-	568	1940	1940	29.3%	-	-	-	0.2	0.2
3/2		U	-		-	-	-	842	2080	2080	40.5%	-	-	-	0.3	0.3
6/1	A5 Watling Street (South-East) Ahead	U	C		1	76	-	858	1940	1245	68.9%	-	-	-	4.4	19.5
6/2	A5 Watling Street (South-East) Right Ahead	O	C		1	76	-	234	1936	343	68.2%	0	113	3	2.9	4.2

C1

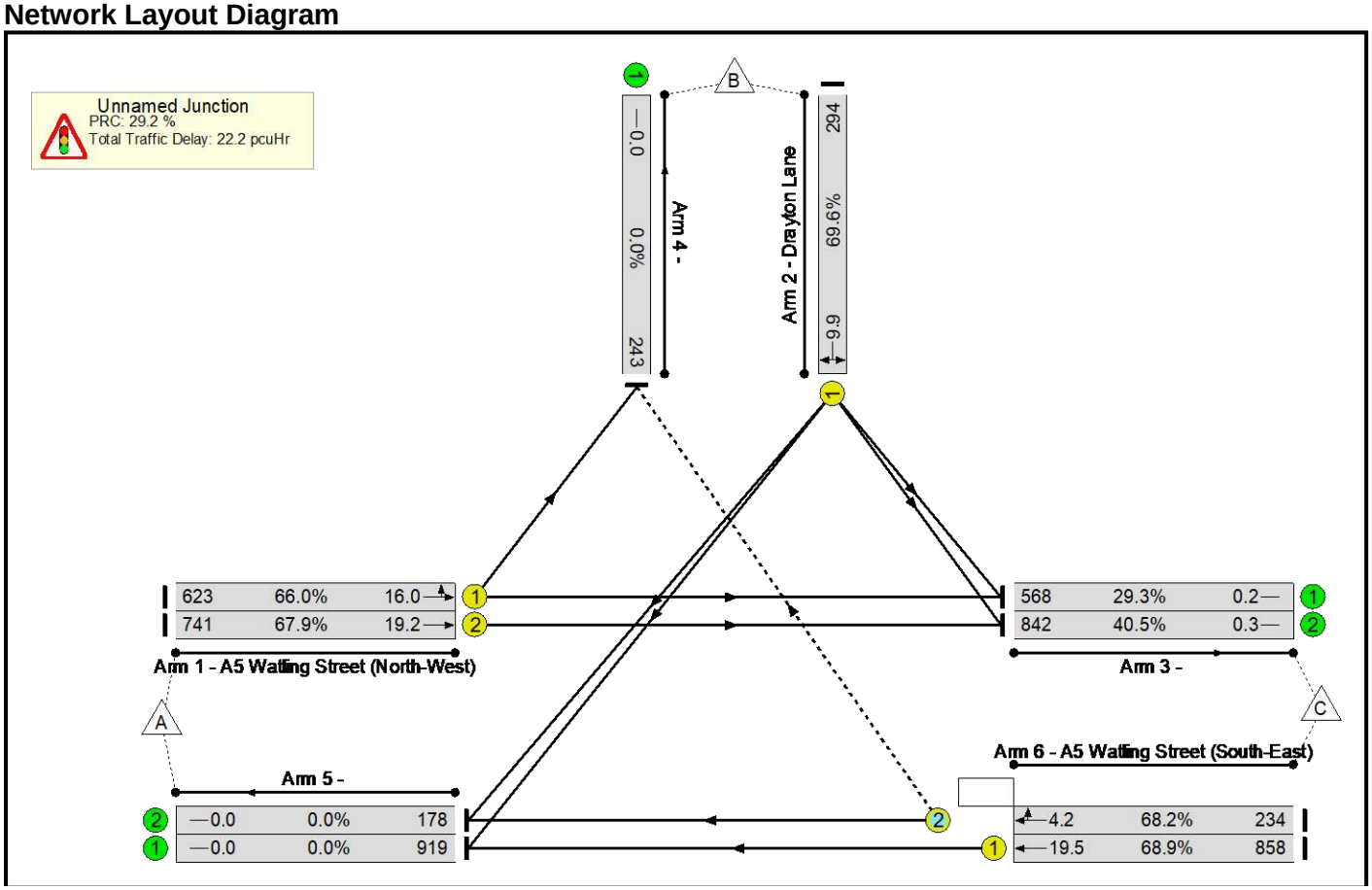
PRC for Signalled Lanes (%): 29.2
PRC Over All Lanes (%): 29.2

Total Delay for Signalled Lanes (pcuHr): 21.68
Total Delay Over All Lanes(pcuHr): 22.22

Cycle Time (s): 120

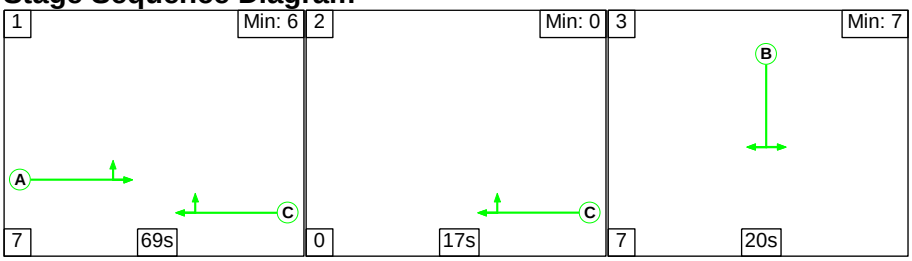
MTP Results Summary

Network Layout Diagram



Scenario 4: 'Ref Case + Development PM (16:00 - 17:00)' (FG10: 'Ref Case + Development PM (1)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



Lane Input Data

Junction: Unnamed Junction

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 (A5 Watling Street (North-West))	U	A	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Ahead	15.00
											Arm 4 Left	Inf
1/2 (A5 Watling Street (North-West))	U	A	2	3	60.0	Geom	-	3.25	0.00	N	Arm 3 Ahead	Inf
2/1 (Drayton Lane)	U	B	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Left	8.00
											Arm 5 Right	8.00
3/1	U		2	3	60.0	Geom	-	3.25	0.00	Y		
3/2	U		2	3	60.0	Geom	-	3.25	0.00	N		
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A5 Watling Street (South-East))	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 5 Ahead	Inf
6/2 (A5 Watling Street (South-East))	O	C	2	3	60.0	Geom	-	3.25	0.00	N	Arm 4 Right	10.00
											Arm 5 Ahead	Inf

Give-Way Lane Input Data

Junction: Unnamed Junction

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)
6/2 (A5 Watling Street (South-East))	4/1 (Right)	1439	0	1/1	1.09	All	3.00	3.00	0.50	3	2.00
				1/2	1.09	All					

MTP Results Summary

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
10: 'Ref Case + Development PM (1)'	16:00	17:00	01:00	

Traffic Flows, Actual

Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	162	1204	1366
	B	72	0	117	189
	C	1012	138	0	1150
	Tot.	1084	300	1321	2705

MTP Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**66.4%**	**0**	**135**	**3**	**17.4**	**-**
Unnamed Junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**66.4%**	**0**	**135**	**3**	**17.4**	**-**
1/1	A5 Watling Street (North-West) Ahead Left	U	A		1	70	-	626	1806	1069	58.6%	-	-	-	3.4	13.6
1/2	A5 Watling Street (North-West) Ahead	U	A		1	70	-	740	2080	1231	60.1%	-	-	-	3.9	16.4
2/1	Drayton Lane Left Right	U	B		1	20	-	189	1634	286	66.1%	-	-	-	3.4	6.8
3/1		U	-		-	-	-	503	1940	1940	25.9%	-	-	-	0.2	0.2
3/2		U	-		-	-	-	818	2080	2080	39.3%	-	-	-	0.3	0.3
6/1	A5 Watling Street (South-East) Ahead	U	C		1	86	-	934	1940	1407	66.4%	-	-	-	3.3	17.3
6/2	A5 Watling Street (South-East) Right Ahead	O	C		1	86	-	216	1898	331	65.3%	0	135	3	2.9	3.1

C1

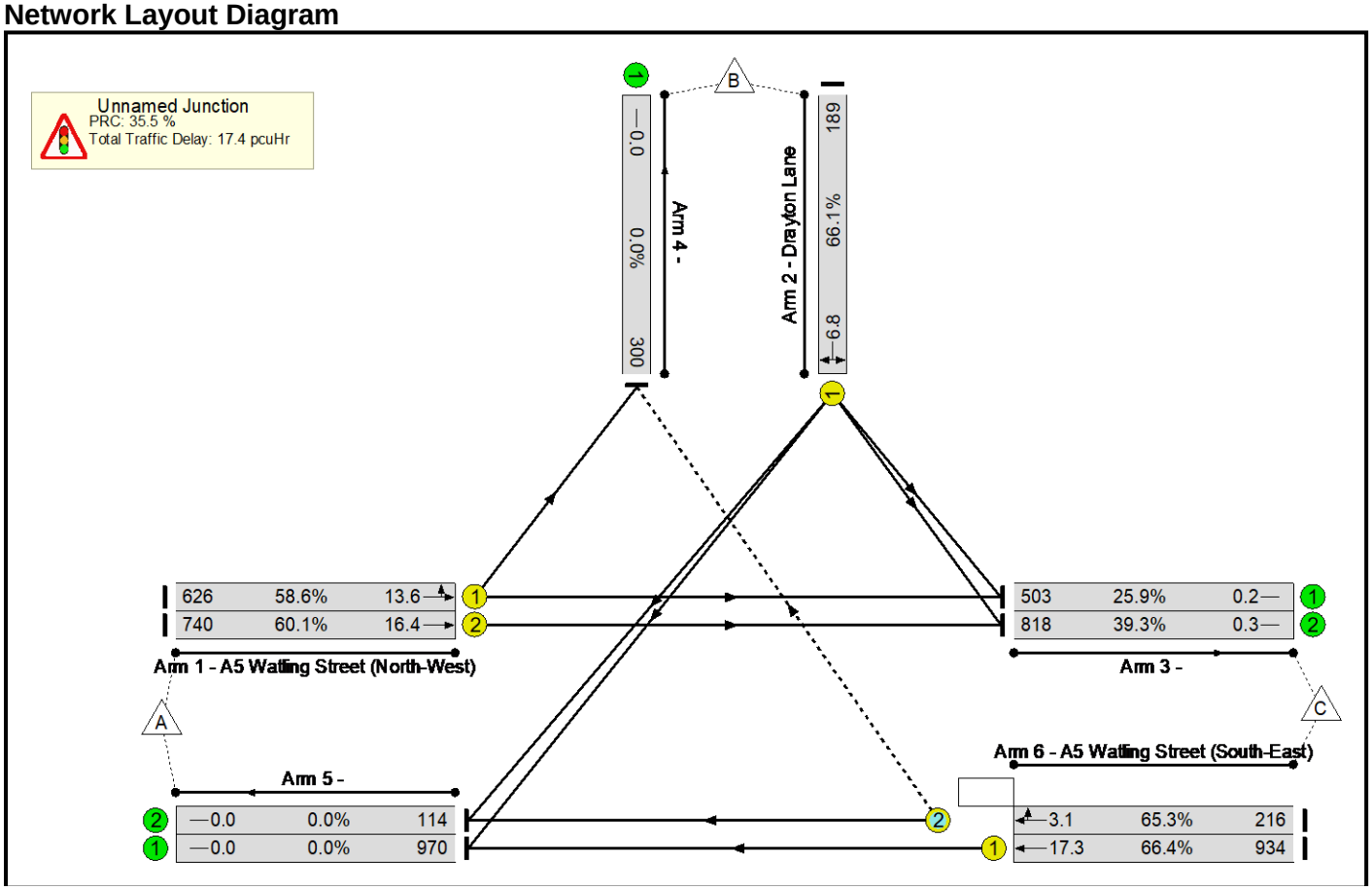
PRC for Signalled Lanes (%): 35.5
PRC Over All Lanes (%): 35.5

Total Delay for Signalled Lanes (pcuHr): 16.88
Total Delay Over All Lanes(pcuHr): 17.38

Cycle Time (s): 120

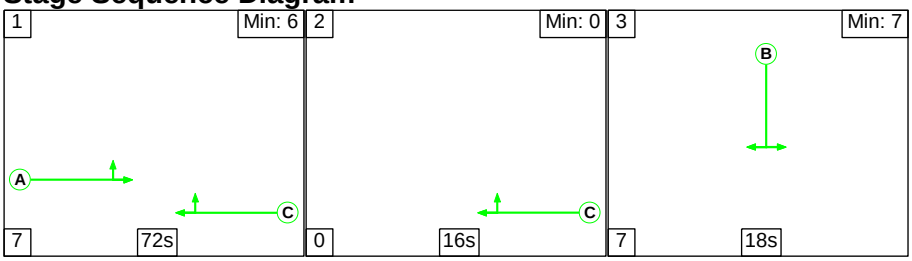
MTP Results Summary

Network Layout Diagram



Scenario 5: 'Ref Case + Development PM (17:00 - 18:00)' (FG11: 'Ref Case + Development PM (2)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



Lane Input Data

Junction: Unnamed Junction

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 (A5 Watling Street (North-West))	U	A	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Ahead	15.00
											Arm 4 Left	Inf
1/2 (A5 Watling Street (North-West))	U	A	2	3	60.0	Geom	-	3.25	0.00	N	Arm 3 Ahead	Inf
2/1 (Drayton Lane)	U	B	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Left	8.00
											Arm 5 Right	8.00
3/1	U		2	3	60.0	Geom	-	3.25	0.00	Y		
3/2	U		2	3	60.0	Geom	-	3.25	0.00	N		
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A5 Watling Street (South-East))	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 5 Ahead	Inf
6/2 (A5 Watling Street (South-East))	O	C	2	3	60.0	Geom	-	3.25	0.00	N	Arm 4 Right	10.00
											Arm 5 Ahead	Inf

Give-Way Lane Input Data

Junction: Unnamed Junction

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)
6/2 (A5 Watling Street (South-East))	4/1 (Right)	1439	0	1/1	1.09	All	3.00	3.00	0.50	3	2.00
				1/2	1.09	All					

MTP Results Summary

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
11: 'Ref Case + Development PM (2)'	17:00	18:00	01:00	

Traffic Flows, Actual

Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	176	1177	1353
	B	63	0	138	201
	C	1137	174	0	1311
	Tot.	1200	350	1315	2865

MTP Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**77.7%**	**0**	**170**	**4**	**19.6**	**-**
Unnamed Junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**77.7%**	**0**	**170**	**4**	**19.6**	**-**
1/1	A5 Watling Street (North-West) Ahead Left	U	A		1	73	-	621	1810	1116	55.6%	-	-	-	2.9	12.7
1/2	A5 Watling Street (North-West) Ahead	U	A		1	73	-	732	2080	1283	57.1%	-	-	-	3.4	14.9
2/1	Drayton Lane Left Right	U	B		1	18	-	201	1634	259	77.7%	-	-	-	4.4	8.1
3/1		U	-		-	-	-	501	1940	1940	25.8%	-	-	-	0.2	0.2
3/2		U	-		-	-	-	814	2080	2080	39.1%	-	-	-	0.3	0.3
6/1	A5 Watling Street (South-East) Ahead	U	C		1	88	-	1106	1940	1439	76.9%	-	-	-	4.5	23.8
6/2	A5 Watling Street (South-East) Right Ahead	O	C		1	88	-	205	1845	275	74.5%	0	170	4	3.9	4.4

C1

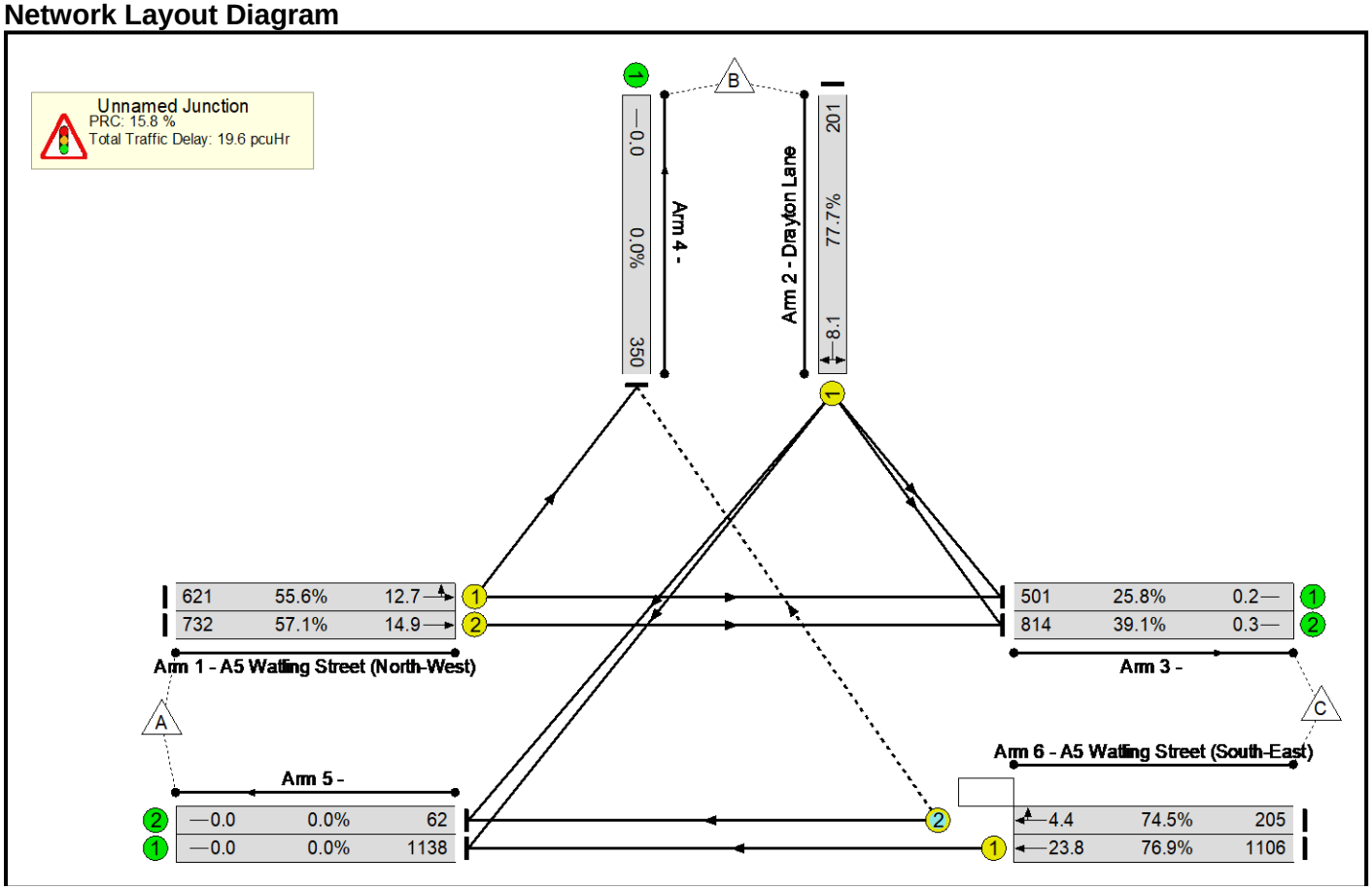
PRC for Signalled Lanes (%): 15.8
PRC Over All Lanes (%): 15.8

Total Delay for Signalled Lanes (pcuHr): 19.13
Total Delay Over All Lanes(pcuHr): 19.63

Cycle Time (s): 120

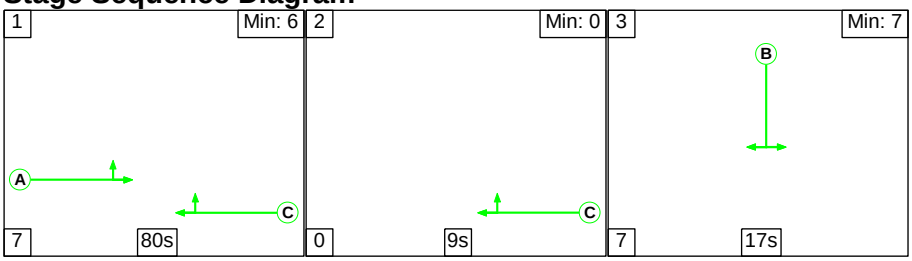
MTP Results Summary

Network Layout Diagram



Scenario 6: 'Ref Case + Development PM (18:00 - 19:00)' (FG12: 'Ref Case + Development PM (3)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



Lane Input Data

Junction: Unnamed Junction

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 (A5 Watling Street (North-West))	U	A	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Ahead	15.00
											Arm 4 Left	Inf
1/2 (A5 Watling Street (North-West))	U	A	2	3	60.0	Geom	-	3.25	0.00	N	Arm 3 Ahead	Inf
2/1 (Drayton Lane)	U	B	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 3 Left	8.00
											Arm 5 Right	8.00
3/1	U		2	3	60.0	Geom	-	3.25	0.00	Y		
3/2	U		2	3	60.0	Geom	-	3.25	0.00	N		
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A5 Watling Street (South-East))	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 5 Ahead	Inf
6/2 (A5 Watling Street (South-East))	O	C	2	3	60.0	Geom	-	3.25	0.00	N	Arm 4 Right	10.00
											Arm 5 Ahead	Inf

Give-Way Lane Input Data

Junction: Unnamed Junction

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)
6/2 (A5 Watling Street (South-East))	4/1 (Right)	1439	0	1/1	1.09	All	3.00	3.00	0.50	3	2.00
				1/2	1.09	All					

MTP Results Summary

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
12: 'Ref Case + Development PM (3)'	18:00	19:00	01:00	

Traffic Flows, Actual

Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	131	985	1116
	B	78	0	87	165
	C	1068	196	0	1264
	Tot.	1146	327	1072	2545

MTP Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**69.1%**	**122**	**69**	**5**	**13.0**	**-**
Unnamed Junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**69.1%**	**122**	**69**	**5**	**13.0**	**-**
1/1	A5 Watling Street (North-West) Ahead Left	U	A		1	81	-	508	1806	1234	41.2%	-	-	-	1.5	7.7
1/2	A5 Watling Street (North-West) Ahead	U	A		1	81	-	608	2080	1421	42.8%	-	-	-	1.8	9.3
2/1	Drayton Lane Left Right	U	B		1	17	-	165	1634	245	67.3%	-	-	-	3.2	6.2
3/1		U	-		-	-	-	396	1940	1940	20.4%	-	-	-	0.1	0.1
3/2		U	-		-	-	-	676	2080	2080	32.5%	-	-	-	0.2	0.2
6/1	A5 Watling Street (South-East) Ahead	U	C		1	89	-	1005	1940	1455	69.1%	-	-	-	3.3	18.4
6/2	A5 Watling Street (South-East) Right Ahead	O	C		1	89	-	259	1868	385	67.3%	122	69	5	2.7	3.5

C1

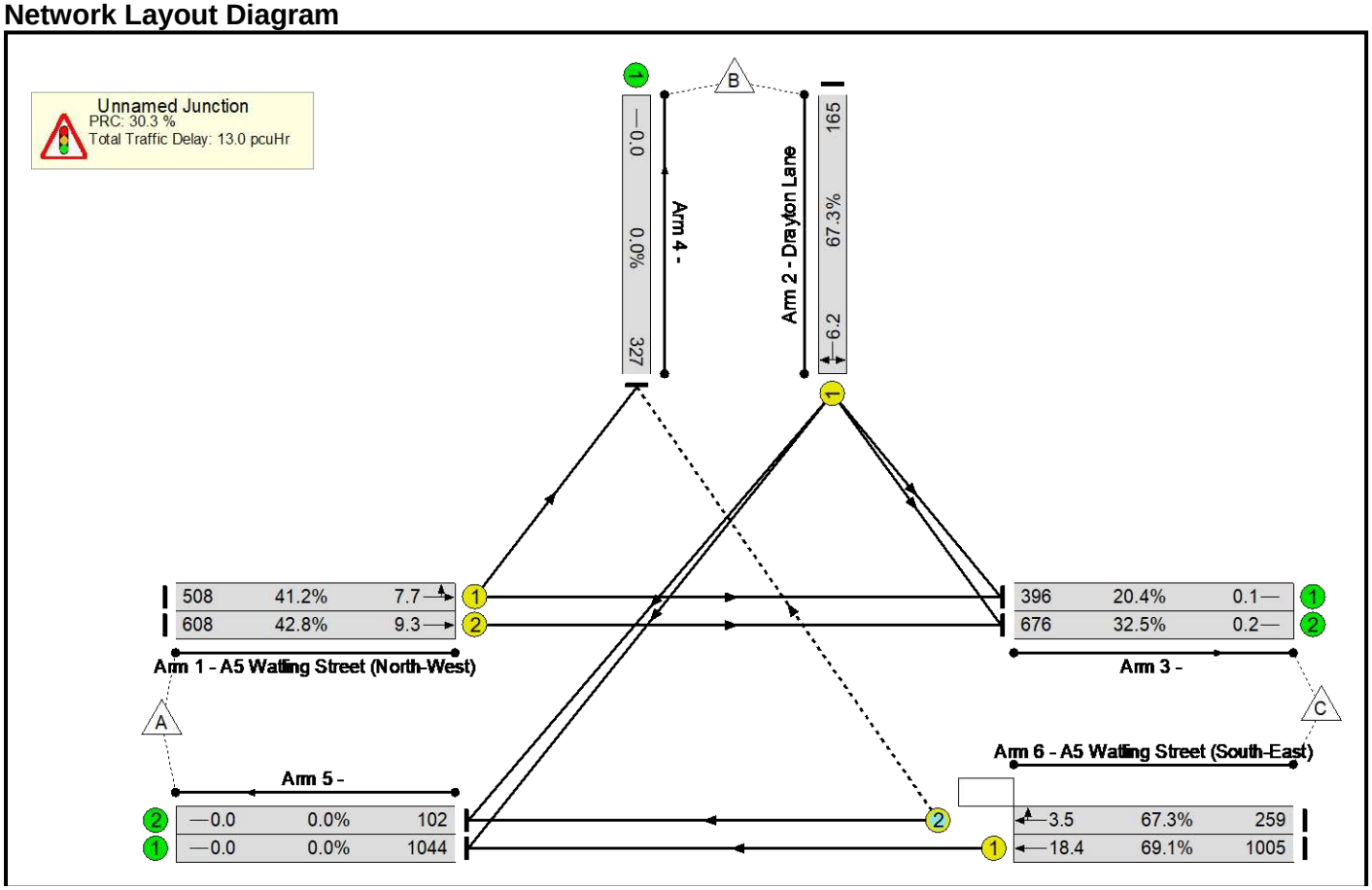
PRC for Signalled Lanes (%): 30.3
PRC Over All Lanes (%): 30.3

Total Delay for Signalled Lanes (pcuHr): 12.58
Total Delay Over All Lanes(pcuHr): 12.95

Cycle Time (s): 120

MTP Results Summary

Network Layout Diagram



Appendix 23

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: 17059- A5-Mira Roundabout (Sensitivity Test).j9
Path: P:\17 jobs\059 MIRA - Southern Manufacturing Sector\Technical Assessments\Modelling - July 2022\Sensitivty Test - Manual Redistribution Models
Report generation date: 18/07/2022 14:14:08

»Ref Case, AM (08:00 - 09:00)
»Ref Case, PM (17:00 - 18:00)
»Ref Case + Development, AM (08:00 - 09:00)
»Ref Case + Development, PM (17:00 - 18:00)

Summary of junction performance

	AM (08:00 - 09:00)					PM (17:00 - 18:00)				
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
	Ref Case									
1 - Mira Drive	0.1	3.66	0.08	A	9.51	4.0	22.68	0.81	C	8.32
2 - A5 South-East	4.2	8.22	0.81	A		1.6	4.58	0.62	A	
3 - Site Access	1.3	12.29	0.57	B		0.4	5.40	0.28	A	
4 - A5 North-West	4.2	10.77	0.81	B		2.8	6.05	0.74	A	
	Ref Case + Development									
1 - Mira Drive	0.1	4.77	0.10	A	35.06	10.9	61.82	0.95	F	15.65
2 - A5 South-East	7.8	15.70	0.89	C		1.7	4.84	0.63	A	
3 - Site Access	5.1	36.80	0.85	E		1.7	10.51	0.63	B	
4 - A5 North-West	27.1	56.40	1.00	F		3.8	7.98	0.79	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. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	24/02/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mtp\MTPGeneral
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	Ref Case	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D2	Ref Case	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D3	Ref Case + Development	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D4	Ref Case + Development	PM (17:00 - 18:00)	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

Ref Case, AM (08:00 - 09:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Site Access - 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	9.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Mira Drive	
2	A5 South-East	
3	Site Access	
4	A5 North-West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Mira Drive	6.64	7.01	4.9	18.0	50.0	23.0	
2 - A5 South-East	8.30	8.30	0.0	25.0	50.0	30.0	
3 - Site Access	3.50	8.16	35.5	15.0	50.0	32.0	
4 - A5 North-West	8.50	8.50	0.0	25.0	50.0	34.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Mira Drive	0.698	2142
2 - A5 South-East	0.770	2539
3 - Site Access	0.660	2007
4 - A5 North-West	0.771	2565

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	Ref Case	AM (08:00 - 09:00)	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 - Mira Drive		ONE HOUR	✓	73	100.000
2 - A5 South-East		ONE HOUR	✓	1709	100.000
3 - Site Access		ONE HOUR	✓	350	100.000
4 - A5 North-West		ONE HOUR	✓	1325	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	67	2	4
	2 - A5 South-East	514	35	0	1160
	3 - Site Access	22	162	0	166
	4 - A5 North-West	264	961	90	10

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	0	0	50
	2 - A5 South-East	1	25	0	7
	3 - Site Access	1	1	0	1
	4 - A5 North-West	2	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 - Mira Drive	0.08	3.66	0.1	A	67	100
2 - A5 South-East	0.81	8.22	4.2	A	1568	2352
3 - Site Access	0.57	12.29	1.3	B	321	482
4 - A5 North-West	0.81	10.77	4.2	B	1216	1824

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 - Mira Drive	55	14	943	1390	0.040	55	600	0.0	0.0	2.696	A
2 - A5 South-East	1287	322	79	2346	0.548	1282	918	0.0	1.2	3.368	A
3 - Site Access	263	66	1292	1095	0.241	262	69	0.0	0.3	4.318	A
4 - A5 North-West	998	249	550	1979	0.504	994	1005	0.0	1.0	3.637	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 - Mira Drive	66	16	1128	1253	0.052	66	718	0.0	0.1	3.030	A
2 - A5 South-East	1536	384	95	2334	0.658	1534	1099	1.2	1.9	4.480	A
3 - Site Access	315	79	1546	920	0.342	314	83	0.3	0.5	5.935	A
4 - A5 North-West	1191	298	658	1900	0.627	1189	1202	1.0	1.7	5.040	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 - Mira Drive	80	20	1376	1071	0.075	80	876	0.1	0.1	3.633	A
2 - A5 South-East	1882	470	116	2319	0.812	1873	1340	1.9	4.1	7.917	A
3 - Site Access	385	96	1888	684	0.564	382	101	0.5	1.3	11.838	B
4 - A5 North-West	1459	365	803	1794	0.813	1449	1468	1.7	4.1	10.152	B

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 - Mira Drive	80	20	1385	1064	0.076	80	881	0.1	0.1	3.657	A
2 - A5 South-East	1882	470	117	2318	0.812	1881	1348	4.1	4.2	8.220	A
3 - Site Access	385	96	1897	678	0.569	385	101	1.3	1.3	12.294	B
4 - A5 North-West	1459	365	807	1791	0.814	1458	1475	4.1	4.2	10.768	B

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 - Mira Drive	66	16	1141	1244	0.053	66	724	0.1	0.1	3.054	A
2 - A5 South-East	1536	384	96	2334	0.658	1545	1110	4.2	2.0	4.617	A
3 - Site Access	315	79	1558	911	0.345	318	83	1.3	0.5	6.095	A
4 - A5 North-West	1191	298	663	1896	0.628	1201	1212	4.2	1.7	5.254	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 - Mira Drive	55	14	950	1385	0.040	55	604	0.1	0.0	2.708	A
2 - A5 South-East	1287	322	80	2346	0.549	1290	925	2.0	1.2	3.419	A
3 - Site Access	263	66	1300	1089	0.242	264	69	0.5	0.3	4.367	A
4 - A5 North-West	998	249	553	1977	0.505	1000	1011	1.7	1.0	3.696	A

Ref Case, PM (17:00 - 18:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Site Access - 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	8.32	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	Ref Case	PM (17:00 - 18:00)	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 - Mira Drive		ONE HOUR	✓	607	100.000
2 - A5 South-East		ONE HOUR	✓	1174	100.000
3 - Site Access		ONE HOUR	✓	237	100.000
4 - A5 North-West		ONE HOUR	✓	1525	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	404	31	172
	2 - A5 South-East	86	50	0	1038
	3 - Site Access	8	70	0	159
	4 - A5 North-West	28	1287	148	62

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	2	0	4
	2 - A5 South-East	3	6	0	5
	3 - Site Access	2	2	0	0
	4 - A5 North-West	4	5	0	7

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 - Mira Drive	0.81	22.68	4.0	C	557	835
2 - A5 South-East	0.62	4.58	1.6	A	1077	1616
3 - Site Access	0.28	5.40	0.4	A	217	326
4 - A5 North-West	0.74	6.05	2.8	A	1399	2099

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 - Mira Drive	457	114	1213	1227	0.372	455	92	0.0	0.6	4.647	A
2 - A5 South-East	884	221	310	2187	0.404	881	1358	0.0	0.7	2.750	A
3 - Site Access	178	45	1056	1267	0.141	178	134	0.0	0.2	3.303	A
4 - A5 North-West	1148	287	161	2330	0.493	1144	1074	0.0	1.0	3.025	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 - Mira Drive	546	136	1452	1057	0.516	544	110	0.6	1.0	6.984	A
2 - A5 South-East	1055	264	370	2142	0.493	1054	1625	0.7	1.0	3.308	A
3 - Site Access	213	53	1264	1124	0.189	213	161	0.2	0.2	3.948	A
4 - A5 North-West	1371	343	192	2306	0.594	1369	1285	1.0	1.5	3.833	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 - Mira Drive	668	167	1775	827	0.808	657	134	1.0	3.8	20.055	C
2 - A5 South-East	1293	323	450	2081	0.621	1290	1982	1.0	1.6	4.535	A
3 - Site Access	261	65	1544	932	0.280	260	196	0.2	0.4	5.358	A
4 - A5 North-West	1679	420	235	2274	0.739	1674	1570	1.5	2.8	5.951	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 - Mira Drive	668	167	1780	824	0.811	667	134	3.8	4.0	22.682	C
2 - A5 South-East	1293	323	454	2078	0.622	1293	1993	1.6	1.6	4.581	A
3 - Site Access	261	65	1550	928	0.281	261	197	0.4	0.4	5.397	A
4 - A5 North-West	1679	420	236	2273	0.739	1679	1575	2.8	2.8	6.054	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 - Mira Drive	546	136	1459	1052	0.519	557	110	4.0	1.1	7.445	A
2 - A5 South-East	1055	264	376	2137	0.494	1058	1641	1.6	1.0	3.342	A
3 - Site Access	213	53	1272	1119	0.190	214	162	0.4	0.2	3.978	A
4 - A5 North-West	1371	343	193	2306	0.595	1376	1293	2.8	1.5	3.894	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 - Mira Drive	457	114	1219	1223	0.374	459	92	1.1	0.6	4.727	A
2 - A5 South-East	884	221	312	2186	0.404	885	1367	1.0	0.7	2.771	A
3 - Site Access	178	45	1062	1263	0.141	179	135	0.2	0.2	3.321	A
4 - A5 North-West	1148	287	161	2330	0.493	1150	1079	1.5	1.0	3.056	A

Ref Case + Development, AM (08:00 - 09:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Site Access - 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	35.06	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
D3	Ref Case + Development	AM (08:00 - 09:00)	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 - Mira Drive		ONE HOUR	✓	73	100.000
2 - A5 South-East		ONE HOUR	✓	1709	100.000
3 - Site Access		ONE HOUR	✓	481	100.000
4 - A5 North-West		ONE HOUR	✓	1569	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	67	2	4
	2 - A5 South-East	514	35	0	1160
	3 - Site Access	22	206	1	252
	4 - A5 North-West	264	961	334	10

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	0	0	50
	2 - A5 South-East	1	25	0	7
	3 - Site Access	1	9	0	13
	4 - A5 North-West	2	10	9	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 - Mira Drive	0.10	4.77	0.1	A	67	100
2 - A5 South-East	0.89	15.70	7.8	C	1568	2352
3 - Site Access	0.85	36.80	5.1	E	441	662
4 - A5 North-West	1.00	56.40	27.1	F	1440	2160

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 - Mira Drive	55	14	1158	1220	0.045	55	599	0.0	0.0	3.088	A
2 - A5 South-East	1287	322	263	2196	0.586	1281	950	0.0	1.4	3.910	A
3 - Site Access	362	91	1292	999	0.362	360	252	0.0	0.6	5.611	A
4 - A5 North-West	1181	295	583	1935	0.611	1175	1069	0.0	1.5	4.703	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 - Mira Drive	66	16	1385	1051	0.062	66	717	0.0	0.1	3.651	A
2 - A5 South-East	1536	384	314	2155	0.713	1532	1136	1.4	2.4	5.739	A
3 - Site Access	432	108	1545	840	0.515	430	302	0.6	1.0	8.754	A
4 - A5 North-West	1411	353	697	1850	0.762	1404	1278	1.5	3.1	7.969	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 - Mira Drive	80	20	1644	857	0.094	80	864	0.1	0.1	4.632	A
2 - A5 South-East	1882	470	372	2109	0.892	1862	1352	2.4	7.2	13.643	B
3 - Site Access	530	132	1877	630	0.840	516	357	1.0	4.3	28.832	D
4 - A5 North-West	1728	432	844	1741	0.992	1664	1550	3.1	19.0	33.099	D

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 - Mira Drive	80	20	1675	835	0.096	80	875	0.1	0.1	4.772	A
2 - A5 South-East	1882	470	379	2104	0.895	1879	1376	7.2	7.8	15.700	C
3 - Site Access	530	132	1895	620	0.855	527	364	4.3	5.1	36.795	E
4 - A5 North-West	1728	432	854	1733	0.997	1695	1567	19.0	27.1	56.403	F

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 - Mira Drive	66	16	1477	983	0.067	66	742	0.1	0.1	3.927	A
2 - A5 South-East	1536	384	336	2138	0.719	1557	1206	7.8	2.6	6.410	A
3 - Site Access	432	108	1570	824	0.525	448	323	5.1	1.1	9.972	A
4 - A5 North-West	1411	353	714	1838	0.768	1505	1305	27.1	3.5	13.895	B

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 - Mira Drive	55	14	1172	1210	0.045	55	605	0.1	0.0	3.118	A
2 - A5 South-East	1287	322	266	2194	0.586	1291	961	2.6	1.4	4.010	A
3 - Site Access	362	91	1302	993	0.365	364	255	1.1	0.6	5.750	A
4 - A5 North-West	1181	295	588	1931	0.612	1189	1078	3.5	1.6	4.899	A

Ref Case + Development, PM (17:00 - 18:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Site Access - 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	15.65	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	Ref Case + Development	PM (17:00 - 18:00)	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 - Mira Drive		ONE HOUR	✓	607	100.000
2 - A5 South-East		ONE HOUR	✓	1174	100.000
3 - Site Access		ONE HOUR	✓	528	100.000
4 - A5 North-West		ONE HOUR	✓	1568	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	404	31	172
	2 - A5 South-East	86	50	0	1038
	3 - Site Access	8	173	2	345
	4 - A5 North-West	28	1287	191	62

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Mira Drive	2 - A5 South-East	3 - Site Access	4 - A5 North-West
From	1 - Mira Drive	0	2	0	4
	2 - A5 South-East	3	6	0	5
	3 - Site Access	2	2	0	1
	4 - A5 North-West	4	5	5	7

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 - Mira Drive	0.95	61.82	10.9	F	557	835
2 - A5 South-East	0.63	4.84	1.7	A	1077	1616
3 - Site Access	0.63	10.51	1.7	B	485	727
4 - A5 North-West	0.79	7.98	3.8	A	1439	2158

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 - Mira Drive	457	114	1324	1146	0.399	454	92	0.0	0.7	5.186	A
2 - A5 South-East	884	221	343	2158	0.410	881	1435	0.0	0.7	2.814	A
3 - Site Access	398	99	1056	1259	0.316	396	168	0.0	0.5	4.163	A
4 - A5 North-West	1180	295	239	2261	0.522	1176	1213	0.0	1.1	3.305	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 - Mira Drive	546	136	1584	960	0.568	543	110	0.7	1.3	8.578	A
2 - A5 South-East	1055	264	410	2106	0.501	1054	1717	0.7	1.0	3.418	A
3 - Site Access	475	119	1264	1117	0.425	474	201	0.5	0.7	5.586	A
4 - A5 North-West	1410	352	286	2225	0.633	1407	1451	1.1	1.7	4.387	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 - Mira Drive	668	167	1934	710	0.941	640	134	1.3	8.5	40.839	E
2 - A5 South-East	1293	323	493	2042	0.633	1290	2081	1.0	1.7	4.766	A
3 - Site Access	581	145	1539	929	0.626	578	244	0.7	1.6	10.147	B
4 - A5 North-West	1726	432	350	2177	0.793	1719	1767	1.7	3.7	7.714	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 - Mira Drive	668	167	1943	704	0.949	658	134	8.5	10.9	61.821	F
2 - A5 South-East	1293	323	501	2036	0.635	1293	2100	1.7	1.7	4.837	A
3 - Site Access	581	145	1547	923	0.630	581	246	1.6	1.7	10.509	B
4 - A5 North-West	1726	432	351	2176	0.793	1726	1777	3.7	3.8	7.982	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 - Mira Drive	546	136	1596	952	0.573	584	110	10.9	1.4	10.791	B
2 - A5 South-East	1055	264	426	2094	0.504	1058	1754	1.7	1.0	3.483	A
3 - Site Access	475	119	1280	1106	0.429	478	204	1.7	0.8	5.765	A
4 - A5 North-West	1410	352	288	2224	0.634	1418	1470	3.8	1.8	4.509	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 - Mira Drive	457	114	1332	1140	0.401	460	92	1.4	0.7	5.314	A
2 - A5 South-East	884	221	346	2155	0.410	885	1445	1.0	0.7	2.838	A
3 - Site Access	398	99	1062	1255	0.317	399	169	0.8	0.5	4.212	A
4 - A5 North-West	1180	295	241	2260	0.522	1183	1220	1.8	1.1	3.351	A

Appendix 24

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: 17059- A444-Mira Roundabout (Sensitivity Test).j9
Path: P:\17 jobs\059 MIRA - Southern Manufacturing Sector\Technical Assessments\Modelling - July 2022\Sensitivty Test - Manual Redistribution Models
Report generation date: 18/07/2022 14:18:16

»Ref Case, AM (08:00 - 09:00)
»Ref Case, PM (17:00 - 18:00)
»Ref Case + Development, AM (08:00 - 09:00)
»Ref Case + Development, PM (17:00 - 18:00)

Summary of junction performance

	AM (08:00 - 09:00)					PM (17:00 - 18:00)				
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
	Ref Case									
1 - A444 Weddington Lane (North-West)	0.1	3.45	0.08	A	3.73	0.1	3.39	0.12	A	3.32
2 - Site Access	0.2	2.84	0.15	A		0.3	3.15	0.22	A	
3 - A444 Weddington Lane (South-East)	0.7	4.10	0.41	A		0.4	3.44	0.29	A	
	Ref Case + Development									
1 - A444 Weddington Lane (North-West)	0.1	3.99	0.09	A	5.15	0.1	3.46	0.12	A	3.59
2 - Site Access	0.2	3.20	0.19	A		0.5	3.58	0.31	A	
3 - A444 Weddington Lane (South-East)	1.4	5.93	0.58	A		0.5	3.63	0.32	A	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	24/02/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mtp\MTPGeneral
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	Ref Case	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D2	Ref Case	PM (17:00 - 18:00)	ONE HOUR	15:45	17:15	15	✓
D3	Ref Case + Development	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D4	Ref Case + Development	PM (17:00 - 18:00)	ONE HOUR	15:45	17:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Ref Case, AM (08:00 - 09:00)

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	3.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A444 Weddington Lane (North-West)	
2	Site Access	
3	A444 Weddington Lane (South-East)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A444 Weddington Lane (North-West)	3.65	4.80	7.3	20.0	45.0	27.0	
2 - Site Access	3.50	5.17	25.4	40.0	45.0	21.0	
3 - A444 Weddington Lane (South-East)	3.75	5.55	9.8	20.0	45.0	28.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A444 Weddington Lane (North-West)	0.563	1351
2 - Site Access	0.617	1561
3 - A444 Weddington Lane (South-East)	0.589	1491

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	Ref Case	AM (08:00 - 09:00)	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 - A444 Weddington Lane (North-West)		ONE HOUR	✓	80	100.000
2 - Site Access		ONE HOUR	✓	207	100.000
3 - A444 Weddington Lane (South-East)		ONE HOUR	✓	548	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	2	78
	2 - Site Access	0	0	207
	3 - A444 Weddington Lane (South-East)	198	350	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	0	0
	2 - Site Access	0	0	1
	3 - A444 Weddington Lane (South-East)	0	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 - A444 Weddington Lane (North-West)	0.08	3.45	0.1	A	73	110
2 - Site Access	0.15	2.84	0.2	A	190	285
3 - A444 Weddington Lane (South-East)	0.41	4.10	0.7	A	503	754

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 - A444 Weddington Lane (North-West)	60	15	263	1202	0.050	60	149	0.0	0.1	3.151	A
2 - Site Access	156	39	59	1510	0.103	155	264	0.0	0.1	2.658	A
3 - A444 Weddington Lane (South-East)	413	103	0	1481	0.279	411	214	0.0	0.4	3.360	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 - A444 Weddington Lane (North-West)	72	18	314	1173	0.061	72	178	0.1	0.1	3.269	A
2 - Site Access	186	47	70	1503	0.124	186	316	0.1	0.1	2.733	A
3 - A444 Weddington Lane (South-East)	493	123	0	1481	0.333	492	256	0.4	0.5	3.638	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 - A444 Weddington Lane (North-West)	88	22	385	1133	0.078	88	218	0.1	0.1	3.445	A
2 - Site Access	228	57	86	1493	0.153	228	387	0.1	0.2	2.844	A
3 - A444 Weddington Lane (South-East)	603	151	0	1481	0.407	603	314	0.5	0.7	4.094	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 - A444 Weddington Lane (North-West)	88	22	385	1132	0.078	88	218	0.1	0.1	3.446	A
2 - Site Access	228	57	86	1493	0.153	228	388	0.2	0.2	2.845	A
3 - A444 Weddington Lane (South-East)	603	151	0	1481	0.407	603	314	0.7	0.7	4.101	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 - A444 Weddington Lane (North-West)	72	18	315	1172	0.061	72	178	0.1	0.1	3.271	A
2 - Site Access	186	47	70	1503	0.124	186	317	0.2	0.1	2.734	A
3 - A444 Weddington Lane (South-East)	493	123	0	1481	0.333	493	256	0.7	0.5	3.646	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 - A444 Weddington Lane (North-West)	60	15	264	1201	0.050	60	149	0.1	0.1	3.156	A
2 - Site Access	156	39	59	1510	0.103	156	265	0.1	0.1	2.659	A
3 - A444 Weddington Lane (South-East)	413	103	0	1481	0.279	413	215	0.5	0.4	3.371	A

Ref Case, PM (17:00 - 18:00)

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	3.32	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	Ref Case	PM (17:00 - 18:00)	ONE HOUR	15:45	17:15	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 - A444 Weddington Lane (North-West)		ONE HOUR	✓	129	100.000
2 - Site Access		ONE HOUR	✓	301	100.000
3 - A444 Weddington Lane (South-East)		ONE HOUR	✓	395	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	3	126
	2 - Site Access	1	0	300
	3 - A444 Weddington Lane (South-East)	161	234	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	0	0
	2 - Site Access	0	0	0
	3 - A444 Weddington Lane (South-East)	0	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 - A444 Weddington Lane (North-West)	0.12	3.39	0.1	A	118	178
2 - Site Access	0.22	3.15	0.3	A	276	414
3 - A444 Weddington Lane (South-East)	0.29	3.44	0.4	A	362	544

Main Results for each time segment

15:45 - 16:00

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 - A444 Weddington Lane (North-West)	97	24	176	1252	0.078	97	122	0.0	0.1	3.117	A
2 - Site Access	227	57	95	1503	0.151	226	178	0.0	0.2	2.818	A
3 - A444 Weddington Lane (South-East)	297	74	0.75	1481	0.201	296	320	0.0	0.3	3.035	A

16:00 - 16:15

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 - A444 Weddington Lane (North-West)	116	29	210	1232	0.094	116	146	0.1	0.1	3.225	A
2 - Site Access	271	68	113	1491	0.181	270	213	0.2	0.2	2.949	A
3 - A444 Weddington Lane (South-East)	355	89	0.90	1481	0.240	355	383	0.3	0.3	3.196	A

16:15 - 16:30

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 - A444 Weddington Lane (North-West)	142	36	257	1205	0.118	142	178	0.1	0.1	3.385	A
2 - Site Access	331	83	139	1475	0.225	331	261	0.2	0.3	3.146	A
3 - A444 Weddington Lane (South-East)	435	109	1	1481	0.294	435	469	0.3	0.4	3.440	A

16:30 - 16:45

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 - A444 Weddington Lane (North-West)	142	36	258	1205	0.118	142	178	0.1	0.1	3.385	A
2 - Site Access	331	83	139	1475	0.225	331	261	0.3	0.3	3.146	A
3 - A444 Weddington Lane (South-East)	435	109	1	1481	0.294	435	469	0.4	0.4	3.440	A

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 - A444 Weddington Lane (North-West)	116	29	211	1232	0.094	116	146	0.1	0.1	3.226	A
2 - Site Access	271	68	113	1491	0.181	271	213	0.3	0.2	2.950	A
3 - A444 Weddington Lane (South-East)	355	89	0.90	1481	0.240	355	383	0.4	0.3	3.200	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 - A444 Weddington Lane (North-West)	97	24	176	1251	0.078	97	122	0.1	0.1	3.121	A
2 - Site Access	227	57	95	1502	0.151	227	179	0.2	0.2	2.822	A
3 - A444 Weddington Lane (South-East)	297	74	0.75	1481	0.201	298	321	0.3	0.3	3.041	A

Ref Case + Development, AM (08:00 - 09:00)

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	5.15	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	Ref Case + Development	AM (08:00 - 09:00)	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 - A444 Weddington Lane (North-West)		ONE HOUR	✓	80	100.000
2 - Site Access		ONE HOUR	✓	246	100.000
3 - A444 Weddington Lane (South-East)		ONE HOUR	✓	754	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	2	78
	2 - Site Access	0	1	245
	3 - A444 Weddington Lane (South-East)	198	556	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	0	0
	2 - Site Access	0	0	8
	3 - A444 Weddington Lane (South-East)	0	5	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 - A444 Weddington Lane (North-West)	0.09	3.99	0.1	A	73	110
2 - Site Access	0.19	3.20	0.2	A	226	339
3 - A444 Weddington Lane (South-East)	0.58	5.93	1.4	A	692	1038

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 - A444 Weddington Lane (North-West)	60	15	417	1105	0.055	60	148	0.0	0.1	3.445	A
2 - Site Access	185	46	58	1412	0.131	185	419	0.0	0.2	2.930	A
3 - A444 Weddington Lane (South-East)	568	142	0.75	1437	0.395	565	242	0.0	0.6	4.115	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 - A444 Weddington Lane (North-West)	72	18	500	1056	0.068	72	178	0.1	0.1	3.657	A
2 - Site Access	221	55	70	1406	0.157	221	502	0.2	0.2	3.038	A
3 - A444 Weddington Lane (South-East)	678	169	0.90	1437	0.472	677	290	0.6	0.9	4.730	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 - A444 Weddington Lane (North-West)	88	22	612	990	0.089	88	218	0.1	0.1	3.991	A
2 - Site Access	271	68	86	1397	0.194	271	614	0.2	0.2	3.196	A
3 - A444 Weddington Lane (South-East)	830	208	1	1437	0.578	828	355	0.9	1.3	5.897	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 - A444 Weddington Lane (North-West)	88	22	613	989	0.089	88	218	0.1	0.1	3.995	A
2 - Site Access	271	68	86	1397	0.194	271	615	0.2	0.2	3.197	A
3 - A444 Weddington Lane (South-East)	830	208	1	1437	0.578	830	356	1.3	1.4	5.932	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 - A444 Weddington Lane (North-West)	72	18	502	1055	0.068	72	178	0.1	0.1	3.662	A
2 - Site Access	221	55	70	1406	0.157	221	504	0.2	0.2	3.039	A
3 - A444 Weddington Lane (South-East)	678	169	0.90	1437	0.472	680	291	1.4	0.9	4.764	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 - A444 Weddington Lane (North-West)	60	15	420	1103	0.055	60	149	0.1	0.1	3.453	A
2 - Site Access	185	46	59	1412	0.131	185	422	0.2	0.2	2.936	A
3 - A444 Weddington Lane (South-East)	568	142	0.75	1437	0.395	569	243	0.9	0.7	4.149	A

Ref Case + Development, PM (17:00 - 18:00)

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	3.59	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	Ref Case + Development	PM (17:00 - 18:00)	ONE HOUR	15:45	17:15	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 - A444 Weddington Lane (North-West)		ONE HOUR	✓	129	100.000
2 - Site Access		ONE HOUR	✓	414	100.000
3 - A444 Weddington Lane (South-East)		ONE HOUR	✓	419	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	3	126
	2 - Site Access	1	3	410
	3 - A444 Weddington Lane (South-East)	161	258	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - A444 Weddington Lane (North-West)	2 - Site Access	3 - A444 Weddington Lane (South-East)
From	1 - A444 Weddington Lane (North-West)	0	0	0
	2 - Site Access	0	0	1
	3 - A444 Weddington Lane (South-East)	0	4	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 - A444 Weddington Lane (North-West)	0.12	3.46	0.1	A	118	178
2 - Site Access	0.31	3.58	0.5	A	380	570
3 - A444 Weddington Lane (South-East)	0.32	3.63	0.5	A	384	577

Main Results for each time segment

15:45 - 16:00

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 - A444 Weddington Lane (North-West)	97	24	196	1237	0.079	97	122	0.0	0.1	3.157	A
2 - Site Access	312	78	95	1488	0.209	311	198	0.0	0.3	3.055	A
3 - A444 Weddington Lane (South-East)	315	79	3	1453	0.217	314	402	0.0	0.3	3.159	A

16:00 - 16:15

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 - A444 Weddington Lane (North-West)	116	29	234	1214	0.096	116	146	0.1	0.1	3.277	A
2 - Site Access	372	93	113	1476	0.252	372	237	0.3	0.3	3.259	A
3 - A444 Weddington Lane (South-East)	377	94	4	1453	0.259	376	481	0.3	0.3	3.344	A

16:15 - 16:30

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 - A444 Weddington Lane (North-West)	142	36	287	1183	0.120	142	178	0.1	0.1	3.455	A
2 - Site Access	456	114	139	1461	0.312	455	290	0.3	0.5	3.578	A
3 - A444 Weddington Lane (South-East)	461	115	4	1452	0.318	461	590	0.3	0.5	3.629	A

16:30 - 16:45

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 - A444 Weddington Lane (North-West)	142	36	287	1183	0.120	142	178	0.1	0.1	3.456	A
2 - Site Access	456	114	139	1461	0.312	456	291	0.5	0.5	3.581	A
3 - A444 Weddington Lane (South-East)	461	115	4	1452	0.318	461	590	0.5	0.5	3.632	A

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 - A444 Weddington Lane (North-West)	116	29	235	1214	0.096	116	146	0.1	0.1	3.281	A
2 - Site Access	372	93	113	1476	0.252	373	238	0.5	0.3	3.262	A
3 - A444 Weddington Lane (South-East)	377	94	4	1453	0.259	377	482	0.5	0.4	3.350	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 - A444 Weddington Lane (North-West)	97	24	197	1236	0.079	97	122	0.1	0.1	3.159	A
2 - Site Access	312	78	95	1488	0.210	312	199	0.3	0.3	3.062	A
3 - A444 Weddington Lane (South-East)	315	79	3	1453	0.217	316	404	0.4	0.3	3.168	A

Appendix 25

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: 17059 - Redgate Roundabout Mitigation (Sensitvity Test).j9
Path: P:\17 jobs\059 MIRA - Southern Manufacturing Sector\Technical Assessments\Modelling - July 2022\Sensitivty Test - Manual Redistribution Models
Report generation date: 18/07/2022 14:07:38

»Ref Case, AM (08:00 - 09:00)
»Ref Case, PM (17:00 - 18:00)
»Ref Case + Development, AM (08:00 - 09:00)
»Ref Case + Development, PM (17:00 - 18:00)

Summary of junction performance

	AM (08:00 - 09:00)					PM (17:00 - 18:00)				
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
	Ref Case									
1 - A5 (East)	2.3	5.61	0.70	A	5.17	2.4	5.87	0.71	A	5.83
2 - A444 Weddington Lane	0.3	4.79	0.23	A		0.2	4.57	0.19	A	
3 - A5 (West)	1.5	4.57	0.60	A		2.3	5.92	0.70	A	
4 - A444 Atherstone Road	0.6	5.56	0.36	A		0.6	5.87	0.38	A	
	Ref Case + Development									
1 - A5 (East)	3.0	6.95	0.75	A	6.93	4.1	8.90	0.81	A	7.66
2 - A444 Weddington Lane	0.3	5.40	0.25	A		0.3	5.64	0.22	A	
3 - A5 (West)	2.7	6.84	0.73	A		2.7	6.78	0.73	A	
4 - A444 Atherstone Road	0.9	8.01	0.47	A		0.6	6.29	0.40	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. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	03/03/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mtp\MTPGeneral
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	Ref Case	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D2	Ref Case	PM (17:00 - 18:00)	ONE HOUR	16:45	18:15	15	✓
D3	Ref Case + Development	AM (08:00 - 09:00)	ONE HOUR	07:45	09:15	15	✓
D4	Ref Case + Development	PM (17:00 - 18:00)	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

Ref Case, AM (08:00 - 09:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A444 Weddington Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A5 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A444 Atherstone Road - 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	5.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A5 (East)	
2	A444 Weddington Lane	
3	A5 (West)	
4	A444 Atherstone Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A5 (East)	7.50	8.30	54.5	15.0	50.0	44.0	
2 - A444 Weddington Lane	3.60	8.02	35.5	30.0	50.0	33.0	
3 - A5 (West)	7.00	8.04	52.8	22.0	50.0	27.0	
4 - A444 Atherstone Road	3.20	7.56	40.2	20.0	50.0	31.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A5 (East)	0.711	2342
2 - A444 Weddington Lane	0.678	2060
3 - A5 (West)	0.755	2453
4 - A444 Atherstone Road	0.654	1943

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	Ref Case	AM (08:00 - 09:00)	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 - A5 (East)		ONE HOUR	✓	1342	100.000
2 - A444 Weddington Lane		ONE HOUR	✓	200	100.000
3 - A5 (West)		ONE HOUR	✓	1081	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	338	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	25	1	1087	229
	2 - A444 Weddington Lane	35	0	90	75
	3 - A5 (West)	1013	46	0	22
	4 - A444 Atherstone Road	279	32	27	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	6	0	6	9
	2 - A444 Weddington Lane	0	0	0	0
	3 - A5 (West)	8	0	0	15
	4 - A444 Atherstone Road	6	0	10	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 - A5 (East)	0.70	5.61	2.3	A	1231	1847
2 - A444 Weddington Lane	0.23	4.79	0.3	A	184	275
3 - A5 (West)	0.60	4.57	1.5	A	992	1488
4 - A444 Atherstone Road	0.36	5.56	0.6	A	310	465

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 - A5 (East)	1010	253	79	2145	0.471	1007	1014	0.0	0.9	3.155	A
2 - A444 Weddington Lane	151	38	1026	1318	0.114	150	59	0.0	0.1	3.079	A
3 - A5 (West)	814	203	273	2073	0.393	811	903	0.0	0.6	2.847	A
4 - A444 Atherstone Road	254	64	840	1280	0.199	253	245	0.0	0.2	3.503	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 - A5 (East)	1206	302	94	2134	0.565	1205	1214	0.9	1.3	3.869	A
2 - A444 Weddington Lane	180	45	1228	1172	0.153	180	71	0.1	0.2	3.626	A
3 - A5 (West)	972	243	327	2033	0.478	971	1081	0.6	0.9	3.386	A
4 - A444 Atherstone Road	304	76	1005	1171	0.260	303	293	0.2	0.3	4.149	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 - A5 (East)	1478	369	115	2119	0.697	1474	1486	1.3	2.3	5.542	A
2 - A444 Weddington Lane	220	55	1502	974	0.226	220	87	0.2	0.3	4.771	A
3 - A5 (West)	1190	298	400	1979	0.602	1188	1322	0.9	1.5	4.538	A
4 - A444 Atherstone Road	372	93	1230	1022	0.364	371	358	0.3	0.6	5.530	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 - A5 (East)	1478	369	116	2119	0.697	1477	1489	2.3	2.3	5.607	A
2 - A444 Weddington Lane	220	55	1506	971	0.227	220	87	0.3	0.3	4.792	A
3 - A5 (West)	1190	298	401	1978	0.602	1190	1326	1.5	1.5	4.569	A
4 - A444 Atherstone Road	372	93	1232	1020	0.365	372	359	0.6	0.6	5.556	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 - A5 (East)	1206	302	95	2134	0.565	1210	1218	2.3	1.3	3.916	A
2 - A444 Weddington Lane	180	45	1234	1168	0.154	180	71	0.3	0.2	3.644	A
3 - A5 (West)	972	243	328	2032	0.478	974	1086	1.5	0.9	3.410	A
4 - A444 Atherstone Road	304	76	1008	1168	0.260	305	294	0.6	0.4	4.172	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 - A5 (East)	1010	253	79	2144	0.471	1012	1019	1.3	0.9	3.183	A
2 - A444 Weddington Lane	151	38	1032	1314	0.115	151	60	0.2	0.1	3.093	A
3 - A5 (West)	814	203	274	2072	0.393	815	908	0.9	0.7	2.866	A
4 - A444 Atherstone Road	254	64	844	1278	0.199	255	246	0.4	0.2	3.520	A

Ref Case, PM (17:00 - 18:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A444 Weddington Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A5 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A444 Atherstone Road - 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	5.83	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	Ref Case	PM (17:00 - 18:00)	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 - A5 (East)		ONE HOUR	✓	1358	100.000
2 - A444 Weddington Lane		ONE HOUR	✓	163	100.000
3 - A5 (West)		ONE HOUR	✓	1268	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	337	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	2	0	1017	339
	2 - A444 Weddington Lane	5	0	69	89
	3 - A5 (West)	1149	87	0	32
	4 - A444 Atherstone Road	254	42	41	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	0	0	5	4
	2 - A444 Weddington Lane	0	0	0	0
	3 - A5 (West)	4	0	0	8
	4 - A444 Atherstone Road	4	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 - A5 (East)	0.71	5.87	2.4	A	1246	1869
2 - A444 Weddington Lane	0.19	4.57	0.2	A	150	224
3 - A5 (West)	0.70	5.92	2.3	A	1164	1745
4 - A444 Atherstone Road	0.38	5.87	0.6	A	309	464

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 - A5 (East)	1022	256	128	2149	0.476	1019	1058	0.0	0.9	3.176	A
2 - A444 Weddington Lane	123	31	1050	1315	0.093	122	97	0.0	0.1	3.018	A
3 - A5 (West)	955	239	326	2118	0.451	951	845	0.0	0.8	3.076	A
4 - A444 Atherstone Road	254	63	933	1270	0.200	253	345	0.0	0.2	3.536	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 - A5 (East)	1221	305	153	2131	0.573	1219	1266	0.9	1.3	3.939	A
2 - A444 Weddington Lane	147	37	1256	1169	0.125	146	116	0.1	0.1	3.521	A
3 - A5 (West)	1140	285	391	2070	0.551	1138	1012	0.8	1.2	3.858	A
4 - A444 Atherstone Road	303	76	1116	1150	0.264	303	413	0.2	0.4	4.248	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 - A5 (East)	1495	374	187	2108	0.709	1491	1548	1.3	2.4	5.792	A
2 - A444 Weddington Lane	179	45	1536	970	0.185	179	142	0.1	0.2	4.551	A
3 - A5 (West)	1396	349	478	2005	0.696	1392	1237	1.2	2.2	5.837	A
4 - A444 Atherstone Road	371	93	1365	986	0.376	370	505	0.4	0.6	5.832	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 - A5 (East)	1495	374	187	2108	0.709	1495	1552	2.4	2.4	5.873	A
2 - A444 Weddington Lane	179	45	1540	967	0.186	179	142	0.2	0.2	4.572	A
3 - A5 (West)	1396	349	479	2004	0.697	1396	1241	2.2	2.3	5.922	A
4 - A444 Atherstone Road	371	93	1368	984	0.377	371	506	0.6	0.6	5.875	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 - A5 (East)	1221	305	153	2131	0.573	1225	1272	2.4	1.4	3.993	A
2 - A444 Weddington Lane	147	37	1262	1164	0.126	147	116	0.2	0.1	3.538	A
3 - A5 (West)	1140	285	392	2069	0.551	1144	1017	2.3	1.2	3.912	A
4 - A444 Atherstone Road	303	76	1121	1146	0.264	304	415	0.6	0.4	4.282	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 - A5 (East)	1022	256	128	2148	0.476	1024	1063	1.4	0.9	3.209	A
2 - A444 Weddington Lane	123	31	1055	1311	0.094	123	97	0.1	0.1	3.031	A
3 - A5 (West)	955	239	328	2117	0.451	956	850	1.2	0.8	3.108	A
4 - A444 Atherstone Road	254	63	937	1267	0.200	254	347	0.4	0.3	3.556	A

Ref Case + Development, AM (08:00 - 09:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A444 Weddington Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A5 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A444 Atherstone Road - 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	6.93	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	Ref Case + Development	AM (08:00 - 09:00)	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 - A5 (East)		ONE HOUR	✓	1429	100.000
2 - A444 Weddington Lane		ONE HOUR	✓	200	100.000
3 - A5 (West)		ONE HOUR	✓	1298	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	366	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	25	1	1166	237
	2 - A444 Weddington Lane	35	0	90	75
	3 - A5 (West)	1230	46	0	22
	4 - A444 Atherstone Road	307	32	27	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	6	0	8	8
	2 - A444 Weddington Lane	0	0	0	0
	3 - A5 (West)	9	0	0	15
	4 - A444 Atherstone Road	6	0	10	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 - A5 (East)	0.75	6.95	3.0	A	1311	1967
2 - A444 Weddington Lane	0.25	5.40	0.3	A	184	275
3 - A5 (West)	0.73	6.84	2.7	A	1191	1787
4 - A444 Atherstone Road	0.47	8.01	0.9	A	336	504

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 - A5 (East)	1076	269	79	2116	0.508	1072	1198	0.0	1.0	3.436	A
2 - A444 Weddington Lane	151	38	1091	1261	0.119	150	59	0.0	0.1	3.239	A
3 - A5 (West)	977	244	279	2051	0.476	974	962	0.0	0.9	3.331	A
4 - A444 Atherstone Road	276	69	1002	1166	0.236	274	251	0.0	0.3	4.031	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 - A5 (East)	1285	321	94	2105	0.610	1283	1433	1.0	1.5	4.364	A
2 - A444 Weddington Lane	180	45	1306	1103	0.163	180	71	0.1	0.2	3.895	A
3 - A5 (West)	1167	292	334	2011	0.580	1165	1152	0.9	1.4	4.247	A
4 - A444 Atherstone Road	329	82	1199	1034	0.318	328	300	0.3	0.5	5.098	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 - A5 (East)	1573	393	115	2091	0.752	1568	1752	1.5	3.0	6.805	A
2 - A444 Weddington Lane	220	55	1596	891	0.247	220	87	0.2	0.3	5.360	A
3 - A5 (West)	1429	357	408	1956	0.731	1424	1408	1.4	2.6	6.701	A
4 - A444 Atherstone Road	403	101	1466	855	0.471	401	367	0.5	0.9	7.899	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 - A5 (East)	1573	393	116	2091	0.753	1573	1758	3.0	3.0	6.948	A
2 - A444 Weddington Lane	220	55	1602	887	0.248	220	87	0.3	0.3	5.401	A
3 - A5 (West)	1429	357	410	1955	0.731	1429	1412	2.6	2.7	6.836	A
4 - A444 Atherstone Road	403	101	1471	852	0.473	403	368	0.9	0.9	8.014	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 - A5 (East)	1285	321	95	2105	0.610	1290	1442	3.0	1.6	4.449	A
2 - A444 Weddington Lane	180	45	1314	1098	0.164	180	71	0.3	0.2	3.927	A
3 - A5 (West)	1167	292	336	2009	0.581	1172	1158	2.7	1.4	4.326	A
4 - A444 Atherstone Road	329	82	1206	1029	0.320	331	301	0.9	0.5	5.165	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 - A5 (East)	1076	269	79	2115	0.509	1078	1205	1.6	1.0	3.476	A
2 - A444 Weddington Lane	151	38	1098	1256	0.120	151	60	0.2	0.1	3.257	A
3 - A5 (West)	977	244	281	2050	0.477	979	968	1.4	0.9	3.370	A
4 - A444 Atherstone Road	276	69	1008	1162	0.237	276	252	0.5	0.3	4.065	A

Ref Case + Development, PM (17:00 - 18:00)

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A5 (East) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A444 Weddington Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A5 (West) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A444 Atherstone Road - 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	7.66	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
D4	Ref Case + Development	PM (17:00 - 18:00)	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 - A5 (East)		ONE HOUR	✓	1548	100.000
2 - A444 Weddington Lane		ONE HOUR	✓	163	100.000
3 - A5 (West)		ONE HOUR	✓	1308	100.000
4 - A444 Atherstone Road		ONE HOUR	✓	340	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	2	0	1188	358
	2 - A444 Weddington Lane	5	0	69	89
	3 - A5 (West)	1189	87	0	32
	4 - A444 Atherstone Road	257	42	41	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A5 (East)	2 - A444 Weddington Lane	3 - A5 (West)	4 - A444 Atherstone Road
From	1 - A5 (East)	0	0	5	4
	2 - A444 Weddington Lane	0	0	0	0
	3 - A5 (West)	5	0	0	8
	4 - A444 Atherstone Road	4	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 - A5 (East)	0.81	8.90	4.1	A	1420	2131
2 - A444 Weddington Lane	0.22	5.64	0.3	A	150	224
3 - A5 (West)	0.73	6.78	2.7	A	1200	1800
4 - A444 Atherstone Road	0.40	6.29	0.6	A	312	468

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 - A5 (East)	1165	291	127	2148	0.543	1161	1090	0.0	1.2	3.628	A
2 - A444 Weddington Lane	123	31	1191	1214	0.101	122	97	0.0	0.1	3.295	A
3 - A5 (West)	985	246	340	2089	0.471	981	973	0.0	0.9	3.238	A
4 - A444 Atherstone Road	256	64	962	1244	0.206	255	359	0.0	0.3	3.635	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 - A5 (East)	1392	348	153	2131	0.653	1389	1304	1.2	1.9	4.834	A
2 - A444 Weddington Lane	147	37	1426	1048	0.140	146	116	0.1	0.2	3.992	A
3 - A5 (West)	1176	294	407	2039	0.577	1174	1165	0.9	1.3	4.151	A
4 - A444 Atherstone Road	306	76	1152	1119	0.273	305	430	0.3	0.4	4.421	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 - A5 (East)	1704	426	187	2108	0.809	1696	1594	1.9	4.0	8.558	A
2 - A444 Weddington Lane	179	45	1741	824	0.218	179	142	0.2	0.3	5.578	A
3 - A5 (West)	1440	360	498	1972	0.730	1435	1422	1.3	2.6	6.639	A
4 - A444 Atherstone Road	374	94	1408	950	0.394	373	525	0.4	0.6	6.234	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 - A5 (East)	1704	426	187	2107	0.809	1704	1600	4.0	4.1	8.900	A
2 - A444 Weddington Lane	179	45	1749	818	0.219	179	142	0.3	0.3	5.637	A
3 - A5 (West)	1440	360	500	1971	0.731	1440	1429	2.6	2.7	6.781	A
4 - A444 Atherstone Road	374	94	1412	946	0.396	374	527	0.6	0.6	6.292	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 - A5 (East)	1392	348	153	2130	0.653	1400	1312	4.1	1.9	4.991	A
2 - A444 Weddington Lane	147	37	1437	1039	0.141	147	116	0.3	0.2	4.037	A
3 - A5 (West)	1176	294	410	2037	0.577	1181	1174	2.7	1.4	4.232	A
4 - A444 Atherstone Road	306	76	1158	1115	0.274	307	433	0.6	0.4	4.463	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 - A5 (East)	1165	291	128	2148	0.543	1168	1096	1.9	1.2	3.685	A
2 - A444 Weddington Lane	123	31	1199	1209	0.102	123	97	0.2	0.1	3.318	A
3 - A5 (West)	985	246	343	2087	0.472	987	980	1.4	0.9	3.275	A
4 - A444 Atherstone Road	256	64	968	1241	0.206	256	361	0.4	0.3	3.660	A